

Emergency Response Action Plan

**Alkali Creek Diesel Fuel Storage Tank
Billings, Montana**



BNSF Railway Company

K/J 0596022.03

Kennedy/Jenks Consultants

**EMERGENCY RESPONSE ACTION PLAN
Alkali Creek Diesel Fuel Storage Tank
Billings, Montana**

Prepared for

BNSF RAILWAY COMPANY

Prepared by

**KENNEDY/JENKS CONSULTANTS
ENGINEERS AND SCIENTISTS
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K/J 0596022.03

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EMERGENCY RESPONSE ACTION PLAN

Several sections of the Integrated Contingency Plan (ICP) are collected, bound separately, and kept in the front pocket of this binder for easy access by response personnel during an actual emergency or diesel spill. These sections comprise the Emergency Response Action Plan, which is intended to contain only as much information as necessary to combat an emergency or spill and is arranged so response actions are not delayed. Use the forms provided or develop forms with similar information.

The Emergency Response Action Plan consists of copies or condensed versions of the forms included in the associated sections of this response plan. The Emergency Response Action Plan consists of the following tabbed sections:

- Qualified Individual Information (Section 2.1.2 and ICS Forms complete)
- Emergency Notification Phone List (Section 2 partial)
- Spill Response Notification Form (Annex 2 partial)
- Response Equipment List and Location (Annex 3 partial)
- Emergency Response Personnel (Section 2 partial)
- Emergency Action Flow Chart (Section 2 partial)
- Facility Diagrams (Annex 1 partial)

Collectively, the actions described in the sections listed above represent those that should be taken to stop the source of the spill or emergency, notify response personnel, and initiate procedures to prevent or minimize the threat of harm to the environment.

FACILITY INFORMATION SUMMARY

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Facility Information	
Facility Name: <u>Alkali Creek Diesel Storage Tank</u>	SIC: <u>4011</u>
Type of Product Stored: <u>Diesel fuel only</u>	
Size of Tank: <u>(b) (7)(F),</u>	
Worst Case Discharge <u>(b) (7)(F), (b) (3)</u>	
Owner: <u>BNSF Railway Company</u>	
Owner's address: <u>235 Main</u> City: <u>Havre</u> State: <u>Montana</u> Zip Code: <u>59501</u>	
Owner's phone number: <u>(406) 265-0483</u>	
Facility Address: <u>Approximately 6 road miles north of Billings, Montana on Alkali Creek Road</u>	
City: <u>Billings</u> State: <u>Montana</u> Zip Code: <u>59106</u> County: <u>Yellowstone</u>	
Location: <u>(b) (7)(F), (b) (3)</u>	
Directions to the facility: <u>From Billings, Montana travel northbound for approx. 6 miles on</u> <u>Alkali Creek Road</u>	
Facility Mailing Address: <u>N/A</u>	
Facility Phone Number: <u>N/A</u>	
Facility Fax Number: <u>N/A</u>	
Key contact for plan development and maintenance: <u>Michael Perrodin, Senior Manager</u> <u>Environmental Operations, BNSF</u>	
Phone Number: <u>(406) 265-0483</u>	
Date of oil storage start-up: <u>1985</u>	
Date of significant expansion: <u>None since 1985/startup</u>	
Qualified Individual: <u>Michael Perrodin; day (406) 265-0483; evening (406) 265-7816;</u> <u>(b) (6)</u>	
Alternate Qualified Individual: <u>Guy LaRango; day (406) 245-3554 (24 hour)</u>	
24 Hour Resource Operation Center: <u>1-800-832-5452</u>	

FACILITY INFORMATION SUMMARY

Page 2 of 2

Facility Information

Basis of determination for significant and substantial harm (see also Applicability of Substantial Harm Criteria on page vi):

The breakout tank exceeds 1 million gallons, and spills could cause injury to fish and wildlife and sensitive environments due to the tank's proximity to Alkali Creek and the Creek's discharge to the Yellowstone River. This determination is based on the definition included in 40 CFR Part 112 for fixed facilities as well as the volume requirements contained in 49 CFR Part 194.103. The pipelines into and out of this breakout tank are owned and operated by Conoco Pipeline, Inc.

ESTABLISHMENT OF A RESPONSE MANAGEMENT SYSTEM

This section describes how the emergency response plan will be implemented and managed. Further discussions of the response management system are contained in Annex 3 of the ICP.

Coordination of the response effort is the responsibility of the QI. The QI has the responsibility and authority to take such action as is necessary to protect human health and the environment and to coordinate remedial actions with governmental agencies. A QI or designated alternate will reside within a short period of travel time to the facility and will be trained in all aspects of the facility response plan.

Due to the remote location of the Alkali Creek facility and the distance from BNSF personnel in Havre, Montana, the QI cannot be located within a short distance of the facility. The ERC will most likely be first on the scene. The ERC personnel are properly trained in all aspects of emergency response.

The QI or contractor designee has the authority to commit moneys for spill response and to take all reasonable measures (including securing outside contractors) to ensure that fires, explosions, and releases do not occur, recur, or spread to other areas. These measures may include stopping facility operations, collecting and containing released materials, and removing or isolating containers. If facility operations are stopped, the QI must visually monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever appropriate.

The duties of the QI or contractor designee are as follows:

- Ascertain from the reporting party the nature of the emergency, injuries, and releases.
- Activate internal alarms and hazard communication systems to notify all facility personnel.
- Alert any personnel in the immediate area and advise the removal of persons and equipment. Ask that all foremen/supervisors of all crafts in the area (mechanical, section, operating) account for the whereabouts of each of their crew members.
- Evaluate the severity of the incident and implement the Facility Response Plan as appropriate.

Verify the following have been called:

- Police: 911
 - Fire Department: 911
 - BNSF Command Center: 1-800-832-5452
 - Yellowstone Pipeline OSC: 1-800-231-2551
-
- Remainder of Notification List (Table 2-1)
 - Establish the exact time of any fire, explosion, spill, or leakage.
 - Assess the interaction between the spilled substance and water and/or other substances stored at the facility, and notify response personnel at the scene of that assessment.
 - Assess the possible hazards to human health and the environment due to the release, including both the direct and indirect effects of the release (i.e., the effects of any toxic, irritating, or asphyxiating gases that may be generated) or the effects of any hazardous surface-water runoffs from water or chemical agents used to control fire and heat-induced explosion.
 - Assess and implement prompt removal actions to contain and remove the substance released.
 - Coordinate rescue and response actions as previously arranged with all response personnel.
 - Direct cleanup activities until properly relieved of this responsibility by the appropriate authorities [e.g., the Federal On-Scene Commander (OSC) who assumes control of a cleanup under National Contingency Plan (NCP) authority]. As specified in the NCP, the OSC may allow the responsible party to voluntarily and promptly perform removal actions.
 - Initiate the ICS for ongoing actions (see following section).
 - Use the ICS form at the end of this tabbed section as appropriate.

**ICS Forms
In Sequential Order**

**INCIDENT COMMAND SYSTEM FORMS
(FOR USE AS APPLICABLE)**

INCIDENT COMMAND SYSTEM – FORMS INDEX		
Form #	Form Title	Prepared by
201	Incident Briefing	Initial Response IC
202	Response Objectives	Planning Section Chief
203	Organization Assignment List	Planning (Resources Unit)
204	Division Assignment List	Operations Chief and Planning (Resources Unit)
205	Incident Radio Communications Plan	Logistics (Communications Unit)
206	Medical Plan	Safety & Logistics (Medical Unit)
207	Organizational Chart	Planning (Resources Unit)
209	Incident Status Summary	Planning (Situation Unit)
210	Status Change Card	Communications Center
211	Check-in List	Resources Unit at Multiple Locations
213	General Message Form	Any Message Originator
214	Unit/Activity Log	All Positions
215	Operational Planning Worksheet	Operations Section Chief & Planning Section Chief
215a	Incident Action Plan Safety Analysis	Safety & Logistics
216	Radio Requirements Worksheet	Communications Center

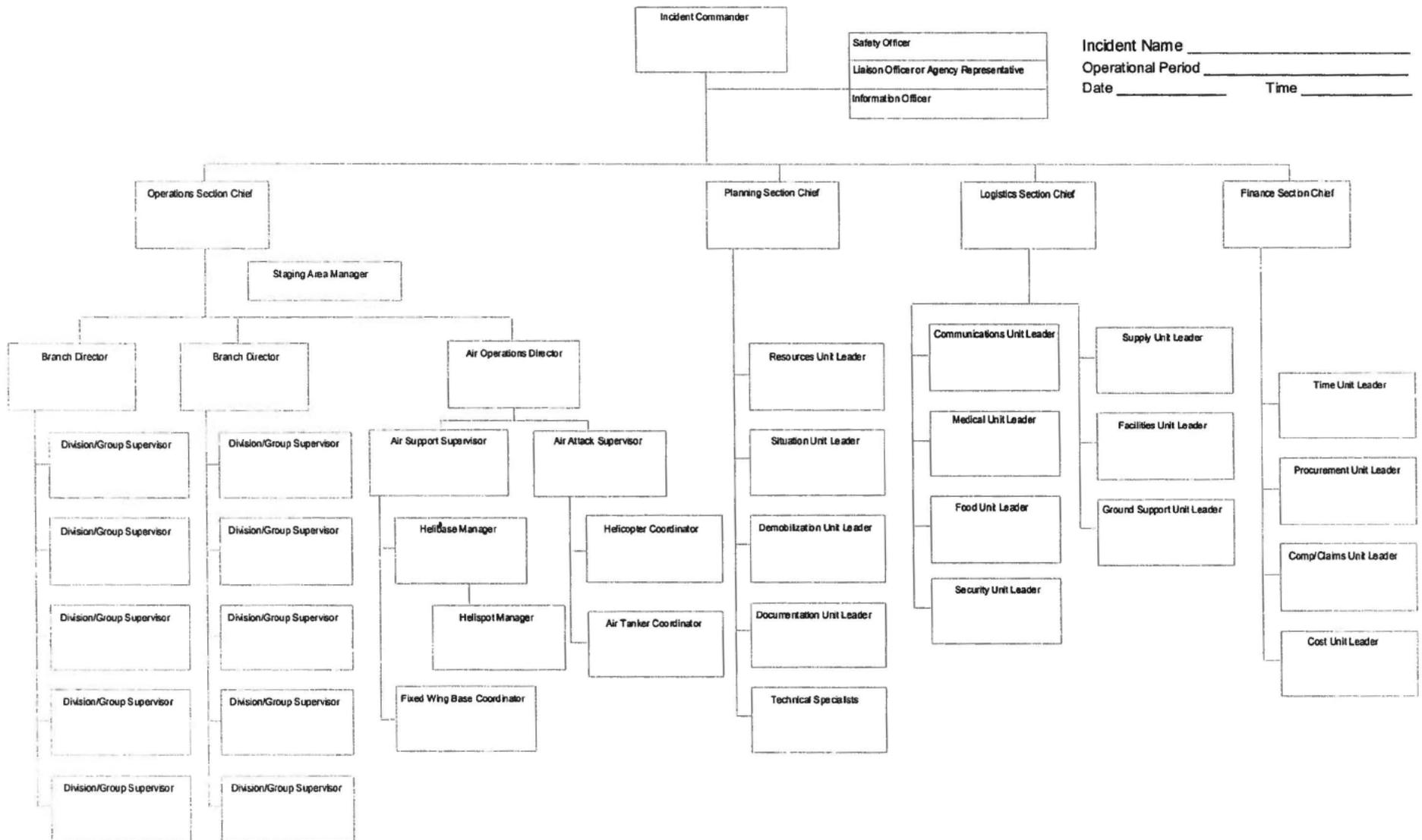
INCIDENT BRIEFING	1. Incident Name	2. Date	3. Time
	4. Map Sketch		
5. Current Organization			
<pre>graph TD; IC[Incident Commander] --- SO[Safety Officer]; IC --- LO[Liaison Officer or Agency Rep.]; IC --- IO[Information Officer]; IC --- Planning; IC --- Operations; IC --- Logistics; IC --- Finance; Operations --- Div1[Div.]; Operations --- Div2[Div.]; Operations --- Div3[Div.]; Operations --- Div4[Div.]; Operations --- Air[Air]; Air --- AO[Air Operations]; Air --- AS[Air Support]; Air --- AA[Air Attack]; Air --- ATC[Air Tanker Coord]; Air --- HC[Helicopter Coord];</pre>			
Page 1 of	6. Prepared by (Name and Position)		

INCIDENT OBJECTIVES	1. Incident Name	2. Date	3. Time
4. Operational Period			
5. General Control Objectives for the Incident (include alternatives)			
6. Weather Forecast for Period			
7. General Safety Message			
8. Attachments (mark if attached)			
<input type="checkbox"/> Organization List - ICS 203	<input type="checkbox"/> Medical Plan - ICS 206	<input type="checkbox"/> (Other)	
<input type="checkbox"/> Div. Assignment Lists - ICS 204	<input type="checkbox"/> Incident Map	<input type="checkbox"/>	
<input type="checkbox"/> Communications Plan - ICS 205	<input type="checkbox"/> Traffic Plan	<input type="checkbox"/>	
9. Prepared by (Planning Section Chief)		10. Approved by (Incident Commander)	

ORGANIZATION ASSIGNMENT LIST		a. Branch I - Division/Groups	
1. Incident Name		Branch Director	
		Deputy	
2. Date		Division/Group	
3. Time		Division/Group	
4. Operational Period		Division/Group	
		Division/Group	
Position	Name	b. Branch II - Division/Groups	
5. Incident Commander and Staff		Branch Director	
Incident Commander		Deputy	
Deputy		Division/Group	
Safety Officer		Division/Group	
Information Officer		Division/Group	
Liaison Officer		Division/Group	
6. Agency Representative		Division/Group	
Agency	Name	c. Branch III - Division/Groups	
		Branch Director	
		Deputy	
		Division/Group	
7. Planning Section		Division/Group	
Chief		d. Air Operations Branch	
Deputy		Air Operations Branch Director	
Resources Unit		Air Attack Supervisor	
Situation Unit		Air Support Supervisor	
Documentation Unit		Helicopter Coordinator	
Demobilization Unit		Air Tanker Coordinator	
Technical Specialists		10. Finance Section	
Human Resources		Chief	
Training		Deputy	
		Time Unit	
		Procurement Unit	
		Compensation/Claims Unit	
		Cost Unit	
8. Logistics Section		Prepared by (Resource Unit Leader)	
Chief			
Deputy			
Supply Unit			
Facilities Unit			
Ground Support Unit			
Communications Unit			
Medical Unit			
Security Unit			
Food Unit			
9. Operations Section			
Chief			
Deputy			

INCIDENT RADIO COMMUNICATIONS PLAN		1. Incident Name		2. Date/Time Prepared		3. Operational Period Date/Time	
4. Basic Radio Channel Utilization							
Radio Type/Cache	Channel	Function	Frequency/Tone	Assignment	Remarks		
5. Prepared by (Communications Unit)							

MEDICAL PLAN	1. Incident Name	2. Date Prepared	3. Time Prepared	4. Operational Period						
	5. Incident Medical Aid Station									
Medical Aid Stations	Location			Paramedics Yes No						
6. Transportation										
A. Ambulance Services										
Name	Address		Phone		Paramedics Yes No					
B. Incident Ambulances										
Name	Location			Paramedics Yes No						
7. Hospitals										
Name	Address		Travel Time Air Ground		Phone		Helipad Yes No		Burn Center Yes No	
8. Medical Emergency Procedures										
Prepared by (Medical Unit Leader)						10. Reviewed by (Safety Officer)				



Incident Name _____
 Operational Period _____
 Date _____ Time _____

INCIDENT STATUS SUMMARY FS-5100-11

1. Date/Time		2. Initial <input type="checkbox"/> Update <input type="checkbox"/> Final <input type="checkbox"/>		3. Incident Name				4. Incident Number			
5. Incident Commander		6. Jurisdiction		7. County		8. Type Incident		9. Location		10. Started Date/Time	
11. Cause		12. Area Involved		13. % Controlled		14. Expected Containment Date/Time		15. Estimated Controlled Date/Time		16. Declared Controlled Date/Time	
17. Current Threat						18. Control Problems					
19. Est. Loss		20. Est Savings		21. Injuries		Deaths		22. Line Built		23. Line to Build	
24. Current Weather			25. Predicted Weather			26. Cost to Date			27. Est. Total Cost		
WS	Temp		WS	Temp							
WD	RH		WD	RH							

28. Agencies

29. Resources																									TOTALS	
	SR	ST																								
Kind of Resource																										
ENGINES																										
DOZERS																										
CREWS Number of Crews:																										
Number of Crew Personnel:																										
HELICOPTERS																										
AIR TANKERS																										
TRUCK COS.																										
RESCUE/MED.																										
WATER TENDERS																										
OVERHEAD PERSONNL																										
TOTAL PERSONNEL																										

30. Cooperating Agencies

31. Remarks

32. Prepared by		33. Approved by		34. Sent to:	
				Date	Time By

General Instructions

Completion of the Incident Status Summary will be as specified by Agency or municipality. Report by telephone, teletype, computer, or facsimile to the local Agency or municipality headquarters by 2100 hours daily on incidents as required by Agency or municipality (reports are normally required on life threatening situations, real property threatened or destroyed, high resource damage potential, and complex incidents that could have political ramifications). Normally, wildland agencies require a report on all Class D (100 acres plus) and larger incidents (unless primarily grass type in which case report Class E (300 acres or larger). The first summary will cover the period from the start of the incident to 2100 hour the first day of the incident, if at least four hours have elapsed; thereafter the summary will cover the 24 hour period ending at 1900 (this reporting time will enable compilation of reporting data and submission of report to local agency or municipality headquarters by 2100 hours) daily until incident is under control. Wildland fire agencies will send the summary to NIFC by 2400 hours Mountain Time.

1. Enter date and time report completed (mandatory).
2. Check appropriate space (mandatory).
3. Provide name given to incident by Incident Commander or Agency (mandatory).
4. Enter number assigned to incident by Agency (mandatory).
5. Enter first initial and last name of Incident Commander (optional).
6. Enter Agency or Municipality (mandatory).
7. Enter County where incident is occurring (optional).
8. Enter type of incident, e.g. wildland fire (enter fuel type), structure fire, hazardous chemical spill, etc. (mandatory).
9. Enter legal description and general location. Use remarks for additional data if necessary (mandatory).
10. Enter date and zulu time incident started (mandatory - maximum of six characters for date and four characters for time).
11. Enter specific cause or under investigation (mandatory).
12. Enter area involved, e.g. 50 acres, top three floors of building, etc. (mandatory).
13. Enter estimate of percent of containment (mandatory).
14. Enter estimate of date and time of total containment (mandatory).
15. Enter estimated date and time of control (mandatory).
16. Enter actual date and time fire was declared controlled (mandatory).
17. Report significant threat to structures, watershed, timber, wildlife habitat or other valuable resources (mandatory).
18. Enter control problems, e.g. accessibility, fuels, rocky terrain, high winds, structures (mandatory).
19. Enter estimated dollar value of total damage to date. Include structures, watershed, timber, etc. Be specific in remarks (mandatory).
20. Enter estimate of values saved as result of all suppression efforts (optional).
21. Enter any serious injuries or deaths which have occurred since the last report. Be specific in remarks (mandatory).
22. Indicate the extent of line completed by chains or other units of measurement (optional).
23. Indicate line to be constructed by chains or other units of measurement (optional).
24. Indicate current weather conditions at the incident (mandatory).
25. Indicate predicted weather conditions for the next operational period (mandatory).
26. Provide total incident cost to date (optional).
27. Provide estimated total cost for entire incident (optional).
28. List agencies which have resources assigned to the incident (mandatory).
29. Enter resource information under appropriate Agency column by single resource or strike team (mandatory).
30. List by name those agencies which are providing support (e.g. Salvation Army, Red Cross, Law Enforcement, National Weather Service, etc. mandatory).
31. The Remarks space can be used to (1) list additional resources not covered in Section 28/29; (2) provide more information on location; (3) enter additional information regarding threat control problems, anticipated release or demobilization, etc. (mandatory).
32. This will normally be the Incident Situation Status Unit Leader (mandatory).
33. This will normally be the Incident Planning Section Chief (mandatory).
34. The ID of the Agency entering the report will be entered (optional).

RADIO REQUIREMENTS WORKSHEET			1. Incident Name			2. Date			3. Time		
4. Branch			5. Agency			6. Operational Period			7. Tactical Frequency		
8. Division/Group			Division/Group			Division/Group			Division/Group		
Agency			Agency			Agency			Agency		
9. Agency	ID No.	Radio Requirements	Agency	ID No.	Radio Requirements	Agency	ID No.	Radio Requirements	Agency	ID No.	Radio Requirements
Page 1 of			10. Prepared by (Name and Position)								

INTERNAL AND EXTERNAL NOTIFICATION CALL SHEET

Page 2 of 2

Organization	Phone Number
Montana Highway Patrol Montana Fire Marshall	1 (800) 525-5555 (406) 444-2050
Area Committee	Not Applicable
State Emergency Response Commission	(406) 324-4777
Local Emergency Planning Committee (Chief Lorren Ballard)	(406) 657-8200
City of Hysham Drinking Water Supply	(406) 342-5544
City of Billings Wastewater Treatment Plant	(406) 657-8356
National Weather Service	(406) 652-1916
Local News (KULR 8) (KTVQ)	(406) 656-8000 (406) 252-5611
Hospital (Deaconess)	(406) 657-4000
Insurance (self-insured) BNSF Claims Department	1 (800) 832-5452 (24 hour)

SPILL RESPONSE NOTIFICATION FORM

Page 1 of 2

Reporter's Last Name _____ First _____ M.I. _____					
Phone Number _____					
Date _____ Time _____					
Company _____					
Organization Type _____					
Position _____					
Address _____					
City _____		State _____		Zip _____	
Were Materials Released?		(Y/N)		Confidential? (Y/N)	
Meeting Federal Obligation to Report?		(Y/N)		Calling for Responsible Party? (Y/N)	
Incident Description					
Source and/or Cause of Incident: _____ _____ _____					
Date of Incident _____ Time of Incident _____ AM/PM					
Incident Address/Location _____ _____					
Nearest City _____		State _____		County _____ Zip _____	
Distance from City _____		Units _____		Direction from City _____	
Section _____		Township _____		Range _____	
Container Type _____		Tank Capacity _____		Units _____	
Facility Capacity _____		Units _____			
Material					
Material Spilled	Total Released Quantity	Unit of Measure	Material Released in Water	Quantity	Units of Measure

Response Action	
Actions Taken to Correct, Control, or Mitigate Incident _____	

Current Location of Spilled Material _____	
Next Actions Planned _____	

Impact	
Number of Injuries _____	Number of Deaths _____
Were There Evacuations? _____ (Y/N)	Number Evacuated _____
Was There Any Damage? _____ (Y/N)	Damage in Dollars (approximate) _____
Medium Affected _____	
Description _____	
More Information about Medium _____	

Weather Information	
Current Weather _____	
Forecasted Weather _____	
Additional Information	
Potential Health Risks _____	
Any information about the incident not recorded elsewhere in the report? _____	

Caller Notifications	
EPA? _____	USCG? _____ (Y/N) State? _____ (Y/N) Locate _____ (Y/N)
Other? _____	Describe _____

RESOURCE LIST/RESPONSE EQUIPMENT/SUPPORT EQUIPMENT

The calculated on-water responses required for this facility are shown below (see Annex 9 for the planning volume worksheet):

- Tier I - 12 hours, 840 bbl/day
- Tier II - 36 hours, 1,120 bbl/day
- Tier III - 60 hours, 1,680 bbl/day.

All spill response equipment is contracted for this site. The following describes the available equipment. The MT-WY Co-op, Olympus Technical Services (and their subcontractors) inspect and test their spill response equipment semiannually. Mr. Michael Perrodin, BNSF Manager Environmental Operations and QI is responsible to ensure that the inspections and tests are conducted and documented. Response equipment is supplied by many response companies in the area, their local sub-contractors, and a contracted OSRO. All equipment is inspected quarterly by these companies. Deployment drills are conducted annually in the late summer by responders.

All equipment lists are included at the end of this Annex. The Billings subcontractor telephone numbers are also included. BNSF has entered into response agreements with Olympus Technical Services, Hulcher Services, and Onyx Special Services, Inc. (a class E OSRO), and is a member of the MT-WY Spill Co-op.

Boom

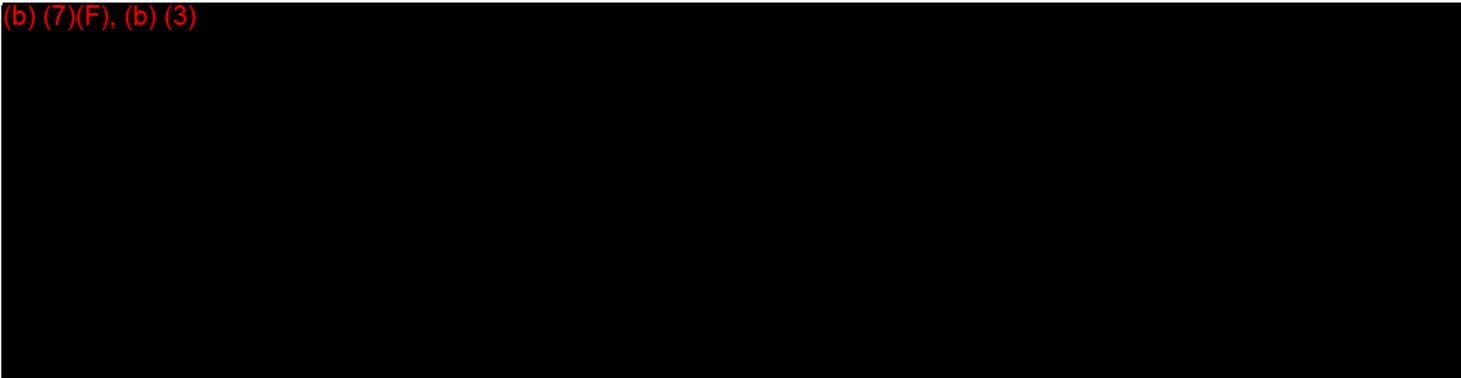
Almost three thousand feet of containment boom is immediately available in the Billings, Montana area through the MT-WY Co-op. Five hundred additional feet of boom is available through Olympus Technical Services located at 454 Moore Lane #2, Billings, Montana. Onyx Special Services of Wisconsin also has over 22,000 feet of boom readily available within 36 hours of Billings. Therefore, 3,500 feet of containment boom are immediately available in the Billings, Montana area and over 22,000 feet available within 36 hours. This quantity of boom is ample to cross Alkali Creek numerous times as the creek is less than 40 feet across at its widest point. In a worst-case discharge, the spill would enter Alkali Creek, but would not reach the Yellowstone River due to flooding and widened creek beds. The Yellowstone River is less than 1,000 feet across in this area.

Tank Storage

Approximately (b) (7)(F), (b) (3) (in the form of vacuum trucks, storage trucks and frac tanks) are available from Olympus Technical Services' subcontractors (see equipment lists at end of Annex 3). Sufficient storage is therefore available for over the required Tier III daily recovery rate (3,360 bbls). If additional storage is required, tank cars could be brought to the site within 12 hours, and arrangements could be made with local refiners for additional temporary storage.

Pumps

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

**Communications**

Radios, cellular phones, and land lines will be used in the case of a spill. All emergency responders have cellular phones. BNSF personnel also use a radio system. Additional communication equipment, including radios and telephones can be rented, if necessary, from Billings subcontractors, including Industrial Communications and Electronics, and Cowboy Communications (see Billings subcontractor equipment list).

Other

MT-WY Co-op and Olympus Technical Services or their subcontractors also provide a variety of other response equipment (see equipment lists), including personal protective equipment, earth moving equipment, hand tools, lighting, compressors, storage, etc. Hulcher Services would provide additional equipment and personnel should the response require it.

Olympus Technical Services and Billings, MT Subcontractor

2008 Equipment List

EMERGENCY RESPONSE EQUIPMENT INVENTORY

**BNSF Railway Company
Alkali Creek, Billings, Montana**

Inspected by: _____ Signature: _____ Date: _____ Time: _____

Olympus Response Inventory

Item	Quantity	Unit
Helena		
Vehicles and Heavy Equipment		
Backhoe – Cat, 416, 4WD	1	each
Bobcat – Model 743	1	each
Trailer – Gooseneck	1	each
Trailer – Tork Flatbed	1	each
Trailer – Vac, 1,000 gallons	1	each
Trailer – Wells Cargo	1	each
Truck – Ford 3/4-Ton, 4WD	1	each
Truck – Dodge 1-Ton, 4WD	1	each
Truck – GMC 1/2-Ton, 4WD	1	each
		each
Field Equipment and Materials		
Auger – hand with bits and extensions	1	each
Bag Filter – 400 cfm	1	each
Bags – 6 mil, case	1	each
Bags – soil; 1 yard	10	each
Battery Charger, 16 amp	1	each
Blower, Coppus	1	each
Bolt Cutter	1	each
Camera – video, Cannon E65, 8mm	1	each
Camlock Fittings, various	1	each
Clinometer – Suunto	2	each
Coliwasa Sludge Sampler – 6-inch	1	each
Compass – Brunton pocket transit	1	each
Compressor – air, Campbell Hausfield, 2 hp	1	each
Cone – traffic	6	each
Controller – pneumatic for pumps	1	each
Coppus ventilator	1	each
Coveralls – Drua Fab (Level B incapsulated suit), each	36	each
Coveralls – Kappler, CPS3, poly coated (dark gray), each	2	each
Coveralls – Saranex sleeveless jackets with hoods, 12/case	1	case
Coveralls – Saranex, poly coated (gray), 12/case	1.25	case
Coveralls – Tyvek (white), 25/case	10	case
Coveralls – Tyvek, poly coated (yellow), 12/case	10	case
Crowbar	2	each
Drum – 30-gal poly OH	1	each
Drum – 30-gal, 17H	6	each
Drum – 30-gal, closed top	4	each
Drum – dolly	3	each
Drum – grappler	1	each
Drum – poly, 105-gal open top	2	each

EMERGENCY RESPONSE EQUIPMENT INVENTORY

**BNSF Railway Company
Alkali Creek, Billings, Montana**

Item	Quantity	Unit
Drum – poly, 55-gal	4	each
Drum – steel, 20-gal open top	16	each
Drum – steel, 55-gal, closed top	15	each
Drums – steel, 55-gal open top	8	each
Drums – steel, 85-gal overpack	8	each
Fuel pump – electric	1	each
Generator – Honda, 5000 watt, model G50	1	each
Generator – Honda, 6000 watt	1	each
GFI – ground fault indicator, standard	2	each
Heater – Kerosene space, Homelite 150000 BTU	1	each
Heater – portable electric	5	each
Hip Chain – distance measurer and thread pouch/belt	1	each
Hose – air, ½-inch, 50 feet	1	each
Hose – air, ¾-inch, 50 feet	1	each
Hose – cutting torch, 50 feet	1	each
Hose – discharge, 2-inch	1	each
Hose – discharge, 3-inch	1	each
Hose – garden	3	each
Hose – suction, 1.5-inch, 30 feet	1	each
Hose – suction, 2-inch, 30 feet	1	each
Hose – suction, 3-inch, 50 feet	6	each
Instrument – OVA-128 with charger, Foxboro Co.	1	each
Jack – hi-lift	1	each
Kit – ferrous iron sampling, Hach model 1R-18C	1	each
Kit – first aid	6	each
Kit – hazcat	1	each
Kit – nitrate sampling, Hach model NI-14	1	each
Ladder – 16-foot aluminum	1	each
Ladder – 8-foot aluminum	1	each
Ladder – 8-foot fiberglass	1	each
Level – 48-inch Contractor	1	each
Light – flash	4	each
Light – flashing	5	each
Light – halogen set	2	each
Meter – conductivity, Oakton TDS Testr 1	1	each
Meter – DO, YSI model 518	1	each
Meter – Global Water, Flow Probe Handheld	1	each
Meter – Industrial Scientific, LEL Monitor with charger	1	each
Meter – Industrial Scientific, Oxygen Monitor, batteries	1	each
Meter – ORP Meter		
Meter – manometer, Dwyer	1	each
Meter – pH, Oakton pH Testr 3	1	each
Meter – Soil moisture	1	each
Meter – Tank, Pipe and Cable Locator	1	each
Meter – Gastech LEL/O2 with charger	1	each

EMERGENCY RESPONSE EQUIPMENT INVENTORY

**BNSF Railway Company
Alkali Creek, Billings, Montana**

Item	Quantity	Unit
Neutralizer – Acid, 5 gallons	1	each
Neutralizer – Caustic, 5 gallons	1	each
PCB Cleaner, pipe-x	2	each
Pressure washer, Hotsy	1	each
Probe – interface, Waterra	1	each
Probe – water level, Keck	1	each
Probe – water level, Solinst 101	1	each
Pump – 1.5-inch trash pump, gasoline powered	1	each
Pump – air diaphragm, Sandpiper	1	each
Pump – air diaphragm, Wilden M15, 3-inch	1	each
Pump – air diaphragm, Wilden M4, 2-inch	1	each
Pump – air displacement, 1.5-inch, QED Purge Pump	2	each
Pump – bladder, 1.5-inch, QED Well Wizard	1	each
Pump – Grundfos Rediflo 2-inch sampling pump and controller	1	each
Pump – Grundfos Rediflo 4-inch sampling pump	1	each
Pump – Homelite water bug	2	each
Pump – Industrial Scientific, Sampling for LEL and O2 Meters	1	each
Pump – positive displacement with air motor	1	each
Pump – Sump, various ½-inch	4	each
Rakes	2	each
Rivet gun	1	each
Sawzall Milwaukee	3	each
SCBA – 30 minute std. cylinders with regulator (not for Scott SCBA)	1	each
SCBA – 30 minute std. cylinders with regulator for Scott Air-Pak 2.2	4	each
SCBA – Scott Air-Pak 2.2; with 30-foot cyl	4	each
SCBA Facemasks	4	each
Scoop – stainless steel	2	each
Sensidyne detector kit	1	each
Separator – air/oil	1	each
Shovel – non-sparking	2	each
Shovel – stainless steel sampling	1	each
Shovel, metal	11	each
Signs – road construction with stand	2	each
Sorbent booms – bale	9	each
Sorbent pads – bale	24	each
Sorbent pads – oil & water – bales	3	each
Sorbent sweeps – bales	17	each
Survey Accessories – 12-foot prism pole, single prism, transit software	1	each
Survey Instrument – Nikon DTM-520 total station	1	each
Survey Radios – Motorola TalkAbout 250; incl. 2 portable radios, case	1	each
Survey rod – Mound City, 25-foot	1	each
Tape measure – 100-foot	3	each
Tools – wrenches miscellaneous	1	each
Torch – propane	1	each
Tripod – Brunton compass extension	1	each

EMERGENCY RESPONSE EQUIPMENT INVENTORY
BNSF Railway Company
Alkali Creek, Billings, Montana

Item	Quantity	Unit
UV Lamp – Mineralight Model – UVGL – 48	1	each
Vac U Max	1	each
Vacuum – mercury maxiguard	1	each
Vacuum – Shop vac	2	each
Vest – orange traffic	10	each
Visqueen – 6 mil	7	each
Waders – hip	2	pair
Wrench – impact, Black and Decker ½-inch	1	each
Billings		
Vehicles and Heavy Equipment		
Truck – Ford 4WD 3/4T with lift	1	each
Truck – Ford 4WD 1/4T	1	each
		each
Field Equipment and Materials		
Cascade System – ARAP escape bottle with full face mask, 50-foot hose with quick connects, one 3-way air supply/pressure gauge	2	each
Absorbent – ultrasorb	4	each
Auger – hand	1	each
Bags – 6 mil	100	each
Cartridges – respirator; North	0.5	case
Chlor-N-Oil	1	each
Compactor – plate, Wacker	1	each
Cone – traffic	2	each
Coolers – large	6	each
Coolers – small	1	each
COPPUS Ventilator	1	each
Coveralls – Tyvek (white), 25/case	6	case
Coveralls – Tyvek, poly-coated (yellow), 12/case	10	case
Cutting Torch Hose	2	each
Cutting Torches	1	each
Drill – ½-inch, Makita Model NHP1310, 2-speed	1	each
Drum – 20 gal steel; OH	3	each
Drum – 55 gal CH steel	6	each
Drum – 55 gal OH, steel	6	each
Drum – 55 gal poly OH	1	each
Drum – 85 gal poly overpak	2	each
Drum – 85 gal steel overpak	5	each
Drum – dolly	1	each
Drum – opener	1	each
Earplugs	1	each
Extension Cords	4	each
Eye Wash	3	each
Fence Post Driver	1	each
Fire Extinguishers-15#	3	each

EMERGENCY RESPONSE EQUIPMENT INVENTORY

**BNSF Railway Company
Alkali Creek, Billings, Montana**

Item	Quantity	Unit
Fire Extinguishers-3#	4	each
Fittings – camlock	1	each
Fittings – PVC	1	each
Floor Dry	7	each
Generator, portable Honda 5,000 watt, SN#EB5000XK1A	1	each
Glass Rods	1	each
Gloves – latex disposable	1	each
Gloves – petroflex	1	case
Gloves – solvex		case
Grinder	1	each
Hammer – carpenter	1	each
Hammer – sledge	1	each
Hardhats	8	each
HEPA Vac – model 829117, SN#s8291171074	1	each
Hose – 2-inch suction with fittings	2	each
Hose – 3-inch suction with fittings	1	each
Hose – air with fittings	1	each
Hose – air ½-foot	1	each
Hose – Chemical Pump 1-inch	1	each
Hose – Garden, 50-foot section	3	each
Kit – chlor dtect	1	each
Kit – Petro Flag Soil Test	1	each
Kit – first aid	3	each
Labels (flammable, poison, etc.)	1	each
Ladder – 16-foot extension	1	each
Level – contractors	1	each
Light – flash	3	each
Light – halogen	1	each
Lime	3	bag
Meter – conductivity, Hanna 4, pocket model	1	each
Meter – LEL/O ₂ /H ₂ S/CH ₄	1	each
Meter – organic vapor, Thermo Environmental Instruments, model 580B, SN#580B-44809-273	1	each
Meter – pH, Hanna 3, pocket model	1	each
Pressure Washer – Hotsy, model 660, SN#c740700290	1	each
Probe – water level, Keck, model ET-94, SN#730	1	each
Probe – water Interface	1	each
Pump – air diaphragm, ARO Model 66605J, ½-inch	1	each
Pump – air diaphragm, Wilden M4, 2-inch	1	each
Pump – air diaphragm, Wilden M15, 4-inch	1	each
Meter – Gastech Sensidyne, model 800, SN#9605	1	each
Pump – Gastech Series II Peristaltic, model 0711; with standard pump head	1	each
River Boom – 100 feet	3	each
Ropes – Nylon, various diameters	1	each

EMERGENCY RESPONSE EQUIPMENT INVENTORY

**BNSF Railway Company
Alkali Creek, Billings, Montana**

Item	Quantity	Unit
Safety Harness	2	each
Sawzall, DeWalt	1	each
SCBA cylinders; steel, 25-minute	5	each
SCBA Magnum ISI with regulator, mask and 25-minute steel cylinder	5	each
Shovels – Non Sparking	2	each
Shovels – metal	4	each
Signs – Men Working with stands	2	each
Sorbent – booms; 5-inch	4	bale
Sorbent – pads	20	bale
Strap – nylon	2	each
Survey Rod	1	each
Vacuum – Shop Vac – 18-gal	1	each
Visqueen – 6 mil	5	each
Waders – Hip	1	each
Wheel – measuring	1	each
Wrenches – Miscellaneous	1	each
Boise		
Vehicles and Heavy Equipment		
Trailer – Wells Cargo, 1995	1	each
Truck – Chevy 2WD 1/2T	1	each
Truck – Ford 4WD 3/4T with lift gate	1	each
Field Equipment and Materials		
Auger – hand	1	each
Blower – EG&G model DR404AR58M, 5 hp	2	each
Blower – 2 hp	1	each
Box – electrical, assorted	4	each
Box – tool with small hand tools	1	each
Cartridge – respirator; North PN#N7500-1 (Dust, Mists, OV)	6	each
Cartridge – respirator; North PN#N7500-83 (Asbestos, AG, OV, Dusts, Mists, Radionuclides, Radon Daughters)	12	pair
Cartridge – respirator; North PN#N7583P10 (Mercury)	2	pair
Cartridges – respirator; North Combination cartridges; pair	2	each
Cartridges – respirator; North multi-gas; pair	30	pair
Cartridges – respirator; North ammonia/methylamine; pair	2	pair
Chemical – Soda ash; 50 lb. bag	1	bag
Cable (3/4-inch x 50-foot)	1	each
Cleaner – PCB “Less than 10”, 5 gallons	2	
Cleaner – PCS-100, 5 gallons	3	
Cleaner – PipeX, Metal X, 5 gallons	3	
Compressor – air, Speedaire model 3Z406J.1	1	each
Cones – traffic	5	each
Coveralls – Tyvek (white), 25/case	3	case
Coveralls – Saranex, 12/case	2	case

EMERGENCY RESPONSE EQUIPMENT INVENTORY

**BNSF Railway Company
Alkali Creek, Billings, Montana**

Item	Quantity	Unit
Coveralls – Kleen Guard	1	case
Coveralls – Tyvek, large	4	case
Coveralls – Tyvek, poly-coated	9	case
Coveralls – Tyvek, x-large	10	case
Crowbar	1	each
Drill – ½-inch (Milwaukee 1630)	1	each
Drill – ½-inch, Skil Extra-Tool-600	1	each
Drum – dolly	1	each
Drum – grappler	1	each
Drums – 10-gallon metal (OT)	4	each
Drums – 20-gallon metal (OT)	3	each
Drums – 30-gallon poly (BT)	1	each
Drums – 30-gallon steel OT	2	each
Drums – 5-gallon metal buckets	8	each
Drums – 5-gallon plastic buckets	5	each
Drums – 55-gallon poly CH	2	each
Drums – 55-gallon metal (BT)	5	each
Drums – 55-gallon metal (OT)	3	each
Drums – 85-gallon Salvage metal (OT)	10	each
Drum – deheader	1	each
Extension Cord – electrical, 100-foot	2	each
Extension Cord – electrical, 25-foot	2	each
Fence – caution, 25-foot	2	roll
Fence – caution, 100-foot	1	each
Fence – caution, 50-foot	1	each
Fence Post – metal	9	each
Fire Extinguisher – 15 lb.	2	each
Fire Extinguisher – 5 lb.	3	each
First Aid Kit	5	each
Floor Dry	17	bag
Funnels	3	each
Generator – GE Honda 5000X	1	each
GFCI	1	each
GFI – ground fault indicator	1	each
Hose – air (with fittings)	1	each
Hose – garden	6	each
Hose – 2-inch discharge X 50 feet	2	each
Hose – 2-inch suction with fittings and screen	1	each
Hose – 3-inch suction with fittings	1	each
Kit – ferrous iron sampling, Hach model 1R-18C	1	each
Lights – flash	3	each
Lights – halogen	1	each
Meter – air flow/Anemometer – Series 470 – Dwyer	1	each
Meter – conductivity, YSI model 30/50-foot	1	each
Meter – dissolved oxygen, YSI model 51B	1	each

EMERGENCY RESPONSE EQUIPMENT INVENTORY

**BNSF Railway Company
Alkali Creek, Billings, Montana**

Item	Quantity	Unit
Meter – explosimeter/LEL, Dynamation model 502	1	each
Meter – gas detector hand pump Nalgene model DC013	1	each
Meter – gas detector tubes, Sensidyne and Drager	9	box
Meter – LEL/O2 explosimeter, Gastech model 1314	1	each
Meter – manometer – Dwyer – model 26 Mark II	1	each
Meter – pH, Orion model 230A	1	each
Meter – thermometer – Tel-TRV model BC550R	3	each
Meter – voltage, Autorange LCD Digital – model 22-163	1	each
Meter – water level, Solinst model 101	1	each
Mops	1	each
Panel – control, Redi-Flow Pump Master One	1	each
Pool – decon	1	each
Probe – interface, Solinst model 121	1	each
Probe – soil gas, AMS model 400.91, set 427.01	1	each
Pump – 2-inch submersible, Grundfos Redi-Flow2, .5 hp, 4W	3	each
Pump – 4-inch submersible, Grundfos Redi-Flow4	3	each
Pump – air diaphragm, Wilden M4	1	each
Pump – development with control box-QED/sample pro #350	1	each
Pump – Sump	1	each
Pump – Trash; “Teel”; 3.5 hp; Model 91232 Type 0062 01	1	each
PVC – ball valves, TUBV 4-inch	4	each
PVC – fittings and pipe, miscellaneous	1	lot
Reel – hose with 100 feet	1	each
Regulator – SCBA cascade regulator, Meco - Cascade A	1	each
Respirator – full face; North Model #7600	3	each
Respirator – half face; North Model #7700	3	each
River Boom – 100-foot	2	each
Rope – nylon, 100-foot	1	each
Rope – nylon, 50-foot	1	each
Rope #3 – Solid brad nylon (1,000-foot)	2	each
Sawzall – Milwaukee	1	each
SCBA – Extra 30-foot tanks	5	each
SCBA – ISI Ranger with 30-foot steel tank	5	each
Shovel – metal	2	each
Shovel – plastic	1	each
Sorbent – boom	11	bale
Sorbent – pad	9	bale
Sorbent – roll	2	bale
Sprayer – decon, Chapin model 1035, 2-gallon	1	each
Sprayer – decon, Chapin model 2009, 2.25-gallon	2	each
Steel Banding – ½-inch x 0.15 – 200-foot	1	each
Straps – Nylon	3	each
Survey Instrument – Level – David White – Meridian L6-20	1	each
Survey rod – Lietz Direct Elevation, 10-foot	1	each
Tank – moisture separator, 20-gallon	1	each

EMERGENCY RESPONSE EQUIPMENT INVENTORY

BNSF Railway Company
Alkali Creek, Billings, Montana

Item	Quantity	Unit
Tank – poly, 500-gallon with stand	1	each
Tape Measure – 100-foot, Tufboy model 1706	1	each
Tape Measure – 300-foot, Plumb model PL1709	1	each
Tools – miscellaneous (wrenches, sockets, screwdrivers, etc.)	1	each
Torch – Cutting Oxy/Acetylene Hose 20-foot	1	each
Torch – Cutting; 1 std., 1-demo torch, misc. fittings and handles	1	each
Torch – propane	1	each
Vacuum – Shop	2	each
Visqueen – 10 mil (20-foot x 100-foot)	1	each
Visqueen – 6 mil (20-foot x 100-foot)	2	each
Waders – chest	1	each

Signed by: _____

Date: _____

Montana-Wyoming Spill Co-Op

Equipment List
Acknowledgement Letter of Management

James W. Rice
Chairman

Montana/Wyoming Oil Spill Cooperative
338 Highway 87 East
Billings, MT 59101
(406) 255-5601

September 27, 1999

Mr. Michael J. Perrodin
BNSF
235 Mail Street
Havre, MT 59501

Dear Michael:

This correspondence is in response to your request for documentation of BNSF's status as a member of the Montana-Wyoming Oil Spill Control Cooperative.

[BNSF has been a Montana-Wyoming Oil Spill Control Cooperative member in good standing since September 23, 1997. BNSF and their contract responder, "Olympus Technical", are active participants in the Cooperative effort to provide equipment, response locations and information to members. Jim Rice - COOP Chairman 1999.]

If you need any more documentation, we have letters and meeting minutes. I can be contacted at (406) 255-5601.

Sincerely,

A handwritten signature in black ink, appearing to be 'Jim Rice', with a large loop at the beginning and a long horizontal stroke extending to the right.

Jim Rice
Chairman

EXHIBIT B

MONTANA - WYOMING OIL SPILL CONTROL COOPERATIVE REPRESENTATIVE CONTACT LIST

MEMBERS BY COMPANY	COUNCIL REP / ALTERNATE	OFFICE	EMAIL
BNSF Railway			
235 Main Street	Michael Perrodin	406-265-0483	michael.perrodin@bnsf.com
Havre, MT. 59501	BNSF ROC (24 hr.)	800-832-5452	
Fax: 406-265-0356	(Resource Operations Center)		
ConocoPhillips Company			
ConocoPhillips Billings Refinery	Greg Neill	406-255-2557	greg.d.neill@Conocophillips.com
401 South 23rd	Lisa Naccarato	406-255-2561	lisa.m.naccarato@conocophillips.com
Billings, MT 59101	Shift Super/Security	406-255-2560	
406-255-5692			
Fax: 406-255-2507			
Glacier Pipeline	Mike Hraban	406-255-5601	michael.i.hraban@conocophillips.com
338 Highway 87 East	Travis Wilke	406-255-5675	wilkepi@conocophillips.com
Billings, MT. 59101			
406-255-5692			
Fax: 406-255-5606			
CHS Inc.			
Cenex Pipelines and Terminals	Mike Stahly	406-628-5209	
Laurel, MT. 59044	Jeff Casey	406-628-5210	Jeff.Casey@chsinc.com
406-628-5200	Jacob Seel	406-628-5361	
	John Traeger	406-628-5202	
Cenex Refinery	Pat Kimmet	406-628-5220	
P. O. Box: 909	Ron Nissen	406-628-5384	
Laurel, MT. 59044	Dave Jany	406-628-5276	dave.jany@chsinc.com
406-628-5231			
Fax: 406-628-5390			
ExxonMobil			
ExxonMobil Refining & Supply	Wes Simpson	406-657-5267	wesley.e.simpson@exxonmobil.com
Billings Refinery			
P.O.Box: 1163			
Billings, MT. 59103			
Fax: 406-657-5374			
Emergency 24 Hr	Shift Superintendent	406-657-5320	
ExxonMobil Pipeline Company	Robert Foote	406-662-3569	robert.d.foote@exxonmobil.com
P.O.Box: 366	James Althoff	406-237-0603	james.althoff@exxonmobil.com
Bridger, MT. 59014	Emergency 24 Hr	800-537-5200	
406-662-3569			
Fax: 406-662-3546			
Marathon Oil Company			
1501 Stampede Avenue	Calvin D. Reavis	307-587-4961	cdreavis@marathonoil.com
Cody, WY. 82414	Marvin Blakesley	307-587-4961	mblakesley@marathonoil.com
Fax: 307-527-3920			
Red Butte Pipe Line Company (Marathon Pipeline Company)			
P.O.Box: 350	Sid Hetland - Powell, WY	307-754-5761x23	schetland@marathonpetroleum.com
Powell, WY. 82435	Rod Wittkop - Worland, WY	307-347-9241x29	rwittkop@marathonpetroleum.com
307-754-5761	Thad Paul - Powell, WY	307-754-5761x36	tpaul@marathonpetroleum.com
Fax: 307-754-2151	Charlie Sullivan - Powell, WY.	307-754-5761x28	cesullivan@marathonpetroleum.com
Rocky Mountain Pipeline			
P. O. Box: 30191	John McCleary	406-254-6966	jmccleary@pacpipe.co
Billings, MT. 59107	Gene Davis	307-864-5593	mdavis@pacpipe.com
Fax: 406-254-7520			
Emergency 24 Hr	Operations Control Center - Long Beach CA	1-866-800-7677	

EXHIBIT B

MONTANA - WYOMING OIL SPILL CONTROL COOPERATIVE REPRESENTATIVE CONTACT LIST

MEMBERS BY COMPANY	COUNCIL REP / ALTERNATE	OFFICE	PHONE	EMAIL
Terasen Pipelines (USA) Inc.		OFFICE		
Terasen Pipelines (USA) Inc.	Dean Dick (Engineering)	307-233-6169	(b) (6)	
800 Werner Court - Suite 352	Marc Jackson (Operations)	307-233-6162	(b) (6)	
Casper, WY. 82601		800-700-8666	(b) (6)	
Terasen Pipelines (USA) Inc. 247 E. 2nd Street Powell, WY. 82435 Fax: 307-754-7963	Mike Graham	307-754-7940	(b) (6)	Mike.Graham@terasen.com
Emergency 24 Hr	Oil Movements - PCC (Canada)	1-888-449-7539	(b) (6)	
Yellowstone Pipe Line Company		OFFICE		
338 Highway 87 East	Neil Steward	406-255-5641	(b) (6)	neil.steward@conocophillips.com
Billings, MT. 59101	Mike Hraban	406-255-5601	(b) (6)	michael.i.hraban@conocophillips.com
406-255-5600			(b) (6)	
Fax: 406-255-5625			(b) (6)	
MT/WY Coop Equipment Locations and Access Contacts		OFFICE		
Trailer 1, 2, & 5 - Glacier Pipeline Yard - 338 Hwy 87 East, Billings, MT 59101		MAIL		
	Jim Costello	406-255-5646	(b) (6)	
	Travis Wilke	406-255-5675	(b) (6)	
	Steve Marsee	406-255-7990	(b) (6)	
	Mike Hraban	406-255-5601	(b) (6)	
	COP Control Center - 24 Hr	800-231-2551	(b) (6)	
Trailer 3 - Strecker Ranch - 4345 Powmer Road, Billings, MT 59105		MAIL		
	Jim Costello	406-255-5646	(b) (6)	
	COP Refinery Security	406-255-2560	(b) (6)	
	COP Control Center - 24 Hr	800-231-2551	(b) (6)	
Trailer 4 - 763 Bernhardt Road, Laurel, MT		MAIL		
	CHS Dispatcher-24 Hr.	1-800-421-4122	(b) (6)	
	Jeff Casey	406-628-5210	(b) (6)	
	Jacob Seel	406-628-5361	(b) (6)	
	John Traeger	406-628-5202	(b) (6)	
Boat 1 - Inboard Jet - ExxonMobil Refinery - Main Gate (Contact Shift Foreman to ExxonMobil Refinery)		MAIL		
	Shift Superintendent	406-657-5320	(b) (6)	
Boat 2 Outboard 150Hp - COP Refinery - Main Gate (Contact Marsee, Neill or Sec		MAIL		
	Greg Neill	406-255-2557	(b) (6)	
	Steve Marsee	406-255-7990	(b) (6)	
	COP Refinery Security	406-255-2560	(b) (6)	

Conoco ICP

Equipment Resources

MT-WY COOP - OSR EQUIP: Trailers 1,5,6,7& Parts-CPL, 338 Hwy 87 East, Billings, MT
Trailer #2 retired 2006

Trailer 3 - Huntly Diversion Dam, Huntley, MT

Inspected By:	Hanser's		LAST INSP	Dec-07
Recovery Capacity:	7,645 bpd = 20% daily recovery rate of 1,529 bpd		(bpd capacity based on 20% efficiency)	
Equipment Type	Description - Model, Style, Size, Capacity	Qty	Location	Operational Status/Comments
TRAILER # 1			Hanser's	
Trailer	Well Cargo 11,500 GVW Trailer with roof rack drawtight sway control, divider wall and pull-down desk top. 2 5/16" hitch	1		OK
Anchors	anchors Size # 10	5	Curb-Side Stor	OK
Anchors	anchors Size # 18	5	Curb-Side Stor	OK
Boat	14-foot Jon boat	1	Roof Rack	OK
Booms	Absorbent booms 5" x 10' (4 per box)	120'	Street-Side	OK
Brushes	Cleaning Brushes 2 big 7 small	9	Curb-Side	OK
Pools	Collapsible Decon Pools	2	Curb-Side	OK
Sprayers	Liquid Sprayers 3gal	2	Curb-Side	OK
Soap	Simple Green liquid soap 1gal	3	Curb-Side	OK
Buoys	Buoys for boom	5	Curb-Side Stor	1 missing
Culverts	16 foot, 16-gauge, 15-inch culverts	2	Roof Rack	OK
Culverts	16 foot, 16-gauge, 8-inch culverts	2	Roof Rack	OK
D-Rings	4" D-Rings	5	Curb-Side	OK
Drum	55 gal steel drum	1	Rear-storage	OK
Ext. Cords	50' extension cords	100'	Street-Side	OK
Ext. Cords	Water tight extension cords 2-100' 2-50'	300'	Curb-Side Stor	OK
Extinguisher	Ansul fire extinguisher 30#	1	Floor-Mounted	OK
Fence Posts	5' x 6" fence posts	14	Curb-Side Stor	OK
Flashlights	flashlights w/batteries	6	Street-Side	OK
Floats	3" hose floats	6	Street-Side	OK
Floats	3/4" hose floats	7	Street-Side	OK
Gas Can	1- 1gal 1-1.5gal 2- 5gal plastic	4	Street-Side	1 extra 2.5 gal can
Gas Tank	6 gallon boat motor gas tank	1	Street-Side	OK
Generator	5000 watt ONAN generator	1	Floor-Mounted	OK
Gloves	Work gloves-rubber	6pr	Curb-Side	OK
Goggles	Safety Goggles	17	Curb-Side	OK
Hammer	Sledge Hammer	1	Curb-Side Stor	OK
Hose	3" x 25' suction hose and fittings	50'	Front Storage	OK
Hose	2" x 50' discharge hose with fittings	100'	Front Storage	OK
Hose	2" x 50' suction hose and fittings	50'	Front Storage	OK
Hose	100' 3/4" discharge hose with clamp	100'	Curb-Side Stor	OK
Jeri Can	5 gallon safety jeri can	1	Street-Side	OK
Light Stand	light stand with generator	1	Floor-Mounted	OK
Light Stand	Light Stand Only	1	Floor-Mounted	OK
Lights	1000 watt lights for light stands	2	Curb-Side Stor	OK
Line Gun	45 Caliber line gun with string canisters	1	Curb-Side	OK
Liners	55 gal drum liners	2 bx	Curb-side	OK
Motor	15 HP Yamaha boat motor	1	Floor-Mounted	OK
Oars	wooden & fiberglass oars with locks & paddles	3 pair	Curb-Side Stor	OK
Pads	Absorbent pads - 17" x 19" (100 per bundle)	300	Street-Side	OK
Pitchforks	5-tine pitchforks	2	Curb-Side Stor	OK
Plastic Bbl	Rubber Maid trash can 44gal	2	Curb-side	OK
Plastic Bbl	Rubber Maid trash can 20gal	1	Curb-side	OK

Conoco ICP

Equipment Resources

MT-WY COOP - OSR EQUIP: Trailers 1,5,6,7& Parts-CPL, 338 Hwy 87 East, Billings, MT
Trailer #2 retired 2006
Trailer 3 - Huntly Diversion Dam, Huntley, MT

Inspected By:	Hanser's		LAST INSP	Dec-07
Recovery Capacity:	7,645 bpd = 20% daily recovery rate of 1,529 bpd	(bpd capacity based on 20% efficiency)		
Equipment Type	Description - Model, Style, Size, Capacity	Qty	Location	Operational Status/Comments
Plastic sheet	Roll of plastic sheeting	2	Curb-Side	OK
Post Drivers	post drivers	2	Curb-Side Stor	OK
Pump	Honda pump (gas driven)	1	Street-Side	OK
Rope	Misc lengths of 1/4" 3/8" 1/2" 5/8"	1	Curb-Side	OK
Rope	Safety Quick Disconnect Rope Bridles	6	Curb-Side	OK
Pump	Monarch diaphragm pump, gas-driven	1	Floor-Mounted	OK
Rakes	Garden Rakes	1	Curb-Side Stor	OK
Bridge Bridle	Bridle to connect boom to bridge piers	1	Curb-side	OK
Shovels	Size 0 shovels 1 round nose, 1 square nose	2	Curb-Side Stor	OK
Skimmer	Manta Ray skimmer	1	Front Storage	OK
Skimmer	Acme vacuum skimmer	1	Street-Side	OK
Snap rings	5/8" snap hooks w/rope loop	7	Curb-side	OK
"O" Rings	3" Steel O-rings	21	Curb-side	OK
Stakes	3' steel stakes	4	Curb-Side Stor	OK
Skimmer	Aqua Guard RBS-05 Oil recovery system w/ Yamaha diesel engine	1		OK
Tape	Duct Tape	1 bx	Curb-Side	OK
Vests	adjustable life vests	8	Street-Side	4 extra
Vests	Incident Command Identification Vests	Misc	Curb-side	OK
Winch	Capstan gas powered winch	1		OK
MAINTENANCE TOOLS AND PARTS				
Additive	Fuel Stabilizer	2	Trailer #1	OK
Batteries	Flashlite-Dcell	18	Trailer #1	OK
Batteries	Lantern-6Volt	3	Trailer #1	OK
Capstan	Spark-plug (1) CJ6Y or Bosch WSR6F	2	Trailer #1	OK
Diaph. Pump	Spark-plug (1) RCJ8 or 840	1	Trailer #1	OK
Diaph. Pump	Spark-plug (1) A7NX or 843	2	Trailer #1	OK
Electrical	Combination Crimper/Cutter	1 Ea	Trailer #1	OK
Feeler Gage	Feeler Gage-Gapping Assortment	1 Ea	Trailer #1	OK
Grease	Lube Grease - Tubes	10	Trailer #1	1 missing
Hammers	Claw, Ballpean, hatchet, rubber mallet	1 Ea	Tool Bx Trail #1	OK
Hex Wrench	Combination Hex Wrench Set	1 Ea	Tool Bx Trail #1	OK
Honda Pump	Spark-plug (1) BPR6ES or 7131	1	Tool Bx Trail #1	OK
Knife	Utility Knife w/Blades	1 Ea	Tool Bx Trail #1	OK
Kohler Gen.	Spark-plug (4) A7C or 841	8	Tool Bx Trail #1	OK
Light Plant	Spark-plug (1) RJ-19LM or 868	2	Tool Bx Trail #1	OK
O / B Motor	Propeller (1)	2	Tool Bx Trail #1	OK
O / B Motor	Spark-plug (2) NGK-B7HS-10	4	Tool Bx Trail #1	OK
Oil	Motor- Oil 10-30	12qt	Trailer #1	missing- replace
Oil	motor-Oil 2-Cycle	12qt	Trailer #1	missing- replace
Onan Gen.	Spark-plug (1) BPR4HS-10 or Bosch W8BC	2	Trailer #1	OK
Pipe Wrench	10 inch	1 Ea	Trailer #1	OK
Pliers	Vise Grip, 10" & 7"	1 Ea	Trailer #1	OK
Pliers	Water Pump, 10"	1 Ea	Trailer #1	OK
Pliers	3 Piece Set, 6", cutting, long nose, slip joint	1 Ea	Trailer #1	OK

Conoco ICP

Equipment Resources

MT-WY COOP - OSR EQUIP: Trailers 1,5,6,7& Parts-CPL, 338 Hwy 87 East, Billings, MT
Trailer #2 retired 2006

Trailer 3 - Huntly Diversion Dam, Huntley, MT

Inspected By:	Hanser's		LAST INSP	Dec-07
Recovery Capacity:	7,645 bpd = 20% daily recovery rate of 1,529 bpd	(bpd capacity based on 20% efficiency)		
Equipment Type	Description - Model, Style, Size, Capacity	Qty	Location	Operational Status/Comments
Pry Bar	18 IN	1 Ea	Trailer #1	OK
Rags	Cotton Rags	1Bx	STORAGE BIN	OK
Saws	Hacksaw-10 IN., Woodsaw-10 IN.	1 Ea	STORAGE BIN	OK
Screw Drivers	Various Types/Sizes	6 Ea	STORAGE BIN	OK
Socket Set	13 Piece, 1/2" Drive w/spark plug sockets	1 Ea	STORAGE BIN	OK
Socket Set	24 Piece, 1/4" & 3/8" Drive	1 Ea	STORAGE BIN	OK
Tape	Electrical, black,red,blue,green	7 Rs	STORAGE BIN	OK
Tape	Duct Tape	4 Ea	STORAGE BIN	OK
Tape	Yellow Caution, Red Danger	1 Ea	STORAGE BIN	OK
Wrenches	18 Piece, Combination S.A.E. & Metric	1 Ea	STORAGE BIN	OK
Wrenchs	Adjustable, 12 IN., 10 IN., 8 IN.	1Ea	STORAGE BIN	OK
Grease gun	Cartridge type	1Ea	STORAGE BIN	OK
Jack	6 ton hydraulic jack	1Ea	Trailers 1, 2, 5	OK
Lug Wrench	Lug wrench	1Ea	Trailers 1, 2, 5	OK
Wheel chocks	Wheel Chocks 2 Sets.	1Ea	Trailers 1, 5	OK

Conoco ICP

Equipment Resources

MT-WY COOP - OSR EQUIP: Trailers 1,5,6,7& Parts-CPL, 338 Hwy 87 East, Billings, MT
Trailer #2 retired 2006
Trailer 3 - Huntly Diversion Dam, Huntley, MT

Inspected By:	Hanser's		LAST INSP	Dec-07
Recovery Capacity:	7,845 bpd = 20% daily recovery rate of 1,529 bpd	(bpd capacity based on 20% efficiency)		
Equipment Type	Description - Model, Style, Size, Capacity	Qty	Location	Operational Status/Comments
TRAILER # 3			Huntly Diversion Dam	
Trailer	1983 Monon 45' Tandem Axle Storage Van U-770-872 Vin# 1NN2F4524EM076247 Walk-up Ramp W/removable hand Rail	1		Ramp added 11/01
Anchors	Danforth anchors #18	12	Trailer 3	1 missing
Anchors	Heavy W/chain for Deflectors	11	Trailer 3	OK
Asenders	Rope pulling tools	9	Trailer 3	OK
Booms	50' Acme 6x6 containment boom (30 each)	1500'	Trailer 3	OK
Brushes	Cleaning Brushes	6	Trailer 3	OK
Buoys	15" mooring buoys	18	Trailer 3	3 missing
Carabiners	Rope pulling /fasteningtools	15	Trailer 3	OK
Cargo Net	3' x12' cargo net	6	Trailer 3	OK
Deflectors-Boom	Aluminum Boom Deflectors	25	Trailer 3	OK
Deflectors-Para	Aluminum Towing Paravanes for Deflectors	5	Trailer 3	OK
Gear Bags	Team Equipment Bags	5	Trailer 3	OK
Generator	5000 watt GENERIC generator Model 09586 SN / 1963644 & SN / 1980840	2	Trailer 3	OK
Hammer	8# sledge hammer	4	Trailer 3	1 missing
Ladders	Extension ladders 24ft	2	Trailer 3	OK
Lights/Stands	Alltrade model 510080, Twin 1600 watt work lights with stands	8	Trailer 3	OK
Line Gun	Bridger line gun with string SN NK379439	1	Trailer 3	OK
Pools	Collapsible Decon Pools	2	Trailer 3	OK
Post Driver	Dixie post driver	3	Trailer 3	OK
Power Cord	50' 12/3 power cords with twist lock caps	10	Trailer 3	OK
Presics	Rope pulling tools	15	Trailer 3	OK
Rings	3" dia, steel rings (Heavy)	16	Trailer 3	17
Rings	3" dia, steel rings (Light)	44	Trailer 3	45
Rope	1/4" poly rope - misc reels	misc	Trailer 3	OK
Rope	1/2" poly rope - misc reels	misc	Trailer 3	OK
Snap Hooks	10mm snap hooks	30	Trailer 3	10 total
Soap	Simple Green liquid soap 1gal	2	Trailer 3	OK
Sprayers	Liquid Sprayers 3gal	2	Trailer 3	OK
Stakes	1"x5' steel rebar stakes	100	Trailer 3	OK
Tow Bridles	Acme TBHD tow bridles	80	Trailer 3	1 extra
OTHER EQUIPMENT				
Boat	18 ft. Jet Boat - Inboard 302 HP Modified to carry boom fore and aft, work lights, (Boat #MT1102AH - Hull ID #MJG18209L989)	1	Exxon Refinery	
Boat	16ft. Custom Boat - w/ 150hp Johnson Outboard Jet, side & bow rails S/N WLG16118A101(Motor 04939795)	1	Conoco Refinery	

Conoco ICP

Equipment Resources

MT-WY COOP - OSR EQUIP: Trailers 1,5,6,7& Parts-CPL, 338 Hwy 87 East, Billings, MT			
Trailer #2 retired 2006			
Trailer 3 - Huntly Diversion Dam, Huntley, MT			
Inspected By:	Hanser's	LAST INSP	Dec-07
Recovery Capacity:	7,645 bpd = 20% daily recovery rate of 1,529 bpd <i>(bpd capacity based on 20% efficiency)</i>		
Equipment Type	Description - Model, Style, Size, Capacity	Qty	Operational Status/Comments
Boat-Trailer	EZ Loader Boat Trailer for 16ft Jet Boat	1	Conoco Refinery
Boat-Trailer	Easy-Loader Boat Trailer for 18 ft. Jet Boat	1	Exxon Refinery

Conoco ICP

Equipment Resources

MT-WY COOP - OSR EQUIPMENT (TRAILER 4): Cenex Pipeline, Laurel, MT**Inspected By:** Cam Fox/J. Casey, Cenex**Last Inspection:** 5/2008**Recovery Capacity:** 1,200 bpd = 20% daily recovery rate of 240 bpd (bpd capacity based on 20% efficiency)

Equipment Type	Description - Model, Style, Size, Capacity, etc	Qty	Location	Operational Status/Comments
TRAILER # 4				
AIR HOSE	4-50' SECTIONS	200'	On Hangers	
ALLENWRENCH	SET OF ALLEN WRENCHES - UP TO 5/8"	1 Set	Tool Box	
ANCHORS	15# DANFORTH ANCHOR	0	Missing	Probably in a Boat
	RAKE ANCHOR - w/40' of chain	1	FrontCompartment	Connecting Bars (5' rebar) on rear floor
ASCENDERS	MOUNTAINEERING ASCENDERS, PETZYL	6	Gear Bag	
BOOM	6"x 6" OK CORRAL BOOM; 10 - 50' SECTIONS	500'	Front Comprtmtnt	
BRUSH	WIRE BRUSH		Tool Box	missing
BRUSHES	18" HANDLE SCRUB BRUSHES	5	In Bins	
BUOYS	15" MOORING BUOY FOR END OF BOOMS	8	In Bins	
CHANNELLOCK	14" PAIR OF CHANNEL LOCK PLIERS	1	Tool Box	
COMPRESSOR	CAMPBELL HAUSFELD W/20 GAL. TANK	1	Rear Aisle	spare gauge on shelf
CRES.WRENCH	10" & 12" CRESCENT WRENCH	2	Tool Box	
DECON POOLS	150 GALLON PORTABLE DECON POOL	2	In Bins	
DRUM LINERS	PLASTIC DRUM LINERS	3Box	On Floor	
DRUMS	REMOVABLE TOP BARRELS, 55 GALLON	1	Back of Trlr	
DUCT TAPE	SILVER DUCT TAPE	1 Roll	Shelf	
ELECTRIC TAPE	BLACK ELECTRICAL TAPE	2 Roll	Tool Box	
END WRENCH	9 PIECE END WRENCH SET - 1/4" THRU 3/4"	1	Tool Box	
EXTSN CORDS	50' EXTENSION CORDS, #12 WIRE	6	On Hangers	
FIRE EXTGSHR	30# FIRE EXTINGUISHER (A:B:C)	1	Trailer Front	
FUNNEL	6" AND 4" FUNNEL	2	On Shelf	
GENERATOR	5 KW GENERATOR	1	Rear Aisle	
HAMMER	CLAW HAMMER	1	Tool Box	
LIGHT SET	PORTABLE LIGHT SETS, 2-500W HALOGEN LAMPS @	2	IN Bins	
O-RINGS	3" DIAMETER "O" RINGS, 15,000# TENSILE	22	On Shelf	
PIPE WRENCH	18" PIPE WRENCH & 12" PIPE WRENCH	2	Tool Box	
PLIERS	STD. PLIER, SIDE CUTTER, LINEMANS, NEEDLE NOSE	4	Tool Box	1 extra set- needle nose w/ red handle
PORT. POOL	1500 GALLON PORTABLE POOL; GRAY BLADDER+FITTINGS IN BOX+1½" RAILS	1		ASSEMBLY RQD.
POST DRIVERS	STEEL POST DRIVERS W/HANDLES	2		
PRUSIKS	6mm LINE	9		
PUMP	2" VERSAMATIC DIAPHRAGM PUMP W/SKIMMER (35 gpm max)	1	Rear Shelf	
ROPE 1/4"	5 SPOOLS	3000'	IN Bins	
ROPE 3/8"	10 SPOOLS	6000'	IN Bins	
Bridge Bridle	Bridle to connect boom to bridge piers	1	Front	Replaced in 2004
SCREW DRIVER	6 PIECE SCREW DRIVER SET	1	Tool Box	
SKIMMER	PNEUMATIC DRUM SKIMMER, ELASTEC TDS 118 (35 gpm)	1	Front Top Shelf	AIR/OIL FILTER INCL.
SLEDGES	8# SLEDGE HAMMERS	2		
SNAP LINKS	1" GATE OPENING, 8,000# TENSILE	0		missing 30
SOAP	SIMPLE GREEN SOAP	2 gal	In Bins	
SOCKET SET	13 PIECE ¼" SOCKET SET	1	Tool Box	

Conoco ICP

Equipment Resources

MT-WY COOP - OSR EQUIPMENT (TRAILER 4): Cenex Pipeline, Laurel, MT				
Inspected By: Cam Fox/J. Casey, Cenex			Last Inspection: 5/2008	
Recovery Capacity:		1,200 bpd = 20% daily recovery rate of 240 bpd	<i>(bpd capacity based on 20% efficiency)</i>	
Equipment Type	Description - Model, Style, Size, Capacity, etc	Qty	Location	Operational Status/Comments
SPRAYERS	3 GALLON SPRAYERS FOR DECON	3	In Bins	
STAKES	1" REBAR STAKES	37	Standing in Rear	
SUC. HOSE 2"	2" SUCTION/DISCHARGE HOSE, 3-15' SECTIONS	45'	On Hangers	
TEFLON TAPE	1/2" TEFLON TAPE	2 Roll	Tool Box	
TIE WIRE	18 GAUGE STOVE WIRE	1 Roll	Tool Box	
TOW BRIDLES	Z-LOCK W / KEEPER PIN	20		
WARNING TAPE	RED "DANGER" TAPE	2000'		
WARNING TAPE	YELLOW "CAUTION" TAPE	2000'		
WRECKING BAR	WRECKING BAR	1	On Shelf	

Conoco ICP

Equipment Resources

MT-WY COOP - OSR EQUIP: Trailers 1,5,6,7& Parts-CPL, 338 Hwy 87 East, Billings, MT
Trailer #2 retired 2006
Trailer 3 - Huntly Diversion Dam, Huntley, MT

Inspected By:	Hanser's		LAST INSP	Dec-07
Recovery Capacity:	7,645 bpd = 20% daily recovery rate of 1,529 bpd		(bpd capacity based on 20% efficiency)	
Equipment Type	Description - Model, Style, Size, Capacity	Qty	Location	Operational Status/Comments
TRAILER # 5			Hanser's	
Trailer	Cy-Corp Open Trailer 8'x16' w/canvas cover, built 2000 8'x16' trailer est. GVW 8,000 lbs., tandem axle, 2-5/16" ball hitch, electric brakes.	1		OK
Anchor	Heavy w/chain for Deflectors	2	Trailer 5	OK
Booms	100' Acme 6x6 booms	200'	Trailer 5	OK
Booms	50' Acme 6x6 booms	100'	Trailer 5	OK
Booms	25' Acme 6x6 booms	100'	Trailer 5	OK
Buoys	15" mooring buoys	2	Trailer 5	OK
Deflectors-Boom	Aluminum Boom Deflectors	5	Trailer 5	OK
Deflectors-Para	Aluminum Towing Paravanes for Deflectors	1	Trailer 5	OK
"O" Rings	3" Steel O-rings	5	Trailer 5	OK
Plastic Bbl	Rubber Maid trash can 44gal	1	Trailer 5	OK
Rope	3/8" poly rope - misc lengths	misc	Trailer 5	OK
Rope	5/8" poly rope - W/snap loops misc lengths	misc	Trailer 5	OK
Rope	1/2" poly rope - misc lengths	misc	Trailer 5	OK
Bridge Bridle	Bridle to connect boom to bridge piers	1	Trailer 5	in trlr 3 - need to put back in this trailer
Tow Bridles	Acme tow bridles	6	Trailer 5	3 missing
TRAILER # 6			Hanser's	
Trailer	2004 P.J. Trailer-Tandem Axle Utility Trailer. Black W / 4' side walls Serial # 4P5UT162142052387	1		OK
Boom	Carolina CB1302 Boom w/connectors 50'	200'	Trailer Deck	OK
Culvert	24" x 16' corrugated steel culverts w/one joining band	2	Trailer Deck	OK
Culvert	18" x 16' corrugated steel culverts w/one joining band	2	Trailer Deck	OK
Extinguisher	Ansul 30# Dry Chemical	1	Trailer Deck	missing
Fence	Chicken Wire Rolls 6-6', 1-3'	7	Trailer Deck	OK
Generator	Kohler 4 Cyl, Gas Powered, Liquid Cooled, 7500W	1	Trailer Deck	sold wih trailer #2
Hose	3" suction hose complete w/flotation and quick connect couplings	70'	Trailer Deck	OK
Skimmer	Acme Tunnel Model Floating Skimmer Pump w/2HP, 3600 RPM single phase 115/230 volt, explosion proof electric motor (Model FS400 ASK-51T-EX-2-1) capable of 40' of head at 50 gpm.	1	Trailer Deck	OK

Conoco ICP

Equipment Resources

MT-WY COOP - OSR EQUIP: Trailers 1,5,6,7& Parts-CPL, 338 Hwy 87 East, Billings, MT
Trailer #2 retired 2006

Trailer 3 - Huntly Diversion Dam, Huntley, MT

Inspected By:	Hanser's		LAST INSP	Dec-07
Recovery Capacity:	7,645 bpd = 20% daily recovery rate of 1,529 bpd		(bpd capacity based on 20% efficiency)	
Equipment Type	Description - Model, Style, Size, Capacity	Qty	Location	Operational Status/Comments
TRAILER #7		Hanser's		
Trailer	2004 Haulmark Tandem Axle Enclosed Cargo Trailer. Color White. VIN # 16HPB14274U038227	1		
Cable	1/4" steel cable	100'	Trailer 7	OK
Extinguisher	Ansul 30# Dry Chemical	1	Trailer 7	missing
Floats	4" hose floats	13	Trailer 7	OK
Gas Can	2.5 gallon plastic gas can	1	Trailer 7	OK
Gas Can	5 gallon plastic gas can	1	Trailer 7	OK
Gas Can	5 gallon steel gas can	1	Trailer 7	OK
Hammer	10lb sledge hammer	1	Trailer 7	missing
Hammer	Ball Pean	1	Trailer 7	missing
Hose	4" discharge hose with quick connect couplers	50'	Trailer 7	OK
Light	Drop Light w/Cord	1	Trailer 7	missing
Light Cords	12/3 electric cords for lights (3 each 100')	300'	Trailer 7	OK
Light Stands	Aluminum Light Stands	3	Trailer 7	OK
Lights	400 Watt Hubbell lights	3	Trailer 7	OK
Pitch Fork	Pitch Fork	1	Trailer 7	missing
Plastic	4 mill plastic roll	1	Trailer 7	OK
Post Drivers	Post Driver	2	Trailer 7	missing
Posts	5' x 6" steel fence posts	14	Trailer 7	missing
Pump	Marlow 3" Diaphragm pump with 2.8 HP B&S Gas Engine	1	Trailer 7	OK
Rakes	Steel Bow Rakes	2	Trailer 7	OK
Rope	3/8" Poly Rope -- Misc. lengths	600'	Trailer 7	OK
Screw driver	Screw driver	1	Trailer 7	missing
Shovel	Hand Shovel Square Nose	1	Trailer 7	missing
Signs	Benzene Warning Signs	3	Trailer 7	missing
Sorbent Boom	Absorbent boom 10' sorbent 3M type 270 (4 ea box)	240'	Trailer 7	OK
Sorbent Pads	Absorbent pads -17"x19" 3M type 156 -100 per bundle	1100	Trailer 7	OK
Sorbent Rolls	3' x 150' Sorbent Rolls (2 ea)	300'	Trailer 7	OK
Steel wire	Steel utility wire	1RL	Trailer 7	missing
Strap	Nylon strap	2RLS	Trailer 7	OK

FACILITY RESPONSE TEAM

Team Member	Response Time (hours)	Phone or Pager Number (day/evening)
Michael J. Perrodin	5	w: (406) 265-(b) (6) (b) (6)
Guy LaRango	0.5	24-hour number (406) 245-3554
David Smith	8	w: (406) 447-2307 (b) (6) (b) (6)

Notes:

w = Work phone
 h = Home phone
 c = Cellular phone

EMERGENCY RESPONSE CONTRACTORSDate of Last Update: February 2006

Contractor	Phone	Response Time	Contract Responsibility
Olympus Technical Services, Inc. 454 Moore Lane #2 Billings, MT 59101	(406) 245-3554 (24-hour number)	30 minutes	General spill control and cleanup
Montana-Wyoming Spill Control Cooperative Trailers located at 338 Hwy 87 East Billings, MT 59101	(800) 231-2551 (24-hour number)	30 minutes	General spill control and cleanup
Hulcher Services, Inc. 4811 King Avenue East Billings, MT 59101	(800) 659-8032 (24-hour number)	2 hours	General spill control and cleanup
Onyx Special Services P.O. Box 1323 Fond de Lac, WI 54936	(800) 688-4005	Within 36 hours	OSRO contractor; spill control and cleanup

EMERGENCY RESPONSE PERSONNEL

Response Title	Name	Phone ^(a)	Address	Response Time	Responsibility During Response Action	Response Training
Qualified Individual	Michael J. Perrodin	w: (406) 265-0483 c: (b) (6) h: [REDACTED] 24-hour: 1-800-832-5452	235 Main Street Havre, MT 59501	5 hours	Senior Manager Environmental Operations	80 hours with 8-hour refresher annually
Alternate Qualified Individual	David Smith	w: (406) 447-2307 h: (b) (6) c: [REDACTED]	825 Great Northern Blvd. Helena, MT 59601	8 hours	Manager Environmental Remediation	80 hours with 8-hour refresher annually
Alternate Qualified Individual	Guy LaRango Olympus Technical Services, Inc.	24-hour: (406) 245-3554	547 So. 20 th Street West Billings, MT 59102	30 minutes	Environmental Clean-up and Emergency Response	40 hours with 8-hour refresher annually

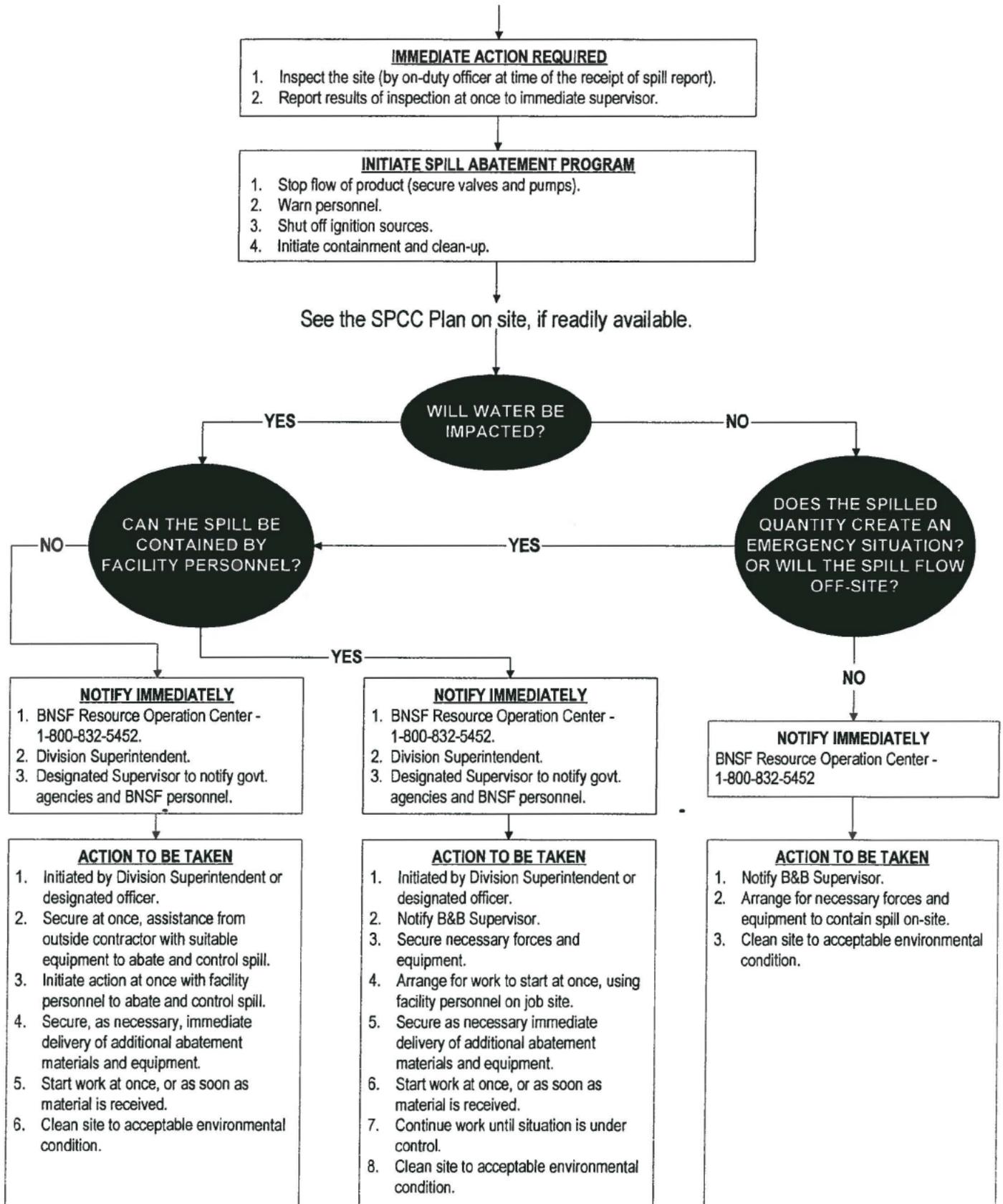
Notes:

(a) Phone number to be used when the person is not onsite.

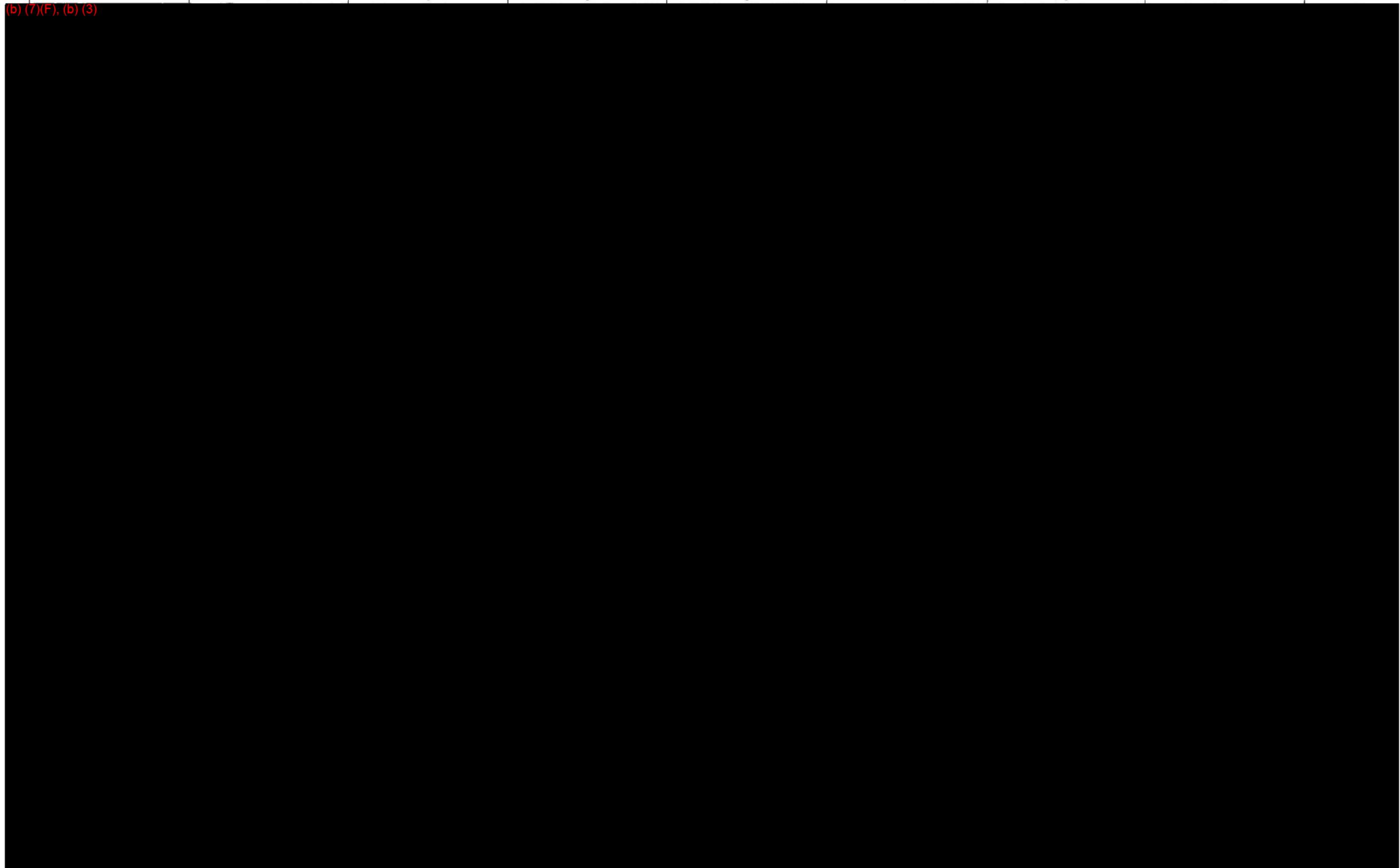
w = Work phone
c = Cellular phone
h = Home phone

BNSF RAILWAY COMPANY CONTINGENCY PLAN (EMERGENCY ACTION) FLOW CHART

SPILL DETECTED AND REPORTED BY ON-DUTY OFFICER



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



NO.	DATE	DESCRIPTION OF REVISIONS

0 1"
0 25.4mm

IF THIS BAR IS NOT
DIMENSION SHOWN,
ADJUST SCALES ACCORDINGLY

DRINK: _____

CHKD: _____

BNSF APPROVAL _____

BY: _____ DATE: _____

Kennedy/Jenks Consultants
Engineers & Scientists

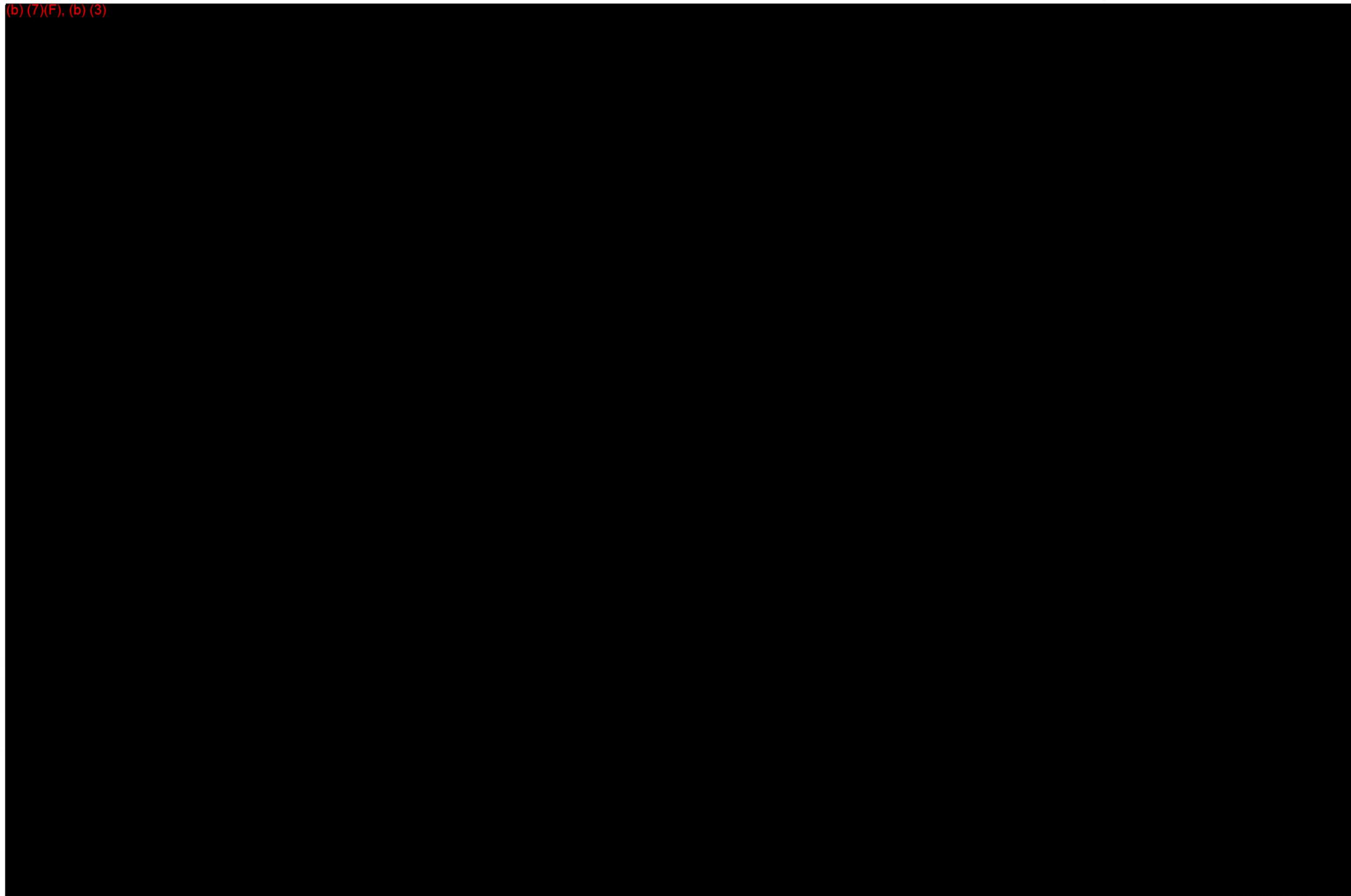


The Burlington Northern and
Santa Fe Railway Company

FIGURE 1 – TANK SITE PLAN
ALKALI CREEK DFO TANK
BILLINGS, MONTANA

DRAWING NUMBER _____
OF _____

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



Legend

-  Evacuation/Regrouping Information
-  Transportation/Access Information
-  River
-  Road

Vicinity Map

Kennedy/Jenks Consultants

BNSF Railway Company

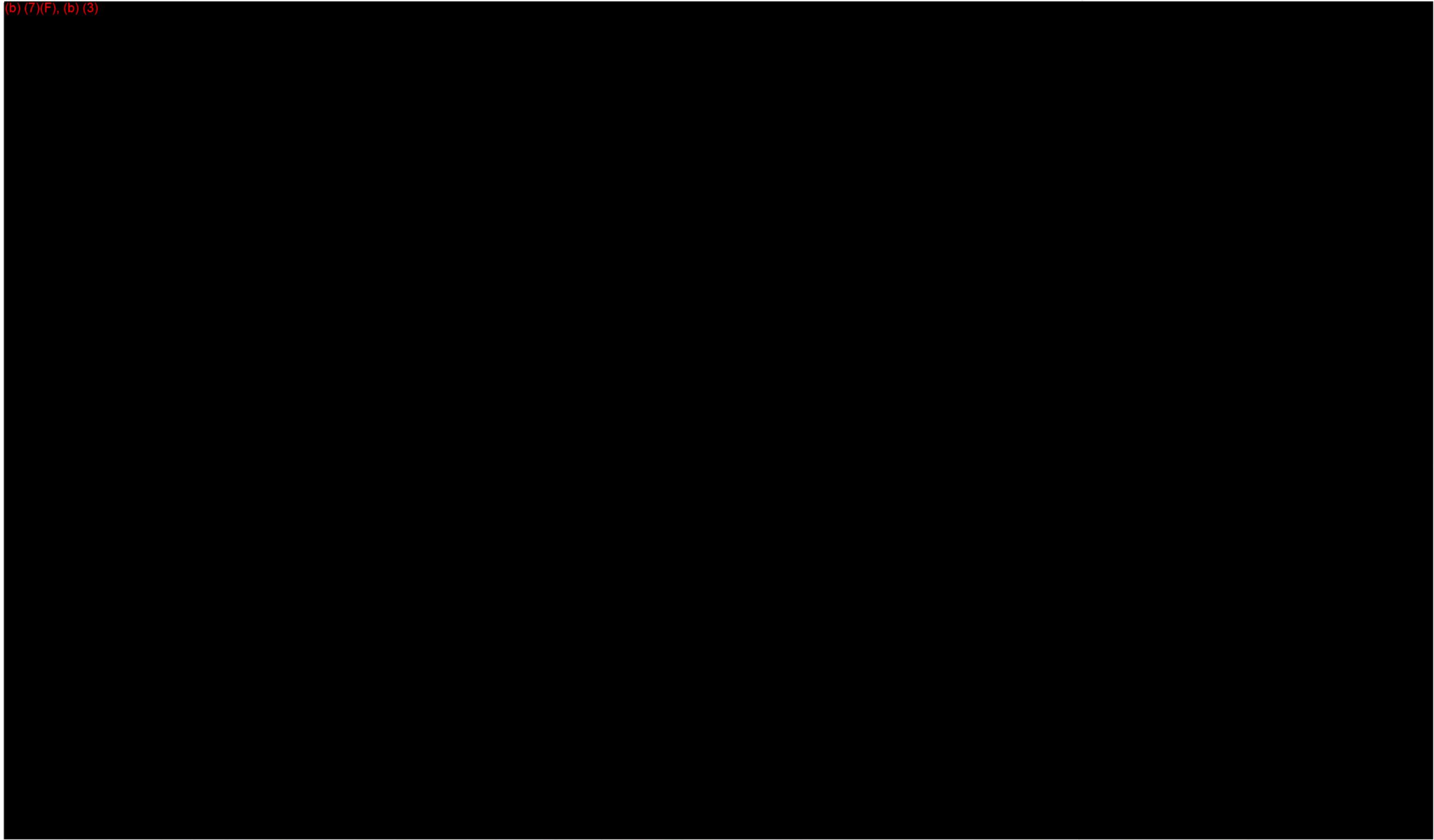
Alkali Creek
Billings, Montana

Vicinity Map

FIGURE 2

Last Revision: December 2010

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



Legend

-  Evacuation/Regrouping Information
-  Transportation/Access Information
-  River
-  Road

**Site Evacuation Plan, Transportation Plan,
Identification of Evacuation Regrouping Areas**

Kennedy/Jenks Consultants
BNSF Railway Company
Alkali Creek
Billings, Montana
Evacuation Routes/Regroup Points
FIGURE 3
Last Revision: December 2010

Integrated Contingency Plan

**Alkali Creek Diesel Fuel Storage Tank
Billings, Montana
FRP08Z0012**



BNSF Railway Company

**K/J 0596022.03
April 2009**

Kennedy/Jenks Consultants

**INTEGRATED CONTINGENCY PLAN
Alkali Creek Diesel Fuel Storage Tank
Billings, Montana
FRP08Z0012**

Prepared for

BNSF RAILWAY COMPANY

Prepared by

**KENNEDY/JENKS CONSULTANTS
ENGINEERS AND SCIENTISTS
32001 32nd Avenue South, Suite 100
Federal Way, Washington 98001
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K/J 0596022.03

April 2009

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**BNSF RAILWAY COMPANY
INTEGRATED CONTINGENCY PLAN (ICP) COVER SHEET**

<u>OWNER/OPERATOR OF FACILITY:</u>	BNSF Railway Company
<u>FACILITY NAME:</u>	Alkali Creek Diesel Storage Tank
<u>FACILITY ADDRESS (Street address or route):</u>	Six road miles north of Billings on Alkali Creek Road
<u>CITY, STATE AND ZIP CODE:</u>	Billings, Montana 59106
<u>FACILITY PHONE NUMBER:</u>	N/A
<u>LATITUDE (Degrees North):</u>	(b) (7)(F), (b) (3)
<u>DEGREES, MINUTES, SECONDS:</u>	
<u>DUN & BRADSTREET NUMBER:</u>	063624324
<u>LARGEST ABOVEGROUND OIL STORAGE TANK CAPACITY (Gallons):</u>	(b) (7)(F),
<u>NUMBER OF ABOVEGROUND OIL STORAGE TANKS:</u>	1
<u>LONGITUDE (Degrees West) :</u>	(b) (7)(F), (b) (3)
<u>DEGREES, MINUTES, SECONDS:</u>	
<u>STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE FOR BNSF:</u>	4011
<u>MAXIMUM OIL STORAGE CAPACITY (Gallons):</u>	(b) (7)(F), (b) (3)
<u>WORST CASE DISCHARGE AMOUNT (Gallons):</u>	
<u>FACILITY DISTANCE TO NAVIGABLE WATER MARK THE APPROPRIATE LINE:</u>	0-¼ mile <u> X </u> ¼ -½ mile _____ ½ -1 mile _____ > 1 mile _____
<u>EXPANSION</u>	There has been no additional expansion since 1985.

**BNSF RAILWAY COMPANY
INTEGRATED CONTINGENCY PLAN (ICP) COVER SHEET (Continued)**

NAME OF FACILITY Alkali Creek Diesel Fuel Storage Tank

TYPE OF FACILITY Diesel Oil Storage Facility

LOCATION OF FACILITY Six miles north of Billings, Montana on Alkali Creek Road

DATE OF INITIAL OPERATION 1985

NAME AND ADDRESS OF OWNER/OPERATOR

BNSF Railway Company
235 Main
Havre, Montana 59501

DESIGNATED PERSON ACCOUNTABLE FOR OIL SPILL PREVENTION AT FACILITY:

Name: Michael Perrodin
Title: Senior Manager Environmental Operations
Telephone Number: (406) 265-0483

MANAGEMENT APPROVAL

This ICP will be implemented as herein described, in accordance with the January 1992 National Contingency Plan and the December 1993 U.S. EPA Region VIII ACP.

Signature: Michael J. Perrodin Date: APRIL 26TH, 2014

Name: Michael J. Perrodin

Title: Senior Manager Environmental Operations

CERTIFICATION

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR Part 112, attest that this ICP has been prepared in accordance with good engineering practices.

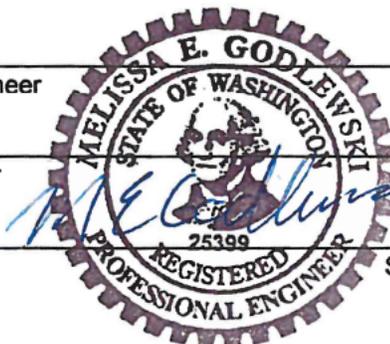
Signature of Professional Engineer

Date

Melissa E. Godlewski
Name of Professional Engineer

25399
Registration No.

Washington
State



4/25/14

Expires 6/3/14

**BNSF RAILWAY COMPANY
INTEGRATED CONTINGENCY PLAN (ICP) COVER SHEET (Continued)**

APPLICABILITY OF SUBSTANTIAL HARM CRITERIA (40 CFR 112)

Facility Name: Alkali Creek Diesel Fuel Storage Area

Facility Address: Six miles north of Billings, Montana on the Alkali Creek Road

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

Yes No

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

Yes No

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Appendix C of 40 CFR Part 112 or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

Yes No

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Appendix C of 40 CFR Part 112 or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?

Yes No

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

Yes No

APPLICABILITY OF SIGNIFICANT AND SUBSTANTIAL HARM (49 CFR 194.113(b)(5))

This facility meets the volume definition of significant and substantial harm contained in 49 CFR 194.113. This ICP does not address the Conoco pipeline into or out of this tank.

CERTIFICATION

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

Signature: Michael J. Perrodin

Name (please type or print): Michael J. Perrodin

Title: Senior Manager Environmental Operations

Date: APRIL 26TH, 2014

**INTEGRATED CONTINGENCY PLAN
AMENDMENT RECORD LOG SHEET
BNSF Alkali Creek Tank
Billings, MT**

Page 1

Amendment Number	Date	Section Amended	Description
1	04/09	SPCC Plan	Updated review date and included lining of containment area. Revised Photographs.
2	10/10	Section 1.2	Table 1-1 fixed. Added Information regarding lack of wellhead protection areas near tank and discharge route. Reference to QI information on Table 2-4. Reference to facility evacuation, site and access plans included in Annex 1.
		Annex 1	All facility maps updated.
		Annex 9	Revised transport information.
		ERAP	Facility maps added and updated.
		SPCC Plan	Updated Section 2.0 – Potential Discharges Fixed typographical error on page 7 of the SPCC plan to reflect lining of containment area. Replaced figures.
3	5/14	ICP Front pages	Cert. and Applicability pages – vi and vii
		Section 2	Pages II-1 and II-7 and Table 2-1
		Annex 6	Page A6-1
		SPCC Plan	Completed 5-Year review form. Place in front of plan behind original Certification page.

SECTION I PURPOSE AND SCOPE

As regulated under 40 CFR Part 112, the owners or operators of facilities that pose a threat of substantial harm to the environment by discharging oil into water bodies or adjoining shorelines are required to prepare and submit facility-specific response plans to the U.S. Environmental Protection Agency (EPA). In addition, 40 CFR Part 112 requires spill prevention control and countermeasure (SPCC) plans for fixed facilities having more than 1,320 gallons of cumulative oil storage that could reach navigable waters during a spill event. An SPCC plan has been prepared and is provided in Appendix A.

As regulated under 49 CFR Part 194, the owners or operators of an onshore oil pipeline that, because of its location, could reasonably be expected to cause substantial harm, or significant and substantial harm to the environment by discharging oil into or on any navigable waters or adjoining shorelines must also prepare and submit facility-specific response plans to the U.S. Department of Transportation (DOT).

The purpose of the Integrated Contingency Plan (ICP) is to provide a single emergency response document for facilities subject to one or more federal regulations that require facility response plans. The scope of this ICP is to provide an emergency response manual for the BNSF Railway Company's (BNSF) Alkali Creek diesel fuel storage tank facility located north of Billings, Montana. This plan addresses only diesel fuel as the potentially spilled material. The Alkali Creek facility is required to submit a plan for the aboveground storage tank as both a fixed onshore facility and as a breakout tank associated with a pipeline. The ICP consolidates these plans, thus eliminating the confusion for responders to diesel spills on which plan to use for a particular incident. This plan has been developed by using the guidelines established by the EPA's National Response Team's ICP guidance document. In all cases, the forms provided may be used or the responders can provide similar information on other forms.

1.1 ICP OVERVIEW

This ICP is prepared in English as required under 49 CFR 194.107(b). The plan is developed as a response resource for those individuals responding to an emergency release of oil from the pipeline facilities described herein. As the individuals required to respond to a discharge as described under this plan are English speaking, the plan is developed in no other language.

This ICP is developed to be consistent with the National Contingency Plan (NCP), dated 15 September 1994, and the Region VIII Area Contingency Plan (December 1993), including the Fish and Wildlife and Sensitive Annex (July 1995).

BNSF will operate within the guidelines of the Incident Command System (ICS) in unified command with the appropriate state and federal agencies as described in the National Interagency Incident Command System (NIIMS). The following is a discussion of the tiered response.

1.1.1 Tiered Response Organization

Spill response will, because of typical resource staffing available locally, follow a tiered approach first using the local staff, contract resources, and agency resources such as police

and fire departments in unison with agency responders; increasing the level of response by bringing in material from outlying areas as required by the size of the incident, the ability to control it, and the gravity of the situation. As subsequent tiers are activated, they absorb the lower tiers of the response and assume the responsibility for management of the response. This is conceptually the same as the ICS used in other emergency response organizations such as fire fighters.

Conoco Pipeline Company (Conoco) maintains and operates the facility at Alkali Creek. The document at the end of this section outlines Conoco's methods of detection and spill mitigation procedures as stated in their "Oil Spill Response Plan-Yellowstone Pipeline Plan," Section 3.

The following tiers are established to help determine the appropriate level of response:

- **TIER I INCIDENT** - Tier I incidents can be managed and mitigated by spill responders without need for help from outside agencies.
 - BNSF Spill Response Team responds.
 - No evacuation required.

A typical Tier 1 incident might be a leak that simply requires tightening a valve or replacing a blown rupture disk. Cleanup can be achieved with a hand shovel without endangering personnel.

- **TIER II INCIDENT** - Tier II incidents require the technical assistance of outside agencies such as spill response contractors, environmental contractors, industrial specialists, or a governmental "strike team."
 - BNSF Spill Response Team responds.
 - Outside contractors with specialized equipment must be called in to mitigate the incident.
 - Evacuation is needed only in the immediate area of the spill or potential release area.
 - Local and/or state governments have responded with specialized technical personnel.

A typical Tier II incident might be a diesel fuel spill into Alkali Creek (non-worst case).

- **TIER III INCIDENT** - A Tier III incident would be considered an "area emergency."
 - BNSF Spill Response Team responds.
 - Incident cannot be properly abated with immediately accessible equipment.
 - Specialized spill response contractors must be called in to control the incident.
 - Evacuation of surrounding population is required.
 - Multiple local and state agencies are involved.

A typical Tier III incident might be a catastrophic diesel fuel spill into the creek.

In the event of a spill, BNSF will quickly respond with the resources readily available. During the course of the initial response, BNSF will make a determination of additional resources required and thus activate additional levels of response organization. This will include notification of the National Response Center for spills that may or have reached the water or exceed its reportable quantity.

BNSF personnel and their response contractors, in conjunction with oil spill response organizations (OSRO) and agency responders including the state and federal on-scene coordinator (OSC) will use the unified command structure to effectively unify command during spill response activities. At a small spill, a single individual may serve as the OSC. Larger spills will use the unified command structure to combine the various roles of federal, state, contractor, and responsible party OSCs into a single group to respond to spills. When the unified command supervisory structure is unified under the ICS, it provides a standard organizational model for emergency response. By using standard terminology and common job descriptions, the unified command allows the spiller, contractor, and government agencies to meld into a single, coordinated organization to combat spills. This organization can then address the spill as a single unit and coordinate efforts to manage the issues that occur such as cleanup methods (e.g., use of dispersants and waste disposal methods) and avoidance of sinking agents as cleanup techniques.

Environmentally sensitive areas include, but are not limited to, wetlands, streams, and rivers.

1.1.2 Types of Products Stored

Diesel fuel (No. 2 fuel oil) is the only product stored in this breakout tank.

1.2 GENERAL FACILITY INFORMATION

BNSF owns the diesel storage tank (known as the Alkali Creek diesel fuel storage tank). The tank is connected to the Conoco pipeline that provides fuel to the Montana Rail Link fueling facility in Laurel, Montana. The purpose of the tank is to relieve pressure at the intersection of the main 10-inch fuel pipeline with a 4-inch pipeline that delivers fuel to the Laurel Fueling Facility. The tank functions by relieving surges in the pipeline system and also receiving and storing oil transported by the pipeline. Spills of oil at the tank facility are covered by this ICP; however, any oil releases from the pipeline outside of the BNSF facility will be the responsibility of the pipeline company. An emergency telephone number for the pipeline company is included in the call-sheet in Table 2-1.

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

Only one response zone is associated with this breakout tank; therefore, a separate core plan has not been developed. No wellhead protection areas are located in the vicinity of this breakout tank. Facility information required by 49 CFR Part 194.113(a) and (b) is summarized in Table 1-1. Qualified Individual information is shown on Table 2-4 in Section II.

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

TABLE 1-1

Page 1 of 2

FACILITY INFORMATION SUMMARY

Date of last update: December 2010

Facility Information	
Facility Name: <u>Alkali Creek Diesel Storage Tank</u>	SIC: <u>4011</u>
Type of Product Stored: <u>Diesel fuel only</u>	
Size of Tank: <u>(b) (7)(F)</u>	
Worst Case Discharge Volume: <u>(b) (7)(F), (b) (3)</u>	
Owner: <u>BNSF Railway Company</u>	
Owner's address: <u>235 Main</u>	City: <u>Havre</u> State: <u>Montana</u> Zip Code: <u>59501</u>
Owner's phone number: <u>(406) 265-0483</u>	
Facility Address: <u>Approximately 6 road miles north of Billings, Montana on Alkali Creek Road</u>	
City: <u>Billings</u>	State: <u>Montana</u> Zip Code: <u>59106</u> County: <u>Yellowstone</u>
Location: <u>SW 1/4 of S11 T1N R25E</u>	
Directions to the facility: <u>From Billings, Montana travel northbound for approx. 6 miles on</u> <u>Alkali Creek Road</u>	
Facility Mailing Address: <u>N/A</u>	
Facility Phone Number: <u>N/A</u>	
Facility Fax Number: <u>N/A</u>	
Key contact for plan development and maintenance: <u>Michael Perrodin, Senior Manager</u> <u>Environmental Operations, BNSF</u>	
Phone Number: <u>(406) 265-0483</u>	
Date of oil storage start-up: <u>1985</u>	
Date of significant expansion: <u>None since 1985/startup</u>	
Qualified Individual: <u>Michael Perrodin; day (406) 265-0483; evening (406) 265-7816;</u> <u>(b) (6)</u>	
Alternate Qualified Individual: <u>Guy LaRango; day (406) 245-3554 (24 hour)</u>	
24 Hour Resource Operation Center: <u>1-800-832-5452</u>	

TABLE 1-1

Page 2 of 2

FACILITY INFORMATION SUMMARY

Facility Information
<p>Basis of determination for significant and substantial harm (see also Applicability of Substantial Harm Criteria on page vii):</p> <p>(b) (7)(F), (b) (3) s could cause injury to fish and wildlife and sensitive environments due to the tank's proximity to Alkali Creek and the creek's discharge to the Yellowstone River. This determination is based on the definition included in 40 CFR Part 112 for fixed facilities as well as the volume requirements contained in 49 CFR Part 194.103. The pipelines into and out of this breakout tank are owned and operated by Conoco Pipeline Company.</p>

The topographical features, drainage and flow patterns of the site are a gentle (<1%) slope to the northeast toward the north fork of Alkali Creek. Alkali Creek is classified as intermittent at the potential discharge point (USGS topographical maps are included in Annex 1). The north and south forks merge, and the stream becomes perennial approximately 500 feet northeast of the discharge point. Evacuation and access plans are included in Annex 1.

SECTION II CORE PLAN ELEMENTS

The information provided in this section describes necessary actions in the event of an actual emergency involving the discharge of oil. The Core Plan reflects the essential steps necessary to initiate, conduct, and terminate an emergency response including recognition, notification, and initial response (including assessment, mobilization, and implementation). Throughout Section II, references are made to specific annexes contained in Section III (Annexes). The Core Plan Elements section of the ICP includes the following components:

- **DISCOVERY** - A flow chart is provided to list the initial actions the person(s) discovering an incident should take to assess the problem at hand and access the response system.
- **INITIAL RESPONSE** - This section provides for activation of the response system following discovery of the incident. It includes 24-hour contact numbers and instructions regarding critical information to pass. This section also provides detailed information on the implementation of a response management system, including hazard assessment and resource protection strategies. In addition, problem assessment, establishment of objectives and priorities, implementation of a tactical plan, and mobilization of resources are discussed herein.
- **SUSTAINED ACTIONS** - This section addresses the transition of the initial response from the emergency stage to the sustained action stage.
- **TERMINATION AND FOLLOW-UP ACTIONS** - This section outlines demobilization of a response effort and the follow-up actions that need to occur.

2.0 DISCOVERY

The Contingency Plan (Emergency Action) Flow Chart (shown on next page) is presented to assist in determining initial courses of action to be taken upon discovery of an oil release.

2.1 INITIAL RESPONSE

2.1.1 Internal and External Notification

An Internal and External Notification Call Sheet (Table 2-1) identifies and prioritizes the names and telephone numbers of organizations and personnel that must be notified immediately in the event of an emergency. These numbers will be verified each time this plan is updated. BNSF's Resource Operations Center (ROC) will make the initial calls to national, state, and local agencies that need to be notified. The National Response Center (NRC) must be notified at the earliest practicable moment (within 2 hours) following discovery of a release. The contact list will be accessible to all facility employees to ensure that in the case of an emergency, any employee onsite could immediately notify the appropriate parties. Emergency response personnel have had appropriate emergency response training (see Annex 5). Response time will vary based on time of day and personnel activities. Olympus Technical Services, a local contractor, would be the first BNSF representative to arrive at the site.

BNSF RAILWAY COMPANY CONTINGENCY PLAN (EMERGENCY ACTION) FLOW CHART

SPILL DETECTED AND REPORTED BY ON-DUTY OFFICER

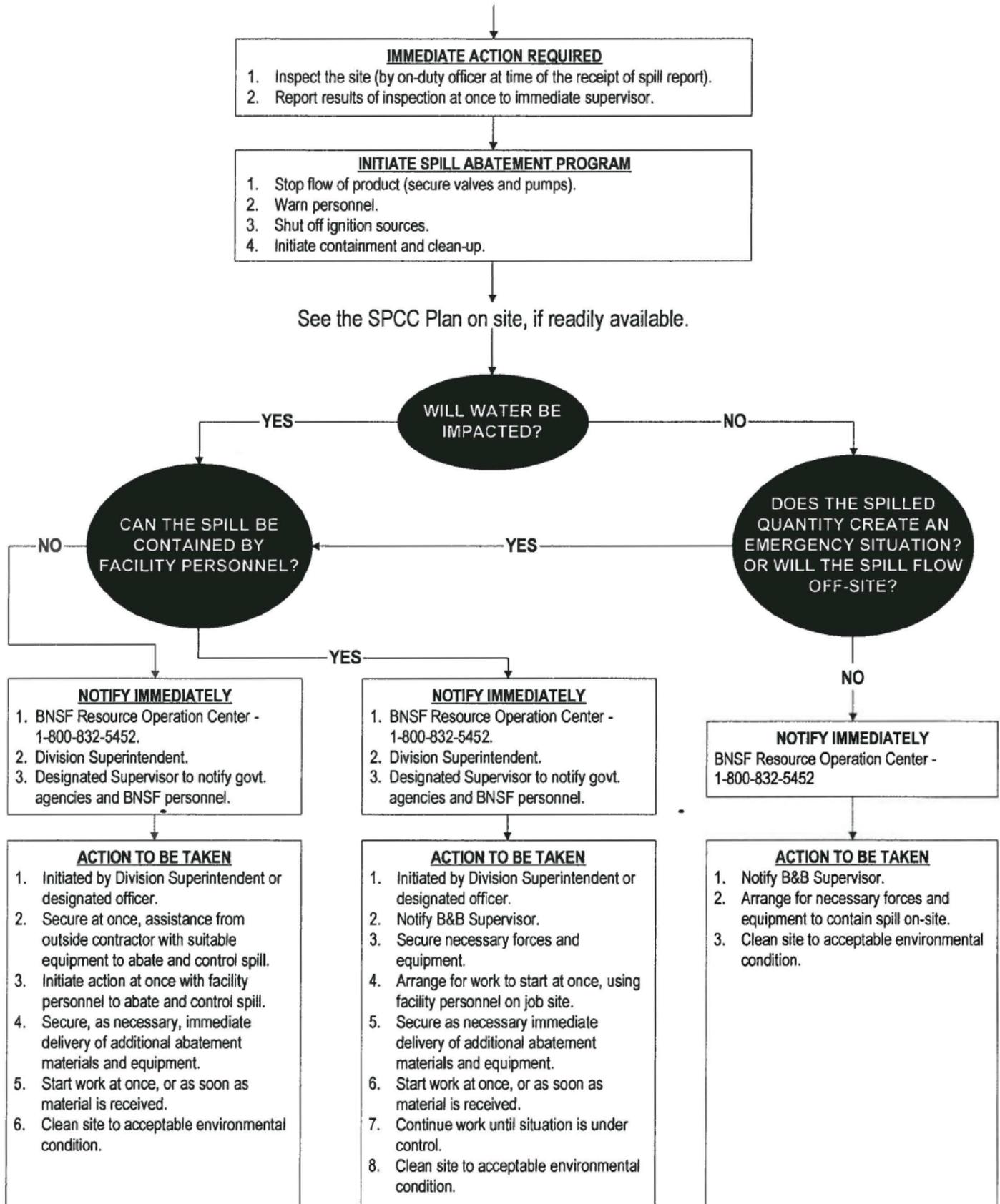


TABLE 2-1

INTERNAL AND EXTERNAL NOTIFICATION CALL SHEET

Reporter's Name: _____ Date: _____	
Facility Name: <u>Alkali Creek</u>	
Owner Name: <u>BNSF Railway Company</u>	
Facility Identification Number: _____	
Date and Time of Each NRC Notification: _____	
Latitude: (b) (7)(F), (b) (3)	
Longitude: _____	
BNSF Resource Operation Center will notify Division Superintendent or his designated representative immediately, so they can assume coordination of the emergency as required. The Division Superintendent (or designated coordinator) is responsible and required by Federal and State Law to notify Federal Agencies, State Agencies, and Local Agencies where applicable.	
Organization	Phone Number
BNSF	
Resource Operation Center	1 (800) 832-5452
Qualified Individual: _____ day Michael Perrodin _____ evening _____ cellular	(406) 265-0483 (406) 265-7816 (b) (6)
Alternate Qualified Individual: _____ 24-hour Guy LaRango (Olympus)	(406) 245-3554
Yellowstone Pipeline System	1 (800) 231-2551
Qualified Individual: _____ day George Jurovich _____ cellular	(406) 255-5641 (b) (6)
Emergency Response Contractors Olympus Technical Services, Inc. Montana/Wyoming Spill Cooperative Hulcher Services, Inc. Onyx Special Services (Oil Spill Response Organization)	(406) 245-3554 (24 hours) (800) 231-2551 (24 hours) 1 (800) 659-8032 (24 hours) (800) 688-4005
National Response Center (notify the NRC at the earliest practicable moment, within 2 hours of discovery of release)	1 (800) 424-8802 (24 hours)
Federal On-Scene Coordinator	(303) 293-1788 (24 hours)
Fire Marshal and Fire Department	911
Billings Highway Patrol	(406) 444-7000
Police Department	911

TABLE 2-1

INTERNAL AND EXTERNAL NOTIFICATION CALL SHEET

Organization	Phone Number
Montana Highway Patrol	1 (800) 525-5555
Montana Fire Marshall	(406) 444-2050
Area Committee	Not Applicable
State Emergency Response Commission	(406) 324-4777
Local Emergency Planning Committee (Chief Lorren Ballard)	(406) 657-8200
City of Hysham Drinking Water Supply	(406) 342-5544
City of Billings Wastewater Treatment Plant	(406) 657-8356
National Weather Service	(406) 652-1916
Local News (KULR 8) (KTVQ)	(406) 656-8000 (406) 252-5611
Hospital (Deaconess)	(406) 657-4000
Insurance (self-insured) BNSF Claims Department	1 (800) 832-5452 (24 hour)

This section also lists facility response personnel. Three tables are included in this section:

1. The Facility Response Team (Table 2-2) is composed of all personnel employed by BNSF whose duties involve responding to emergencies, even when they are not physically present at the site.
2. The Emergency Response Contractors (ERCs) (Table 2-3).
3. The Emergency Response Personnel (Table 2-4) is composed of the personnel employed by BNSF and ERCs, who will be the first people to respond in the event of a spill.

It is important to remember that the Alkali Creek facility is not equipped with a telephone. Any person(s) discovering a release of oil will need to initiate communications via cellular telephone, radios, or telephones at an offsite location (see Annex 2). Primary communication will be by land-line telephone or cellular phone. Secondary communication will be via BNSF radio system (160 MHZ). This radio system is installed at fixed facilities and in company vehicles. The system uses microwave transmissions and allows local and regional transmissions. Dialing 911 on the radio system connects the dialer to the BNSF dispatcher in Fort Worth, Texas. It also allows connection to telephone lines, if necessary.

At any time a Conoco Inc., Conoco Pipe Line Company, or Yellowstone Pipe Line Company employee observes a release of fuel occurring from BNSF's tank at the Alkali Creek Facility, or if a discrepancy in tank levels are observed, the employee will immediately notify BNSF by calling BNSF's 24-hour emergency contact telephone number listed in this plan.

At any time a BNSF employee, representative, or contractor observes a release of fuel occurring from Conoco Pipe Line Company or Yellowstone Pipe Line Company's piping, located at the Alkali Creek Facility, BNSF will immediately notify Conoco Inc. by calling Conoco Inc.'s 24-hour emergency contact telephone number listed in this plan.

As outlined on Table 2-1, the first number to call is the BNSF ROC followed by the Qualified Individual (QI). It is important to be able to provide the following information (if available).

- What is the nature of the incident?
- When was it discovered?
- Has the flow of the product been stopped?
- Have personnel been warned?
- Have ignition sources (if any) been shut off?
- Has the spill been contained and/or cleaned up (if possible)?
- Will water be impacted?
- Can the spill be contained by facility personnel?
- Does the spill quantity create an emergency situation? Or will the spill flow offsite?

TABLE 2-2
FACILITY RESPONSE TEAM

Team Member	Response Time (hours)	Phone or Pager Number (day/evening)
Michael J. Perrodin	5	w: (406) 265-0483 (b) (6) (b) (6)
Guy LaRango	0.5	24-hour number (406) 245-3554
David Smith	8	w: (406) 447-2307 (b) (6) (b) (6)

Notes:

w = Work phone
h = Home phone
c = Cellular phone

TABLE 2-3
EMERGENCY RESPONSE CONTRACTORS

Date of Last Update: February 2006

Contractor	Phone	Response Time	Contract Responsibility
Olympus Technical Services, Inc. 454 Moore Lane #2 Billings, Montana 59101	(406) 245-3554 (24-hour number)	30 minutes	General spill control and cleanup
Montana-Wyoming Spill Control Cooperative Trailers located at 338 Hwy 87 East Billings, Montana 59101	(800) 231-2551 (24-hour number)	30 minutes	General spill control and cleanup
Hulcher Services, Inc. 4811 King Avenue East Billings, Montana 59101	(800) 659-8032 (24-hour number)	2 hours	General spill control and cleanup
Onyx Special Services P.O. Box 1323 Fond de Lac, Wisconsin 54936	(800) 688-4005	Within 36 hours	OSRO contractor; spill control and cleanup

TABLE 2-4

EMERGENCY RESPONSE PERSONNEL

Response Title	Name	Phone ^(a)	Address	Response Time	Responsibility During Response Action	Response Training
Qualified Individual	Michael J. Perrodin	w: (406) 265-0483 c: (b) (6) h: 24-hour: 1-800-832-5452	235 Main Street Havre, MT 59501	5 hours	Senior Manager Environmental Operations	80 hours with 8-hour refresher annually
Alternate Qualified Individual	David Smith	w: (406) 447-2307 h: (b) (6) c:	825 Great Northern Blvd. Helena, MT 59601	8 hours	Manager Environmental Remediation	80 hours with 8-hour refresher annually
Alternate Qualified Individual	Guy LaRango Olympus Technical Services, Inc.	24-hour: (406) 245-3554	547 So. 20 th Street West Billings, MT 59102	30 minutes	Environmental Clean-up and Emergency Response	40 hours with 8-hour refresher annually

Notes:

(a) Phone number to be used when the person is not onsite.

w = Work phone
c = Cellular phone
h = Home phone

2.1.2 Establishment of a Response Management System

This section describes how the emergency response plan will be implemented and managed. Further discussions of the response management system are contained in Annex 3 of the ICP.

Coordination of the response effort is the responsibility of the QI. The QI has the responsibility and authority to take such action as is necessary to protect human health and the environment and to coordinate remedial actions with governmental agencies. A QI or designated alternate will reside within a short period of travel time to the facility and will be trained in all aspects of the ICP.

Due to the remote location of the Alkali Creek facility and the distance from BNSF personnel in Havre, Montana, the QI cannot be located within a short distance of the facility. The ERC will most likely be first on the scene. The ERC personnel are properly trained in all aspects of emergency response.

The QI or contractor designee has the authority to commit moneys for spill response and to take all reasonable measures (including securing outside contractors) to ensure that fires, explosions, and releases do not occur, recur, or spread to other areas. These measures may include stopping facility operations, collecting and containing released materials, and removing or isolating containers. If facility operations are stopped, the QI must visually monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever appropriate.

The duties of the QI or contractor designee are as follows:

- Ascertain from the reporting party the nature of the emergency, injuries, and releases.
- Activate internal alarms and hazard communication systems to notify all facility personnel.
- Alert any personnel in the immediate area and advise the removal of persons and equipment. Ask that all foremen/supervisors of all crafts in the area (mechanical, section, operating) account for the whereabouts of each of their crew members.
- Evaluate the severity of the incident and implement the ICP as appropriate.
- Verify the following calls have been made:
 - Police: 911
 - Fire Department: 911
 - BNSF Command Center: 1-800-832-5452
 - Yellowstone Pipeline OSC: 1-800-231-2551
 - Remainder of Notification, Call Sheet (Table 2-1)
- Establish the exact time of any fire, explosion, spill, or leakage.
- Assess the interaction between the spilled substance and water and/or other substances stored at the facility, and notify response personnel at the scene of that assessment.

- Assess the possible hazards to human health and the environment due to the release, including both the direct and indirect effects of the release (i.e., the effects of any toxic, irritating, or asphyxiating gases that may be generated) or the effects of any hazardous surface-water runoffs from water or chemical agents used to control fire and heat-induced explosion.
- Any animals that have been affected by release are not to be touched except by trained, authorized personnel.
- Assess and implement prompt removal actions to contain and remove the substance released.
- Coordinate rescue and response actions as previously arranged with all response personnel.
- Direct cleanup activities until properly relieved of this responsibility by the appropriate authorities [e.g., the Federal On-Scene Commander (OSC) who assumes control of a cleanup under National Contingency Plan (NCP) authority]. As specified in the NCP, the OSC may allow the responsible party to voluntarily and promptly perform removal actions.
- Initiate the ICS for ongoing actions (see following section).
- Use ICS forms as appropriate [see forms at the end of this section (Section 2.4)].

2.1.3 ICS

The ICS discussed in Section 1.1 will be followed in the event of a spill. This system organizes the response efforts for spills of any size. The five functional areas of the ICS are:

- Command (including health and safety, public affairs, liaison, and technical advisors)
- Operations
- Planning
- Logistics
- Finance/Administration.

A sixth functional area, Intelligence, may be established depending on the requirements of the situation as deemed necessary by the Incident Commander. The analysis and sharing of information and intelligence are important elements of ICS. In this context, intelligence includes not only national security or other types of classified information but also other operational information, such as risk assessments, medical intelligence (i.e., surveillance), weather information, geospatial data, structural designs, toxic contaminant levels, and utilities and public works data that may come from a variety of different sources. Traditionally, information and intelligence functions are located in the Planning Section. However, in exceptional situations, the IC may need to assign the information and intelligence functions to other parts of the ICS

organization. In any case, information and intelligence must be appropriately analyzed and shared with personnel, designated by the IC, who have proper clearance and a “need-to-know” to ensure that they support decision-making.

In a minor incident, a single person may serve as the OSC and perform all functions. In a major incident, the incident command may be comprised of a group of EPA, state, Coast Guard, and BNSF representatives. The EPA is the federal OSC for the area. In the event of a major incident, BNSF personnel will work in conjunction with the OSC, OSRO, state, and other agency responders under the unified command structure to allow for a coordinated response effort. The unified command structure incorporates EPA, state, contractor, and responsible party command structures into a single group for spill response. Organizing the unified command structure under the ICS allows the parties involved to use standard terminology and job descriptions to facilitate rapid coordination of unified command team member efforts. The following Incident Command System (ICS) Organization with unified command flow chart (Figure 1-0) illustrates the ICS. The following table lists the titles of the individuals who will fill the positions.

ICS	BNSF Representative
Incident Commander	Contractors/Manager Environmental Operations
Health & Safety	Manager Safety
Public Affairs	Corporate Relations
Liaison	Manager Environmental Operations
Technical Advisors	Contractors
Logistics	Contractor
Planning	Contractor
Operations	Assistant Manager Environmental Operations
Finance	Claims Manager

2.1.3.1 Incident Commander (IC)

1. Assess the incident priorities.
2. Determine in cooperation with other ICs the strategic goals and tactical objectives.
3. Develop or approve the incident action plan and implement those portions for which his/her agency is responsible.
4. Develop IC structure within his/her agency appropriate for the incident.
5. Assess response needs in cooperation with other ICs; order, deploy, and release needed resources and identify appropriate assignment of personnel within the ICS structure.
6. Serve as the ultimate incident safety officer, responsible for preventing injuries and/or death of response personnel.
7. Authorize information releases to the media in cooperation with other ICs.

2.1.3.2 Safety Officer (SO)

1. Ensure a site safety plan is prepared and released in coordination with unified command counterparts.
2. Assess safety hazards and unsafe situations on an ongoing basis.
3. Ensure that response personnel are briefed daily or more often as required regarding safety work practices.
4. Ensure all agency personnel have the training required to participate in spill response under the Occupational Safety and Health Administration (OSHA) regulations.
5. Provide or ensure training as necessary to meet OSHA regulations related to worker safety.
6. Work with unified command counterparts to ensure consistency of site safety standards.
7. Establish with unified command counterparts decontamination procedures and contamination reduction zones for all on-scene personnel and equipment.
8. Work with local public health officials regarding general health concerns related to oil contamination (i.e., beach closures, marina closures).
9. Assess environmental conditions to determine the level of personal protective gear required for response operations.

2.1.3.3 Liaison Officer (LO)

1. Serve as the initial point of contact for participating federal, state, and local agencies with a vested interest in the response.
2. Maintain a spill response summary distribution list for all public and private entities requesting spill response status reports.
3. Receive and coordinate all calls from public and private entities offering assistance or requesting information.
4. Identify public and private concerns related to the status and effectiveness of the spill response to the IC.

2.1.3.4 Public Information Officer (PIO)

1. Establish in cooperation with counterparts in the unified command, a press area and Joint Information Center.
2. Serve as the central clearing point for the dissemination of public information from the agency he/she is representing to both the unified command and media.

3. Coordinate approval of the unified command prior to releasing information to the media.
4. Organize and serve as a central clearing house for all media tours as approved by the unified command.
5. Organize and conduct unified command media briefings.
6. Resolve conflicting information and identify media concerns to the unified command.

2.1.3.5 Planning. The Planning section is responsible for the collection, evaluation, dissemination, and use of information about the development of the incident and the status of resources. Planning section chief duties include:

1. Collect information regarding the incident with respect to quantity and type of oil, loss rate, projected total loss before spill is secured, weather conditions, and current and projected trajectory of oil over time.
2. Current and projected response resources and schedule of delivery.
3. Natural, cultural, and economic resources actually impacted and projected impacts based upon trajectory and their sensitivity.
4. Recommend oil spill response activity priorities.
5. Potential oil spill countermeasures (skimming, booming, etc.) to be recommended to the unified commanders. (Note: Dispersants and in-situ burning are not expected to be appropriate for a spill from this tank, so these countermeasures are not considered in this planning.)
6. Develop an effective incident action plan based upon projected needs.
7. Modify the incident action plan to meet changing needs.
8. Anticipate changing resource needs.
9. Prepare alternative strategies and tactical operations based on incident potential and effectiveness of current operations (following consultation with operations chief).
10. Develop units within the section to meet the needs of the spill.
11. Identify to the IC specific areas where assistance is required from the staff of the other represented unified commanders.
12. Identify intelligence needs.

The Planning section may be subdivided as follows:

- Situation Unit
- Resource Unit
- Environmental Unit

- Disposal and Decontamination Unit
- Documentation Unit
- Demobilization Unit
- Intelligence Unit.

2.1.3.6 Operations. The Operations section is responsible for management of all tactical operations at the incident. Operations also:

1. Assists the IC in developing strategic goals and tactical objectives for the incident.
2. Develops operational plans.
3. Requests or releases resources through the IC.
4. Consults with the IC about the overall incident action plan.
5. Keeps the IC informed of situation and resource status within operations.
6. Supervises the unit operations.
7. Provides reports on spill response countermeasures efficiency.

Operations may be subdivided into the following components:

- Staging Unit
- On-Water Recovery Unit
- Beach Operations Unit
- Salvage Unit
- Air Operations Unit
- Wildlife Operations Unit
- Waste Handling and Disposal Unit.

2.1.3.7 Logistics. The Logistics section is responsible for arranging for facilities, services, and support materials for the incident. This section may be, subdivided into the following components:

- Communications Unit
- Medical Unit
- Food and Lodging Unit

- Supply Unit
- Facilities Unit
- Ground Support Unit.

2.1.3.8 Finance. The Finance section is responsible for tracking all incident costs and evaluating the financial considerations of the incident. Responsibilities of this section include:

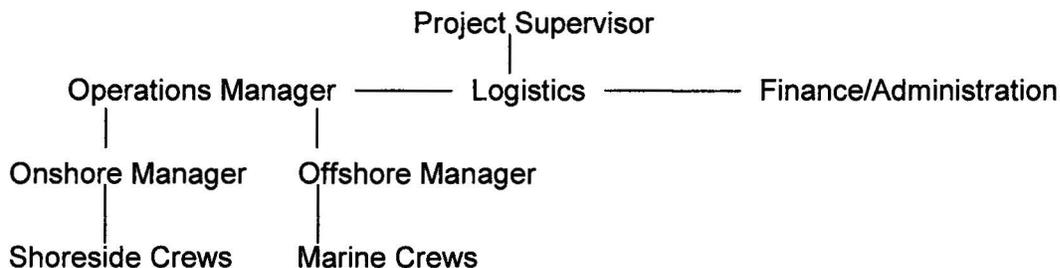
1. Future payments.
2. Future budgeting.
3. Payment of personnel costs.
4. Cost recovery.
5. Timely administration of contracts.

Finance section responsibilities may be subdivided as follows:

- Time Unit
- Procurement Unit
- Compensation/Claims Unit
- Cost Unit.

2.1.4 Response Contractor Job Descriptions

This section describes the jobs of response contractors in the event of a spill. The response personnel organization chart is as follows:



2.1.4.1 Project Supervisor. Responsible for overall execution of response activities including customer and agency liaison, crew safety, operational efficiency, logistical and administrative support, tactical and strategic deployment of assets and demobilization. Implements policies, objectives, and plans as devised by the ICS/Unified Command planning sections.

2.1.4.2 Operations Manager. Same as above, less liaison responsibilities; implements all field activities bearing on response including containment, control recovery, cleanup/restoration, disposal, and decontamination and demobilization activities.

2.1.4.3 Onshore Manager. Responsible for executing all onshore tactical activities as directed by the Operations Manager. Recommends to the Operations Manager any changes in the operation plan that would increase the effectiveness of onshore containment and recovery operations. Coordinates with offshore operations supervisor for transport of shoreline crews and/or removal of recovered oil and/or debris from beach sites.

2.1.4.4 Offshore Manager. Responsible for executing all offshore tactical activities, as directed by the Operations Manager. Recommends to the Operations Manager any changes in the operational plan that would increase the effectiveness of offshore containment and recovery operations. Coordinates with onshore operations supervisor for transport of shoreline crews and/or removal of recovered oil and/or debris from beach sites. Oversees maintenance of daily vessel logs. Other positions reporting to the offshore manager:

Response Vessel Operator. Safely navigates and operates response and skimmer vessels; executes designated mission.

Deck/Engineer. Assists vessel operator in line handling, cargo stowage, engine and equipment maintenance, debris handling, helming, and lookout.

Technician. Directly operates spill recovery gear including pumps and portable skimmers; deploys and retrieves oil boom; remains cognizant of safe working conditions.

2.1.5 Procedures For Preliminary Assessment of the Situation

Upon discovery of a spill, a preliminary assessment should be conducted to ascertain critical information to assist in coordination of the response effort. The following sections comprise the areas to be examined in order to conduct a preliminary site assessment. These include:

- **Identification of incident type**
- **Hazards involved**
- **Magnitude of problem**
- **Resources threatened.**

This section is devoted to discussing each of the preliminary assessment criteria.

1. Identification of Incident Type

To effectively mitigate a spill, a classification system must be used to manage actual and potential hazards. The incident classification system will determine and ensure that the level of response is appropriate for the type of incident.

The criteria used to identify the severity of the incident are:

- Extent of injuries
- Need for evacuation and/or size of the evacuation area
- Availability and/or need for spill or environmental response resources
- Level of technical knowledge needed to abate the incident
- Extent of governmental or regulatory involvement.

These criteria are to be used by the QI or spill response team member on the scene to determine the classification of the incident. The incident will fall into one of three categories based on the severity, with Tier III being the most severe.

Tier I Incident

Tier I incidents can be managed and mitigated by spill responders without need for help from outside agencies.

- BNSF Spill Response Team responds.
- No evacuation required.

A typical Tier I incident might be a leak that simply requires tightening a valve or replacing a blown rupture disk. Cleanup can be achieved with a hand shovel without endangering personnel.

Tier II Incident

Tier II incidents require the technical assistance of outside agencies such as spill response contractors, environmental contractors, industrial specialists, or a governmental "strike team."

- BNSF Spill Response Team responds.
- Outside contractors with specialized equipment must be called in to mitigate the incident.
- Evacuation is needed only in the immediate area of the spill or potential release area.
- Local and/or state governments have responded with specialized technical personnel.

A typical Tier II incident might be a diesel fuel spill into Alkali Creek (non-worst case).

Tier III Incident

A Tier III incident would be considered an "area emergency":

- BNSF Spill Response Team responds.
- Incident cannot be properly abated with immediately accessible equipment.
- Specialized spill response contractors must be called in to control the incident.
- Evacuation of surrounding population is required.
- Multiple local and state agencies are involved.

A typical Tier III incident might be a catastrophic diesel fuel spill into the creek.

2. Hazards Involved

Hazard identification and evaluation assists facility owners and operators in planning for potential releases, thereby potentially reducing the severity of discharge impacts that may occur. This evaluation consists of identifying potential sources of releases, analyzing vulnerable sites and receptors in the exposure area, assessing the potential for an oil spill, and reviewing facility reportable oil spill history. A detailed hazard identification and vulnerability analysis is contained in Annex 3(d) - Planning.

- a. Potential sources of releases
- b. Vulnerability analysis
- c. Prioritization of potential risk
- d. Spill potential analysis
- e. Sensitive areas and environmental data

3. Magnitude of Problem

This section provides a description of the facility's worst-case discharge, as well as small and medium discharges, as appropriate. These criteria will assist responders in determining the magnitude of the problem at hand.

- A small discharge volume is less than 2,100 gallons.
- A medium discharge volume is between 2,100 and 36,000 gallons.

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

The worst-case discharge could occur if the tank was filled to capacity and one of the following were true:

- Tank and containment were catastrophically destroyed.
- Pipeline was severed, valves were open, and no response actions were taken.

4. Resources Threatened

Refer to Annex 3(d) for a vulnerability analysis regarding potentially threatened resources.

2.1.6 Procedures for Establishment of Objectives and Priorities for Response to Spill

When responding to a spill, it is critical to establish objectives and priorities for the response effort. The objectives and priorities may differ depending on the magnitude of the incident. For example, a 20-gallon spill of fuel oil within the containment area probably will not warrant a full-scale response. However, a larger spill that threatens adjacent waterways will require a more coordinated response effort.

When establishing objectives and priorities, the following criteria should be taken into account:

- 1. Immediate goals/tactical planning**
- 2. Mitigating actions**
- 3. Identification of resources required for response.**

The following section is devoted to a discussion of the three criteria.

1. Immediate Goals/Tactical Planning

- Protecting life and health
- Protecting property and the environment
- Cooperating with and assisting governmental authorities
- Maintaining and restoring normal operations
- Providing necessary information to the news media
- Complying with all applicable local, state, and federal laws, rules, and regulations.

2. Mitigating Actions

- Discharge/Release Control. Fuel delivery to the tank is remotely monitored and controlled by the pipeline company. If problems are indicated by the back pressure on the pipeline, the delivery meter, the tank gauge, the high level alarm, the manifold alarm, or the rupture disk alarm, fuel delivery is stopped. If necessary, the pipeline control valve can be closed manually.

- Containment. Detailed discussion and examples of spill containment and recovery are included in Annex 3, Section C (Operations).
- Recovery. Detailed discussion and examples of spill containment and recovery are included in Annex 3, Section C (Operations).

3. Identification of Resources Required for Response

A detailed resource list is included in Annex 3 (f) (Finance/Procurement/Administration). Sufficient equipment necessary to provide initial response to a worst-case discharge is available within 6 hours. In addition, all equipment listed in Annex 3 (f) that is owned by Olympus Technical Services and the Montana-Wyoming Spill Control Cooperative is available within the Tier I planning time (12 hours). In addition, other spill response materials are available through other response trailers owned by the Montana-Wyoming Co-op or from local contractors within 12 hours. Onyx Special Services (an OSRO) could bring in over 22,000 feet of boom equipment within the Tier II (36 hours) and Tier III (60 hours) planning times.

2.1.7 Procedures for Implementation of Tactical Plan

The implementation of a tactical plan is to be administered by the QI or a designated representative.

2.1.8 Procedures for Mobilization of Resources

Mobilization of BNSF resources or procurement of contractors to assist in the response effort or outside resources is the responsibility of the QI.

2.2 SUSTAINED ACTIONS

This section addresses the transition of a response from the initial emergency stage to the sustained action stage. A more prolonged mitigation effort and recovery actions may progress under the response management system, depending on the magnitude of the incident.

The transition of response modes should be the responsibility of the QI or a designated representative and is contingent upon individual characteristics of the situation. Refer to Annex 3 (Response Management System) for more information regarding response sustained actions.

2.3 TERMINATION AND FOLLOW-UP ACTIONS

This section of the ICP addresses mechanisms to ensure that the individual in charge of the incident mitigation can, in coordination with the Federal or State OSC, terminate the response effort. This section also describes how the orderly demobilization of response resources should occur.

The follow-up action items are outlined below.

- 1. Termination**
- 2. Termination documentation**
- 3. Environmental remediation briefing**
- 4. Post-incident analysis**
- 5. Incident out-briefing.**

1. Termination

BNSF will consider that a spill response has ended and recovery procedures have begun when the OSC and BNSF Environmental Department Representative have determined that:

- Spill response activities have ended.
- There is no longer a release or threatened release of a spilled material.

2. Termination Documentation

Before leaving the scene of a spill, the OSC should ensure that adequate documentation has been obtained. Documentation should include:

- Completed Site Health and Safety Plan
- Exposure monitoring results
- Photographs
- All measurements
- Shipping papers
- Material Safety Data Sheets (MSDS)
- Contractors used
- Incident reports.

3. Environmental Remediation Briefing

Before spill responders leave the incident scene, they must brief the remediation team with the following information:

- The spilled materials present
- Past and present exposure data
- Signs and symptoms of over-exposure
- First aid and medical procedures taken
- Unsafe conditions requiring further action
- Summary of actions that were taken
- Assignment of responsibilities for the post-incident analysis and critique
- Reinforcement of the positive aspects of the response.

4. Post-Incident Analysis

- a. The purpose of the post-incident analysis is to reconstruct the incident and establish a clear picture of the events that took place. The analysis is conducted to improve the efficiency and effectiveness of future responses. The post-incident analysis is not an incident investigation, as it is not concerned with determining the cause of the incident. Rather, it involves only the emergency response portion of the incident.
- b. The post-incident analysis will be conducted by BNSF, OSC, or designee. The person conducting the post-incident analysis should meet with as many involved personnel as soon as possible to gather the most thorough and accurate information available.
- c. Documentation that should be obtained and examined includes:
 - Shipping papers and MSDS
 - Chemical hazard information
 - Notes for personnel
 - Site Safety and Health Plan
 - DOT Form F 5800.1
 - Photographs and sketches
 - Exposure data
 - Incident report

- Incident command chart
 - Business cards and notes made by response agencies
 - Videotapes recorded by the news media
 - Interviews from witnesses
 - Personal notes.
- d. The OSC should compile a post-incident report that documents the response and focuses on recommendations that will improve future response activities. The report should be forwarded to the Director of Hazardous Materials Safety for corrective action consideration.

5. Incident Out-Briefing

Spill incident out-briefing will be conducted by all BNSF departments, customers, and contractors directly involved in the incident to identify and understand any lessons to be learned and to outline corrective actions to be taken to abate future errors.

2.4 ICS FORMS

The ICS forms that follow can be used, as appropriate, during a spill or tabletop drill.

- **The forms are grouped sequentially.**

**ICS Forms
In Sequential Order**

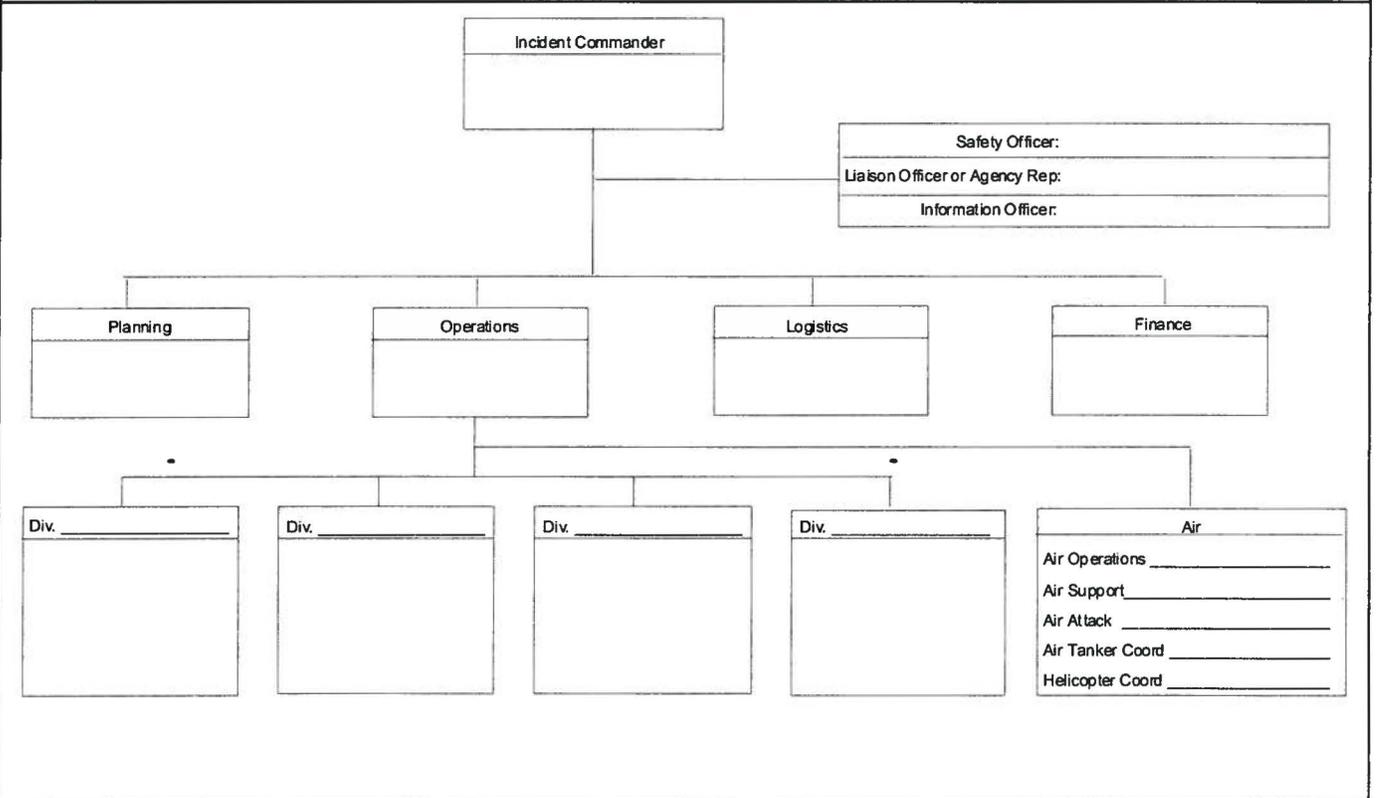
**INCIDENT COMMAND SYSTEM FORMS
(FOR USE AS APPLICABLE)**

INCIDENT COMMAND SYSTEM – FORMS INDEX		
Form #	Form Title	Prepared by
201	Incident Briefing	Initial Response IC
202	Response Objectives	Planning Section Chief
203	Organization Assignment List	Planning (Resources Unit)
204	Division Assignment List	Operations Chief and Planning (Resources Unit)
205	Incident Radio Communications Plan	Logistics (Communications Unit)
206	Medical Plan	Safety & Logistics (Medical Unit)
207	Organizational Chart	Planning (Resources Unit)
209	Incident Status Summary	Planning (Situation Unit)
210	Status Change Card	Communications Center
211	Check-in List	Resources Unit at Multiple Locations
213	General Message Form	Any Message Originator
214	Unit/Activity Log	All Positions
215	Operational Planning Worksheet	Operations Section Chief & Planning Section Chief
215a	Incident Action Plan Safety Analysis	Safety & Logistics
216	Radio Requirements Worksheet	Communications Center

INCIDENT BRIEFING	1. Incident Name	2. Date	3. Time
	4. Map Sketch		

4. Map Sketch

5. Current Organization

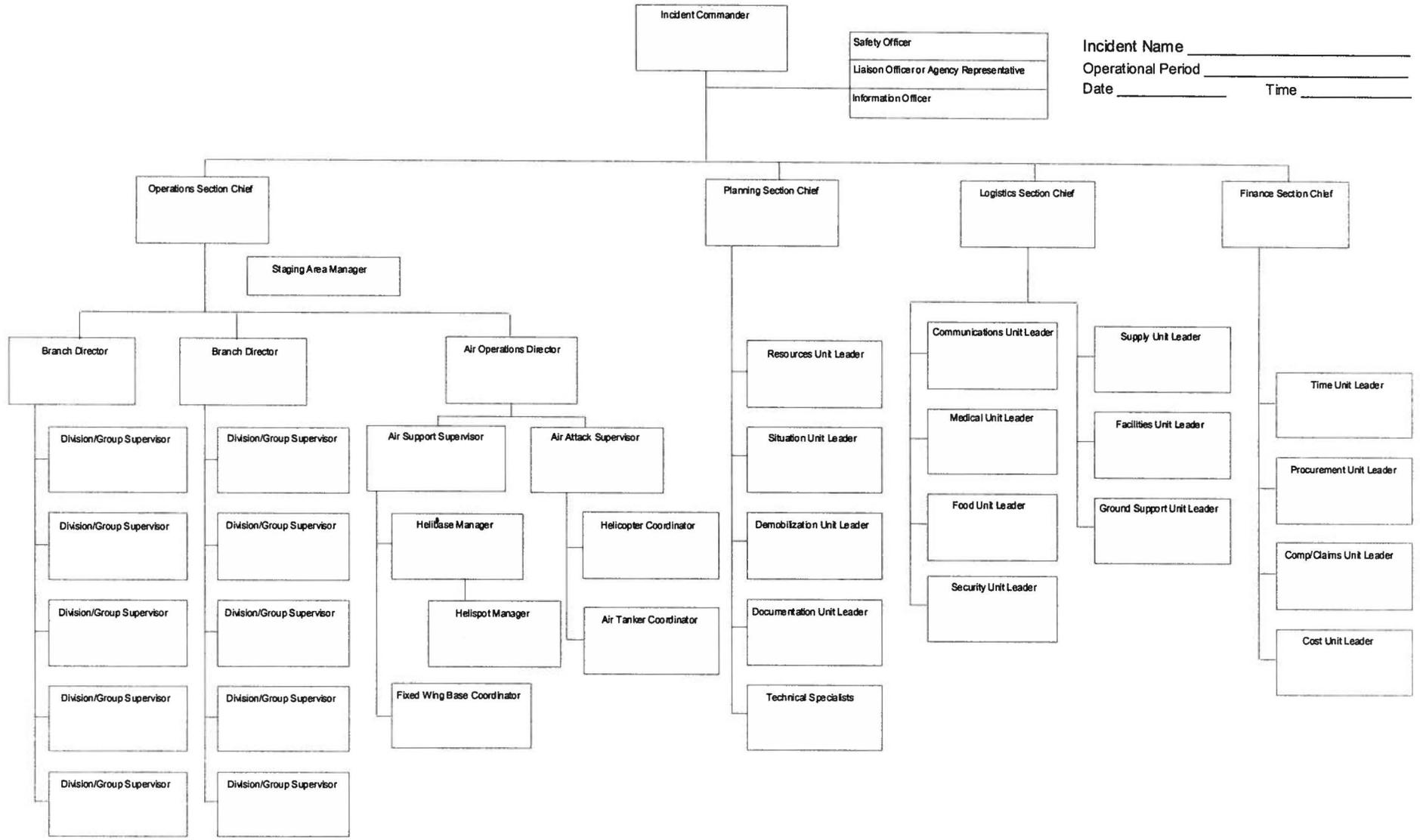


Page 1 of	6. Prepared by (Name and Position)
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INCIDENT OBJECTIVES	1. Incident Name	2. Date	3. Time
4. Operational Period			
5. General Control Objectives for the Incident (include alternatives)			
6. Weather Forecast for Period			
7. General Safety Message			
8. Attachments (mark if attached)			
<input type="checkbox"/> Organization List - ICS 203	<input type="checkbox"/> Medical Plan - ICS 206	<input type="checkbox"/> (Other)	
<input type="checkbox"/> Div. Assignment Lists - ICS 204	<input type="checkbox"/> Incident Map	<input type="checkbox"/>	
<input type="checkbox"/> Communications Plan - ICS 205	<input type="checkbox"/> Traffic Plan	<input type="checkbox"/>	
9. Prepared by (Planning Section Chief)	10. Approved by (Incident Commander)		

INCIDENT RADIO COMMUNICATIONS PLAN		1. Incident Name		2. Date/Time Prepared		3. Operational Period Date/Time	
		4. Basic Radio Channel Utilization					
Radio Type/Cache	Channel	Function	Frequency/Tone	Assignment	Remarks		
5. Prepared by (Communications Unit)							

MEDICAL PLAN	1. Incident Name	2. Date Prepared	3. Time Prepared	4. Operational Period						
	5. Incident Medical Aid Station									
Medical Aid Stations		Location			Paramedics					
					Yes	No				
6. Transportation										
A. Ambulance Services										
Name		Address		Phone		Paramedics				
						Yes	No			
B. Incident Ambulances										
Name		Location			Paramedics					
					Yes	No				
7. Hospitals										
Name	Address		Travel Time		Phone		Helipad		Burn Center	
			Air	Ground			Yes	No	Yes	No
8. Medical Emergency Procedures										
Prepared by (Medical Unit Leader)						10. Reviewed by (Safety Officer)				



ICS 207

NFES 1332

INCIDENT STATUS SUMMARY FS-5100-11

1. Date/Time		2. Initial <input type="checkbox"/> Update <input type="checkbox"/> Final <input type="checkbox"/>		3. Incident Name				4. Incident Number							
5. Incident Commander		6. Jurisdiction		7. County		8. Type Incident		9. Location		10. Started Date/Time					
11. Cause		12. Area Involved		13. % Controlled		14. Expected Containment Date/Time		15. Estimated Controlled Date/Time		16. Declared Controlled Date/Time					
17. Current Threat						18. Control Problems									
19. Est. Loss		20. Est Savings		21. Injuries		Deaths		22. Line Built		23. Line to Build					
24. Current Weather				25. Predicted Weather				26. Cost to Date				27. Est. Total Cost			
WS		Temp		WS		Temp									
WD		RH		WD		RH									

28. Agencies

29. Resources																									TOTALS		
Kind of Resource	SR	ST	SR	ST																							
ENGINES																											
DOZERS																											
CREWS Number of Crews:																											
Number of Crew Personnel:																											
HELICOPTERS																											
AIR TANKERS																											
TRUCK COS.																											
RESCUE/MED.																											
WATER TENDERS																											
OVERHEAD PERSONNL																											
TOTAL PERSONNEL																											

30. Cooperating Agencies

31. Remarks

32. Prepared by		33. Approved by		34. Sent to:	
				Date	Time By

General Instructions

Completion of the Incident Status Summary will be as specified by Agency or municipality. Report by telephone, teletype, computer, or facsimile to the local Agency or municipality headquarters by 2100 hours daily on incidents as required by Agency or municipality (reports are normally required on life threatening situations, real property threatened or destroyed, high resource damage potential, and complex incidents that could have political ramifications). Normally, wildland agencies require a report on all Class D (100 acres plus) and larger incidents (unless primarily grass type in which case report Class E (300 acres or larger). The first summary will cover the period from the start of the incident to 2100 hour the first day of the incident, if at least four hours have elapsed; thereafter the summary will cover the 24 hour period ending at 1900 (this reporting time will enable compilation of reporting data and submission of report to local agency or municipality headquarters by 2100 hours) daily until incident is under control. Wildland fire agencies will send the summary to NIFC by 2400 hours Mountain Time.

1. Enter date and time report completed (mandatory).
2. Check appropriate space (mandatory).
3. Provide name given to incident by Incident Commander or Agency (mandatory).
4. Enter number assigned to incident by Agency (mandatory).
5. Enter first initial and last name of Incident Commander (optional).
6. Enter Agency or Municipality (mandatory).
7. Enter County where incident is occurring (optional).
8. Enter type of incident, e.g. wildland fire (enter fuel type), structure fire, hazardous chemical spill, etc. (mandatory).
9. Enter legal description and general location. Use remarks for additional date if necessary (mandatory).
10. Enter date and zulu time incident started (mandatory - maximum of six characters for date and four characters for time).
11. Enter specific cause or under investigation (mandatory).
12. Enter area involved, e.g. 50 acres, top three floors of building, etc. (mandatory).
13. Enter estimate of percent of containment (mandatory).
14. Enter estimate of date and time of total containment (mandatory).
15. Enter estimated date and time of control (mandatory).
16. Enter actual date and time fire was declared controlled (mandatory).
17. Report significant threat to structures, watershed, timber, wildlife habitat or other valuable resources (mandatory).
18. Enter control problems, e.g. accessibility, fuels, rocky terrain, high winds, structures (mandatory).
19. Enter estimated dollar value of total damage to date. Include structures, watershed, timber, etc. Be specific in remarks (mandatory).
20. Enter estimate of values saved as result of all suppression efforts (optional).
21. Enter any serious injuries or deaths which have occurred since the last report. Be specific in remarks (mandatory).
22. Indicate the extent of line completed by chains or other units of measurement (optional).
23. Indicate line to be constructed by chains or other units of measurement (optional).
24. Indicate current weather conditions at the incident (mandatory).
25. Indicate predicted weather conditions for the next operational period (mandatory).
26. Provide total incident cost ot date (optional).
27. Provide estimated total cost for entire incident (optional).
28. List agencies which have resources assigned to the incident (mandatory).
29. Enter resource information under appropriate Agency column by singe resource or stike team (mandatory).
30. List by name those agencies which are providing support (e.g. Salvation Army, Red Cross, Law Enforcement, National Weather Service, etc. mandatory).
31. The Remarks space can be used to (1) list additional resources not covered in Section 28/29; (2) provide more information on location; (3) enter additional information regarding threat control problems, anticipated release or demobilization, etc.(mandatory).
32. This will normally be the Incident Situation Status Unit Leader (mandatory).
33. This will normally be the Incident Planning Section Chief (mandatory).
34. The ID of the Agency entering the report will be entered (optional).

RADIO REQUIREMENTS WORKSHEET			1. Incident Name				2. Date			3. Time	
4. Branch			5. Agency			6. Operational Period			7. Tactical Frequency		
8. Division/Group			Division/Group			Division/Group			Division/Group		
Agency			Agency			Agency			Agency		
9. Agency	ID No.	Radio Requirements	Agency	ID No.	Radio Requirements	Agency	ID No.	Radio Requirements	Agency	ID No.	Radio Requirements
Page 1 of			10. Prepared by (Name and Position)								

Olympus Technical Services, Inc. Response Contract

Empty contract response area.

FEB. 17. 2006 9:45AM

BNSF ENV OPNS HAVRE

NO. 849 P. 1



MICHAEL J. PERRODIN
 Manager Environmental Operations

BNSF Railway Company
 235 Main Street
 Havre, MT 59501

Phone: 406-265-0483
 Fax: 406-265-0356
 Email: Michael.Perrodin@BNSF.com

January 20, 2006

Guy LaRango
 Olympus Technical Services, Inc
 547 South 20th Street West #5
 Billings, MT 59102

WORK ORDER NO. MPOTMT 0602

You are requested to perform the following specified services under the terms and conditions as set forth in Contract (BF 9575) dated February 19, 1999 between your company and the Burlington Northern and Santa Fe Railway Company, the successor to both The Atchison, Topeka and Santa Fe Railway Company and Burlington Northern Railroad Company, which Contract is incorporated herein by this reference to:

Provide services and assistance to maintain all aspects of the Facility Integrated Contingency Plan and to provide emergency response services for the BNSF Alkali Creek aboveground storage tank in Billings, Montana. Services will be based on a time and materials basis not-to-exceed \$20,000.00 annually, per the Olympus proposal dated January 19, 2006.

Billings for services provided under this authorization must refer to the above noted Work Order Number, be provided in triplicate, and addressed as follows:

Michael J. Perrodin
 Manager Environmental Operations
 The Burlington Northern and Santa Fe Railway Company
 235 Main Street
 Havre, MT 59501

Sincerely,

Michael J. Perrodin
 Manager Environmental Operations
 (406) 265-0483

cc: J.J. Smith
 File

BNSF011.001

Received 02-17-06 09:28am

From-14062650356

To-Kennedy/Jenks FWY

Page 001

FEB. 17. 2006 9:45AM

BNSF ENV OPNS HAVRE

NO. 849 P. 2

**Olympus Technical Services, Inc.**

Billings, MT • Boise, ID • Havre, MT • Helena, MT

January 19, 2006

Michael J. Perrodin
Manager Environmental Operations
The Burlington Northern and Santa Fe Railway Company
235 Main Street
Havre, MT 59501

**Re: Proposal for contracted services for Alkali Creek AST Facility Response
Billings, MT.**

Dear Mike:

Olympus Technical Services, Inc. (Olympus) is submitting this cost proposal to provide emergency response and consulting services as part of the Integrated Contingency Plan (ICP) for the above referenced facility. Olympus proposes to provide the following services:

1. Provide information as needed for the ICP.
2. Conduct monthly facility inspections as required for the ICP.
3. Attend quarterly co-op meetings, as requested.
4. Participate in spill exercises with the co-op (3 people). Usually one two-day drill per year is scheduled, but a smaller one-day drill may sometimes be scheduled.
5. Respond to planned or unannounced spill drills at the facility.
6. Allow facility access to other BNSF contractors.
7. Provide assistance with other miscellaneous tasks that may be required for facility maintenance and to maintain facility compliance.

Olympus proposes to provide these services on a time and materials basis not-to-exceed \$20,000.00 per year.

We appreciate the opportunity to provide this proposal. Please contact me if you have any questions.

Sincerely,

Guy LaRango
Operations Manager

cc: file A4016

454 Moore Lane Suite #2 • Billings, MT 59101
(406) 245-3554 • Fax (406) 245-3555 • E-mail: Billings@OlyTech.com

SECTION III RESPONSE ANNEXES

The annexes are designed to provide key supporting information for conducting an emergency response under the core plan as well as document compliance with regulatory requirements not mentioned elsewhere in the ICP. The annexes are not meant to duplicate information that is already contained in the core plan, but to augment core plan information. The following annexes are provided:

Annex 1: Facility and Locality Information

Annex 2: Notification

Annex 3: Response Management System

Annex 4: Incident Documentation

Annex 5: Training and Exercises/Drills

Annex 6: Response Critique and Plan Review and Modification Process

Annex 7: Prevention

Annex 8: Regulatory Compliance and Cross-Reference Matrices

Annex 9: Planning Distance, Worst-Case Discharge, and Volume Calculations.

Annex 1

Facility and Locality Information

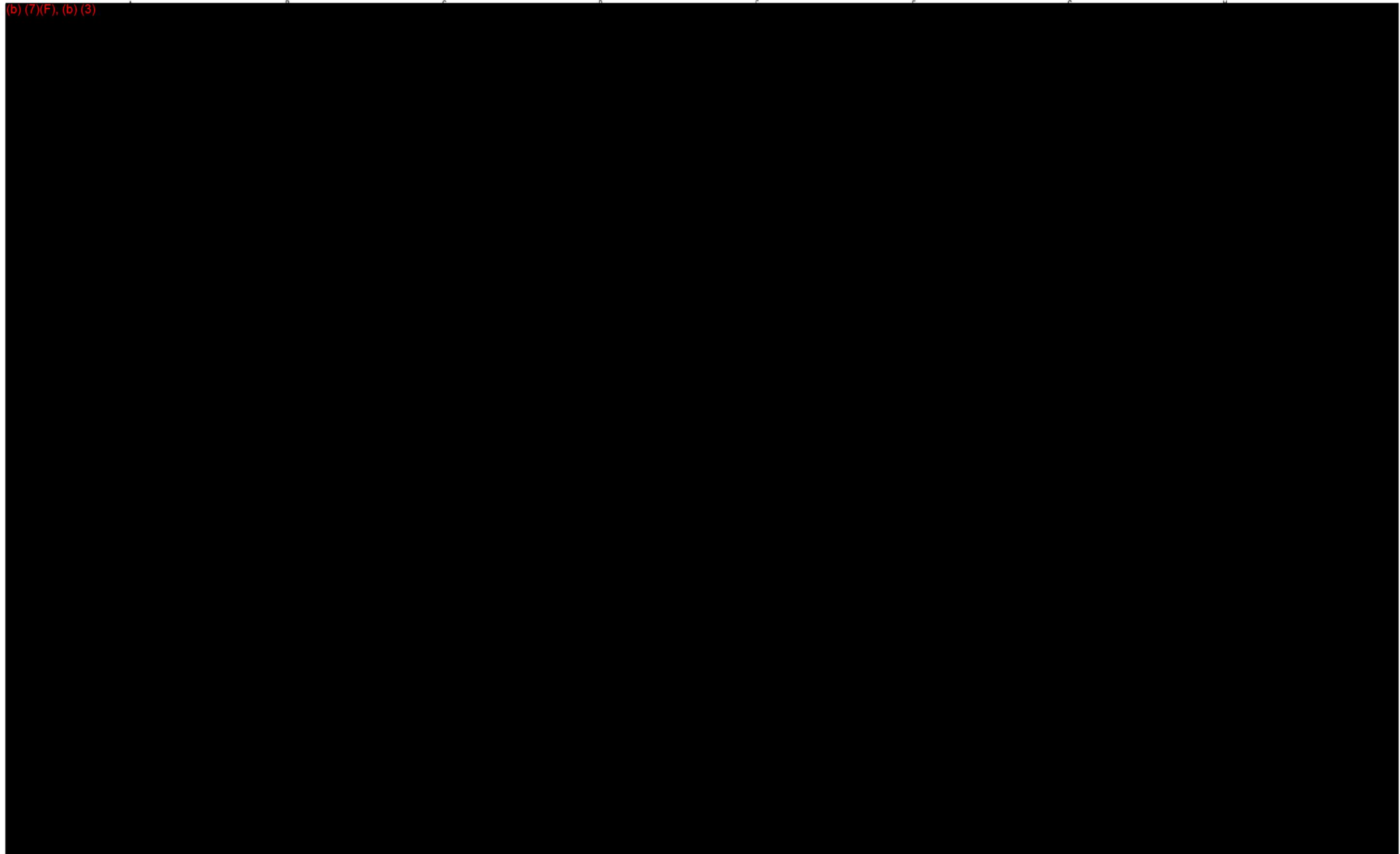
ANNEX 1 FACILITY AND LOCALITY INFORMATION

This annex provides detailed information to responders regarding the layout of the facility and the surrounding environment. The annex contains facility maps and drawings that identify locations of discharge sources, containment capacity of the diked area, emergency shut-off valves, evacuation/access routes, and nearby environmentally sensitive resources and human populations.

The figures provided in this section include:

- a. Figure 1 – Tank Site Plan - shows the specific features of the tank and containment**
- b. Figure 2 –Vicinity Map – shows the immediate vicinity of the tank with access and evacuation routes and closest regrouping area and the adjacent portions of the creek**
- c. Figure 3 – Evacuation Routes/Regroup Points – shows route of the creek and road all the way to Billings and the Yellowstone River, including identification of hazards and vulnerable resources and populations on and off the facility that may be impacted by an incident. Also shows the response equipment access route and evacuation route.**
- d. Photographs of the facility and vicinity.**

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



NO.	DATE	DESCRIPTION OF REVISIONS

SCALE BAR:
 0 1"
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 IF THIS BAR IS NOT
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ENGR:
 DRWN:
 CHKD:
 BNSF APPROVAL
 BY: DATE:

Kennedy/Jenks Consultants
 Engineers & Scientists

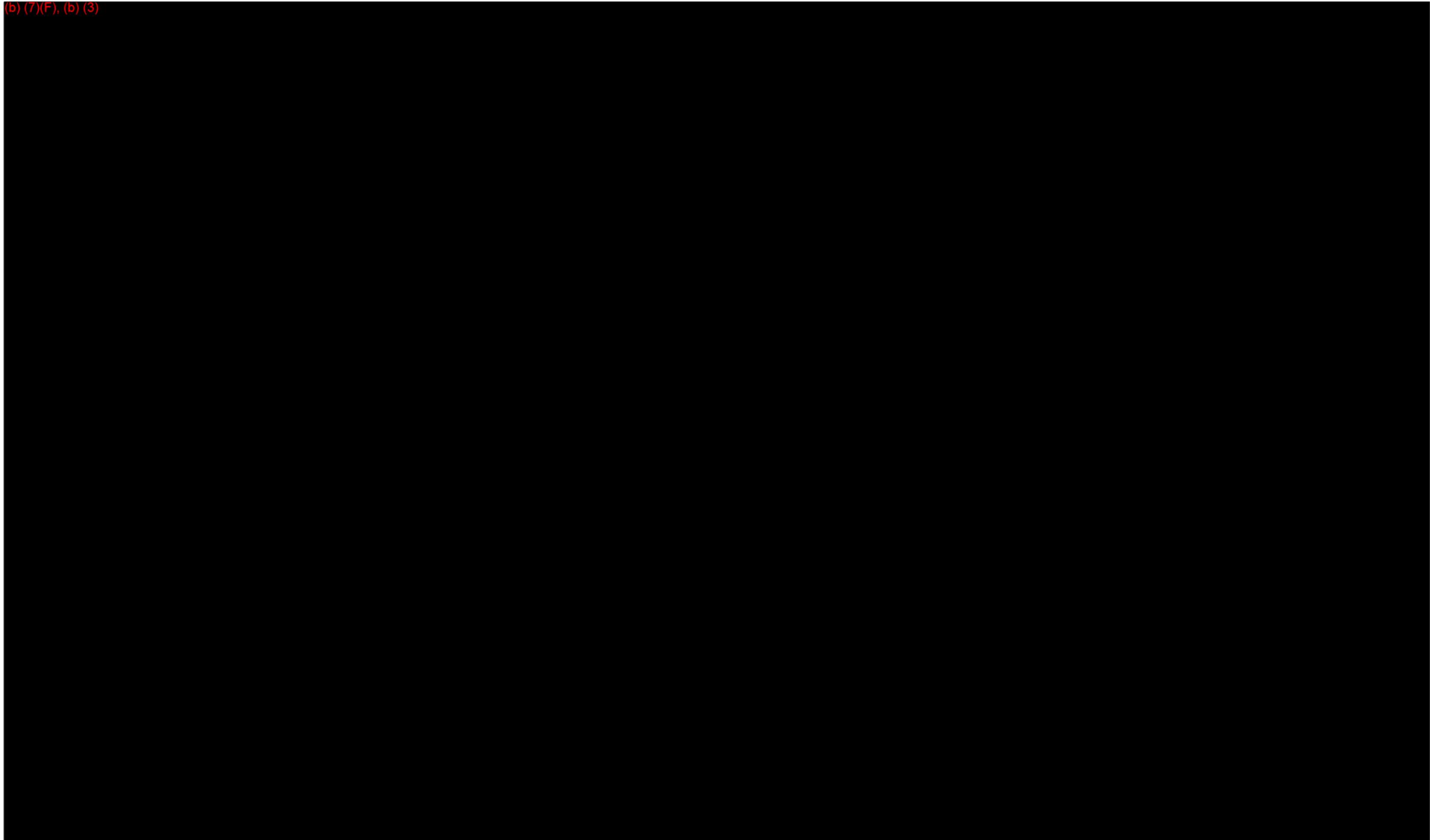
The Burlington Northern and
 Santa Fe Railway Company



FIGURE 1 - TANK SITE PLAN
 ALKALI CREEK DFO TANK
 BILLINGS, MONTANA

DRAWING NUMBER
 OF

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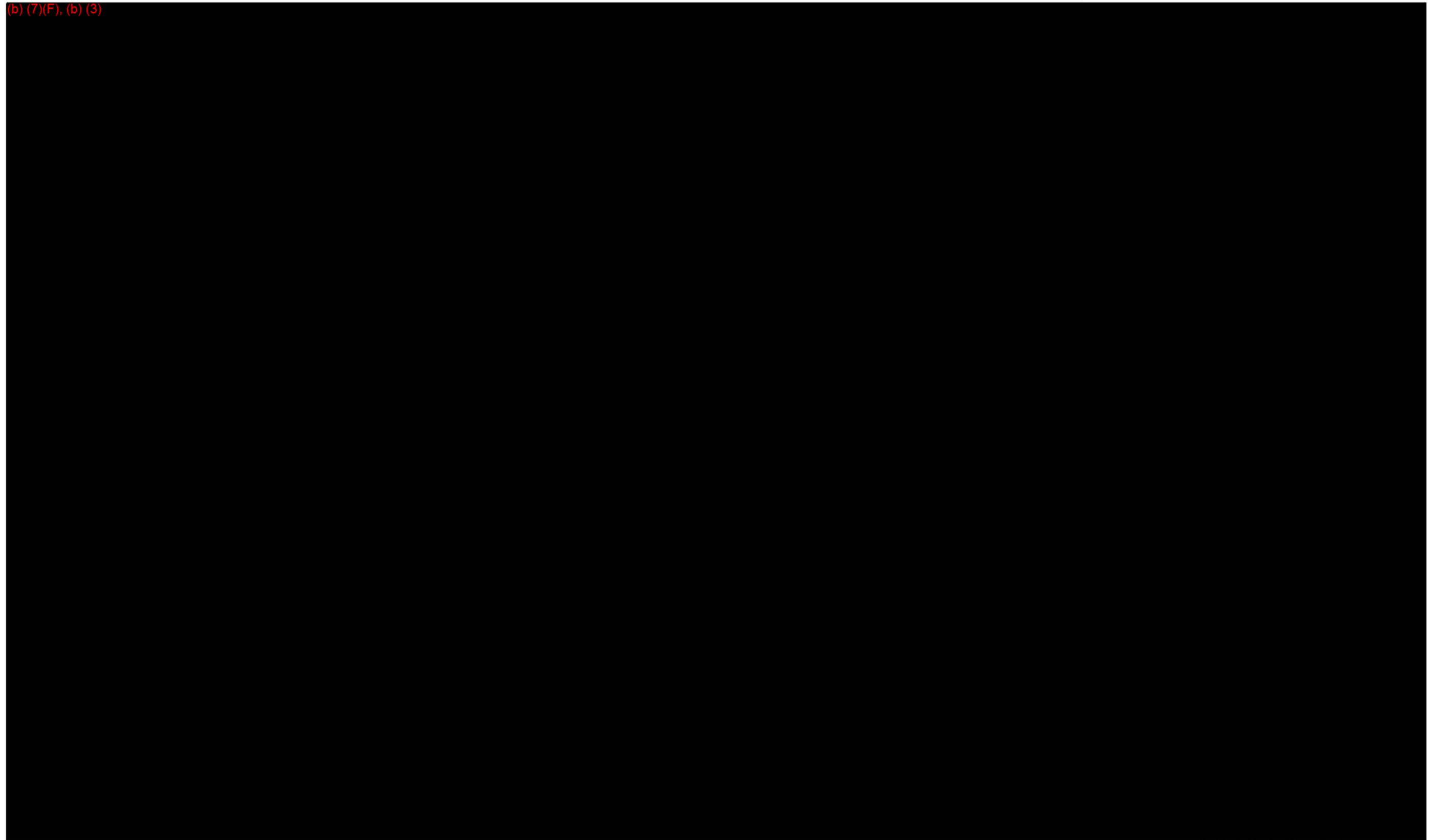
Legend

-  Evacuation/Regrouping Information
-  Transportation/Access Information
-  River
-  Road

Vicinity Map

Kennedy/Jenks Consultants
BNSF Railway Company
Alkali Creek
Billings, Montana
Vicinity Map
FIGURE 2
Last Revision: December 2010

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



Legend

-  Evacuation/Regrouping Information
-  Transportation/Access Information
-  River
-  Road

**Site Evacuation Plan, Transportation Plan,
Identification of Evacuation Regrouping Areas**

Kennedy/Jenks Consultants

BNSF Railway Company

Alkali Creek
Billings, Montana

Evacuation Routes/Regroup Points

FIGURE 3

Last Revision: December 2010



Photograph 7
The tank in relation to
Alkali Creek.



Photograph 8
A segment of Alkali Creek
near the tank photographs
in late spring, 1997.

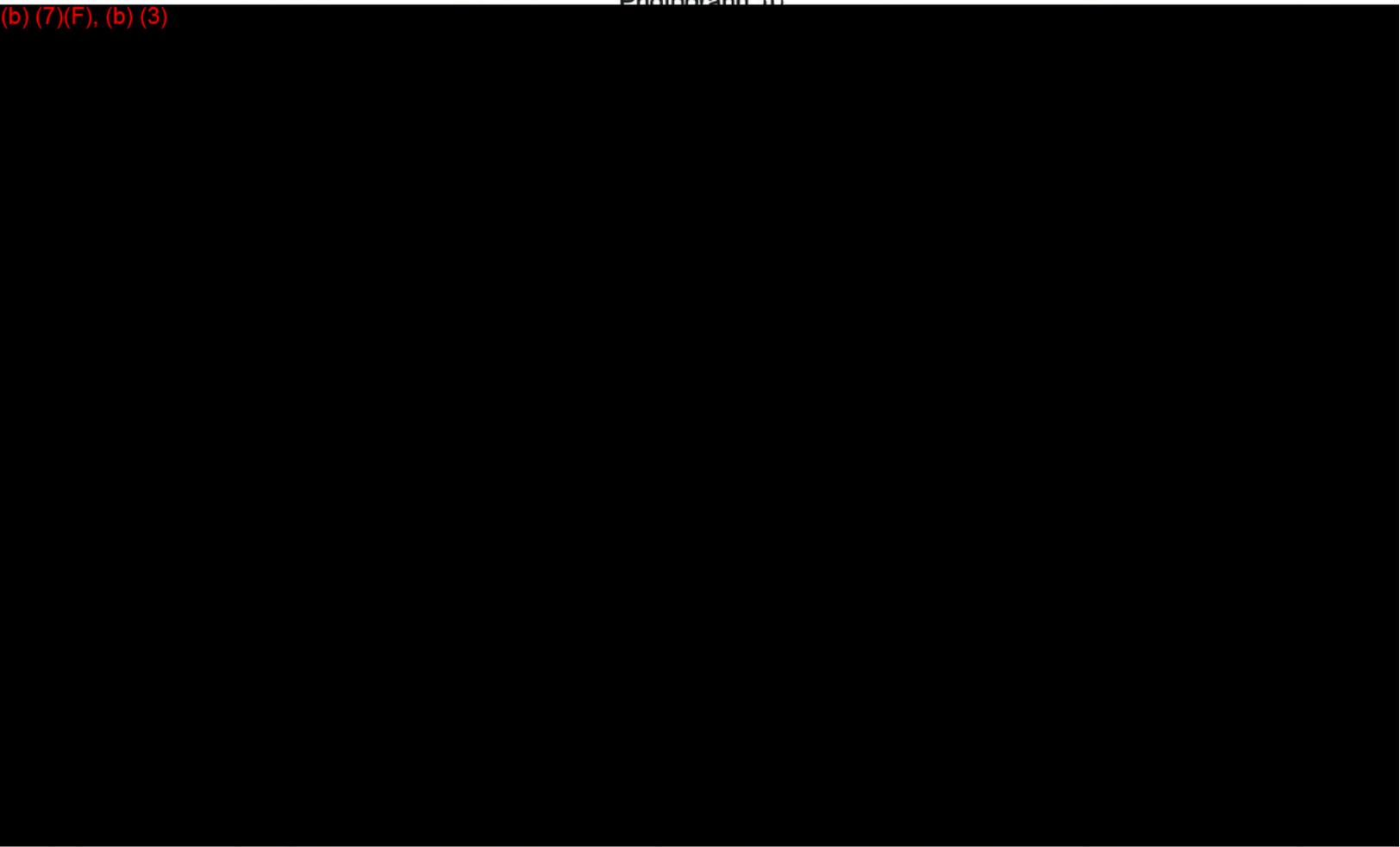


Photograph 9

A segment of Alkali Creek
near the tank, photographs
in late spring 1997.

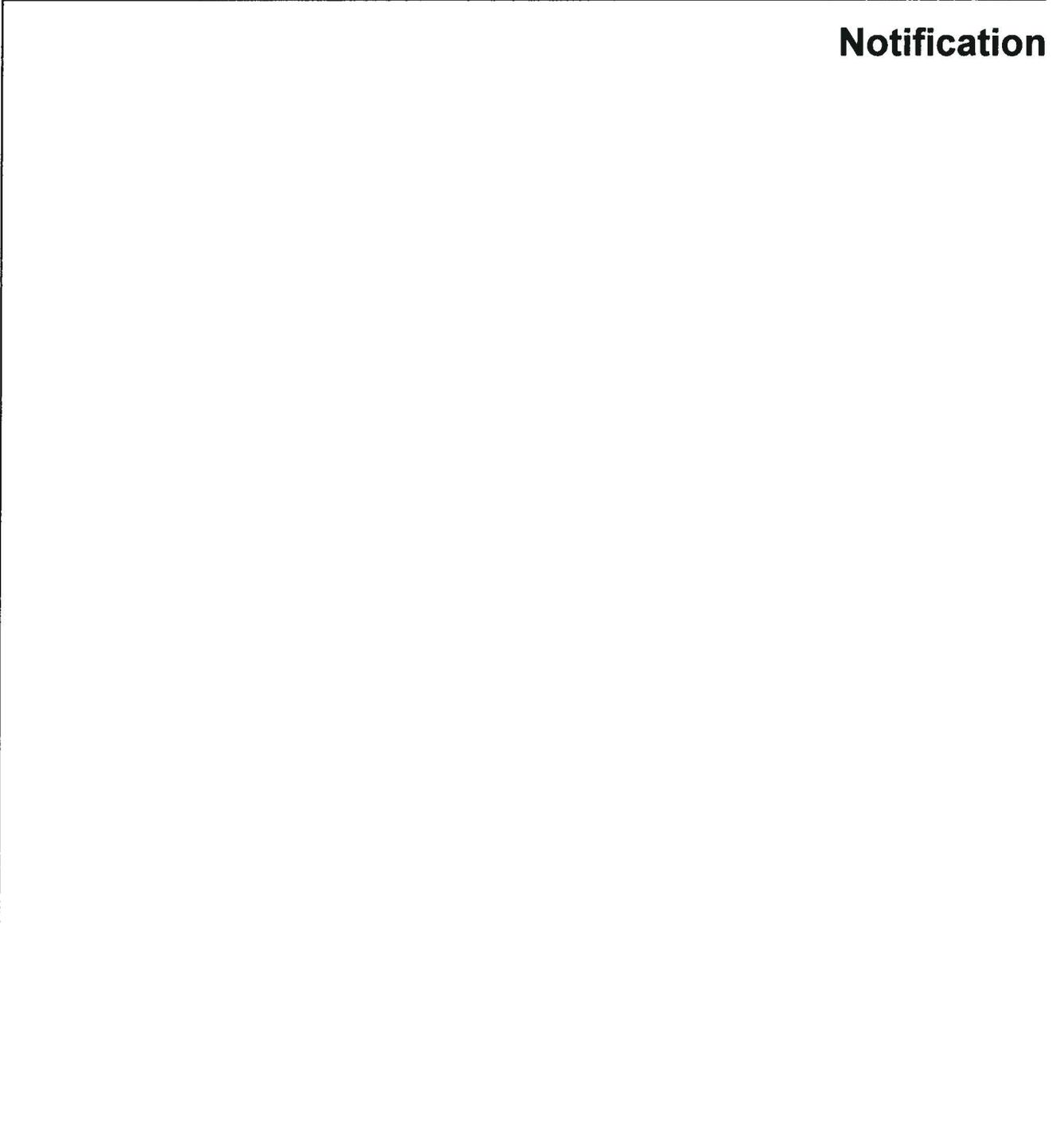
Photograph 10

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Annex 2

Notification



ANNEX 2 NOTIFICATION

- a. Internal notifications**
- b. Community notifications**
- c. Federal and state agency notifications.**

This annex details the process of making people aware of an incident (i.e., whom to call, when the call must be made, and what information/date to provide about the incident). The QI is responsible for ensuring that notifications are carried out in a timely manner, but is not necessarily responsible for making the notifications.

a. Internal Notifications

In any spill, effective and rapid communication both within BNSF and between BNSF and other responders is vital for effective and safe operations.

Notification procedures begin immediately upon learning of any spill incident (see Section 2.1.1, Table 2-1, internal and external notifications). The QI or designated alternate will be responsible for the notification. Until complete information is available from the scene to indicate that the situation has stabilized, a spill is considered an emergency. Initiating response via notification is the highest priority. BNSF will use whatever modes of communication necessary to ensure accurate and timely information on a spill. These modes include, but are not limited to, two-way radios, cellular telephones, pagers, and land-line telephones.

b. Community Notifications

Refer to Section 2.1.1 (Table 2-1), internal and external notifications.

c. Federal and State Agency Notifications

Refer to Section 2.1.1 (Table 2-1), internal and external notifications.

The attached spill response notification and follow-up form (Form 2-1) may be used to assist in external notifications.

The QI or designated alternate will be responsible for the follow-up notification. Federal, state, and local authorities will be updated periodically during spill response. The attached notification and follow-up form (Form 2-1) may be used to assist with both initial and follow-up notifications. These follow-up reports should be made regularly to inform the agencies of current response status, location of spill, potential health risks, and next actions to be taken.

FORM 2-1

Page 1 of 2

SPILL RESPONSE NOTIFICATION AND FOLLOW-UP FORM

Reporter's Last Name _____ First _____ M.I. _____					
Phone Number _____					
Date _____ Time _____					
Company _____					
Organization Type _____					
Position _____					
Address _____					
City _____ State _____ Zip _____					
Were Materials Released?		(Y/N)	Confidential?		(Y/N)
Meeting Federal Obligation to Report?		(Y/N)	Calling for Responsible Party?		(Y/N)
Incident Description					
Source and/or Cause of Incident:					

Date of Incident _____ Time of Incident _____ AM/PM					
Incident Address/Location _____					

Nearest City _____ State _____ County _____ Zip _____					
Distance from City _____ Units _____ Direction from City _____					
Section _____ Township _____ Range _____					
Latitude _____ Longitude _____					
Container Type _____ Tank Capacity _____ Units _____					
Facility Capacity _____ Units _____					
Material					
Material Spilled	Total Released Quantity	Unit of Measure	Material Released in Water	Quantity	Units of Measure

FORM 2-1

Page 2 of 2

SPILL RESPONSE NOTIFICATION AND FOLLOW-UP FORM

Response Action	
Actions Taken to Correct, Control, or Mitigate Incident _____	
Current Location of Spilled Material _____	
Next Actions Planned _____	
Impact	
Number of Injuries _____	Number of Deaths _____
Were There Evacuations? _____ (Y/N)	Number Evacuated _____
Was There Any Damage? _____ (Y/N)	Damage in Dollars (approximate) _____
Medium Affected _____	
Description _____	
More Information about Medium _____	
Weather Information	
Current Weather _____	
Forecasted Weather _____	
Additional Information	
Potential Health Risks _____	
Any information about the incident not recorded elsewhere in the report? _____	
Caller Notifications	
EPA? _____	USCG? _____ (Y/N) State? _____ (Y/N) Locate _____ (Y/N)
Other? _____	Describe _____

Annex 3

Response Management System

ANNEX 3 RESPONSE MANAGEMENT SYSTEM

- a. General**
- b. Command**
- c. Operations**
- d. Planning**
- e. Logistics**
- f. Finance/procurement/administration.**

This annex contains a general description of the facility's response management system and provides information necessary to guide or support the actions of each response management function. Due to the small number of hazards, the response management system for the BNSF Alkali Creek facility is relatively simple compared to more complex operations with multiple hazards.

a. General

This section of the annex contains the following information:

- 1. Organizational chart/specific job description for each position**
- 2. A detailed description of information flow**
- 3. Description of the formation of a unified command within the response management system.**

1. Organizational Chart/Specific Job Description for Each Position

A general flow chart of the incident command system is shown on Figure 3-0. Additional emergency response information and specific job descriptions are included in Sections b through f of this annex.

2. A Detailed Description of Information Flow

The individual discovering the spill will follow the Emergency Action Flow Chart. The BNSF ROC, division superintendent, supervisors, and government agencies will be notified. The internal and external notification call-sheet is included in Table 2-1.

Incident Command System (ICS) Organization with Unified Command

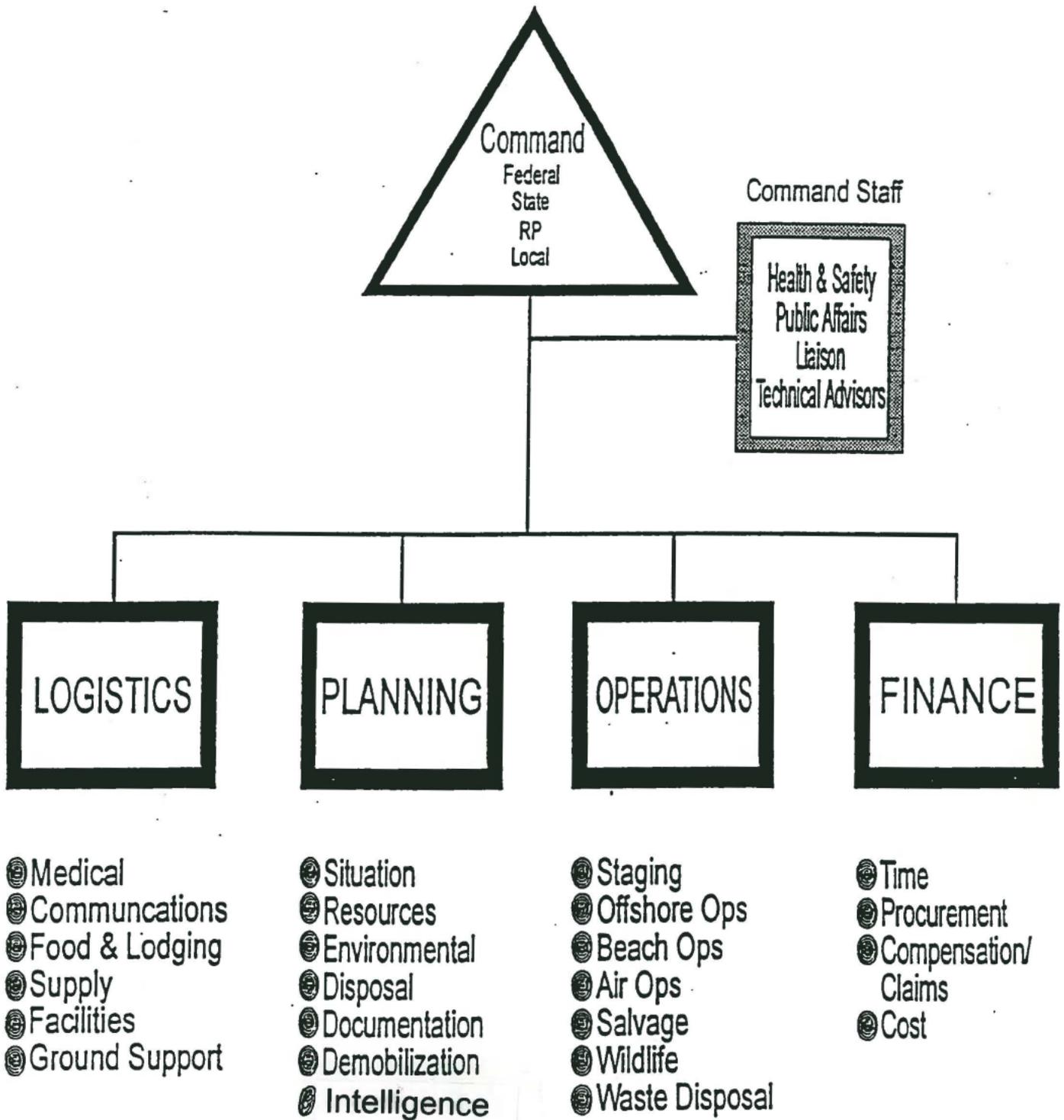


FIGURE 3-0

3. Description of the Formation of a Unified Command within the Response Management System

Command of the response effort will be the responsibility of the QI or a designated representative. The OSC may also assume command of the response effort.

b. Command

- 1. Facility Incident Commander (IC) and Qualified Individual (QI)**
- 2. Information (internal and external notifications)**
- 3. Safety**
- 4. Liaison.**

1. Facility Incident Commander (IC) and Qualified Individual (QI)

The Emergency Response Personnel that will fill the IC and QI roles are listed in Section II, Table 2-4. There are no suitable locations on the site for use as a command post. The need for a response command center must be met by temporary shelter brought to the scene (i.e., trailers), or the post shall be located in Billings, MT.

2. Information (Internal and External Notifications)

Internal and external notification procedures are contained in Section II in the Emergency Action Flow Chart and Table 2-1.

3. Safety

- a. Training**
- b. Evacuation**

a. Training

All response personnel have received emergency response training. ERCs are responsible for providing individuals with appropriate training. The safety of all individuals is the primary goal of the response effort (see Section II, 2.1.4).

b. Evacuation

No personnel are located at the facility; therefore, evacuation of railroad property during a spill would not be necessary.

The decision to evacuate beyond railroad property will be made by civil response officers (i.e., Fire Chief) and such evacuation will be under the jurisdiction of that civil authority. The facility and vicinity are shown on maps included in Annex 1. If an evacuation is necessary, residents will be instructed to go to Alkali Creek Elementary School, where they will receive further instructions.

4. Liaison

In the event of a response effort, both BNSF emergency response and ERCs will respond to the scene. Parallel mobilization will occur between these two response teams, and eventual coordination between the two will be required. Once both BNSF and ERCs arrive at the scene, integration of the two teams will be the responsibility of the QI. The QI will assume incident command and integrate the response of the two groups.

c. Operations

- 1. Operational response objectives**
- 2. Discharge or release control**
- 3. Assessment/monitoring**
- 4. Containment**
- 5. Recovery**
- 6. Decontamination**
- 7. Non-responder medical needs**
- 8. Disposal plans.**

1. Operational Response Objectives

Section II, 2.1.4 contains information on objectives and priorities for response.

2. Discharge or Release Control

Fuel delivery to the tank is remotely monitored and controlled by the pipeline company. If problems are indicated by the pressure on the pipeline, the delivery meter, the tank gauge, the high level alarm, the manifold alarm, or the rupture disk alarm, the fuel delivery is stopped. Alarm conditions during non-pumping periods would be evaluated and, if related to the breakout tank, reported and coordinated with BNSF. If necessary, the pipeline control valve can be closed manually.

3. Assessment/Monitoring

Section II, 2.1.3 contains information regarding preliminary assessment of the situation.

The assessment of the situation may change during the response as the situation magnifies or diminishes, depending on the type of emergency. The situation should be monitored throughout the response effort to maintain an effective response.

4. Containment

Typical containment methods are discussed and illustrated at the end of this annex.

5. Recovery

Typical recovery methods are discussed and illustrated at the end of this annex.

6. Decontamination

Typical decontamination procedures are discussed at the end of this annex.

7. Non-Responder Medical Needs

The City of Billings (located 15 minutes from the facility) is equipped with medical facilities capable of serving the medical needs of a response effort. The telephone number for the hospital is included in Table 2-1.

8. Disposal Plans

Typical disposal methods for potentially contaminated materials are listed below.

- Recovered product is pumped to a slop oil tank or container or shipped offsite for recycling. Tanks from contractors and tank cars are available.
- Contaminated soil is stockpiled for subsequent land farming, thermal treatment, or disposal at appropriate facilities.
- Contaminated equipment and materials, including drums, tanks, parts, valves, and shovels, are cleaned as appropriate and residues collected.
- Personnel protective equipment is drummed and stored as appropriate for disposal.
- Decontamination solutions are drummed and stored as appropriate for disposal.
- Sorbents are drummed and stored as appropriate for disposal.

The two recycling contractors used by BNSF are:

- Safety-Kleen Oil Recovery
601 Rieley Road
East Chicago, IL
- Tri-State Recycling Services, Inc.
1506 Highway 312
Worden, MT

Disposal locations for contaminated materials will vary depending on the type and alternatives that are available. The BNSF Environmental Engineering Department will assist with and coordinate appropriate disposal options.

No permit is required to dispose of soil and material contaminated with petroleum products at a permitted Class 2 landfill. A preconstruction permit with the State Air Quality Division of the Department of Environmental Quality would be required to treat petroleum-contaminated soil with an onsite thermal desorption unit. If the vapor from the thermal desorption unit was incinerated to destroy hydrocarbons, the operations would need to comply with the incineration section of the Montana Codes Annotated (MCA 75-2-21).

d. Planning

- 1. Hazard Assessment**
- 2. Protection**
- 3. Coordination with Natural Resources**
- 4. Waste Management**
- 5. Intelligence.**

1. Hazard Assessment

- a. Facility Hazards Identification**
- b. Vulnerability Analysis**
- c. Prioritization of Potential Risk**
- d. Spill Potential Analysis**
- e. Possible Events**
- f. Small to Medium Size Discharge Scenarios**
- g. Worst-Case Discharge Scenario and Response Strategies.**

a. Facility Hazards Identification

- Loading and unloading operations
- Daily operations
- Secondary containment volumes
- Normal daily throughput
- Loading and Unloading Operations. Tank delivery and dispensing are accomplished by pipeline. No truck or tank car loading or unloading operations occur at the Alkali Creek Facility. The facility is equipped with a truck loading and unloading facility, but the facility is not used for such operations.
- Daily Operations. No fueling operations occur at the facility. Occasional minor repair to equipment such as valves and pipes may cause incidental releases (less than 5 gallons).
- Secondary Containment Volumes. As previously mentioned elsewhere in this plan, the tank is equipped with secondary containment with an estimated capacity of 1,700,000 gallons.
- Normal Throughput. The throughput to the tank is approximately 70,000 to 75,000 barrels (bbls) per month. Delivery to the tank occurs three times per month, with an approximate delivery amount of 20,000 to 30,000 bbls in each instance. The delivery rate is approximately 750 to 900 bbls per hour and is maintained for approximately 32 to 38 hours during each delivery. Fuel dispensing from the Alkali Creek tank to the day tanks at Laurel is controlled by a float switch in the Laurel day tanks.

b. Vulnerability Analysis

This section addresses the potential effects of a spill to human health, property, or the environment. In order to assess what sensitive areas could be impacted, the planning distance has been calculated using the formulas provided by Attachment C-III to the final regulations (published in the Federal Register, 1 July 1994). The calculations and supporting data are included in Annex 9. The planning distance was calculated to be 18 miles. The distance from the Alkali Creek storage tank facility to the Alkali Creek and Yellowstone River confluence is 11.5 river miles. The following paragraphs describe the vulnerability of the exposure area in the 18-mile planning distance.

The area along Alkali Creek extends through a rural area north of Billings, Montana. Alkali Creek generally follows alongside Alkali Creek Road toward Billings. The creek flows approximately 11.5 river miles before it empties into the Yellowstone River, approximately 1/2 mile downstream from the Highway 87 bridge.

The town of Hysham, the closest downriver town that draws drinking water from the Yellowstone River, is located approximately 65 miles away.

There are few houses near the tank or along the creek as it extends toward Billings. The area becomes residential approximately 4 miles down Alkali Creek Road from the tank. A school is located within 1/4 mile of the creek, approximately 5 miles downstream from the tank.

In addition, some farms have land adjacent to Alkali Creek. Typical farm animals include cows, dogs, horses, sheep, and smaller animals such as chickens. In the event of a release, these owners would be required to move their animals to another part of the farm away from the creek. Potential impacts to these animals include death and/or sickness due to ingestion of or exposure to the fuel, and need of proper cleaning of the affected animals. The farm owners would need to contain these animals away from the creek until the U.S. Fish and Wildlife deem it safe.

The City of Billings withdraws its drinking water from two locations on the Yellowstone River. The intakes are located at the Lockwood Bridge area of the river near Interstate 90. Both drinking water intakes are located upstream from the Alkali Creek discharge point and, therefore, would not be threatened in the event of oil release.

The City of Hysham has a drinking water intake on the Yellowstone River approximately 65 river miles downstream of the Alkali Creek and Yellowstone River confluence. According to the Montana State Department of Environmental Quality, there are no other municipal water intakes on the Yellowstone between Billings and Hysham. No well head protection areas are within the planning distance.

According to representatives of the Billings suboffice of the U.S. Fish and Wildlife Service, only one threatened or endangered species is known to inhabit the planning area; the Pallid Sturgeon. They also stated that it is possible that migrant eagles or falcon might be found within the area. As with any river, wetlands likely exist all along the shores of the planning area. Wetlands have not been officially delineated on the creek. A complete list of all endangered species in Montana is included at the end of this section.

c. Prioritization of Potential Risks

A discussion of risks that deserve primary consideration during an incident is included in Section II, 2.1.5.

The primary goal of the response is to protect life, health, and the environment.

d. Spill Potential Analysis

This section analyzes the probability of a spill occurring at the facility considering tank age, oil spill history, horizontal range of a potential spill, and vulnerability to natural disaster. It also considers the severity of consequences of potential spill events.

The following are possible events that have the potential to occur and cause a spill of oil at the facility. The table categorizes the events into levels of harm.

- a. Spillage during loading and unloading operations
- b. Minor release due to equipment failure

- c. Severance of diesel fuel pipeline from tank to fueling area
- d. Failure of tank

Probability of Discharge	Probable Level of Harm		
	Substantial	Moderate	Slight
Low	c,d		
Medium		a	b
High			

e. Possible Events

No reportable spill has occurred at this site. The tank and facility were constructed in 1985.

The site is within 1/4 mile of Alkali Creek. The creek, by definition an environmentally sensitive area, could potentially receive oil from a spill due to a containment area rupture. Although there are no designated sensitive areas downstream, it is possible that migrant endangered species may be present. These endangered species are identified in the list at the end of this section. Wetlands have not been delineated on the river, although they may exist.

A tornado or lightning damage could cause significant destruction at this site. According to the Billings suboffice of the National Weather Service, four to five tornadoes occur every summer in the south-central and southeastern sections of Montana.

The winter season in southeastern Montana can be harsh. Sub-freezing temperatures are common and could cause damage to the tank and piping.

According to the 1994 Uniform Building Code seismic zone map of the United States, Billings is located in seismic zone 1, with seismic zone 4 having the highest potential for earthquake damage. Therefore, the potential for damage due to earthquakes is relatively low.

Possible discharges at the Alkali Creek Facility during abnormal operations range from minor drips to a catastrophic spill situation. The severity of consequences is dependent upon the size and location of the spill, as many potential spills would probably be adequately contained by secondary containment. A failure in the secondary containment for the breakout tank could cause significant risk to Alkali Creek and possibly the Yellowstone River. A leak in the valve attaching the pipeline to the breakout tank is possible if there is deterioration of the valve; however, this sort of leak would be minor and most likely contained by the secondary containment. A point of failure in the surrounding berm, caused by a mole tunnel or general weakness in the structure, would also have little affect if a spill did occur.

Measures taken to prevent discharges during possible events from the Alkali Creek breakout tank facility include the following:

- Monthly facility inspections. This facility is inspected monthly by Olympus Technical Services, a contractor located in the Billings area. They inspect the general structure of the tank, the connections and valves from the pipeline to the tank, the secondary containment berm, surrounding fencing, and general area survey. The inspection logs are available through BNSF.

- Required agency test drills: BNSF and its contractors conduct emergency drills and tabletop exercises as required by the DOT, EPA, and state agencies. The results of these drills are available through BNSF.
- Continuous monitoring of tank by Conoco: As previously stated in Section II-2, "At any time a Conoco Inc., Conoco Pipe Line Company, or Yellowstone Pipe Line Company employee observes a release of fuel occurring from BNSF's tank at the Alkali Creek Facility, or if a discrepancy in tank levels are observed, the employee will immediately notify BNSF by calling BNSF's 24 hour emergency contact telephone number listed in this plan.

At any time a BNSF employee, representative, or contractor observes a release of fuel occurring from Conoco Pipe Line Company or Yellowstone Pipe Line Company's piping, located at the Alkali Creek Facility, BNSF will immediately notify Conoco Inc. by calling Conoco Inc.'s 24 hour emergency contact telephone number listed in this plan."

As necessary, deliveries into and/or out of the breakout tank will cease until the situation is fixed. In addition, should the situation warrant it, a person will stand watch at the tank with appropriate communication devices, until the situation has been remedied.

f. Small to Medium Size Discharge Scenarios

The following scenario demonstrates what might occur in the event of a small or medium sized spill.

Due to continued use of the influent valves to the breakout tank at Alkali Creek, a leak has occurred within the valve connecting the pipeline to the tank. A small but steady stream of fuel has been escaping the valve and accumulating below the valve in the secondary containment area for approximately two weeks. After almost two weeks of rain, Billings has received 3.5 inches of rain over the weekend. Water has accumulated within the berm of the secondary containment area, and is mixing with the leaking fuel from the valve. The rain continues, and the water level continues to rise.

0800 May 6: Guy LaRango of Olympus Technical Services in Billings, MT (a BNSF contractor) drives to the breakout tank at Alkali Creek to conduct his monthly inspections. When he arrives, he notices a strong odor of hydrocarbons. He enters into the gated area, and can see the high level of water within the bermed area. He also notices the hydrocarbon odor and sheen on the water, thus immediately deducting that there is a leak somewhere. Acting as the Qualified Individual (QI), Mr. LaRango dispatches his response team in Billings to the site. The QI notifies BNSF's Resource Operations Center (ROC), as well as Mike Perrodin and Dave Smith, both of BNSF. Mike calls Conoco's 24-hour emergency line to report the spill, as well as requests that the pipeline flow to the tank is stopped. The QI calls fire and police departments and the Montana-Wyoming Co-op.

0830 May 6: Fire and Police personnel arrive and close access to Alkali Creek Road near the facility, allowing only response personnel and equipment through to the facility. A representative from Conoco arrives as part of the response effort.

0900 May 6: Olympus personnel arrive with 200 feet of boom, protective equipment, a backhoe, and other safety materials. After a brief safety meeting, the QI (from Olympus) sends three members of his team to the closest point of Alkali Creek to deploy the boom as a safety measure, as well as construct a coffer dam at the pond area close to the facility.

1030 May 6: Olympus is joined by ten personnel from Philip Services with eight vacuum trucks (total capacity = 28,560 gallons) and eight frac tanks (total capacity = 134,400 gallons). The vacuum trucks will be used to lower the level within the bermed area. Philip Services set up vacuum trucks along the perimeter of the bermed area, and begins pumping the impacted water from the containment area. When full, the vacuum truck discharges water into one of the frac tanks, located to the east of the breakout tank facility.

1045 May 6: The QI receives word from the other members of Olympus that the dam has been completed and boom is deployed. There does not appear to be any indications of fuel in the creek, and the team will remain there to monitor the situation. A portable trailer has been brought in. This portable trailer serves as the Unified Command, and all non-active response personnel gather here. The Unified Command consists of Fire Department personnel, Sheriff's Deputies, and the Olympus QI (QI).

1200 May 6: The QI holds a meeting with all responding agencies to brief them on the progress. Since a release has not occurred outside the facility, no animals have been affected. In addition, arrangements are made with recycling facilities for the reclaimed water, and disposal facilities for the saturated materials and aggregate.

1400 May 6: The Unified Command receives word that approximately 25% of the impacted water has been recovered.

1830 May 6: Spill response team relief crews arrive to replace initial spill responders. Cleanup continues. The Unified Command receives word that approximately 60% of the impacted water has been recovered.

2100 May 6: The Unified Command receives word that approximately 70% of the impacted water has been recovered.

0200 May 7: The Unified Command receives word that approximately 90% of the impacted water has been recovered. The weather report for the next weeks shows little signs of rain. It appears that the storm will be clearing up in the next day or so. The remainder of the impacted water is expected to evaporate or dissipate in the next week. Therefore, the Unified Command ceases recovery from the containment area, and decides to reconvene the next morning.

0800 May 7: The Unified Command meets to decide the next steps of the recovery process. Overnight, the rain has slowly let up, and is a mere sprinkle. The Planning Committee makes arrangements for the connection valve to be repaired later in the week. It is also determined that the aggregate making up the containment area will not need to be replaced.

0830 May 7: The Unified Command, recovery equipment, boom, and dam begins to be disassembled. The recovered impacted water is sent to Tri-State Recycling Service via trucks.

g. Worst-Case Discharge Scenario and Response Strategies

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

In the worst-case discharge, the size of this spill would affect response efforts. All response resources listed in this plan would have to be activated. Every effort should be taken to prevent the worst-case discharge from entering the Alkali Creek. No drinking water intakes are located within the planning distance. However, as the City of Hysham withdraws its drinking water from the Yellowstone River, 65 miles downstream of the facility, the Hysham Water Supply telephone number has been included on the notification list. A spill of this magnitude would likely move offsite, probably following the topography of a gentle slope to the northeast toward Alkali Creek. The location of the material spilled could significantly lessen a worst-case discharge if a portion of the discharge occurred within the secondary containment area. A high-stream flow could affect response efforts, as faster stream velocity could increase downstream movement of a discharge. The stream level is highest during the spring snow melts and during significant rain events. The photographs of the creek contained in Annex 1 were taken during the late spring. According to the Billings suboffice of the National Weather Service, the creek is typically dry in late summer and early fall.

The available remediation equipment would be used to its maximum planned capacity. A chain reaction of events is unlikely; however, some level of catastrophic destruction of a significant portion of the site would have to occur to cause the oil tank and containment to fail simultaneously.

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

The worst-case discharge would be from the tank. The response team's first goal in containment would be to stop the discharge from reaching Alkali Creek. The spill might be contained with the aid of earth-moving devices. In the event that the facility response team could not stop the discharge prior to entering the Alkali Creek, the team would employ booming strategies. Booming strategies would be determined in part by how quickly the spill was detected and how far downstream the discharge had traveled. The average mean velocity of the Alkali Creek is 0.5 feet/second, or 0.3 mile per hour. However, in a worst-case scenario the velocity could double to 1.0 foot/second or 0.6 miles/hour (see Annex 9 for calculations). Bridges are located at three points where Alkali Creek Road crosses the creek (2.9 miles, 3.4 miles, and 5 miles from the site). Because Alkali Creek Road generally follows the creek, there are many access points (refer to the USGS topographical maps located in Annex 1) and, therefore, many possible booming locations. When the ERCs arrive onsite, they would be instructed to deploy containment booms downstream of the spill; construct temporary berms if necessary; and deploy skimmers, pumps, and vacuum trucks where possible to contain and recover the spill as quickly as possible.

The following scenario describes a worst-case discharge and the steps BNSF would take.

The basis of this scenario is taken from a tabletop exercise for this facility conducted on 19 April 2000 in Billings, Montana.

"From seasonal end-of-the-winter weather, snow has piled up on top of the roof of the diesel fuel breakout tank near Alkali Creek. A strong wind is pushing heavy storms across the area. A seam near the base of the tank begins to buckle. In one instant, a seam splits and spills the tank's contents into the collection berm. More rain falls and the fuel and water rise to near the top of the berm. A northern section of the berm wall begins to weaken in the rain. The diesel and water begin to trickle out of cracks the previous summer's drought caused. The crack in the berm widens to approximately 20 feet, and fuel, water, and mud pour onto the surrounding area."

0400 April 19: The residents across the creek to the northwest awake to the strong smell of hydrocarbons. They call the Sheriff's Department and notify them of the smell. A deputy is dispatched to Alkali Creek Road. As the deputy approaches the tank facility, he discovers diesel in the creek about a mile from the tank.

0420 April 19: The deputy calls the dispatcher, who notifies the fire department, who in turn calls the local Conoco office. The local office confirms the drop in pressure and recommends the shut-off of the Yellowstone Pipeline to Conoco headquarters in Houston. In addition, Conoco headquarters calls BNSF's 24-hour emergency line [the Resource Operations Center (ROC)] to notify them of the possible spill.

0435 April 19: The ROC personnel begins calling designated agencies and responders (EPA, DOT, National Response Center, Department of Environmental Quality, etc.), Mike Perrodin, and Dave Smith. The BNSF QI, Mike Perrodin, calls the Olympus (local contractor) QI, Guy LaRango, and notifies him of the spill while he prepares to head to the site. Mike also calls the emergency line of Onyx Special Services. Mike notifies them of the spill situation. Although it is anticipated at this time that the spill can be contained in the creek, Superior is instructed to arrive on-site with at least 12,000 feet of boom.

0440 April 19: The Olympus QI contacts Olympus response personnel in the area, as well as the Montana-Wyoming Co-op. The Olympus QI instructs the Co-op to report to the mouth of Alkali Creek at the Yellowstone River and deploy boom and other sorbent material across the mouth as a precautionary measure.

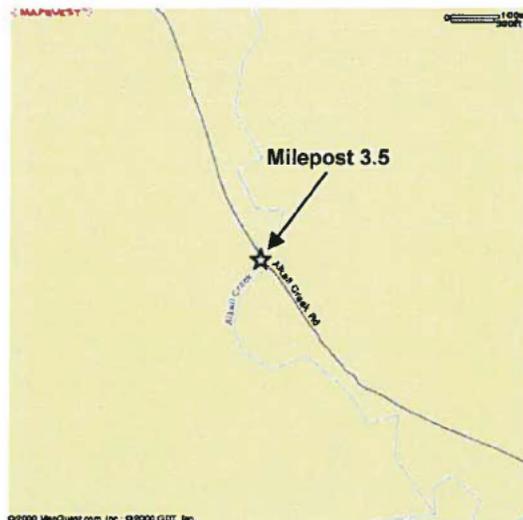
0530 April 19: The Olympus QI arrives at the head of Alkali Creek Road (intersection with Main Street), with his response crew. The crew has brought backhoes, front-loaders, boom, culverts, and protective equipment. They follow the road to the first bridge crossing (milepost 2.9). The creek is approximately 27 feet wide at this point. The Olympus QI gets out and checks the creek for sheen in the water, odors of hydrocarbons, and/or fuel along the sandy beds around the creek. He detects none, and instructs his team to erect a siphon dams at that site as a precautionary measure. The Olympus crew also deploys 200 feet of 12-inch boom at this point. While half of Olympus' crew is erecting the dam and deploying the boom, the QI and the rest of the crew continue up Alkali Creek Road toward the facility.



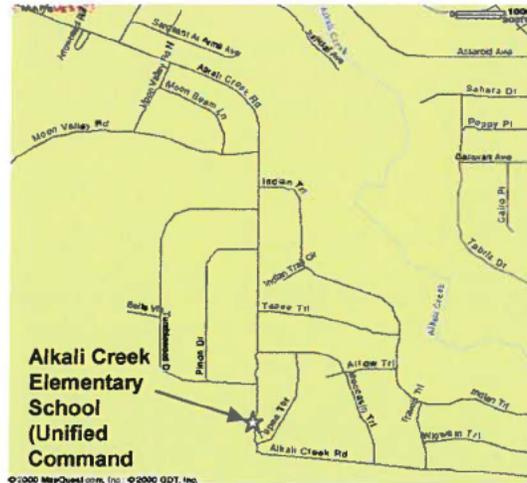
The resources available for use from the Montana-Wyoming Co-op, Olympus, and local contractors include:

- Boom
 - 300 feet of river boom with 12-inch skirt (Olympus)
 - 3,860 feet available onsite for deployment (Montana-Wyoming Co-op)
- Recovery
 - 6-inch Centrifugal, diesel-powered pump with skimmer (Montana Powder & Equipment) 2,000 gpm
 - 3-3-inch Centrifugal, gas-powered pump (Total Rental) 1,050 gpm
 - 2-3-inch Centrifugal, gas-powered pumps are location as back-up for the other four pumps (Montana Powder & Equipment) 700 gpm
 - Four skimmers for use with the active pumps (Montana-Wyoming Co-op)
- Storage
 - One Vacuum Truck (Big Sky Industrial) 3,800 gal
 - Two Pump Trucks (Big Sky Industrial) 6,400 gal
 - Eight Storage Trucks (Big Sky Industrial) 72,000 gal
 - Nine Vacuum Trucks (Philip Services, Inc.) 23,200 gal
 - Eight Frac Tanks (Philip Services, Inc.) 134,400 gal
 - BNSF Tank Cars are available as needed (each holds 20,000 gallons)

0545 April 19: The Olympus QI and crew stop at the second bridge, milepost 3.5, to check for sheen, smells, and residue. They find a minimal amount in the creek, which indicates that this is possibly the lead of the spill, heading down to the underflow dam that is currently being constructed at milepost 2.9. The crew immediately deploys 300 feet of the 12-inch boom, as well as starts up the 3,800-gallon vacuum truck and skimmer from one of the local contractors. The Olympus QI calls for his crew at the first bridge to continue operations, and also calls for the boom and recovery equipment from local contractors to be dispatched to that milepost as a secondary line of defense. While these instructions are being met, the Olympus QI continues upstream along Alkali Creek Road towards the facility, stopping intermittently to check the creek.



0615 April 19: After confirming that the heaviest part of the spill is currently at milepost 4.6, the Olympus QI arrives at the facility, seven miles from the beginning of Alkali Creek Road. He discovers the source of the spill (the break in the tank), and reports his findings to the Fire Department. He has noted where the failure in the containment berm is located. It appears that a small portion of fuel has been retained in part of the secondary berm (approximately 100,000 gallons has formed puddles in the berm area), as well as a much larger portion that has saturated the ground around the tank and berm. The tank and berm lie approximately 300 feet away from the closest point of Alkali Creek, where it appears that some of the spill has reached. Along the banks of the creek, fuel has been absorbed. Upon initial inspection, the Olympus QI estimates that approximately 70% (753,000 gallons) of the total amount of fuel actually reached the creek. The rest has been absorbed into the surrounding soil (323,000 gallons). Of the 70% that reached the creek, approximately 30% (226,000 gallons) will be absorbed into the creek banks, and 50% of the remaining impacted water (264,000 gallons) will be absorbed by soils in the floodplain. After a meeting between BNSF and the Fire Chief; the Fire Chief, as outlined in the ICP, assigns the Unified Command post to be at Alkali Creek Elementary School, five miles down Alkali Creek Road from the facility, thus providing access to the spill and containment, while being a safe distance away from the affected area. After he has received confirmation that the crews are successfully holding the spill with the dams, the Olympus QI heads back to the Unified Command to brief the other parties that have responded to the spill.



0635 April 19: Response representatives from Olympus, the EPA, Department of Environmental Quality, Sheriff's Department, Montana-Wyoming Co-op, and Billings Fire Department have been gathered in the parking lot awaiting orders. In the structure of the Unified Command, Olympus personnel assumes the role of the QI with the Fire Department, EPA, and the Police Department filling as other parts of the Unified Command. The QI receives reports that the additional recovery equipment from the local contractors is in the area, the straw bale underflow dams at milepost 2.9 are working with additional damming with the soils near the creek. The boom at milepost 2.9 appears to be holding with the help of additional sorbent pads and earthen berms along the creek banks. Acting on behalf of the railroad, the Olympus QI briefs all agencies on the known damage and pending cleanup efforts.

0700 April 19: The Olympus QI receives a call that the Montana-Wyoming Co-op and local contractor crews have arrived at milepost 3.5 and are preparing to deploy the booms and recovery equipment. First a large semi-circular underflow berm is constructed at milepost 3.5 to contain as much diesel fuel as possible in the flood plain as far upstream as possible. Montana-Wyoming Co-op personnel are assigned to be the head of the recovery process. Now that the containment has begun, the Olympus QI outlines to the other responders plans for cleanup which will not begin until all the fuel in the creek has been recovered. The Unified Command begins to receive calls from a local morning television show inquiring about the spill. A press conference is scheduled by BNSF officials for 10am. The responders are told not to comment to reporters.

0730 April 19: The Montana-Wyoming Co-op reports that the recovery equipment is running, and the recovery process has begun.

The Unified Command has agreed with the Olympus QI's initial estimations of amount of fuel in the creek (approximately 10%, or 115,500 gallons, is expected to reach milepost 3.5). The rest will be recovered from soil or remains in the secondary containment.

0750 April 19: Responding representative from the EPA, Department of Environmental Quality, and the Montana Fish and Wildlife Commission are dispatched to the affected area to evaluate the damage. The Sheriff's Department provides traffic control on the two-lane Alkali Creek Road, notification to residents, as well as security around the Command Center. A representative from the Unified Command Planning Group contacts the two recycling facilities listed in BNSF's plan. The plan calls for the recovered fuel to be sent to one of these recyclers via truck or tank car.

0920 April 19: The Montana-Wyoming Co-op reports on the amount recovered from milepost 3.5:

	<u>MFG Rate</u>	<u>De-rated at 20% Efficiency</u>
3-3" Centrifugal, gas-powered pumps with skimmers	126,000 gal	25,200 gal total

The storage equipment listed from local contractors is being used to transfer the material being pumped from the creek to the tank cars located at the BNSF facility in Billings and Laurel. These tank cars will eventually be sent to BNSF's designated recycling facility in East Chicago, Illinois (Safety-Kleen).

0950 April 19: After evaluating the effects of the spill on local fish and wildlife, state agencies report that some animals are showing signs of harm. The Unified Command calls in the local Human Society and Tri-State Bird and Rescue and Research to relocate and/or treat the animals. Mike Perrodin has arrived and takes over as the BNSF QI. The Olympus QI now assumes the role of Operations Leader. Other command positions are filled by BNSF and BNSF contractors.

1020 April 19: BNSF representatives hold a news conference responding to questions about the spills, measures that are being done to contain and recover the fuel, risk to surrounding properties, and expect length of time for the cleanup. The first group of frac tanks and storage trucks leave for the designated disposal site, and the remaining four frac tanks and storage trucks move into place to continue recovery.

1050 April 19: A decontamination area is set up ½-mile up Alkali Creek Road from the elementary school.

1320 April 19: The Montana-Wyoming Co-op reports on the amount recovered from milepost 3.5:

	<u>MFG Rate</u>	<u>De-rated</u>
3-3" Centrifugal, gas-powered pumps with skimmers	378,000 gal	75,600 gal total

1350 April 19: Spill response team relief crews arrive to replace spill responders. Recovery continues.

1620 April 19: The UC receives the following recovery report.

- Amount of recovered impacted water:

	<u>MFG Rate</u>	<u>De-rated</u>
3-3" Centrifugal, gas-powered pumps with skimmers	567,000 gal	113,400 gal total

1920 April 19: The UC receives the following recovery report.

- Amount of recovered impacted water:

	<u>MFG Rate</u>	<u>De-rated</u>
3-3" Centrifugal, gas-powered pumps with skimmers	756,000 gal	151,200 gal total

2150 April 19: Spill response team relief crews arrive to replace spill responders. Recovery continues.

2220 April 19: The UC receives the following recovery report.

- Amount of recovered impacted water:

	<u>MFG Rate</u>	<u>De-rated</u>
3-3" Centrifugal, gas-powered pumps with skimmers	945,000 gal	189,000 gal total

0130 April 20: The UC receives the following recovery report.

- Amount of recovered impacted water:

	<u>MFG Rate</u>	<u>De-rated</u>
3-3" Centrifugal, gas-powered pumps with skimmers	1,134,000 gal	226,800 gal total

0430 April 20: The UC receives the following recovery report.

- Amount of recovered impacted water:

	<u>MFG Rate</u>	<u>De-rated</u>
3-3" Centrifugal, gas-powered pumps with skimmers	1,323,000 gal	264,600 gal total

0600 April 20: Spill response team relief crews arrive to replace spill responders. Recovery continues. The eighth group of frac tanks and storage trucks have left for the designated disposal site, and the seventh group of four frac tanks and storage trucks, that have returned from the disposal site, move into place to continue recovery.

0800 April 20: The daily briefing meeting for the Unified Command personnel, Coast Guard, EPA, and Department of Environmental Quality representatives commences. Progress made thus far is evaluated and priorities are established for the continued cleanup efforts. The situation stands as follows:

- Winds continue to be easterly at 10mph
- Diesel fuel on the water has been contained at milepost 3.5

Disposal arrangements are made for recovered oil and oily materials from cleanup activities with firms listed in the disposal section of this plan.

The UC receives the following recovery report.

- Amount of recovered impacted water:

	<u>MFG Rate</u>	<u>De-rated</u>
3-3" Centrifugal, gas-powered pumps with skimmers	1,512,000 gal	302,400 gal total

* Based on field measurements it is estimated that 85% of the recovered fluid is oil.

After developing a plan with the Department of Environmental Quality, the Corps of Engineers, and Montana Fish and Wildlife, the UC instructs the recovery crews to use backhoes and other equipment from local contractors to excavate the soil areas that the fuel has saturated. The recovered soil is to be stockpiled in a designated area that will be later transported off-site to appropriate treatment/disposal facilities. It is estimated that about 7,500 cubic yards of soil have been impacted.

The UC assesses the situation. Most of the discharged diesel fuel has been recovered from Alkali Creek. A light sheen remains on the water. Cleanup continues. The command personnel, Coast Guard, EPA, and Department of Environmental Quality representatives meet. Continued disposal arrangements are made for recovered oil and oily materials from cleanup activities. Cleanup and disposal activities are expected to continue over the next week. Minimal impacted water recovery from Alkali Creek continues, and is expected to be concluded also within the week.

1700 April 20: Onyx Special Services arrives with their crew and equipment. They are updated by the Unified Command on the current situation, and told to stay in the area for 48-hours, available to help, if needed.

0800 April 21: The daily briefing meeting for the command personnel, Coast Guard, EPA, and Department of Environmental Quality representatives commences. Progress made thus far is evaluated and priorities are established for the continued cleanup efforts. The situation stands as follows:

- Winds continue to be easterly at 10mph
- Diesel fuel on the water has been contained at milepost 3.5

The UC plans for the repair of the tank and berm once the fuel-saturated soil has been recovered. A monitoring plan will be put in effect for soil and surface water, as well as installation of monitoring wells to assess groundwater. Additional revised measures will be evaluated subsequent to results of initial monitoring. All this work will be coordinated with regulatory

agencies. The repair work will be conducted by BNSF employees, and their designated contractors.

1700 April 22: Onyx Special Services is instructed by the Unified Command that their services will not be needed. They immediately demobilize.

0800 April 26: A post spill critique meeting is held with the Unified Command and Spill Management Team members. This grouping includes representatives of all the participating government agencies. A more refined calculation of quantity of oil recovered (after debris and water are decanted from recovered liquids) is presented during this meeting. The Fire Chief declares the emergency is over. Therefore the Unified Command is dissolved.

0800 March 1: The repair and recovery work has been completed to the tank, secondary berm, and surrounding area. Conoco reopens the pipeline.

March 19: BNSF submits a spill report to the Department of Environmental Quality, DOT, and EPA.

April 2: BNSF submits a spill report to EPA and DOT, including copies of the revised ICP.

2. Protection

This section presents strategies for protecting the vulnerable receptors identified in the vulnerability analysis.

All efforts should be made to protect populations that may be at risk of exposure during a spill incident. The local emergency planning commission will be contacted, as well as local fire and police personnel. These agents shall be responsible for notifying and protecting human populations.

The use of containment and recovery strategies should be chosen based upon their potential to protect life and health. No containment and recovery method will be used if it endangers human populations. Acceptable containment and recovery methods are included at the end of this annex.

The water intakes for the City of Billings would not be threatened if a spill of oil were to reach the Yellowstone River. If the spill reaches the Yellowstone River and approaches Hysham, then steps should be taken to protect the drinking water intakes for that location. If necessary, contractors would be dispatched to boom the water intake.

If wildlife are contaminated with oil, then coordination with State and Federal Fish and Wildlife officials must be facilitated. The phone number for the U.S. Department of Fish and Wildlife, Billings office is (406) 247-7366. The local area planning commissioner may also assist in establishing wildlife decontamination centers.

3. Coordination with Natural Resources

This section discusses the coordination of response personnel with natural resource personnel who would likely be a part of the command personnel. In their role as managers of and experts in natural resources, trustees assist the federal OSC in developing or selecting removal actions to protect natural resources.

During a response effort, the BNSF emergency response personnel and ERCs will focus on containment and recovery of the spill. The need for BNSF personnel to interact with natural resources personnel should be coordinated by the QI in cooperation with the OSC.

4. Waste Management

Annex 3(c) (Disposal Plans) discusses the regulatory requirements for disposing of diesel oil within the State of Montana.

e. Logistics

- 1. Medical needs of responders**
- 2. Site security**
- 3. Communications (internal and external resources)**
- 4. Transportation**
- 5. Personnel support (e.g., meals, housing, equipment)**
- 6. Equipment maintenance and support.**

This section of the annex addresses how to provide for the operational needs of response operations.

1. Medical Needs of Responders

The city of Billings, located 15 minutes from the tank site, is equipped with medical facilities. The telephone number for the area hospital is included in the notification call-sheet in Section II (Table 2-1).

2. Site Security

The security of the site is discussed in Annex 7(b) (Security). Additional security measures must be met by local law enforcement or BNSF Resource Protection.

3. Communications (Internal and External Resources)

Communications procedures are discussed in Section II, 2.1.1.

4. Transportation

Air travel into Billings is served by Logan International Airport. Several air carriers (Northwest, Delta, Horizon) provide service to this area. Interstate 90 runs east/west through Billings.

5. Personnel Support (e.g., Meals, Housing, Equipment)

Billings has numerous restaurants and motels for response personnel support. An equipment support list is included in Annex 3 (f) (support equipment).

6. Equipment Maintenance and Support

An equipment support list is included in Annex 3 (f) (support equipment). Equipment maintenance may be conducted onsite or through mechanical support in Billings.

f. Finance/Procurement/Administration

- 1. Resource list**
- 2. Response equipment**
- 3. Support equipment**
- 4. Contracting.**

1,2,3,4 Resource List/Response Equipment/Support Equipment/Contracting

The calculated on-water responses required for this facility are shown below (see Annex 9 for the planning volume worksheet):

- Tier I - 12 hours, 840 bbl/day
- Tier II - 36 hours, 1,120 bbl/day
- Tier III - 60 hours, 1,680 bbl/day.

All spill response equipment is contracted for this site. The following describes the available equipment. The Montana-Wyoming Co-op, Olympus Technical Services (and their subcontractors) inspect and test their spill response equipment semiannually. Mr. Michael Perrodin, BNSF Manager Environmental Operations and BNSF QI is responsible to ensure that the inspections and tests are conducted and documented. Response equipment is supplied by

many response companies in the area, their local sub-contractors, and a contracted OSRO. All equipment is inspected quarterly by these companies. Deployment drills are conducted annually in the late summer by responders.

All equipment lists are included at the end of this Annex. The Billings subcontractor telephone numbers are also included. BNSF has entered into response agreements with Olympus Technical Services, and Hulcher Services, and is a member of the Montana-Wyoming Spill Co-op.

Boom

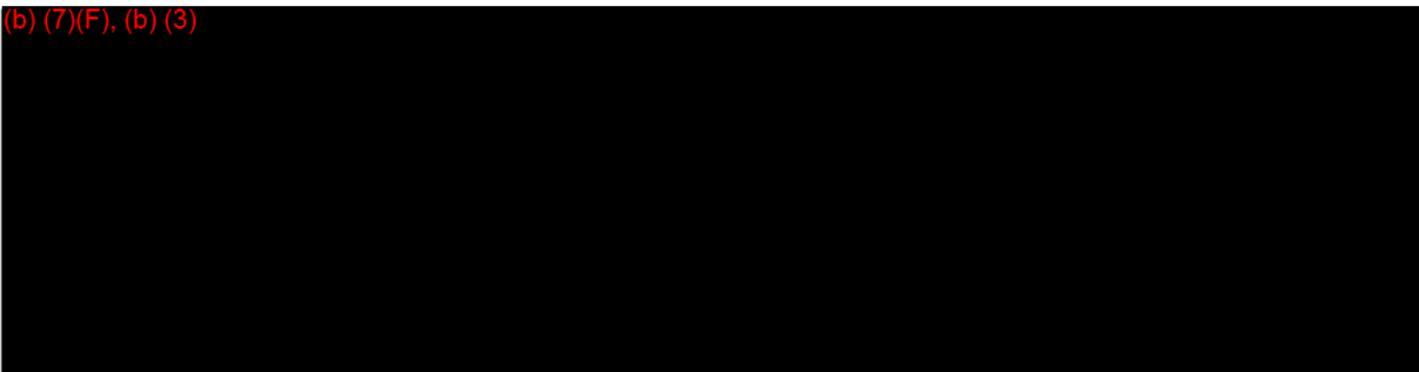
Almost three thousand feet of containment boom is immediately available in the Billings, Montana area through the Montana-Wyoming Co-op. Five hundred additional feet of boom is available through Olympus Technical Services located at 454 Moore Lane #2, Billings, Montana. Onyx Special Services of Wisconsin also has over 22,000 feet of boom readily available within 36 hours of Billings. Therefore, 3,500 feet of containment boom are immediately available in the Billings, Montana area and over 22,000 feet available within 36 hours. This quantity of boom is ample to cross Alkali Creek numerous times as the creek is less than 40 feet across at its widest point. In a worst-case discharge, the spill would enter Alkali Creek, but would not reach the Yellowstone River due to flooding and widened creek beds. The Yellowstone River is less than 1,000 feet across in this area.

Tank Storage

Approximately (b) (7)(F), (b) storage (in the form of vacuum trucks, storage trucks, and frac tanks) are available from Olympus Technical Services' subcontractors (see equipment lists at end of Annex 3). Sufficient storage is therefore available for over the required Tier III daily recovery rate (3,360 bbls). If additional storage is required, tank cars could be brought to the site within 12 hours, and arrangements could be made with local refiners for additional temporary storage.

Pumps

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



Communications

Radios, cellular phones, and land lines will be used in the case of a spill. All emergency responders have cellular phones. BNSF personnel also use a radio system. Additional communication equipment, including radios and telephones can be rented, if necessary, from Billings subcontractors, including Industrial Communications and Electronics, and Cowboy Communications (see Billings subcontractor equipment list).

Other

Montana-Wyoming Co-op and Olympus Technical Services or their subcontractors also provide a variety of other response equipment (see equipment lists), including personal protective equipment, earth moving equipment, hand tools, lighting, compressors, storage, etc. Hulcher Services would provide additional equipment and personnel should the response require it.

Response Telephone List

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Telephone List**BNSF**

BNSF Resource Operations Center 800-832-5452

Mike Perrodin 406-265-0483 (day)
 406-265-7816 (night)
 (b) (6) (cell)

Dave Smith 406-447-2307
 (b) (6) (home)
 (b) (6) (cell)

Pipelines

George Jurovich (Yellowstone) 406-255-5641 (day)
 406-671-0714 (night)

Conoco (Houston) 800-231-2551

Cenex (Laurel) 800-628-5200

Regulators/Public Agencies

National Response Center 800-424-8802

Federal On-Scene Coordinator 303-293-1788

Montana DEQ 800-457-0568

State Emergency Planning Commission 406-324-4777
 (Direct Line) 406-841-3911

LEPC (Chief Jochems) 406-657-8200

Yellowstone County DES 406-256-2775

Yellowstone County Sanitarian 406-256-2772

City of Hysham (water supply) 406-342-5544

Billings Waste Water Treatment Plant 406-657-8356

National Weather Service 406-652-11916

Fish Wildlife and Parks 406-247-7366

Army Corps of Engineers (Billings) 406-657-5910
 (Helena) 406-441-1375

Locates

(OTS ID #31673) **800-424-5555**

Telephone List

Locates

(OTS ID #31673)

800-424-5555

Excavation/Equipment

Hulcher Services

800-659-8032

Jim's Excavating (Jim McIntosh)

406-259-3904 (day)
406-248-4405 (night)**Pump Trucks**

Big Sky Industrial (John Nelson)

406-256-4949 (24 hr)
(b) (6)

Philip Services (Bill Hanley)

406-252-1999 (24 hr)

Equipment Rentals

H&E Equipment

After Hours – Jamie Kemp

(pumps, compressors, heavy equipment)

406-259-9720 (office)
(b) (6)

Machinery Power & Equipment

After Hours – JD

406-245-4426 (office)
(b) (6)

Paul Heinaman

(b) (6)

Tom Liggett

(b) (6)

Total Rental

(pumps & misc equipment)

406-248-9965 (office)

Construction Remediation Engineering – Skimmer Rental
(Rob Peery)406-656-1770
406-321-1770
307-234-9103
(b) (6)**Frac Tanks**

Phillip Services (Bill Hanley)

406-252-1999 (24 hr)

Frac Tanks, Inc. (Dwight Armstrong, Branch Manager)
Evanston, WY

307-789-3858

Sorbents/Drums

TSD (Don Berger)

406-256-7782 (office)
(b) (6)

Reis Environmental (Salt Lake City)

801-978-3755

Cross Petroleum

(closed head drums only)

406-252-5519

Telephone List**Heavy Equipment Transport**

Whitewood Transportation 406-245-8030 (24 hr)

Hansers (semi-trailer transport, tractor only) 406-248-7795 (24 hr)

WASTE DISPOSAL**Oil Recyclers**

Oily Waste Processors 406-248-8806

Tri-State Recyclers 406-698-4912
800-876-8645**Hazardous Waste Transport/Disposal**Mountain States Environmental Services
(Brad Fimrite) 406-248-4777
(b) (6)**Solid/Non-Hazardous Waste Disposal**

Billings Landfill (Barb Butler or Ken Behling) 406-657-8260

High Plains Landfill (Great Falls, Greg Wennerberg) 406-452-3143
800-257-6947

Allied Waste (Missoula, David Seebeurger) 800-823-8231

Roll-off BoxesAllied Waste ((Missoula, David Seebeurger)
800-823-8231
406-259-6155
406-543-3157 (office)
(b) (6)Allied Waste (Billings, John Whitman)
406-248-5400
(b) (6)Allied Waste (Billings, Scott Reese)
(b) (6)Baker (Salt Lake City, Brian Plyer)
800-225-3712 or 1-800-BAKER 12
(b) (6)**Communications (Radio Rentals)**

Industrial Communications 406-259-1212 (24 hr)

Cowboy Communication 406-256-8850 (office)

MiscellaneousSharon and Donald Hallberg
(Property Owner)
4208 Drexel Drive
Davis, CA
530-756-1671Minutemen
Search & RescueYellowstone County
406-657-8200
(Billings) 406-256-4962**Wildlife Cleaning**Tri-State Bird Rescue & Research
302-737-7241 bus hrs (Delaware)
302-737-9543 answering service
ER #800-710-0695
800-710-0696Humane Society (Dave Pauli)
Billings – 406-248-1527

Telephone List

Culvert – Empire Steel 406-252-0101
After Hours (Tom Breen) 406-656-6054

Roscoe Steel 406-656-2253

Air Charter Service

Billings Flying Service (fixed wing & helicopter)	406-259-3731	Northern Skies Aviation 406-628-2219 (fixed wing & helicopter) Laurel, MT
Corporate Air (fixed wing)	406-247-3100	Central Helicopters 406-586-9185
Edwards Jet Center (fixed wing)	406-252-0508	Carisch Helicopters 406-586-4300 (Bozeman/Cell) 406-579-5498

Caterers

Chalet Market 656-6600

Kreative Kapers 256-5469

Nick & J's Catering 256-6160

Party Pig (Dean Brown) 256-5009

Tiny's Tavern 259-0828

Yellowstone Kelly's 245-2264
(John-cell 406-671-5772)

Mobile Office Trailers

Billings Construction Supply 248-8355

Williams Scotsman 800-782-1500

Pierce Leasing 259-6059

Storage Trailers

Billings Construction Supply 248-8355

Pierce Leasing 259-6059

Portable Toilets

Billings Construction Supply 248-8355

Car/Truck*/Van Rentals**

AA&A Auto** 245-9759

Avis (Airport) 252-8007

Budget (Airport) 259-4168

Dollar Rent-A-Car 2591147

Enterprise 652-2000
259-9999

Rent-A-Wreck 245-9008

Hertz (Airport) 248-9151

Thrifty 259-1025

Semi-Flatbed & Van Trailer

(no tractor)
Big Sky Utilities 652-2330
Trailer Sales

Plastic Sheeting/Geotextiles

Lowe's 655-9317
(Billings)

Western Industries 232-1680
(Miles City, Geotextiles)



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Species of Concern

The Montana Natural Heritage Program serves as Montana's source of information for Species of Concern — plants and animals that are at risk or potentially at risk. Use the search options on the site to generate current lists of species of concern for the state, counties, watersheds or townships. You can filter your request by plant or animal groups as well as by Natural Heritage Program global and state ranks, and federal agency status.

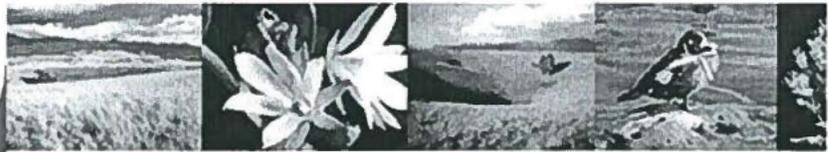
Species of Concern Report

17 Species found with the following criteria:

Watershed Name = Upper Yellowstone-Pompeys Pillar

Report Date: 2/27/2006 2:25:05 PM

▼ Birds							
Scientific Name	Common Name	Nature Serve	GLOBAL Rank	STATE Rank	USFWS	USFS	BLM
<i>Ammodramus savannarum</i>	Grasshopper Sparrow	☞	G5	S2B			
<i>Calcarius mccownii</i>	McCown's Longspur	☞	G4	S2B			SENSITIVE
<i>Calcarius ornatus</i>	Chestnut-collared Longspur	☞	G5	S3B			SENSITIVE
<i>Centrocercus urophasianus</i>	Greater Sage-grouse	☞	G4	S3		SENSITIVE	SENSITIVE
<i>Dolichonyx oryzivorus</i>	Bobolink	☞	G5	S2B			
<i>Falco peregrinus</i>	Peregrine Falcon	☞	G4	S2B	DM	SENSITIVE	SENSITIVE
<i>Haliaeetus leucocephalus</i>	Bald Eagle	☞	G5	S3	LT, PDL	THREATENED	SPECIAL STATUS
<i>Melanerpes erythrocephalus</i>	Red-headed Woodpecker	☞	G5	S3B			SENSITIVE
<i>Numenius americanus</i>	Long-billed Curlew	☞	G5	S2B			SENSITIVE
<i>Spizella breweri</i>	Brewer's Sparrow	☞	G5	S2B			SENSITIVE
▼ Mammals							
Scientific Name	Common Name	Nature Serve	GLOBAL Rank	STATE Rank	USFWS	USFS	BLM
<i>Corynorhinus townsendii</i>	Townsend's Big-eared Bat	☞	G4	S2		SENSITIVE	SENSITIVE
<i>Cynomys ludovicianus</i>	Black-tailed Prairie Dog	☞	G3G4	S3		SENSITIVE	SENSITIVE
<i>Euderma maculatum</i>	Spotted Bat	☞	G4	S2		SENSITIVE	SENSITIVE
▼ Reptiles							
Scientific Name	Common Name	Nature Serve	GLOBAL Rank	STATE Rank	USFWS	USFS	BLM
<i>Apalone spinifera</i>	Spiny Softshell	☞	G5	S3			SENSITIVE
<i>Chelydra serpentina</i>	Snapping Turtle	☞	G5	S3			SENSITIVE
<i>Heterodon nasicus</i>	Western Hognose Snake	☞	G5	S2		SENSITIVE	SENSITIVE
<i>Lampropeltis triangulum</i>	Milk Snake	☞	G5	S2		SENSITIVE	SENSITIVE

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Species of Concern

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Species of Concern Report

21 Species found with the following criteria:
Watershed Name = Upper Yellowstone-Lake Basin

Report Date: 2/27/2006 2:34:00 PM

▼ Birds							
Scientific Name	Common Name	Nature Serve	GLOBAL Rank	STATE Rank	USFWS	USFS	BLM
<i>Ammodramus bairdii</i>	Baird's Sparrow	☞	G4	S2B			SENSITIVE
<i>Ammodramus savannarum</i>	Grasshopper Sparrow	☞	G5	S2B			
<i>Anthus spragueii</i>	Sprague's Pipit	☞	G4	S2B			SENSITIVE
<i>Buteo regalis</i>	Ferruginous Hawk	☞	G4	S2B			SENSITIVE
<i>Buteo swainsoni</i>	Swainson's Hawk	☞	G5	S3B			SENSITIVE
<i>Calamospiza melanocorys</i>	Lark Bunting	☞	G5	S3B			
<i>Calcarius mccownii</i>	McCown's Longspur	☞	G4	S2B			SENSITIVE
<i>Calcarius ornatus</i>	Chestnut-collared Longspur	☞	G5	S3B			SENSITIVE
<i>Centrocercus urophasianus</i>	Greater Sage-grouse	☞	G4	S3		SENSITIVE	SENSITIVE
<i>Falco peregrinus</i>	Peregrine Falcon	☞	G4	S2B	DM	SENSITIVE	SENSITIVE
<i>Haliaeetus leucocephalus</i>	Bald Eagle	☞	G5	S3	LT, PDL	THREATENED	SPECIAL STATUS
<i>Numenius americanus</i>	Long-billed Curlew	☞	G5	S2B			SENSITIVE
<i>Spizella breweri</i>	Brewer's Sparrow	☞	G5	S2B			SENSITIVE
<i>Tyto alba</i>	Barn Owl	☞	G5	S1			
▼ Mammals							
Scientific Name	Common Name	Nature Serve	GLOBAL Rank	STATE Rank	USFWS	USFS	BLM
<i>Corynorhinus townsendii</i>	Townsend's Big-eared Bat	☞	G4	S2		SENSITIVE	SENSITIVE
<i>Cynomys ludovicianus</i>	Black-tailed Prairie Dog	☞	G3G4	S3		SENSITIVE	SENSITIVE
<i>Euderma maculatum</i>	Spotted Bat	☞	G4	S2		SENSITIVE	SENSITIVE
▼ Reptiles							
Scientific Name	Common Name	Nature Serve	GLOBAL Rank	STATE Rank	USFWS	USFS	BLM
<i>Apalone spinifera</i>	Spiny Softshell	☞	G5	S3			SENSITIVE
<i>Heterodon nasicus</i>	Western Hognose Snake	☞	G5	S2		SENSITIVE	SENSITIVE
<i>Lampropeltis triangulum</i>	Milk Snake	☞	G5	S2		SENSITIVE	SENSITIVE
▼ Vascular Plants							
Scientific Name	Common Name	Nature Serve	GLOBAL Rank	STATE Rank	USFWS	USFS	BLM

Gratiola ebracteata	Bractless Hedge-hyssop		G4	S1				
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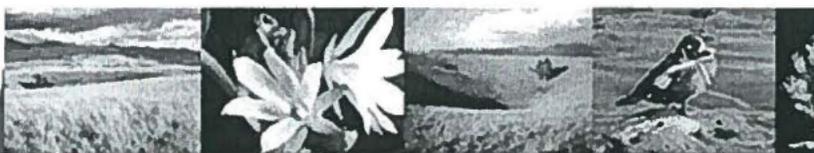


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Species of Concern

The Montana Natural Heritage Program serves as Montana's source of information for Species of Concern — plants and animals that are at risk or potentially at risk. Use the search options on the page to generate current lists of species of concern for the state, counties, watersheds or townships. You can filter your request by plant or animal groups as well as by Natural Heritage Program global and state ranks, and federal agency status.

Species of Concern Report

36 Species found with the following criteria:
Watershed Name = Upper Yellowstone

Report Date: 2/27/2006 2:34:57 PM

▼ Birds							
Scientific Name	Common Name	Nature Serve	GLOBAL Rank	STATE Rank	USFWS	USFS	BLM
<i>Anthus spragueii</i>	Sprague's Pipit	☞	G4	S2B			SENSITIVE
<i>Centrocercus urophasianus</i>	Greater Sage-grouse	☞	G4	S3		SENSITIVE	SENSITIVE
<i>Contopus cooperi</i>	Olive-sided Flycatcher	☞	G4	S3B			
<i>Falco peregrinus</i>	Peregrine Falcon	☞	G4	S2B	DM	SENSITIVE	SENSITIVE
<i>Haliaeetus leucocephalus</i>	Bald Eagle	☞	G5	S3	LT, PDL	THREATENED	SPECIAL STATUS
<i>Histrionicus histrionicus</i>	Harlequin Duck	☞	G4	S2B		SENSITIVE	SENSITIVE
<i>Numenius americanus</i>	Long-billed Curlew	☞	G5	S2B			SENSITIVE
<i>Spizella breweri</i>	Brewer's Sparrow	☞	G5	S2B			SENSITIVE
▼ Fish							
Scientific Name	Common Name	Nature Serve	GLOBAL Rank	STATE Rank	USFWS	USFS	BLM
<i>Oncorhynchus clarkii bouvieri</i>	Yellowstone Cutthroat Trout	☞	G4T2	S2		SENSITIVE	SENSITIVE
▼ Mammals							
Scientific Name	Common Name	Nature Serve	GLOBAL Rank	STATE Rank	USFWS	USFS	BLM
<i>Canis lupus</i>	Gray Wolf	☞	G4	S3	LE,XN	ENDANGERED	SPECIAL STATUS
<i>Cynomys ludovicianus</i>	Black-tailed Prairie Dog	☞	G3G4	S3		SENSITIVE	SENSITIVE
<i>Lynx canadensis</i>	Lynx	☞	G5	S3	LT	THREATENED	SPECIAL STATUS
<i>Sorex preblei</i>	Preble's Shrew	☞	G4	S3			
<i>Ursus arctos horribilis</i>	Grizzly Bear	☞	G4T3T4	S3	LT	THREATENED	SPECIAL STATUS
▼ Invertebrates							
Scientific Name	Common Name	Nature Serve	GLOBAL Rank	STATE Rank	USFWS	USFS	BLM
<i>Agapetus montanus</i>	An Agapetus Caddisfly	☞	G2	S2?			
<i>Discus shimekii</i>	Striate Disc	☞	G5	S1			
<i>Oreohelix strigosa berryi</i>	Berry's Mountainsnail	☞	G5T2	S1S2			
▼ Vascular Plants							

Scientific Name	Common Name	Nature Serve	GLOBAL Rank	STATE Rank	USFWS	USFS	BLM
<i>Adoxa moschatellina</i>	Musk-root		G5	S2		SENSITIVE	SENSITIVE
<i>Aquilegia brevistyla</i>	Short-styled Columbine		G5	S2		SENSITIVE	
<i>Atriplex truncata</i>	Wedge-leaved Saltbush		G5	S1			
<i>Carex multicosata</i>	Many-ribbed Sedge		G5	S1			
<i>Carex norvegica</i> ssp. <i>inserrulata</i>	Toothed Scandinavian Sedge		G5TNRQ	S1Q			
<i>Carex stenoptila</i>	Small-winged Sedge		G2	S2			
<i>Carex tinctoria</i>	Slender Sedge		G4G5	S1			
<i>Cypripedium parviflorum</i>	Small Yellow Lady's-slipper		G5	S2S3		SENSITIVE	SENSITIVE
<i>Draba densifolia</i>	Dense-leaf Draba		G5	S2			
<i>Eleocharis rostellata</i>	Beaked Spikerush		G5	S2		SENSITIVE	
<i>Erigeron eatonii</i> ssp. <i>eatonii</i>	Eaton's Daisy		G5T5	S1			
<i>Erigeron formosissimus</i>	Beautiful Fleabane		G5	S1			
<i>Juncus covillei</i> var. <i>covillei</i>	Coville's Rush		G4G5T5	S1			
<i>Kobresia simpliciuscula</i>	Simple Kobresia		G5	S2			SENSITIVE
<i>Papaver kluanensis</i>	Alpine Poppy		G5T3T4	S1			
<i>Physaria saximontana</i> var. <i>dentata</i>	Rocky Mountain Twinpod		G3T3	S3			
<i>Polygonum douglasii</i> ssp. <i>austinae</i>	Austin's Knotweed		G5T4	S2		SENSITIVE	
<i>Polystichum kruckebergii</i>	Kruckeberg's Sword-fern		G4	S1			
<i>Taraxacum eriophorum</i>	Rocky Mountain Dandelion		G4	S2			SENSITIVE

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Data Source: BIOTICS® Database Updated: Nightly

February 2000

**MONTANA ANIMAL AND PLANT CANDIDATES FOR LISTING
UNDER THE ENDANGERED SPECIES ACT**

Candidate species are those taxa for which the U.S. Fish and Wildlife Service has sufficient information on biological status and threats to propose to list them as threatened or endangered. The Service encourages their consideration in environmental planning and partnerships; however, none of the substantive or procedural provisions of the Act apply to candidate species.

<u>Common Name</u>	<u>Scientific Name</u>	<u>Expected Occurrence (Montana)</u>
Swift fox	<i>Vulpes velox</i>	E of divide - prairie, grasslands
Sturgeon chub	<i>Macrhybopsis gelida</i>	Lower Yellowstone, Powder, Missouri Rivers
Sicklefin chub	<i>Macrhybopsis meeki</i>	Yellowstone, Lower Missouri Rivers
Arctic grayling (fluvial population)	<i>Thymallus arcticus</i>	SW Montana - Big Hole River
Warm spring zaitzevian riffle beetle	<i>Zaitzevia thermae</i>	Gallatin Co. - warm springs
Black-tailed prairie dog	<i>Cynomys ludovicianus</i>	Eastern Montana - prairie; colonial

16-Mar-00

Montana Natural Heritage Program

Species of Special Concern: Yellowstone River from Laurel to North Dakota

EO #	Scientific Name	Common Name	GRANK	SRANK	ESA Status	USFS Status	BLM Status	Township/ Range	SECTION	SURVEY_SITE
003	CORYNORHINUS TOWNSENDII	TOWNSEND'S BIG-EARED BAT	G4	S2S3		SENSITIVE	SPECIAL STATUS	022N059E	15	SIDNEY MINE
001	LOBELIA SPICATA	PALE-SPIKED LOBELIA	G5	S1				023N059E	28	SIDNEY
003	ZAPUS HUDSONIUS	MEADOW JUMPING MOUSE	G5	S2S3			SPECIAL STATUS	021N059E	5	CRANE-E
002	ZAPUS HUDSONIUS	MEADOW JUMPING MOUSE	G5	S2S3			SPECIAL STATUS	022N059E	19	CRANE-N
040	STATE CHAMPION TREE	STATE CHAMPION TREE	Z	Z				021N058E	11	PICHE
031	BIRD ROOKERY	BIRD ROOKERY	Z	Z				021N058E	34	CRANE
007	HYBOPSIS GELIDA	STURGEON CHUB	G2	S2	C		SPECIAL STATUS	021N058E	27	SEARS CREEK MOUTH
004	ZAPUS HUDSONIUS	MEADOW JUMPING MOUSE	G5	S2S3			SPECIAL STATUS	021N058E	33	CRANE-S
005	ZAPUS HUDSONIUS	MEADOW JUMPING MOUSE	G5	S2S3			SPECIAL STATUS	020N058E	27	ELK ISLAND
030	BIRD ROOKERY	BIRD ROOKERY	Z	Z				018N057E	21	DIVERSION DAM
001	HYBOPSIS GELIDA	STURGEON CHUB	G2	S2	C		SPECIAL STATUS	018N056E	36	LOWER MISSOURI & YELLOWSTONE RIVER DRAINAGES.
004	POLYODON SPATHULA	PADDLEFISH	G4	S1S2			SPECIAL STATUS	018N056E	36	INTAKE
1	SCAPHIRHYNCHUS ALBUS	PALLID STURGEON	G1G2	S1	LE		SPECIAL STATUS	018N056E	35	LOWER MISSOURI & YELLOWSTONE RIVERS
001	HYBOPSIS MEEKI	SICKLEFIN CHUB	G3	S1	C		SPECIAL STATUS	028N055E	34	LOWER MISSOURI & YELLOWSTONE RIVERS
029	BIRD ROOKERY	BIRD ROOKERY	Z	Z				016N056E	18	GLENDIVE - ROOK
001	MENTZELIA NUDA	BRACKETLESS MENTZELIA	G5	S1			WATCH	016N055E	25	GLENDIVE
001	CELASTRUS SCANDENS	BITTERSWEET	G5	S1			WATCH	016N055E	25	
028	BIRD ROOKERY	BIRD ROOKERY	Z	Z				013N053E	31	FALLON - ROOK
006	HETERODON NASICUS	WESTERN HOGNOSE SNAKE	G5	S3				012N051E	10	TERRY
013	FALCO PEREGRINUS	PEREGRINE FALCON	G4	S1S2B,S ZN		DESIGNATION PENDING	SPECIAL STATUS	012N051E	9	TERRY
001	POLYODON SPATHULA	PADDLEFISH	G4	S1S2			SPECIAL STATUS	011N050E	4	POWDER RIVER MOUTH
010	HYBOPSIS GELIDA	STURGEON CHUB	G2	S2	C		SPECIAL STATUS	011N050E	4	POWDER RIVER MOUTH
027	BIRD ROOKERY	BIRD ROOKERY	Z	Z				010N049E	29	SHIRLEY
202	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	009N048E	18	KINSEY
276	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	008N047E	14	MURN
001	MENTZELIA MONTANA	WHITE-BRACT STICKLEAF	G4	SH				008N047E	28	MILES CITY
02	POLYODON SPATHULA	PADDLEFISH	G4	S1S2			SPECIAL STATUS	008N047E	32	TONGUE RIVER MOUTH

16-Mar-00

Montana Natural Heritage Program

Species of Special Concern: Yellowstone River from Laurel to North Dakota

EO #	Scientific Name	Common Name	GRANK	SRANK	ESA Status	USFS Status	BLM Status	Township/ Range	SECTION	SURVEY_SITE
003	CYPERUS SCHWEINTZII	SCHWEINTZ FLATSEDGE	G5	S2			WATCH	008N047E	32	FORT KEOGH
001	PENSTEMON GRANDIFLORUS	LARGE FLOWERED BEARDTONGUE	G5?	S1				007N046E	11	FORT KEOGH
278	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	007N046E	14	PARAGON
112	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	007N046E	21	KEOGH
130	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	007N045E	27	HORTON
026	BIRD ROOKERY	BIRD ROOKERY	Z	Z				007N045E	27	SHEFFIELD EAST
003	MENTZELIA NUDA	BRACTLESS MENTZELIA	G5	S1			WATCH	007N045E	34	
004	RORIPPA CALYCINA	PERSISTENT-SEPAL YELLOW-CRESS	G3	S1			WATCH	007N045E	32	*FORT SARP(Y)SHEFFIE LD)
099	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	006N044E	17	HATHAWAY
025	BIRD ROOKERY	BIRD ROOKERY	Z	Z				006N043E	13	COAL CREEK
024	BIRD ROOKERY	BIRD ROOKERY	Z	Z				006N043E	14	THURLOW
180	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	006N043E	8	SAND CREEK
001	CYCLEPTUS ELONGATUS	BLUE SUCKER	G4	S3?			SPECIAL STATUS	026N041E	5	LOWER MISSOURI & YELLOWSTONE RIVER DRAINAGES.
05	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	006N042E	7	ROSEBUD
023	BIRD ROOKERY	BIRD ROOKERY	Z	Z				006N041E	10	ORINOCO
114	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	006N041E	8	LANTRY
003	POLYODON SPATHULA	PADDLEFISH	G4	S1S2			SPECIAL STATUS	006N040E	23	FORSYTH
024	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	006N040E	18	ARMELLS CREEK
022	BIRD ROOKERY	BIRD ROOKERY	Z	Z				006N039E	15	NICHOLS
129	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	006N039E	16	HOWARD
001	TRIONYX SPINIFERUS	SPINY SOFTSHELL	G5	S3			SPECIAL STATUS	006N039E	17	YELLOWSTONE RIVER DRAINAGE
147	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	006N038E	11	RESERVATION CREEK
100	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	006N038E	4	FINCH
021	BIRD ROOKERY	BIRD ROOKERY	Z	Z				006N038E	5	FINCH
020	BIRD ROOKERY	BIRD ROOKERY	Z	Z				006N037E	4	SANDERS
079	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	006N037E	4	SANDERS
113	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	007N036E	35	FROZE TO DEATH (CREEK)
019	BIRD ROOKERY	BIRD ROOKERY	Z	Z				007N036E	34	HYSHAM - ROOK
018	BIRD ROOKERY	BIRD ROOKERY	Z	Z				006N035E	1	ISAAC HOMESTEAD

16-Mar-00

Montana Natural Heritage Program

Species of Special Concern: Yellowstone River from Laurel to North Dakota

EO #	Scientific Name	Common Name	GRANK	SRANK	ESA Status	USFS Status	BLM Status	Township/ Range	SECTION	SURVEY_SITE
020	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	006N035E	15	MYERS (HOWERY ISLAND); ISAAC HOMESTEAD?
019	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	006N034E	36	PEASE BOTTOM
098	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	005N034E	14	BIG HORN
017	BIRD ROOKERY	BIRD ROOKERY	Z	Z				005N034E	22	BIG HORN - ROOK
216	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	005N034E	29	GOVERNMENT ISLAND
088	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	004N033E	3	CUSTER
016	BIRD ROOKERY	BIRD ROOKERY	Z	Z				004N033E	3	CUSTER - ROOK
002	RORIPPA CALYCINA	PERSISTENT-SEPAL YELLOW-CRESS	G3	S1			WATCH	004N033E		CUSTER
274	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	004N033E	7	FEE
015	BIRD ROOKERY	BIRD ROOKERY	Z	Z				004N033E	7	SEVENMILE FLAT
097	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	004N032E	33	WACO
014	BIRD ROOKERY	BIRD ROOKERY	Z	Z				004N032E	33	WACO
111	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	003N031E	1	500 KV (YELLOWSTONE RIVER)
004	CHELYDRA SERPENTINA	SNAPPING TURTLE	G5	S3			SPECIAL STATUS	003N031E	1	BACKWATER SLOUGH
013	BIRD ROOKERY	BIRD ROOKERY	Z	Z				003N031E	1	SPRING CREEK - ROOK
273	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	003N031E	7	BIG MARY
128	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	003N030E	21	POMPEY'S PILLAR
012	BIRD ROOKERY	BIRD ROOKERY	Z	Z				003N030E	20	NIBBE
215	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	003N030E	20	NIBBE
076	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	003N029E	21	BALLANTINE
268	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	003N028E	26	WORDEN
010	BIRD ROOKERY	BIRD ROOKERY	Z	Z				002N027E	13	SPRAKLIN ISLAND, S.I. NORTH
089	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	002N027E	12	CROOKED CREEK
199	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	002N027E	13	SPRAKLIN ISLAND
143	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	001N027E	4	FEEDLOT
029	FALCO PEREGRINUS	PEREGRINE FALCON	G4	S1S2B,S ZN		DESIGNATION PENDING	SPECIAL STATUS	001S026E	2	SACRIFICE CLIFF
001	LAMPROPELTIS TRIANGULUM	MILK SNAKE	G5	S2				001S026E	2	BILLINGS
012	HETERODON NASICUS	WESTERN HOGNOSE SNAKE	G5	S3				001S026E	4	BILLINGS
214	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	001S025E	25	YEGEN

16-Mar-00

Montana Natural Heritage Program

Species of Special Concern: Yellowstone River from Laurel to North Dakota

EO #	Scientific Name	Common Name	GRANK	SRANK	ESA Status	USFS Status	BLM Status	Township/ Range	SECTION	SURVEY_SITE
243	HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	G4	S3B,S3N	LT	THREATENED	SPECIAL STATUS	002S025E	8	MOSSMAIN
009	BIRD ROOKERY	BIRD ROOKERY	Z	Z				002S024E	20	LAUREL - ROOK



MONTANA
**Natural Heritage
 Program**

A program of the
 NATURAL RESOURCE INFORMATION SYSTEM

P.O. Box 201800 • 1515 East Sixth Avenue • Helena, Montana 59620-1800 • Fax: 406-444-0581 • Phone: 406-444-3009

March 16, 2000

Guy Larango
 Olympus Technical Services
 454 Moore Lane #2
 Billings, Montana 59101

Dear Guy,

This is in response to your request for information on species of special concern along the Yellowstone River from Laurel to North Dakota, with a 0.5 mile buffer. Enclosed is a table of species of concern occurring in the vicinity of this area and explanatory material.

Please keep in mind the following when interpreting and using the element occurrence data and map:

- (1) The report is the result of a search of our database for species of concern that occur in the area defined by the requested location description, with an additional one-half mile buffer surrounding the requested area. This is done to provide you with a more inclusive set of records and to capture records for which only general location information is known.
- (2) Location information for animals represents occupied breeding habitat and has an areal extent beyond that conveyed by the location (point) data. Location information for plants represents known occurrences of plant species, and, like animals, has an implied areal extent that is not conveyed by the point (location) data.
- (3) This report may include sensitive data intended for your use only and not for general distribution or publication. In particular, public release of specific location information may jeopardize the welfare of a threatened, endangered, or sensitive species or community.
- (4) The accompanying map(s) display management status, which may differ from ownership. Also, this report may include data from privately-owned lands, and approval by the landowner is advisable if specific location information is considered for distribution. Features shown on this map do not imply public access to any lands.
- (5) Additional biological data for the search area(s) may be available from other sources. We suggest you contact the U.S. Fish and Wildlife Service for any additional information on threatened and endangered species (406-449-5225). Also, significant gaps exist in the Heritage Program's fisheries data, and we suggest you contact the Montana Rivers Information System for information related to your area of interest (406-444-3345).
- (6) The results of a data search by the Montana Natural Heritage Program reflect the current status of our data collection efforts. These results are not intended as a final statement on sensitive species within a given area, or as a substitute for on-site surveys, which may be required for environmental assessments

Electronic access to the Montana Natural Heritage Program is available at URL

<http://nris.mt.gov/mtnhp/>

THE NATURE CONSERVANCY AND MONTANA STATE LIBRARY

We are required to send you an invoice for these services, which will arrive under separate cover. The charges incurred are:

Database access fee	\$30.00
Printouts – 4 pages at .25 per page	<u>\$1.00</u>
Invoice total	\$31.00

Please note, the fee can be waived if work is performed for a state or federal government agency, or for a non-profit organization. When the invoice arrives, present it to the contracting agency and have them return it to the Montana Natural Heritage Program along with a note stating they have not been charged by you for the services provided by the Heritage Program. We will then cancel the fee.

Please feel free to contact me at (406) 444-2817 or via email at martinm@state.mt.us if you have any questions or require further information.

Sincerely,



Martin P. Miller
Montana Natural Heritage Program

Yellowstone River Fish Species
Mouth Of Clarks Fork To Huntley Dam

Species considered common:

Goldeye *	<i>Hiodon alosoides</i>
Mountain whitefish *	<i>Prosopium williamsoni</i>
Rainbow trout	<i>Oncorhynchus mykiss</i>
Brown trout	<i>Salmo trutta</i>
Carp	<i>Cyprinus carpio</i>
Flathead chub *	<i>Platygobio gracilis</i>
Emerald shiner *	<i>Notropis atherinoides</i>
Western silvery/plains minnow *	<i>Hypognathus spp.</i>
Longnose dace *	<i>Rhinichthys cataractae</i>
River carpsucker *	<i>Carpiodes carpio</i>
Shorthead redhorse *	<i>Moxostoma macrolepidotum</i>
Longnose sucker *	<i>Catostomus catostomus</i>
White sucker *	<i>Catostomus commersoni</i>
Mountain sucker *	<i>Catostomus platyrhynchus</i>
Burbot *	<i>Lota lota</i>

Other species of record of lesser abundance:

Fathead minnow *	<i>Pimephales promelas</i>
Smallmouth buffalo *	<i>Ictiobus bubalus</i>
Pumpkinseed	<i>Lepomis gibbosus</i>
Smallmouth bass	<i>Micropterus dolomieu</i>
Largemouth bass	<i>Micropterus salmoides</i>
Black bullhead	<i>Ameiurus melas</i>
Channel catfish *	<i>Ictalurus punctatus</i>
Stonecat *	<i>Noturus flavus</i>
Yellow perch	<i>Perca flavescens</i>
Mottled sculpin *	<i>Cottus bairdi</i>

There are a few other species that would not surprise me if they turned up in this reach. They are:

Yellowstone cutthroat trout *	<i>Oncorhynchus clarki bouvieri</i>
Northern pike	<i>Esox lucius</i>
Sturgeon chub *	<i>Macrhybopsis gelida</i>
Lake chub *	<i>Coxesius plumbeus</i>
Bigmouth buffalo *	<i>Ictiobus cyprinellus</i>
Yellow bullhead	<i>Ameiurus natalis</i>
Black crappie	<i>Pomoxis nigromaculatus</i>
Sauger *	<i>Stizostedion canadense</i>
Walleye	<i>Stizostedion vitreum</i>
Freshwater drum *	<i>Aplodinotus grunniens</i>

A paddlefish *Polyodon spathula* * was found alive in the Huntley Diversion Dam canal in the 1960's. Pallid sturgeon *Scaphirhynchus albus* *, shovelnose sturgeon *S. platyrhynchus* *, and blue sucker *Cycleptus elongatus* * may have been visitors to this stretch of river in the past.

* Native to the Yellowstone River drainage.

1/99 MWVaughn

Post-It Fax Note		7671	
To	Jan Hanbury	From	Ken Fayer
Co/Dept	FWS	Ca.	
Phone #		Phone #	
Fax #	248-7364	Fax #	
		1 of 1 pages	

December 1999

THREATENED AND ENDANGERED SPECIES - MONTANA
Endangered Species Act

ENDANGERED (E) - Any species that is in danger of extinction throughout all or a significant portion of its range.

THREATENED (T) - Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

COMMON NAME	SCIENTIFIC NAME	STATUS	RANGE - MONTANA
Black-footed Ferret	<i>Mustela nigripes</i>	E	Prairie dog complexes; Eastern Montana
Gray Wolf	<i>Canis lupus</i>	E	Forests; Western Montana
Whooping Crane	<i>Grus americana</i>	E	Wetlands; migrant statewide
Least Tern	<i>Sterna antillarum</i>	E	Yellowstone, Missouri River sandbars, beaches; Eastern Montana
Pallid Sturgeon	<i>Scaphirhynchus albus</i>	E	Bottom dwelling; Missouri, Yellowstone Rivers
White Sturgeon (Kootenai River population)	<i>Acipenser transmontanus</i>	E	Bottom dwelling; Kootenai River
Grizzly Bear	<i>Ursus arctos horribilis</i>	T	Alpine/subalpine coniferous forest; Western Montana
Bald Eagle	<i>Haliaeetus leucocephalus</i>	T* (Proposed for delisting)	Forested riparian; statewide

-continued-

COMMON NAME	SCIENTIFIC NAME	STATUS	RANGE - MONTANA
Piping Plover	<i>Charadrius melodus</i>	T	Missouri River sandbars, alkaline beaches; northeastern Montana
Water Howellia	<i>Howellia aquatilis</i>	T	Wetlands; Swan Valley, Lake and Missoula Counties
Ute Ladies'-tresses	<i>Spiranthes diluvialis</i>	T	River meander wetlands; Jefferson, Madison, Beaverhead, Gallatin Counties
Bull trout (Columbia River basin and St. Mary - Belly River populations)	<i>Salvelinus confluentus</i>	T	West of Continental Divide in Clark Fork, Flathead, Kootenai river basins; East of Continental Divide in Glacier National Park and Blackfoot Reservation - cold water rivers & lakes
Spalding's Campion	<i>Silene spaldingii</i>	Proposed T	Upper Flathead River drainage and Tobacco Valley - open grasslands with rough fescue or bluebunch wheatgrass
Canada lynx (contiguous U.S. population)	<i>Lynx canadensis</i>	Proposed T	Western Montana - montane forest
Mountain Plover	<i>Charadrius montanus</i>	Proposed T	Eastern Montana - shortgrass prairie

Notes:

* On July 6, 1999, the bald eagle was proposed for removal from the Federal List of Endangered and Threatened Wildlife. The bald eagle remains protected as a threatened species until delisting is final.

**The American peregrine falcon (*Falco peregrinus anatum*) has recovered following restrictions on organochlorine pesticides and successful management activities; therefore, it was removed from the Federal List of Endangered and Threatened Wildlife on August 25, 1999.

Olympus Technical Services and Billings, MT Subcontractor

Equipment List

EMERGENCY RESPONSE EQUIPMENT INVENTORY

**BNSF Railway Company
Alkali Creek, Billings, Montana**

Inspected by: _____ Signature: _____ Date: _____ Time: _____

Olympus Response Inventory

Item	Quantity	Unit
Helena		
Vehicles and Heavy Equipment		
Backhoe – Cat, 416, 4WD	1	each
Bobcat – Model 743	1	each
Trailer – Gooseneck	1	each
Trailer – Tork Flatbed	1	each
Trailer – Vac, 1,000 gallons	1	each
Trailer – Wells Cargo	1	each
Truck – Ford 3/4-Ton, 4WD	1	each
Truck – Dodge 1-Ton, 4WD	1	each
Truck – GMC 1/2-Ton, 4WD	1	each
		each
Field Equipment and Materials		
Auger – hand with bits and extensions	1	each
Bag Filter – 400 cfm	1	each
Bags – 6 mil, case	1	each
Bags – soil; 1 yard	10	each
Battery Charger, 16 amp	1	each
Blower, Coppus	1	each
Bolt Cutter	1	each
Camera – video, Cannon E65, 8mm	1	each
Camlock Fittings, various	1	each
Clinometer – Suunto	2	each
Coliwasa Sludge Sampler – 6-inch	1	each
Compass – Brunton pocket transit	1	each
Compressor – air, Campbell Hausfield, 2 hp	1	each
Cone – traffic	6	each
Controller – pneumatic for pumps	1	each
Coppus ventilator	1	each
Coveralls – Drua Fab (Level B incapsulated suit), each	36	each
Coveralls – Kappler, CPS3, poly coated (dark gray), each	2	each
Coveralls – Saranex sleeveless jackets with hoods, 12/case	1	case
Coveralls – Saranex, poly coated (gray), 12/case	1.25	case
Coveralls – Tyvek (white), 25/case	10	case
Coveralls – Tyvek, poly coated (yellow), 12/case	10	case
Crowbar	2	each
Drum – 30-gal poly OH	1	each
Drum – 30-gal, 17H	6	each
Drum – 30-gal, closed top	4	each
Drum – dolly	3	each
Drum – grappler	1	each
Drum – poly, 105-gal open top	2	each

EMERGENCY RESPONSE EQUIPMENT INVENTORY

**BNSF Railway Company
Alkali Creek, Billings, Montana**

Item	Quantity	Unit
Drum – poly, 55-gal	4	each
Drum – steel, 20-gal open top	16	each
Drum – steel, 55-gal, closed top	15	each
Drums – steel, 55-gal open top	8	each
Drums – steel, 85-gal overpack	8	each
Fuel pump – electric	1	each
Generator – Honda, 5000 watt, model G50	1	each
Generator – Honda, 6000 watt	1	each
GFI – ground fault indicator, standard	2	each
Heater – Kerosene space, Homelite 150000 BTU	1	each
Heater – portable electric	5	each
Hip Chain – distance measurer and thread pouch/belt	1	each
Hose – air, ½-inch, 50 feet	1	each
Hose – air, ¾-inch, 50 feet	1	each
Hose – cutting torch, 50 feet	1	each
Hose – discharge, 2-inch	1	each
Hose – discharge, 3-inch	1	each
Hose – garden	3	each
Hose – suction, 1.5-inch, 30 feet	1	each
Hose – suction, 2-inch, 30 feet	1	each
Hose – suction, 3-inch, 50 feet	6	each
Instrument – OVA-128 with charger, Foxboro Co.	1	each
Jack – hi-lift	1	each
Kit – ferrous iron sampling, Hach model 1R-18C	1	each
Kit – first aid	6	each
Kit – hazcat	1	each
Kit – nitrate sampling, Hach model NI-14	1	each
Ladder – 16-foot aluminum	1	each
Ladder – 8-foot aluminum	1	each
Ladder – 8-foot fiberglass	1	each
Level – 48-inch Contractor	1	each
Light – flash	4	each
Light – flashing	5	each
Light – halogen set	2	each
Meter – conductivity, Oakton TDS Testr 1	1	each
Meter – DO, YSI model 518	1	each
Meter – Global Water, Flow Probe Handheld	1	each
Meter – Industrial Scientific, LEL Monitor with charger	1	each
Meter – Industrial Scientific, Oxygen Monitor, batteries	1	each
Meter – ORP Meter		
Meter – manometer, Dwyer	1	each
Meter – pH, Oakton pH Testr 3	1	each
Meter – Soil moisture	1	each
Meter – Tank, Pipe and Cable Locator	1	each
Meter – Gastech LEL/O2 with charger	1	each

EMERGENCY RESPONSE EQUIPMENT INVENTORY

**BNSF Railway Company
Alkali Creek, Billings, Montana**

Item	Quantity	Unit
Neutralizer – Acid, 5 gallons	1	each
Neutralizer – Caustic, 5 gallons	1	each
PCB Cleaner, pipe-x	2	each
Pressure washer, Hotsy	1	each
Probe – interface, Waterra	1	each
Probe – water level, Keck	1	each
Probe – water level, Solinst 101	1	each
Pump – 1.5-inch trash pump, gasoline powered	1	each
Pump – air diaphragm, Sandpiper	1	each
Pump – air diaphragm, Wilden M15, 3-inch	1	each
Pump – air diaphragm, Wilden M4, 2-inch	1	each
Pump – air displacement, 1.5-inch, QED Purge Pump	2	each
Pump – bladder, 1.5-inch, QED Well Wizard	1	each
Pump – Grundfos Rediflo 2-inch sampling pump and controller	1	each
Pump – Grundfos Rediflo 4-inch sampling pump	1	each
Pump – Homelite water bug	2	each
Pump – Industrial Scientific, Sampling for LEL and O2 Meters	1	each
Pump – positive displacement with air motor	1	each
Pump – Sump, various ½-inch	4	each
Rakes	2	each
Rivet gun	1	each
Sawzall Milwaukee	3	each
SCBA – 30 minute std. cylinders with regulator (not for Scott SCBA)	1	each
SCBA – 30 minute std. cylinders with regulator for Scott Air-Pak 2.2	4	each
SCBA – Scott Air-Pak 2.2; with 30-foot cyl	4	each
SCBA Facemasks	4	each
Scoop – stainless steel	2	each
Sensidyne detector kit	1	each
Separator – air/oil	1	each
Shovel – non-sparking	2	each
Shovel – stainless steel sampling	1	each
Shovel, metal	11	each
Signs – road construction with stand	2	each
Sorbent booms – bale	9	each
Sorbent pads – bale	24	each
Sorbent pads – oil & water – bales	3	each
Sorbent sweeps – bales	17	each
Survey Accessories – 12-foot prism pole, single prism, transit software	1	each
Survey Instrument – Nikon DTM-520 total station	1	each
Survey Radios – Motorola TalkAbout 250; incl. 2 portable radios, case	1	each
Survey rod – Mound City, 25-foot	1	each
Tape measure – 100-foot	3	each
Tools – wrenches miscellaneous	1	each
Torch – propane	1	each
Tripod – Brunton compass extension	1	each

EMERGENCY RESPONSE EQUIPMENT INVENTORY

**BNSF Railway Company
Alkali Creek, Billings, Montana**

Item	Quantity	Unit
UV Lamp – Mineralight Model – UVGL – 48	1	each
Vac U Max	1	each
Vacuum – mercury maxiguard	1	each
Vacuum – Shop vac	2	each
Vest – orange traffic	10	each
Visqueen – 6 mil	7	each
Waders – hip	2	pair
Wrench – impact, Black and Decker ½-inch	1	each
Billings		
Vehicles and Heavy Equipment		
Truck – Ford 4WD 3/4T with lift	1	each
Truck – Ford 4WD 1/4T	1	each
		each
Field Equipment and Materials		
Cascade System – ARAP escape bottle with full face mask, 50-foot hose with quick connects, one 3-way air supply/pressure gauge	2	each
Absorbent – ultrasorb	4	each
Auger – hand	1	each
Bags – 6 mil	100	each
Cartridges – respirator; North	0.5	case
Chlor-N-Oil	1	each
Compactor – plate, Wacker	1	each
Cone – traffic	2	each
Coolers – large	6	each
Coolers – small	1	each
COPPUS Ventilator	1	each
Coveralls – Tyvek (white), 25/case	6	case
Coveralls – Tyvek, poly-coated (yellow), 12/case	10	case
Cutting Torch Hose	2	each
Cutting Torches	1	each
Drill – ½-inch, Makita Model NHP1310, 2-speed	1	each
Drum – 20 gal steel; OH	3	each
Drum – 55 gal CH steel	6	each
Drum – 55 gal OH, steel	6	each
Drum – 55 gal poly OH	1	each
Drum – 85 gal poly overpak	2	each
Drum – 85 gal steel overpak	5	each
Drum – dolly	1	each
Drum – opener	1	each
Earplugs	1	each
Extension Cords	4	each
Eye Wash	3	each
Fence Post Driver	1	each
Fire Extinguishers-15#	3	each

EMERGENCY RESPONSE EQUIPMENT INVENTORY

**BNSF Railway Company
Alkali Creek, Billings, Montana**

Item	Quantity	Unit
Fire Extinguishers-3#	4	each
Fittings – camlock	1	each
Fittings – PVC	1	each
Floor Dry	7	each
Generator, portable Honda 5,000 watt, SN#EB5000XK1A	1	each
Glass Rods	1	each
Gloves – latex disposable	1	each
Gloves – petroflex	1	case
Gloves – solvex		case
Grinder	1	each
Hammer – carpenter	1	each
Hammer – sledge	1	each
Hardhats	8	each
HEPA Vac – model 829117, SN#s8291171074	1	each
Hose – 2-inch suction with fittings	2	each
Hose – 3-inch suction with fittings	1	each
Hose – air with fittings	1	each
Hose – air ½-foot	1	each
Hose – Chemical Pump 1-inch	1	each
Hose – Garden, 50-foot section	3	each
Kit – chlor dtect	1	each
Kit – Petro Flag Soil Test	1	each
Kit – first aid	3	each
Labels (flammable, poison, etc.)	1	each
Ladder – 16-foot extension	1	each
Level – contractors	1	each
Light – flash	3	each
Light – halogen	1	each
Lime	3	bag
Meter – conductivity, Hanna 4, pocket model	1	each
Meter – LEL/O ₂ /H ₂ S/CH ₄	1	each
Meter – organic vapor, Thermo Environmental Instruments, model 580B, SN#580B-44809-273	1	each
Meter – pH, Hanna 3, pocket model	1	each
Pressure Washer – Hotsy, model 660, SN#c740700290	1	each
Probe – water level, Keck, model ET-94, SN#730	1	each
Probe – water Interface	1	each
Pump – air diaphragm, ARO Model 66605J, ½-inch	1	each
Pump – air diaphragm, Wilden M4, 2-inch	1	each
Pump – air diaphragm, Wilden M15, 4-inch	1	each
Meter – Gastech Sensidyne, model 800, SN#9605	1	each
Pump – Gastech Series II Peristaltic, model 0711; with standard pump head	1	each
River Boom – 100 feet	3	each
Ropes – Nylon, various diameters	1	each

EMERGENCY RESPONSE EQUIPMENT INVENTORY

**BNSF Railway Company
Alkali Creek, Billings, Montana**

Item	Quantity	Unit
Safety Harness	2	each
Sawzall, DeWalt	1	each
SCBA cylinders; steel, 25-minute	5	each
SCBA Magnum ISI with regulator, mask and 25-minute steel cylinder	5	each
Shovels – Non Sparking	2	each
Shovels – metal	4	each
Signs – Men Working with stands	2	each
Sorbent – booms; 5-inch	4	bale
Sorbent – pads	20	bale
Strap – nylon	2	each
Survey Rod	1	each
Vacuum – Shop Vac – 18-gal	1	each
Visqueen – 6 mil	5	each
Waders – Hip	1	each
Wheel – measuring	1	each
Wrenches – Miscellaneous	1	each
Boise		
Vehicles and Heavy Equipment		
Trailer – Wells Cargo, 1995	1	each
Truck – Chevy 2WD 1/2T	1	each
Truck – Ford 4WD 3/4T with lift gate	1	each
Field Equipment and Materials		
Auger – hand	1	each
Blower – EG&G model DR404AR58M, 5 hp	2	each
Blower – 2 hp	1	each
Box – electrical, assorted	4	each
Box – tool with small hand tools	1	each
Cartridge – respirator; North PN#N7500-1 (Dust, Mists, OV)	6	each
Cartridge – respirator; North PN#N7500-83 (Asbestos, AG, OV, Dusts, Mists, Radionuclides, Radon Daughters)	12	pair
Cartridge – respirator; North PN#N7583P10 (Mercury)	2	pair
Cartridges – respirator; North Combination cartridges; pair	2	each
Cartridges – respirator; North multi-gas; pair	30	pair
Cartridges – respirator; North ammonia/methylamine; pair	2	pair
Chemical – Soda ash; 50 lb. bag	1	bag
Cable (3/4-inch x 50-foot)	1	each
Cleaner – PCB “Less than 10”, 5 gallons	2	
Cleaner – PCS-100, 5 gallons	3	
Cleaner – PipeX, Metal X, 5 gallons	3	
Compressor – air, Speedaire model 3Z406J.1	1	each
Cones – traffic	5	each
Coveralls – Tyvek (white), 25/case	3	case
Coveralls – Saranex, 12/case	2	case

EMERGENCY RESPONSE EQUIPMENT INVENTORY

**BNSF Railway Company
Alkali Creek, Billings, Montana**

Item	Quantity	Unit
Coveralls – Kleen Guard	1	case
Coveralls – Tyvek, large	4	case
Coveralls – Tyvek, poly-coated	9	case
Coveralls – Tyvek, x-large	10	case
Crowbar	1	each
Drill – ½-inch (Milwaukee 1630)	1	each
Drill – ½-inch, Skil Extra-Tool-600	1	each
Drum – dolly	1	each
Drum – grappler	1	each
Drums – 10-gallon metal (OT)	4	each
Drums – 20-gallon metal (OT)	3	each
Drums – 30-gallon poly (BT)	1	each
Drums – 30-gallon steel OT	2	each
Drums – 5-gallon metal buckets	8	each
Drums – 5-gallon plastic buckets	5	each
Drums – 55-gallon poly CH	2	each
Drums – 55-gallon metal (BT)	5	each
Drums – 55-gallon metal (OT)	3	each
Drums – 85-gallon Salvage metal (OT)	10	each
Drum – deheader	1	each
Extension Cord – electrical, 100-foot	2	each
Extension Cord – electrical, 25-foot	2	each
Fence – caution, 25-foot	2	roll
Fence – caution, 100-foot	1	each
Fence – caution, 50-foot	1	each
Fence Post – metal	9	each
Fire Extinguisher – 15 lb.	2	each
Fire Extinguisher – 5 lb.	3	each
First Aid Kit	5	each
Floor Dry	17	bag
Funnels	3	each
Generator – GE Honda 5000X	1	each
GFCI	1	each
GFI – ground fault indicator	1	each
Hose – air (with fittings)	1	each
Hose – garden	6	each
Hose – 2-inch discharge X 50 feet	2	each
Hose – 2-inch suction with fittings and screen	1	each
Hose – 3-inch suction with fittings	1	each
Kit – ferrous iron sampling, Hach model 1R-18C	1	each
Lights – flash	3	each
Lights – halogen	1	each
Meter – air flow/Anemometer – Series 470 – Dwyer	1	each
Meter – conductivity, YSI model 30/50-foot	1	each
Meter – dissolved oxygen, YSI model 51B	1	each

EMERGENCY RESPONSE EQUIPMENT INVENTORY

**BNSF Railway Company
Alkali Creek, Billings, Montana**

Item	Quantity	Unit
Meter – explosimeter/LEL, Dynamation model 502	1	each
Meter – gas detector hand pump Nalgene model DC013	1	each
Meter – gas detector tubes, Sensidyne and Drager	9	box
Meter – LEL/O2 explosimeter, Gastech model 1314	1	each
Meter – manometer – Dwyer – model 26 Mark II	1	each
Meter – pH, Orion model 230A	1	each
Meter – thermometer – Tel-TRV model BC550R	3	each
Meter – voltage, Autorange LCD Digital – model 22-163	1	each
Meter – water level, Solinst model 101	1	each
Mops	1	each
Panel – control, Redi-Flow Pump Master One	1	each
Pool – decon	1	each
Probe – interface, Solinst model 121	1	each
Probe – soil gas, AMS model 400.91, set 427.01	1	each
Pump – 2-inch submersible, Grundfos Redi-Flow2, .5 hp, 4W	3	each
Pump – 4-inch submersible, Grundfos Redi-Flow4	3	each
Pump – air diaphragm, Wilden M4	1	each
Pump – development with control box-QED/sample pro #350	1	each
Pump – Sump	1	each
Pump – Trash; “Teel”; 3.5 hp; Model 91232 Type 0062 01	1	each
PVC – ball valves, TUBV 4-inch	4	each
PVC – fittings and pipe, miscellaneous	1	lot
Reel – hose with 100 feet	1	each
Regulator – SCBA cascade regulator, Meco - Cascade A	1	each
Respirator – full face; North Model #7600	3	each
Respirator – half face; North Model #7700	3	each
River Boom – 100-foot	2	each
Rope – nylon, 100-foot	1	each
Rope – nylon, 50-foot	1	each
Rope #3 – Solid brad nylon (1,000-foot)	2	each
Sawzall – Milwaukee	1	each
SCBA – Extra 30-foot tanks	5	each
SCBA – ISI Ranger with 30-foot steel tank	5	each
Shovel – metal	2	each
Shovel – plastic	1	each
Sorbent – boom	11	bale
Sorbent – pad	9	bale
Sorbent – roll	2	bale
Sprayer – decon, Chapin model 1035, 2-gallon	1	each
Sprayer – decon, Chapin model 2009, 2.25-gallon	2	each
Steel Banding – ½-inch x 0.15 – 200-foot	1	each
Straps – Nylon	3	each
Survey Instrument – Level – David White – Meridian L6-20	1	each
Survey rod – Lietz Direct Elevation, 10-foot	1	each
Tank – moisture separator, 20-gallon	1	each

EMERGENCY RESPONSE EQUIPMENT INVENTORY

BNSF Railway Company
Alkali Creek, Billings, Montana

Item	Quantity	Unit
Tank – poly, 500-gallon with stand	1	each
Tape Measure – 100-foot, Tufboy model 1706	1	each
Tape Measure – 300-foot, Plumb model PL1709	1	each
Tools – miscellaneous (wrenches, sockets, screwdrivers, etc.)	1	each
Torch – Cutting Oxy/Acetylene Hose 20-foot	1	each
Torch – Cutting; 1 std., 1-demo torch, misc. fittings and handles	1	each
Torch – propane	1	each
Vacuum – Shop	2	each
Visqueen – 10 mil (20-foot x 100-foot)	1	each
Visqueen – 6 mil (20-foot x 100-foot)	2	each
Waders – chest	1	each

Signed by: _____

Date: _____

Montana-Wyoming Spill Co-Op

Equipment List
Acknowledgement Letter of Management

James W. Rice
Chairman

Montana/Wyoming Oil Spill Cooperative
338 Highway 87 East
Billings, Mt 59101
(406) 255-5601

September 27, 1999

Mr. Michael J. Perrodin
BNSF
235 Mail Street
Havre, MT 59501

Dear Michael:

This correspondence is in response to your request for documentation of BNSF's status as a member of the Montana-Wyoming Oil Spill Control Cooperative.

[BNSF has been a Montana-Wyoming Oil Spill Control Cooperative member in good standing since September 23, 1997. BNSF and their contract responder, "Olympus Technical", are active participants in the Cooperative effort to provide equipment, response locations and information to members. Jim Rice - COOP Chairman 1999.]

If you need any more documentation, we have letters and meeting minutes. I can be contacted at (406) 255-5601.

Sincerely,



Jim Rice
Chairman

EXHIBIT B

MONTANA - WYOMING OIL SPILL CONTROL COOPERATIVE REPRESENTATIVE CONTACT LIST

MEMBERS BY COMPANY	COUNCIL REP / ALTERNATE	OFFICE	EMAIL
BNSF Railway			
235 Main Street	Michael Perrodin	406-265-0483	michael.perrodin@bnsf.com
Havre, MT. 59501	BNSF ROC (24 hr.)	800-832-5452	
Fax: 406-265-0356	(Resource Operations Center)		
ConocoPhillips Company			
ConocoPhillips Billings Refinery	Greg Nell	406-255-2557	greg.d.nell@Conocophillips.com
401 South 23rd	Lisa Naccarato	406-255-2561	lisa.m.naccarato@conocophillips.com
Billings, MT 59101	Shift Super/Security	406-255-2560	
406-255-5692			
Fax: 406-255-2507			
Glacier Pipeline	Mike Hraban	406-255-5601	michael.i.hraban@conocophillips.com
338 Highway 87 East	Travis Wilke	406-255-5675	wilkepi@conocophillips.com
Billings, MT. 59101			
406-255-5692			
Fax: 406-255-5606			
CHS Inc.			
Cenex Pipelines and Terminals	Mike Stahly	406-628-5209	
Laurel, MT. 59044	Jeff Casey	406-628-5210	Jeff.Casey@chsinc.com
406-628-5200	Jacob Seel	406-628-5361	
	John Traeger	406-628-5202	
Cenex Refinery	Pat Kimmet	406-628-5220	
P. O. Box: 909	Ron Nissen	406-628-5384	
Laurel, MT. 59044	Dave Jany	406-628-5276	dave.jany@chsinc.com
406-628-5231			
Fax: 406-628-5390			
ExxonMobil			
ExxonMobil Refining & Supply	Wes Simpson	406-657-5267	wesley.e.simpson@exxonmobil.com
Billings Refinery			
P.O.Box: 1163			
Billings, MT. 59103			
Fax: 406-657-5374			
Emergency 24 Hr	Shift Superintendent	406-657-5320	
ExxonMobil Pipeline Company	Robert Foote	406-662-3569	robert.d.foote@exxonmobil.com
P.O.Box: 366	James Althoff	406-237-0803	james.althoff@exxonmobil.com
Bridger, MT. 59014	Emergency 24 Hr	800-537-5200	
406-662-3569			
Fax: 406-662-3546			
Marathon Oil Company			
1501 Stampede Avenue	Calvin D. Reavis	307-587-4961	cdreavis@marathonoil.com
Cody, WY. 82414	Marvin Blakesley	307-587-4961	mblakesley@marathonoil.com
Fax: 307-527-3920			
Red Butte Pipe Line Company (Marathon Pipeline Company)			
P.O.Box: 350	Sid Hetland - Powell, WY	307-754-5761x23	shetland@marathonpetroleum.com
Powell, WY. 82435	Rod Wittkop - Worland, WY	307-347-9241x29	rwittkop@marathonpetroleum.com
307-754-5761	Thad Paul - Powell, WY	307-754-5761x36	tpaul@marathonpetroleum.com
Fax: 307-754-2151	Charlie Sullivan - Powell, WY.	307-754-5761x28	csullivan@marathonpetroleum.com
Rocky Mountain Pipeline			
P. O. Box: 30191	John McCleary	406-254-6966	mcclary@racpipe.co
Billings, MT. 59107	Gene Davis	307-864-5593	gdavis@racpipe.com
Fax: 406-254-7520			
Emergency 24 Hr	Operations Control Center - Long Beach CA	1-866-800-7677	

EXHIBIT B

MONTANA - WYOMING OIL SPILL CONTROL COOPERATIVE REPRESENTATIVE CONTACT LIST

MEMBERS BY COMPANY	COUNCIL REP / ALTERNATE			
Terasen Pipelines (USA) Inc.		OFFICE	(b) (6)	EMAIL
Terasen Pipelines (USA) Inc.	Dean Dick (Engineering)	307-233-6169		
800 Werner Court - Suite 352	Marc Jackson (Operations)	307-233-6162		
Casper, WY. 82601		800-700-8666		
Terasen Pipelines (USA) Inc. 247 E. 2nd Street Powell, WY. 82435	Mike Graham	307-754-7940		Mike.Graham@terasen.com
Fax: 307-754-7963	Oil Movements - PCC (Canada)			
Emergency 24 Hr	Oil Movements - PCC (Canada)	1-888-449-7539		
Yellowstone Pipe Line Company		OFFICE		EMAIL
338 Highway 87 East	Neil Steward	406-255-5641		neil.steward@conocophillips.com
Billings, MT. 59101	Mike Hraban	406-255-5601		michael.j.hraban@conocophillips.com
406-255-5600				
Fax: 406-255-5625				
MT/WY Coop Equipment Locations and Access Contacts		OFFICE	EMAIL	
Trailer 1, 2, & 5 - Glacier Pipeline Yard - 338 Hwy 87 East, Billings, MT 59101				
	Jim Costello	406-255-5646		
	Travis Wilke	406-255-5675		
	Steve Marsee	406-255-7990		
	Mike Hraban	406-255-5601		
	COP Control Center - 24 Hr	800-231-2551		
Trailer 3 - Strecker Ranch - 4345 Powmer Road, Billings, MT 59105				
	Jim Costello	406-255-5646		
	COP Refinery Security	406-255-2560		
	COP Control Center - 24 Hr	800-231-2551		
Trailer 4 - 753 Bernhardt Road, Laurel, MT				
	CHS Dispatcher-24 Hr.	1-800-421-4122		
	Jeff Casey	406-628-5210		
	Jacob Seel	406-628-5361		
	John Traeger	406-628-5202		
Boat 1 - Inboard Jet - ExxonMobil Refinery - Main Gate (Contact Shift Foreman)				
ExxonMobil Refinery	Shift Superintendent	406-657-5320		
Boat 2 Outboard 150Hp - COP Refinery - Main Gate (Contact Marsee, Neill or Seel)				
	Greg Neill	406-255-2557		
	Steve Marsee	406-255-7990		
	COP Refinery Security	406-255-2560		

MT-WY COOP - OSR EQUIP: Trailers 1,5,6,7& Parts-CPL, 338 Hwy 87 East, Billings, MT
Trailer #2 retired 2006

Trailer 3 - Huntly Diversion Dam, Huntley, MT

Inspected By:	Hanser's		LAST INSP	Dec-07
Recovery Capacity:	7,845 bpd = 20% daily recovery rate of 1,529 bpd	(bpd capacity based on 20% efficiency)		
Equipment Type	Description - Model, Style, Size, Capacity	Qty	Location	Operational Status/Comments
TRAILER # 1			Hanser's	
Trailer	Well Cargo 11,500 GVW Trailer with roof rack drawtight sway control, divider wall and pull-down desk top. 2 5/16" hitch	1		OK
Anchors	anchors Size # 10	5	Curb-Side Stor	OK
Anchors	anchors Size # 18	5	Curb-Side Stor	OK
Boat	14-foot Jon boat	1	Roof Rack	OK
Booms	Absorbent booms 5" x 10' (4 per box)	120'	Street-Side	OK
Brushes	Cleaning Brushes 2 big 7 small	9	Curb-Side	OK
Pools	Collapsible Decon Pools	2	Curb-Side	OK
Sprayers	Liquid Sprayers 3gal	2	Curb-Side	OK
Soap	Simple Green liquid soap 1gal	3	Curb-Side	OK
Buoys	Buoys for boom	5	Curb-Side Stor	1 missing
Culverts	16 foot, 16-gauge, 15-inch culverts	2	Roof Rack	OK
Culverts	16 foot, 16-gauge, 8-inch culverts	2	Roof Rack	OK
D-Rings	4" D-Rings	5	Curb-Side	OK
Drum	55 gal steel drum	1	Rear-storage	OK
Ext. Cords	50' extension cords	100'	Street-Side	OK
Ext. Cords	Water tight extension cords 2-100' 2-50'	300'	Curb-Side Stor	OK
Extinguisher	Ansul fire extinguisher 30#	1	Floor-Mounted	OK
Fence Posts	5' x 6" fence posts	14	Curb-Side Stor	OK
Flashlights	flashlights w/batteries	6	Street-Side	OK
Floats	3" hose floats	6	Street-Side	OK
Floats	3/4" hose floats	7	Street-Side	OK
Gas Can	1- 1gal 1-1.5gal 2- 5gal plastic	4	Street-Side	1 extra 2.5 gal can
Gas Tank	6 gallon boat motor gas tank	1	Street-Side	OK
Generator	5000 watt ONAN generator	1	Floor-Mounted	OK
Gloves	Work gloves-rubber	6pr	Curb-Side	OK
Goggles	Safety Goggles	17	Curb-Side	OK
Hammer	Sledge Hammer	1	Curb-Side Stor	OK
Hose	3" x 25' suction hose and fittings	50'	Front Storage	OK
Hose	2" x 50' discharge hose with fittings	100'	Front Storage	OK
Hose	2" x 50' suction hose and fittings	50'	Front Storage	OK
Hose	100' 3/4" discharge hose with clamp	100'	Curb-Side Stor	OK
Jeri Can	5 gallon safety jeri can	1	Street-Side	OK
Light Stand	light stand with generator	1	Floor-Mounted	OK
Light Stand	Light Stand Only	1	Floor-Mounted	OK
Lights	1000 watt lights for light stands	2	Curb-Side Stor	OK
Line Gun	45 Caliber line gun with string canisters	1	Curb-Side	OK
Liners	55 gal drum liners	2 bx	Curb-side	OK
Motor	15 HP Yamaha boat motor	1	Floor-Mounted	OK
Oars	wooden & fiberglass oars with locks & paddles	3 pair	Curb-Side Stor	OK
Pads	Absorbent pads - 17" x 19" (100 per bundle)	300	Street-Side	OK
Pitchforks	5-tine pitchforks	2	Curb-Side Stor	OK
Plastic Bbl	Rubber Maid trash can 44gal	2	Curb-side	OK
Plastic Bbl	Rubber Maid trash can 20gal	1	Curb-side	OK

MT-WY COOP - OSR EQUIP: Trailers 1,5,6,7& Parts-CPL, 338 Hwy 87 East, Billings, MT
Trailer #2 retired 2006

Trailer 3 - Huntly Diversion Dam, Huntley, MT

Inspected By:	Hanser's		LAST INSP	Dec-07
Recovery Capacity:	7,645 bpd = 20% daily recovery rate of 1,529 bpd (bpd capacity based on 20% efficiency)			
Equipment Type	Description - Model, Style, Size, Capacity	Qty	Location	Operational Status/Comments
Plastic sheet	Roll of plastic sheeting	2	Curb-Side	OK
Post Drivers	post drivers	2	Curb-Side Stor	OK
Pump	Honda pump (gas driven)	1	Street-Side	OK
Rope	Misc lengths of 1/4" 3/8" 1/2" 5/8"	1	Curb-Side	OK
Rope	Safety Quick Disconnect Rope Bridles	6	Curb-Side	OK
Pump	Monarch diaphragm pump, gas-driven	1	Floor-Mounted	OK
Rakes	Garden Rakes	1	Curb-Side Stor	OK
Bridge Bridle	Bridle to connect boom to bridge piers	1	Curb-side	OK
Shovels	Size 0 shovels 1round nose, 1 square nose	2	Curb-Side Stor	OK
Skimmer	Manta Ray skimmer	1	Front Storage	OK
Skimmer	Acme vacuum skimmer	1	Street-Side	OK
Snap rings	5/8" snap hooks Wrope loop	7	Curb-side	OK
"O" Rings	3" Steel O-rings	21	Curb-side	OK
Stakes	3' steel stakes	4	Curb-Side Stor	OK
Skimmer	Aqua Guard RBS-05 Oil recovery system w/ Yamaha diesel engine	1		OK
Tape	Duct Tape	1 bx	Curb-Side	OK
Vests	adjustable life vests	8	Street-Side	4 extra
Vests	Incident Command Identification Vests	Misc	Curb-side	OK
Winch	Capstan gas powered winch	1		OK
MAINTENANCE TOOLS AND PARTS				
Additive	Fuel Stabilizer	2	Trailer #1	OK
Batteries	Flashlite-Dcell	18	Trailer #1	OK
Batteries	Lantern-6Volt	3	Trailer #1	OK
Capstan	Spark-plug (1) CJ6Y or Bosch WSR6F	2	Trailer #1	OK
Diaph. Pump	Spark-plug (1) RCJ8 or 840	1	Trailer #1	OK
Diaph. Pump	Spark-plug (1) A7NX or 843	2	Trailer #1	OK
Electrical	Combination Crimper/Cutter	1 Ea	Trailer #1	OK
Feeler Gage	Feeler Gage-Gapping Assortment	1 Ea	Trailer #1	OK
Grease	Lube Grease - Tubes	10	Trailer #1	1 missing
Hammers	Claw, Ballpean, hatchet, rubber mallet	1 Ea	Tool Bx Trail #1	OK
Hex Wrench	Combination Hex Wrench Set	1 Ea	Tool Bx Trail #1	OK
Honda Pump	Spark-plug (1) BPR6ES or 7131	1	Tool Bx Trail #1	OK
Knife	Utility Knife w/Blades	1 Ea	Tool Bx Trail #1	OK
Kohler Gen.	Spark-plug (4) A7C or 841	8	Tool Bx Trail #1	OK
Light Plant	Spark-plug (1) RJ-19LM or 868	2	Tool Bx Trail #1	OK
O / B Motor	Propeller (1)	2	Tool Bx Trail #1	OK
O / B Motor	Spark-plug (2) NGK-B7HS-10	4	Tool Bx Trail #1	OK
Oil	Motor- Oil 10-30	12qt	Trailer #1	missing- replace
Oil	motor-Oil 2-Cycle	12qt	Trailer #1	missing- replace
Onan Gen.	Spark-plug (1) BPR4HS-10 or Bosch W8BC	2	Trailer #1	OK
Pipe Wrench	10 inch	1 Ea	Trailer #1	OK
Pliers	Vise Grip, 10" & 7"	1 Ea	Trailer #1	OK
Pliers	Water Pump, 10"	1 Ea	Trailer #1	OK
Pliers	3 Piece Set, 6", cutting,long nose, slip joint	1 Ea	Trailer #1	OK

MT-WY COOP - OSR EQUIP: Trailers 1,5,6,7& Parts-CPL, 338 Hwy 87 East, Billings, MT				
Trailer #2 retired 2006				
Trailer 3 - Huntly Diversion Dam, Huntley, MT				
Inspected By:	Hanser's		LAST INSP	Dec-07
Recovery Capacity:	7,645 bpd = 20% daily recovery rate of 1,529 bpd		<i>(bpd capacity based on 20% efficiency)</i>	
Equipment Type	Description - Model, Style, Size, Capacity	Qty	Location	Operational Status/Comments
Pry Bar	18 IN	1 Ea	Trailer #1	OK
Rags	Cotton Rags	1Bx	STORAGE BIN	OK
Saws	Hacksaw-10 IN., Woodsaw-10 IN.	1 Ea	STORAGE BIN	OK
Screw Drivers	Various Types/Sizes	6 Ea	STORAGE BIN	OK
Socket Set	13 Piece, 1/2" Drive w/spark plug sockets	1 Ea	STORAGE BIN	OK
Socket Set	24 Piece, 1/4" & 3/8" Drive	1 Ea	STORAGE BIN	OK
Tape	Electrical, black,red,blue,green	7 Rs	STORAGE BIN	OK
Tape	Duct Tape	4 Ea	STORAGE BIN	OK
Tape	Yellow Caution, Red Danger	1 Ea	STORAGE BIN	OK
Wrenches	18 Piece, Combination S.A.E. & Metric	1 Ea	STORAGE BIN	OK
Wrenchs	Adjustable, 12 IN., 10 IN., 8 IN.	1Ea	STORAGE BIN	OK
Grease gun	Cartridge type	1Ea	STORAGE BIN	OK
Jack	6 ton hydraulic jack	1Ea	Trailers 1, 2, 5	OK
Lug Wrench	Lug wrench	1Ea	Trailers 1, 2, 5	OK
Wheel chocks	Wheel Chocks 2 Sets.	1Ea	Trailers 1, 5	OK

MT-WY COOP - OSR EQUIP: Trailers 1,5,6,7& Parts-CPL, 338 Hwy 87 East, Billings, MT
Trailer #2 retired 2006

Trailer 3 - Huntly Diversion Dam, Huntley, MT

Inspected By:	Hanser's		LAST INSP	Dec-07
Recovery Capacity:	7,645 bpd = 20% daily recovery rate of 1,529 bpd		(bpd capacity based on 20% efficiency)	
Equipment Type	Description - Model, Style, Size, Capacity	Qty	Location	Operational Status/Comments
TRAILER # 3			Huntly Diversion Dam	
Trailer	1983 Monon 45' Tandem Axle Storage Van U-770-872 Vin# 1NN2F4524EM076247 Walk-up Ramp W/removable hand Rail	1		Ramp added 11/01
Anchors	Danforth anchors #18	12	Trailer 3	1 missing
Anchors	Heavy W/chain for Deflectors	11	Trailer 3	OK
Asenders	Rope pulling tools	9	Trailer 3	OK
Booms	50' Acme 6x6 containment boom (30 each)	1500'	Trailer 3	OK
Brushes	Cleaning Brushes	6	Trailer 3	OK
Buoys	15" mooring buoys	18	Trailer 3	3 missing
Carabiners	Rope pulling /fasteningtools	15	Trailer 3	OK
Cargo Net	3' x12' cargo net	6	Trailer 3	OK
Deflectors-Boom	Aluminum Boom Deflectors	25	Trailer 3	OK
Deflectors-Para	Aluminum Towing Paravanes for Deflectors	5	Trailer 3	OK
Gear Bags	Team Equipment Bags	5	Trailer 3	OK
Generator	5000 watt GENERIC generator Model 09586 SN / 1963644 & SN / 1980840	2	Trailer 3	OK
Hammer	8# sledge hammer	4	Trailer 3	1 missing
Ladders	Extension ladders 24ft	2	Trailer 3	OK
Lights/Stands	Alltrade model 510080, Twin 1600 watt work lights with stands	8	Trailer 3	OK
Line Gun	Bridger line gun with string SN NK379439	1	Trailer 3	OK
Pools	Collapsible Decon Pools	2	Trailer 3	OK
Post Driver	Dixie post driver	3	Trailer 3	OK
Power Cord	50' 12/3 power cords with twist lock caps	10	Trailer 3	OK
Presics	Rope pulling tools	15	Trailer 3	OK
Rings	3" dia, steel rings (Heavy)	16	Trailer 3	17
Rings	3" dia, steel rings (Light)	44	Trailer 3	45
Rope	1/4" poly rope - misc reels	misc	Trailer 3	OK
Rope	1/2" poly rope - misc reels	misc	Trailer 3	OK
Snap Hooks	10mm snap hooks	30	Trailer 3	10 total
Soap	Simple Green liquid soap 1gal	2	Trailer 3	OK
Sprayers	Liquid Sprayers 3gal	2	Trailer 3	OK
Stakes	1"x5' steel rebar stakes	100	Trailer 3	OK
Tow Bridles	Acme TBHD tow bridles	80	Trailer 3	1 extra
OTHER EQUIPMENT				
Boat	18 ft. Jet Boat - Inboard 302 HP Modified to carry boom fore and aft, work lights, (Boat #MT1102AH - Hull ID #MJG18209L989)	1	Exxon Refinery	
Boat	16ft. Custom Boat - w/ 150hp Johnson Outboard Jet, side & bow rails S/N WLG16118A101(Motor 04939795)	1	Conoco Refinery	

Conoco ICP**Equipment Resources**

MT-WY COOP - OSR EQUIP: Trailers 1,5,6,7& Parts-CPL, 338 Hwy 87 East, Billings, MT				
Trailer #2 retired 2006				
Trailer 3 - Huntly Diversion Dam, Huntley, MT				
Inspected By:	Hanser's		LAST INSP	Dec-07
Recovery Capacity:	7,645 bpd = 20% daily recovery rate of 1,529 bpd (bpd capacity based on 20% efficiency)			
Equipment Type	Description - Model, Style, Size, Capacity	Qty	Location	Operational Status/Comments
Boat-Trailer	EZ Loader Boat Trailer for 16ft Jet Boat	1	Conoco Refinery	
Boat-Trailer	Easy-Loader Boat Trailer for 18 ft. Jet Boat	1	Exxon Refinery	

MT-WY COOP - OSR EQUIPMENT (TRAILER 4): Cenex Pipeline, Laurel, MT				
Inspected By: Cam Fox/J. Casey, Cenex			Last Inspection: 5/2008	
Recovery Capacity:	1,200 bpd = 20% daily recovery rate of 240 bpd		(bpd capacity based on 20% efficiency)	
Equipment Type	Description - Model, Style, Size, Capacity, etc	Qty	Location	Operational Status/Comments
TRAILER # 4				
AIR HOSE	4-50' SECTIONS	200'	On Hangers	
ALLENWRENCH	SET OF ALLEN WRENCHES - UP TO 5/8"	1 Set	Tool Box	
ANCHORS	15# DANFORTH ANCHOR	0	Missing	Probably in a Boat
	RAKE ANCHOR - w/40' of chain	1	Front Compartment	Connecting Bars (5' rebar) on rear floor
ASCENDERS	MOUNTAINEERING ASCENDERS, PETZYL	6	Gear Bag	
BOOM	6"x 6" OK CORRAL BOOM; 10 - 50' SECTIONS	500'	Front Comprtmt	
BRUSH	WIRE BRUSH		Tool Box	missing
BRUSHES	18" HANDLE SCRUB BRUSHES	5	In Bins	
BUOYS	15" MOORING BUOY FOR END OF BOOMS	8	In Bins	
CHANNELLOCK	14" PAIR OF CHANNEL LOCK PLIERS	1	Tool Box	
COMPRESSOR	CAMPBELL HAUSFELD W/20 GAL. TANK	1	Rear Aisle	spare gauge on shelf
CRES.WRENCH	10" & 12" CRESCENT WRENCH	2	Tool Box	
DECON POOLS	150 GALLON PORTABLE DECON POOL	2	In Bins	
DRUM LINERS	PLASTIC DRUM LINERS	3Box	On Floor	
DRUMS	REMOVABLE TOP BARRELS, 55 GALLON	1	Back of Trlr	
DUCT TAPE	SILVER DUCT TAPE	1 Roll	Shelf	
ELECTRIC TAPE	BLACK ELECTRICAL TAPE	2 Roll	Tool Box	
END WRENCH	9 PIECE END WRENCH SET - 1/4" THRU 3/4"	1	Tool Box	
EXTSN CORDS	50' EXTENSION CORDS, #12 WIRE	6	On Hangers	
FIRE EXTGSHR	30# FIRE EXTINGUISHER (A:B:C)	1	Trailer Front	
FUNNEL	6" AND 4" FUNNEL	2	On Shelf	
GENERATOR	5 KW GENERATOR	1	Rear Aisle	
HAMMER	CLAW HAMMER	1	Tool Box	
LIGHT SET	PORTABLE LIGHT SETS, 2-500W HALOGEN LAMPS @	2	IN Bins	
O-RINGS	3" DIAMETER "O" RINGS, 15,000# TENSILE	22	On Shelf	
PIPE WRENCH	18" PIPE WRENCH & 12" PIPE WRENCH	2	Tool Box	
PLIERS	STD. PLIER, SIDE CUTTER, LINEMANS, NEEDLE NOSE	4	Tool Box	1 extra set- needle nose w/ red handle
PORT. POOL	1500 GALLON PORTABLE POOL; GRAY BLADDER+FITTINGS IN BOX+1/2" RAILS	1		ASSEMBLY RQD.
POST DRIVERS	STEEL POST DRIVERS W/HANDLES	2		
PRUSIKS	6mm LINE	9		
PUMP	2" VERSAMATIC DIAPHRAGM PUMP W/SKIMMER (35 gpm max)	1	Rear Shelf	
ROPE 1/4"	5 SPOOLS	3000'	IN Bins	
ROPE 3/8"	10 SPOOLS	6000'	IN Bins	
Bridge Bridle	Bridle to connect boom to bridge piers	1	Front	Replaced in 2004
SCREW DRIVER	6 PIECE SCREW DRIVER SET	1	Tool Box	
SKIMMER	PNEUMATIC DRUM SKIMMER, ELASTEC TDS 118 (35 gpm)	1	Front Top Shelf	AIR/OIL FILTER INCL.
SLEDGES	8# SLEDGE HAMMERS	2		
SNAP LINKS	1" GATE OPENING, 8,000# TENSILE	0		missing 30
SOAP	SIMPLE GREEN SOAP	2 gal	In Bins	
SOCKET SET	13 PIECE 1/4" SOCKET SET	1	Tool Box	

Conoco ICP

Equipment Resources

MT-WY COOP - OSR EQUIPMENT (TRAILER 4): Cenex Pipeline, Laurel, MT				
Inspected By: Cam Fox/J. Casey, Cenex			Last Inspection: 5/2008	
Recovery Capacity:	1,200 bpd = 20% daily recovery rate of 240 bpd		<i>(bpd capacity based on 20% efficiency)</i>	
Equipment Type	Description - Model, Style, Size, Capacity, etc	Qty	Location	Operational Status/Comments
SPRAYERS	3 GALLON SPRAYERS FOR DECON	3	In Bins	
STAKES	1" REBAR STAKES	37	Standing in Rear	
SUC. HOSE 2"	2" SUCTION/DISCHARGE HOSE, 3-15' SECTIONS	45'	On Hangers	
TEFLON TAPE	1/2" TEFLON TAPE	2 Roll	Tool Box	
TIE WIRE	18 GAUGE STOVE WIRE	1 Roll	Tool Box	
TOW BRIDLES	Z-LOCK W / KEEPER PIN	20		
WARNING TAPE	RED "DANGER" TAPE	2000'		
WARNING TAPE	YELLOW "CAUTION" TAPE	2000'		
WRECKING BAR	WRECKING BAR	1	On Shelf	

MT-WY COOP - OSR EQUIP: Trailers 1,5,6,7& Parts-CPL, 338 Hwy 87 East, Billings, MT
Trailer #2 retired 2006

Trailer 3 - Huntly Diversion Dam, Huntley, MT

Inspected By:	Hanser's		LAST INSP	Dec-07
Recovery Capacity:	7,645 bpd = 20% daily recovery rate of 1,529 bpd		(bpd capacity based on 20% efficiency)	
Equipment Type	Description - Model, Style, Size, Capacity	Qty	Location	Operational Status/Comments
TRAILER # 5			Hanser's	
Trailer	Cy-Corp Open Trailer 8'x16' w/canvas cover, built 2000 8'x16' trailer est. GVW 8,000 lbs., tandem axle, 2-5/16" ball hitch, electric brakes.	1		OK
Anchor	Heavy w/chain for Deflectors	2	Trailer 5	OK
Booms	100' Acme 6x6 booms	200'	Trailer 5	OK
Booms	50' Acme 6x6 booms	100'	Trailer 5	OK
Booms	25' Acme 6x6 booms	100'	Trailer 5	OK
Buoys	15" mooring buoys	2	Trailer 5	OK
Deflectors-Boom	Aluminum Boom Deflectors	5	Trailer 5	OK
Deflectors-Para	Aluminum Towing Paravanes for Deflectors	1	Trailer 5	OK
"O" Rings	3" Steel O-rings	5	Trailer 5	OK
Plastic Bbl	Rubber Maid trash can 44gal	1	Trailer 5	OK
Rope	3/8" poly rope - misc lengths	misc	Trailer 5	OK
Rope	5/8" poly rope - W/snap loops misc lengths	misc	Trailer 5	OK
Rope	1/2" poly rope - misc lengths	misc	Trailer 5	OK
Bridge Bridle	Bridle to connect boom to bridge piers	1	Trailer 5	in trlr 3 - need to put back in this trailer
Tow Bridles	Acme tow bridles	6	Trailer 5	3 missing
TRAILER # 6			Hanser's	
Trailer	2004 P.J. Trailer-Tandem Axle Utility Trailer. Black W / 4' side walls Serial # 4P5UT162142052387	1		OK
Boom	Carolina CB1302 Boom w/connectors 50'	200'	Trailer Deck	OK
Culvert	24" x 16' corrugated steel culverts w/one joining band	2	Trailer Deck	OK
Culvert	18" x 16' corrugated steel culverts w/one joining band	2	Trailer Deck	OK
Extinguisher	Ansul 30# Dry Chemical	1	Trailer Deck	missing
Fence	Chicken Wire Rolls 6-6', 1-3'	7	Trailer Deck	OK
Generator	Kohler 4 Cyl, Gas Powered, Liquid Cooled, 7500W	1	Trailer Deck	sold wih trailer #2
Hose	3" suction hose complete w/flotation and quick connect couplings	70'	Trailer Deck	OK
Skimmer	Acme Tunnel Model Floating Skimmer Pump w/2HP, 3600 RPM single phase 115/230 volt, explosion proof electric motor (Model FS400 ASK-51T-EX-2-1) capable of 40' of head at 50 gpm.	1	Trailer Deck	OK

Conoco ICP

Equipment Resources

MT-WY COOP - OSR EQUIP: Trailers 1,5,6,7& Parts-CPL, 338 Hwy 87 East, Billings, MT
Trailer #2 retired 2006
Trailer 3 - Huntly Diversion Dam, Huntley, MT

Inspected By:	Hanser's		LAST INSP	Dec-07
Recovery Capacity:	7,645 bpd = 20% daily recovery rate of 1,529 bpd (bpd capacity based on 20% efficiency)			
Equipment Type	Description - Model, Style, Size, Capacity	Qty	Location	Operational Status/Comments
TRAILER #7			Hanser's	
Trailer	2004 Haulmark Tandem Axle Enclosed Cargo Trailer. Color White. VIN # 16HPB14274U038227	1		
Cable	1/4" steel cable	100'	Trailer 7	OK
Extinguisher	Ansul 30# Dry Chemical	1	Trailer 7	missing
Floats	4" hose floats	13	Trailer 7	OK
Gas Can	2.5 gallon plastic gas can	1	Trailer 7	OK
Gas Can	5 gallon plastic gas can	1	Trailer 7	OK
Gas Can	5 gallon steel gas can	1	Trailer 7	OK
Hammer	10lb sledge hammer	1	Trailer 7	missing
Hammer	Ball Pean	1	Trailer 7	missing
Hose	4" discharge hose with quick connect couplers	50'	Trailer 7	OK
Light	Drop Light w/Cord	1	Trailer 7	missing
Light Cords	12/3 electric cords for lights (3 each 100')	300'	Trailer 7	OK
Light Stands	Aluminum Light Stands	3	Trailer 7	OK
Lights	400 Watt Hubbell lights	3	Trailer 7	OK
Pitch Fork	Pitch Fork	1	Trailer 7	missing
Plastic	4 mill plastic roll	1	Trailer 7	OK
Post Drivers	Post Driver	2	Trailer 7	missing
Posts	5' x 6" steel fence posts	14	Trailer 7	missing
Pump	Marlow 3" Diaphragm pump with 2.8 HP B&S Gas Engine	1	Trailer 7	OK
Rakes	Steel Bow Rakes	2	Trailer 7	OK
Rope	3/8" Poly Rope -- Misc. lengths	600'	Trailer 7	OK
Screw driver	Screw driver	1	Trailer 7	missing
Shovel	Hand Shovel Square Nose	1	Trailer 7	missing
Signs	Benzene Warning Signs	3	Trailer 7	missing
Sorbent Boom	Absorbent boom 10' sorbent 3M type 270 (4 ea box)	240'	Trailer 7	OK
Sorbent Pads	Absorbent pads -17"x19" 3M type 156 -100 per bundle	1100	Trailer 7	OK
Sorbent Rolls	3' x 150' Sorbent Rolls (2 ea)	300'	Trailer 7	OK
Steel wire	Steel utility wire	1RL	Trailer 7	missing
Strap	Nylon strap	2RLS	Trailer 7	OK

Spill Cleanup and Recovery Methods

CLEAN-UP METHODS FOR OIL SPILLS

Oil In Ice and Snow

Oil spilled onto the surface of smooth ice spreads easily, although the extent of the spread is influenced by the ambient temperature and the viscosity and pour point of the product. Irregularities and undulations in the ice surface restrict the extent of the spread as oil pools are formed. The presence of cracks and crevices in the ice cover also reduce the extent of the surface spread by allowing oil to percolate downwards to the water beneath. Particularly with salt water, voids between the ice crystals can absorb oil, and this, too, plays a major role in limiting the spread; the upper ice layer can absorb up to 25 percent of its volume. (Figure 1).

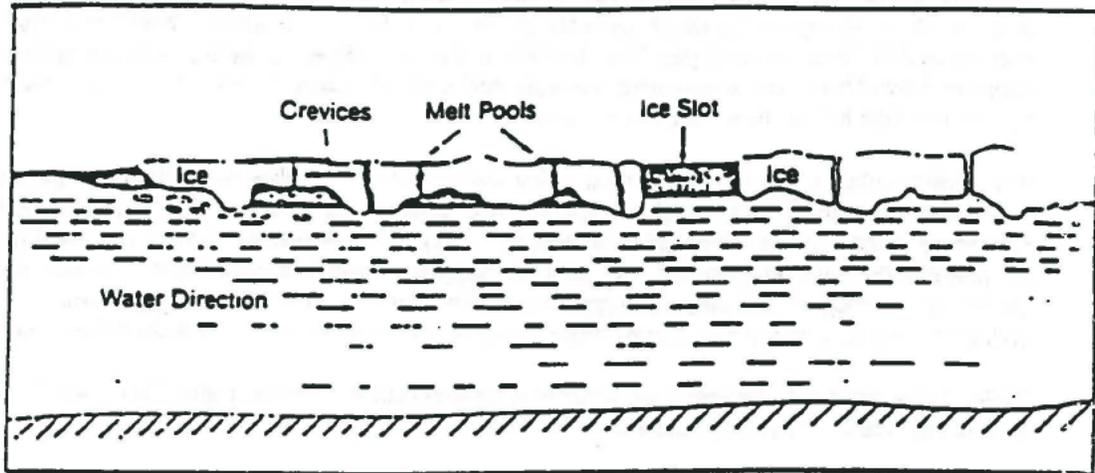


Figure 1. Movement and Retention of Oil Under Ice

Snow, particularly when uncompacted, has an even higher absorption capacity, and its low temperature may, depending on the nature of the oil spilled, significantly increase the viscosity of the oil to the point where it no longer flows easily. Spilled oil rarely penetrates the surface of frozen ground, unless the oil is hot or the spill is accomplished by fire, but even then penetration is limited. Oil increases the absorption of solar radiation, and this may result in an increase in the rate of melting of the ice or snow.

Oil can reach the underside of a sheet of ice through any one of a number of routes. Oil on surface water approaching an ice layer should theoretically be held back as it would be any other surface barrier. In practice, however, some oil infiltrates through cracks and crevices, while the water current entrains other oil and carries it beneath the ice sheet. Under these conditions, oil accumulates in the irregularities and crevices on the underside of the ice and moves at a lower velocity than the water. This can lead to oil being "sandwiched" between successive layers of ice.

Clean-Up Methods in Ice and Snow

Oil spilled above ground in ice and snow can be enclosed by ice or snow dikes thrown up around the spill. The absorptive capacity, particularly of snow, can be used to soak up any free oil by mixing-in clean snow. Such action retards or even halts the movement of oil. If possible, the contaminated ice and snow should be transferred to a sealed dike or pit as soon as possible where it may be left until the thaw. Oil is then released and can be removed by the most convenient method.

Flowing water containing discrete lumps of ice poses problems similar to those experienced with water containing other forms of floating debris. The most effective way developed so far of dealing with the problem is to construct a boom capable of deflecting the ice away from the recovery area but which, at the same

time, allows oil to flow through gaps or perforations. The resulting ice-free area can then be used to deploy a conventional oil boom to deflect oil towards a recovery area. Several such installations will be necessary, since the whole width of a river cannot be intercepted at once; sufficient space between the downstream end of the boom and the bank must be provided for the deflected ice to escape. Oil which also escapes through this gap must be handled in a second arrangement deployed from the opposite bank. Further assemblies may be necessary depending on the river width and the volume of oil spilled. Unfortunately, this technique of allowing the ice to by-pass the recovery area ignores the fact that the ice may have entrained some oil. If this is so, then this oil will be carried downstream and released at some more distant location. This may be deemed an acceptable option when the quantity of entrained oil is negligible. The alternative is to deploy a strong boom which deflects all the ice to the bank, remove it with mechanical equipment and place it in tanks or lined pits. The success of this technique, however, depends entirely on the ability to deploy heavy mechanical ice-removing equipment, an adequate intermediate storage facility, and suitable heated tankage for the treatment of the oiled ice.

It is always better to try and contain oil in icy water before it reaches a continuous ice sheet. Compared to this, oil recovery from beneath an ice sheet is likely to be more difficult, more expensive, and more protracted, although the ice sheet itself acts as a form of containment barrier in that it both slows down the rate of movement and entrains the oil. If this happens in weather conditions in which the ice is growing, oil can be trapped in pockets, crevices, and layers until the thaw, and one approach may be to leave it until the thaw and collect it then. On balance, however, this would lead to a less controlled clean-up operation.

Slicks would gradually appear over a larger area and during a longer period than would be the case with a more rapid and immediate response.

The most effective way of containing oil beneath ice would seem to be to provide slots in which the oil can rise to the water surface and accumulate. Such slots can be combined with barriers of, for example, wood sheeting, which extend through the ice cover part way into the water column beneath. However, since there will be turbulence at both the upstream and downstream ice water interfaces, this will reduce the ability of the oil to rise in the slot and will increase the tendency for it to be swept under the downstream face, and several slots will therefore be necessary. In general terms, a series of parallel slots should be cut in the ice cover (using, for example, circular or chain saws), preferably at an angle to the current flow, and equipped for maximum efficiency with a barrier located against the downstream wall. The slot width to ice thickness ratio is reported to be unimportant, but the width needs to be sufficient to allow oil recovery operations to proceed easily.

To reduce the tendency of the ice slot to freeze over in the subzero air temperatures, the slots can be covered with sorbents, a layer of insulating material, and plastic sheeting.

Temporary Storage

Because of the difficulty in storing large quantities of oil-contaminated ice and snow until the thaw, temporary storage may be needed. This can be fabricated by preparing snow dikes and spraying the inside with fresh water and allowing it to freeze, thereby forming an impervious lining. Contaminated ice and snow can be stored inside without loss of oil.

Removal Methods

The basic principals of spilled oil recovery are similar to those practices in warmer climates. Once the oil begins to accumulate free of ice on the water surface, most of the skimming and sorbent methods could be used. The main problem would appear to be to prevent damage to any machinery, hoses, and tankage by freezing during periods of inactivity and to ensure that the build-up of ice during operation does not impair the efficiency of the equipment. In this type of situation, nozzles are probably least susceptible to problems of ice formation.

A variation of this treatment is to pile up the contaminated ice and snow behind a wooden barrier or coffer dam constructed with narrow gaps between vertical planks. Outside of the coffer dam, a weir and oil-retaining barrier arrangement is constructed to control the water level and prevent loss of oil. During the thaw, oil runs out between the gaps in the planks and can either be skimmed off or absorbed.

Treatment Methods

Spilled oil collection in severe winter conditions will almost inevitably be accompanied by the pick up of much contaminated ice and snow. The main process will, of course, be to allow the ice to melt and then to remove the floating oil. Melting the ice may be achieved either artificially with applied heat in tanks or by waiting for the spring thaw. Possibly the main factors in this decision are the amount of oiled ice collected and the available storage space. To some extent, applying artificial heat in tankage prevents the build-up of large quantities of ice and enables the problem to be dealt with sooner, but does, of course, rely on suitable heated tankage, probably portable, being available. Relying on the natural spring thaw does require more intermediate storage. If this is in waterproof-lined pits, there is a risk that sharp ice corners may puncture the lining; linings must, therefore, be durable enough to prevent this from happening.

Clean-Up Methods for Oil on Ground Surfaces

Confinement Methods

Confinement techniques are used to limit the spread of the oil and to concentrate the oil in a given area. If this oil cannot be picked up very quickly but is left in puddles to soak into porous ground, a much greater depth of penetration will result than if the oil is allowed to spread freely. The increased depth of penetration will carry the oil closer to the groundwater surface, which may then be exposed to a greater risk, with serious consequences if the groundwater is being abstracted for portable or industrial use. An early decision has to be taken, therefore, whether or not to confine oil spilled on porous soils.

Occasionally, spills occur in oil storage plant areas. If the spill occurs in a confined but unsealed area, such as the gravel bottom of a tank dike area, the migration of the oil into the underlying soil can be reduced by putting a water bottom into the dike. The tank dike drain valve should normally be kept closed except when opened under supervision to permit the drainage of accumulated rainwater.

It is vitally important that measures are taken as soon as possible to prevent oil from entering drains, sewage systems, pipe, cable ducts, etc. Inlets to these can be protected by dams formed from earth, sand bags, or sorbents. Drain gratings can be sealed by covering with plastic bags containing water and sand. Football bladders, when inflated, make very effective plugs for drains up to about 12 inches in diameter.

Oil escaping down the storm water drains will pollute water courses and, possibly, reservoirs or lakes used for drinking water supply. Contamination of such sources can have a serious impact on public water supplies. Any oil which enters the wastewater system may interfere with sewage treatment plants. Instances have occurred when sewage treatment plants have been put out of action completely, resulting in the discharge to the receiving water of partially treated sewage. This could have implications for public health. Where volatile components are concerned, an explosion hazard will result from oil entering drains and ducts.

Oil which enters ditches or gullies can be trapped by earth dams or, if appropriate, a "spade dam" as described elsewhere in this section.

Oil can rapidly be contained by the application of sorbents. These are now available in a variety of forms. For the purpose of confining spilled oil, however, organic foams, felts, etc., are less effective than inorganic materials such as, for example, sand or soil. The former materials, being relatively open-textured and of low density, allow oil to pass through relatively easily once their maximum capacity has been reached, while the latter materials, with their smaller pore size and greater density, resist this flow. Some of the sorbents are designed to take up both water and oil, and this may or may not be a problem in any specific event. If the spill is relatively small, however, and the main objective is to mop-up the oil rather than to confine

it and limit its spread. The various organic foams, felts, and fibers can be used quite successfully. In any case, the use of sorbents for large oil spillages on soil will usually be too expensive for more than a limited application to priority areas (e.g., to form a dam surrounding a drain inlet).

Any oil which escapes being trapped on land or in the subsoil usually ends up on a water course or on the underground water table. In either case, the clean-up operation is much more difficult than on land. Confinement operations to contain a spill should, therefore, be started as soon as possible.

Removal Methods

The removal of small quantities of spilled oil can be achieved using sorbents as stated above. If these are pressed onto oil-soaked soil, the sorbent will act as a sponge and can withdraw some oil. This technique is especially useful in the clean up of small spills on tarmac/adam or concrete surfaces.

Even small spillages of product onto asphalt drives will cause softening and result in physical damage. Spills should be removed as quickly as possible. Powder-type sorbents should be used to soak up small spillages and also to form a dam to prevent the oil from entering drains or sewers. After removing the oil-soaked sorbent, traces of oil remaining in a coarse structured surface can be lifted by vigorous brushing with a small amount of water or detergent. Sorbents should be scattered onto the surface of the puddle to remove the released oil.

Free oil lying on a soil surface should be removed into temporary storage as soon as possible so as to minimize the seepage of oil into the subsoil.

Large volumes of oil should be removed by pumps using a hose fitted with a strainer or suction nozzle. The pump, preferably "self-priming," must be capable of handling oil, water, and air in any combination and often a high percentage of entrained solids. Vacuum trucks are frequently used for this purpose and are widely available. Explosion-proof pumps must be used for spillage of volatile products, unless the area is first proved safe by an explosimeter test and continues to prove safe on repeated tests during clean-up operations.

Channels can be formed to drain pools of free oil into storage pits. Puddles, such as are formed when oil flows over a plowed field, may be collected together for easier removal by using a similar method. Puddles can also be collected by baling or using a small portable pump. Commercially available sorbent mops can also be used effectively.

On a dry soil, low viscosity oils will rapidly soak away. However, on a wet or water-logged soil, surface oil puddles can persist for long periods. In this case, following removal of the free surface oil, draining furrows about 4 inches deep should be formed to collect further oil.

Straw can be mixed into heavy oil to enable it to be physically lifted with forks, and synthetic sorbents are now available designed specifically for the problem of picking up heavy fuel oil. However, disposal of some synthetic sorbents which cannot be biodegraded must be taken into consideration. A heavy fuel oil which has cooled to form a tarry mass can be lifted mechanically using shovels or the addition of sorbent, earth, or sand, making the job easier. It is possible to render this oil pumpable by heating with steam or by diluting with kerosene. When the spill is on an impermeable surface and precautions can be taken to prevent further spreading, this approach is recommended due to the reduction in labor requirements.

Clean-Up Methods for Surface Waters

Clean-up of oil on water surfaces is easiest on small water courses with low water velocities. The difficulty and cost of most clean-up operations increases with increasing size of water course, increasing water velocity, and increasing wave heights. Thus, the quicker that action can be taken to limit the extent of a spill, the cheaper and more effective the overall clean-up operation will be.

Confinement Methods

Oil spilled from an installation (e.g., pipeline, tank, tank-truck) frequently runs over the ground before it reaches a water course. Partial evaporation occurs, and what is left is frequently contaminated with silty sediments. The density of the oil is increased, and it does not rise so easily to the water surface. A longer time is, therefore, needed to allow the oil to separate.

Shallow water courses have to be dammed not only to provide sufficient time for the oil to separate in calm water, but also to provide sufficient depth of water to allow a skimmer to operate. The depth of the water and the height of the adjacent banks must be considered when selecting the best method of damming.

All mechanical confinement devices work on the same principle as a normal interceptor. Essentially, a barrier is formed which prevents the passage of oil and water at surface level but permits water to flow away beneath. Such devices, which dip part way through the body of water, reduce the cross-sectional area of the water course causing the water current to increase. This, in turn, will increase the risk of losing oil beneath the barrier.

Barriers should be constructed in a water course at a place where the water velocity is low. Beneath a bridge is often not a good place, because the bridge piers frequently reduce the river width. This increases the water velocity and causes turbulence. It may be necessary to widen or deepen the stream by excavating the bed or the bank, but this should be avoided, if possible, since it leads to secondary environmental damage. Oil recovery sites have to be accessible to road vehicles such as vacuum or tank trucks.

If a large quantity of oil is spilled, particularly on fast flowing water, more than one barrier may be necessary. Oil escaping from one barrier can then be stopped by a subsequent one. The distance between the barriers should allow sufficient time for the oil droplets to float to the water surface before they reach the next dam or boom (*Figure 2*). From experience, the tow barriers have been observed to be most effective when the distance between them is about 1 meter (40 inches). However, in any given situation, the optimal distance should be determined by experiment and observation.

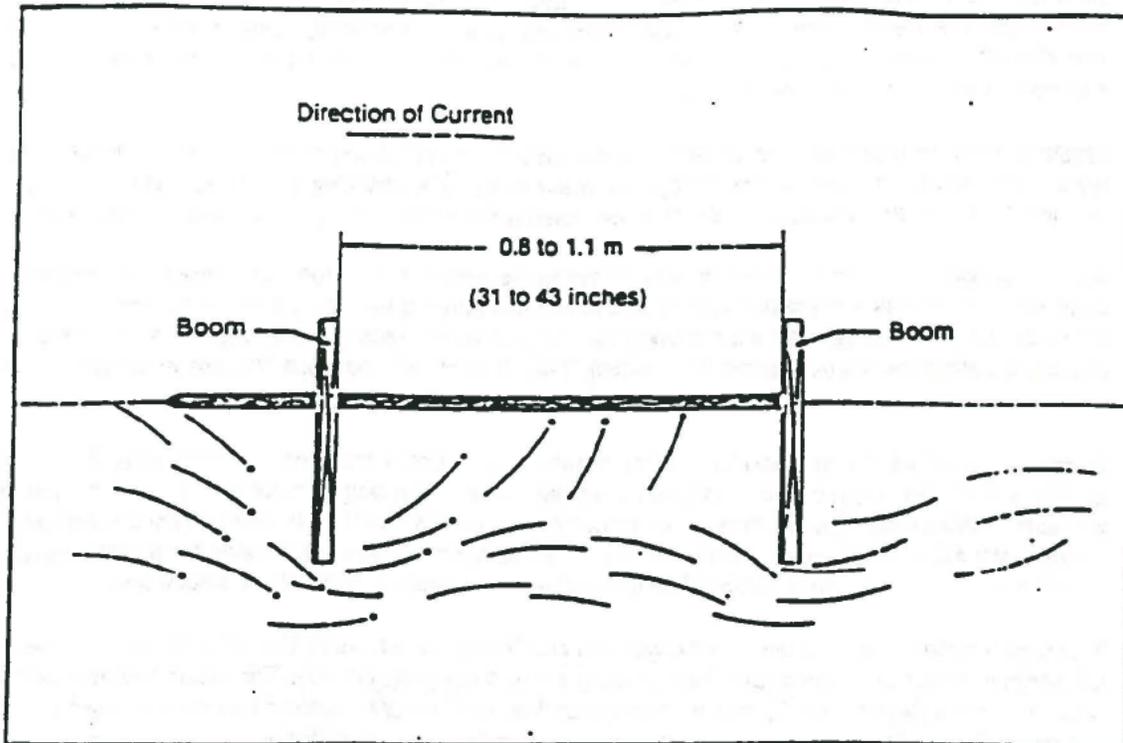


Figure 2. Reduction of Drainage Loss by Double Barrier

Commercially fabricated barriers to suit every situation are not always available, since the precise need is determined by the local conditions. Consequently, barriers which can be constructed of widely and easily available materials are considered.

Dams and Weirs With Fixed Booms

The following paragraphs describe various systems, but, in practice, it may be found necessary to install several successive barriers, possibly different kinds, in order to achieve complete protection.

Earth Dam

On small water courses, emergency dams of earth or sand bags can be constructed to hold the oil. The dam should be situated at an accessible point where there are high banks on the upstream side to allow for the increased water depth which will result. It must be well keyed into the banks and buttressed to support the hydrostatic pressure. If flowing water threatens to overtop the dam carrying oil with it, water can be pumped from the bottom of the water course and discharged beyond the dam. This can sometimes be done by the fire service since they have large capacity pumps available, but great care needs to be taken to avoid entrainment of oil, which can contaminate both the downstream water and the pump itself.

Dam With Water Discharge

This is an extension of the dam described in the preceding paragraph. In this case, however, pipes are inserted near the top of the dam, which allow good oil separation, and elbows are fitted on the upstream end extending the pipe to within about 10 cm (4 inches) from the bottom of the stream, which allow water to drain from the bottom (Figure 3). In effect, a gravity separator has been constructed. Pipes of 10 or 15 cm (4 to 6 inches) diameter are often a convenient size, but, for high water volumes, more than one may be needed. Suitable pipes made from PVC or similar material can be readily obtained.

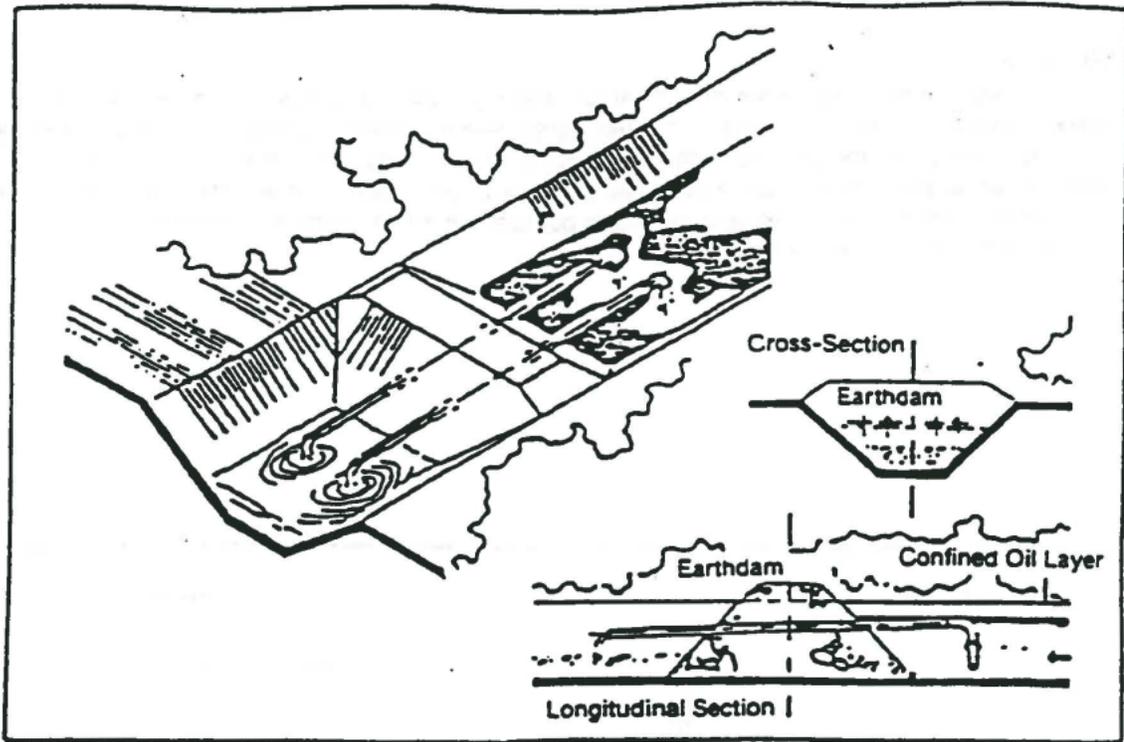


Figure 3. Earth Dam Barrier With Water Discharge

Spade Dam

A simple device which conveniently and rapidly dams ditches is illustrated in *Figure 4*. It consists of a mild steel or aluminum plate about 3 mm (1/8 inch) thick and of dimensions to suit typical local ditches. In use, it is hammered into the ditch with the edges cutting in to the banks to form a water-tight seal. A space may be left at the bottom to allow the water to escape. Alternatively, where there is very little water flow, a complete seal can be made, and the water pumped off intermittently as necessary. The handle assists adjustment and removal of the plate.

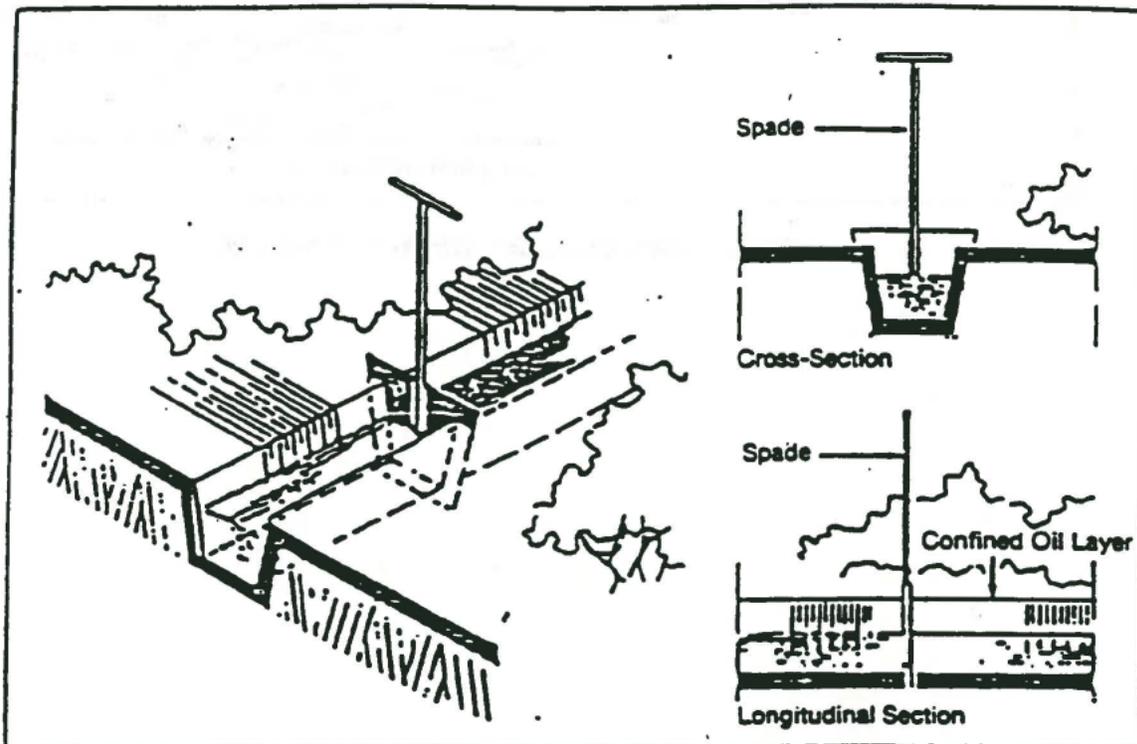


Figure 4. Simple Spade Dam

Improved Spade Dam

In this version, pipe elbows are added to the device to permit the discharge of water (Figure 5). The level of the discharge pipes in the spade regulates the depth of water, and the elbows should reach nearly to the bottom of the ditch. Depending on the size, supports may have to be added to support it properly when it is driven into the bottom and sides of the ditch.

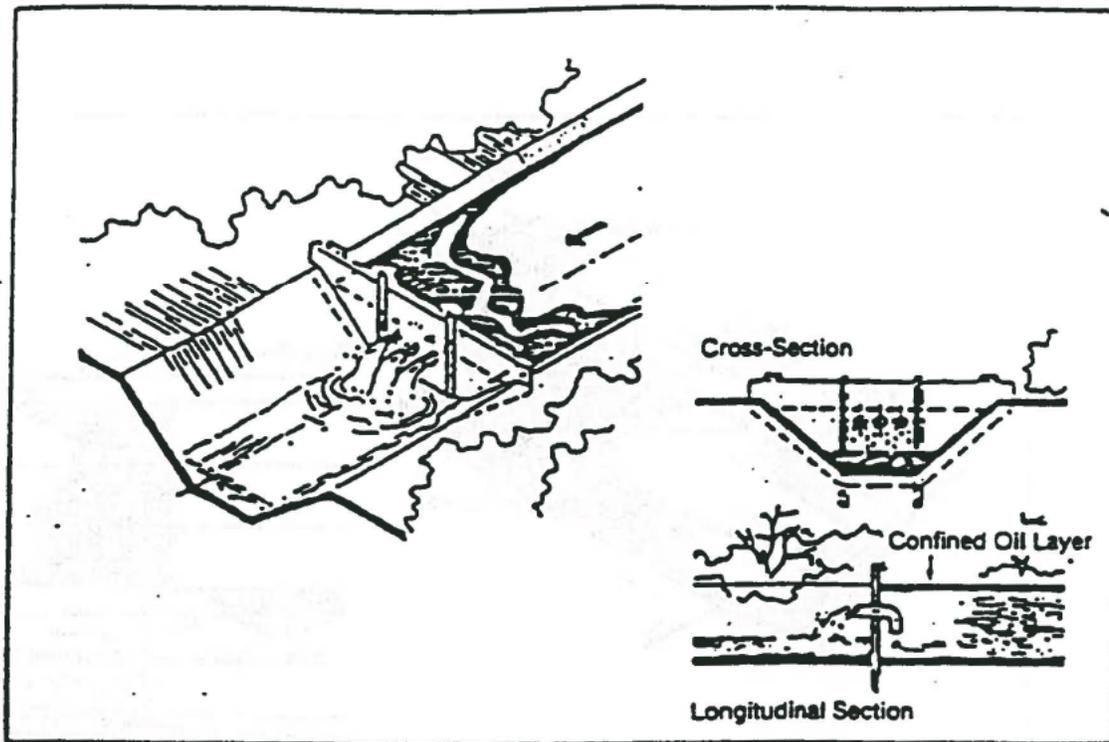


Figure 5. Improved Spade Dam With Drainage

Straw Barrier

In this approach, the oil-absorbing capacity of straw is utilized. Since straw bales float half-submerged in water, they form a combined filter and under-pass barrier (Figure 6). They can be attached to a steel or nylon rope and secured across the water course, or they can be held in place by wire netting, a ladder, or plank supported by stakes driven into the ground. A double row of bales with overlapping joints improves the seal. Since straw picks up water together with the oil, however, they should be replaced at least daily. It may be an advantage to install several filter barriers at intervals along the stream since this minimizes oil loss during the removal of saturated bales. If much oil is absorbed, the bales will have to be properly disposed of.

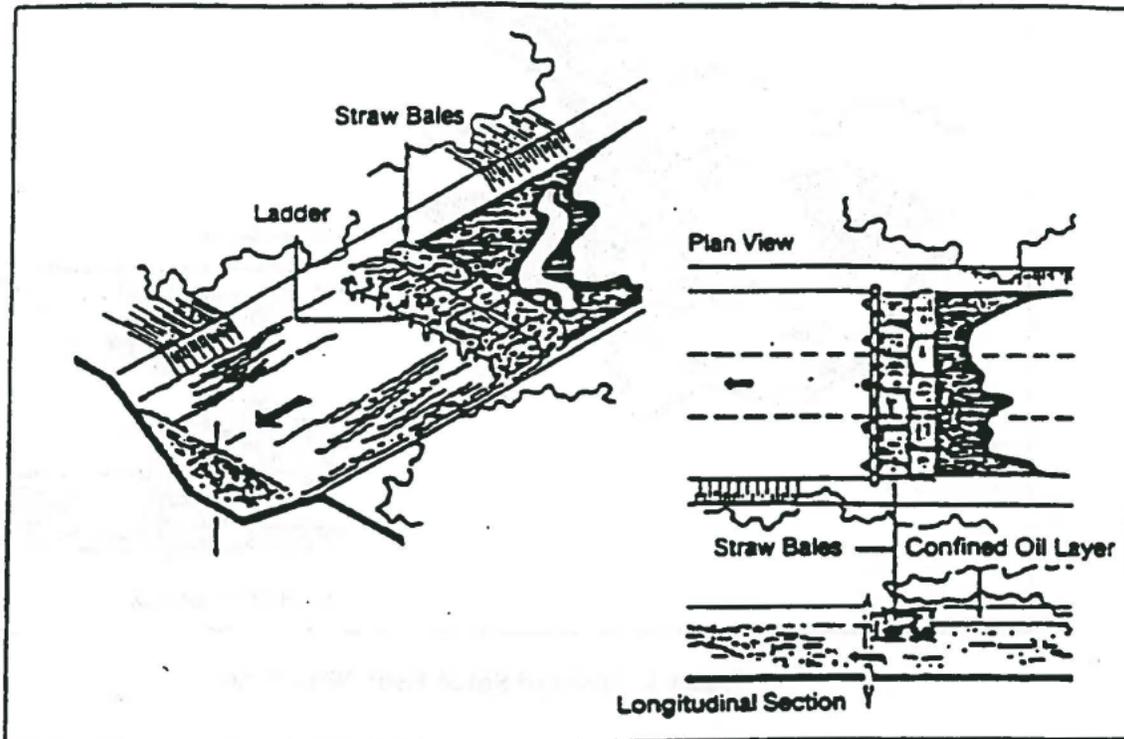


Figure 6. Straw Bale Barrier

Wood Dam

A wooden dam can be fabricated from planks, such as floor boards, driven vertically into the bottom and sides of the ditch and supported by horizontal beams let into the banks (Figure 7). Additional bracing may be needed on wider streams. Wooden shuttering panels can be similarly used. The center of the barrier can be constructed as a separate item so that it slides vertically, allowing the accumulated water to pass beneath and also providing a means of controlling the depth of water upstream.

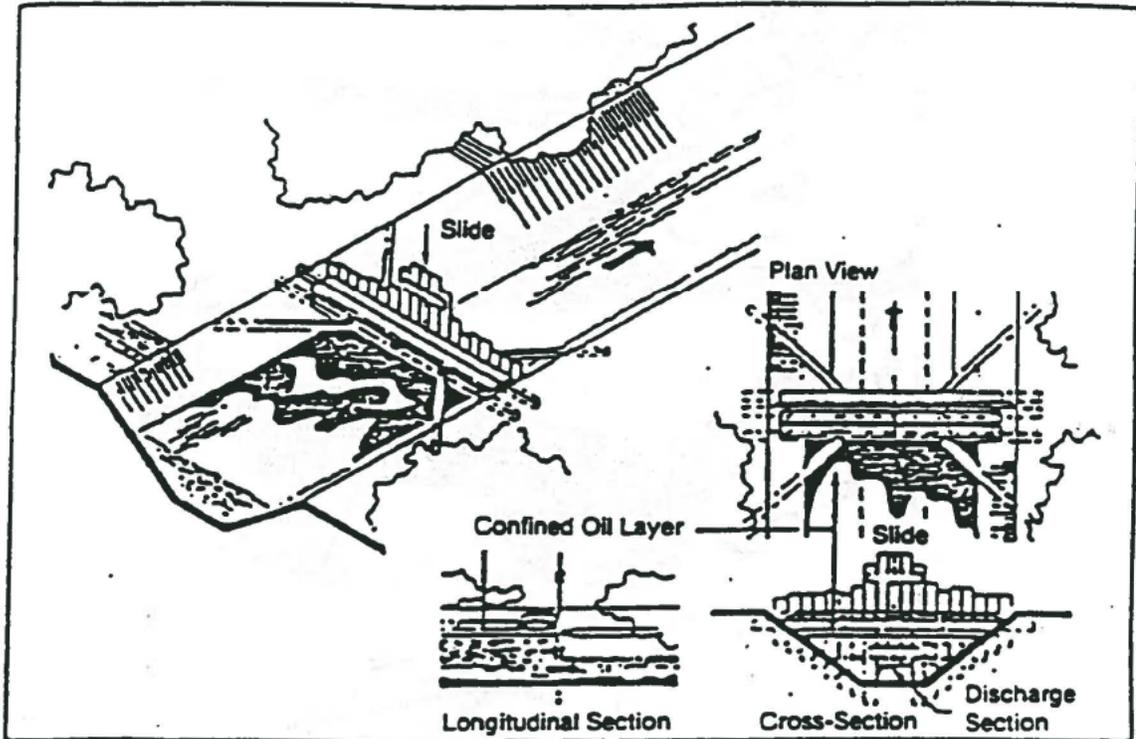


Figure 7. Wooden Plate Dam

Weir and Oil-Retaining Barrier

Dams of timber, soil, or sand bags, as described in the preceding paragraphs, can be combined with an oil-retaining barrier or boom (Figure 8).

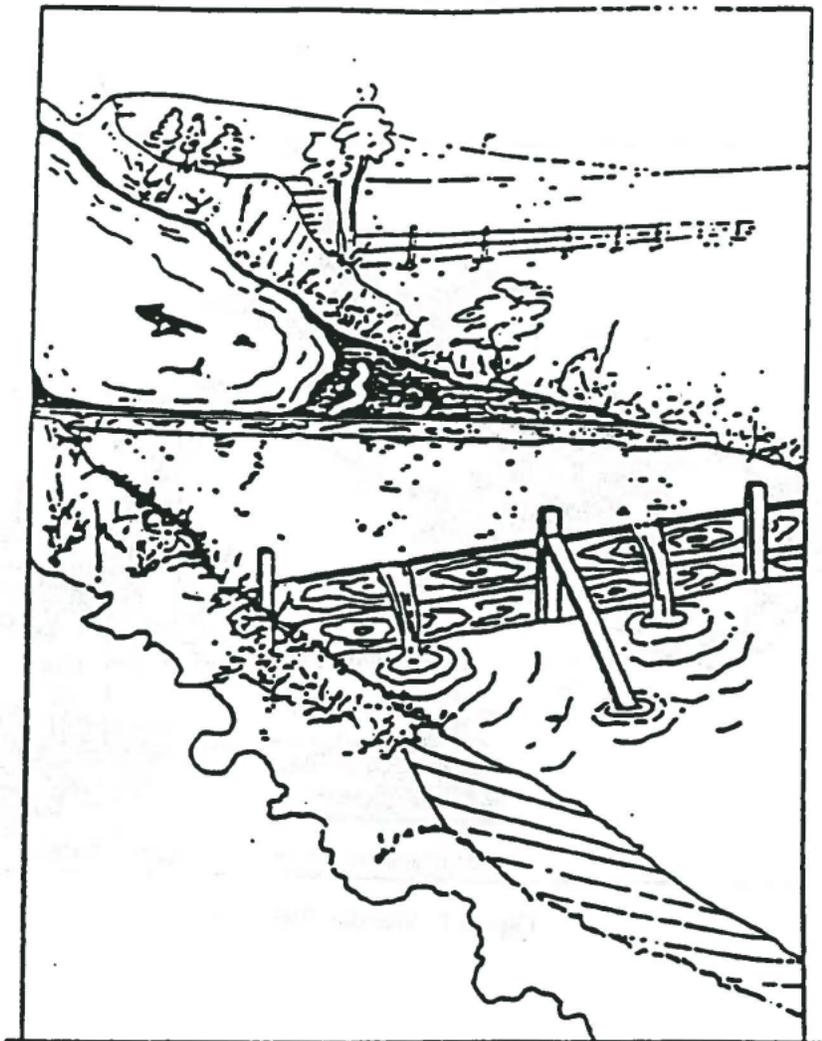


Figure 8. Weir and Barrier

A suitable boom for this purpose can be constructed from timber planks of the type used on builders' scaffolding. These are typically 30 cm (12 inches) wide by 5 cm (2 inches) thick and up to 7 cm (2 3/4 inches) in length. The boom is positioned to form a vertical barrier across the water course with a depth of immersion in the water of between 15 cm (6 inches) and 25 cm (10 inches) [giving a minimum freeboard of 5 cm (2 inches)].

To compensate for the restriction of the barrier, the water velocity increases as it passes beneath the boom. This can cause turbulence which may entrain the surface oil and allow it to escape beneath the boom. In practice, it has been found that this mode of failure can be reduced if the boom immersion can be limited to a maximum of 20 percent of the total water depth. This restriction can be relaxed for very slow stream velocities of below 0.15 m/sec. Many of the factors which limit the use and performance of floating booms also apply to fixed barriers.

The boom should be placed at an angle across the waterway. This decreases the effective water velocity near the banks beneath the barrier and also concentrates the oil at the bank. The oil is, therefore, brought to the bank where there is better access. The wind may tend to concentrate the oil against one bank in preference to the other, and velocity of the water at the removal point should be a minimum. These factors should be considered, in addition to questions of accessibility, when deciding at which bank to angle the boom.

The ends of the planks are buried in the banks of the waterway to provide an effective seal, and 5 cm x 5 cm (2 inches x 2 inches) timber stakes are driven into the stream bed as additional supports as required.

As it arrives, the oil must be continuously removed from the angle between the downstream end of the boom and the bank. It is essential that a water-tight seal between the boom and the bank is maintained at this point. If mechanical removal methods are employed, sufficient water depth must be available to accommodate the skimmer.

Any protrusions on the upstream side of the boom will cause pockets which trap the oil and also form points at which turbulence is likely to be set up at high water flows. These should be avoided, because they will result in oil being drawn down beneath the boom.

Net Barrier

Layers of loose sorbent can be retained on the water surface by fine mesh plastic netting (Figure 9). Clearly, fine powdery sorbents would require a finer mesh net than would larger sorbent particles. If the net is stretched over the entire cross section of the water with stakes or pegs to fix it to the bottom and sides, no sorbent can escape. One major advantage possessed by netting, as compared to other barrier materials, is that the resistance to the water flow is negligible, and hence the mooring forces are correspondingly small. The increase in water velocity is also negligible, minimizing the loss of entrained oil. The net barrier is well suited to fast water courses and thin films of oil. Sorbents must be replaced as they become saturated. A similar effect can be achieved using sorbent sweeps, but it is more difficult to effect a good bank seal.

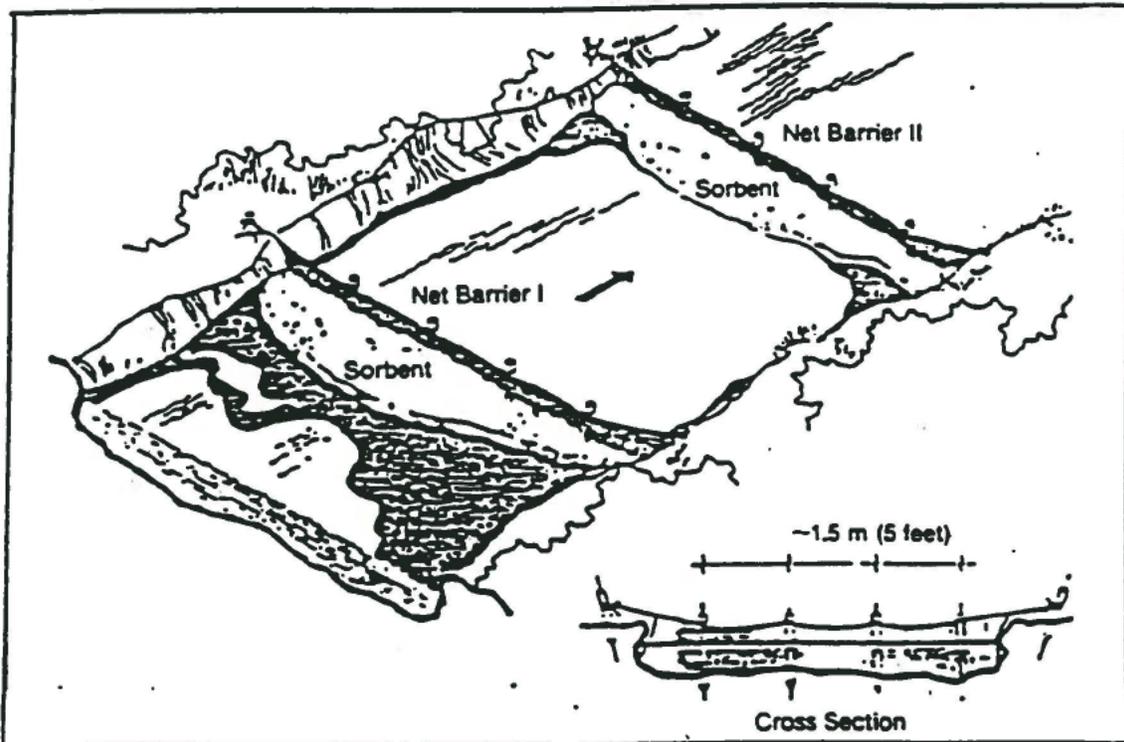


Figure 9. Net Barrier (With Sorbent)

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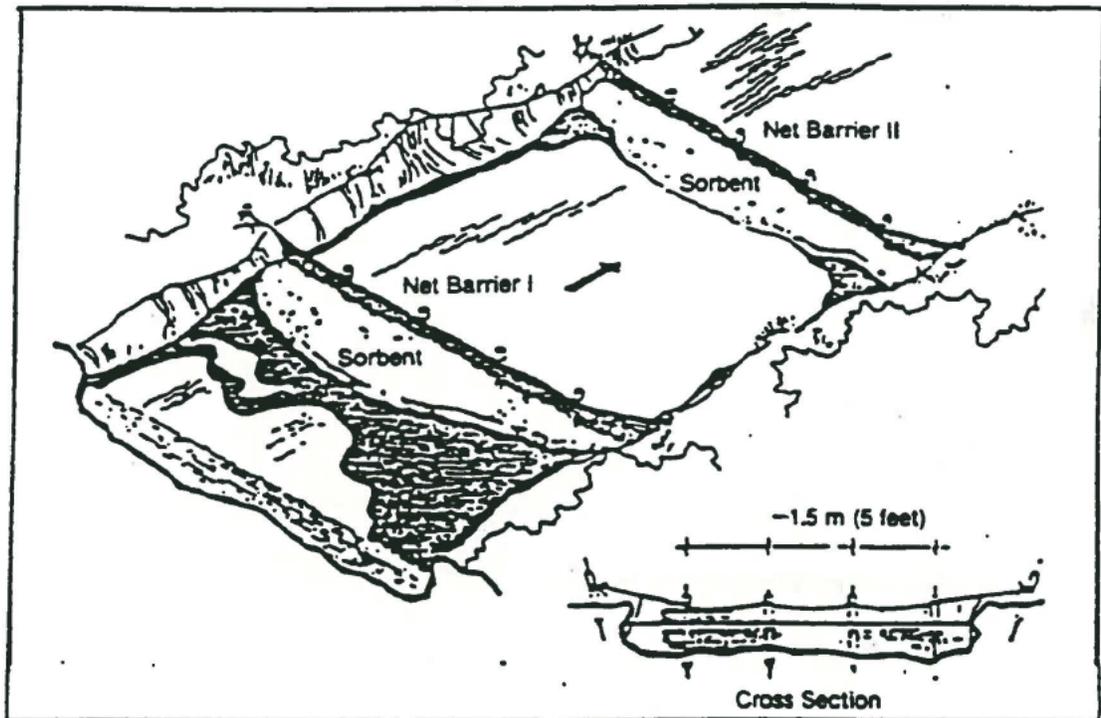


Figure 9. Net Barrier (With Sorbent)

Floating Booms

A floating boom is composed basically of a vertical barrier floating so that it extends above and below the water surface. Buoyancy is provided by separate floats or by a buoyant section made as an integral part of the boom.

A wide selection of different designs and sizes of booms are now available on the commercial market, but many are of heavy construction designed for prolonged use under conditions experienced in estuaries and mild seas. These are too expensive and cumbersome for emergency use on small inland water courses where transportability, lightness, and ease of deployment are the prime requirements. Flexible booms with inflatable buoyancy chambers are suitable for this purpose. Some are cheap enough to be regarded as disposable, and this obviates any cleaning problems. It is desirable that light-weight inflatable booms should be attended constantly, due to the risk of failure through puncturing. This can occur through vandalism, from floating debris, inappropriate handling, or lack of maintenance and supervision. Booms are also available which contain plastic foam as the floatation member. Some of these booms are quite flexible and easy to handle, and they are also quite suitable for use on inland waters.

Since the ability of a floating boom to stop oil is dependent mainly upon the water velocity and the oil density, the depth of the skirt or fin becomes of secondary importance. Although small booms are marketed for use on small, very sheltered, and still bodies of water, a skirt depth of about 15 cm is about the minimum generally used on inland waters. Deeper skirts are required as the current increases. Improvements in performance decline with increasing skirt depth, and, for inland water, little advantage is gained by using skirts of more than 60 cm (24 inches) depth. The draught of the skirt should not exceed 20 percent of the water depth.

Light-weight booms with skirts up to 30 cm (12 inches) deep are appropriate on slow-moving waters or narrow waterways (up to 15 m [6 inches] wide). Stronger booms with deeper skirts are preferred where wide and deep waterways are associated with water currents above about 0.5 m/s. Similarly, the amount of freeboard on a boom for use on inland waters is not a particularly critical factor either, since waves are normally of limited height. A freeboard of 15 cm (6 inches) will usually suffice, and there is nothing to be gained by having more than 30 cm (12 inches). Protection from overtipping by waves and swell is principally governed by the flexibility of the boom and correct mooring arrangements. Joints in rigid boom must permit flexing in both horizontal and vertical planes.

Projections on the upstream side of the boom should be avoided, because they cause vortices and give rise to localized diving currents. Mooring ropes on the water line, individual outrigger floats, and angular variations in profile at joints between sections of the boom are likely to cause this mode of failure.

Speed in deploying a boom is essential. As a general rule, it is advisable to join enough boom sections together on the bank and to ensure that mooring ropes, stakes, and anchors are all in position before launching the boom into the water.

Local conditions of current and wind must be considered when selecting the site for the boom. A point with a low water velocity near the bank, sufficient depth to operate the oil removal equipment, and good access are required. The wind may tend to concentrate the oil against one bank. A smooth, undisturbed area of water is required immediately upstream of the boom to ensure that the oil has opportunity to separate out onto the surface. The boom should be positioned where the current is a minimum. It is more effective to boom at a wide slow position than on a narrow fast stretch of water. (Figure 10).

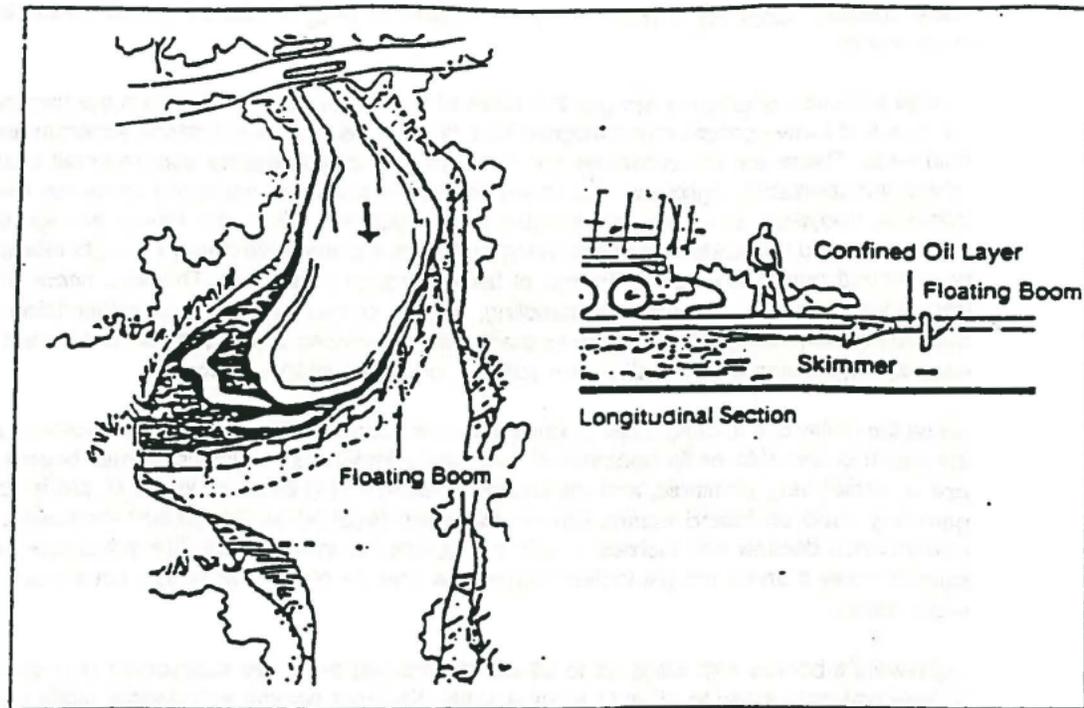


Figure 10. Preferred Boom Location

Removal Methods

Oil removal operations for inland surface waters should always be used in conjunction with one of the methods of confinement. This will ensure that the oil is presented under the most favorable conditions for removal, i.e., oil layers of maximal thickness, concentrated near the bank, and in relatively still water with small waves.

Oil removal should normally be carried out as a two-stage operation. The major part of the oil is removed first while it is in a form suitable for skimming devices, i.e., in thick slicks. Oil collected in this stage can often be reprocessed. Second-stage operations consist of polishing techniques, e.g., sorbents for minor amounts of oil in slicks which are too thin for effective mechanical recovery. Techniques employed in this stage usually result in the eventual destruction of the oil, i.e., through dumping or burning.

Floating Sorbents

The general term "sorbent" is used almost exclusively since the properties of both adsorption and absorption are involved. The discussion in this section is confined to those sorbents which are applied loose or bagged and does not, of course, apply to sorbent principles embodied in the skimmers discussed in the preceding section.

Many proprietary sorbents are now available on the market. These include those based on rigid and flexible organic foams, felted organic fibers, vegetable fibers presented both in separate and felted forms, strips of plastic film, netting, clay granules, and others. The range of physical forms includes loose sorbent, strips, pads, sheets, sweeps, carpets, booms, pillows, bales, mops, and various other forms.

Sorbents are used to immobilize oil by a combination of surface wetting and capillarity (i.e., adsorption and absorption) enabling the oil to be lifted from the water surface. In most cases, the use of a sorbent precludes

the oil being recovered by pumping or skimming techniques. Sorbent retrieval, which is usually crude hand-operated rakes and scoops, requires more manpower than recovery by skimmers. Sorbent recovery methods can be used on all thicknesses of oil slicks, but are more labor intensive than skimming methods in situations where either method could be used. For inland spills, it is recommended that sorbents be usually confined to second-stage clean-up operations or relatively small spills. Disposal of large quantities of contaminated sorbent may present problems.

Disposal

Excessive use of sorbents emphasizes and aggravates disposal problems. These problems are minimized by limiting the use of sorbents to the relatively minor quantities of oil that remain after a first stage recovery operation with skimmers. Some sorbents are made of biodegradable vegetable fibers which, in some circumstances, may be considered an advantage. Combustible sorbents also have the advantage that their negligible ash content eliminates any disposal problem.

From the point of view of storage and transport, a high oil capacity per unit volume is desirable. Sorbents should be stored in packages or bales which are of handleable weight and dimensions. They must be stored according to the manufacturer's recommendations.

A problem with most loose sorbents is that they are scattered by any wind above a light breeze. If this happens, natural products are absorbed into the environment, because they are more acceptable to the layman than nondegradable synthetic materials.

Straw is particularly useful on viscous oils, which are only poorly absorbed by foams and powders. It is inexpensive and widely available at very short notice.

**Table 1
Protection Techniques**

<u>Protection Technique</u>	<u>Description of Technique</u>	<u>Primary Use of Protection Technique</u>	<u>Environmental Effect of Use</u>
1. Exclusion Booming	Boom is deployed across or around sensitive areas and anchored in place. Approaching oil is deflected or contained by boom.	Used across small bays, harbor entrances, inlets, rivers, or creek mouths where currents are less than 1 kt and breaking waves are less than 25 cm in height.	Minor disturbance substrate at shoreline anchor points.
2. Diversion Booming	Boom is deployed at an angle to the approaching slick. Oil is diverted away from the sensitive area or to a less sensitive area for recovery.	Used on inland streams where currents are greater than 1 kt; across small bays, harbor entrances, inlets, rivers, or creek mouths where currents exceed 1 kt and breaking waves are less than 25 cm; and on straight coastline areas to protect specific sites where breaking waves are less than 25 cm.	Minor disturbances to substrate at shoreline anchor points, cause heavy shoreline oil contamination on downstream side.
3. Containment Booming	Boom is deployed in a "U" shape in front of the oncoming slick. The ends of the boom are anchored by drogues or work boats. The oil is contained within the "U" and prevented from reaching the shore.	Used on open water to surround an approaching oil slick to protect shoreline areas where surf is present and oil slick does not cover a large area; also on inland waters where currents are less than 1 kt.	No effect on open water; minor disturbance to substrate on inland anchor points.
4. Sorbent Booming	Boom is anchored along a shoreline or used in one of the manners described above to protect sensitive areas and absorb oil.	Used on quiet waters with minor oil contaminations.	Minor disturbance to shoreline at anchor points.
5. Sorbent Barriers	Barriers are constructed across a waterway and constructed of wire mesh and stakes which contain loose sorbents. The barrier allows water to flow but retains and absorbs oil on the surface.	Used in small, low velocity streams, tidal inlets, channels, or any narrow waterway with low current velocities.	Minor disturbances to stream or channel substrate.

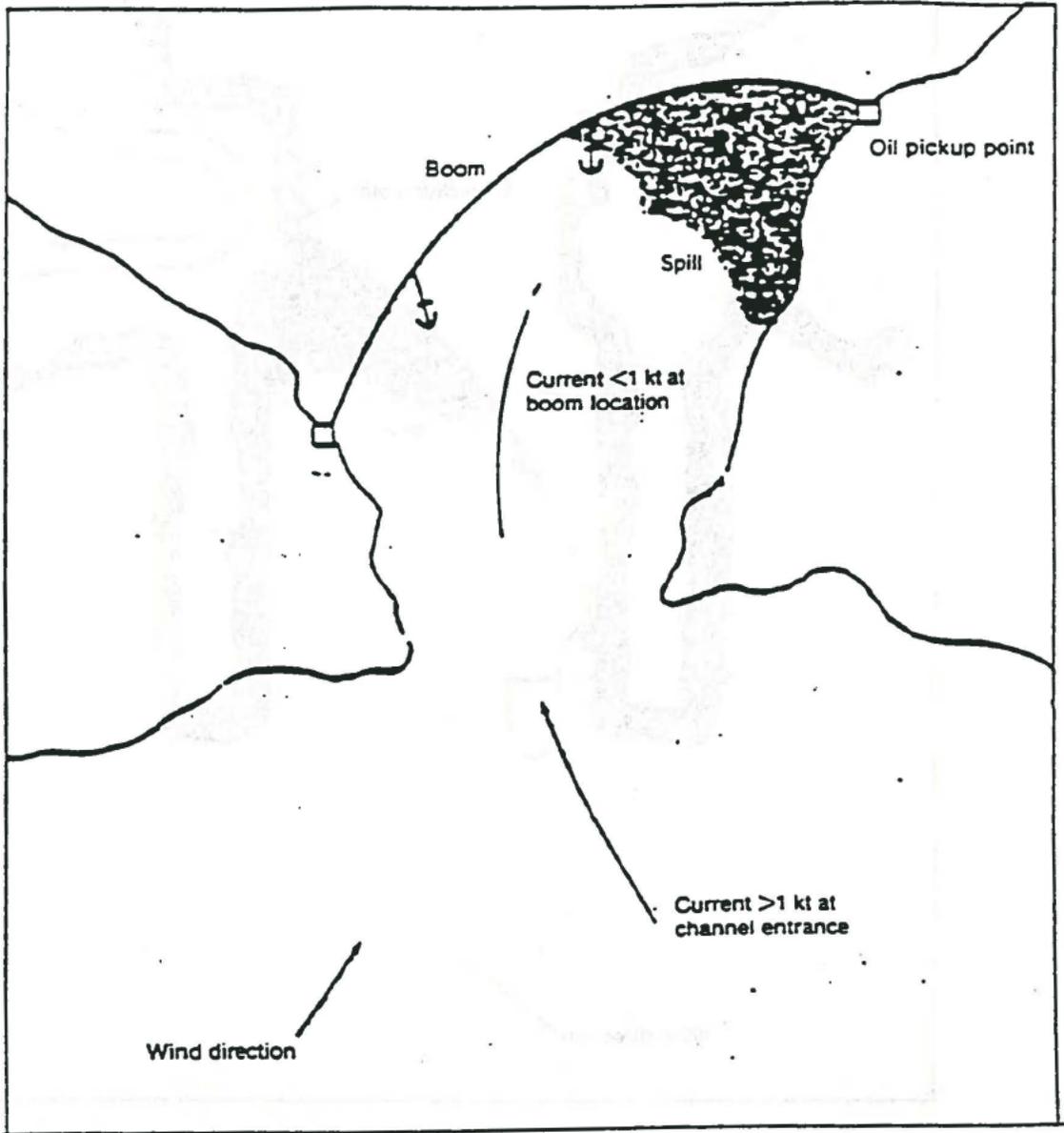


Figure 6. Enclosure Booming at Inlet

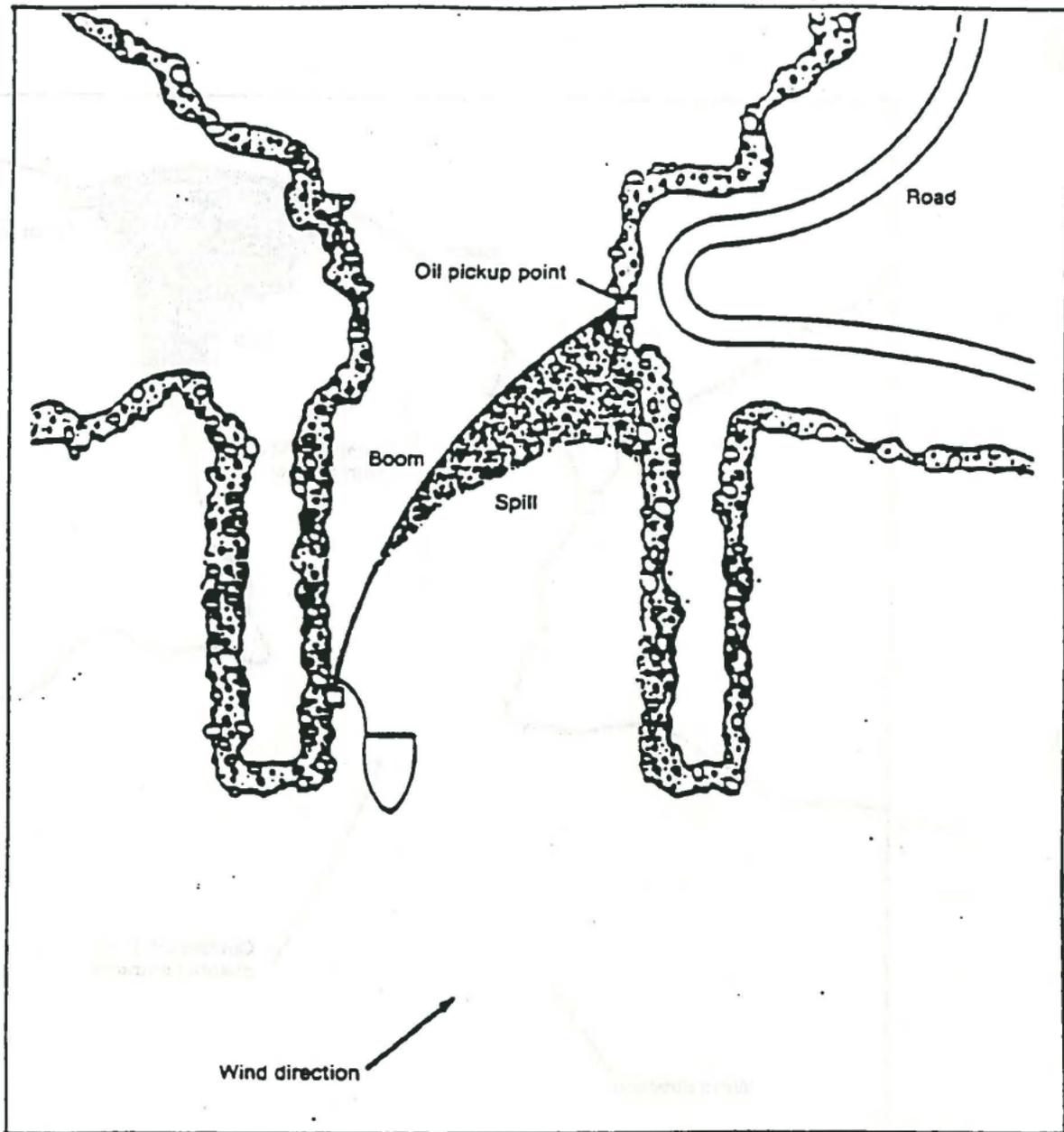
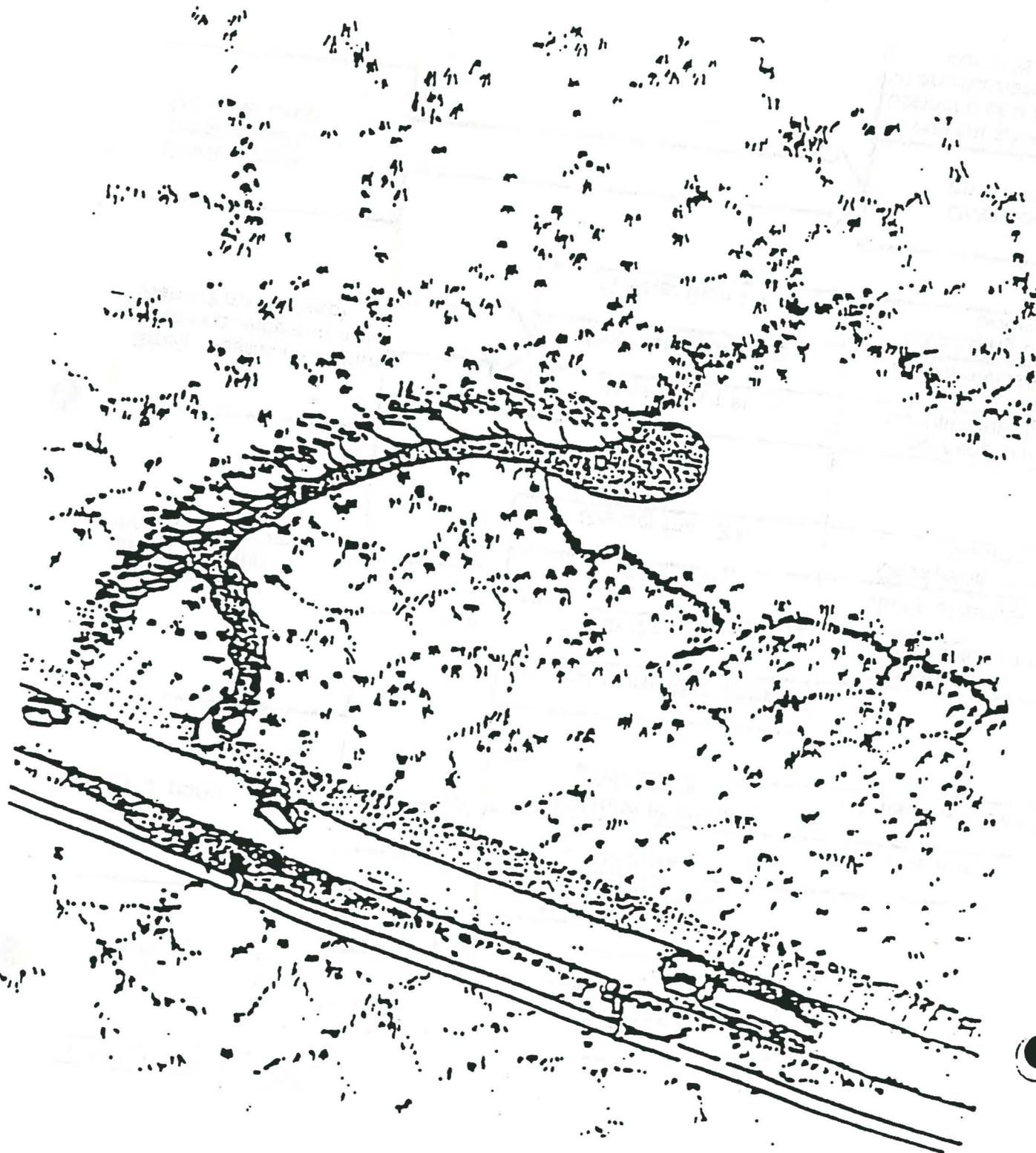


Figure 7. Boom at Harbor Entrance

Figure 1. Diversion Berm (Oil)



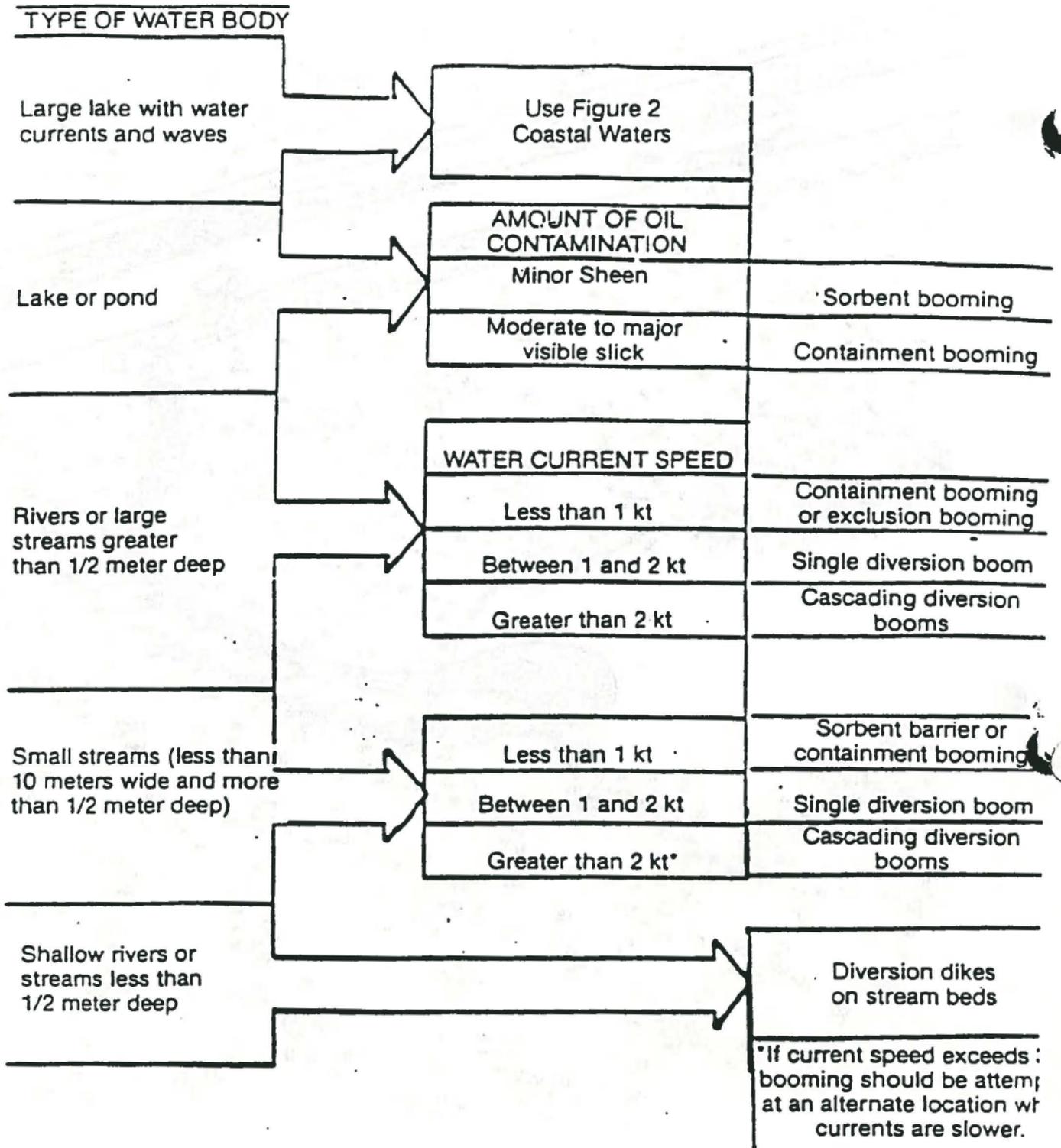


Figure 1. Decision Guide for Inland Waters

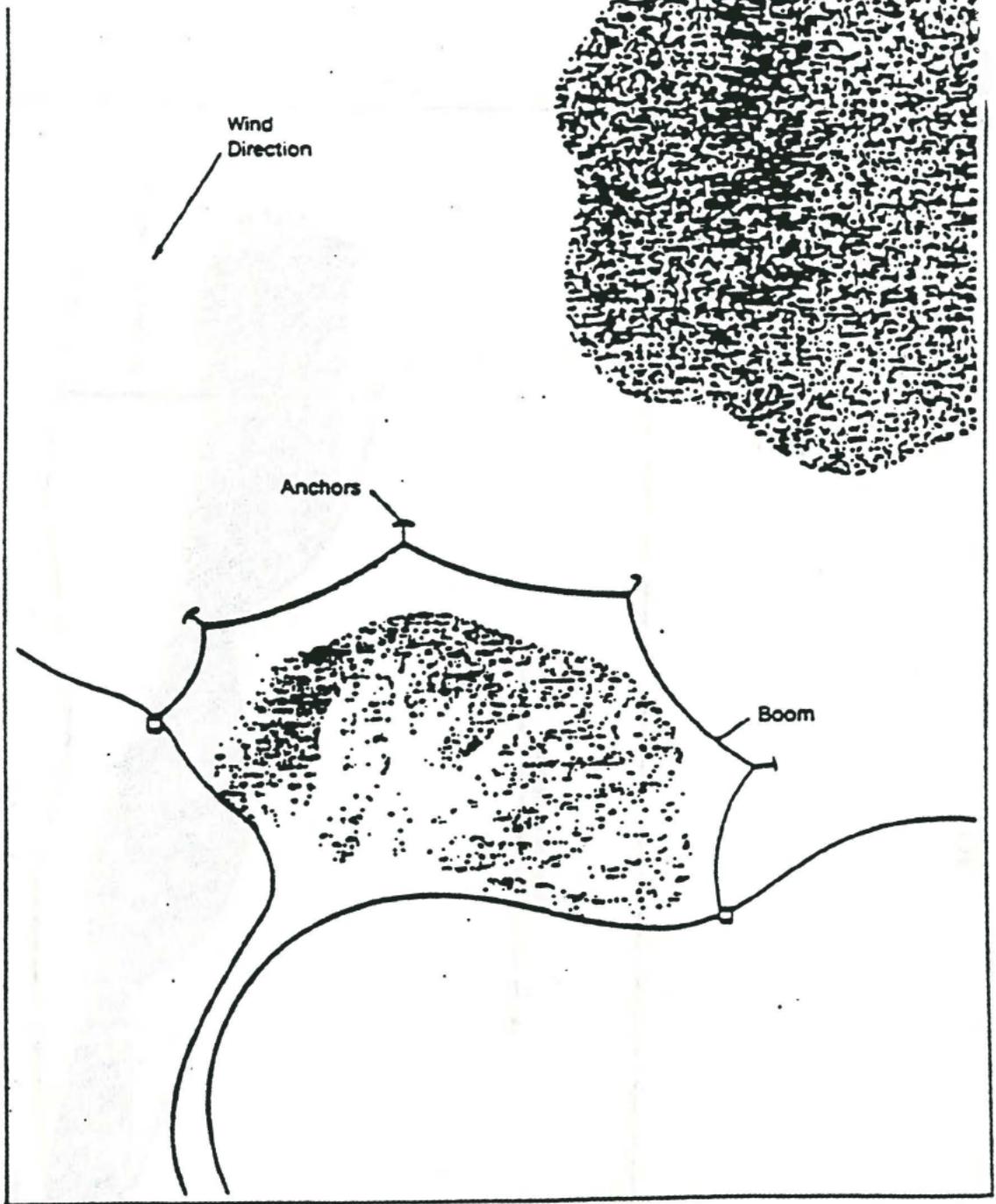


Figure 9. Exclusion Booming of a Stream

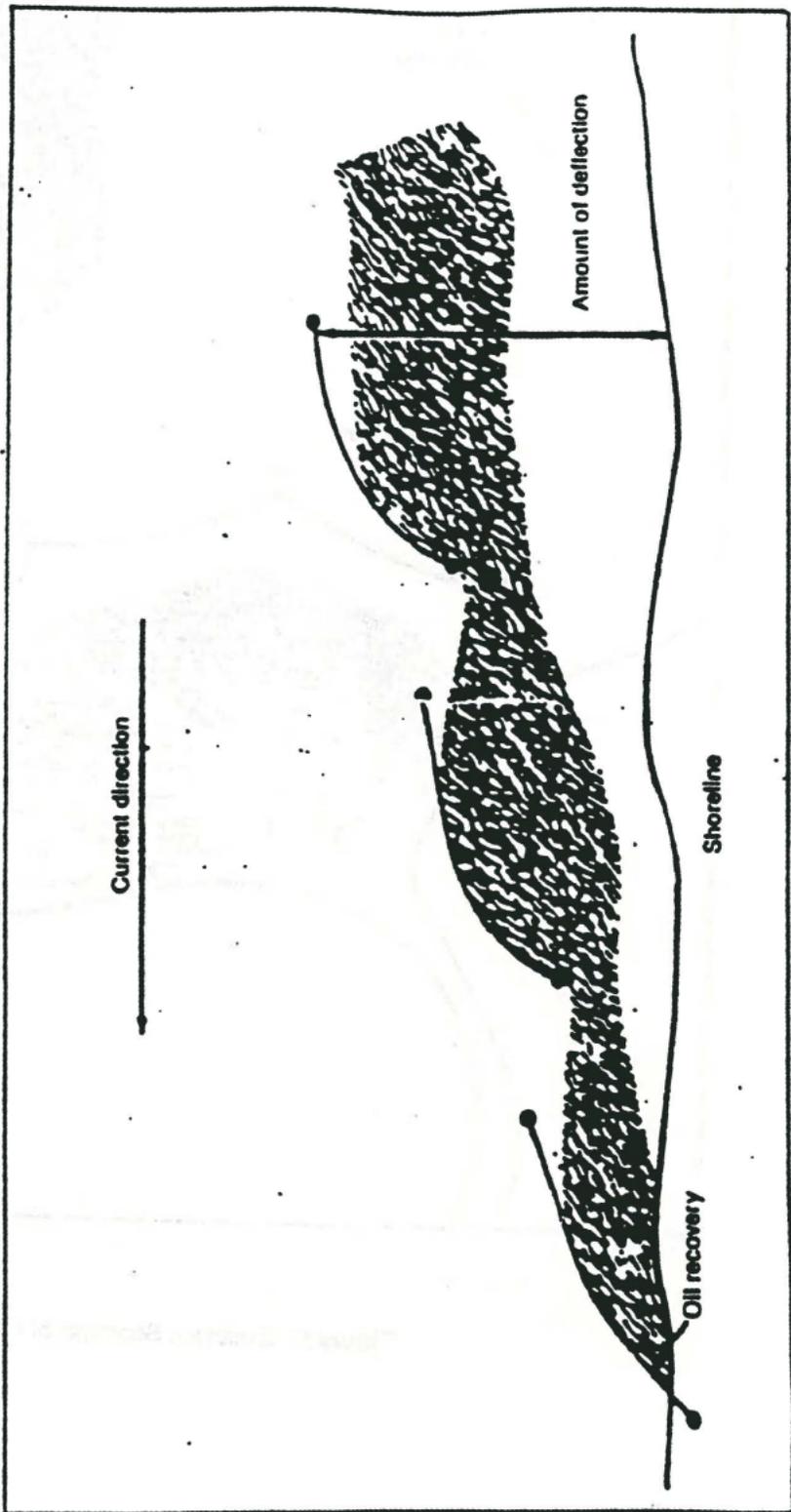


Figure 10. Placement Configuration of Three Lengths of Boom (Cascading Deflection Booms)

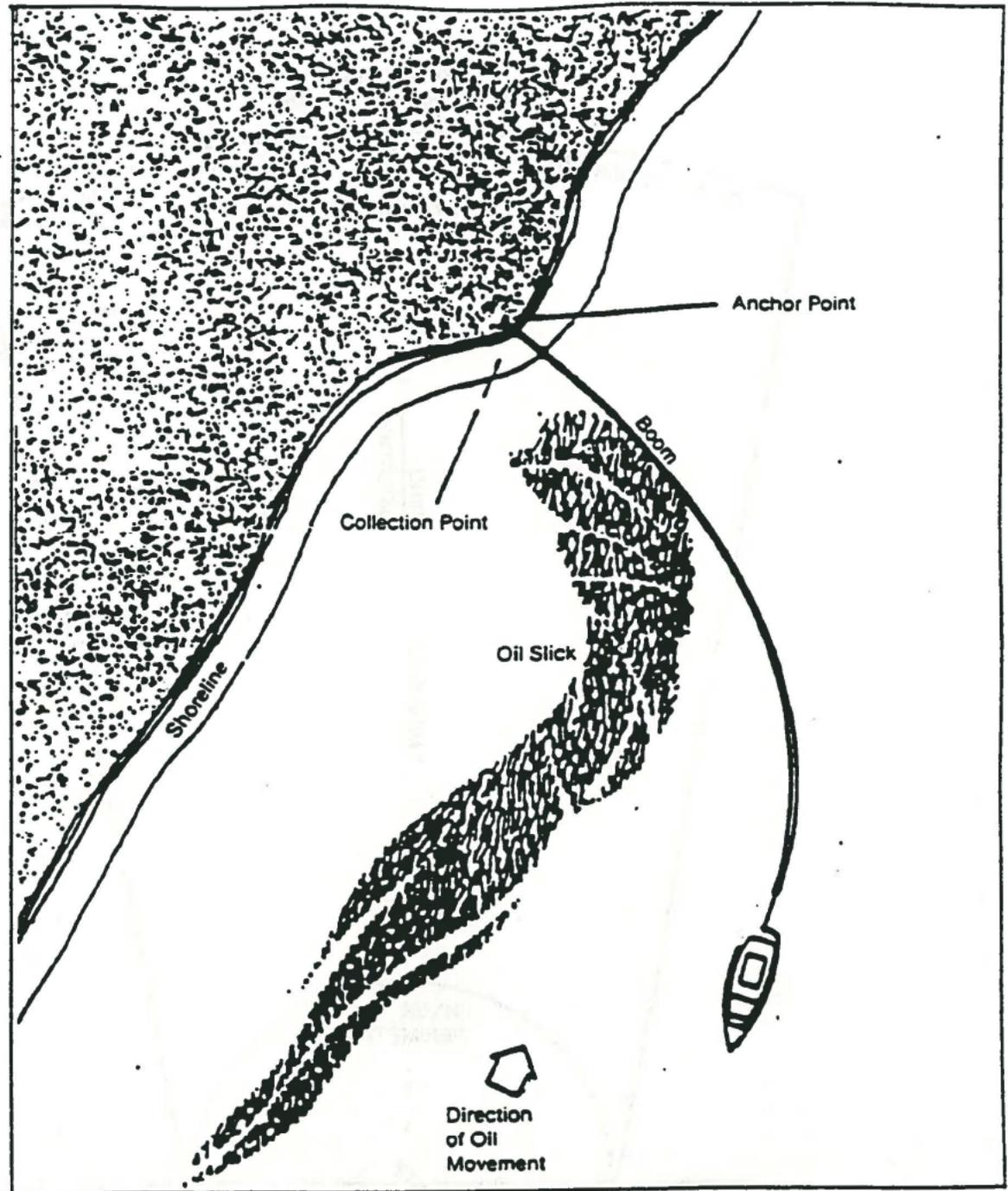


Figure 11. Diversion Booming Along Shoreline

Hazard Material Site Layout Plan—Windy Day

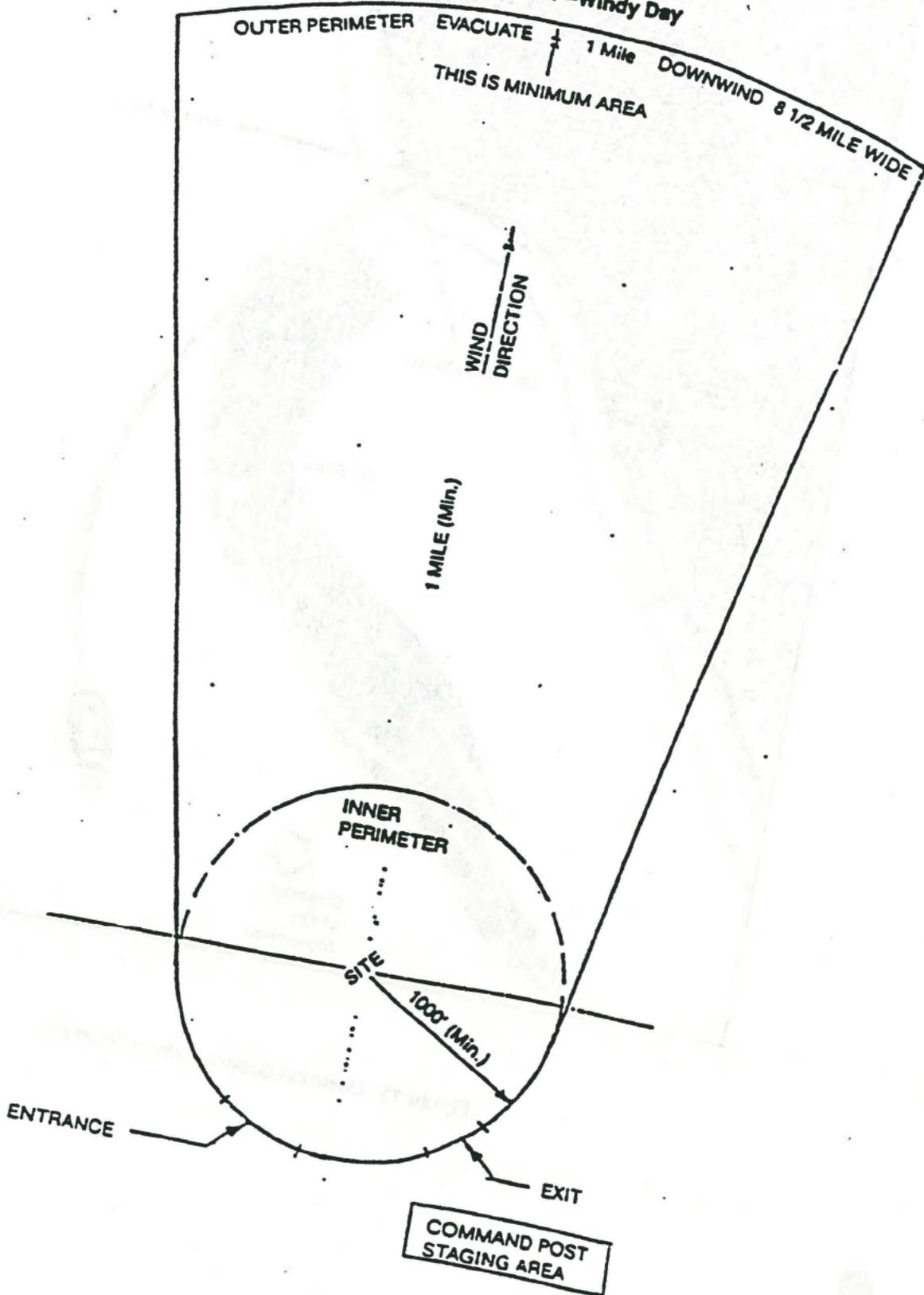


Fig. 1

BOOM PLACEMENT IN RUNNING WATER

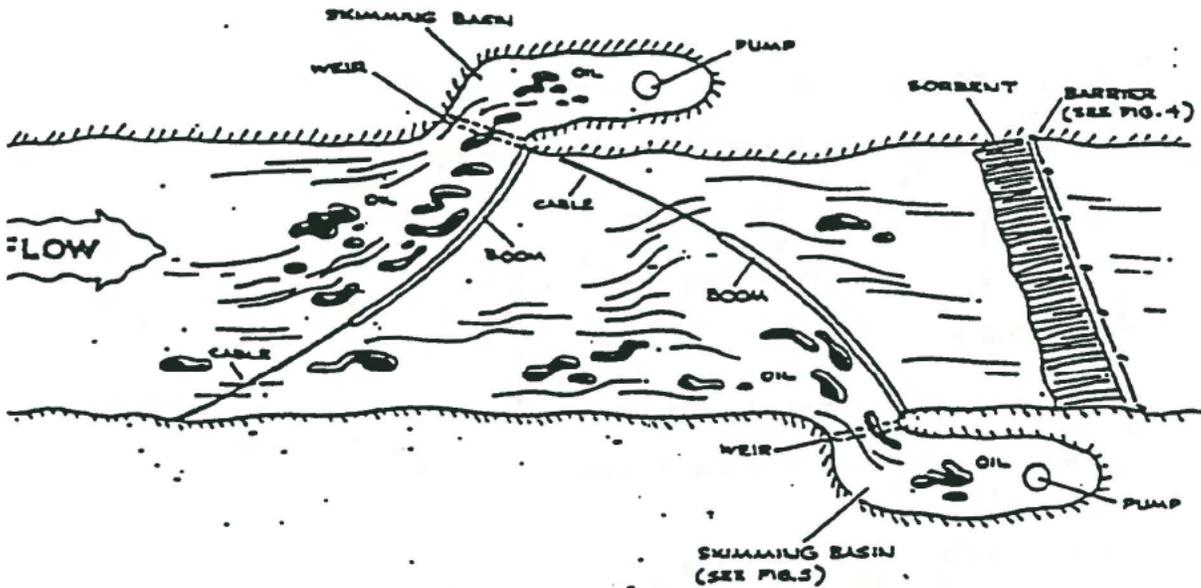


Fig. 2

CURTAIN BOOM

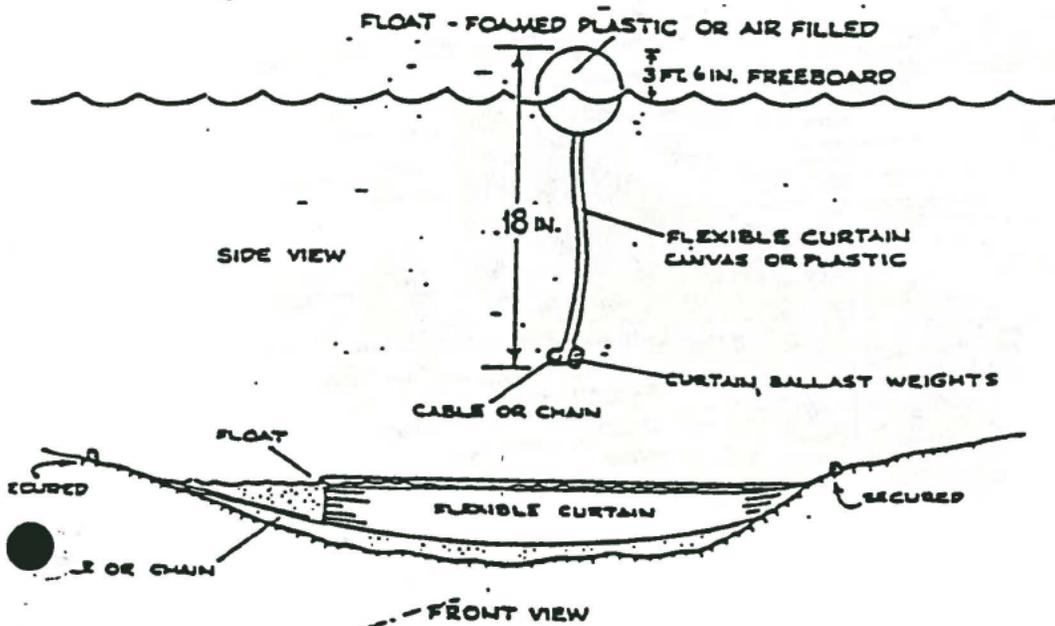


Fig. 3

BOOM PLACEMENT ANGLES

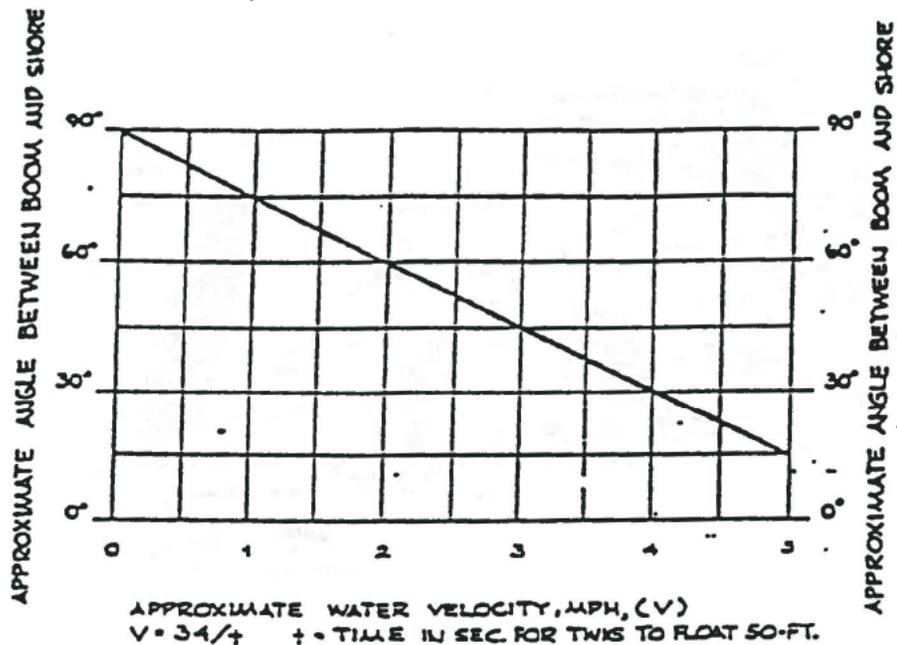


Fig. 4

SORBENT BARRIER

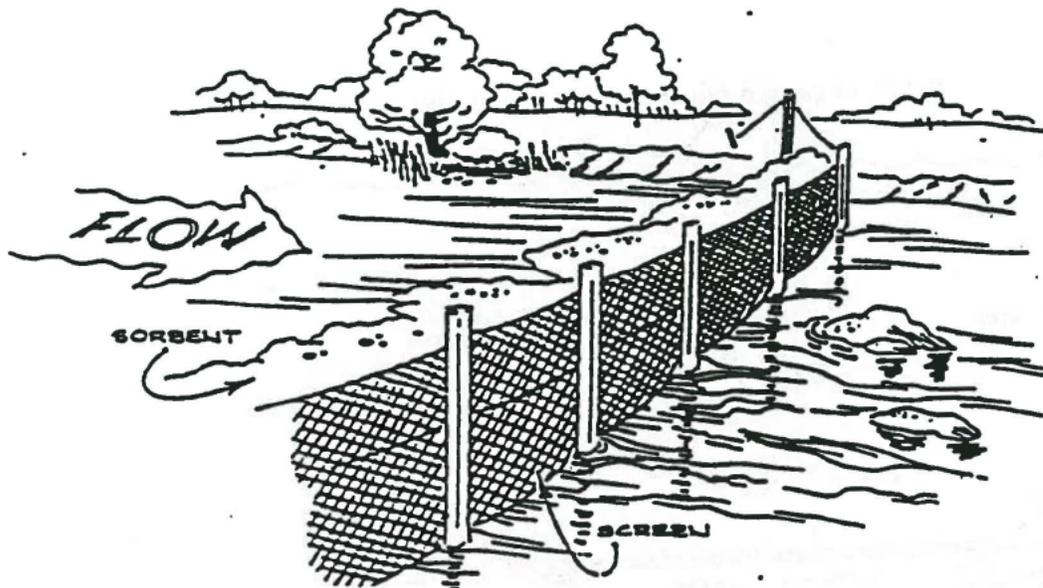


Fig. 7.

FLOATING PUMP OR SKIMMER

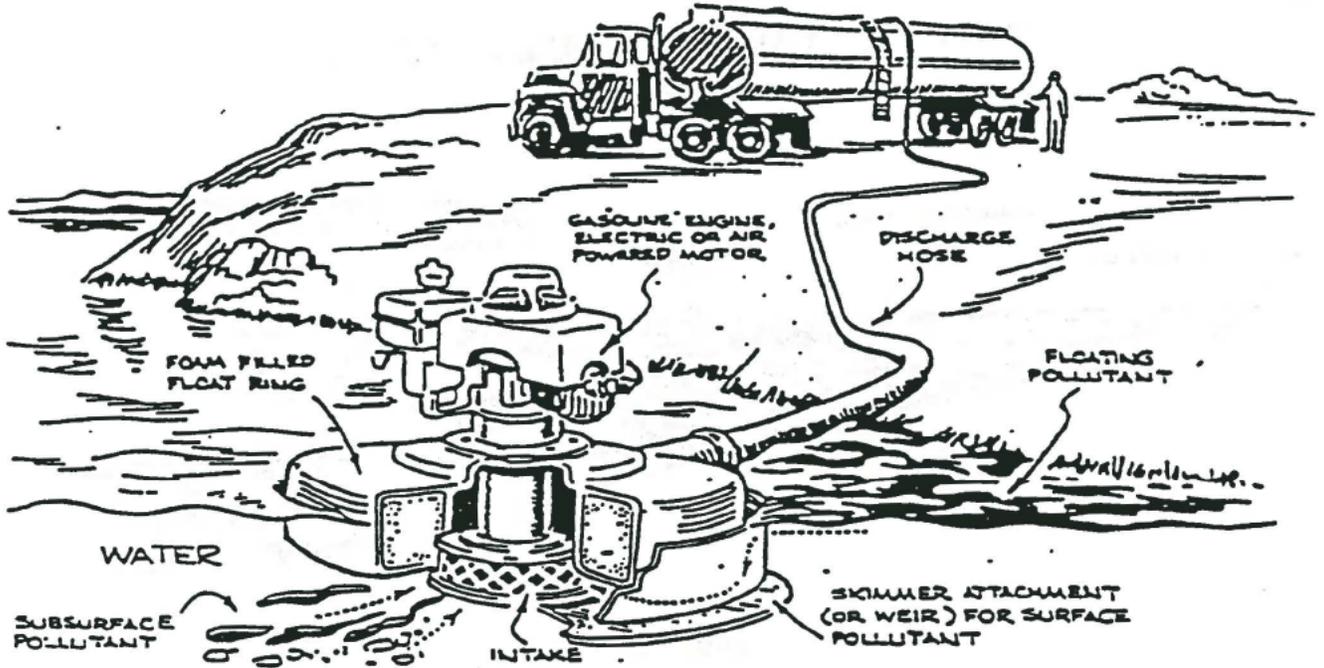


Fig. 8

CONTAINMENT DAM

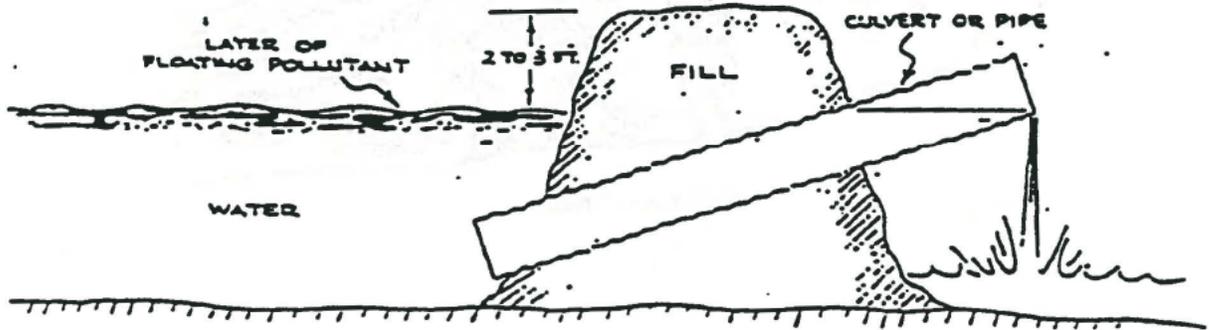
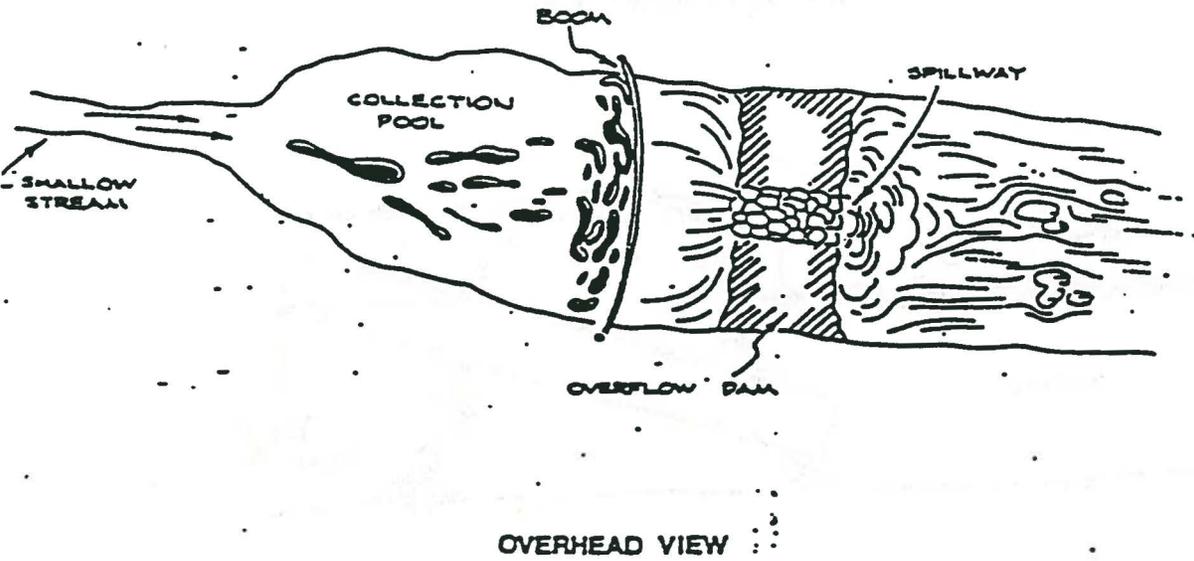
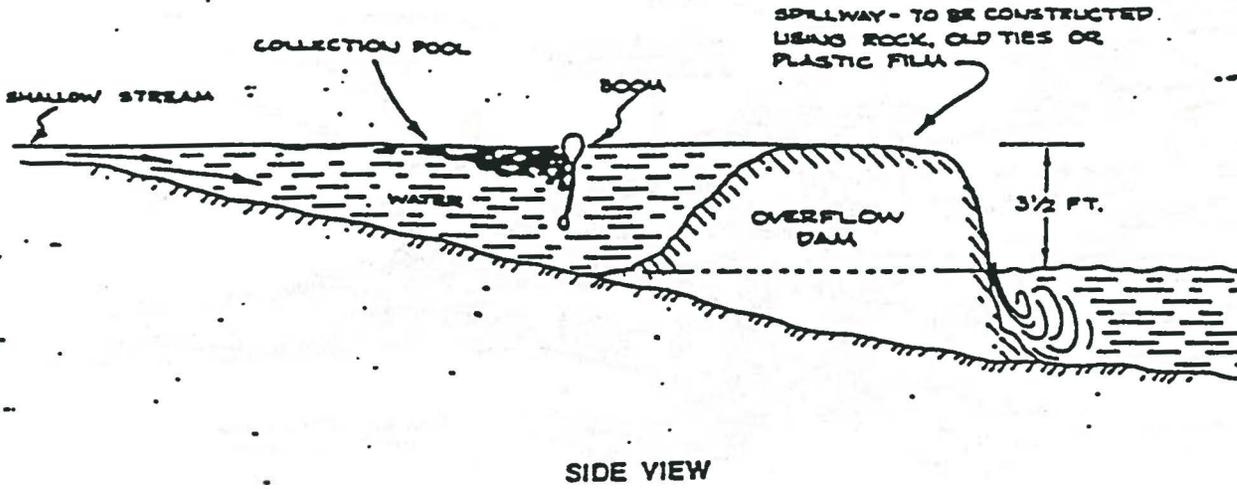


Fig. 9

OVERFLOW DAM FOR SHALLOW STREAM



DECONTAMINATION PROCEDURES

The procedure involves three basic stations that include various activities depending on the situation.

The first zone includes an inflatable basin (wading pools). A contaminated person wearing full protective gear steps into the basin and is sprayed with water from the sprayers using as little water as possible. After initial rinse, the person is rubbed down with soap and water or whatever solution is recommended by the manufacturer of the chemical or product involved.

Once gross contamination is removed, the contaminated person moves to Zone 2, which consists of salvage cover, or tarp, whose sides are supported with 2-inch inflatable hose boom to contain dripping water. One corner of the tarp stretches over the top of the Zone 1 basin to prevent spills.

At that point, the decontamination officer (safety coordinator) determines whether discarded equipment and clothing should be impounded for further decontamination or removed from the area and whether the person who shed them should go to another facility for a medical examination.

Zone 3 is adjacent to Zone 2. It consists of polyethylene sheeting to protect the ground and basically is used for impounded clothing and equipment. Zone 3 is equipped with an "ample supply of plastic bags and salvage drums for equipment and clothing that must be disposed."

These procedures are followed for accident victims as well as response personnel. After gross contamination is removed from the victim (clothing remains at the scene), the hospital is alerted, and the victim is transported there along with a sample of the contaminant.

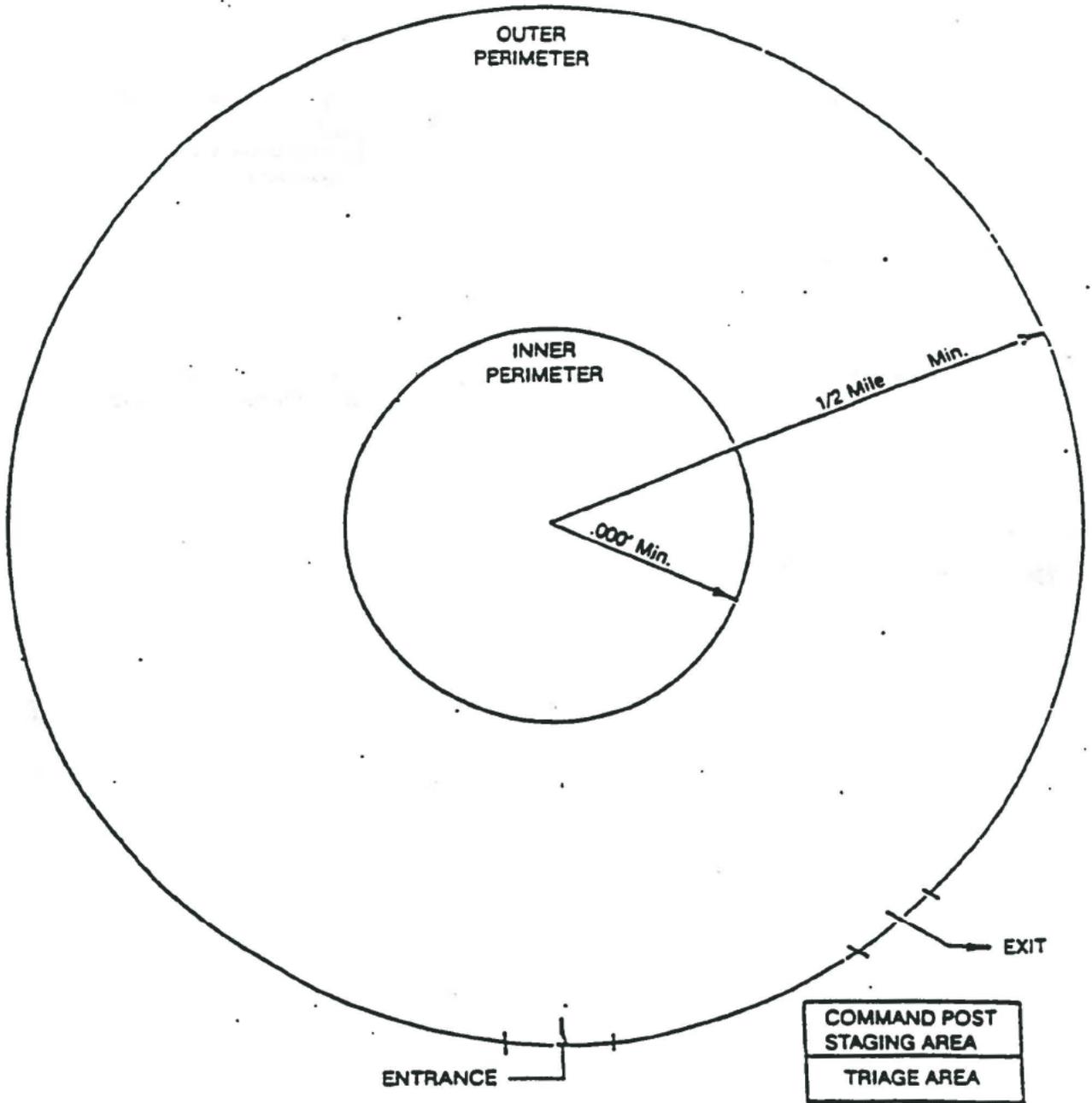
Contaminated water is pumped into salvage drums, which then are sealed, labeled, and left for disposal after the emergency has ended.

Basic Decontamination Equipment

It is possible to spend vast sums of money on decontamination equipment. Most times you need to run a decon-operation with items readily available from a local discount store. Some items may need to come from a more specialized source. Below is a list of items recommended for decontamination and its purpose.

<u>Item</u>	<u>Purpose</u>
Wading Pools	<ol style="list-style-type: none"> 1. Containment areas for spraying down solutions. 2. Get inflatable rather than rigid.
Polyethylene Sheeting	<ol style="list-style-type: none"> 1. Keeps ground uncontaminated. 2. Easy to spot-clean contamination. 3. Easy to dispose. 4. Clearly defines work area.
Garden Sprayers	For spray of water and decon solutions.
Dishwashing Soap	Liquid soap will not clog up sprayers.
Scrub Brushes	Toilet brushes for scrubbing down.
Disposable Diapers	A highly absorbent surface with a liquid-resistant backing. Use to wipe down suits or to clean up suit run-off.
Folding Chairs	Inexpensive and aluminum frame chairs.
Trash Cans and Liners	Inexpensive, lightweight PVC 30- to 40-gallon capacity. Use them to store things prior to use.
Tables	Card table.
Buckets	For glove washing, refilling sprayers, and various uses.
Towels	Either cloth or paper.
Liquids	Potable water, Gatorade, etc.

Layout Plan—Calm Day
(No Wind)
Hazard Material Incident Site



Zone 1

Equipment drop (bucket)

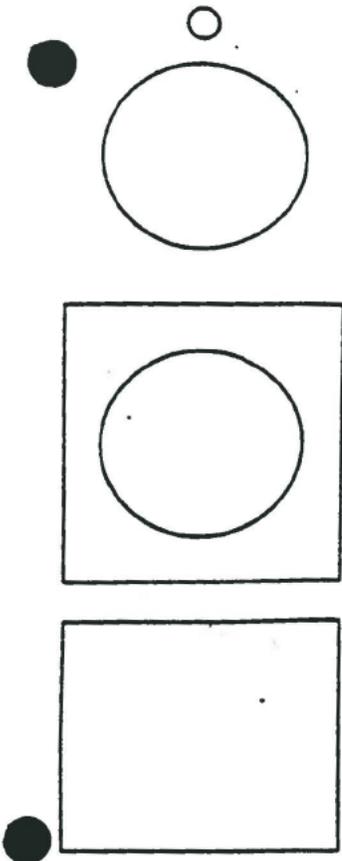
Wading pool (wash + rinse)

Zone 2

Wading pool, tarp with sides
(wash + rinse)
Medical examination
(if necessary)

Zone 3

Polyethylene sheeting
(impounded clothing drop)



Annex 4

Incident Documentation

ANNEX 4 INCIDENT DOCUMENTATION

a. Post-Accident Investigation

b. Incident History

This annex describes BNSF procedures for conducting a follow-up investigation of the cause of the accident, including coordination with federal, state, and local officials. This annex also contains account of previous incidents at the facility, including information on cause, amount released, resources impacted, injuries, and response actions.

a. Post-Accident Investigation

A follow-up investigation should be conducted to determine the cause of the accident. All applicable agencies should be included in this investigation. After an oil spill, a post-spill review meeting should be held to discuss the causes of the accident and review the effectiveness of the spill response. The attached spill prevention briefing form and a summary of the meeting should be kept in this section of the plan. The follow-up actions are outlined below.

- 1. Termination**
- 2. Termination Documentation**
- 3. Environmental Remediation Briefing**
- 4. Post-Incident Analysis**
- 5. Incident Out-Briefing**

1. Termination

BNSF will consider that a spill response has ended and recovery procedures have begun when the OSC and BNSF Environmental Department Representative have determined that:

- Spill response activities have ended.
- There is no longer a release or threatened release of a spilled material.

2. Termination Documentation

Before leaving the scene of a spill, the OSC should assure that adequate documentation has been obtained. Documentation should include:

- Completed Site Health and Safety Plan
- Exposure monitoring results
- Photographs

- All measurements
- Shipping papers
- MSDS
- Contractors used
- Incident reports.

3. Environmental Remediation Briefing

Before spill responders leave the incident scene, they must brief the remediation team with the following information:

- The spilled materials present
- Past and present exposure data
- Signs and symptoms of over-exposure
- First aid and medical procedures applied
- Unsafe conditions requiring further action
- Summary of actions that were taken
- Assignment of responsibilities for the post-incident analysis and critique
- Reinforcement of the positive aspects of the response.

4. Post-Incident Analysis

- a. The purpose of the post-incident analysis is to reconstruct the incident and establish a clear picture of the events that took place. The analysis is conducted to improve the efficiency and effectiveness of future responses. It is not an incident investigation as it is not concerned with determining the cause of the incident. Rather, it involves only the emergency response portion of the incident.
- b. The post-incident analysis will be conducted by BNSF, OSC, or designee. The person conducting the post-incident analysis should meet with as many involved personnel as soon as possible to gather the most thorough and accurate information available.
- c. Documentation that should be obtained and examined includes:
 - Shipping papers and MSDS
 - Chemical hazard information

- Notes for personnel
 - Site Safety and Health Plan
 - DOT Form F 5800.1
 - Photographs and sketches
 - Exposure data
 - Incident report
 - Incident Command Chart
 - Business cards and notes made by response agencies
 - Video tapes recorded by the news media
 - Interviews from witnesses
 - Personal notes.
- d. The OSC should compile a post-incident report that documents the response and focuses on recommendations that will improve future response activities. The report should be forwarded to the Director of Hazardous Materials Safety for corrective action consideration.

5. Incident Out-Briefing

Spill incident out-briefing will be conducted by all BNSF departments, customers and contractors directly involved in the incident to identify and understand any lessons to be learned and outline corrective actions to be taken to abate future errors.

b. Incident History

As of June 2000, there have been no spills at the facility. In the event of a spill, the following Form 4-1 should be used to record spill information to establish a spill history for the facility.

FORM 4-1
INCIDENT HISTORY

Date	Cause	Amount Released	Resources Impacted	Injuries	Response Actions

Annex 5

Training and Exercises/Drills

ANNEX 5 TRAINING AND EXERCISES/DRILLS

a. Execution

b. Record Maintenance

This annex contains a description of the training and exercise program conducted at the facility. Evidence that required training and exercises have been conducted on a regular basis is on file with the Manager Environmental Operations.

a. Execution

There are no personnel are permanently located at the Alkali Creek facility.

BNSF has developed a 3-year cycle of facility response drills and exercises in accordance with the National Preparedness for Response Exercise Program (PREP) guidelines. A copy of the PREP guidelines used by the BNSF Emergency Response Team is included in this annex. These guidelines specify that the facility conduct the drills and exercises listed below. The Manager Environmental Operations is responsible for implementation of the training drills.

(1) Classroom training

- Annual ICP. See attached syllabus and outline following Form 5-3. This training includes:
 - Characteristics and hazards of diesel fuel
 - Contacting the BNSF Resource Operations Center
 - Contacting the QI
 - Content of the ICP and how to use it
 - Contacting the NRC and other agencies (location of phone numbers)
 - Causes of spills
 - Prevention of spills
 - Response actions
 - Incident Command System
- Initial and annual OSHA training. All BNSF employees responding to a diesel spill and all ERCs will have a minimum of 40 hours OSHA Hazardous Waste Site Operations Worker Training as required by 29 CFR 1910.120 and the annual 8-hour refresher course. This course will address personnel protection equipment, hazards, emergency resource, and safety and environmental considerations.

(2) Internal exercises

- QI notification drills (quarterly)
- Spill management team tabletop exercises (annually). Once per calendar year, a Spill Management Team Tabletop Exercise will be conducted in order for the major participants in spill response to become familiar with the details of the plan, the facility, the other participants, and the proper notification and response actions required. Participants in the tabletop exercise will be the QI, the BNSF Hazardous Materials Emergency Response Team, the local Fire Department representative, if available, and the local emergency contractors supporting the implementation of the FRP. The objectives of this training are to review the following:

- Knowledge of the response plan
 - Proper notifications
 - Communications system
 - Ability to access an OSRO.
 - Coordination of internal organization personnel with responsibility for spill response.
 - Review of the transition from a local team to a regional, national, and international team, as appropriate.
 - Ability to effectively coordinate spill response activities with the National Response System (NRS) infrastructure. (If personnel from the NRS are not participating in the exercise, the spill management team should demonstrate knowledge of response coordination with the NRS).
 - Ability to access information in Area Contingency Plan for location of sensitive areas, resources available within the area, unique conditions of area, etc.
 - A least one spill management team tabletop exercise every 3 years will involve simulation of a worst case discharge scenario.
 - Unannounced exercises (once/3 years).
- (3) Equipment deployment exercises (annually for contractors and the Montana-Wyoming Co-op).
- (4) External exercises
- Area exercises (participation as requested by agencies).

Credit for an area- or facility-specific exercise will be given to the facility for an actual response to a spill in the area if the plan was used for response to the spill, the objectives of the Exercise were met, and these objectives were properly evaluated, documented, and self-certified (See the attached PREP guidelines).

The Qualified Individual QI Notification Log and Spill Management Team Tabletop Exercise Log follow as Forms 5-1 and 5-2, respectively.

Form 5-3 presents a general spill prevention briefing form to document spill prevention training required annually for employees who may be involved with oil spills.

A formal DOT tabletop drill and an unannounced EPA spill response drill were conducted in 2000. No additional response training has been identified as necessary to fully implement the plan.

b. Records Maintenance

The Manager Environmental Operations will be responsible for maintaining complete and detailed training records sufficient to document individual facility and response personnel's participation in, and successful completion of identified training programs related to his/her responsibilities and duties. The Manager Environmental Operations will maintain the training records for each employee as long as the employee is on the response team. Records for the instructors will also be maintained by the Manager Environmental Operations. Records will be made available to management, the QI, DOT, and EPA upon their request.

Contractors will be responsible for maintaining their own records and will provide them to BNSF upon request. Current deployment drill evaluations by the Montana-Wyoming Spill Co-op are available through the BNSF Manager Environmental Operations' office.

FORM 5-1

QUALIFIED INDIVIDUAL NOTIFICATION LOG

Date: _____
Company: _____
Qualified Individual: _____
Emergency Scenario: _____

Evaluation: _____

Changes to be Implemented: _____

Timetable for Implementation: _____

FORM 5-2

SPILL MANAGEMENT TEAM TABLETOP EXERCISE LOG

Date: _____
Company: _____
Qualified Individual: _____
Emergency Scenario: _____

Evaluation: _____

Changes to be Implemented: _____

Timetable for Implementation: _____

FORM 5-3

BNSF SPILL PREVENTION BRIEFING FORM

Location: _____

Date of Briefing: _____

Briefing Conducted by: _____

The following items were discussed at the meeting:

(Check items discussed)

ICP

- Applicable pollution control laws, rules, and regulations
- Spill events or failures at this or other facility
- Operation and maintenance of equipment to prevent oil spills
- Spill reporting procedures
- Other(s)

Facility operating personnel in attendance:

This spill prevention briefing form is to be kept with the ICP.

SYLLABUS

1. September, 1997

2. Code: SPCC/FRP

3. Training Unit Topic: Facility Response Plan (FRP) and Spill Prevention, Control, and Countermeasures (SPCC) Plan
4. Task: Identification, notification, and response actions to be taken during an oil spill.
5. Target Audience: All Burlington Northern & Santa Fe Railway employees at FRP regulated facilities.
6. Pre-requisite skills: Employment with Burlington Northern & Santa Fe Railway.
7. Instructor: Environmental & Hazardous Materials Staff knowledgeable in oil spill prevention and response.
8. Training supplies needed:

Overhead Projector & Overhead Marker to Write on Overheads

A Copy of the facility's SPCC/FRP Plans

Spill Response Guidelines Cards to Give to Participants

Training Module Script and Overheads 1-36

9. Learning Objectives	10. Instructional Strategies	11. Time
<p>Participants will:</p> <p>a. Be aware of the regulations that govern oil spills and the types of plans required.</p> <p>b. Identify when a spill requires reporting.</p> <p>c. Identify where the SPCC Plan and FRP are located and their elements.</p> <p>d. Identify who the Qualified Individual is and what their responsibilities are.</p> <p>e. Discuss the Incident Command System.</p> <p>f. Identify what kinds of spills are likely to occur and how they can be prevented.</p> <p>g. Identify who should be notified and what response actions can be taken if a spill occurs.</p> <p>h. Discuss the types of training, practical drills, and exercises that are required.</p> <p>i. Summarize key recordkeeping and training issues.</p>	<p>a. Overheads 1-7 & Lecture</p> <p>b. Overheads 8-12, Handout & Lecture</p> <p>c. Overheads 13-15 & Lecture</p> <p>d. Overheads 16 & Lecture</p> <p>e. Overheads 17-26 & Lecture</p> <p>f. Overheads 27-28 & Guided Discussion</p> <p>g. Overheads 29-31, Handout & Lecture</p> <p>h. Overheads 32-33 & Lecture</p> <p>i. Overheads 34-36, Guided Discussion, & Lecture</p>	<p>a. 10-15 minutes</p> <p>b. 5-10 minutes</p> <p>c. 5-10 minutes</p> <p>d. 5 minutes</p> <p>e. 5 - 10 minutes</p> <p>f. 5-10 minutes</p> <p>g. 5-10 minutes</p> <p>h. 10-15 minutes</p> <p>i. 5 minutes</p> <hr/> <p>Total Time: 60 - 95 minutes</p>

Contents

FACILITY RESPONSE PLAN AND SPILL PREVENTION, CONTROL, AND COUNTERMEASURES TRAINING MODULE

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**NATIONAL PREPAREDNESS
FOR
RESPONSE EXERCISE PROGRAM
(PREP)
GUIDELINES**

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



Environmental Protection Agency



Department of the Interior
Wildlife Management Service



PREP GUIDELINES

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SECTION 1: INTRODUCTION

Purpose

The National Preparedness for Response Exercise Program (PREP) was developed to establish a workable exercise program which meets the intent of section 4202(a) of the Oil Pollution Act of 1990 (OPA 90), amending section 311(j) of the Federal Water Pollution Control Act (FWPCA), by adding a new subsection (7) for spill response preparedness [33 U.S.C. 1321 (j)(7)]. The PREP was developed to provide a mechanism for compliance with the exercise requirements, while being economically feasible for the government and oil industry to adopt and sustain. The PREP is a unified federal effort and satisfies the exercise requirements of the Coast Guard, the Environmental Protection Agency (EPA), the Research and Special Programs Administration (RSPA) Office of Pipeline Safety, and the Minerals Management Service (MMS). Completion of the PREP exercises will satisfy all OPA 90 mandated federal oil pollution response exercise requirements.

At this time, the PREP addresses the exercise requirements for oil pollution response only. Regulations for hazardous substance releases are currently under development and once completed, the hazardous substance exercises requirements will be incorporated into the PREP.

The PREP represents the minimum guidelines for ensuring adequate response preparedness. If personnel within an organization believe additional exercises or an expansion of the scope of the PREP exercises are warranted to ensure enhanced preparedness, they are highly encouraged to conduct these exercises.

The PREP exercises should be viewed as an opportunity for continuous improvement of the response plans and the response system. **Plan holders are responsible for addressing any issues that arise from evaluation of the exercises, and for making changes to the response plans necessary to ensure the highest level of preparedness.**

Participation in PREP

Plan holders are required to meet the pollution response exercise requirements mandated by the federal agency with regulatory oversight for the specific type of industry involved (e.g., vessels, marine transportation-related facilities, onshore and certain offshore non transportation-related facilities, pipelines, offshore facilities). The PREP satisfies these requirements. The PREP is a voluntary program. Plan holders are not required to follow the PREP guidelines and, if they choose not to, may develop their own exercise program that complies with the regulatory exercise requirements.

All plan holders, whether participating in the PREP or following the exercise mandates of relevant agency regulations, will be subject to government initiated unannounced exercises. Unannounced exercises are mandated by OPA 90. These exercises are further described in these guidelines.

Applicability

The PREP is applicable to all industry response plan holders who elect to follow these guidelines. Area Contingency Plan holders are required to follow the PREP guidelines.

Industry plan holders electing not to adopt the PREP as their exercise program will be responsible for developing and documenting an exercise program that satisfies the appropriate federal oversight agency.

If an industry plan holder has developed one response plan that covers a fleet of vessels or regional operations of offshore platforms, this plan holder would only be required to conduct one "set" of exercises for the plan, with the exception of the qualified individual notification exercises and the emergency procedures exercises, which are required for all manned vessels and unmanned barges (as specified in 33 CFR 155.1015).

Effective Date

THE PREP GUIDELINES BECAME EFFECTIVE JANUARY 1, 1994. THE PREP FOLLOWS THE CALENDAR YEAR - THE EXERCISE YEAR IS JANUARY 1 TO DECEMBER 31.

Definitions

▪ **Area** - That geographic area for which a separate and distinct Area Contingency Plan has been prepared, as described in the Oil Pollution Act of 1990. For EPA Areas with sub-area plans or annexes to the Area Contingency Plan, the EPA Regional Administrator shall decide which sub-area plan is to be exercised within the triennial cycle.

▪ **Area Committee** - Area Committees are those committees comprised of federal, state and local officials, formed in accordance with section 4202 of the Oil Pollution Act of 1990, whose task is to prepare an Area Contingency Plan for the area for response to a discharge of oil or hazardous substance.

▪ **Area Spill Management Team** - The Area Spill Management Team is the group of individuals within the Coast Guard or EPA On-Scene Coordinator organization with responsibility for spill response management within the respective area. The Area Spill Management Team should include state and local personnel whenever possible.

▪ **Average Most Probable Discharge** - This definition is agency-dependent, and the appropriate definitions are detailed as follows:

- ◆ For Coast Guard-regulated vessels, a discharge of 50 barrels of oil from the vessel during oil transfer operations [33 CFR 155.1020].
- ◆ For Coast Guard-regulated facilities, a discharge of the lesser of 50 barrels or 1 percent of the volume of the worst case discharge [33 CFR 154.1020].
- ◆ For EPA regulated facilities, a small spill volume of 2,100 gallons or less, provided this amount is less than the worst case discharge.
- ◆ For RSPA regulated pipelines, the size of the discharge as defined in the response plan regulations.
- ◆ For MMS regulated offshore facilities, the size of the discharge as defined in the response plan regulations.
- ◆ For Areas, the size of the discharge as defined in the Area Contingency Plan.

▪ **Barge Custodian** - A barge custodian is the individual that has custody of an unmanned barge. The barge custodian may be affiliated with the towing vessel, floating area or facility at which the barge may be moored. The custodian can be the towing vessel operator, the facility operator, the fleet operator, or whoever may be in charge of the entity that has custody of the barge.

▪ **Certification** - Certification is the act of confirming that an exercise (1) was completed; (2) was conducted in accordance with the PREP guidelines, meeting all objectives listed; and (3) was evaluated using a mechanism that appraised the effectiveness of the response or contingency plan.

▪ **Complex** - A complex is a facility regulated under section 311(j) of the Federal Water Pollution Control Act [33 U.S.C. 1321(j)] by two or more federal agencies.

▪ **Equipment deployment exercise** - An equipment deployment exercise is an exercise where response equipment is deployed to a specific site and operated in its normal operating medium.

▪ **Equipment activation** - Equipment activation is the movement, staging, deployment or operation of response equipment, as determined by the plan holder in consultation with the exercise design team.

▪ **Exercise Design Team** - This team is comprised of federal, state and industry representatives who have responsibility for designing an Area Exercise.

▪ **Industry** - For the purpose of these guidelines, industry means the vessels, marine transportation-related (MTR) facilities, onshore and certain offshore non-transportation-related facilities, pipelines, and Outer Continental Shelf platforms for which response plans for oil spill response are required to be submitted by owners or operators. The response plan requirements and regulations for these entities are administered by the Coast Guard, EPA, RSPA, and MMS.

▪ **Maximum Most Probable Discharge*** – This definition is agency-dependent, and the appropriate definitions are detailed as follows:

- ♦ For Coast Guard-regulated vessels, a discharge of 2,500 barrels of oil for vessels with an oil cargo capacity equal to or greater than 25,000 barrels, or 10 percent of the vessel's oil cargo capacity for vessels with a capacity of less than 25,000 barrels [33 CFR 155.1020].
- ♦ For Coast Guard-regulated facilities, a discharge of the lesser of 1,200 barrels or 10 percent of the volume of a worst case discharge [33 CFR 154.1020].
- ♦ For EPA-regulated facilities, a discharge greater than 2,100 gallons and less than or equal to 36,000 gallons or 10 percent of the capacity of the largest tank at the facility, whichever is less.
- ♦ For RSPA-regulated pipelines, the size of the discharge as defined in the response plan regulations.
- ♦ For MMS-regulated offshore facilities, the size of the discharge as defined in the response plan regulations.

* Although this type of spill is not included as a spill to be used in any of the exercises, the definition is included to remind the program participants that this spill type is included in the planning process and can be used when conducting the various exercises.

▪ **National Response System** – Under 40 CFR part 300 (The National Oil and Hazardous Substances Pollution Contingency Plan), the National Response System (NRS) includes the National Response Team, Regional Response Teams, On-Scene Coordinators, and state and local government entities involved with response planning and coordination. The PREP, consistent with OPA 90 objectives, specifically involves the private sector with the NRS in order to ensure effective exercise development, delivery and coordination.

▪ **Oil Spill Removal Organization (OSRO)** – An oil spill removal organization is an entity that provides response resources. An oil spill removal organization includes, but is not limited to, any for-profit or not-for-profit contractor, cooperative, or in-house response resources established in a geographic area to provide required response resources.

▪ **On-Scene Coordinator (OSC)** – The On-Scene Coordinator is the federal official pre-designated by EPA or the USCG prior to an oil spill to coordinate and direct federal responses under subpart D of the National Contingency Plan, or the official designated by the lead agency to coordinate and direct removal actions under subpart E of the National Contingency Plan.

▪ **Plan Holder** – The plan holder is the industry (e.g., vessels, MTR facilities, onshore and certain offshore non-transportation-related facilities, pipelines, or offshore facilities) for which a response plan is required by federal regulation to be submitted by a vessel or facility's owner or operator. If an owner or operator is authorized to prepare one plan for a fleet of vessels, that owner or operator is considered to be the plan holder.

▪ **Primary Oversight Agency** – The primary oversight agency is the agency with regulatory authority over a particular industry. For the purposes of the PREP, the four primary oversight agencies and the industries they regulate are the U.S. Coast Guard (vessels, MTR facilities), the Environmental Protection Agency (onshore and certain offshore non-transportation-related facilities), the Research and Special Programs Administration (pipelines), and the Minerals Management Service (offshore facilities).

▪ **Qualified Individual** – A qualified individual is the person located in the United States who meets the requirements identified in the respective federal regulations (USCG, EPA, RSPA, MMS), and who is authorized to do the following: (1) activate and engage in contracting with oil spill removal organizations; (2) act as a liaison with the On-Scene Coordinator; and (3) obligate funds required to effectuate response activities. The qualified individual will be the individual or a designee identified in the response plan.

▪ **Self-Certification** – Self-certification is where the plan holder declares he or she has met the following standards: (1) completion of the exercise; (2) conducting of the exercise in accordance with the PREP guidelines, meeting all objectives listed; and (3) evaluation of the exercise using a mechanism that appraises the effectiveness of the response or contingency plan.

▪ **Self-Evaluation** – Self-evaluation means that the plan holder is responsible for carefully examining the effectiveness of the plan for response during the exercise. The plan holder may choose the mechanism for conducting this appraisal, as long as it appropriately measures the plan effectiveness. The plan holder is responsible for addressing issues that arise in the exercise that would lead to improvements in the response plan or any aspect of preparedness for spill response. The plan holder is responsible for incorporating necessary changes to the response plan as a result of the exercise.

▪ **Spill Management Team** – The spill management team is the group of personnel identified to staff the appropriate organizational structure to manage spill response implementation in accordance with the response plan.

▪ **Tabletop Exercise** – For the purpose of the PREP, a tabletop exercise is an exercise of the response plan and the spill management team's response efforts without the actual deployment of response equipment.

▪ **Unified Command** – This entity is a command structure consisting of the On-Scene Coordinator, the State and the Responsible Party. The Unified Command is utilized during a spill response to achieve the coordination necessary to carry out an effective and efficient response.

▪ **Verification** – Verification is the act of ensuring that an exercise was properly documented and certified. Verification would be conducted by the Coast Guard, EPA, RSPA, or MMS. Verification of the exercise records may be conducted through normal operations of the regulatory agency, such as inspections, boarding, spot checks, or other systems developed to ensure exercises are being conducted and properly documented.

▪ **Vessel** – For the purpose of the PREP, a "vessel" is any vessel required by 33 CFR 155.1015 to submit a response plan. A "vessel" includes unmanned barges.

▪ **Worst Case Discharge** – This definition is agency-dependent, and the appropriate definitions are detailed as follows:

- ◆ For Coast Guard-regulated vessels, a discharge in adverse weather conditions of a vessel's entire cargo as defined in 33 CFR 155.1020.
- ◆ For Coast Guard-regulated facilities, the size of the discharge as defined in 33 CFR 154.1020 (in the case of an onshore facility and deepwater port, the largest foreseeable discharge in adverse weather conditions meeting the requirements of 33 CFR 154.1029).
- ◆ For EPA-regulated facilities, the size of the discharge described in 40 CFR 112.20.
- ◆ For RSPA-regulated pipelines, the size of the discharge as defined in applicable regulations.
- ◆ For MMS-regulated offshore facilities, the size of the discharge as defined in applicable regulations.
- ◆ For Areas, the size of the discharge as defined in the Area Contingency Plan.
- ◆ For complexes regulated by more than one federal agency, the largest of the worst case discharges calculated for the various regulated components.

SECTION 2: GUIDING PRINCIPLES

Internal and External Exercises

→ Internal Exercises.

Internal exercises are those that are conducted wholly within the plan holder's organization. While the internal exercises include personnel such as the qualified individual and those affiliated with the OSRO, the internal exercises usually do not involve other members of the response community. The internal exercises are designed to examine the various components of the response plan to ensure the plan is adequate to meet the needs of the organization for spill response.

The internal exercises include --

- ◆ Qualified individual notification exercises;
- ◆ Emergency procedures exercises for vessels and barges;
- ◆ Emergency procedures exercises for facilities (optional);
- ◆ Spill management team tabletop exercises; and
- ◆ Equipment deployment exercises.

All internal exercises should be self-evaluated and self-certified.

→ External Exercises.

External exercises are exercises that extend beyond the internal focus of the plan holder's organization, and involve other members of the response community. The external exercises are designed to examine the response plan and the plan holder's ability to coordinate with the response community to conduct an effective response to a pollution incident.

The external exercises include --

- ◆ Area exercises; and
- ◆ Government-initiated unannounced exercises.

While the government-initiated unannounced exercises will not usually involve all members of the response community, the involvement of an agency outside of the plan holder's organization places it in the category of an external exercise.

Qualified Individual Notification Exercises

The purpose of the qualified individual notification exercise is to ensure that the qualified individual (or designee, as designated in the response plan) is able to be reached in a spill response emergency to carry out his or her required duties. Contact by telephone, radio, message-pager, or facsimile must be made with the qualified individual, and confirmation must be received from him or her to satisfy the requirements of this exercise.

For vessels, a telex will be acceptable, but the baseline should be voice communication. If a telex is used for this exercise, confirmation from the qualified individual must be received to properly satisfy the requirements of this exercise.

The qualified individual notification exercise is not intended to verify phone numbers, points of contact or the notification list contained in the plan. The plan holder is expected to update the notification list periodically (recommended at least once every 6 months) as part of the normal course of conducting business.

At least once a year, the qualified individual notification exercise should be conducted during non-business hours.

→ Vessels.

For vessels, it is the responsibility of the plan holder to ensure that the qualified individual notification exercise is conducted. If a plan holder has a fleet of vessels covered by one response plan, the plan holder must ensure that each vessel in the fleet conducts this exercise.

→ Unmanned Barges.

For unmanned barges, it is the responsibility of the plan holder to ensure that the qualified individual notification exercise is conducted. If a plan holder has a fleet of unmanned barges covered by one response plan, during each quarter the plan holder should randomly choose a barge in the fleet to conduct the qualified individual notification exercise.* The plan holder should have the barge custodian of the chosen barge conduct the exercise. The plan holder should choose the barges and the various custodians randomly. This method will ensure that all barges and custodians are ultimately included in the exercises.

* To require each unmanned barge in a fleet to conduct this exercise quarterly would be extremely difficult and unwieldy to manage.

Emergency Procedures Exercises

The purpose of the emergency procedures exercises is to ensure that personnel are capable of conducting the initial actions necessary to mitigate the effects of a spill.

→ Vessels.

For vessels, it is the responsibility of the plan holder to ensure that the emergency procedures exercise is conducted. If a plan holder has a fleet of vessels covered by one response plan, the plan holder must ensure that each vessel in the fleet conducts this exercise. Since vessels do not always sail with the same crews, it is important that each vessel conducts this exercise quarterly to ensure that the personnel on board are familiar with the procedures for mitigating a spill occurring from that vessel.

→ Unmanned barges.

For unmanned barges, it is the responsibility of the plan holder to ensure the emergency procedures exercise is conducted. If a plan holder has a fleet of unmanned barges covered by one response plan, during each quarter the plan holder should randomly choose a barge in the fleet to conduct the emergency procedures exercise.* The plan holder should have the barge custodian of the chosen barge conduct the exercise. The plan holder should choose the barges and the various custodians randomly to ensure that all barges and custodians will ultimately be included in the exercises.

* To require each unmanned barge in a fleet to conduct this exercise quarterly would be extremely difficult and unwieldy to manage.

→ Facilities (optional).

Facilities have the option of conducting emergency procedures exercises. For the purpose of the PREP, emergency procedures for facilities are the procedures established at the facility to mitigate or prevent any discharge or a substantial threat of such discharge of oil resulting from facility operational activities associated with cargo transfers. An emergency procedures exercise conducted unannounced would satisfy the facility's requirement for the annual unannounced exercise.

Spill Management Team Tabletop Exercises

The response plan holder must identify a spill management team in the response plan. This spill management team shall conduct an annual tabletop exercise, in accordance with the PREP guidelines. The response plan must be utilized in the exercise to ensure the spill management team is familiar with the plan and is able to use it effectively to conduct a spill response. At least one spill management team tabletop exercise in a triennial cycle shall involve a worst case discharge scenario.

If a response plan lists different types of spill management teams for varying sizes of spills -- for example a local spill management team for small spills, a regional team for larger spills, and a national team for major spills -- each team identified would be required to conduct an annual spill management team tabletop exercise.

→ Examples of Variations in Spill Management Team Organizations.

If an organization has one national spill management team identified for all plan holders within the organization, that spill management team would only have to conduct one spill management team tabletop exercise annually, as long as the TTX addresses individual responses to spill scenarios for all types of industry plan holders covered by the SMT, i.e. vessels, facilities, pipelines and offshore facilities. For the annual spill management team tabletop exercise, the spill management team may use core response management procedures that would cover all plan holders, but the SMT must ensure it is familiar with each response plan for the vessels, facilities, pipelines and offshore facilities for which they are responsible, including the specific spill scenarios identified in each of the plans as well as the specific operations of each of the vessels, facilities, pipelines and offshore facilities. All plan holders that cite this national team in their response plans should take credit for this exercise. Likewise, if regional spill management teams are set up within the organization, each regional team would only have to conduct one spill management team tabletop exercise annually, as long as the TTX addresses individual responses to spill scenarios for all types of industry plan holders covered by the SMT, i.e. vessels, facilities, pipelines and offshore facilities. The spill management team may utilize core response management procedures that would cover all plan holders, but the spill management team must ensure it is familiar with each response plan for which they are responsible, including the specific spill scenarios identified in each of the plans as well as the specific operations and unique characteristics of each of the vessels, facilities, pipelines and offshore facilities. All plan holders that cite this regional team in their response plans should take credit for this exercise.

If a plan holder uses a core spill management team to handle most spills and adds personnel to the team as the size of the spill increases, either locally or from regional locations, the entire expanded spill management team must be exercised annually.

The spill management team tabletop exercises should take into account shift changes to ensure that all personnel serving as part of the spill management team during an actual spill have participated in an exercise.

If a plan holder cites a spill management team that is not part of the plan holder's organization, i.e. "SMT for hire", that spill management team would only be required to conduct one spill management team tabletop exercise annually, as long as the TTX addresses individual responses to spill scenarios for all types of industry plan holders covered by the SMT, i.e. vessels, facilities, pipelines and offshore facilities. One or more

representatives from each plan holder organization that the spill management team represents must participate in the exercise. During the spill management team tabletop exercise, the spill management team must utilize each response plan to ensure familiarity with the spill scenarios identified in each of the plans as well as the specific operations of each vessel, facility, pipeline, and offshore facility the spill management team represents. The spill management team must also work with each plan holder representative to ensure the spill management team is able to incorporate the response management operations into the plan holder's organization during spill response. The spill management team should provide all plan holders with documentation upon completion of the spill management team tabletop exercise, and each plan holder should take credit for this exercise.

→ Vessels.

For vessels, if a plan holder has one response plan for a fleet of vessels and cites the same spill management team for more than one or all of the plans, the spill management team would only have to conduct one spill management team tabletop exercise annually, as long as the core response plan is used in the exercise and the spill management team demonstrates knowledge of the geographic specific annexes of the vessels during the exercise. All vessel plan holders in the fleet citing this spill management team should take credit for the annual exercise.

→ Pipelines.

For pipelines, the spill emergency response team is the spill management team.

Equipment Deployment Exercises

The equipment deployment exercise applies to all plan holders. It is the responsibility of the plan holder to ensure that the Equipment Deployment Exercise requirement is met.

The two primary requirements for the equipment deployment exercise are --

1. The personnel that would normally operate or supervise the operation of the response equipment must participate in the exercise. The personnel must demonstrate their ability to deploy and operate the equipment. All personnel involved in equipment deployment and operation must be involved in a training program.

2. The response equipment must be in good operating condition. The equipment must be appropriate for the intended operating environment. The equipment must operate during the exercise. All response equipment must be included in a maintenance program.

-> OSRO Involvement in Equipment Deployment Exercises.

The PREP guidelines identify the minimum amount of equipment that must be deployed in an equipment deployment exercise. This amount is considered to be a representative sample of the equipment. The rationale for this approach is that if the representative sample works, then the rest of the equipment could be expected to work since it would be part of the company's maintenance program. For the personnel, if a representative sample of the OSRO's personnel are involved in the deployment exercise and handle their responsibilities effectively, the rest of the personnel could be expected to be knowledgeable and effective since they would be a part of the company's training program. *When selecting the equipment and personnel for the exercise, the OSRO should ensure that the same equipment and personnel are not used repeatedly for each exercise. The equipment should be selected on a rotational basis, as with the personnel, with the ultimate goal of eventually exercising all of the OSRO's equipment and personnel.*

A few of the larger OSROs have small field response facilities. A field response facility is defined as a location where personnel and equipment are staged. Some of these OSROs have divided their operations into regional response facilities. In some instances, a regional facility will be responsible for several small field response facilities or equipment stockpiles. For the purpose of the equipment deployment exercises under PREP, each regional facility will be considered a separate OSRO and will be required to conduct an annual equipment deployment exercise of the minimum amount of equipment specified in the PREP. The OSRO regional facility would be responsible for coordinating resources from all field facilities within the region for the exercise. In such instances, equipment may be drawn from one or more field facilities, but personnel from each field facility must participate in the equipment deployment exercise. If the OSRO operates using regional facilities, the OSRO will be responsible for defining its regional boundaries and providing this information to its plan holders. Generally, however, regions should be reasonable in geographic size.

If an OSRO has separate field response facilities located throughout the country in areas that do not lend themselves to regional consolidation, each staffed field response facility, for the purpose of the PREP, will be considered a separate OSRO and will be required to conduct an annual equipment deployment exercise of the minimum amount of equipment specified in the PREP.

In both cases, if the OSRO is classified to deploy equipment to more than one type of operating environment, the OSRO must conduct a deployment exercise in each of the environments.

OSROs do not have to conduct equipment deployment exercises in each specific Area (the Area being the geographic boundaries for which an Area Contingency Plan has been developed) of the various plan holders they cover. For example, if an OSRO is located in the Galveston Bay Area, and provides response assets to the South Texas Coastal Area in addition to the Galveston Bay Area, the OSRO does not have to conduct an exercise in both areas. If the OSRO is cited in a response plan outside of its normal equipment staging and operating areas (i.e. as a Tier 2 responder), the plan holder citing that OSRO must ensure that the OSRO has the local knowledge relevant to an effective, efficient response in the plan holder's operating area. The plan holder must describe arrangements for providing the OSRO with information such as equipment launching locations, tides and currents of the local area, and any other logistical problems or information specific to the particular area.

The OSRO should provide documentation of completion of the exercise requirements to each plan holder covered by that OSRO. It is the plan holder's responsibility to ensure that the OSRO has completed the equipment deployment exercise requirements and has obtained the necessary documentation. All plan holders identifying an OSRO in their response plans as providing response resources should take and document their credit for completing the equipment deployment exercise requirements once documentation is received from the OSRO. All plan holders must remember that merely citing an OSRO in their response plan is not sufficient to ensure credit for the equipment deployment exercise.

→ Cooperatives (Co-ops).

For co-ops that are comprised of OSROs, each separate OSRO that makes up the co-op would be required to conduct an annual equipment deployment exercise of the minimum amount of equipment listed below.

For co-ops that are comprised of facility equipment and personnel pooled together, for the purposes of the PREP, this type of co-op is considered an OSRO and would be required to conduct the equipment deployment exercise as outlined in the OSRO section. This co-op, which is formed by a number of facilities pooling their response equipment and personnel together, would be required to conduct an equipment deployment exercise of the minimum amount of equipment listed below annually. Each facility and the personnel will not have to conduct the exercise individually. The co-op as a whole would conduct one equipment deployment exercise per year. Representatives from all of the facilities comprising this co-op must participate in this exercise.

Co-op personnel that are responsible for deploying the response equipment must be involved in a training program which prepares them for operating the response equipment. Likewise, the Co-op must have a maintenance program for all of the response equipment.

→ Facility Owned and Operated Equipment.

Facility owned and operated equipment is that equipment owned by a facility and operated either by the facility's own personnel or other personnel hired by the facility to operate this equipment. Whoever operates this equipment must be involved in the equipment deployment exercises.

Facilities that have facility owned and operated equipment, and have this equipment identified in their response plan for spill response, would be required to deploy this equipment twice a year (semiannually). The facility would be required to deploy the minimum amount of equipment for deployment (see below), or that amount of equipment necessary to respond to an average most probable discharge, whichever is less. For a complex, the average most probable discharge amount to be used would be that which represents the largest size spill. The requirement for semiannual equipment deployment is based on the fact that this equipment is not deployed routinely and that the personnel operating it do not do this as a part of the facility's normal operations. The semiannual requirement is necessary to ensure adequate preparedness for spill response.

The facility's personnel responsible for deploying the response equipment must be involved in a training program which prepares them for operating the response equipment. Likewise, the facility must have a maintenance program for all of the response equipment.

→ Plan Holders Using a Combination of OSRO Equipment and Facility Owned and Operated Equipment.

Plan holders citing both OSRO equipment and their own equipment in their response plans would be required to exercise both types of equipment following the previously-described guidelines for each.

→ Minimum Amount of Equipment for Deployment.

1) 1000 feet of each type of boom in the inventory.

Types of boom:

- a) Solid Log Flotation Boom
- b) Air Inflated Boom
- c) Self Inflated Boom
- d) Bottom Seal Boom (Only 50 feet of this type of boom need be deployed)
- e) Fire Boom (Minimum Effective Length)
- f) Special Purpose Boom

2) One of each type of skimming system.

→ Operating Environments.

For the purposes of PREP, there are three types of operating environments:

- a. Fully protected, i.e. no waves. (This type would include rivers and some lakes.)
- b. Sheltered, i.e. harbors.
- c. Unsheltered, i.e. open ocean.

If an OSRO would be operating in all three environments, the OSRO would be required to conduct an exercise of the minimum amount of equipment in each of the environments. If the OSRO only operates in two of the environments, it would be required to conduct the exercises in the two environments.

→ Area Equipment Deployment.

The area equipment deployment exercise involves Coast Guard and EPA "first aid" response equipment and the Coast Guard's prepositioned equipment. All of the "first aid" equipment or that which is necessary to respond to an average most probable discharge in the area, whichever is less, would be deployed annually. The prepositioned equipment should be deployed in accordance with the frequency cited in COMDTINST 16465.47, dated October 8, 1993.

Internal Unannounced Exercises

THIS IS NOT A SEPARATE EXERCISE. THIS SECTION OUTLINES THE REQUIREMENT THAT ONE OF THE PREP EXERCISES LISTED BELOW MUST BE CONDUCTED UNANNOUNCED.

Annually, each plan holder should ensure that one of the following exercises is conducted unannounced:

- ◆ Emergency procedures exercise for vessels and barges;
- ◆ Emergency procedures exercise for facilities (optional);
- ◆ Spill management team tabletop exercise; or
- ◆ Equipment deployment exercise.

An unannounced exercise is where the exercise participants do not have prior knowledge of the exercise, as they would be the situation in an actual spill incident.

To ensure that the nation maintains an adequate posture for response preparedness, and to satisfy the OPA 90 requirement for unannounced exercises, it is necessary to have an exercise program which is comprised of both announced and unannounced exercises. The requirement for the annual unannounced exercise is necessary to maintain the level of preparedness necessary to effectively respond to a spill.

Response to an actual spill should be taken as credit for the unannounced exercise requirement, if the response was evaluated.

The emergency procedures exercise is being offered as an option for facilities, to provide an additional exercise that may be conducted unannounced.

Government-Initiated Unannounced Exercises

The government-initiated unannounced exercises are designed to give the agency with primary regulatory oversight over a particular industry the opportunity to evaluate, on a random basis, the response preparedness of that industry. The PREP has attempted to make this requirement as reasonable as possible. For Coast Guard-regulated vessels and facilities, the government-initiated unannounced exercises would be limited to four per area per year. For EPA-regulated facilities, the government-initiated unannounced exercises would be limited to four per area per year. For RSPA-regulated pipelines, the government-initiated unannounced exercises would be limited to 20 annually across the nation. For MMS-regulated offshore facilities, the number of government-initiated unannounced exercises would be determined by the Regional Supervisor. A facility will not face an MMS unannounced exercise more than once per year, unless the results of previous exercises warrant more frequency.

A plan holder directed to participate in a government-initiated unannounced exercise is required to participate as directed.

The cost of the unannounced exercise would be borne by the response plan holder.

The EPA and the Coast Guard will coordinate the unannounced exercises conducted in the Inland Region.

A plan holder that has participated in a government-initiated unannounced exercise would not be required to participate in another Federal government-initiated unannounced exercise for at least 36 months from the time of the last exercise. The plan holder must maintain documentation of this participation.

Triennial Exercise of the Entire Response Plan

Every 3 years all components of the entire response plan must be exercised. Rather than requiring each plan holder to conduct a major exercise every 3 years, the PREP allows for the individual components to be exercised in portions through the required exercises.

The following are the basic types of plan components that must be exercised at least once every 3 years:

Organizational Design

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

Operational Response

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

Response Support

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

While not all of these components would necessarily be contained in each plan, the plan holder should identify those that are applicable from the list above, and add or delete other components as appropriate. The plan holder would then be responsible for ensuring that all components of the plan are exercised within each 3-year exercise cycle.

To satisfy the requirement of the triennial exercise of the entire response plan, it is not necessary to exercise the entire plan all at one time. The plan may be exercised in segments over a period of 3 years, as long as each component of the plan is exercised at least once within the 3 year period. The required exercises should be developed to ensure that each component is addressed and exercised in the triennial cycle.

The plan holder is responsible for documenting the components completed in the exercises.

- Triennial Cycle.

In the triennial cycle, the following internal exercises must be conducted:

- ✦ 12 qualified individual notification exercises;
- ✦ 12 emergency procedures exercises -- manned vessels and unmanned barges (optional for facilities);
- ✦ 3 spill management team tabletop exercises -- one must involve a worst case discharge scenario;
- ✦ 3 unannounced exercises -- any of the exercises, with the exception of the qualified individual notification exercise, if conducted unannounced, would satisfy this requirement;
- ✦ Equipment deployment exercises as described below:
 - ◆ For facilities with facility owned and operated equipment --
 - 6 facility owned and operated equipment deployment exercises (for facilities with facility owned and operated equipment identified in their response plan)
 - ◆ For vessels and facilities with OSROs identified for response equipment --
 - 3 OSRO equipment deployment exercises
 - ◆ For pipelines --
 - 3 pipeline equipment deployment exercises (using either OSRO and/or operator owned equipment)
 - ◆ For offshore facilities --
 - 3 equipment deployment exercises (for equipment staged onshore);
 - 6 equipment deployment exercises (for equipment staged offshore); and
- ✦ Triennial Exercise of Entire Response Plan -- Each component of the response plan must be exercised at least once in the triennial cycle.

Area Exercises

The purpose of the area exercise is to exercise the entire response community in a particular area. An area is defined as "that geographic area for which a separate and distinct Area Contingency Plan has been prepared, as described in OPA 90." The response community includes the federal, state and local government and industry. The area exercises are designed to exercise the government and industry interface for spill response.

The goal of the PREP is to conduct 20 area exercises per year nationwide, 60 within a triennial cycle. This method should ensure that all areas of the country are exercised triennially. Six of the 20 annual area exercises would be led by the government, and 14 would be led by industry plan holders. All of the area exercises will be developed by an exercise design team. The exercise design team is comprised of representatives from the federal, state and local government and industry. A lead plan holder would lead each area exercise. The lead plan holder is the organization (government or industry) that holds the primary plan that is exercised in the area exercise. The lead plan holder would have the final word on designing the scope and scenario of the exercise. The U.S. Coast Guard or the EPA would be the lead agency for the 6 government led exercises, with RSPA and MMS participating as appropriate.

A suggested mix of participants for the industry led area exercises would include ---

- ◆ Vessels (6 exercises);
- ◆ Marine transportation-related (MTR) facilities (2 exercises);
- ◆ Onshore and certain offshore non-transportation-related facilities (2 exercises);
- ◆ Pipelines (2 exercises); and
- ◆ Offshore facilities (2 exercises).

The area exercises do not necessarily have to be large scale productions. The scenario does not always have to involve a worst case discharge. The primary purpose of the area exercise is to activate and observe the response infrastructure in the area, and the ability of the entire response community to effectively conduct a spill response. The focus should be on the interaction between the responsible party and the federal, state and local government to exercise both the Area Contingency Plan and the responsible party's plan. There will be some level of equipment deployment; whatever is appropriate for the scenario. The following are recommendations for the area exercises:

- ◆ Each exercise should be approximately 8-12 hours in duration. The exercises may be longer, if agreed to by the exercise design team.
- ◆ The area response mechanism would be evaluated in each area exercise. The unified command would be exercised.
- ◆ The lead plan holder will have the primary voice and final decision authority in the exercise design. However, exercise design should be conducted as a cooperative effort of the entire exercise design team.

- ◆ The exercise scenario will involve some amount of equipment deployment. The extent of equipment deployment should be determined by the lead plan holder after consulting with the exercise design team.

An industry plan holder that participates in an Area Exercise would not be required to participate in another area exercise for a minimum of 6 years.

Plan holders are responsible for funding their participation in the area exercises.

An evaluation report should be completed not later than 60 days after completion of the area exercise. The evaluation report would be completed by the joint evaluation team.

Area Exercise Scheduling

Scheduling of area exercises will be done under a nationally coordinated system that involves the federal, state and local governments and industry plan holders, and that recognizes the unique needs of specific geographic regions of the country.

→ NSCC.

A National Scheduling Coordinating Committee (NSCC) has been established for scheduling the area exercises. The NSCC is comprised of personnel representing the four federal agencies – the Coast Guard, EPA, RSPA, and MMS.

→ Scheduling Process.

The NSCC is charged with developing and publishing a proposed area exercise schedule for each upcoming triennial period. This proposed schedule will be published in the Federal Register annually in January. The NSCC will solicit comments on the proposed schedule and industry plan holders to lead and participate in the Area Exercises. An area exercise scheduling workshop will be held annually in May to finalize the schedule. The workshop will be the forum for obtaining industry input into the scheduling process. Industry plan holders may also provide input to the scheduling process through the local On-Scene Coordinators.

Prior to the time the schedule is published and the workshop held, the Area Committees and Regional Response Teams should meet to discuss the schedule and scheduling process. This local and regional input should be provided to the NSCC through the normal chain of command.

Other Credit Issues

→ Credit for Spill Response.

Plan holders may take credit for internal exercises conducted in response to actual spills. The spill response must be evaluated. The plan holder must determine which exercises were completed in the spill response. This determination should be based on whether the response effort would meet the objectives of the exercise as listed in the PREP guidelines. The plan holder should document the exercises completed.

The NSCC is responsible for authorizing credit for area exercises, based on the recommendations of the On-Scene Coordinator. Credit should be given to a plan holder for participation in an area exercise if the following circumstances exist (1) the response plan was utilized in an actual spill response; (2) the response involved the entire response community; (3) the objectives of the area exercise were met as outlined in the PREP guidelines; (4) the response was evaluated; and (5) the spill response was properly documented and certified.

→ Proper Documentation for Self-Certification.

Proper documentation for self-certification should include, as a minimum, the following information:

- ◆ The type of exercise.
- ◆ Date and time of the exercise.
- ◆ A description of the exercise.
- ◆ The objectives met in the exercise.
- ◆ The components of the response plan exercised.
- ◆ Lessons learned.

This documentation must be in writing and signed by an individual empowered by the plan holder organization.

Sample documentation forms are attached as Appendix A to the PREP Guidelines.

Special Issues

→ Complexes.

Complexes are facilities that must meet the requirements of more than one federal agency. For example, a facility that has oil storage tanks, a pipeline and a waterfront oil transfer dock is considered a complex since it must meet the requirements of EPA, RSPA and the Coast Guard.

Complexes would only be required to conduct one exercise to meet all agency requirements for that particular type of exercise. For example, if a quarterly notification exercise is required by all three agencies regulating the complex, one notification exercise per quarter would satisfy the requirements for all three regulatory agencies.

→ Vessels Serving as Secondary Carriers of Oil.

Vessels serving as secondary carriers of oil should comply with the exercise requirements in 33 CFR 155.1045(h).

→ TAPAA Vessels and Facilities.

Trans-Alaska Pipeline Authorization Act (TAPAA) vessels and facilities, in addition to complying with the primary exercise requirements, must comply with the additional exercise requirements identified in the vessel and facility response plan regulations at 33 CFR 155.1125(a)(2) and 33 CFR 154.1125(a)(2), respectively.

→ LEPC Drill Credit.

Local Emergency Planning Committees (LEPCs) are required to conduct exercises periodically. Industry plan holders should coordinate their exercises with the LEPCs, whenever possible, and should take credit, as long as the PREP exercise objectives are met.

→ Foreign Vessels Calling Only Occasionally at U.S. Ports.

If a vessel plan holder has a response plan, prepared with the intent that the vessel would be calling at U.S. ports, even if only occasionally, the vessel plan holder must have an exercise program in place and be conducting the required exercises. If the plan holder is following the PREP guidelines, all exercises must be conducted at the frequency listed in the PREP guidelines. The only exception to this requirement is the qualified individual notification exercise, which is only required to be conducted quarterly while operating in U.S. waters, otherwise upon entry into U.S. waters.

If a vessel comes into U.S. waters for the first time, but intends to continue trading, it must conduct the qualified individual notification exercise immediately, and then begin its exercise program. Since the PREP follows the calendar year, the triennial cycle should begin as soon as the vessel enters U.S. waters. The vessel should remain on the calendar year schedule, with the following January 1 beginning the next year of the vessel's triennial cycle.

If the vessel only intends to make one voyage into U.S. waters, the vessel must conduct the qualified individual notification exercise immediately upon entry. If the vessel intends to reenter the U.S. at any time, it must comply with all exercise requirements.

→ Railroad Tank Cars.

While it is unlikely that oil would be carried in railroad tank cars in quantities (42,000 gallons or more) that may cause substantial harm to navigable waters of the U.S., if a railroad tank car does carry this amount of oil and is required to have a response plan, the exercise requirements would apply.

SECTION 4:

**EPA-REGULATED ONSHORE
AND CERTAIN OFFSHORE
NON TRANSPORTATION-RELATED
FACILITIES**

QI NOTIFICATION EXERCISES**EPA-Regulated Facilities**

Applicability:	Facility.
Frequency:	Quarterly.
Initiating Authority:	Company policy.
Particip. Elements:	Facility personnel and qualified individual.
Scope:	Exercise communications between facility personnel and qualified individual.
Objectives:	Contact must be made with a qualified individual or designee, as designated in the response plan.
Certification:	Self-certification.
Verification:	Environmental Protection Agency (EPA)
Records:	
Retention:	5 years
Location:	Records to be kept at the facility.
Evaluation:	Self-evaluation.
Credit:	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

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EMERGENCY PROCEDURES EXERCISE**Facilities (Optional)***

Applicability:	Facility.
Frequency:	Quarterly.
Initiating Authority:	Facility owner or operator.
Particip. Elements:	Facility personnel.
Scope:	Exercise the emergency procedures for the facility to mitigate or prevent any discharge or a substantial threat of such discharge of oil resulting from facility operational activities associated with oil transfers.
Objectives:	Conduct an exercise of the facility's emergency procedures to ensure personnel knowledge of actions to be taken to mitigate a spill. This exercise may be a walk-through of the emergency procedures. Exercise should involve one or more of the sections of the emergency procedures for spill mitigation. For example, the exercise may involve a simulation of a response to an oil spill. The facility should ensure that spill mitigation procedures for all contingencies at the facility are addressed at some time.
Certification:	Self-certification.
Verification:	EPA.
Records:	
Retention:	5 years.
Location:	At each facility.
Evaluation:	Self-evaluation.

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Credit:

Plan holder should take credit for this exercise when conducted in conjunction with other exercises, as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

* This is offered as an optional exercise to provide facilities with an exercise that may be conducted unannounced to fulfill the internal unannounced exercise requirement.

SPILL MANAGEMENT TEAM TABLETOP EXERCISE**EPA-Regulated Facilities**

Applicability:	Facility spill management team.
Frequency:	Annually.
Initiating Authority:	Company policy.
Particip. Elements:	Spill management team as established in the response plan.
Scope:	Exercise the spill management team's organization, communication, and decision-making in managing a spill response.
Objectives:	Exercise the spill management team in a review of -- <ul style="list-style-type: none"> > Knowledge of the response plan; > Proper notifications; > Communications system; > Ability to access an OSRO; > Coordination of internal organization personnel with responsibility for spill response; > An annual review of the transition from a local team to a regional, national, and international team, as appropriate; > Ability to effectively coordinate spill response activity with the National Response System (NRS) infrastructure. (If personnel from the NRS are not participating in the exercise, the spill management team should demonstrate knowledge of response coordination with the NRS.) > Ability to access information in Area Contingency Plan for location of sensitive areas, resources available within the area, unique conditions of area, etc. (This is only applicable

If the Area Contingency Plan is available for the exercise.)

At least one spill management team tabletop exercise in a triennial cycle would involve simulation of a worst case discharge scenario.

Certification: Self-certification.

Verification: EPA.

Records:

Retention: 5 years.

Location: At each facility.

Evaluation: Self-evaluation.

Credit: Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

EQUIPMENT DEPLOYMENT EXERCISES

EPA-Regulated Facilities

Applicability: Facilities with facility owned and operated response equipment.

Frequency: Semiannually.

Initiating Authority: Company policy.

Particip. Elements: Facility personnel.

Scope: Deploy and operate facility owned and operated response equipment identified in the response plan. The equipment to be deployed would be either (1) the minimum amount of equipment for deployment as described in "Guiding Principles", or (2) the equipment necessary to respond to an average most probable discharge at the facility, whichever is less.

All of the facility personnel involved in equipment deployment operations must be included in a comprehensive training program. All of the facility equipment must be included in a comprehensive maintenance program. Credit should be taken for deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturer's recommendations and best commercial practices. All inspection and maintenance must be documented by the owner.

Objectives: Demonstrate ability of facility personnel to deploy and operate equipment.

Ensure equipment is in proper working order.

Certification: Self-certification.

Verification: EPA.

Records:

Retention: 5 years.

Location: Records to be kept at the facility.

Evaluation: Self-evaluation.

Credit: Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Note: If a facility with facility owned and operated equipment also identifies OSRO equipment in its response plan, the OSRO equipment must also be deployed and operated in accordance with the equipment deployment requirements for OSRO owned equipment.

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EQUIPMENT DEPLOYMENT EXERCISES

EPA-Regulated Facilities

Applicability: Facilities with OSRO response equipment cited in their response plan.

Frequency: Annually.

Initiating Authority: Company policy.

Particip. Elements: Facility owner or operator and OSRO.

Scope: Deploy and operate response equipment identified in the response plan. The equipment to be deployed would be the minimum amount of equipment for deployment as described in "Guiding Principles."

All of the OSRO personnel involved in equipment deployment operations must be included in a comprehensive training program. All of the OSRO equipment must be included in a comprehensive maintenance program. Credit should be taken for equipment deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturer's recommendations and best commercial practices. The facility owner or operator must ensure that inspection and maintenance by the OSRO is documented. The OSRO must provide inspection and maintenance information to the owner or operator.

Objectives: Demonstrate the ability of the personnel to deploy and operate response equipment.

Ensure the response equipment is in proper working order.

Certification: The facility owner or operator should ensure that the OSRO identified in the response plan provides adequate documentation that the requirements for this exercise have been met.

Verification: EPA.

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Records:**Retention:** 5 years, kept at the facility.**Evaluation:** Self-evaluation.

Credit: Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when the objectives are met, the response is evaluated, and a proper record is generated.

GOVERNMENT-INITIATED UNANNOUNCED EXERCISES**EPA-Regulated Facility Response Plan Holders**

Applicability:	EPA-regulated facility response plan holders within the area.
Frequency:	Annually, if selected. (<i>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.</i>)
Initiating Authority	EPA.
Particip. Elements	EPA-regulated facility response plan holders.
Scope:	<p>Unannounced exercises are limited to a maximum of four exercises per area per year.</p> <p>Exercises are limited to approximately 4 hours in duration.</p> <p>Exercises would involve response to an average most probable discharge scenario.</p> <p>Exercise would involve equipment deployment to respond to spill scenario.</p> <p>RSPA and MMS would cover unannounced exercises for pipelines and offshore facilities <u>not a part of a complex</u> in their exercise programs.</p>
Objectives:	<p>Conduct proper notifications to respond to unannounced scenario of an average most probable discharge.</p> <p>Demonstrate that the response is --</p> <ul style="list-style-type: none"> > Timely; > Conducted with adequate amount of equipment for scenario; and > Properly conducted.
Certification:	EPA.

Verification: EPA.

Records:

Retention: 5 years, kept at the facility.

Evaluation: Evaluation to be conducted by initiating agency.

Credit: Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated. Plan holders participating in this exercise should also take credit for notification and equipment deployment exercises.

SECTION 5:

**ONSHORE
TRANSPORTATION-RELATED
PIPELINES**

OWNER OR OPERATOR INTERNAL NOTIFICATION EXERCISES**Onshore Transportation-Related Pipelines**

Applicability:	Pipeline owner or operator.
Frequency:	As indicated by the response plan and, at a minimum, consistent with the triennial cycle (quarterly).
Party Initiating Exercise:	As indicated in response plan.
Participants:	Facility response personnel and the facility's qualified individual.
Scope:	Exercise notification process between key facility personnel and the qualified individual to demonstrate the accessibility of the qualified individual.
Objectives:	Contact by telephone, radio, message-pager, or facsimile and confirmation established as indicated in response plan.
Format:	As indicated in response plan.
Certification:	Self-certification as indicated in response plan. Each plan should have a written description of the company's certification process.
Verification:	Verification conducted by Research and Special Programs Administration (RSPA) during regular inspections* or RSPA tabletop exercises.
* Verification will not be done by inspections in the near term.	
Records:	
Retention:	3 years.
Location:	Owner or operator shall retain records as indicated in response plan. RSPA to retain verification records.
Credit:	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

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INTERNAL TABLETOP EXERCISE**Onshore Transportation-Related Pipelines**

Applicability:	Pipeline owner or operator.
Frequency:	As indicated by the response plan and, at a minimum, consistent with the triennial cycle (annually).
Party Initiating Exercise:	As indicated in response plan.
Participants:	Designated spill emergency response team members.
Scope:	Demonstration of the response team's ability to organize, communicate, and make strategic decisions regarding population and environmental protection during a spill event.
Objectives:	Designated emergency response team members should demonstrate --- (1) Knowledge of facility response plan; (2) Ability to organize team members to effectively interface with a unified command; (3) Communication capability; and (4) Coordination for response capability as outlined in response plan.
Format:	Internal tabletop exercise as outlined in response plan.
Certification:	Self-certification as indicated in response plan or as defined in the "Guiding Principles" section of this document, whichever is more stringent. Each plan should have a written description of the company's certification process.
Verification:	Verification conducted by RSPA during regular inspections* or RSPA tabletop exercises.
* Verification will not be done by inspections in the near term.	
Records:	
Retention:	3 years.
Location:	Owner or operator shall retain records as indicated in response plan. RSPA to retain verification records.

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Credit:

Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

OWNER/OPERATOR EQUIPMENT DEPLOYMENT EXERCISES**Onshore Transportation-Related Pipelines**

Applicability: Pipeline owner or operator.

Frequency: As indicated by the response plan and, at a minimum, consistent with the triennial cycle (annually).*

* The number of equipment deployment exercises conducted should be such that equipment and personnel assigned to each response zone are exercised at least once per year. If the same personnel and equipment respond to multiple zones, they need only exercise once per year. If different personnel and equipment respond to various response zones, each must participate in an annual equipment deployment exercise.

Party Initiating Exercise: As indicated in response plan.

Participants: Designated spill emergency response team members.

Scope: Demonstrate ability to deploy spill response equipment* identified in the FRP.

* May consist entirely of operator owned equipment, or a combination of OSRO and operator equipment.

Objectives: Designated emergency response personnel should demonstrate ---

- (1) Ability to organize; and
- (2) Ability to deploy and operate representative types of key response equipment as described in response plan.

Format: Announced deployment exercise indicated in response plan.

Certification: Self-certification as indicated in response plan. Each plan should have a written description of the company's certification process.

Verification: Verification conducted by RSPA during regular inspections* or RSPA tabletop exercises.

* Verification will not be done by inspections in the near term.

Records:

Retention: 3 years.

Location: Owner or Operator shall retain records as indicated in response plan.

RSPA to retain verification records.

Credit: Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

UNANNOUNCED EXERCISES

Onshore Transportation-Related Pipelines

Applicability: Pipeline owner/operator.

Frequency: Maximum of 20 unannounced RSPA exercises conducted annually for the pipeline industry as a whole. A single owner or operator will not be required to participate in a RSPA-initiated unannounced exercise, if they have already participated in one within the previous 36 months.

Party Initiating Exercise: RSPA.

Participants: Designated spill emergency response team members.
Operations staff.
On-Scene Coordinator (optional).
State and local government (optional).

Scope: Demonstrate ability to respond to a worst case discharge spill event.

Objectives: Designated emergency response team members should demonstrate adequate knowledge of their facility response plan and the ability to organize, communicate, coordinate, and respond in accordance with that plan.

Format: Unannounced tabletop exercise to discuss strategic issues.

Operations will provide the owner or operator the following information at least 10 working days in advance (1) date, time, and location of exercise; (2) expected exercise duration; and (3) response zone to be exercised.

On the day of the exercise, the pipeline owner or operator will be provided the scenario and post-spill events. This information will be used to explore and discuss strategic issues that will help operators evaluate their response plans.

Certification: Certification can be effectuated by RSPA personnel conducting the exercise. RSPA will provide written certification of the exercise date, participants, and response zone exercised.

Verification: Verification can be made by RSPA personnel conducting the exercise.

Records:

**Retention
Time:**

3 years.

Location:

Owner or Operator shall retain records as indicated in response plan.

RSPA to retain verification records.

Credit:

Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

APPENDIX A: INTERNAL EXERCISE DOCUMENTATION FORMS

The following sample documentation forms are provided to give plan holders an idea of how to document the internal PREP exercises. These sample forms are provided only as guidance. Plan holders do not have to include all of the information presented on these forms nor do they have to use these exact forms. Plan holders may choose to develop their own forms. Documentation should include, as a minimum, the following information:

- ◆ The type of exercise;
- ◆ Date and time of the exercise;
- ◆ A description of the exercise;
- ◆ The objectives met in the exercise;
- ◆ The components of the response plan exercised; and
- ◆ Lessons learned.

INTERNAL EXERCISE DOCUMENTATION FORM

Notification Exercise

1. Date performed: _____
2. Exercise or actual response? _____
3. Vessel/Facility/Pipeline/ Offshore Facility Initiating exercise: _____
4. Name of person notified: _____
Is this person identified in your response plan as qualified individual or designee? _____
5. Time Initiated: _____
Time in which qualified individual or designee responded: _____
6. Method used to contact: _____
 Telephone
 Pager
 Radio
 Other _____
7. Description of notification procedure:

8. Identify which of the 15 core components of your response plan were exercised during this particular exercise:

Certifying Signature

Retain this form for a minimum of 3 years (for USCG/RSPAMMS) or 5 years (for EPA).

For vessel qualified individual notification, ensure log entry is also made and retained for a minimum of 3 years.

INTERNAL EXERCISE DOCUMENTATION FORM

Emergency Procedures Exercise

1. Date performed: _____
2. Exercise or actual response? _____
If an exercise, announced or unannounced? _____
3. Location: _____
4. Vessel/Barge/Facility name: _____
5. Time started: _____
Time completed: _____
6. Sections of Vessel/Barge/Facility emergency procedures exercised (i.e., response to collision, response to oil spill on deck, response to vessel fire, etc.)?

7. Description of exercise:

8. Identify which of the 15 core components of your response plan were exercised during this particular exercise:

Emergency Procedures Exercise (continued)

9. Attach a description of the lesson(s) learned and person(s) responsible for follow up of corrective measures.

Certifying Signature

Retain this form for a minimum of 3 years (for USCG/RSPA/MMS) and 5 years (for EPA).

For manned vessels, ensure log entry is made and retained for 3 years.

INTERNAL EXERCISE DOCUMENTATION FORM

Spill Management Team Tabletop Exercise

1. Date(s) performed: _____

2. Exercise or actual response? _____
If an exercise, announced or unannounced? _____

3. Location of tabletop: _____

4. Time started: _____
Time completed: _____

5. Response plan scenario used (check one):
____ Average most probable discharge
____ Maximum most probable discharge
____ Worst case discharge
Size of (simulated) spill _____ bbls/gals

6. Describe how the following objectives were exercised:

a) Spill management team's knowledge of oil-spill response plan:

b) Proper notifications:

c) Communications system:

Spill Management Team Tabletop Exercise (continued)

d) Spill management team's ability to access contracted oil spill removal organizations:

e) Spill management team's ability to coordinate spill response with On-Scene Coordinator, state and applicable agencies:

f) Spill management team's ability to access sensitive site and resource information in the Area Contingency Plan:

7. Identify which of the 15 core components of your response plan were exercised during this particular exercise:

Spill Management Team Tabletop Exercise (continued)

8. Attach description of lesson(s) learned and person(s) responsible for follow up of corrective measures.

Certifying Signature

Retain this form for a minimum of 3 years (for USCG/RSPA/MMS) or 5 years (for EPA).

INTERNAL EXERCISE DOCUMENTATION FORM

Equipment Deployment Exercise

- 1. Date(s) performed: _____
- 2. Exercise or actual response? _____
If an exercise, announced or unannounced? _____
- 3. Deployment location(s):

- 4. Time started: _____
Time completed: _____
- 5. Equipment deployed was:
 Facility-owned
 Oil spill removal organization-owned if so, which OSRO? _____
 Both
- 6. List type and amount of all equipment (e.g., boom and skimmers) deployed and number of support personnel employed:

- 7. Describe goals of the equipment deployment and list any Area Contingency Plan strategies tested. (Attach a sketch of equipment deployments and booming strategies):

Equipment Deployment Exercise (continued)

- 8. For deployment of facility-owned equipment, was the amount of equipment deployed at least the amount necessary to respond to your facility's average most probable spill? _____

Was the equipment deployed in its intended operating environment?

- 9. For deployment of OSRO-owned equipment, was a representative sample (at least 1000 feet of each boom type and at least one of each skimmer type) deployed? _____

Was the equipment deployed in its intended operating environment?

- 10. Are all facility personnel that are responsible for response operations involved in a comprehensive training program, and all pollution response equipment involved in a comprehensive maintenance program? _____
If so, describe the program: _____

- Date of last equipment inspection: _____
- 11. Was the equipment deployed by personnel responsible for its deployment in the event of an actual spill? _____
- 12. Was all deployed equipment operational? If not, why not?

Equipment Deployment Exercise (continued)

13. Identify which of the 15 core components of your response plan were exercised during this particular exercise:

14. Attach a description of lesson(s) learned and person(s) responsible for follow up of corrective measures.

 Certifying Signature

Retain this form and other documentation related to this exercise on file for a minimum of 3 years (for USCG/RSPA/MMS) or for a minimum of 5 years (for EPA).

APPENDIX B: RESPONSE PLAN CORE COMPONENTS

During each triennial cycle, all components of a plan holder's response plan must be exercised at least once. The purpose of this requirement is to ensure that all plan components function adequately for response to an oil spill.

The 15 core components listed below are the types of components that must be exercised. However, these components may not be contained in each response plan. As such, the plan holder shall identify those that are applicable from this list, adding or deleting as appropriate.

1. **Notifications:** Test the notifications procedures identified in the Area Contingency Plan and the associated Responsible Party Response Plan.
2. **Staff Mobilization:** Demonstrate the ability to assemble the spill response organization identified in the Area Contingency Plan and associated Responsible Party Response Plan.
3. **Ability to Operate Within the Response Management System Described in the Plan:**
 - a. **Unified Command:** Demonstrate the ability of the spill response organization to work within a unified command.
 - (1) **Federal Representation:** Demonstrate the ability to consolidate the concerns and interests of the other members of the unified command into a unified strategic plan with tactical operations.
 - (2) **State Representation:** Demonstrate the ability to function within the unified command structure.
 - (3) **Local Representation:** Demonstrate the ability to function within the unified command structure.
 - (4) **Responsible Party Representation:** Demonstrate the ability to function within the unified command structure.
 - b. **Response Management System:** Demonstrate the ability of the response organization to operate within the framework of the response management system identified in their respective plans.
 - (1) **Operations:** Demonstrate the ability to coordinate or direct operations related to the implementation of action plans contained in the respective response and contingency plans developed by the unified command.
 - (2) **Planning:** Demonstrate the ability to consolidate the various concerns of the members of the unified command into joint planning recommendations and specific long-range strategic plans. Demonstrate the ability to develop short-range tactical plans for the operations division.

- (3) **Logistics:** Demonstrate the ability to provide the necessary support of both the short-term and long-term action plans.
- (4) **Finance:** Demonstrate the ability to document the daily expenditures of the organization and provide cost estimates for continuing operations.
- (5) **Public Affairs:** Demonstrate the ability to form a joint information center and provide the necessary interface between the unified command and the media.
- (6) **Safety Affairs:** Demonstrate the ability to monitor all field operations and ensure compliance with safety standards.
- (7) **Legal Affairs:** Demonstrate the ability to provide the unified command with suitable legal advice and assistance.
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 an 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.
- 7.1 **On-Water Recovery:** Demonstrate the ability to assemble and deploy the on-water recovery resources identified in the response plans.
- 7.2 **Shore-Based Recovery:** Demonstrate the ability to assemble and deploy the shoreside cleanup resources identified in the response plans.
8. **Protection:** Demonstrate the ability of the spill response organization to protect the environmentally and economically sensitive areas identified in the Area Contingency Plan and the respective industry response plan.
- 8.1 **Protective Booming:** Demonstrate the ability to assemble and deploy sufficient resources to implement the protection strategies contained in the Area Contingency Plan and the respective industry response plan.
- 8.2 **Dispersant Use:** Demonstrate the ability to quickly evaluate the applicability of dispersant use for this incident and implement the protection strategies contained in the Area Contingency Plan and the respective industry response plan.

8.3 **In-Situ Burning:** Demonstrate the ability to quickly evaluate the applicability of In-situ burning for this incident and implement a pre-approved plan from the Area Contingency Plan or develop a plan for use.

8.4 **Water Intake Protection:** Demonstrate the ability to quickly identify water intakes and implement the proper protection procedures from the Area Contingency Plan or develop a plan for use.

8.5 **Wildlife Recovery and Rehabilitation:** Demonstrate the ability to quickly identify these resources at risk and implement the proper protection procedures from the Area Contingency Plan to develop a plan for use.

8.6 **Population Protection:** Demonstrate the ability to quickly identify health hazards associated with the discharged product and the population at risk from these hazards, and to implement the proper protection procedures from the Area Contingency Plan or develop a plan for use.

8.7 **Bioremediation:** Demonstrate the ability to quickly evaluate the applicability of bioremediation use for this incident, and implement a plan from the Area Contingency Plan or develop a plan for use.

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.

10.1 **Internal Communications:** Demonstrate the ability to establish an intra-organization communications system. This encompasses communications both within the administrative elements and the field units.

10.2 **External Communications:** Demonstrate the ability to establish communications both within the administrative elements and the field units.

11. **Transportation:** Demonstrate the ability to provide effective multi-mode transportation both for execution of the discharge and support functions.

11.1 **Land Transportation:** Demonstrate the ability to provide effective land transportation for all elements of the response.

11.2 **Waterborne Transportation:** Demonstrate the ability to provide effective waterborne transportation for all elements of the response.

11.3 **Airborne Transportation:** Demonstrate the ability to provide the necessary support of all personnel associated with the response.

- 12. Personnel Support:** Demonstrate the ability to provide the necessary support of all personnel associated with the response.
- 12.1 Management:** Demonstrate the ability to provide administrative management of all personnel involved in the response. This requirement includes the ability to move personnel into or out of the response organization with established procedures.
 - 12.2 Berthing:** Demonstrate the ability to provide overnight accommodations on a continuing basis for a sustained response.
 - 12.3 Messing:** Demonstrate the ability to provide suitable feeding arrangements for personnel involved with the management of the response.
 - 12.4 Operational and Administrative Spaces:** Demonstrate the ability to provide suitable operational and administrative spaces for personnel involved with the management of the response.
 - 12.5 Emergency Procedures:** Demonstrate the ability to provide emergency services for personnel involved in the response.
- 13. Equipment Maintenance and Support:** Demonstrate the ability to maintain and support all equipment associated with the response.
- 13.1 Response Equipment:** Demonstrate the ability to provide effective maintenance and support for all response equipment.
 - 13.2 Support Equipment:** Demonstrate the ability to provide effective maintenance and support for all equipment that supports the response. This requirement includes communications equipment, transportation equipment, administrative equipment, etc.
- 14. Procurement:** Demonstrate the ability to establish an effective procurement system.
- 14.1 Personnel:** Demonstrate the ability to procure sufficient personnel to mount and sustain an organized response. This requirement includes insuring that all personnel have qualifications and training required for their position within the response organization.
 - 14.2 Response Equipment:** Demonstrate the ability to procure sufficient response equipment to mount and sustain an organized response.
 - 14.3 Support Equipment:** Demonstrate the ability to procure sufficient support equipment to support and sustain an organized response.
- 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. ■

Annex 6

Response Critique and Plan Review and Modification Process

ANNEX 6 RESPONSE CRITIQUE AND PLAN REVIEW AND MODIFICATION PROCESS

This annex describes procedures for modifying the plan based on periodic review or lessons learned through an exercise or a response to an actual incident. Plan modification should be viewed as a part of a facility's continuous improvement process. The ICP will be reviewed and updated and submitted to Pipeline and Hazardous Materials Safety Administration (PMHSA) and EPA at least every 5 years. However, the plan must be reviewed and recertified by a professional engineer every 3 years to comply with 40 CFR 112. In addition, the ICP will be updated and submitted to PMHSA and the EPA for approval if one of the following conditions occurs:

- New pipeline construction or purchase
- Change in worst case discharge volume
- Change in commodities transported
- Change in OSRO
- Change in the QI
- Changes in NCP/ACP that significantly impact the appropriateness of response equipment or response strategies
- Change in response procedures
- Change in ownership
- Post-drill evaluation results are available
- Post-incident evaluation results are available
- Any other event that materially affects the implementation of the ICP.

If new or different operating conditions and/or information will substantially affect the implementation of the ICP, the ICP will be immediately updated and the modifications submitted to the EPA and PMHSA for approval within 30 days of the changed condition.

A detailed response critique and plan review shall be conducted upon completion of a spill response effort in which the ICP is used. Evaluations/critiques need to be conducted by qualified personnel. Evaluations also were provided by DOT and EPA after the 2000 tabletop drill and spill response drill. The evaluations/critiques shall then be used to revise the ICP as necessary to address issues identified during the facility drills. Sample critique forms are included in this annex.

Oil-Handling Facility Drill Evaluation Checklist

Evaluator Worksheet

Date: _____

Facility: _____

Type of Drill: _____

Drill Scenario: _____

Plan Components to be Exercised: _____

Facility Representative: _____

Ecology Evaluator(s): _____

Other Participants: _____

1. Notifications

Notification procedures identified in the facility contingency plan were followed (including prioritization, sequence of events, and spill magnitude classification).

Internal spill response team was notified.

Entire spill response organization including Primary Response Contractor/Oil Spill Response Organization and government agencies were notified.

Notifications were made in a timely manner (e.g., state Division of Emergency Management notified within one hour).

2. Staff Mobilization

Adequately assembled the spill response organization described in the facility contingency plan.

Local/internal response team was mobilized and on-site.

Adequate personnel were mobilized to meet the one-hour benchmark.

Oil Spill Response Organization/Primary Response Contractor was mobilized and on site. (Note arrival times.)

Regional/National ("away") response team was mobilized in state.

3. Response Management System

Adequately demonstrated the ability to operate within the spill management system described in the facility contingency plan.

Operations checklist(s)—including the field document—identified in the plan were used by spill management team.

Initial emergency operation procedures were enacted prior to arrival of local emergency response authorities (e.g., fire and security related procedures).

Task assignments as described in the facility contingency plan were followed.

The Local Spill Management Team as identified in the facility contingency plan was exercised.

Demonstrated smooth transition of successive levels of spill management as described by facility contingency plan procedures.

The Regional/National ("away") Spill Management Team as identified in the facility contingency plan was exercised.

Unified Command: Adequately demonstrated the ability of the spill response organization to work within Unified Command Structure (UCS).

___ Unified Command was established.

___ Facility On-Scene Coordinator addressed concerns and interests of other members of the unified command.

___ Facility On-Scene Coordinator prepared and/or assisted in developing a unified action plan.

Operations Section: Adequately demonstrated the ability of the Operations Section to carry out approved action plans.

___ Operations Section was established.

___ Implemented action plans in a timely manner (e.g., an approved incident action plan, facility contingency plan, and Geographic Response Plan).

___ Coordinated with local, state, and federal operations representatives (if applicable).

Planning Section: Adequately demonstrated the ability of the Planning Section to develop short-term and long-term action plans.

___ Planning Section was established.

___ Used the facility contingency plan, Geographic Response Plan, and/or other resource protection information.

___ Planning cycle was defined and initiated (e.g., initial/daily/long-term).

___ Developed and submitted an effective written initial incident action plan in a timely manner to the Unified Command.

___ Developed an effective short-term action (within first 48-hours) plan.

___ Consolidated the various issues of the unified command into joint planning recommendations and developed a specific long-range (beyond 48 hours) action plan.

___ Coordinated with NRDA and other local, state, and federal representatives.

___ Displayed and documented spill status/situation in a manner that was accessible and understandable to all spill management response team members (e.g., status boards which indicated slick location, slick trajectory, estimated impact times of sensitive areas, estimated times for complete deployment of strategies to protect sensitive areas, cleanup resources deployed and en-route, equipment and personnel tracking, etc.).

Logistics Section: Adequately demonstrated the ability of the Logistics Section to provide necessary support for implementing the short-term and long-term action plans.

___ Logistics Section was established.

___ Established command post, central communications post, equipment/personnel staging areas, heliports per contingency plan specifications.

___ Provided the necessary support of short-term (first 48-hours) action plans.

___ Provided the necessary support of long-term (beyond 48-hours) action plans.

Public Affairs: Adequately demonstrated the ability to address public affairs issues.

___ Public Information Officer (PIO) was designated.

___ Provided effective news media and community relations.

___ Joint Information Center (JIC) was established and provided timely and accurate information regarding the spill cleanup effort.

Safety Affairs: Adequately demonstrated the ability to monitor all field operations and ensure compliance with safety standards.

___ Safety Officer designated.

___ A site safety plan was developed and followed.

4. Discharge Control

___ Adequately demonstrated the ability to control and stop the discharge at the source.

___ Emergency shut-down procedures identified in the facility response plan were conducted (may be a walk-through).

5. Assessment

___ Adequately demonstrated the ability to provide an initial assessment of the discharge and provide continuing assessments of the effectiveness of the response effort.

___ Performed initial assessment of spill status (e.g., spill volume, product type, status of discharge/slick including consideration of environmental conditions).

___ Performed continual assessments of the spill status and effectiveness of the response effort (e.g., trajectory analysis, calculations of spill volume, and reports on specific dimensions of slick(s) and the effectiveness of cleanup operations).

6. Containment

Adequately demonstrated the ability to contain the discharge at the source or in various locations for recovery operations.

- Began initial deployment of response equipment and had personnel on-site within one hour.
- Deployed containment boom equal to four times the length of the longest vessel/combination that transfers at the facility.
- Completed deployment of containment boom equal to four times the length of the longest vessel/combination within two hours (this is optional).
- Demonstrated the ability to contain spilled product at locations other than the point of discharge.

7. Recovery

Adequately demonstrated the ability to recover discharged product.

- Assembled and deployed the on-water recovery resources identified in the contingency plan.
- Addressed state of Washington recovery benchmarks.
- Boom and recovery equipment deployed in varied operating environments (e.g., shallow water recovery vs. deep water, varied conditions for Geographic Response Plan's).
Credit may be obtained during an OSRO deployment exercise(s).
- Assembled and deployed the shoreside cleanup resources identified in the contingency plan.

8. Protection

Protective Booming : Adequately demonstrated the ability to assemble and deploy sufficient resources to implement the protection strategies contained in the Geographic Response Plan and the facility contingency plan.

- Demonstrated familiarity with all Geographic Response Plan protective booming strategies identified within the scope of the facility contingency plan.
- Deployed equipment and resources in a timely manner that met the needs of the response effort.
- Addressed Ecology's booming benchmarks.
- Facility systematically conducting deployment of Geographic Response Plan strategies located within the scope of the contingency plan (this is optional).

In-Situ Burning: Demonstrated the ability to quickly evaluate the applicability of in-situ burning and utilize Northwest Area Contingency Plan policy and procedures for attaining approval of in-situ burning.

Water Intake Protection: Demonstrated the ability to quickly identify water intakes and implement the proper protection procedures from the facility contingency plan or develop a plan for use.

Wildlife Recovery and Rehabilitation: Demonstrated the ability to quickly coordinate with appropriate state representatives to implement the Northwest Area Contingency Plan's Wildlife Rescue Plan.

Population Protection: Demonstrated the ability to quickly identify health hazards associated with the discharged product and the population at risk.

9. Disposal

Adequately demonstrated the ability to dispose of the recovered material and contaminated debris.

Used the facility contingency plan's disposal plan.

Interim storage capabilities were sufficient.

Evaluated the applicability of decanting and utilize Northwest Area Contingency Plan policy and procedures for attaining approval.

Documented the source(s) and amount(s) of recovered product/waste prior to commingling, treatment, recycling, or disposal.

Complied with applicable local, state, and federal waste regulations.

10. Communications

Adequately demonstrated the ability to establish an effective communications system for the overall response effort.

Used the facility contingency plan's communications plan.

Land-line communications established and utilized in accordance with the contingency plan.

Cellular communications established and utilized in accordance with the contingency plan.

Radio communications established and utilized in accordance with the contingency plan.

All elements of the communications system were effective.

11. Transportation

Adequately demonstrated the ability to provide effective transportation for the overall response effort.

Provided effective land transportation for all elements of the response.

Provided effective waterborne transportation for all elements of the response.

Provided effective air transportation for all elements of the response.

12. Personnel Support

Adequately demonstrated the ability to provide the necessary support of personnel associated with the overall response effort (e.g., food, housing, emergency services).

13. Equipment Maintenance and Support

Adequately demonstrated the ability to maintain and support all equipment associated with the response.

14. Procurement

Adequately demonstrated the ability to establish an effective procurement system for the overall response effort.

Procured sufficient personnel to mount and sustain an effective response. (This requirement includes insuring that all personnel have qualifications and training required for their position within the response organization.)

Procured sufficient response equipment to mount and sustain an effective response.

Procured sufficient support equipment (such as communications, transportation, and administrative equipment) to support and sustain an effective response.

15. Documentation

Adequately demonstrated the ability to document all operational and support aspects of the response and provide detailed records of decisions and actions taken.

Documented the spill response effort (i.e., utilizing an historian, use of plan documentation forms, etc.).

Documented decisions made by the Unified Command.

Annex 7

Prevention

ANNEX 7 PREVENTION

This annex provides mechanisms by which oil spill prevention is exercised at the facility.

- a. **Inspection and Maintenance**
- b. **Security**
- c. **Containment.**

a. **Inspection and Maintenance**

Detection of leaks by personnel involves inspections of the tank and its appurtenances (i.e., piping and valves). This is a pipeline breakout tank owned by BNSF but essentially operated by the pipeline company. The pipeline company monitors and inspects the pipeline on either side of the breakout tank. In addition, pipeline personnel continuously monitor the status of the tank. Potential problems would be indicated by the back pressure on the pipeline, the delivery meter, the tank gauge, the high level alarm, the manifold alarm, or the rupture disk alarm, and fuel delivery would be stopped.

BNSF structures personnel or the spill response contractor (Olympus Technical Services) inspect the facility at least once a month. In addition, a detailed inspection by the structures department or the ERC is completed monthly. Pipeline personnel constantly monitor tank level gauges using telemetry.

The facility is well lit and operated 24 hours a day. Local residents and emergency personnel are familiar with the facility and notification procedures.

Detection of leaks by personnel involves integrity testing and inspections to both tanks and their appurtenances (i.e., piping within the containment area only). The frequency of external and internal inspections and maintenance is outlined as follows:

Paint	Annually
NFPA Markings	Annually
Ladder	Annually
Railings	Annually
Gauge	Monthly
Transmitter	Monthly
Grounding	Annually
RTD Temperature Gauge	Semi annually
Vents	Monthly
Manhole Cover	Annually
Other Covers	Annually
Water Draw Off System	Monthly
Bottom Cathodic Protection Sacrificial Anode Type	Every 3 Years
Bottom Interstitial Space Leak Detection	Monthly
Internal Tank Inspection	Every 10 years
Piping/Valves	Monthly

The BNSF recommended maintenance frequency for containment areas is as follows:

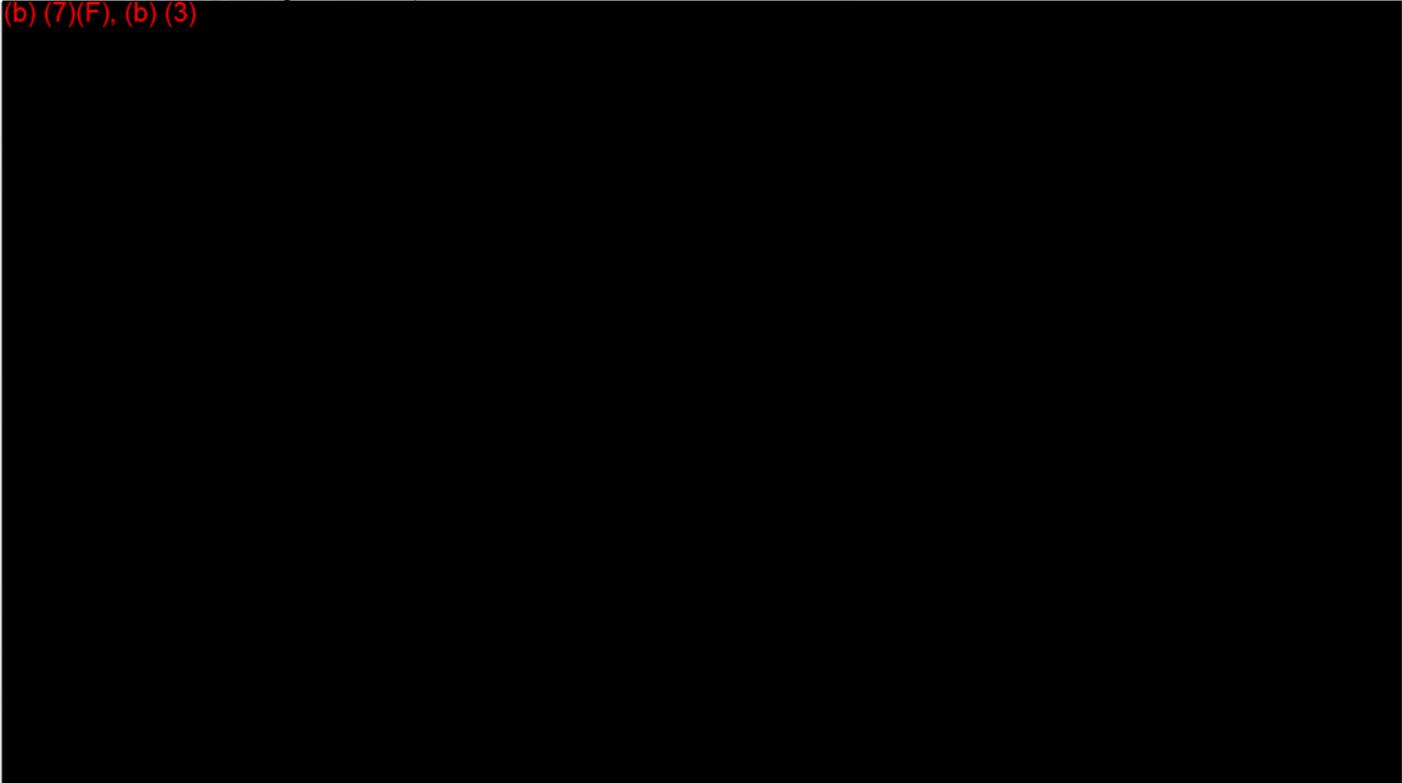
Earth Dikes and Liners	Monthly
Joints	Monthly
Stairways	Annually
Fencing	Monthly
Sump	Annually
Sump Grating	Monthly
Sump Discharge Piping	Annually

(b) (7)(F), (b) (3) was structurally inspected in September 2002 according to American Petroleum Institute guidances 650 and 653.

The facility inspection Form 7-1 has been included to assist facility personnel in conducting and documenting site inspections.

b. Site Security

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



c. Containment

There is only one tank at the facility. The tank capacity and containment volume are presented below.

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



FORM 7-1

**BNSF RAILWAY COMPANY
ALKALI CREEK
FACILITY INSPECTION FORM**

Inspected By: _____

Date: _____ Time: _____

Area of Concern	Tank		Comments
	1,470,000-gallon diesel fuel		
	OK	Deficient	
Tank Integrity			
Piping/Valving Integrity			
Signs of Leaks			
Signs of Spills			
Containment Integrity			
Containment Area			
Fuel Nozzles Functional			

Notes:

Check appropriate box.
Report any deficiencies to responsible personnel and note in comment section.

The secondary containment/diversionary structures for the tank to prevent oil discharge from reaching a navigable water course are described below. Photographs of the tank and containment are included in Annex 1.

The containment for the tank consists of a fenced, 6-foot-high HDPE lined berm (i.e., dike). A spill in this area would generally be contained within the facility property and would require implementation of additional cleanup measures.

The tank is not equipped with a drainage system, and there are no storm drains on the site. Spilled product contained within the dike must be manually removed from the area. Any precipitation that accumulates in the containment area will be inspected and purged out as irrigation water.

Annex 8

Regulatory Compliance and Cross-Reference Matrices

ANNEX 8 REGULATORY COMPLIANCE AND CROSS-REFERENCE MATRICES

This annex includes cross-reference matrices to demonstrate which sections of the ICP meet which regulatory requirements.

Attachment 2: ICP Development Matrix

ICP Elements	RCRA (40 CFR part 264, Subpart D, 40 CFR part 265, Subpart D, and 40 CFR 279.52)	EPA's Oil Pollution Prevention Regulation (40 CFR part 112)	USCG-FRP (33 CFR part 154)	DOT/RSPA-FRP (49 CFR part 194)	OSHA Emergency Action Plans (29 CFR 1910.38(a)) and Process Safety (29 CFR 1910.119)	OSHA HAZWOPER (29 CFR 1910.120)	CAA RMP (40 CFR part 68)
Section I - Plan Introduction Elements							
1. Purpose and scope of plan coverage	264.51 265.51 279.52(b)(1) 264.52(a) 265.52(a) 279.52(b)(2)(i)				38(a)(1) ¹ 119(n) 272(d)	(l) ² (p)(8) (q)(1)	
2. Table of contents		112.20(h) Appendix F	1035(a)(4) ³ 1030(b)	Appendix A			
3. Current revision date		F1.2	1035(a)(6)				
4. General facility identification information		F1.2 F1.9		194.107(d)(1)(i) 194.113 194.113(b)(1)			
a. Facility name		F1.2	1035(a)(1)				
b. Owner/operator/ agent		112.20(h)(2) F1.2 F2.0	1035(a)(3)	194.113(a)(1) A-1			
c. Physical address and directions		112.20(h)(2) F1.2 F2.0	1035(a)(1) 1035(a)(2) 1035(e)	194.113(a)(2) 194.113(b)(3),(4) A-1			
d. Mailing address		112.20(h)(2)	1035(a)(1)	194.113(a)(1)			
e. Other identifying information							

¹ All citations refer to part 1910 unless otherwise noted.² All citations refer to 29 CFR 1910.120 unless otherwise noted.³ All citations refer to part 154 unless otherwise noted.

ICP Elements	RCRA (40 CFR part 264, Subpart D, 40 CFR part 265, Subpart D, and 40 CFR 279.52)	EPA's Oil Pollution Prevention Regulation (40 CFR part 112)	USCG-FRP (33 CFR part 154)	DOT/RSPA-FRP (49 CFR part 194)	OSHA Emergency Action Plans (29 CFR 1910.38(a)) and Process Safety (29 CFR 1910.119)	OSHA HAZWOPER (29 CFR 1910.120)	CAA RMP (40 CFR part 68)
f. Key contact(s) for plan development and maintenance					38(a)(2)(vi)	(l)(2)(i),(ii) (p)(8)(ii)(A),(B) (q)(2)(i),(ii)	
g. Phone number for key contact(s)							
h. Facility phone number		F1.2 F2.1	1035(a)(1)				
i. Facility fax number			1035(a)(1)				
Section II - Core Plan Elements							
1. Discovery		112.20(h)(6) F1.6.1, F1.6.2	1035(b)(3)(i)	194.107(d)(1)(iii) A-3	119(n)	(l)(2)(iii) (p)(8)(ii)(C) (q)(2)(iii)	68.95(a)(1)(iii)
2. Initial response		112.20(h)(7)(i) F1.3.6 F1.7	1035(b)(2)(ii) 1035(b)(3)(i) 1035(b)(3)(ii)	A-2	38(a)(2)(i) 38(a)(2)(ii) 119(n)	(l)(2)(ix) (p)(8)(ii)(I) (q)(2)(ix)	68.95(a)(1)(iii)
a. Procedures for internal and external notifications	264.52(d) 265.52(d) 279.52(b)(2)(iv) 264.55 265.55 279.52(b)(5) 264.56(a)(1),(2) 265.56(a)(1),(2) 279.52(b)(6)(i)(A),(B) 264.56(d)(1),(2) 265.56(d)(1),(2) 279.52(b)(6)(iv)(A),(B)	112.20(h)(1)(iii) 112.20(h)(3)(iii) 112.20(h)(3)(iii) 112.20(h)(3)(iv) F1.2 F1.3.1	1026 1035(a)(3) 1035(b)(1)(i) 1035(e)(2)	194.107(d)(1)(ii) 194.113(b)(2) A-1, A-1(b)(2) A-2 A-5	38(a)(2)(v) 38(a)(2)(vi) 38(a)(3)(i) 38(a)(3)(ii) 165	(l)(2)(ix) (p)(8)(ii)(I) (q)(2)(ix)	68.95(a)(1)(i)
b. Establishment of a response management structure	264.37 265.37 279.52(a)(6) 264.52(c) 265.52(c) 279.52(b)(2)(iii)	112.20(h)(1)(v) 112.20(h)(3)(v) F1.3.4	1035(b)(3)(iii)	194.107(d)(1)(v) A-4 A-9		(l)(2)(i),(ii) (p)(8)(ii)(A),(B) (q)(2)(i),(ii) (q)(3)(i)	
c. Preliminary assessment	264.56(b),(c) 265.56(b),(c) 279.52(b)(6)(ii),(iii)	112.20(h)(3)(ix) 112.20(h)(4) F1.4, F1.4.2	1035(b)(3) 1035(b)(4)(i)	194.107(d)(1)(ii)	38(a)(2)(i) 38(a)(2)(ii)	(l)(2)(i) (l)(3)(vii) (p)(8)(ii)(A) (q)(2)(i) (q)(3)(i),(iii)	

ICP Elements	RCRA (40 CFR part 264, Subpart D, 40 CFR part 265, Subpart D, and 40 CFR 279.52)	EPA's Oil Pollution Prevention Regulation (40 CFR part 112)	USCG-FRP (33 CFR part 154)	DOT/RSPA-FRP (49 CFR part 194)	OSHA Emergency Action Plans (29 CFR 1910.38(a)) and Process Safety (29 CFR 1910.119)	OSHA HAZWOPER (29 CFR 1910.120)	CAA RMP (40 CFR part 68)
d. Establishment of objectives and priorities for response, including: (1) Immediate goals/ tactical planning (2) Mitigating actions (3) Response resources	264.52(e) 265.52(e) 279.52(b)(2)(v)	112.20(h)(1)(iv) 112.20(h)(1)(vii) 112.20(h)(3)(vi) 112.20(h)(3)(ix) 112.20(h)(7) F1.3.2 F1.7.1, F1.7.3	1035(b)(2) 1035(b)(3)(iv),(v)	194.107(d)(1)(iii) 194.107(d)(1)(v)	38(a)(4) 119(n)	(l)(2)(vi),(viii) (p)(8)(ii)(F),(H) (q)(2)(vi),(viii) (p)(8)(iv)(F) (q)(3)(ii),(iii),(iv), (vi),(vii)	
e. Implementation of tactical plan	264.52(e) 265.52(e) 279.52(b)(2)(v)	112.20(h)(3)(ix) 112.20(h)(7)	1035(b)(2)(iii) 1035(b)(3) 1035(b)(4)(iii)	194.107(d)(1)(v) A-3	38(a)(2)(ii)	(l)(3)(vii) (p)(8)(iv)(F) (q)(3)(iii)	
f. Mobilization of resources	264.52(e) 265.52(e) 279.52(b)(2)(v)	112.20(h)(7) F1.7.1	1035(b)(2)(ii) 1035(b)(3) 1035(b)(4)(iii)	194.115 194.107(d)(1)(v) A-1 A-3		(l)(2)(ix) (p)(8)(ii)(l) (q)(2)(ix)	
3. Sustained actions		112.20(h)(7)	1035(b)(3)	194.107(d)(1)(v) A-9	38(a)(2)(iii)	(l)(2)(x) (p)(8)(ii)(J) (q)(2)(x)	68.95(a)(1)(iii)
4. Termination and follow-up actions	264.56(i) 265.56(i)	112.20(h)(7)	1035(b)(3)			(l)(2)(ix) (p)(8)(ii)(l) (q)(2)(ix)	68.95(a)(1)(iii)
Section III - Annexes							
1. Facility and locality information		112.20(h)(2) F1.2 F2.0	1035(a) 1035(e)(1)	194.107(d)(1)(i) 194.113 194.113(b)(1)			
a. Facility maps		112.20(h)(1)(viii) F1.9		194.113(b)(2) A-9			
b. Facility drawings		112.20(h)(1)(viii) 112.20(h)(9) F1.9	1035(e)	A-9			
c. Facility description/ layout		F1.9	1035(b)(4)	A-9		(l)(3)(i)(A) (p)(8)(iv)(A)(1)	

ICP Elements	RCRA (40 CFR part 264, Subpart D, 40 CFR part 265, Subpart D, and 40 CFR 279.52)	EPA's Oil Pollution Prevention Regulation (40 CFR part 112)	USCG-FRP (33 CFR part 154)	DOT/RSPA-FRP (49 CFR part 194)	OSHA Emergency Action Plans (29 CFR 1910.38(a) and Process Safety (29 CFR 1910.119)	OSHA HAZWOPER (29 CFR 1910.120)	CAA RMP (40 CFR part 68)
2. Notification	264.52(d) 265.52(d) 279.52(b)(2)(iv) 264.56(a)(1),(2) 265.56(a)(1),(2) 279.52(b)(6)(i)(A),(B) 264.56(d)(1),(2) 265.56(d)(1),(2) 279.52(b)(6)(iv)(A),(B)	112.20(h)(1)(ii)		194.107(d)(1)(ii) A-2	119(n) 165(b)(1) 165(b)(4) 272(d)	(l)(3)(i)(B) (l)(2)(ix) (p)(8)(ii)(1) (p)(8)(iv)(A)(2) (q)(2)(ix)	68.95(a)(1)(i)
a. Internal		112.20(h)(3)(iii) F1.3.1	1035(b)(1)(i) 1035(b)(1)(ii) 1035(e)(2)	194.107(d)(1)(iv)	119(n) 165(b)(1)	(l)(2)(ix) (q)(2)(ix) (p)(8)(ii)(1)	
b. Community		112.20(h)(3)(iii) 112.20(h)(3)(ix) F1.3.1	1035(b)(1)(i) 1035(b)(1)(ii) 1035(e)(2)		119(n)	(l)(2)(i),(ii),(ix) (p)(8)(ii)(A),(B),(1) (q)(2)(i),(ii),(ix)	
c. Federal and state agency		112.20(h)(3)(iii) 112.20(h)(3)(ix) F1.3.1	1035(b)(1)(i) 1035(b)(1)(ii) 1035(e)(2)	194.107(d)(1)(vi)		(l)(2)(i),(ii),(ix) (p)(8)(ii)(A),(B),(1) (q)(2)(i),(ii),(ix)	
3. Response management structure		112.20(h)(1)(v) 112.20(h)(3)(v) F1.3.4	1035(b)(3)(iii)	194.107(d)(1)(v) A-9		(q)(3)(i)	
a. General	264.52(c) 265.52(c) 279.52(b)(2)(iii)		1035(b)(3)(iii)			(q)(3)(i)	
b. Command		112.20(h)(3)(iv)				(q)(3)(i)	
(1) Facility incident commander and qualified individual	264.55 265.55 279.52(b)(5)	112.20(h)(1)(i) F1.2.5	1026	A-4		(q)(3)(i)	
(2) Information	264.56(a)(1),(2) 265.56(a)(1),(2) 279.52(b)(6)(i)(A),(B)	112.20(h)(3)(iii)	1035(b)(3)(iii) 1035(e)(4)	194.107(d)(1)(v) A-2	38(a)(2)(vi) 38(a)(5)(iii)	(q)(3)(i)	
(3) Safety	264.52(f) 265.52(f) 279.52(b)(2)(vi)	112.20(h)(1)(vi) 112.20(h)(3)(vii) 112.20(h)(3)(viii) F1.3.5	1035(b)(3)(iii) 1035(e)(5)		38(a)(2)(i) 38(a)(2)(iii) 38(a)(2)(iv) 38(a)(4)	(l)(2)(iv),(vi) (p)(8)(ii)(D),(F) (q)(2)(iv),(vi) (q)(3)(vii),(viii)	
(4) Liaison			1035(b)(3)(iii)		38(a)(2)(vi)	(l)(2)(i),(ii) (p)(8)(ii)(A),(B) (q)(2)(i),(ii)	

ICP Elements	RCRA (40 CFR part 264, Subpart D, 40 CFR part 265, Subpart D, and 40 CFR 279.52)	EPA's Oil Pollution Prevention Regulation (40 CFR part 112)	USCG-FRP (33 CFR part 154)	DOT/RSPA-FRP (49 CFR part 194)	OSHA Emergency Action Plans (29 CFR 1910.38(a) and Process Safety (29 CFR 1910.119)	OSHA HAZWOPER (29 CFR 1910.120)	CAA RMP (40 CFR part 68)
c. Operations			1035(b)(3)(iii)	194.107(d)(1)(v)	38(a)(2)(i)-(iv)	(q)(3)(iii),(v)	
(1) Response objectives			1035(b)(2)(iii) 1035(b)(4)(iii)		38(a)(1)	(q)(3)(iii)	
(2) Discharge or release control	264.56(e) 265.56(e) 279.52(b)(6)(v)	112.20(h)(3)(i) 112.20(h)(7)(iv) 112.20(h)(1)(vii)	1035(b)(2) 1035(b)(2)(iii) 1035(b)(4)(iii)	194.107(d)(1)(v) A-3			
(3) Assessment/monitoring	264.56(b),(c),(d),(f) 265.56(b),(c),(d),(f) 279.52(b)(6)(ii),(iii),(iv),(vi)	112.20(h)(3)(ix) F1.7.1	1035(b)(2)(iii) 1035(b)(3) 1035(b)(4)(iii)		38(a)(3)(ii) 38(a)(4)	(q)(3)(ii)	
(4) Containment	264.56(e) 265.56(e) 279.52(b)(6)(v)	112.20(h)(1)(vii) 112.20(h)(3)(i) 112.20(h)(7)(iv) F1.7.3	1035(b)(2)(iii) 1035(b)(3)(iv) 1035(b)(4)(iii)	194.107(d)(1)(v)			
(5) Recovery		112.20(h)(3)(i) 112.20(h)(7)(iii) F1.7.2	1035(b)(2)(iii) 1035(b)(3)(iv) 1035(b)(4)(iii)	194.107(d)(1)(v)			
(6) Decontamination	264.56(h)(2) 265.56(h)(2) 279.52(b)(6)(viii)(B)	112.20(h)(7)(iii) F1.7.2		194.107(d)(1)(v)		(k) (l)(2)(vii) (p)(8)(ii)(G) (q)(2)(vii) (q)(3)(ix)	
(7) Non-responder medical needs			1035(e)(5)		38(a)(2)(iv)	(l)(2)(viii) (p)(8)(ii)(H) (q)(2)(viii)	68.95(a)(1)(ii)
(8) Salvage plans				194.107(d)(1)(v)			
d. Planning				194.107(a) 194.115	38(a)(1) 38(a)(4)	(l)(2)(i),(ix) (p)(8)(ii)(A),(I) (q)(1) (q)(2)(i),(ix)	
(1) Hazard assessment		112.20(h)(3)(ix) 112.20(h)(4) 112.20(h)(5) 112.20(h)(7)(ii) F1.4.1-F1.4.3 F1.5.1, F1.5.2	1029 1035(b)(4)(ii)	194.105 194.113(b)(6)	38(a)(4)	(l)(1)(ii)(C),(D) (p)(8)(iv)(A),(1),(F) (q)(3)(iii)	68.20-36 68.50 68.67
(2) Protection		112.20(h)(7)(i) 112.20(h)(7)(iv) F1.7.1, F1.7.3	1035(b)(4)			(l)(2)(iv),(v),(vi) (p)(8)(ii)(D),(E),(K) (q)(2)(iv),(v),(vi) (q)(3)(iii)	

ICP Elements	RCRA (40 CFR part 264, Subpart D, 40 CFR part 265, Subpart D, and 40 CFR 279.52)	EPA's Oil Pollution Prevention Regulation (40 CFR part 112)	USCG-FRP (33 CFR part 154)	DOT/RSPA-FRP (49 CFR part 194)	OSHA Emergency Action Plans (29 CFR 1910.38(a) and Process Safety (29 CFR 1910.119)	OSHA HAZWOPER (29 CFR 1910.120)	CAA RMP (40 CFR part 68)
(3) Coordination with natural resource trustees		112.20(g)	1030(f)	194.107(c)			
(4) Waste management	264.56(h)(1) 265.56(h)(1) 279.52(b)(6)(vii)(A) 264.56(g) 265.56(g) 279.52(b)(6)(vii)	112.20(h)(7)(iv) F1.7.2	1035(b)(5)	194.107(d)(1)(v)			
e. Logistics			1035(b)(3)(iii)			(l)(3)(iii) (p)(8)(iv)(B) (q)(2)(xii)	
(1) Medical needs			1035(e)(5)		38(a)(2)(iv)	(l)(2)(viii) (p)(8)(ii)(H) (q)(2)(viii)	68.95(a)(1)(ii)
(2) Site security		112.20(h)(10) F1.10				(l)(2)(v) (p)(8)(ii)(E) (q)(2)(v)	
(3) Communications		112.20(h)(1)(iv) 112.20(h)(3)(vi) F1.3.2	1035(e)(3)	194.107(d)(1)(v) A-2	38(a)(3) 119(e)(3)(iii) 165(b)	(q)(3)(i)	
(4) Transportation							
(5) Personnel support		112.20(h)(1)(v) 112.20(h)(1)(vi) 112.20(h)(3)(i-ii) 112.20(h)(3)(v) 112.20(h)(3)(vii) F1.3.5			38(a)(5)(i)	(l)(2)(ii) (p)(8)(ii)(B) (q)(2)(ii) (q)(3)(v),(vi)	
(6) Equipment maintenance and support		112.20(h)(1)(iv) 112.20(h)(3)(vi) 112.20(h)(8) F1.3.3 F1.8.1	1035(b)(3)(iv) 1035(e)(3) 1057	194.107(d)(1)(viii)	119(j)(4) 119(j)(5) 165(d)	(l)(2)(xi) (p)(8)(ii)(K) (q)(2)(xi)	68.95(a)(2)
f. Finance/procurement/administration		112.20(h)(3)(ix)	1028 1035(b)(3)(iii)				
(1) Resource list	264.52(e) 265.52(e) 279.52(b)(2)(v)	112.20(h)(1)(iv) 112.20(h)(3)(vi) F1.3.2 F1.7.1	1035(b)(3)(iv) 1035(e)(3)				
(2) Personnel		112.20(h)(1)(v) 112.20(h)(3)(v) F1.3.4	1035(b)(3)(iv)				

ICP Elements	RCRA (40 CFR part 264, Subpart D, 40 CFR part 265, Subpart D, and 40 CFR 279.52)	EPA's Oil Pollution Prevention Regulation (40 CFR part 112)	USCG-FRP (33 CFR part 154)	DOT/RSPA-FRP (49 CFR part 194)	OSHA Emergency Action Plans (29 CFR 1910.38(a)) and Process Safety (29 CFR 1910.119)	OSHA HAZWOPER (29 CFR 1910.120)	CAA RMP (40 CFR part 68)
(3) Response equipment	264.52(e) 265.52(e) 279.52(b)(2)(v)	112.20(h)(1)(iv) 112.20(h)(3)(vi) F1.3.2 F1.7.1	1035(b)(2)(ii) 1035(b)(4)(iii) 1035(e)(3) Appendix C			(l)(2)(xi) (p)(8)(ii)(K) (q)(2)(xi)	
(4) Support equipment	264.52(e) 265.52(e) 279.52(b)(2)(v)	F1.3.2 F1.7.1	1035(e)(3)				
(5) Contracting		112.20(h)(3)(ii)	1028(a)(1) 1035(e)(3)	194.115			
(6) Claims procedures							
(7) Cost documentation							
4. Incident documentation					38(a)(2)(iii) 119(e)(3)(ii)	(l)(2)(x) (p)(8)(ii)(J) (q)(2)(x)	
a. Post-accident investigation	264.56(j) 265.56(j) 279.52(b)(6)(ix)				119(m)	(l)(2)(x) (p)(8)(ii)(J) (q)(2)(x)	68.60 68.81
b. Incident history		112.20(h)(4) F1.4.4			119(e)(3)(ii)		68.42
5. Training and exercises/drills		112.20(h)(8) 112.21 F1.8.2, F1.8.3	1035(c) 1050 1055 Appendix D	194.107(d)(1)(vii) 194.107(d)(1)(ix) 194.117 A-6 A-7	38(a)(5) 119(g)(1)(i)	(l)(3)(iv) (p)(8)(iii) (q)(6)	68.95(a)(3)
6. Response critique and plan review and modification process	264.54 265.54, 279.52(b)(4)	112.20(g)	1035(a)(6) 1035(d) 1065	194.107(d)(1)(x) 194.111 194.119 194.121 A-8	119(l) 119(o)(1)	(l)(2)(x) (p)(8)(ii)(J) (q)(2)(x)	68.95(a)(4)
7. Prevention						(l)(2)(iii) (p)(8)(ii)(C) (q)(2)(iii)	

Annex 9

Planning Distance, Worst-Case Discharge, and Volume Calculations

ANNEX 9 PLANNING DISTANCE, WORST-CASE DISCHARGE, AND VOLUME CALCULATIONS

Transport on Moving Waterways

The planning distance formula for transport on moving waterways according to Attachment C-III to the final regulations (published in the Federal Register on 1 July 1994) is:

$$d = v \times t \times c$$

- d = the distance downstream from a facility within which fish and wildlife and sensitive environments could be injured or a public drinking water intake would be shut down in the event of an oil discharge (in miles)
- v = the velocity of the river/navigable water of concern (in ft/sec)
- t = the time interval specified in Table 3 in Attachment C-III to the final regulations based upon the type of water body and location (in hours). For all non-port area rivers and canals, inland and near shore areas, t is equal to 27 hours.
- c = 0.68 sec *mile/(hr*ft) constant conversion factor

Attachment C-III to the final regulation directs plan preparers to use an average mid-channel depth to calculate the hydraulic radius, an average river slope, and Manning's roughness coefficient for flood flow rates to determine river velocity with the Chezy-Manning equation. As mid-channel depth information is not available for Alkali Creek, but velocities are known for both Alkali Creek and the Yellowstone River, velocities are used in the planning distance calculations below.

Alkali Creek is spring fed and flows northeast approximately 500 feet north of the site's diesel storage tank. Alkali Creek continues northeast, paralleling the site, and turns south past the facility. Alkali Creek continues eastward and flows into the Yellowstone River approximately 11.5 river miles downstream of the facility. The probable point of entry of a worst-case spill is approximately 11.5 river miles upstream of the Alkali Creek and Yellowstone River confluence.

As the transport of oil during adverse weather conditions is the concern of this ICP, the time it would take an oil spill to travel from the site via Alkali Creek to the Yellowstone River is calculated below, assuming a 1.0 ft/s flow in Alkali Creek (flood stage). Velocity of Alkali creek was verified in May 2010 (during spring runoff) by using a floating object at five locations and measuring the time the object took to move over a known distance. Velocities varied from 0 feet per second to 0.074 ft/s. Therefore, using 1ft/s is a conservative velocity to be used for planning purposes in Alkali creek.

$$1.0 \text{ ft/s} \times 1 \text{ mile}/5280 \text{ ft} \times 3,600 \text{ sec/hr} = 0.68 \text{ miles/hr.}$$

$$11.5 \text{ miles}/0.68 \text{ miles/hr} = 16.9 \text{ hours}$$

To find the possible distance traveled in a worst case scenario, in the required response time, again use 1.0 ft/s. Therefore, the equation becomes:

The planning distance calculated using the methods provided in Attachment C-III to the final regulation is 18.4 miles. The distance from the Alkali Creek storage tank facility to the Alkali Creek and Yellowstone River confluence is 11.5 miles. Therefore, the Yellowstone River is within the calculated planning distance.

INSTRUCTIONS (FROM APPENDIX D TO PART 112, FINAL RULE)

Owner and operators are required to complete this worksheet if it is determined that the facility could cause "substantial harm" to the environment by self-selection or RA determination. The calculation of a worst-case discharge is used for emergency planning purposes and is required in 112.20(h)(5)(A) for facility owners and operators who must prepare a response plan. When planning for the amount of resources and equipment necessary to respond to the worst-case discharge planning volume, adverse weather conditions should be taken into consideration. An owner or operator is required to determine the facility's worst-case discharge from either Part A of this appendix for onshore storage facilities or Part B of this appendix for onshore production facilities. The worksheet considers the provision of adequate secondary containment at a facility. Although a potential worst-case volume is calculated within each section of the worksheet, the final worst-case amount is dependent on the risk parameter that results in the highest volume.

PART A WORST-CASE DISCHARGE CALCULATION FOR ONSHORE STORAGE FACILITIES

Part A of this worksheet is to be completed by owners or operators of SPCC-regulated facilities (excluding oil production facilities) if it is determined that the facility could cause substantial harm to the environment by self-selection or RA determination.

A.1 Single-Tank Facilities

For facilities containing only one aboveground storage tank, the worst-case discharge planning volume equals the capacity of the storage tank. If adequate secondary containment (sufficiently large to contain the capacity of the aboveground oil storage tank plus sufficient freeboard to allow for precipitation) exists for the oil storage tank, multiply the capacity of the tank by 0.8.

(1) FINAL WORST-CASE VOLUME: (b) (7)(F), (b) (3)

(2) Do not proceed further.

The worst-case discharge planning volume for single tank onshore storage facilities was determined by multiplying the capacity of the tank by 0.8.

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

ANNEX 9 PLANNING VOLUME WORKSHEET

I. Background Information

A. Worst-Case Discharge (barrels)

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

B. Oil Group

Group I

Diesel, used diesel, and used lube oil are all Group I non-persistent oils (at least 50 percent by volume distill at a temperature of 340°C or 95 percent by volume distill at a temperature of 370°C).

C. Geographic Area

Choose 1: Nearshore/Inland Great Lakes

Rivers and Canals

D. Percentages of Oil (Table 2)

Group I:	D ₁ Percent Natural Dissipation	<u>80</u>
	D ₂ Percent Recovered Floating Oil	<u>10</u>
	D ₃ Percent Oil Onshore	<u>10</u>

E.

E₁ On-Water Recovery

$$\frac{D_2 \times A}{100}$$

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

E₂ On-Shore Recovery

$$\frac{D_3 \times A}{100}$$

F. Emulsification Factor (Table 3)

for Group I = 1.0

G. On-Water Oil Recovery Resource Mobilization Factor (Table 4)

G₁ Tier 1 = .30G₂ Tier 2 = .40G₃ Tier 3 = .60**II. On-Water Recovery Capacity (barrels/day)**Tier 1 (E₁)(F)(G₁)

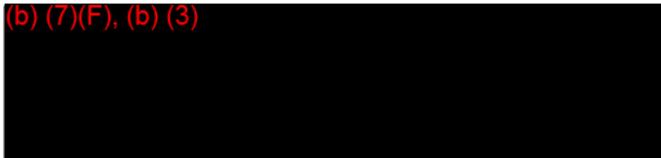
(b) (7)(F), (b) (3)

Tier 2

Tier 3

III. Shoreline Cleanup Volume (barrels/day)

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



**IV. On-Water Response Capacity by Operating Area (barrels/day) (Table 5)
(Amount Needed to be Contracted for)**

	Feb 1993	Feb 1998	Feb 2003
J ₁ Tier 1	1,500	1,875	TBD ^(a)
J ₂ Tier 2	3,000	3,750	TBD
J ₃ Tier 3	6,000	7,500	TBD

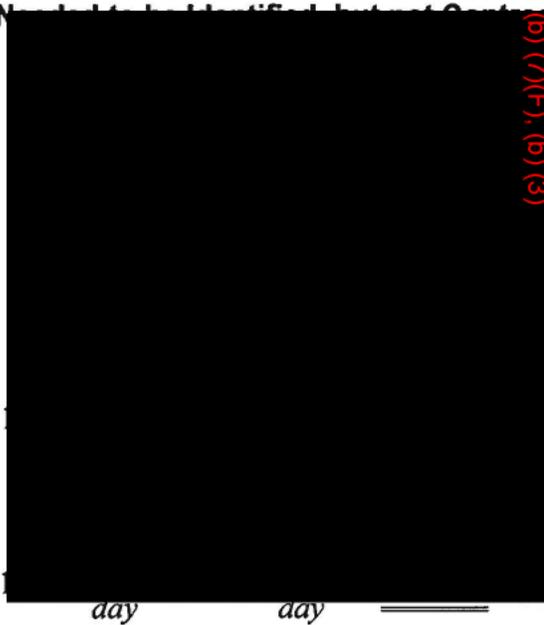
(a) To be determined

**V. On-Water Amount Needed to be Identified but not Contracted for in Advance
(barrels/day)**

Tier 1

Tier 2

Tier 3



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

day

day