Maine Department of Environmental Protection

Marine Oil Spill Contingency Plan

Appendices

II - VII

APPENDIX II

WILDLIFE REHABILITATION PLAN APPENDICES

WILDLIFE REHABILITATION PLAN TABLE OF CONTENTS

APPENDIX A – COOPERATIVE AGREEMENTS **3**

APPENDIX B - INITIAL RESPONSE STAFF ASSIGNMENTS **4**

APPENDIX C – INITIAL RESPONSE CHECKLISTS **5**
Generic Equipment List for IF&W Oiled Wildlife Response Staff 6
Wildlife Branch Director Checklist 7
Wildlife Branch Director Checklist (continued) 8
Technical Specialist Checklist 9
Wildlife Recovery Group Supervisor Checklist 11
Aerial Assessment Task Force Leader Checklist 12
Boat Assessment Task Force Leader Checklist 13
Shoreline Assessment Task Force Leader Checklist 14
Wildlife Recovery Task Force Leader Checklist 15
Hazing Task Force Leader Checklist 17

APPENDIX D – STANDARD FORMS **18**
Daily Briefing Agenda 19
Communication Form – Unified Command 20
Communication Form - Task Forces 21
Task Force Assignment 22
Location information Form 23
Bird Species Codes 24
Wildlife Assessment and Collection Form 25
Daily Check In / Check Out 26
Oiled Wildlife Hotline Form 27
Volunteer Hotline Form 28
Oiled Wildlife Hotline Protocol 29
Initial Press Release (sample) 30

APPENDIX E – GENERAL WILDLIFE HAZING PLAN **31**

APPENDIX F – TRAINED WILDLIFE REHABILITATORS **34**

APPENDIX G – TRAINED VOLUNTEERS (SORTED ALPHABETICALLY) **35**

APPENDIX H – TRAINED VOLUNTEERS (SORTED BY SKILL/INTEREST) **36**

APPENDIX A – COOPERATIVE AGREEMENTS

Maine Inland Fisheries and Willdlive has the following agreements (not attached):

- Memorandum of Understanding Regarding Oil Spills To Maine Waters between the Maine Department of Inland Fisheries and Maine DEP
- Memorandum of Understanding between the Maine Department of Inland Fisheries and the Maine Army National Guard
- Memorandum of Agreement amongst the Department of the Interior, U.S. Fish and Wildlife Service and the Maine Department of Inland Fisheries and Wildlife regarding roles and responsibilities during oil spills

APPENDIX B - INITIAL RESPONSE STAFF ASSIGNMENTS

Wildlife Branch Director

1. Jordan Bailey (941-4448, 827-6781, 557-1039, 818-4478/)
2. Don Katnik (941-4455, 862-5111, 356-5138, 818-0155)
3. Richard Dressler (941-4467, 827-5407, 592-7858, 758-1168)

Technical Specialist (Science and Environmental Unit, Planning Section)

1. Don Katnik (941-4455, 862-5111, 356-5138, 818-0155)
2. Richard Dressler (941-4467, 827-5407, 592-7858, 758-1168)
3. Brad Allen (941-4469, 469-3406, 592-7859)

Wildlife Assessment/Recovery Group Supervisor

1. Regional Biologist in Region where spill occurs
2. Regional Biologist in adjacent Region to where spill occurs

- Region A – Scott Lindsay (657-2345 ext. 110, 645-4899, 592-2941)
- Region B – Jim Connolly (547-5318, 285-3517, 592-7856, 818-4479)
- Region C – Tom Schaeffer (434-5927, 434-6227, 592-6022)

Assistant Wildlife Assessment/Recovery Group Supervisor

1. Assistant Regional Biologist in Region where spill occurs
2. Assistant Regional Biologist in adjacent Region to where spill occurs

- Region A – Judy Camuso (657-2345 ext. 109, 865-0840, 592-7855)
- Region B – Keel Kemper (547-5319, 948-3806, 592-0521)
- Region C – Rich Bard (434-5927, 255-4564, 592-0109)

Aerial Assessment Task Force

1. Charlie Todd (941-4468, 825-3725, 825-2179)
2. Danielle D'Auria (941-4478, 825-3746)
3. Brad Allen (941-4469, 469-3406, 592-7859)

Boat Assessment Task Force

1. Brad Allen (941-4469, 469-3406, 592-7859)
2. Kelsey Sullivan (941-4474, 862-2124)

Shoreline Assessment Task Force

Any trained wildlife biologist

Wildlife Recovery Task Force

Any trained wildlife biologist

Hazing Task Force

1. Assistant Regional Biologist in Region where spill occurs
2. Assistant Regional Biologist in adjacent Region to where spill occurs

- Region A – Norm Forbes (657-2345 ext. 108, 892-5227, 592-1782)
- Region B – Kendall Marden (547-5324)
- Region C – Jim Hall (434-5927, 255-8332, 592-0605)

APPENDIX C – INITIAL RESPONSE CHECKLISTS

- Generic Equipment List
- Wildlife Branch Director
- Technical Specialist (Command Post)
- Wildlife Assessment, Hazing, and Recovery Group Supervisor
- Assistant Wildlife Recovery Group Supervisor
- Aerial Assessment Task Force
- Boat Assessment Task Force
- Shoreline Assessment Task Force
- Wildlife Recovery Task Force
- Hazing Task Force

GENERIC EQUIPMENT LIST FOR IF&W OILED WILDLIFE RESPONSE STAFF

When called to respond to a spill, please bring the following supplies if available.

- ☐ IF&W Uniform
- ☐ Work Boots
- ☐ VHF Radio and/or Cellular Phone
- ☐ Binoculars
- ☐ Bird Field Guide
- ☐ Personal Floatation Device
- ☐ First Aid Kit
- ☐ Aluminum Clipboard
- ☐ Pole Nets
- ☐ Water Bottle
- ☐ Watch
- ☐ Compass
- ☐ Knife
- ☐ Sunglasses
- ☐ Sun Screen
- ☐ Raingear

WILDLIFE BRANCH DIRECTOR CHECKLIST

- ☐ DEP or USFWS notification of spill
- ☐ Contact supervisor
- ☐ Contact Regional Biologist in region where spill occurred. Ask Regional Biologist to travel to scene and make initial assessment. **Regional Biologist or designee will become the Wildlife Recovery Group Supervisor (see Appendix B).**
- ☐ Contact oiled wildlife rehabilitation contractor and alert them that a spill has occurred

  IBRRC Emergency Response Line (510) 841-9086; Office (510) 841-9087
- ☐ Arrange for Technical Specialist to represent IF&W at the Command Post.
- ☐ If DEP spill notification, contact USFWS Regional Spill Response Coordinator at 413-539-3194 (alternate number is 603-225-1411) as soon as practical and report the location, the product spilled and the estimated amount spilled.
- ☐ Contact Maine National Guard to arrange for the use of the nearest armory (Portland, Westbrook, Brunswick, Belfast, Calais), if appropriate.

  Donovan G. Lajoie, P.E.Lieutenant Colonel, Maine Army National Guard
  Director of Facilities Engineering (207) 626-4220
- ☐ With Technical Specialist assistance, arrange for aerial survey of spill area. This may be accomplished through the Incident Command System - Command Post (if established), the Maine Warden Service, IF&W contract pilots or the USFWS (John Bidwell 207-827-6138 extension 18).
- ☐ Arrange for Bird Group to transport oil spill boat to spill site and to fly aerial survey as soon as possible.

Bird Group Leader - Brad Allen 941-4469, 469-3406, #2310

1. Bird Group Biologist – Lindsay Tudor 941-4479, 564-2386, #2308
2. Bird Group Biologist – Tom Hodgman 941-4482, 223-5542, #2319
3. Bird Group Biologist – Andy Weik 941-4474, (207) 827-5321, #2309

- ☐ Inform IF&W Division of Information and Education (I&E) that an oil spill has occurred. Mark Latti should report to the Joint Information Center at the Command Post as soon as possible. Request that I&E release the initial press release (see Appendix D) through existing media channels.

Don Kleiner (207) 287-5248

4. Mark Latti (207) 287-6008, #2297

- ☐ Transport oiled wildlife response trailer to armory or spill location and meet with Regional Biologist and Bird Group Leader to assess situation.
- ☐ Work with Regional Biologist to deploy task forces as needed and to establish the oiled wildlife hotline. Initial priorities should be wildlife assessment and hazing.

WILDLIFE BRANCH DIRECTOR CHECKLIST (CONTINUED)

- ☐ Work with Regional Biologist to arrange for lodging and meals for staff. If the Unified Command System has been implemented, contact the Logistics Section for assistance.
- ☐ Transfer the Oiled Wildlife Hotline (1-877-OIL-BIRD) to one of the new phone lines. During business hours, contact Kelly Colby at 287-5210, ask her to fax service order change with new number to 621-2722. During non-business hours, call BIS at 624-7700. Make sure to tell Kelly or BIS that it is an emergency and that we need the number to be redirected as soon as possible.
- ☐ Contact Site Safety Officer. Function as liaison between Site Safety Officer and Oiled Wildlife Operations.

Equipment List

- ☐ Oiled wildlife response trailer
- ☐ 2 canoes from the pole barn (Old Town)
- ☐ Environmental Vulnerability Index maps
- ☐ Cellular Phone (592-7858)
- ☐ Oiled Wildlife Response Management System (on laptop)
- ☐ IF&W Oil Spill Response GIS (on laptop)
- ☐ Oiled Wildlife Rehabilitation Plan and appendices
- ☐ State Marine Oil Spill Contingency Plan
- ☐ Maine-New Hampshire Area Contingency Plan
- ☐ Geographic Response Plans

TECHNICAL SPECIALIST CHECKLIST

The Technical Specialist represents IF&W in the planning section and serves as an intermediary between IF&W staff and the Incident Command System.

- ☐ Travel to Command Post
- ☐ Check-in with the Planning Section Chief and make contact with the NOAA Scientific Support Coordinator (Steve Lehmann)
- ☐ Using professional judgment and referring to Figure 1, determine whether a significant threat to wildlife exists and, if so, whether the Responsible Party's Qualified Individual (QI) has arranged adequately for wildlife rehabilitation services. If the QI has not addressed oiled wildlife rehabilitation, consult with the Wildlife Branch Director regarding the activation of the State of Maine Oiled Wildlife Contractor.
- ☐ Coordinate with the Wildlife Branch Director to arrange for an initial aerial survey, either through the Unified Command, IF&W Warden Service or contract pilots, or through the U.S. Fish and Wildlife Service.
- ☐ Gather spill information from the Unified Command and the Planning Section and relay it to the Wildlife Branch Director
- ☐ Meet with Wildlife Branch Director and Wildlife Recovery Supervisor to discuss plan of action
- ☐ Work within the Planning Section to draft an Incident Action Plan using standardized ICS/UCS forms and formats (sensitive area identification, booming strategies, wildlife hazing). The Planning Section Chief will provide Incident Action Plan oversight and coordination.
- ☐ Participate as a Natural Resource Trustee in Natural Resource Damage Assessment (NRDA) meetings. The initial priority will be to collect data within the spill area, adjacent to the spill area, and in representative areas beyond the spill area. The Maine Department of Environmental Protection will coordinate this effort at the state level.

Equipment List

- ☐ Environmental Vulnerability Index maps
- ☐ Cellular Phone (592-7859)
- ☐ State Marine Oil Spill Contingency Plan
- ☐ Maine-New Hampshire Area Contingency Plan
- ☐ Geographic Response Plans
- ☐ Wildlife Rehabilitation Plan with Appendices
- ☐ Laptop and printer

Comments;

The Department of Environmental Protection's GIS staff will be on-scene. They will be able to

produce maps and provide information on the spill trajectory and resources at risk. The Department of Marine Resources will have a representative in the Planning Section as well.

Planning Section Contacts

1. Scientific Support Coordinator (NOAA) - Steve Lehmann
2. Department of Marine Resources Technical Specialist - Seth Barker
3. NRDA State Coordinator – to be identified

WILDLIFE RECOVERY GROUP SUPERVISOR CHECKLIST

- ☐ Travel to spill area, make an initial assessment of spill and contact Wildlife Branch Director (941-4448 or 592-7858).
- ☐ Meet with Wildlife Branch Director and Technical Specialist to assess situation and decide plan of action.
- ☐ Develop a wildlife assessment plan for the spill area (air, land, water). Determine how many and what types of task forces will be necessary and then staff them with trained IF&W biologists, USFWS biologists, and volunteers.
- ☐ Develop a hazing plan by identifying areas suitable for hazing and the type of hazing equipment (acoustic, propane canon, cracker shell, etc.) most appropriate. Then, determine the number of task forces necessary to carry out the hazing plan and staff them with trained IF&W or USFWS biologists.
- ☐ Develop a recovery plan for the spill area. Determine how many and what types of task forces will be necessary and then staff them with trained IF&W biologists, USFWS biologists, and volunteers.
- ☐ Work with Wildlife Branch Director to arrange for lodging and meals for staff. If the Unified Command System has been implemented, contact the Logistics Section for assistance.
- ☐ Contact staff
- ☐ Arrange for at least 4 phones to be installed at the Wildlife Rehabilitation Center.
- ☐ Use the forms in Appendix D to assign and manage task forces.
- ☐ Conduct daily briefing session for task forces (see daily briefing form – appendix D).

Equipment List

- ☐ Environmental Vulnerability Index maps
- ☐ State Marine Oil Spill Contingency Plan
- ☐ Maine-New Hampshire Area Contingency Plan
- ☐ Geographic Response Plans
- ☐ Wildlife Rehabilitation Plan with Appendices
- ☐ Laptop and printer
- ☐ Photocopier (contact Logistics Section)
- ☐ Oiled Wildlife Equipment Trailer
- ☐ Oiled Wildlife Response Boat
- ☐ Canoes

Comments: The Oiled Wildlife Information Management System may be used to manage response activities.

AERIAL ASSESSMENT TASK FORCE LEADER CHECKLIST

Collect data of wildlife use in the vicinity of the oil spill. Data should be collected beyond the extent of spill to document wildlife use in the area. Information collected will be used to deploy assessment and collection task forces, hazing task forces, and for Natural Resource Damage Assessment.

Equipment

- ☐ Binoculars
- ☐ Field Guide
- ☐ VHF radio or cellular phone
- ☐ Survival suit for over-water assessment
- ☐ Map or chart of spill area (from on-site DEP GIS)
- ☐ First aid kit

Forms (on waterproof paper)

- ☐ Communication Form – Unified Command
- ☐ Communication Form – Task Forces
- ☐ Task Force Assignment
- ☐ Location Form
- ☐ Bird Species Codes
- ☐ Wildlife Assessment and Collection Form
- ☐ Clipboard and 2 pens (Sharpie or equivalent)

BOAT ASSESSMENT TASK FORCE LEADER CHECKLIST

Collect data of wildlife use in the vicinity of the oil spill. Data should be collected beyond the extent of spill to document wildlife use in the area. Information collected will be used to deploy Assessment and collection task forces, hazing task forces, and for Natural Resource Damage Assessment. Each task force should have 1 leader and 1-3 crew members. Task force leaders should be trained biologists. Crew members can be either biologists or trained volunteers, subject to Site Safety Officer approval (see Wildlife Branch Director).

Equipment

- ☐ Binoculars
- ☐ Field Guide
- ☐ VHF radio or cellular phone
- ☐ Personal Floatation Device
- ☐ Survival suit
- ☐ Map or chart of spill area (from on-site DEP GIS or onboard chart)
- ☐ First aid kit
- ☐ GPS (optional)

Forms (on waterproof paper)

- ☐ Communication Form – Unified Command
- ☐ Communication Form – Task Forces
- ☐ Task Force Assignment
- ☐ Location Form
- ☐ Bird Species Codes
- ☐ Wildlife Assessment and Collection Form
- ☐ Clipboard and 2 pens (Sharpie or equivalent)

SHORELINE ASSESSMENT TASK FORCE LEADER CHECKLIST

Collect data of wildlife use in the vicinity of the oil spill. Data should be collected beyond the extent of spill to document wildlife use in the area. Information collected will be used to deploy Assessment and collection task forces, hazing task forces, and for Natural Resource Damage Assessment. Each task force should have 1 leader and 1-2 crew members. Task force leaders should be trained biologists. Crew members can be either biologists or trained volunteers. Assessment task forces should stay clear of oiled areas.

Equipment

- ☐ Binoculars
- ☐ Field Guide
- ☐ VHF radio or cellular phone
- ☐ Personal Floatation Devices
- ☐ Map or chart of spill area (from on-site DEP GIS)
- ☐ First aid kit
- ☐ Personal Floatation Device
- ☐ GPS (optional)

Forms (on waterproof paper)

- ☐ Communication Form – Unified Command
- ☐ Communication Form – Task Forces
- ☐ Task Force Assignment
- ☐ Location Form
- ☐ Bird Species Codes
- ☐ Wildlife Assessment and Collection Form
- ☐ Clipboard and 2 pens (Sharpie or equivalent)

WILDLIFE RECOVERY TASK FORCE LEADER CHECKLIST

Collect live and dead wildlife in the vicinity of the oil spill and transport to the Wildlife Rehabilitation Center. Each task force should have 1 leader and 1-5 crew members. Task force leaders should be trained biologists. Crew members can be either biologists or trained volunteers, subject to Site Safety Officer approval (see Wildlife Branch Director).

Personal Protective Equipment

- ☐ 1 pair of tyvex coveralls per person
- ☐ 1 pair of tyvex boots per person
- ☐ 1 pair of gloves per person
- ☐ 1 pair of safety glasses per person (if necessary)
- ☐ 1 work PFD per person (if working on or adjacent to open water)
- ☐ First aid kit

Forms (on waterproof paper)

- ☐ Communication Form – Unified Command
- ☐ Communication Form – Task Forces
- ☐ Task Force Assignment
- ☐ Location Form
- ☐ Bird Species Codes
- ☐ Wildlife Assessment and Collection Form
- ☐ Clipboard and 2 pens (Sharpie or equivalent)

Assessment and Collection Supplies

- ☐ Site map
- ☐ 1 disposable camera
- ☐ Binoculars
- ☐ Field Guide
- ☐ Long-handled net
- ☐ Throw net (optional)
- ☐ 10 towels
- ☐ 10 pet carriers
- ☐ 10 pillow cases
- ☐ Collection tags
- ☐ 10 paper bags (for dead birds)

- ☐ 10 plastic bags (for dead birds)
- ☐ 1 roll duct tape
- ☐ Chain-of-Custody Tags
- ☐ Communications
- ☐ VHF radio or cellular phone

HAZING TASK FORCE LEADER CHECKLIST

Implement wildlife hazing plan, which is developed within the Planning Section. Refer to Appendix E - General Wildlife Hazing for additional hazing information. Each task force should have 1 leader and 1-5 crew members. Task force leaders should be trained biologists. Crew members can be either biologists or trained volunteers, subject to Site Safety Officer approval.

Personal Protective Equipment

- ☐ 1 pair of tyvex coveralls per person
- ☐ 1 pair of tyvex boots per person
- ☐ 1 pair of gloves per person
- ☐ 1 pair of safety glasses per person (if necessary)
- ☐ 1 work PFD per person (if working on or adjacent to open water)
- ☐ First aid kit

Hazing Equipment (depending on operation)

- ☐ Breco Buoy (subtidal-floats with oil)
- ☐ Phoenix Marine Wailer (shallow sub-tidal or intertidal)
- ☐ Phoenix Wailer (shore-based)
- ☐ Shotgun
- ☐ Cracker shells
- ☐ Propane cannon and tank
- ☐ Whistling tape

Forms (on waterproof paper)

- ☐ Communication Form – Unified Command
- ☐ Communication Form – Task Forces
- ☐ Task Force Assignment
- ☐ Location Form
- ☐ Bird Species Codes
- ☐ Wildlife Assessment and Collection Form
- ☐ Clipboard and 2 pens (Sharpie or equivalent)

Reference Material

- ☐ Waterbird Deterrent Techniques
- ☐ Bird Deterrent Field Tests and Instruction for Emergency Oil Spills

APPENDIX D – STANDARD FORMS

- Daily Briefing Form
- Communication Form – Unified Command
- Communication Form – Task Forces
- Task Force Assignment
- Location Form
- Bird Species Codes
- Wildlife Assessment and Collection Form
- Daily Check In / Check Out Form
- Oiled Wildlife Hotline Form
- Volunteer Hotline Form
- Oiled Wildlife Hotline Protocol
- Initial Press Release

DAILY BRIEFING AGENDA

- ☐ Check In/Check Out List – Make sure everyone has signed in and understands the importance of signing out at the end of their shift
- ☐ Administrative Items
- ☐ Incident Update
- ☐ Task Force Assignments – hand out forms* and discuss
- ☐ Safety Update – review the Site Safety Plan
- ☐ Communication Forms and Site Maps
- ☐ Discuss plan for next day (staff assignments, availability, etc.)

* Each Task Force should have the following forms:

- Communication Form – Unified Command
- Communication Form – Task Forces
- Task Force Assignment
- Location Form
- Bird Species Codes
- Wildlife Assessment and Collection Forms

COMMUNICATION FORM – UNIFIED COMMAND

Wildlife Rehabilitator: _____
Phone: _____ Cell: _____

Wildlife Rehabilitation Center: _____

Wildlife Hotline: _____

Wildlife Branch Director: _____
Phone: _____ Cell: _____

Wildlife Recovery Group Supervisor: _____
Phone: _____ Cell: _____

Planning Section: _____

Operations Section: _____

COMMUNICATION FORM – IF & W TASK FORCES

Date: _____

Type	Leader	Location	Cell Phone/ Call #

Type		Handheld radio channels for spill response VHF radios	
1 – Assessment (Boat)	6 – Hazing	1 – Warden Car/Car	6 – Clean Casco Bay (repeater)
2 – Assessment (Shoreline)	7 –	2 – Warden (South Coast)	7 – Marine Spill Response Corp. (repeater)
3 – Assessment (Air)	8 –	3 – Warden (Mid-Coast)	8 – Nat'l Response Corp. (repeater)
4 – Recovery (Boat)	9 –	4 – Warden (East Coast)	9 – Marine Channel 9
5 – Recovery (Shoreline)	10 –	5 – DEP (no repeater)	10 – Marine Channel 16

TASK FORCE ASSIGNMENT

Date: _____ Task Force ID: _____

Type: _____

Location: _____

_____

Leader: _____ Cell/Call #: _____

Members: _____

_____

_____

_____

_____

Decon Location: _____

TYPE	
1 - Assessment (Boat)	6 – Hazing
2 – Assessment (Shoreline)	7 –
3 – Assessment (Air)	8 –
4 - Recovery (Boat)	9 –
5 – Recovery (Shoreline)	10 -

LOCATION INFORMATION FORM

Date: _____

Location: _____

_____

Actual or potential degree of oiling: _____

_____

Access: _____

_____

BIRD SPECIES CODES

Species	Code	Species	Code
American Black Duck	ABDU	Least Tern	LETE
American Crow	AMCR	Lesser Yellowlegs	LEYE
American Kestrel	AMKE	Mallard	MALL
Arctic Tern	ARTE	Marsh Wren	MAWR
Bald Eagle	BAEA	Nelson's Sharp-tailed Sparrow	NSTS
Black-bellied Plover	BBPL	Osprey	OSPR
Black-crowned Night Heron	BCNH	Ring-billed Gull	RBGU
Belted Kingfisher	BEKI	Red Knot	REKN
Bonaparte's Gull	BOGU	Ring-necked Duck	RNDU
Blue-winged Teal	BWTE	Red-winged Blackbird	RWBL
Canada Goose	CAGO	Short-billed Dowitcher	SBDO
Common Eider	COEI	Semipalmated Plover	SEPL
Common Loon	COLO	Semipalmated Sandpiper	SESA
Common Merganser	COME	Snowy Egret	SNEG
Common Raven	CORA	Sora	SORA
Common Tern	COTE	Solitary Sandpiper	SOSA
Double-crested Cormorant	DCCO	Spotted Sandpiper	SPSA
Great Black-backed Gull	GBBG	Saltmarsh Sharp-tailed Sandpiper	SSTS
Great Blue Heron	GBHE	Tricolored Heron	TRHE
Glossy Ibis	GLIB	Unknown Egret	UEGR
Great Egret	GREG	Unknown Gull	UGUL
Green Heron	GRHE	Unknown Heron	UHER
Greater Yellowlegs	GRYE	Unknown Duck	UNDU
Green-winged Teal	GWTE	Unknown Bird	UNKN
Herring Gull	HEGU	Unknown Sandpiper	UNSA
Hooded Merganser	HOME	Unknown Shorebird (plvr/sndpipr)	UNSH
Laughing Gull	LAGU	Unknown Tern	UNTE
Little Blue Heron	LBHE	Willett	WILL
Least Sandpiper	LESA		

WILDLIFE ASSESSMENT AND COLLECTION FORM

Task Force ID: _____ Incident: _____ Date: _____

Location: _____

Task Force Leader: _____ Weather: _____

SPECIES CODE	Time *(0-2400)*	Tag ID *(if collected)*	LIVE/DEAD	Degree of Oiling *(check or number)*				Comments
				Un-oiled	Light	Moderate	Heavy	

Page _____ of _____

DAILY CHECK IN / CHECK OUT

Incident: _____ Date: _____

Name	Phone		In (0-2400)	Out (0-2400)	Availability (check)						
	Local	Home			S	M	T	W	T	F	S

Page _____ of _____

OILED WILDLIFE HOTLINE FORM

Incident: _____ Date: _____

Name: _____

Name	Phone	Time (0-2400)	Report (include number of animals, species, and location)

Page _____ of _____

VOLUNTEER HOTLINE FORM

Incident: _____ Date: _____

Name: _____

Name	Phone		Availability (check)							Comments
	Home	Work	S	M	T	W	T	F	S	

Page _____ of _____

OILED WILDLIFE HOTLINE PROTOCOL

1-877-OIL-BIRD (1-877-645-2473)

Use the Oiled Wildlife Hotline Form to record reports of oiled wildlife and the Volunteer Hotline Form to record offers to volunteer. Before answering the phone:

4. fill in the incident, date, and name blanks on the top of each form; and
5. contact the Wildlife Recovery Group Supervisor and the Wildlife Rehabilitation contractor and ask them whether they need volunteers.

Answer the phone with the following greeting:
"Oiled Wildlife Hotline, this is *(your full name)*. How may I help you?"

For Oiled Wildlife Reports:

1. Ask for the caller's name and phone number.
2. Ask the caller when they saw the oiled animals. Use military time (0-2400).
3. Ask the caller to estimate the number of oiled animals and to identify the species of the oiled animals, if possible.
4. Ask the caller to estimate the degree of oiling (lightly oiled, moderately oiled, heavily oiled).
5. Ask the caller for specific location information.
6. Thank the caller for calling and assure the caller that one of our task forces will respond as soon as possible.

For offers to volunteer:
Ask the caller if they have attended one of the oiled wildlife rehabilitation training sessions conducted by Inland Fisheries and Wildlife.

- If the caller has attended one of our oiled wildlife rehabilitation training sessions, then fill out the Volunteer Hotline Form. Include their name, phone numbers, availability (check day based on next seven days), and add comments (extended availability, time of day when available, special skills, etc.). If volunteers are needed, then tell the potential volunteer where and when to report. If volunteers are not needed, then thank them for calling and tell them that we will contact them when we need their assistance.
- If the caller has not had oiled wildlife rehabilitation training, then thank them for their concern and interest and explain that we have trained over 300 people in Maine to assist us during an oil spill. Take their name if they would like to receive training in the future, and indicate in the comments box that they are untrained. Make sure to include their address in the comments box as well.

INITIAL IF & W PRESS RELEASE (SAMPLE)

The Maine Department of Inland Fisheries and Wildlife is the natural resource trustee for Maine's inland fish and wildlife resources and is therefore responsible for protecting and managing inland fish and wildlife resources threatened by oil spills. We will be working with the U.S. Fish and Wildlife Service, our federal counterpart, to assess the impact of the spill on wildlife and to develop an appropriate wildlife response strategy.

Our first priority is to prevent wildlife from coming in contact with the spilled oil. Currently, trained biologists from the Maine Department of Inland Fisheries and Wildlife are on-scene assessing the impact of the spill on wildlife, working with oil spill response organizations to prevent ecologically sensitive areas from becoming oiled and developing hazing strategies to deter wildlife from oiled habitat and from habitat destined to become oiled. We are also in the process of establishing an oiled wildlife rehabilitation center.

If you observe oiled wildlife, please do not approach, touch or try to capture the animals. Instead, make a note of the number, species (if possible) and location of the oiled animals and then call the Oiled Wildlife Hotline, which is 1-877-OIL-BIRD (1-877-645-2473). Initially, you may be asked to leave a message. As soon as the wildlife rehabilitation center is operational, a biologist or a volunteer will staff the Hotline. We will do our best to respond to your report as soon as possible.

Trained volunteers are encouraged to contact us through the Oiled Wildlife Hotline to let us know when you are available to assist us at the rehabilitation center. At this time, please do not contact us if you have not been trained to rehabilitate oiled wildlife.

APPENDIX E – GENERAL WILDLIFE HAZING PLAN *(adapted from the General Wildlife Hazing Plan for Oil Spills in California)*

A. Considerations prior to beginning any hazing operation:

1. Are planned activities safe for workers involved and nearby workers?
2. Is there available "clean" habitat within a reasonable distance? If so, can it be made more attractive? (e.g. temporarily limiting access to people, boats or certain activities, baiting).
3. Is there adjacent or nearby contaminated habitat where hazed birds might end up? (i.e. are there significant negative possibilities).
4. Hazing will be most effective if the entire area of concern can be hazed as continuously as possible. Generally, hit the area with a variety of devices/techniques, somewhat randomly varying them to control habituation. Back off as events dictate. As a general rule, do not start a hazing operation that cannot be maintained for the duration of the need.
5. Hazing would probably not be effective for areas larger than 7 to 10 miles in length or diameter since so much equipment and person power would be required and the chance of hazing birds into contaminated habitat would be high.

B. Once the decision to haze has been made, remember that each spill situation will be unique and pre-planned hazing activities must be viewed as tentative at best. The pros and cons of every hazing operation must be evaluated in view of site and incident specific details and after consultation with local expertise when available.

C. Equipment that has hazing potential, very roughly in order of importance:

1. Helicopter. Helicopters provide both visual and auditory deterrence and are arguably the single most effective hazing device. They are very noisy and can be flown offshore or onshore at any speed, including backwards or sideways, at very low altitude. The downside is that they are labor-intensive and expensive to operate. They would probably be most useful for initiating and periodically reinforcing a hazing operation. ***Helicopters may be available from the Maine Forest Service, Department of Conservation.***
2. Propane Cannon. Propane cannons provide a loud directional shotgun-like noise by slowly filling a bellows with propane gas from a LPG tank then rapidly transferring this gas to a firing chamber and igniting it with a spark. The interval between detonations can be varied from 3 to 30 minutes. After deployment, these devices operate automatically. They are inexpensive to operate and require little maintenance. The downside, common to most hazing devices, is that many species habituate to the noise within a day or two. They are most useful when used as one element of an integrated hazing scheme where they are moved frequently and interchanged with a variety of other devices. ***IF&W owns 2 propane cannons.***
3. Phoenix Wailer. The Phoenix Wailer is a relatively new electronic sound-generating device that broadcasts a programmable variety of sounds at up to 130 dB through four speakers, one in each direction, with an option for additional speakers. The variety of sounds produced and the random nature of the broadcasts are reported to minimize habituation. A strobe light option is

also available. The floating version of this device (Marine Wailer) has been successful in calm to moderate water situations. The device could function as the central unit of a shore-based integrated hazing scheme. ***IF&W owns 1 Phoenix Wailer with 4 speakers and 1 Phoenix Marine Wailer.***

4. Breco Bird Scarer. This electronic sound-generating unit broadcasts random, frightening sounds (up to 130 dB) through four speakers, one in each direction, for up to 72 hours of continuous operation with a lithium battery. The battery may be changed in approximately 1 hour. The completely sealed buoy design allows deployment from ship or helicopter in virtually any sea state. The Canadian Wildlife Service highly recommends this device. This is the only unmanned hazing tool that is available for offshore or open water use. Deployment of several of these devices at 1.5 kilometer intervals might be effective for hazing birds from relatively large open water areas. ***IF&W owns 1 Breco Buoy and related hardware. An additional buoy may be available from the Rhode Island Department of Environmental Management, Division of Fish and Wildlife (Laurie Supprock @ 401-789-0281).***
5. Shell Crackers. These shotgun-launched firecrackers are very effective against most species although they are labor intensive. They are an important tool in most integrated hazing schemes. ***IF&W owns 2 shotguns for hazing activities and a case of cracker shells.***
6. Bird Whistlers. These pistol-launched noisemakers screech for 250 to 300 feet and are an important tool for most land-based or water-based integrated hazing schemes. ***IF&W does not own any pistols or bird whistlers for hazing at this time.***
7. Bird Bombs. Pistol-launched noisemakers that explode at the end of a 75 to 125 foot trajectory. Again, an important tool to rotate into many integrated hazing schemes. ***IF&W does not own any pistols or bird bombs for hazing at this time.***
8. Reflective Tape. Glittering in the wind, reflective tape results in deterrence of several bird species. Alternating placement and removal helps to avoid habituation. Reflective tape is an important tool for shore-based hazing schemes. It is inexpensive and requires no maintenance. ***IF&W has a supply of reflective tape.***
9. Weather Balloons. Helium-filled weather balloons in addition to their intrinsic hazing properties can be used to suspend other hazing tools (e.g. other weather balloons, eye spot balloons, reflective tape, predator models, etc.). ***IF&W does not own any weather balloons for hazing at this time.***
10. ATVs. All terrain vehicles can produce auditory and visual deterrence where their use is suitable. They are excellent for shuttling other hazing devices. IF&W owns many ATVs.
11. Boats. Small boats can be used directly to haze animals or as platforms for other hazing devices (e.g. propane cannons). ***Refer to the State of Maine Marine Oil Spill Contingency Plan for a list of available boats.***
12. Airboats. In shallow water and marsh areas, airboats, which again provide auditory as well as visual deterrence may be used directly to move animals or as a vehicle to deploy, redistribute or service other hazing tools. ***The Maine Warden Service owns 1 airboat.***

13. Audio-visual Alarm or Bird Guard. These smaller electronic sound-generating devices can be effective in small ground-based hazing schemes. They are inexpensive and require little maintenance to operate. ***IF&W does not own any of these devices at this time.***
14. Kites. Kites and kites with predator pictures scare some birds. They are useful occasionally when wind conditions allow. ***IF&W does not own any kites for hazing at this time.***
15. Balloons. Air and/or helium-filled balloons deployed periodically deter some species. Effectiveness is similar to reflective tape, kites and flags. ***IF&W does not own any balloons for hazing at this time.***
16. Eye Spot Balloons. Helium-filled balloons with a large eye on them deter some species. ***IF&W does not own any balloons for hazing at this time.***
17. Predator models. Plastic and inflatable predator models, owls, hawks and snakes can be rotated into a hazing scheme to deter some species. ***IF&W does not own any predator models at this time.***
18. Planes. Small fixed-wing aircraft have been used with success for hazing some species, but, in general, are not nearly as effective as helicopters. Like helicopters, they are labor-intensive and expensive to operate. ***Small fixed-wing aircraft may be available through the Maine Warden Service, Maine Warden Service contract pilots, or the U.S. Fish and Wildlife Service.***
19. Human Effigies. Scarecrows are effective on some species for short periods of time and could be rotated in, occasionally, in a hazing scheme. ***IF&W does not own any human effigies for hazing at this time.***
20. Seal Bombs. Underwater firecrackers can be used to haze marine mammals and perhaps diving birds. ***IF&W does not own any seal bombs for hazing at this time.***
21. Live Birds of Prey. Falcons, flown by professional falconers, have been used to keep birds out of spill areas.
22. Remote-control model planes or boats. Operators potentially available from model plane and model boat clubs.

APPENDIX F – TRAINED WILDLIFE REHABILITATORS

Contact IF&W for current list

APPENDIX G – TRAINED VOLUNTEERS (SORTED ALPHABETICALLY)

Contact IF&W for current list

APPENDIX H – TRAINED VOLUNTEERS (SORTED BY SKILL/INTEREST)

- Administrative Experience
- Computer Experience
- Media Relations Experience
- Bird Identification Experience
- Veterinary Experience
- Wildlife Rehabilitation Experience
- Wildlife Food Preparation Interest/Experience
- Carpentry Experience
- Electrical Experience
- Plumbing Experience
- No Response to Questionnaire

Contact IF&W for current list

APPENDIX III

MARINE SITE SAFETY PLAN (GENERIC)

TABLE OF CONTENTS

EMERGENCY INFORMATION 1
1.0 SCOPE AND APPLICABILITY OF THE SSP 2
1.1 Site Background/Description 2
1.2 Visitors 2
2.0 PERSONNEL 3
2.1 Site Safety Briefing 3
3.0 SITE CONTROL 4
4.0 HEALTH RISK ANALYSIS 4
5.0 TASK RISK ANALYSIS 4
5.1 General Safety Precautions 6
5.2 Heat-related Illness 6
5.3 Cold-related Illness 7
5.4 Confined Space Entry 7
5.5 Excavation Protection 7
6.0 TRAINING 8
7.0 PERSONAL PROTECTION FROM HAZARDS 8
8.0 MEDICAL SURVEILLANCE 8
9.0 DECONTAMINAT ION PLAN 8
10.0 SITE COMMUNICATION PLAN 9
11.0 ACCIDENTS AND EMERGENCIES 9
11.1 Evacuation and Emergency Response 9
11.2 Medical Assistance/Emergency Contacts 10
11.3 Incident Reporting 10
11.4 Emergency Medical Treatment Procedures 10
11.5 Fire or Explosion 10
11.6 Spills and Leaks 10
11.7 Emergency Equipment and Facilities 11
APPENDIX A - Acknowledgement Page 12
APPENDIX B - Attach Site Map 13
APPENDIX C - Attach Material Safety Data Sheets 14
APPENDIX D - Attach directions to hospital 15
APPENDIX E - Guidelines For the Use and Selection of Flotation and Anti-exposure Clothing 16

EMERGENCY INFORMATION

(fill all spaces)

Ambulance 911 or _____
Fire 911 or _____
Police 911 or _____
Local Hospital _____ _____
Department of Environmental Protection (800)482-0777
Poison Control Center (800)442-6305
National Response Center (800)424-8802
U. S. Coast Guard (Search & Rescue) _____
Maine Marine Patrol ME/NH Border of the West Bank of the Kennebec River (800)482-0730
Maine Marine Patrol East Bank of the Kennebec River to the West Bank of the Penobscot River (800)452-4664
Maine Marine Patrol East Bank of the Penobscot River to the Canadian Border (800)432-7381

Site Safety Officer:
Nam e: _____ _____

Contractor:
Nam e: _____ _____
Nam e: _____ _____
Nam e: _____ _____

BRWM Health & Safety Training Coordinator (HSC)
Linda Doran (207)287-2651

1.0 SCOPE AND APPLICABILITY OF THE SSP

The scope of this generic Site Safety Plan (SSP) is to identify, evaluate, and control potential safety and health hazards, as well as provide limited emergency response to accidents during field operations during the initial phase of an oil spill response. A site specific safety plan will be developed during larger spills and when an Incident Command System (ICS) has been established.

Objectives of this SSP include:

1. Identification and evaluation of potential hazards.
2. Definition of levels of protection required for certain work activities.
3. Establishment and implementation of work zones.
4. Evaluation and implementation of worker protective measures.
5. Formation of emergency action plans for Hazardous Waste Operations sites.
6. Ensuring of medical surveillance.
7. Ensuring personnel training.
8. Design and implementation of decontamination procedures.
9. Enforcement of appropriate record keeping.

The personnel covered by this SSP include Bureau of Remediation and Waste Management (BRWM) employees working on a SARA Title I mitigation site as defined by BRWM SOP Classification of Work Sites Paragraph 5.1.2, including marine oil spills. When a site specific safety plan has been developed such as a plan developed within ICS it will replace this generic plan. Other contractors involved with this project may be covered by their own SSPs. This SSP complies with the requirements of the Occupational Safety and Health Administration standards as stated in 29 CFR 1910 with emphasis on subsection 1910.120 (Hazardous Waste Operations and Emergency Response), the applicable portion of CFR 1926 (Safety and Health Regulations for Construction) and any other federal or state statutes or regulations. Amendments to this plan will be made as the contaminant profile information is updated, a change in work status or task is made, or as regulatory requirements dictate. Any changes to the SSP will be brought to the attention of those covered under the plan through additional training by the BRWM Health, Safety, and Training Coordinator.

1.1 Site Background/Description

Any specific background information for this site will be added to theAppendices.

- Complete Acknowledgement page Appendix A
- Attach map to Appendix B
- Attach MSDS to Appendix C
- Attach directions to hospital to Appendix D

1.2 Visitors

Visitors to the site must follow entry/exit procedures as described in section 3, Site Control. To enter the exclusion or contamination reduction zones, all visitors including regulatory personnel must first: show proof of medical surveillance, show proof of 40-hour HAZWOPER training and appropriate refreshers, show proof of clearance to wear a respirator (where appropriate), read and sign the SSP, and use the personal protective equipment required by this plan.

2.0 PERSONNEL

Safety is affected by the actions of all site personnel. Any site safety concerns should be referred to the Site Safety Officer or the BRWM Health and Safety Coordinator, who will also oversee compliance with health and safety regulations by personnel.

The following personnel will be available for consultation at the DEP employee's request:

Office	**Name**	**Phone #**
BRWM HSC	Linda Doran	(207)287-2651
DEP Presque Isle	Frank Wezner	(207)764-0477
DEP Bangor	Nathan Thompson	(207)941-4570
DEP Portland	Sheryl Bernard	(207)822-6300
DEP Augusta	Robert Williams	(207)287-7800

2.1 Site Safety Briefing

Before any work begins, personnel covered under this SSP must attend a safety briefing. This briefing will be presented by the Site Safety Officer. Additional training may occur on a daily basis relative to planned tasks and as events and circumstances arise which require revision of the SSP.

Training topics may include:

- Site characterization
- Chemical and physical hazards present
- Medical surveillance requirements
- Symptoms of overexposure to hazards
- Site control
- Training requirements

DEP personnel must attend this briefing if they need to perform tasks that impact other work on the site.

3.0 SITE CONTROL

Personnel entering or leaving the site must sign-in and sign-out at the entrance with the Site Safety Officer or with logistics if an incident command system has been established. During normal operations, the exclusion or "hot" zone will be designated with a line of hazard tape for shore operations. For off-shore operations, the safety zone will be determined by the U. S. Coast Guard and relayed by a "Broadcast to Mariners". The Zone will be enforced by USCG boats. If upgrade to Level C PPE is required, the contamination reduction zone will be identified with yellow caution tape and the decon area will be designated within this zone. Only authorized personnel who meet the training, medical surveillance, and respiratory requirements may enter these zones. All personnel working in these areas must also read and sign the SSP.

Whenever possible, locate the contamination reduction and support zones upwind from the hot zone. If unable, monitoring should be continual or other provisions made to ensure minimum exposure.

4.0 HEALTH RISK ANALYSIS

Substances that may pose a potential hazard have been determined based on previous sampling results from and general knowledge of the materials on a marine oil spill site.

The chemicals of concern at the site are expected to be petroleum products. Since petroleum products are highly volatile, the primary route of entry into the body is inhalation. Petroleum products are highly flammable. Skin absorption and ingestion may be of concern if handling contaminated debris or handling pure product. Material Safety Data Sheets (MSDSs) shall be attached in Appendix C.

5.0 TASK RISK ANALYSIS

A risk analysis for each field task identified by the SSP, has been conducted.

Tasks include: Inspection for regulatory compliance; Mitigation management; Safety and environmental sampling; Instrument use; Surveying & Mapping; Trenching through contaminated soil; Beach assessment; Small boat operation; Boom deployment; and Skimmer operation.

Hazards include: Exposure to contaminated soil/water/air; Excavating equipment; Exposure to cold water environment; Injury from ropes/cables; and Lifting as well as the usual slips trips and falls.

Protective measures and operating procedures to prevent injury

- Review site safety plan, including any daily revisions to the site safety plan
- Review MSDS, and know ionization potential (IP) of suspected chemicals
- Wear appropriate floatation device, and rubber soled safety boots.
- Wear appropriate chemical protective PPE to prevent direct contact exposure and as dictated by splash potential and vaporization of chemicals (gloves, boots, chemical resistant clothing, and respirators).
- Avoid breathing vapors.
- Remain upwind when possible
- Perform vapor checks with combustible gas indicator and PID. For PID use, use lamp that is above the IP for the suspected chemicals
- Calibrate and check working order of equipment daily before use.
- Review progress at end of shift.
- Observe excavation from a distance of 5 feet or more, and do not enter excavation.
- Work in pairs or small groups
- Observe USCG rules of the road. Boat operator should wear kill switch to ignition when appropriate.
- Keep extremities clear of ropes and cables.
- Wear back support when lifting.

If contamination exists above PELs or STELs as identified by air monitoring instruments, inhalation exposure will be prevented with the use of appropriate respiratory protection.

Precautions will also be taken to avoid hazards such as electrical exposure, mechanical exposure, fire/explosion, noise exposure, and thermal stress.

Levels of petroleum vapors above the action level will result in evacuation from the area to prevent the fire/explosion hazard. Work around excavation equipment or in areas of high noise levels above 84 dBA, will require hearing protection to prevent noise exposure.

5.1 General Safety Precautions

The following general safety rules must be followed by all project personnel:

- Specified use of Flotation and Anti Exposure Clothing as determined by BRWM SOP – Guidance for Selection, Use, and Maintenance of Personal Protective Equipment, will be worn according to the procedure. See Appendix E of this document.

- Avoid unnecessary contact with contaminated, or potentially contaminated surfaces.

- Eating, drinking, chewing gum or tobacco, smoking or any practice that increases the probability of hand-to-mouth transfer and ingestion of material is prohibited in the exclusion and contamination reduction zones.

- Since medicines can increase the effects of toxic chemicals in exposure situations, medicines should not be used by employees working on site. Personnel who must be on medication shall advise their supervisor prior to beginning work on site.

- The use of alcohol or illegal drugs during the work day will not be tolerated. Any employee who exhibits the effects of alcohol or drugs will be removed from the site.

- Hands and face must be thoroughly washed upon leaving the work area and before eating, drinking, performing bathroom functions or other activities.

- If a water source is not available on site, use waterless cleaner and dispose of paper towels in plastic bags.

- Personnel should shower as soon as possible after protective clothing is removed and the activity for the day has ended. Regional offices or other facilities per special arrangement will be available for showering. **Employees should not wait to shower at home.**

5.2 Heat-related Illness

When chemical resistant clothing is worn, body ventilation and evaporation are greatly reduced. Additional breaks will be scheduled for personnel wearing coveralls in hot weather. Employees should be aware of the effects of heat stress, provided with adequate liquids, and instructed to observe each other for signs of heat stress during hot weather.

Signs of heat stress are summarized as follows:

- *Heat exhaustion:* clammy skin, confusion, dizziness, fainting, fatigue, heat rash, light-headedness, nausea, profuse sweating, slurred speech, weak pulse.

- *Heat Stroke:* confusion, convulsion, hot dry skin, high temperature (yet may feel chilled), incoherent speech, staggering gait, cessation of sweating, unconsciousness.

These signs can be distinguished with those associated with chemical hazards which are characterized by behavioral changes, breathing difficulties, changes in complexion or skin color, coordination difficulties, coughing, dizziness, drooling, diarrhea, fatigue and irritability. Pulse rates should also be monitored when working in protective clothing.

5.3 Cold-related Illness

Decreased ventilation and evaporation are also concerns in cold weather as undergarments may become soaked and add to the cold. Employees should be aware of the effects of hypothermia, provided with frequent breaks and instructed to observe each other for signs of hypothermia and frostbite.

Signs of cold stress are summarized as follows:

- *Frostbite:* skin changes to white or grayish-yellow; usually affects nose, ears, cheeks, fingers and toes. Blisters may appear later and affected part feels intensely cold or numb. The victim frequently is not aware of frostbite until a pale glossy skin is observed.

- *Mild hypothermia*: abnormal drowsiness, slurred speech, memory lapses, incoherence, and fumbling hands.

5.4 Confined Space Entry

All confined space entries will be planned as outlined in BRWM SOP for Confined Space Entry. NOTE: Oil & Hazardous Materials Specialist (OHMS) are the only personnel allowed to enter a permit-required confined space.

5.5 Excavation Protection

The excavation contractor will be responsible for providing protection against falling into open holes. All excavation will be enclosed and or covered before the

end of each work shift. MDEP personnel should remain upwind, at least 5 feet from the excavation, have the equipment operator bring soil to the surface and sample from the bucket. Do not ride on a backhoe bucket. *NOTE: Any trench over 4 feet deep is a confined space.*

6.0 TRAINING

DEP personnel working in the exclusion or contamination reduction zones shall be trained pursuant to OSHA 29 CFR 1310.120(e). All workers will have forty hours of training, 24 hours of supervised field experience, annual refreshers, and DEP required training. Documentation of classroom training and alternative training experience must be made available upon entering the site.

7.0 PERSONAL PROTECTION FROM HAZARDS

Personal Protective Equipment(PPE) will be used to minimize potential exposures. Specified safety equipment and protective clothing will be worn in the exclusion zone at all times. PPE to be determined by BRWM SOP's – Guidance for Selection, Use, and Maintenance of Personal Protective equipment, and Site Monitoring.

DEP personnel working on site will be medically approved for site work. Those using respiratory protection will be medically approved for respirator use and be fit-tested annually.

The level of protection provided by PPE selected will be upgraded or downgraded based upon a change in site conditions or later findings. When a significant change occurs, the hazards will be reassessed.

If PID > 750 ppm or LEL > 10 %, evacuate MDEP personnel as specified in Section 11, Emergencies.

8.0 MEDICAL SURVEILLANCE

All MDEP personnel working on the site have had medical surveillance according to BRWM SOP - Respiratory Protection Program, paragraphs 5.2 - 5.2.2.3.

All personnel covered by this SSP must report accidents, injuries, and/or possible exposures to their supervisors as soon as possible. The employee will call for medical support as necessary.

9.0 DECONTAMINATION PLAN

Decontamination (decon) is the removal of contaminants from PPE or site equipment. Decon will be carried out in accordance with BRWM SOP – Decontamination Program.

In an emergency, the primary concern is to prevent loss of life or severe injury. Should immediate medical attention be required to save a life, decon should be delayed until the victim is stabilized. However, if decon can be performed without interfering with first aid or life-saving techniques, or should a worker be contaminated with an extremely toxic or corrosive material that has the potential to cause severe injury or loss of life, decon must be performed immediately. If an emergency due to heat-related illness develops, protective clothing should be removed. During an emergency, provision should also be made for protecting medical personnel and disposing of contaminated clothing and equipment.

10.0 SITE COMMUNICATION PLAN

Successful communication between field teams and contact with personnel in the Support zone is essential. The following system will be used to supplement radio and cell phone communications within the exclusion zone:

Normal verbal communication

	SIGINAL	DEFINITION
Vehicle or boat horn	three blast	evacuate
Hand signal	Hands on top of head	Need assistance
Hand signal	Thumbs up	OK/I am all right/I understand
Hand signal	Thumbs down	No/Negative/I do not understand
Hand signal	Arms waving upright	Send backup support
Hand signal	Grip partner's wrist	Exit area immediately

11.0 ACCIDENTS AND EMERGENCIES

In the event of an exposure, accident, injury or fire, the following general accident and emergency response procedures are to be followed by all personnel working under the SSP.

11.1 Evacuation and Emergency Response

In the event of an emergency, personnel on the scene shall notify the Site Safety Officer as soon as possible. If an evacuation is necessary, three blast of a vehicle horn or boat horn will be sounded. All personnel will evacuate the area to a location established by the Site Safety Officer. These locations will be situated upwind of the exclusion zone and be designated on a daily basis. All locations will be a safe distance from the area where the emergency occurred and will be explained during the initial site safety briefing. Following evacuation, the Site Safety Officer will initiate a head count to ensure that all personnel who entered the site have been accounted for.

11.2 Medical Assistance/Emergency Contacts

The Site Safety Officer will contact Police/Fire/Rescue, as necessary. See the Emergency Information at the beginning of this Appendix for a list of emergency numbers.

11.3 Incident Reporting

Following an accident or incident, a report will be completed by DEP personnel at the scene. Information in the report will include, at minimum, the following:

Name(s) of individuals involved
Name(s) of witnesses
Date and time
Exact location
Description of incident
Type of exposure or nature of injury
Nature of emergency response
Corrective measure taken to prevent repeat of the incident

All incident reports will be filed with the HSC.

In the event of a hazardous materials spill or chemical release the Site Safety Officer will make appropriate notifications.

11.4 Emergency Medical Treatment Procedures

Any individual who becomes ill or injured while working within the exclusion zone must be decontaminated to the maximum extent possible. Injured or ill personnel must be transported by ambulance to a medical facility. MDEP personnel should not transport ill/injured employees in a personal vehicle unless the illness/injury is minor or no other help is available.

11.5 Fire or Explosion

In the event of fire or explosion, the Fire Department and the Site Safety Officer must be notified immediately. Fire extinguishers may then be used for small incipient stage fires. **OTHERWISE EVACUATE!**

11.6 Spills and Leaks

Personnel will report any spills or leaks to the Site Safety Officer. Should a spill or leak occur that is a threat to human health or a release to the environment, the person observing the spill will:

Evacuate or request evacuation of all persons at risk
Inform the Site Safety Officer

11.7 Emergency Equipment and Facilities

The following equipment will be available:

First aid kit
Fire extinguisher
Fire blanket
Emergency Flares
Life ring

APPENDIX A - ACKNOWLEDGMENT PAGE

Location:_____

I have read and understood the Site Safety Plan. I agree to abide by these safety rules and understand that any violation will result in my removal from the site. I have also completed the required 40-hour training, appropriate refreshers, and am medically approved for hazardous waste site work.

Name:	Date:

APPENDIX B - ATTACH SITE MAP

APPENDIX C - ATTACH MATERIAL SAFETY DATA SHEETS

APPENDIX D - ATTACH DIRECTIONS TO HOSPITAL

APPENDIX E - GUIDELINES FOR THE USE AND SELECTION OF FLOTATION AND ANTI-EXPOSURE CLOTHING

Definitions

A **Personal Floatation Device** (PFD) is a buoyant device designed to keep a person afloat in water.

Anti-exposure Coveralls are US Coast Guard approved Special Use Class V Personal Floatation Device coveralls made of urethane coated nylon external fabric covering a closed-cell foam interlining to provide thermal protection.

Hypothermia is a medical condition where the body core temperature falls below the normal range of 95 – 98 degrees F. Hypothermia affects the body core – the brain, heart, lungs, and other vital organs. Even mild hypothermia may affect the individuals physical and mental abilities. Severe hypothermia may result in loss of consciousness and even death.

Heat Stress, Hypothermia, is a medical condition where the body becomes overheated. Severe heat stress can lead to heat exhaustion, eventually heat stroke, and death.

Policy

It shall be the policy of the bureau that all staff use approved flotation devices while in any boat, vessel, or when working where drowning or hypothermia may be a hazard except when traveling on a commercial vessel such as a ferry.

Instruction

1. A Class III/Class V USG approved PFD will be worn whenever any bureau staff is working or traveling in or on a boat, vessel or worksite where there is a real or potential risk of falling into the water where one could drown. Exceptions can only be made to this policy for commercial travel or where another risk such as heat stress presents an immediate more severe risk to the bureau member's health or safety. This exception can only be made by the senior qualified person on site after alternate procedures have been put into place (i.e. lifelines, lifeguard, etc.) to protect the staff member from drowning or falling into the water.

2. The use of anti exposure coveralls is required:

    a. when working or traveling in a boat or vessel when the water temperature is 50 degrees F (10 degrees C) or less; or when the combined water/air temperature is less than 120 degrees F (49 degrees C) except as noted in 1 above.

b. when working/traveling over ice less than 1.5 X the "safe" thickness under the conditions illustrated in the table below.

Blue Ice Thickness (inches)	Will Support
2	One person
3	Small group –walking single file
7.5	Car
8	Light truck

Caution!!! One must never assume that white ice or ice that has visible degradation can support the same weight as blue ice.

c. when performing dockside or shoreline operations only where there is an imminent hazard of falling into the water (i.e.) working on a dock in poor condition during a cleanup operation.

The most qualified person on site may provide an exception to the use of Anti-exposure coveralls as noted in 1 where the threat of heat stress exceeds the threat of hypothermia. (Alternate PFD still required.) Considerations include:

- Scope of work (consider - boat stability and work being performed)
- Location of work (consider - rescuer's line of sight)
- Distance to shore or rescue (consider – using rescue ring with buoy line or harness with life line)
- Rescue time (consider – distance to assistance and/or place of warming)
- Weather conditions (consider – sea state and wind chill index)

3. A full emersion suit (Gumby suit) must be available for all operations in a boat or vessel operated in ocean waters or waters below 50 degrees F (10 degrees C) where rescue or movement to a place of warming, in the event of the boat or vessel becoming incapacitated through sinking or overturning, may be delayed more than 15 minutes.

4. Staff whose tasks may require them to work in conditions requiring the use of PFDs must be trained annually in this guidance and demonstrate annually to their Regional Safety and Training Coordinator their ability to don, doff, and care for any PFD they may be required to use.

APPENDIX IV

SCENARIOS

TABLE OF CONTENTS

Scenario #	Location	Spill Size
1	Portsmouth/Kittery	100,000 gallons
2	Portsmouth/Kittery	1 to 13 million gallons
3	Portland/Casco Bay	100,000 gallons
4	Portland/Casco Bay	1 to 30 million gallons
5	Penobscot River/Bay	100,000 gallons
6	Penobscot River/Bay	1 to 11 million gallons
7	St John, New Brunswick	100,000 gallons
8	St John, New Brunswick	1 to 90 million gallons
9	Eastport	100,000 gallons
10	Other than major port	30,000 gallons

SCENARIO # 1

LOCATION	Portsmouth/Kittery	
SPILL SIZE	100,000 gallons	
NOTIFICATIONS BY DEP	Department of Inland Fisheries and Wildlife Department of Marine Resources Maine Emergency Management Agency New Hampshire Department of Environmental Services U.S. Coast Guard Local Officials	
ROLES	Spiller; Direct response effort. Department of Environmental Protection; Observe response effort of spiller and assist as necessary. New Hampshire Department of Environmental Services; If spill originates in New Hampshire, will direct clean-up. Otherwise, will assist as necessary. Department of Inland Fisheries & Wildlife; Direct wildlife hazing and rehabilitation activities. Assist in determining resource protection priorities. Assess damage to natural resources. Department of Marine Resources; Assist in determining resource protection priorities. Assess damage to natural resources. Initiate fishery closure(s) if warranted. U.S. Coast Guard; Evaluate, monitor and/or supervise response effort and assist as necessary	
RESPONDERS	Local contractor(s) Local cooperative(s) Department of Environmental Protection New Hampshire Department of Environmental Services	
MITIGATION	Favorable Conditions 1. Prioritize and protect sensitive areas. 2. Evaluate resources and options available for clean-up (i.e., mechanical, burning, dispersants, etc.). 3. Begin wildlife rehabilitation, if necessary	Adverse Conditions 1. Plan for deployment of resources as conditions permit. 2. Monitor travel of slick in order to be prepared if conditions improve. 3. Begin wildlife rehabilitation, if necessary

SCENARIO # 2

LOCATION	Portsmouth/Kittery	
SPILL SIZE	1 to 13 million gallons	
NOTIFICATIONS BY DEP	Governor's Office Department of Human Services Department of Inland Fisheries and Wildlife Department of Marine Resources Maine Emergency Management Agency Maine State Police New Hampshire Department of Environmental Services Department of the Interior Environmental Protection Agency National Oceanic and Atmospheric Administration U.S. Coast Guard Local Officials	
ROLES	Spiller; Direct response effort. Department of Environmental Protection; Observe response effort of spiller and assist as necessary. New Hampshire Department of Environmental Services; If spill originates in New Hampshire, will direct clean-up. Otherwise, will assist as necessary. Department of Inland Fisheries & Wildlife; Direct wildlife hazing and rehabilitation activities. Assist in determining resource protection priorities. Assess damage to natural resources. Department of Marine Resources; Assist in determining resource protection priorities. Assess damage to natural resources. Initiate fishery closure(s) if warranted. U.S. Coast Guard; Evaluate, monitor and/or supervise response effort and assist as necessary	
RESPONDERS	Local contractor(s) Local cooperative(s) National response organization(s) Department of Environmental Protection New Hampshire Department of Environmental Services U.S. Coast Guard Strike Team Trained volunteers	
MITIGATION	Favorable Conditions 1. Prioritize and protect sensitive areas. 2. Evaluate resources and options available for clean-up (i.e., mechanical, burning, dispersants, etc.). 3. Begin wildlife rehabilitation, if necessary. 4. Train additional clean-up crews.	Adverse Conditions 1. Plan for deployment of resources as conditions permit. 2. Monitor travel of slick in order to be prepared if conditions improve. 3. Begin wildlife rehabilitation, if necessary.

SCENARIO # 3

LOCATION	Portland/Casco Bay	
SPILL SIZE	100,000 gallons	
NOTIFICATIONS BY DEP	Department of Inland Fisheries and Wildlife Department of Marine Resources Maine Emergency Management Agency U.S. Coast Guard Local Officials	
ROLES	Spiller; Direct response effort. Department of Environmental Protection; Evaluate and supervise response effort of spiller and assist as necessary. Department of Inland Fisheries & Wildlife; Direct wildlife hazing and rehabilitation activities. Assist in determining resource protection priorities. Assess damage to natural resources. Department of Marine Resources; Assist in determining resource protection priorities. Assess damage to natural resources. Initiate fishery closure(s) if warranted. U.S. Coast Guard; Evaluate, monitor and/or supervise response effort and assist as necessary.	
RESPONDERS	Local contractor(s) Local cooperative(s) Department of Environmental Protection	
MITIGATION	Favorable Conditions 1. Prioritize and protect sensitive areas. 2. Evaluate resources and options available for clean-up (i.e., mechanical, burning, dispersants, etc.). 3. Begin wildlife rehabilitation, if necessary	Adverse Conditions 1. Prioritize and protect sensitive areas. 2. Evaluate resources and options available for clean-up (i.e., mechanical, burning, dispersants, etc.). 3. Begin wildlife rehabilitation, if necessary

SCENARIO # 4

LOCATION	Portland/Casco Bay	
SPILL SIZE	1 to 30 million gallons	
NOTIFICATIONS BY DEP	Governor's Office Department of Human Services Department of Inland Fisheries and Wildlife Department of Marine Resources Maine Emergency Management Agency Maine State Police Department of the Interior Environmental Protection Agency National Oceanic and Atmospheric Administration U.S. Coast Guard Local Officials	
ROLES	Spiller; - Direct response effort. Department of Environmental Protection; - Evaluate and supervise response effort of spiller and assist as necessary. Department of Inland Fisheries & Wildlife; Direct wildlife hazing and rehabilitation activities. Assist in determining resource protection priorities. Assess damage to natural resources. Department of Marine Resources; Assist in determining resource protection priorities. Assess damage to natural resources. Initiate fishery closure(s) if warranted. U.S. Coast Guard; Evaluate, monitor and/or supervise response effort and assist as necessary	
RESPONDERS	Local contractor(s) Local cooperative(s) National response organization(s) Department of Environmental Protection U.S. Coast Guard Strike Team Trained volunteers	
MITIGATION	Favorable Conditions 1. Prioritize and protect sensitive areas. 2. Evaluate resources and options available for clean-up (i.e., mechanical, burning, dispersants, etc.). 3. Begin wildlife rehabilitation, if necessary. 4. Train additional clean-up crews	Adverse Conditions 1. Plan for deployment of resources as conditions permit. 2. Monitor travel of slick in order to be prepared if conditions improve. 3. Begin wildlife rehabilitation, if necessary

SCENARIO # 5

LOCATION	Penobscot River/Bay	
SPILL SIZE	100,000 gallons	
NOTIFICATIONS BY DEP	Department of Inland Fisheries and Wildlife Department of Marine Resources Maine Emergency Management Agency U.S. Coast Guard Local Officials	
ROLES	Spiller; Direct response effort. Department of Environmental Protection; Evaluate and supervise response effort of spiller and assist as necessary. Department of Inland Fisheries & Wildlife; Direct wildlife hazing and rehabilitation activities. Assist in determining resource protection priorities. Assess damage to natural resources. Department of Marine Resources; Assist in determining resource protection priorities. Assess damage to natural resources. Initiate fishery closure(s) if warranted. U.S. Coast Guard; Evaluate, monitor and/or supervise response effort and assist as necessary	
RESPONDERS	Local contractor(s) Local cooperative(s) Department of Environmental Protection	
MITIGATION	Favorable Conditions 1. Prioritize and protect sensitive areas. 2. Evaluate resources and options available for clean-up (i.e., mechanical, burning, dispersants, etc.). 3. Begin wildlife rehabilitation, if necessary	Adverse Conditions 1. Plan for deployment of resources as conditions permit 2. Monitor travel of slick in order to be prepared if conditions improve. 3. Begin wildlife rehabilitation, if necessary.

SCENARIO # 6

LOCATION	Penobscot River/Bay	
SPILL SIZE	1 to 11 million gallons	
NOTIFICATIONS BY DEP	Governor's Office Department of Human Services Department of Inland Fisheries and Wildlife Department of Marine Resources Maine Emergency Management Agency Maine State Police Department of the Interior Environmental Protection Agency National Oceanic and Atmospheric Administration U.S. Coast Guard Local Officials	
ROLES	Spiller; Direct response effort. Department of Environmental Protection; Evaluate and supervise response effort of spiller and assist as necessary. Department of Inland Fisheries & Wildlife; Direct wildlife hazing and rehabilitation activities. Assist in determining resource protection priorities. Assess damage to natural resources. Department of Marine Resources; Assist in determining resource protection priorities. Assess damage to natural resources. Initiate fishery closure(s) if warranted. U.S. Coast Guard; Evaluate, monitor and/or supervise response effort and assist as necessary	
RESPONDERS	Local contractor(s) Local cooperative(s) National response organization(s) Department of Environmental Protection U.S. Coast Guard Strike Team Trained volunteers	
MITIGATION	Favorable Conditions 1. Prioritize and protect sensitive areas. 2. Evaluate resources and options available for clean-up (i.e., mechanical, burning, dispersants, etc.). 3. Begin wildlife rehabilitation, if necessary. 4. Train additional clean-up crews	Adverse Conditions 1. Prioritize and protect sensitive areas. 2. Evaluate resources and options available for clean-up (i.e., mechanical, burning, dispersants, etc.). 3. Begin wildlife rehabilitation, if necessary. 4. Train additional clean-up crews

SCENARIO # 7

LOCATION	St John, New Brunswick	
SPILL SIZE	100,000 gallons	
NOTIFICATIONS BY DEP	Department of Inland Fisheries and Wildlife Department of Marine Resources Maine Emergency Management Agency U.S. Coast Guard Local Officials	
ROLES	Spiller; Direct response effort. Canadian Officials; Evaluate and supervise response effort of spiller and assist as necessary. If spill threatens the Maine coast: Maine Department of Environmental Protection; Evaluate and supervise response effort of spiller and assist as necessary. Department of Inland Fisheries & Wildlife; Direct wildlife hazing and rehabilitation activities. Assist in determining resource protection priorities. Assess damage to natural resources. Department of Marine Resources; Assist in determining resource protection priorities. Assess damage to natural resources. Initiate fishery closure(s) if warranted. U.S. Coast Guard; Evaluate, monitor and/or supervise response effort and assist as necessary	
RESPONDERS	Local contractor(s) Local cooperative(s) Canadian officials If spill threatens the Maine coast: Local Maine contractor(s) Local Maine cooperative(s) Department of Environmental Protection	
MITIGATION	Favorable Conditions 1. If spill threatens the Maine coast: 1. Prioritize and protect sensitive areas. 2. Evaluate resources and options available for clean-up (i.e., mechanical, burning, dispersants, etc.). 3. Begin wildlife rehabilitation, if necessary	Adverse Conditions 1. Plan for deployment of resources as conditions permit. 2. Monitor travel of slick in order to be prepared if conditions improve. 3. Begin wildlife rehabilitation, if necessary

SCENARIO # 8

LOCATION	St John, New Brunswick	
SPILL SIZE	1 to 90 million gallons	
NOTIFICATIONS BY DEP	Governor's Office Department of Human Services Department of Inland Fisheries and Wildlife Department of Marine Resources Maine Emergency Management Agency Maine State Police Department of the Interior Environmental Protection Agency National Oceanic and Atmospheric Administration U.S. Coast Guard Local Officials	
ROLES	Spiller; Direct response effort. Canadian Officials; Evaluate and supervise response effort of spiller and assist as necessary. If spill threatens the Maine coast: Maine Department of Environmental Protection; Evaluate and supervise response effort of spiller and assist as necessary. Department of Inland Fisheries & Wildlife; Direct wildlife hazing and rehabilitation activities. Assist in determining resource protection priorities. Assess damage to natural resources. Department of Marine Resources; Assist in determining resource protection priorities. Assess damage to natural resources. Initiate fishery closure(s) if warranted. U.S. Coast Guard; Evaluate, monitor and/or supervise response effort and assist as necessary	
RESPONDERS	Local contractor(s) Local cooperative(s) Canadian officials If spill threatens the Maine coast: National response organization(s) Maine Department of Environmental Protection U.S. Coast Guard Strike Team Trained volunteers	
MITIGATION	Favorable Conditions 1. If spill threatens the Maine coast: 1. Prioritize and protect sensitive areas. 2. Evaluate resources and options available for clean-up (i.e., mechanical, burning, dispersants, etc.). 3. Begin wildlife rehabilitation, if necessary. 4. Train additional clean-up crews., if necessary	Adverse Conditions 1. Plan for deployment of resources as conditions permit. 2. Monitor travel of slick in order to be prepared if conditions improve. 3. Begin wildlife rehabilitation, if necessary., if necessary

SCENARIO # 9

LOCATION	Eastport	
SPILL SIZE	100,000 gallons	
NOTIFICATIONS BY DEP	Department of Inland Fisheries and Wildlife Department of Marine Resources Maine Emergency Management Agency U.S. Coast Guard Local Officials Canadian Officials	
ROLES	Spiller; Direct response effort. Department of Environmental Protection; Evaluate and supervise response effort of spiller and assist as necessary. Department of Inland Fisheries & Wildlife; Direct wildlife hazing and rehabilitation activities. Assist in determining resource protection priorities. Assess damage to natural resources. Department of Marine Resources; Assist in determining resource protection priorities. Assess damage to natural resources. Initiate fishery closure(s) if warranted. U.S. Coast Guard; Evaluate, monitor and/or supervise response effort and assist as necessary. Canadian Officials; Assist as necessary.	
RESPONDERS	Local contractor(s) Local cooperative(s) Department of Environmental Protection	
MITIGATION	Favorable Conditions 1. Prioritize and protect sensitive areas. 2. Evaluate resources and options available for clean-up (i.e., mechanical, burning, dispersants, etc.). 3. Begin wildlife rehabilitation, if necessary	Adverse Conditions 1. Plan for deployment of resources as conditions permit. 2. Monitor travel of slick in order to be prepared if conditions improve. 3. Begin wildlife rehabilitation, if necessary.

SCENARIO # 10

LOCATION	Other than major port	
SPILL SIZE	30,000 gallons	
NOTIFICATIONS BY DEP	Department of Inland Fisheries and Wildlife Department of Marine Resources Maine Emergency Management Agency U.S. Coast Guard Local Officials	
ROLES	Spiller; Direct response effort. Department of Environmental Protection; Evaluate and supervise response effort of spiller and assist as necessary. Department of Inland Fisheries & Wildlife; Direct wildlife hazing and rehabilitation activities. Assist in determining resource protection priorities. Assess damage to natural resources. Department of Marine Resources; Assist in determining resource protection priorities. Assess damage to natural resources. Initiate fishery closure(s) if warranted. U.S. Coast Guard; Evaluate, monitor and/or supervise response effort and assist as necessary.	
RESPONDERS	Local contractor(s) Local cooperative(s) Department of Environmental Protection	
MITIGATION	Favorable Conditions 1. Prioritize and protect sensitive areas. 2. Evaluate resources and options available for clean-up (i.e., mechanical, burning, dispersants, etc.). 3. Begin wildlife rehabilitation, if necessary.	Adverse Conditions 1. Plan for deployment of resources as conditions permit. 2. Monitor travel of slick in order to be prepared if conditions improve. 3. Begin wildlife rehabilitation, if necessary.

APPENDIX V

GASOLINE SPILL RESPONSE

GENERAL

Gasoline is the second highest volume petroleum product (the first highest is crude oil) transported into Maine ports. The nature of a gasoline spill response is extremely diverse in comparison to a response to a spill of oil. A discharge of gasoline will present responders with different challenges and response options than a response to another type of product. This section will outline considerations that must be addressed for all gasoline releases.

In the case of a gasoline spill the foremost priority will be the safety of the public and responders. The second priority is the protection of the environment. A gasoline spill can be very dangerous and both responders and the general public need to be aware of how hazardous a situation this may be. Maine has many areas that are environmentally sensitive. During a spill, these areas need to be protected from the gasoline, but after safety of life has been protected.

SAFETY OF LIFE AND HEALTH

The Site Safety Officer (SSO) must be established prior to any response operations involving gasoline spills. The SSO is responsible for ensuring the safety of the public as well as the responders. The SSO reports to the Oil Spill Coordinator (OSC) or Incident Commander (IC).

SITE CONTROL

Public safety will have priority over environmental protection in the strategic response and deployment of resources. The spill area must be isolated. Ignition sources must be removed, secured or protected.

A decision must be made to either evacuate the public, or keep the public indoors. Roads will be closed by local policy and bridges by USCG 1st District. Local emergency personnel would conduct public evacuation. The Captain of the Port will establish safety zones in navigable waters and/or close port.

Air monitoring, area and personal, will be performed prior to site entry as well as periodically during the incident, to assure site personnel are not over-exposed to hazardous substances. Instruments that may be utilized include combustible gas indicators (CGI's), portable gas chromatographs (GC's), photo-ionization detectors (PIDs), detector tubes, organic vapor monitors (OVMs), personal air sampling pumps, personal air monitoring badges and tubes, and radiation detectors.

A hazard analysis shall include but not be limited to: ppm levels, lower explosive limits, benzene levels, and fire/explosion hazards. The exposure route may include: Inhalation, absorption, ingestion, and eye contact

At site, personnel shall stay up wind and keep out of low areas. Cold weather will slow the rate of evaporation.

Gasoline:

LEL - 14,000 ppm or 1.4 % (evacuate at 10% of the LEL)
UEL - 76,000 ppm or 7.6 %
OSHA PEL – no longer enforceable, but was TWA 300 ppm
Odor threshold - 5 ppm

Benzene, a component of gasoline, is a clear, colorless, highly flammable liquid with an odor threshold between 1.5 and 119 ppm. Inhalation exposure can cause acute symptoms such as fatigue, dizziness, dryness of the mouth, headache, nausea, stagger and shortness of breath, and irritation to eye, nose, and throat.

Odor description:	Aromatic sweet odor
Ionization potential:	9.24 eV
Odor threshold:	119 ppm
Action level: 0.5	ppm
OSHA PEL/TWA:	1 ppm
OSHA STEL: 5	ppm
OSHA IDLH limit:	500 ppm

Most MSDS for gasoline recommend the following PPE:

- Splash proof or dust resistant goggles
- Impervious gloves (Use of barrier cream recommended)
- Respirator protection would be determined by air monitoring
- Coveralls or other protective clothing (i.e., exposure suits in winter etc.)

The exact PPE shall be determined by considering the following:

- Is there splash potential?
- Is the concentration of gasoline in air above the action level?
- Is there potential for high levels of vapor in certain work areas or performing certain tasks?
- Is there potential for falls from heights or into a body of water?

PPE shall be reviewed upgraded or downgrading when the degree of hazard or tasks change, whenever additional hazards are identified, or when symptoms occur from inhaling gasoline vapors.

POLLUTION RESPONSE

The evolution of action during a gasoline spill incident response should follow five basic steps. The steps are Discovery and Notification, Preliminary Assessment, Development of Incident Objectives, Containment and Control, and Conclusion. These steps have been assigned to separate sections for this document. Each of these steps needs to be addressed and each step will need to be tailored to the specific incident.

Discovery and Notification- This step involves the identification of gasoline, the associated hazards, and the degree of hazard. The reporting agency or person will normally conduct this initial step. THIS STEP DOES NOT INCLUDE RECONNAISSANCE. Recognition should be general in nature and include the nature of the incident (e.g., overturned rail car in a river) and that gasoline is involved (e.g., placard UN# 1203). Once on-scene, the OSC shall identify what hazards may exist (e.g., Physical hazard of the tank, chemical hazards of gasoline, evacuation call). The OSC shall establish a "Hot Zone," ensure all required agencies and persons are notified, and designate the personnel or agency to make the initial site recognizance and the level of PPE for those responders.

Preliminary Assessment, or Evaluation - This step includes assessing the risks that the situation poses to the public, response personnel, and the environment. This is the step in which initial entry or approach to the site occurs. Response personnel will use analytical techniques to determine the level of contamination and identify the existence of any hazards. The Scientific Support Team will use the information gathered by on-site personnel to identify the level of risk to the public, responders, and the environment. The OSC will re-evaluate the evacuation policy and set PPE limits for all responders.

Reconnaissance of the spill shall include: source of the spill, the extent of the area affected by the spill, and the amount spilled. Personnel tasked with reconnaissance shall be provided the proper air monitoring equipment and have been properly trained to utilize the equipment.

Development of Incident Objectives and/or an Incident Action Plan– This step includes identifying methods to reduce or eliminate the hazard. This step will be conducted by the Incident Commander or the Oil Spill Coordinator as described in Section 7.3 of the plan.

Containment and Control, or Remediation - In reality, this step and the Evaluation step could happen simultaneously or in reverse order. This step is the physical work of shoring, diking, berming, adsorption of material, stabilization of physical hazards, preventive hazing of wildlife, etc. Public safety will have priority over environmental protection in the strategic response and deployment of resources.

Remediation is the long term clean up of a site and may involve such activities as soil removal, dredging, and ground water clean up or other long-term projects. The OSC will

ensure the site has been properly cleaned up and taken over by a remediation agency or contractor

The DEP's policy is to not implement containment booming of a gasoline discharge. (An exception would be the containment booming of debris associated with the spill - degraded Styrofoam from floating docks, etc.) Containment booming will increase the concentration of vapors and increase the probability of creating an explosive atmosphere. However, it may be considered in some circumstances as determined by the OSC.

In open water, allow product to spread out and explosive vapors evaporate. Booming shall be limited to preventing product from drifting under piers, protect water intakes and divert from the public and sensitive areas. Materials contaminated by spill (i.e. foam flotation) shall be sent out for analysis to be determined if it needs to be treated as a hazardous material.

Strategies most commonly implemented include:

- Continuous air monitoring.
- Evacuation/access restriction - A decision must be made to either evacuate the public, or keep the public indoors.
- Isolation - People and ignition sources must be kept away from the spill.
- Dispersing - using water from fire hoses to push gasoline away from the shore.
- Suppression - applying AFFF on to gasoline to suppress the vapors.
- Exclusion/protection booming - To protect water intakes, ignition sources, prevent gasoline from drifting under docks and to implement geographic response plans that protect environmentally sensitive areas
- Evaporation - Allowing gasoline to evaporate so explosive vapors dissipate and the slick naturally disperses and degrades..
- Containment booming - not the policy of the MDEP, however, it may be considered in some circumstances as determined by the OSC.
- Monitoring of the harbor for slicks
- Monitoring of wharf areas to locate areas of pooling
- Staying in advance of spill - evacuate/remove equipment/protect (as determined) possible down wind hazard areas

In cold weather ice conditions, where gasoline is trapped beneath ice, possible methods:

- Collect contaminated ice for proper handling and disposal.
- Break up ice and allow evaporation.

Conclusion - Once the OSC has decided that the site is as clean as reasonably possible, that a hazard no longer exists, or that a proper remediation is under way, they will conclude the incident, ensure the proper funding and legal documentation is completed, and debrief the responders.

THANKS TO THE MAINE AND NEW HAMPSHIRE AREA COMMITTEE FOR COMPILATION OF THIS APPENDIX BASED ON INFORMATION FROM THE GASOLINE RESPONSE SPRING SEMINAR 2000.

APPENDIX VI

IN SITU BURNING, CHECKLIST, DECISION TREE AND MEMORANDUM OF UNDERSTANDING

IN-SITU BURN DECISION VERIFICATION CHECKLIST

The following checklist, created with input from the Region I RRT, provides a summary of important information to be considered by the Unified Command (consisting of the Federal On-Scene Coordinator (OSC), State On-Scene Coordinator (SOSC), and responsible party representative (RP)) when planning for the use of in-situ burning to respond to an oil spill in Region I that requires federal assistance. This checklist is intended to serve as Unified Command's verification and documentation of an in-situ burning decision, rather than as an information distribution sheet or an approval form.

Each section of the checklist provides a series of "limiting factors" questions for each of the decision points on the Region I In-Situ Burning Decision Flowchart. Some sections also contain a "worksheet" for important information that may be necessary to answer limiting factor questions; the user is encouraged to attach forms that contain this information, if available. The final section of the plan should be completed (in addition to the rest of the checklist) only for burns at the shoreline, in marshes, or on land.

Questions in the limiting factors section that are answered with a "Yes/Optimal" support the decision to conduct an in-situ burn. However, spill response involves numerous tradeoffs, and any less-than-ideal conditions that are represented by a "No/Sub-Optimal" answer may be balanced by other benefits of in-situ burning in a given situation. Not every question of the worksheet must be answered. It is acceptable for the Unified Command to make a decision based on incomplete information, provided the information gaps are understood and considered.

IN-SITU BURN DECISION:

Fields may be left blank, limiting factors do not preclude burning.

Federal On-Scene Coordinator Decision:	__ Approve	Signature: _____
State On-Scene Coordinator Decision:	__ Concur	Signature: _____
Responsible Party Decision:	__ Concur	Signature: _____
Fire Official Decision: *	__ Concur	Signature: _____

* In Zone C and where elsewhere applicable. Under Region I MOU, additional consultation or concurrence is required in Zone C and in SCAs. Note additional concurrence/consultation per state matrices and SCAs.

Agency/Contact	Concurrence/consultation	Time/Date	Method (verbal, written)
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Recommendation by checklist preparers:

Points of Contact for checklist:	Name	Position	Telephone
Federal			
State:			
Responsible Party:			
Scientific team:			
Other:			
Other:			

Common Section (All Burns)

INCIDENT INFORMATION

Incident Name	
Current date/time	
Anticipated burn date/time	
Location of spill (descriptive)	
Location of burn (descriptive)	

SPILL LOCATION/TRAJECTORY (Resource for section: Scientific Support Team)

Trajectory (Graphic Attached)	__Yes __ No
-or- Text:	
Overflight Map (Graphic Attached)	__Yes __ No
-or- Text:	

Resource for section: Scientific Support Team:

OIL BURNABILITY	Optimal Condition Yes or Probable	Sub-Optimal Condition No or Unlikely	Comments
Anticipate oil to remain ignitable (fresh, not highly emulsified)?			
Attachments/Additional Information:			

Resource for section: Scientific Support Team:

WEATHER/SEA CONDITIONS	Optimal Condition Yes or Probable	Sub-Optimal Condition No or Unlikely	Comments
Weather forecast precipitation-free (affects ignition)?			
Winds/forecast winds less than 25 knots?			
Visibility sufficient for burn operations/observations (greater than 500 feet vertical, 1/2 mile horizontal)?			
Wave heights/predicted wave heights less than 2-3 feet?			
Attachments/Additional Information:			

Resource for section: Requesting Party:

OPERATIONAL FEASIBILITY	Optimal Condition Yes or Probable	Sub-Optimal Condition No or Unlikely	Comments
Is an operational plan written or in process? (if available, attach)			
Is needed air support available?			
Are personnel properly trained, equipped with safety gear, and covered by a site safety plan?			
Are all necessary communications possible (i.e. between aircraft, vessels, and control base in an open water burn)?			
Can all necessary equipment be mobilized during window of opportunity?			
If present, are ice and debris factored into plan?			
Can undesirable secondary fires be avoided?			
Can burn be safely extinguished or controlled?			
Can aircraft pilots/mariners be adequately notified, as necessary?			

Resource for section: Requesting Party:

OPERATIONAL FEASIBILITY	Optimal Condition Yes or Probable	Sub-Optimal Condition No or Unlikely	Comments
Is equipment and personnel available for residue recovery?			
If ignition from a helicopter, FAA approved equipment?			
Attachments/Additional Information:			

Operational worksheet:

Product Type: _____

Easily emulsified? _____

Volume of product released: _____

Volume to be burned: _____

Estimated burn duration: _____

Burn method (at source, containment and towing to safe distance, onshore ignition): _____

Resource for section: OSC/SOSC staff in consultation with meteorologists/modelers as appropriate:

HUMAN AND ENVIRONMENTAL IMPACTS	Optimal Condition Yes or Probable	Sub-Optimal Condition No or Unlikely	Comments
Public exposure to PM-10 (particulates <10µm) not expected to exceed 150 $\mu g/m^3$ averaged over 1 hour as a result of burn? (current NRT planning guideline)			
Can burning be conduced at a safe distance from other response operations, and public, recreational, and commercial activities?			
Is particulate (hour-averaged PM-10) monitoring available if plume may cross over populated areas?			
Can public be adequately notified of burn?			
Is burn outside of identified Special Consideration Areas? (if no, additional restriction or permission exists inside area)			
Trustees consulted if endangered species in immediate burn area?			
Attachments/Additional Information:			

Public Health/Plume Worksheet:

Distance/direction to nearest population relative to burn: _____ miles to the ____ (direction)
Distance/direction to nearest downwind population: _____ miles to the ____ (direction)
Forecast wind direction/speed (24 hour): _____ mph from the _____ (direction)
Forecast wind direction/speed (48 hour): _____ mph from the _____ (direction)
Estimated plume trajectory (text or attached graphic):

Visibility comments and forecast: _____
Other comments/issues: _____
_____
_____
_____
_____

Resource for section: OSC representative:

DECISION TO INITIATE ISB (CONSULTATIONS/CONCURRENCE)	Yes	No	Comments
Have MOU Zones been reviewed and zone of burn location determined (A, B, C, Special Consideration Area)?			
Are consultations/concurrence called for by zone complete or in process? (Zone A=OSC, B=OSC/SOSC, C=OSC/SOSC/ Trustee consultation and others required by state (i.e. fire official), Special Consideration Areas=specific requirement)			
Has SOSC received concurrence from or consulted/notified any additional agencies, if required by the state for *in-situ* burning?			
Have adjacent state(s) SOSC(s) concurred (land within 6 miles of burn) or been consulted (no land within 6 miles, but interested in decision)?			
If applicable, are other boundary concerns pre-planned/resolved by consultation/concurrence (Canadian, Region II, tribal)?			
Is oil to be lit only with ignition source (i.e. helotorch), without the use of a burning agent to improve combustibility of oil?			
Only if no: Concurrence of State RRT representative?			
Concurrence of EPA RRT representative?			
Consultation with natural resource trustees?			
Notifications planned as described in MOU (EPA, DOI,			

Resource for section: OSC representative:

DECISION TO INITIATE ISB (CONSULTATIONS/CONCURRENCE)	Yes	No Co	mments
NOAA, State(s))?			
Attachments/Additional Information:			

Inshore Burn Section (Complete this section only for inshore burns):

Resource for section: Scientific Support Team:

ENVIRONMENTAL IMPACTS	Optimal Conditio n Yes or Probable	Sub-Optimal Condition No or Unlikely	Comments
Does season or water/ice level minimize damage to oiled area (i.e. dormant plants and/or flooded root systems)?			
Does information in worksheet below and additional information available indicate that proposed inshore burn will result in net environmental benefits when compared to other alternative response countermeasures or no action?			

Resource for section: SOSC representative:

DECISION TO INITIATE ISB (CONSULTATIONS/CONCURRENCE)	Yes	No	Comments
Does fire official concur with decision to burn (per state requirements)			
Local Air Quality Personnel consulted/concur on decision to burn? (Consult SOSC for particular state requirements)			
Landowner consulted on decision to burn?			

In-shore Environmental Worksheet:

Oil Thickness:

_____

Habitat/Substrate Type (e.g. salt marsh) and dominant Plant Species:

_____

_____

Description and size of Area to be Burned (include location of proposed burn with respect to spill source, an attached sketch, survey or picture of area is helpful):

_____

_____

Environmental Concerns and Recommendations, (include environmental trade-offs, water depth, past management practices, weather factors, presence of wildlife, alternate or additional clean-up methods):

_____

_____

_____

Environmental Review Personnel (names and numbers):

_____

_____

Description of Operations (include how the fire will be contained, controlled and ignited):

_____

_____

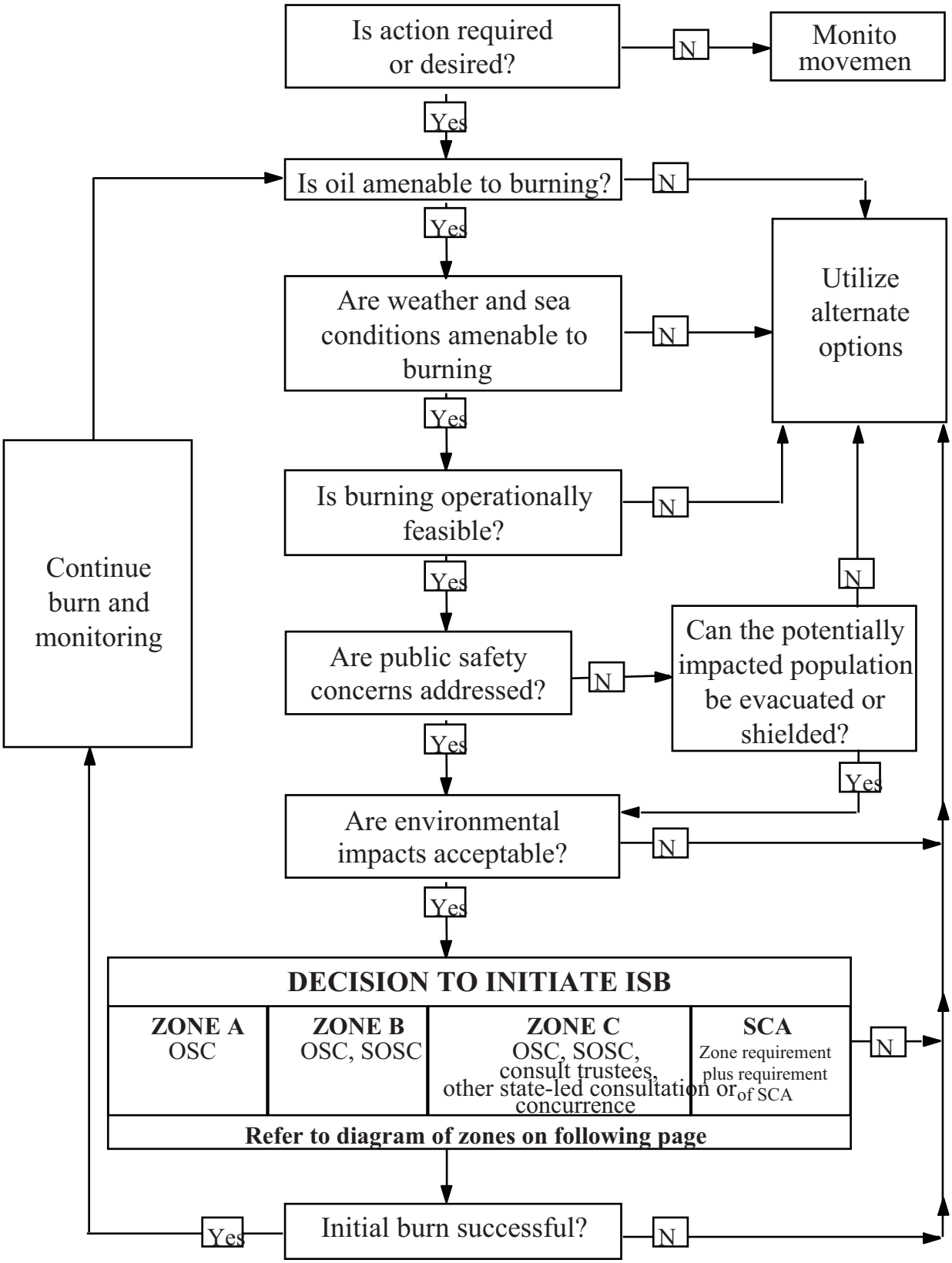
Method to Recover Burn Residue, if expected:

_____

Monitoring to be Performed:

_____

IN SITU DECISION TREE



Memorandum Of Understanding

Among
U.S. Coast Guard District 1 (USCG)
and
U.S. Environmental Protection Agency Region I (EPA)
and
U.S. Department of the Interior (DOI)
and
U.S. Department of Commerce /
National Oceanic and Atmospheric Administration (DOC/NOAA)
and
State of Maine (ME) Department of Environmental Protection
and
Commonwealth of Massachusetts (MA)
Executive Office of Environmental Affairs
and
State of New Hampshire (NH) Department of Environmental Services
and
State of Rhode Island and Providence Plantations (RI)
Department of Environmental Management
and
State of Vermont (VT) Agency of Natural Resources

PURPOSE

The USCG, EPA, DOI, DOC/NOAA and the States of ME, MA, NH, RI, and VT recognize that the effectiveness of physical removal of spilled oil may be limited by the dynamic nature of the environment in which the oil is spilled. In such circumstances, timely and effective containment, collection, and mechanical removal of the oil may not provide an adequate response. The burning of oil in place as a removal technique (*in-situ* burning), alone or in conjunction with mechanical removal methods and/or chemical countermeasures, may be considered as a means to enhance removal and reduce harm to public health and welfare, or the environment.

This Memorandum of Understanding (memorandum) is designed to implement sections of the National Oil and Hazardous Substances Pollution Contingency Plan (National Contingency Plan) [40 CFR §300.210 (c)(4)(ii)(D) and §300.115 (a)] and the requirements of 33 USC 1321 (j)(4)(B)(ii), the Federal Water Pollution Control Act, as amended by the Oil Pollution Act of 1990. This memorandum provides the primary decision makers in oil spill response (the Federal On-Scene Coordinator (OSC) and the State On-Scene Coordinator (SOSC)) with the authority to use *in-situ* burning in certain zones under the jurisdiction of the Region I Regional Response Team without additional consultation or concurrence. The Responsible Party, another key player in spill response, will also be a part of the decisionmaking process.

Because the jurisdictional boundary between Regions I and II divides Long Island Sound, the State of Connecticut will pursue a separate agreement on the use of this technique. When developed, this agreement will be included in Appendix III, Boundary Area Guidance and Agreements. References to Region I throughout this document apply to all Region I states except Connecticut.

This memorandum constitutes consultation under the National Contingency Plan with DOC/NOAA and DOI for the use of *in-situ* burning as an oil spill removal technique in the "B" Zone and consultation with DOC/NOAA and DOI, and concurrence of the States of ME, MA, NH, and RI in the "A" Zone (both zones defined under **Scope** below). It is anticipated an ignition source will be sufficient to light oil that is inherently combustible, provided a spill receives timely response action. This memorandum applies to *in-situ* burns that are lit using ignition sources (e.g., small quantities of burning gelled gasoline or kerosene released from a helotorch or a hand-held ignition pack). This memorandum does not apply to *in-situ* burns where the combustibility of the oil must be enhanced using a burning agent (e.g., through the direct addition of a flammable hydrocarbon prior to ignition or the addition of a wicking agent to enhance combustibility). Use of burning agents to enhance the combustibility of oil is subject to the approval requirements described in Subpart J of the National Contingency Plan (§300.910(c)).

This memorandum applies only to response operations within Region I where federal assistance is required. This agreement does not expand or otherwise modify the jurisdiction of any of the signatories to this agreement in matters that are the subject of this agreement.

This memorandum will be incorporated into the Region I Regional Contingency Plan and Area Contingency Plans within Region I.

AUTHORITY

Subpart C of the National Contingency Plan directs the Regional Response Teams to conduct regional planning and coordination of preparedness and response actions in conjunction with Area Committees in the case of oil discharges. Area Contingency Plans, written by Area Committees, should provide pre-approval of specific countermeasures or removal actions that, if expeditiously applied, will minimize adverse spill-induced impacts to fish and wildlife resources, their habitat, and other sensitive environments. (40 CFR §300.210 (c) (4) (ii) (D)).

Commandant, USCG, has designated the USCG Captains Of The Port (as defined in 33 CFR Part 3) as the OSCs for coastal oil discharges (subject to joint response boundary agreements with EPA), and has delegated to these OSCs the authority and responsibility for compliance with the Federal Water Pollution Control Act and its amendments (33 USC 1221, et seq., as amended).

The U.S. EPA Administrator has designated EPA Regional Administrators as OSCs for inland oil discharges (subject to joint response boundary agreements with USCG), and has delegated to these OSCs the authority and responsibility for compliance with the Federal Water Pollution Control Act and its amendments (33 USC 1221, et seq., as amended). EPA Regional Administrators have further delegated the duties of OSC to members of their Regional staffs.

The DOI and DOC/NOAA are designa ted federal trustees of certain natural resources under Subpart G of the National Contingency Plan and are to be consulted regarding appropriate removal actions in an oil sp ill, including the determination to burn oil *in-situ* in United States waters, and m ust concur w ith pre-approval plans for the application of specific counterm easures or rem oval actions (Subpart C of the National Contingency Plan).

In the State of Maine, the State Oil Sp ill Coordinator f rom the Departm ent of Environmental Protection has the authority to approve the use of *in-situ* burning for the control of oil spills.

In the Commonwealth of Massachusetts, the Department of Environmental Protection has the authority to approve the use of *in-situ* burning for the control of oil spills.

In the State of New Hampshire, the Commissioner of the Department of Environmental Services has the authority to approve the use of *in-situ* burning for the control of oil spills.

In the State of Rhode Island and Providence Plantations, the Commissioner of the Department of Environmental Management has the authority to approve the use of *in-situ* burning for the control of oil spills.

In the State of Vermont, the Secretary of the Department of Environmental Conservation has the authority to approve the use of *in-situ* burning for the control of oil spills.

SCOPE

This memorandum establishes decision authority for use of *in-situ* burning (absent the use of burning agents) within zones within Region I. The geographic zones and conditions are described below, and a map of the zones is attached as Appendix II.

1) "A" Zones — OSC decision to burn

Geographic Scope:
Zone "A" is defined as all waters subject to the jurisdiction of the United States located seaward of a line measured six miles from the mean low waterline along the coasts and islands of ME, MA, NH, and RI, that are not specifically defined as "Special Consideration Areas" (see paragraph 4 below).

Approval for *in-situ* burning in Zone "A":
Within Zone "A," the decision to use *in-situ* burning rests solely with the OSC. No further concurrence or consultation on the part of the OSC is required with EPA, DOC/NOAA, DOI, or the states of ME, MA, NH, and RI *(please refer to Special Consideration Areas that modify the "A" zone).* However, if threatened or endangered species are present in the immediate burn area, the trustee agency for that species must be consulted prior to initiating burning operations.

The OSC will immediately notify EPA, DOC/NOAA, DOI, and the applicable state(s) of a decision to conduct burning within the "A" zone via each agency's Regional Response Team representative.

2) "B" Zones — Unified Command decision to burn

Geographic Scope:
Zone "B" is defined as all waters subject to the jurisdiction of the United States located seaward of a line measured one mile and terminating six miles from the mean low water line along the coasts and islands of ME, MA, NH, and RI, that are not specifically defined as Special Consideration Areas (see paragraph 4 below).

Approval for *in-situ* burning in Zone "B":
Within Zone "B," the decision to use *in-situ* burning rests with the OSC and SOSC(s) within the Unified Command. Cases may arise where a state potentially affected by a smoke plume is not represented in the Unified Command because it may not be affected by the unburned oil. Therefore, the SOSC(s) from the state(s) within 6 miles of the burn source must also concur with the decision to burn (unless a Special Consideration Area has been established to reduce this distance). In Zone "B" no further concurrence or consultation on the part of the OSC is required with EPA, DOC/NOAA, DOI, or other states not within 6 miles of the burn source. If threatened or endangered species are present in the immediate burn area, the trustee agency for that species must be consulted prior to initiating burning operations. The SOSC is responsible for any additional concurrence/consultation requirements that apply at the state level.

The OSC will immediately notify EPA, DOC/NOAA, DOI, and applicable state(s) of a decision to conduct burning within the "B" zone via each agency's Regional Response Team representative.

3) "C" Zones — Unified Command decision to burn following additional consultations/concurrence

Geographic Scope:
Zone "C" is defined as waters and lands subject to the jurisdiction of the United States and within the geographic responsibility of Regional Response Team I that are shoreward

of a line measured 1 mile seaward of the mean low water mark along the coasts and islands of ME, MA, NH, and RI, that are not specifically defined as Special Consideration Areas (see paragraph 4 below).

Approval for *in-situ* burning in Zone "C":
Within Zone "C," the decision to use *in-situ* burning rests with the OSC (USCG or EPA) and SOSC(s) within the Unified Command. The OSC must consult with DOC/NOAA and DOI on the appropriateness of *in-situ* burning as a removal action, and gain concurrence of states with land within 6 miles of the burn source (unless this distance has been reduced in a Special Consideration Area). The SOSC is responsible for any additional concurrence/consultation requirements that apply at the state level.

The OSC will immediately notify EPA, DOC/ NOAA, DOI, and applicable state(s) of a decision to initiate a burn within the "C" zone via each agency's Regional Response Team representative.

4) "Special Consideration Areas"

Geographic Scope:
Special Consideration Areas are specific geographic areas where the level of approval/concurrence granted in Zones "A," "B," and "C" is modified by the any of the following agencies/entities within their authority, jurisdiction, and areas of responsibility: Area Committees, pre-designated OSCs, DOC/ NOAA, DOI, and the states of ME, MA, NH, RI, and VT. These areas will be identified in writing to the Regional Response Team co-chairs and listed in Appendix I. Upon receipt of a Special Consideration Area, the Regional Response Team co-chairs shall solicit comments from signatories to this memorandum with jurisdiction over the area and any areas within 6 miles of the Special Consideration Area. Absent objection, Special Consideration Areas are effective 30 days from their receipt by the Regional Response Team co-chairs.
Approval for *in-situ* burning in Special Consideration Areas
Each defined Special Consideration Area shall contain specific restrictions or permissions that alter pre-approval or pre-consultation otherwise defined by this memorandum in Zones "A," "B," or "C". The restriction placed or authority granted by a Special Consideration Area may be defined to apply only under certain conditions, such as certain wind directions or in certain seasons. Special Consideration Areas shall specify what additional or lesser action, consultation, or concurrence is necessary to

proceed with *in-situ* burning in that area. Means of contacting primary or alternate points-of-contact for Special Consideration Areas should be identified for work and non-working hours.

5) Boundary Areas - Region I Boundary

In areas where burning will have an impact across a Region I border into Canada or Region II (e.g., within 6 miles of the border), the concurrence of the applicable parties on the opposite side of the border must be obtained prior to use of *in-situ* burning. Specific cross-border guidance documents and agreements regarding near-border *in-situ* burning, when developed, will be included in Appendix III.

PROTOCOLS

The signatories to this memorandum agree that the decision to use *in-situ* burning lies with either the OSC or the OSC and the SOSC, based on the location of the burn as detailed in **Scope**. The SOSC is responsible for any additional concurrence/consultation requirements that apply at the state level. The decision to use *in-situ* burning should be made with guidance from the Region I *In-situ* Burning Policy (Information Section) and applicable Area Contingency Plans and is subject to the following conditions:

1. The OSC may authorize the use of *in-situ* burning on a discharge of oil to prevent or substantially reduce the hazard to human life without obtaining concurrence from EPA, DOI, DOC/NOAA, or the affected states, without following protocols established in this memorandum, and without following the guidelines in the Regional Contingency Plan and Area Contingency Plan. If *in-situ* burning is used in this manner, notification of EPA, USCG, DOC/NOAA, DOI and the affected state(s) via Regional Response Team representatives shall be made as soon as practicable. Once the risk to human life has subsided, this exception no longer applies.

2. The decision to use *in-situ* burning shall rest solely with the pre-designated OSC or jointly with the SOSC in certain zones as described under the **Scope** of this memorandum. This responsibility of the OSC may not be delegated.

3. If a decision has been made to use *in-situ* burning under the provisions of this memorandum, the OSC will immediately notify EPA, DOI, DOC/NOAA and the applicable state(s) of that decision via Regional Response Team representatives. This

initial notification should include, but is not limited to, the following information to the extent available:

Type and amount of oil discharged

Area affected

The projected area of impact of the oil if not burned

Reasons why *in-situ* burning has been selected as a mitigation technique

On-scene weather

4. *In-situ* burning will be conducted by trained professionals using recognized techniques and technology. Burning will be conducted in a way that allows for safe and effective control of the burn to the maximum extent feasible, including the ability to stop the burn if necessary. Containment and control using fire-resistant boom is recognized as the preferred method of *in-situ* burning in open-water situations. In this situation, all practical efforts to limit the potential for igniting the source or adjacent, uncontained, or uncontrollable slicks will be made.

5. *In-situ* burning is advised only when the meteorological and sea conditions are operationally favorable for a successful burn. The OSC will give due consideration to the direction of the wind and the possibility of the wind blowing the smoke plume over population centers or sensitive resources onshore.

6. Health and Safety Concerns

(a) OPERATORS: Worker health and safety is of paramount concern. Each employer and OSC must comply with all applicable Occupational Health and Safety Administration regulations. Prior to any *in-situ* burn operations, a site safety plan must be prepared.

(b) GENERAL PUBLIC: Burning should be stopped if it becomes an unacceptable health risk to the general public. If at any time during burning operations exposure limits are observed to exceed National Ambient Air Quality Standards in nearby populated areas as a result of the burn, the OSC shall modify or suspend the burn operation as appropriate. Additionally, the OSC and the Unified Command should consider the potential effects of short term exposure of the public to high levels of particulates which may still meet National Ambient Air Quality Standards. Specifically, the OSC should consider the current short term *in-situ* burning exposure guideline recommended by the

National Response Team (at the time of signature, the NRT guideline for short term particulate exposure from *in-situ* burning is 150 µg/m ^{3} of particulates less than 10 µm diameter (PM-10) averaged over one hour; the current National Ambient Air Quality Standard for particulates is the same concentration averaged over 24 hours. The NRT guideline will be revised when more stringent particulate standards are adopted). OSCs in Region I shall factor this guideline on public exposure to *in-situ* burn emissions into burn initiation and continuation decisions. Public notification is advisable prior to initiating a burn.

7. The OSC shall ensure *in-situ* burning is conducted in accordance with any biological opinions rendered under Section 7 of the Endangered Species Act. Seasonal, spacial, or other similar restrictions identified in biological opinions shall be listed as Special Consideration Areas and placed in Appendix I. If threatened or endangered species are present in the immediate burn area, the trustee agency for that species must be consulted prior to initiating burning operations.

8. The OSC will make every reasonable effort to continuously evaluate the decision to burn, and allow Regional Response Team agencies and affected states the opportunity for comment. The OSC shall provide a mechanism to receive information from authorized representatives of the following entities that may necessitate termination of an *in-situ* burn: EPA, affected states, natural resource trustee agencies, and cognizant health agencies. Any verbal recommendations to terminate an *in-situ* burn must be followed up immediately in writing.

9. Representatives of the OSC shall monitor *in-situ* burning operations. The trustee agencies, the affected states, the Occupational Safety and Health Administration, and the responsible party may monitor *in-situ* burning operations, when feasible.

(a) Monitoring to establish "continue / modify / discontinue" information for input to the OSC shall accompany a burn. Visual monitoring may be sufficient provided the smoke plume is not predicted to affect human populations or highly sensitive areas. If smoke plumes are predicted to or may cross over populated areas, real-time PM-10 monitoring (a protocol is identified in Regional Response Team I *In-situ* Burning Policy — Information Section) is advisable and, when practicable, should be in place prior to the start of burn operations to gather baseline data.

(b) All burns must incorporate observations (typically visual) to monitor smoke plume behavior. A trial burn may be conducted to better estimate plume behavior prior to operational burning. Conditions under which the burn should be stopped, such as a threat of plume contact with the ground in populated or environmentally sensitive areas, shall be clearly identified to the maximum extent practicable to those conducting burn operations prior to starting the burn.

12. Mechanical recovery equipment shall be mobilized on-scene when feasible for backup and complimentary response capability. Provisions should be made for collection of burn residue following the burn(s).

13. If *in-situ* burning is used, a post incident debriefing will take place within 45 days to gather information concerning its effectiveness and to determine whether any changes to this memorandum are necessary. The debriefing will be chaired by the OSC, who will also arrange the time, place, and date of the debrief.

AMENDMENTS

This Memorandum of Understanding may be amended in writing in whole or in part as is mutually agreeable to all signatories.

Special Consideration Areas submitted to the Regional Response Team as outlined in paragraph 4 of the **Scope** of this memorandum will be promptly distributed to signatories and included in Appendix I.

CANCELLATION

Each signatory to this Memorandum of Understanding may withdraw their agreement to the memorandum in whole or in part by submitting a letter of withdrawal to the Regional Response Team co-chairs; withdrawal from this memorandum will take effect no earlier than 30 days after receipt of this letter. The Regional Response Team co-chairs shall promptly notify other document signatories. Withdrawal by signatories shall not have any effect on this agreement with respect to remaining signatories.

SIGNATURES

Captain Thomas M. Daley
First Coast Guard District (m)
Acting Regional Response Team Co-Chair

May 19, 1998
Date

Ms. Dennisses Valdés
US EPA Region I
Regional Response Team Co-Chair

5/19/98
Date

Commander Burton Russell, USCG
Captain of the Port Portland
Federal On-Scene Coordinator

5/19/98
Date

Captain John Grenier, USCG
Captain of the Port Boston
Federal On-Scene Coordinator

MAY 20 1998
Date

Captain Peter A. Popko, USCG
Captain of the Port Providence
Federal On-Scene Coordinator

5/19/98
Date

Mr. Andrew Raddant
Regional Environmental Officer/Northeast
U.S. Department of Interior
Regional Response Team Representative

1/26/99
Date

Gerald E. Wheaton

Commander Gerald Wheaton
NOAA/Hazmat
U.S. Department of Commerce
Regional Response Team Representative

5/19/98
Date

David C. Sait

Mr. David C. Sait
State of Maine
State Oil Spill Coordinator

5/19/98
Date

Trudy Coxe

Ms. Trudy Coxe
Commonwealth of Massachusetts
Secretary of Environmental Affairs

10-6-98
Date

Robert W. Varney

Mr. Robert W. Varney
State of New Hampshire
Commissioner, Department of Environmental Services

1-25-99
Date

Andrew H. McLeod

Mr. Andrew H. McLeod
State of Rhode Island and Providence Plantations
Director, Department of Environmental Management

7/9/98
Date

MOU applies outside of Vermont – see attached letter

Ms. Barbara Ripley
State of Vermont
Secretary, Agency of Natural Resources

Date

State of Vermont

Department of Fish and Wildlife
Department of Forests, Parks and Recreation
Department of Environmental Conservation
State Geologist
RELAY SERVICE FOR THE HEARING IMPAIRED
1-800-253-0191 TDD>Voice
1-800-253-0195 Voice>TDD

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
Office of the Secretary
103 South Main Street
Waterbury, Vermont 05671-0404
(802) 241-3600
FAX (802) 244-1102

March 4, 1999

Captain Thomas Daley
Ms Dennisses Valdes
Region I Regional Response Team
C/O Scott Lundgren
First Coast Guard District
408 Atlantic Ave
Boston MA 02110-3350

RE: IN SITU BURNING MEMORANDUM OF UNDERSTANDING (MOU)

Dear Captain Daley and Ms. Valdes:

After careful consideration, I have decided not to sign the In Situ Burning MOU developed by the Region I Regional Response Team at this time.

The MOU mainly addresses issues related to open water burns. It is certainly in the best interest of the other New England states to sign the MOU, as the other states have seaports that handle large, petroleum carrying vessels, in areas close to the borders of other states. Vermont does not share these characteristics; indeed, since the cessation of petroleum transporting barge traffic on Lake Champlain, the likelihood of a spill warranting open water in situ burning is negligible.

As members of the In Situ Burning Working Group, we certainly appreciate the hard work put into this project, and appreciate the opportunity to sign the MOU. However, without the benefit of expedited decisions established by the MOU in marine coastal states, we feel that any protocols developed regarding this countermeasure would be best if designed for our risks and location. We understand that all other participants have signed the MOU, and we have no objection to its use in the Region. Do not take our abstention as finding fault with the MOU; it is simply felt that the MOU is not a vital tool for oil spill response in our state.

We look forward to further participation in Regional Response Team endeavors. If you have any questions regarding this letter, please contact me at 802.241.3600.

Sincerely,

John Kassel, Secretary
Vermont Agency of Natural Resources

cc: David C. Sait, ME Oil Spill Coordinator
Ms. Trudy Coxe, MA Secretary of Environmental Affairs
Robert Varney, NH Commissioner of Environmental Services
Timothy Keeney, RI Commissioner of Environmental Management
Canute Dalmasse, VT Commissioner of Environmental Conservation
P.H. Flanders, VT Director of Waste Management Division
Marc Roy, VT Regional Response Team Designee

mr/spills/cdisb.ltr

Appendix I: Special Consideration Areas

State of Maine Special Consideration Area **Year-round**

The OSC shall gain concurrence of the Maine State On-Scene Coordinator for *in-situ* burns within 12 miles of the Maine coast.

State of Vermont Special Consideration Area **Year-round**

The State of Vermont elected not to sign the Memorandum of Understanding, but agree to use elsewhere in Region under the MOU as described in 4 March 1999 letter. Absent other agreements, normal National Contingency Plan procedures apply in Vermont.

20 foot water depth Special Consideration Area **Year-round**

The OSC must consult with DOI and NOAA Regional Response Team representatives when using *in-situ* burning in waters where the depth is less than 20 feet at mean low water. (Such consultation is already required in Zone C, which is inside 1 mile, so this only applies to any areas that may be less than 20 feet deep that are beyond 1 mile from shore.)

National Marine Fisheries Service Special Consideration Area Summary

Details of boundaries and conditions detailed in NMFS Northeast Section 7 consultation letter to First Coast Guard District dated November 18, 1997.

Case-by-case consultation with NMFS Northeast Region required for *in-situ* burning in:

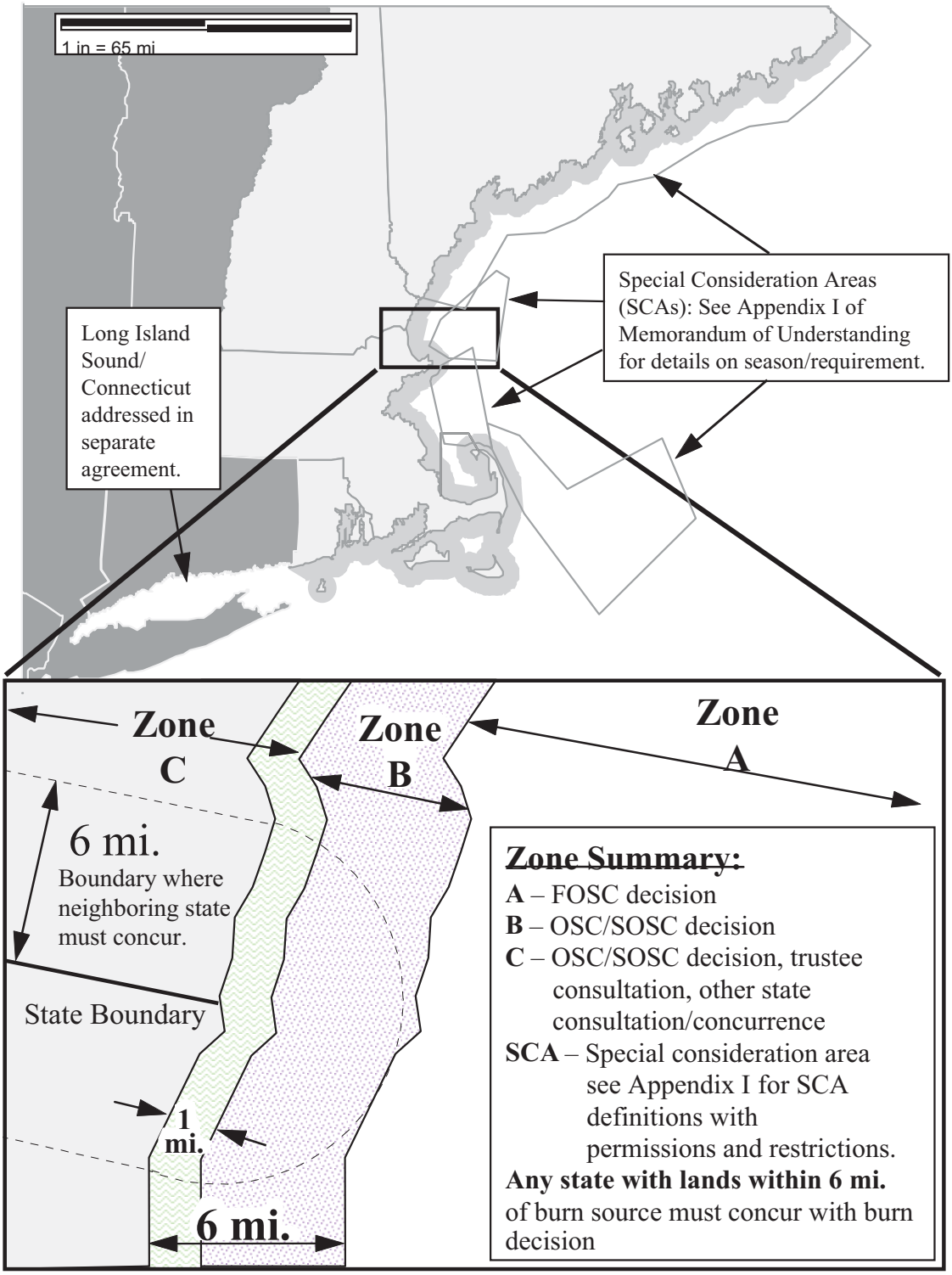
Jeffreys Ledge	*April 1—September 30*
Great South Channel	*April 1—June 30, October 1—November 15*
Cape Cod Bay	*February 1—May 15*

National Ocean Service Special Consideration Area

Case-by-case consultation with sanctuary manager required for *in-situ* burning in:

Stellwagen Bank National Marine Sanctuary	*Year-round*

Appendix II: Zone Boundary map and diagram



Appendix III: Boundary Area Guidance and Agreements

Boundary agreements or guidance developed (i.e. with Canadians, for Region II, Long Island Sound, etc.) may be attached here.

APPENDIX VII

DISPERSANT PREAUTHORIZATION PLAN

DISPERSANTS

Dispersion may be defined as the act or state of being broken apart and scattered. Oil floating on water will ultimately disperse naturally in response to currents and waves. As the degree of surface energy increases, the rate of natural dispersion increases. Typically, however, this process is slow and may allow an oil slick to move considerable distances and threaten large areas. Additionally, natural dispersion commonly results in the formation of persistent and difficult to treat water-in-oil emulsions (tar balls, mousse).

With the proper use of chemical treating agents (or dispersants), the rates of dispersion can be greatly increased, reducing the potential damage associated with floating slicks. Once dispersed under appropriate conditions, the oil is diluted and degraded rapidly to concentrations not believed dangerous to the environment. Dispersants also restrict or prevent the formation of water-in-oil emulsions.

Dispersant formulations contain varying amounts of surface-active agents (or surfactants). Technically, surfactants act to modify (reduce) the oils surface tension. Each surfactant molecule may be thought of as polar in nature, one end having an affinity for oil, and the other an affinity for water. When applied to floating oil, the surfactant diffuses through the oil and individual molecules orient themselves (water-attracting ends out) at the oil-water boundary. (It is critical that the dispersant be applied to the oil and not the surrounding water.) As the slick is broken apart by natural or manmade energy, treated particles of oil are repelled, preventing slick reformation. Eventually treated oil particles are broken into small enough drops that they remain suspended and dispersed in the water column. This suspension of oil droplets should not be confused with sinking. Dispersant treatment does not, in itself, result in the sinking of oil. Further, as only surface tension properties are modified, dispersants do not change the chemistry of the oil or render it more toxic.

1 HABITAT CONSIDERATIONS

The following are habitats in which:

- Dispersant usage is an option for oil spill cleanup if slick dispersion is desirable.
    - Open water (waters deeper than 5 fathoms)
- Dispersant usage is a viable option for oil spill cleanup, although other methods may be preferred.
    - Enclosed bays and harbors, providing the area is adequately flushed by tidal or current action and has adequate volume of dissolved oxygen.
- Dispersant usage is not advisable but may be considered under some circumstances, e.g., if long-term impact can be avoided. Should probably be authorized only if there is adequate flushing by tidal or current action.

- Intertidal sea grass beds
- Wade zone sea grass beds
- Shallow subtidal sea grass beds
- Kelp beds

- Dispersant usage should be avoided. (Note: There may be exceptions to this e.g., if oil threatens long-term impacts on one or more sensitive areas).
  - Bird and marine mammal habitats
  - Salt marshes
  - Tidal flats
  - Soft bottom subtidal

2 DISPERSANT TYPES

There are three basic types of modern dispersants:

- water base;
- solvent base; and
- concentrate.

They differ mainly in the nature of their carrier medium and the ease with which dispersions are formed.

- Dispersion using water-base formulations typically require more time and energy. Because they use water as a solvent, their products can be diluted on-site with sea water, thus lending themselves to vessel application.
- Solvent-base formulations tend to disperse easier, but are generally more toxic and require higher dosage rates. Their intended use is for heavy and weathered oils. They are ineffective when diluted with water.
- Concentrates contain high percentages of surface-active agents. Depending on the product, they may be used full strength, diluted with sea water, and/or diluted with hydrocarbon solvents. The "self-mixing" type of concentrate requires extremely low levels of mixing energy. By virtue of their versatility, dispersant concentrates lend themselves to most methods of application they are particularly suitable for aerial use.

3 DISPERSANT SELECTION

The effectiveness of any dispersant is dependent on its formulation, characteristics of the oil to be dispersed, method of application, and certain environmental conditions. Product selection should be based on maximizing effectiveness and minimizing potential environmental effects.

The initial step in dispersant selection is identification of types compatible with the oil in question. Dispersants suitable for marine use can be divided into three generic types: water base, hydrocarbon solvent base, and concentrate. Water-base dispersants are miscible with water and can be applied both full strength and diluted with sea water.

Generally, an external source of mixing (breaker boards, propwash, etc.) is required for optimum effectiveness. Hydrocarbon solvent-base dispersants are not miscible with water and cannot be applied by eduction or injection into sea water. As a result of their solvent properties, they are more effective with viscous, waxy, or emulsified oil than are other types. External mixing is generally required.

Concentrates contain high percentages of surface-active ingredients (greater than 50 percent by volume) and may be applied at lower dosages than other types. They may be applied full strength or diluted with sea water or hydrocarbon, depending on their inherent solvent system.

Each dispersant type is most appropriate for specific ranges of oil type. It should be noted that the properties affecting an oil's dispersibility typically change as weathering proceeds. Accordingly, dispersant requirements may change with time.

Numerous products may be available under each dispersant type. Under provisions of the National Oil and Hazardous Material Spills Contingency Plan, chemical agents shall not be considered for use as dispersing agents unless they have been accepted by the Environmental Protection Agency (EPA), and listed in the National Contingency Plan Product Schedule (available by calling the NCP Hotline at 202-260-2342). To be useful, dispersants must be on-scene in sufficient quantity and in a timely fashion. Product selection should also consider effectiveness and toxicity. Desirable products should combine maximum effectiveness and minimum toxicity.

Measures of effectiveness and toxicity are typically based on laboratory evaluations, and as such, are difficult to apply directly to field situations. Data of this type should be used only in the most general sense, such as in rough product screening. Accurate evaluation of field effectiveness may require trial application.

4 APPLICATION METHOD SELECTION

Selection of the proper application method is as important as selection of an appropriate dispersant. Application methods are determined by the characteristics of the dispersant to be applied, the nature and location of the spill, and limiting environmental conditions.

The basic types of dispersant application systems include spray booms attached to vessels, portable and integral vessel fire systems, and aerial spray systems using a variety of helicopters and fixed wing aircraft. For small spills, use of a single application method may be acceptable. For such spills, vessel, helicopter, or light aircraft systems are most practical. For larger spills, rapid treatment of extensive areas may be desirable. Under such circumstances, large aerial application systems or use of several types of systems may be required.

5 MAKING THE DISPERSANT USE DECISION

An on-scene coordinator has a range of options available for combating oil spills. The OSC must examine conventional response alternatives such as source containment and shoreline protection and cleanup for comparison to dispersant application.

At times when physical control and recovery are not feasible and important resources or shoreline areas are threatened, dispersant may be the best method to protect sensitive areas. The dispersant use guidelines in Section 6 are designed to define the scope of the dispersant approval problem, organize information required to reach a decision, and specify a range of answers beyond a simple approval or disapproval.

Four areas of information are identified in the guidelines below:

- data about the spill source, oil, and physical conditions on scene,
- delineation of the requirements for dispersant response and physical control options,
- identification of potential environmental and economic costs of possible response options, and
- evaluation of the consequences of dispersant application and recommendations on a course of action.

5.1 Step one:

The first priority in any spill is to identify the spill source, cause, rate of release, and type of oil. Once the oil type is known it properties, specific gravity, viscosity, pour point, etc. can be determined. Data are also gathered on the physical conditions on scene, including temperature, wind speed and speed direction, water temperature, salinity, and depth.

The OSC uses this information to make a preliminary assessment of whether or not dispersants would be effective or desirable. For example, a very viscous oil near its pour point in cold water would most likely not be dispersible. Conversely, a light fuel, with heavy seas, might disperse naturally before chemicals could be mobilized.

5.2 Step two:

If it is decided that dispersants could be of use, the next step is to evaluate the movement of the oil, both dispersed and undispersed. Accurate oil trajectory forecast modeling may be a critical element in the decision process, providing predictions of travel time to land, slick surface area, and length of expected shoreline impact. Each aspect of the forecast is used to evaluate the logistics of dispersant application and the potential environmental impact.

The OSC can now assemble information on the available dispersants and application equipment for the spill at hand. The OSC must ensure that the dispersant type is effective on the oil spilled and compatible with the proposed application method and

that enough dispersant is available to combat the forecasted slick surface area. It is important not to initiate dispersant application without sufficient supplied or logistical support; such an effort could fail, compounding the environmental effects. The OSC uses logistical information to plan a schedule of application, determine the location and area of slick to be treated, not set a dose rate of dispersant to oil. The OSC can get assistance on this matter from the USCG Strike Team, EPA Environmental Response Team, and industry representatives for assistance.

5.3 Step three:

To hasten a decision, the involved natural resource trustees/Scientific Support Coordinator (SSC) examine the resources at risk for both a dispersant-treated spill and an untreated spill, while the OSC is examining the logistics of dispersant use. The SSC distinguishes threatened resources by studying oil travel paths identified by trajectory forecasts.

Shoreline habitat types, including critical habitats for endangered species are identified within the area of expected impact. The relative threat posed by oil to a particular area can be rapidly evaluated if ranking of shoreline areas (such as an Environmental Vulnerability Index maps) has been completed for a region. Specific categories of wildlife present in the threatened areas are also identified. These categories include endangered and threatened species, marine mammals, waterfowl, fish, mollusks, and crustaceans and their respective seasonal variation and sensitive life stages. Commercial and public use areas such as aquaculture sites, parks, and marinas are also considered. The SSC will rely on state and federal resource agencies for guidance in developing resources protection priorities.

Although there have been attempts at quantitatively ranking environmental impacts associated with oil and dispersants in the environment and there are hundreds of publications on the toxicity of dispersants, it is difficult to predict the response of a particular population or system to oil and dispersants in a specific geographic area. Post experience can provide guidance on areas not appropriate for dispersants. If the time of travel of oil to shore is short, dispersion may not be completed before landfall, and therefore shoreline impacts may not be mitigated. Oil penetration and persistence in sediments may be increased when dispersants are used in inshore areas. Areas of low natural water exchange where dilution is slow might experience greater environmental harm from dispersant and oil mixtures than from oil alone.

5.4 Step four:

Having gathered the information required by the guidelines, the OSC may decide for dispersant use. Experience has shown that in most cases it takes hours to gather the information. There are four determinations an OSC can make:

- Do not use dispersants.
- Use dispersants on a trial basis (to ensure effectiveness).
- Disperse in limited or selected areas

- Disperse to the maximum extent possible with accepted methods.

6 GUIDELINES FOR DISPERSANT USE DECISION MAKING

These guidelines are intended as an aid to the OSC in deciding whether or not to use dispersants in response to an oil spill. A decision relative to the use of dispersants will be in accordance with the Preauthorization Plan (section 7).

The following outline illustrates the information that must be considered for a dispersant use decision to be made.

DISPERSANT USE OUTLINE

A. SPILL DATA
   (1) Circumstances:
   (2) Time/Date:
   (3) Location:
   (4) Type of Oil:
   (5) Volume Released:
   (6) Total Potential of Release:
   (7) Type of Release (Instantaneous, Continuous, Intermittent):
B. CHARACTERISTICS OF THE SPILLED OIL
   (1) Specific Gravity:
   (2) Viscosity:
   (3) Pour Point:
   (4) Flash Point:
   (5) Relative Toxicity:
C. WEAX/WATER CONDITIONS
   (1) Air Temp:
   (2) Wind Speed/Direction:
   (3) Tide/Current Info:
   (4) Sea Conditions:
   (5) Water Temp/Salinity:
   (6) Water Depth at Spill Location:
D. OIL TRAJECTORY INFORMATION
   (1) 48-Hour Surface Oil Trajectory Forecast:
      (a) Surface area of slick
      (b) Expected areas of landfall
   (2) 48-Hour Dispersed Oil Trajectory Forecast:
      (a) Oil movement in water column
      (b) Surface oil movement
      (c) Expected landfall
E. CHARACTERISTICS OF AVAILABLE DISPERSANTS & APPLICATION EQUIPMENT
   (1) Characteristics of the Dispersant(s)
      (a) Name:
      (b) Manufacturer:

(c) When available:
(d) Location (s):
(e) Am ount available:
(f) Type of containers:
(g) Toxicity :
(h) Application methods:
(i) Miscellan eous:

(2) Type of Transportation & Dispersing Equipment
(a) Nam e:
(b) Location :
(c) Time to arrive:
(d) Equipm ent available:
(e) Other:

F. INFORMATION ABOUT AVAILABLE DISPERSANT AND DIPSERSING EQUIPMENT
(1) Name on EPA & State Acceptance List
(2) Type (Self-Mix, Concentrate, Solvent, Other)
(3) Proposed Application Method(s) & Rates
(4) Efficiency (% Dispersed & Volume Dispersed)
(5) Schedule of Operation
(6) Location of Area to be treated
(7) Surface Area of the Slick which can be treated in the Schedule Time Period

G. CONSIDERATIONS FOR CONVENTIONAL METHODS OF CONTAINMENT AND CLEANUP (COULD DIPERSION AID IN REDUCING IMPACT)
(1) Containment at source
(2) Shoreline Protection Strategies
(3) Shoreline Cleanup Strategies
(4) Time Necessary to Execute Response

H. HABITATS AND RESOURCES AT RISK
(1) Habitat
(2) Resources

I. ECONOMIC CONSIDERATIONS
(1) Cost of Dispersant Operation
(2) Cost of Conventional Containment & protection
(a) With dispersant use
(b) Without dispersant use
(3) Cost of Shoreline Cleanup (Cost per Barrel X # of Barrels Reaching Shoreline)
(a) With dispersant use
(b) Without dispersant use

7 PREAUTHORIZATION FOR DISPERSANT USE

7.1 Purpose

This Preauthorization Plan is designed to implement sections of Subpart J of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and implement the requirements of Title 33 United States Code 1321(j)(4)(v) of the Federal Water Pollution Control Act, as amended, (FWPCA) that the Area Contingency Plan (ACP) shall "describe the procedures to be followed for obtaining an expedited decision regarding the use of dispersants." This Plan provides preauthorization for the use of dispersants by the Coast Guard On Scene Coordinator (FOSC). This preauthorization applies only in designated zones in the Coast Guard Captain of the Port Portland, Maine geographic area of responsibility.

This Plan also implements Subpart J (Use of Dispersants and Other Chemicals) and Appendices 300.945 and 30C.950 of Region I New England Regional Contingency Plan (RCP).

7.2 Authority

Section 311(d)(2)(G) of the FWPCA requires the NCP include a schedule for identifying "dispersants, other chemicals, and other spill mitigating devices and substances, if any, may be used in carrying out" the NCP. These are referred to as "chemical countermeasures" and are listed on the NCP Product Schedule. The responsibility to maintain the NCP Product Schedule was delegated to the Administrator, Environmental Protection Agency, by Executive Order 12777, and is carried out under Subpart J of the NCP.

Subpart J of the NCP authorizes the Regional Response Team (RRT) representatives from EPA and the States with jurisdiction over the waters of the area to which a Preauthorization plan applies, and the DOC and DOI natural resource trustees, to approve in advance the use of certain products under specified circumstances as described in the preauthorization plan. The FOSC may authorize the use of the products without obtaining the specific concurrences described above under Subpart J of the NCP.

Subpart J further provides that for spill situations that are not addressed by the preauthorization plans described previously, the FOSC, with the concurrence of the EPA representative to the RRT and the States with jurisdiction over the navigable waters threatened by the oil discharge, and in consultation with DOC and DOI natural resource trustees, may authorize the use of chemical and biological countermeasures on oil discharges; provided that such chemical and countermeasures are the NCP Product Schedule.

Commandant, United States Coast Guard, has pre-designated the Coast Guard Captain of the Port Portland, Maine as the FOSC for oil discharges in COTP Portland Zone (as defined in 33 CFR Part 3, and subject to joint response boundary agreements with the EPA) and has delegated to the COTP the authority and responsibility for compliance with the FWPCA.

The Legislature of the State of Maine has authorized the Commissioner of the Department of Environmental Protection (MEDEP) to designate an Oil Spill Coordinator, with the authority to approve the use of chemical countermeasures for the control of oil spills.

The Waste Management Division of the New Hampshire Department of Environmental Services (NHDES), under the authority of state law RSA 146A:4, assumes primary jurisdiction for response to oil spills in the state. Accordingly, the authority and responsibility for providing approval for the use of chemical countermeasures for control of oil spills rests with the Division Director or his designee.

The US DOI and DOC/NOAA are designated Federal trustees of certain natural resources under Subpart G of the NCP and are to be consulted regarding the determination to apply dispersants to oil discharges in U.S. waters.

The Region I RRT representative from EPA and the DOC/NOAA and DOI natural resource trustees approve in advance the use oil certain dispersants under specified circumstances as described in this Plan. As specified in this Plan, the FOSC, in consultation with MEDEP and NHDES, may authorize the use of these products without obtaining the specific concurrences from EPA, DOC/NOAA and DOI.

7.3 Scope

This preauthorization Plan is applicable to the marine waters of the COTP Portland Zone (defined in 33 CFR Part 3). These waters, for the purpose of this plan, are divided into four zones geographic areas and conditions under which dispersant use is preauthorized are as follows:

7.3.1 Zone 1 - Preauthorization Zone

<u>Geographic scope:</u>
Zone 1 is defined as waters that lie 0.5 nm from the Territorial Sea Baseline (as defined in 33 CFR 2.05-10) alone the coast of Maine and New Hampshire to the outermost extent of the Exclusive Economic Zone.

<u>Advance approval for Zone 1:</u>
The FOSC, in consultation with MEDEP and NHDES, may authorize the use of dispersants in Zone 1 in accordance with the protocols listed in section 7.4 of this Plan with the exception of Special Consideration Areas listed below.

7.3.2 Zone 2 - Concurrence Zone

<u>Geographic scope:</u>
Zone 2 is defined as waters that lie within 0.5 nm of the Territorial Sea Baseline along the coast of Maine and New Hampshire, including all bays and coves.

Advance approval for Zone 2:
No preauthorization is given for Zone 2. The use of dispersants in this Zone will require concurrence and consultation with the specified agencies in accordance with Subpart J of the NCP and Subpart J of the Region I Regional Response Plan.

7.3.3 Special Consideration Areas

Special Consideration Areas (SCA's) will be designated and described in writing by the natural resource trustee (or his/her designated representative) for the State of Maine, the State of New Hampshire, the National Oceanic and Atmospheric Administration, and the Department of the Interior.

Special Consideration Areas will consist of restrictions imposed on the use of dispersants for specific geographic areas to be described in this Plan. These restrictions may range from outright prohibition to a requirement for consultation prior to deployment of the chemicals. They may be special, seasonal or species-specific in nature. Each Special Consideration area submitted by the above mentioned representatives shall describe the specific conditions to be applied on the use of chemical dispersants, include primary and alternate point of contact telephone numbers.

Changes to any aspect the Special Consideration Areas will be submitted, in writing, to the Chairperson of the Area Committee and will take effect thirty (30) days following receipt by the Chairperson. Upon receipt, the Chairperson will provide copies of these changes, as soon as practical, to the membership of that Area Committee and to the Co-Chairpersons of the Region One Regional Response Team.

Special Consideration Area 1

Geographic Scope:
SCA 1 is defined as the waters that lie from 0.5 nm the Territorial Sea Baseline to 2.0 nm from the Territorial Sea Baseline

Approval for SCA 1:
The use of dispersant this SCA requires concurrence and consultation with the DOI. Once the appropriate contact person for the DOI is notified, the DOI will reach a decision within one (1) hour as to whether the use of a dispersant will be detrimental to trust resources. The appropriate contact person for the DOI must be contacted directly. Voice mail messages do net constitute "contacts." No response by the DOI would constitute approval of the use of dispersant in this SCA.

Special Consideration Area 2

Geographic Scope:
SCA 2 is defined as the waters that lie within 2.0 nm from the boundaries of any offshore islands owned or managed by the DOI that are beyond 0.5 nm from the Territorial Sea Baseline.

Approval for SCA 2:
The use of dispersants in this SCA is approved to the 0.5 limit (with the further restriction of SCA 1 above within the 0.5 to 2.0 nm) except in the following windows of time:
From May 15 to August 15 dispersant use in this SCA requires concurrence and consultation with the DOI.
From January 1 to March 31 it is recommended that concurrence with the DOI be obtained prior to dispersant use.

7.4 Protocols

As attested by the approval of this Preauthorization Plan, the RRT I representatives from EPA, MEDEP, and NHDES, and the DOI and DOC/NOAA natural resource trustees, agree that the predesignated FOSC has the authority and may order the use of dispersant on oil discharges using the guides found in Subpart J of the NCP, Appendix 300.945 and 300.950 of the Region I RCP and the Maine and New Hampshire ACP and subject to the following conditions:

The decision to use dispersants within these Guidelines rests with the pre-designated FOSC, in consultation with MEDEP and NHDES.

The FOSC may authorize the use of dispersants on a release or discharge to prevent or substantially reduce a hazard to human life without obtaining concurrence from EPA, affected States, DOT, and DOC/NOAA, without following protocols established in this Plan, and without following the guides in the RCP and ACP. If dispersants are used in this manner, notification to EPA, affected States, DOI, and DOC/NOAA shall be made as soon as practical. Once risk to human life has subsided, these exceptions no longer apply.

The dispersants listed in the NCP Product Schedule and as further pre-approved by Federal natural resource trustees may be authorized for use in Zone 1 by the FOSC, in consultation with MEDEP and NHDES, without further specific concurrence from EPA, DOT and DOC/NOAA.

If a decision has been made by the FOSC, in consultation with MEDEP and NH-DES, to use dispersants under the provisions of this Plan, the FOSC will immediately notify the EPA, DOI, and DOC/NOAA of that decision. This initial notification will include, but is not limited to, the following information to the extent available:

- Type and amount of oil discharged.

- Areas effected.
- The projected area of impact of the oil if not dispersed.
- Type of chemical agent to be used.
- Application rate and method.
- On scene weather.

If dispersants are used as described in this Plan or for the protection of human life, a post incident debriefing will take place within 45 days to gather information concerning the effectiveness of the chemical accents used and whether any chances to this Plan are necessary. The results of the debrief will be included in the FOSC report.

Monitoring for dispersants application and effectiveness will be conducted. An inability to implement a Monitoring Plan in a timely manner will not revoke the FOSC's authorization to use dispersants under this Plan. However, the FOSC should make all attempts to implement a Monitoring Plan as soon as practical.

7.5 Amendments

This Preauthorization Plan shall be reviewed annually by the Maine and New Hampshire Area Committee at the first meeting of the full Area Committee in the calendar year.

Thanks to the Maine and New Hampshire Area Committee for compilation of this Appendix