© Technical Response Planning

TABLE OF CONTENTS

SECTION 1 - INTRODUCTION	Pg.12
Figure 1-1 - Distribution List	Pg 13
Figure 1-2 - Willbridge Information Summary	Pg 14-16
Figure 1-3 - Facility Area Map	Pg 17
Figure 1-4 - Facility Photograph	Pg 18
Figure 1-5 - Facility Site Plan	Pg 19-21
1.1 Purpose / Scope of Plan	Pg 22
1.2 Plan Review and Update Procedure	Pg 23
1.3 Agency Submittal / Approval Letters	Pg 24-99
1.4 Certification of Adequate Resources	Pg 100
1.5 Interface with Other Plans	Pg 101
SECTION 2 - INITIAL RESPONSE ACTIONS	Pg 102
2.1 Spill / Release Response	Pg 103
Figure 2.1-1 - Spill Release Flowchart	Pg 104
Figure 2.1-2 - Spill / Release Response Action Checklist	Pg 105-106
2.1.1 Spill Detection and Mitigation Procedures	Pg 107
Figure 2.1-3 - Spill Mitigation Procedures	Pg 107
2.1.2 Spill Surveillance Guidelines	Pg 108
Figure 2.1-4 - Spill Surveillance Checklist	Pg 109-110
2.1.3 Spill Volume Estimating	Pg 111
Figure 2.1-5 - Spill Estimation Factors	Pg 111
2.1.4 Estimating Spill Trajectories	Pg 112
2.1.5 Initial Containment Actions	Pg 112
2.2 Evacuation	Pg 113-118
2.3 Tornado	Pg 119
2.4 Flood	Pg 120
2.5 Medical	Pg 121
(b) (7)(F) [redacted]	[redacted]
2.7 Fire and/or Explosion	Pg 124-126
SECTION 3 - NOTIFICATIONS / TELEPHONE NUMBERS	Pg 127
3.1 Emergency Information and Notification Procedures	Pg 128
Figure 3.1-1 - Emergency Notification Flow Chart	Pg 129
Figure 3.1-2 - Oil Spill Report Form	Pg 130-131
Figure 3.1-3 - Internal Notifications and Telephone Numbers	Pg 132-134
Figure 3.1-4 - External Notifications and Telephone Numbers	Pg 135-139
SECTION 4 - RESPONSE TEAM ORGANIZATION	Pg 140
4.1 Emergency Management Team (EMT) Description	Pg 141
4.2 Activation Procedures	Pg 141

TABLE OF CONTENTS, CONTINUED

SECTION 4 - RESPONSE TEAM ORGANIZATION, CONTINUED	
4.3 Levels of Response	Pg 141
4.3.1 Level 1 (Minor) Spills	Pg 141
4.3.2 Level 2 (Moderate) Spills	Pg 141
4.3.3 Level 3 (Major) Spills	Pg 142
4.4 Team Member Response Times	Pg 142
4.5 Unified Command System	Pg 142
4.6 Qualified Individual (QI)	Pg 142
4.7 Additional Company Resources	Pg 143
4.7.1 Advisory and Resource Team	Pg 143
4.7.2 Chevron Emergency Information Center (CEIC)	Pg 144
4.7.3 Communications Equipment	Pg 144
4.7.4 Cultural Resources (Historic Properties)	Pg 145
4.7.5 Emergency Response Staff	Pg 145
4.7.6 Fire and Process Safety (ETC, OpCo and Third Party)	Pg 146
4.7.7 Functional Teams	Pg 147-148
4.7.8 Worldwide Spill Response Team	Pg 149
Figure 4.1 - Emergency Management Team (EMT) Activation Procedur	Pg 150
Figure 4.2 - Emergency Management Team (EMT) Organization Cha	Pg 151
4.8 Emergency Management Team (EMT) Job Descriptions and Guideline	Pg 152-190
SECTION 5 - INCIDENT PLANNING	Pg 191-192
5.1 Documentation Procedures	Pg 193
5.2 Incident Action Plan Process and Meetings	Pg 194
Figure 5.2-1 Operational Period Planning Cycle	Pg 194
5.2.1 Incident Occurs / Notifications	Pg 195
5.2.2 Initial Response and Assessment	Pg 195
5.2.3 Unified Command Objectives Meeting	Pg 195
5.2.4 Tactics Meeting	Pg 196
5.2.5 Planning Meeting	Pg 196-197
5.2.6 Incident Action Plan (IAP) Preparation and Approval	Pg 197
5.2.7 Operations Briefing	Pg 198
5.2.8 Assess Progress	Pg198
5.2.9 Initial Unified Command Meeting	Pg 198-199
5.2.10 Command Staff Meeting	Pg 199
5.2.11 Command and General Staff Breakfast/Supper	Pg 199
5.2.12 Business Management Meeting	Pg 199
5.2.13 Agency Representative Meeting	Pg 199
5.2.14 News Briefing	Pg 199

TABLE OF CONTENTS, CONTINUED

SECTION 5 - INCIDENT PLANNING, CONTINUED	
5.3 ICS Forms	Pg200-201
5.3.1 Incident Briefing ICS 201-OS	Pg 202-205
5.3.2 Incident Action Plan (IAP) Cover Sheet	Pg 206
5.3.3 Incident Objectives ICS 202-OS	Pg 207
5.3.4 Organization Assignment List ICS 203-OS	Pg 208
5.3.5 Assignment List ICS 204-OS	Pg 209
5.3.6 Communications Plan ICS 205-OS	Pg 210
5.3.7 Medical Plan ICS 206-OS	Pg 211
5.3.8 Incident Status Summary ICS 209-OS	Pg 212
5.3.9 Unit Log ICS 214-OS	Pg 213-214
5.3.10 Individual Log ICS 214a-OS	Pg 215
5.4 Site Safety and Health Plan	Pg 216-227
5.5 Decontamination Plan	Pg 228-232
5.6 Disposal Plan	Pg 233-235
5.7 Dispersant Plan Authorization Checklist	Pg 236-237
5.8 Bioremediation	Pg 238
5.9 In-Situ Burn	Pg 238-244
5.10 Decanting	Pg 245
5.11 Incident Security Plan	Pg 246-247
5.12 Demobilization Plan	Pg 248
SECTION 6 - SENSITIVE AREAS / RESPONSE TACTICS	Pg 249
6.1 Area Description	Pg 250
6.1.1 Hydrographic and Climatic Conditions	Pg 250
6.1.2 Physical Geographic Features	Pg 251
6.2 Spill Containment / Recovery	Pg 252-253
Figure 6.2-1 - Response Tactics for Various Shorelines	Pg 254-256
6.3 Sensitive Area Protection	Pg 257
Figure 6.3-1 - Sensitive Area Protection Implement Sequence	Pg 258
Figure 6.3-2 - Summary of Shoreline and Terrestrial Cleanup Techniques	Pg 259-262
6.4 Alternate Response Strategies	Pg 263
6.4.1 Dispersants	Pg 263-264
6.4.2 Bioremediation	Pg 264
6.4.3 In Situ Burn	Pg 264-265
Figure 6.4-1 - In Situ Burn Decision Process	Pg 266
6.4.4 Decanting	Pg 267-268
6.5 Wildlife Protection and Rehabilitation	Pg 269

TABLE OF CONTENTS, CONTINUED

SECTION 6 - SENSITIVE AREAS / RESPONSE TACTICS, CONTINUED	
6.6 Endangered and Threatened Species By State	Pg 269-271
6.7 Vulnerability Analysis (Detailed)	Pg 272-273
6.8 Tactical Overview Map	Pg 273
6.9 Tactical Plan Index	Pg 273
6.10 Tactical Plans	Pg 274-276
6.11 Sensitivity Maps	Pg 277-295
6.12 Protection / Response Strategies	Pg 295
SECTION 7 - SUSTAINED RESPONSE ACTIONS	Pg 296
7.1 Response Resources	Pg 297
7.1.1 Facility Response Equipment	Pg 297-298
Figure 7.1-1 - Regional Company and Response Contractor's Equipment List / Response Time	Pg 298
7.1.2 Response Equipment Inspection and Maintenance	Pg 299
7.1.3 Contractors, Contractor Equipment, and Labor	Pg 299
7.1.4 Command Post	Pg 300
Figure 7.1-2 - Command Post Checklist	Pg 300
7.1.5 Staging Area	Pg 300
7.1.6 Communications Plan	Pg 301
Figure 7.1-3 - Communications Checklist	Pg 302
7.2 Public Affairs	Pg 303-304
Figure 7.2-1 - Incident Fact Sheet	Pg 305
7.3 Site Security Measures	Pg 306
Figure 7.3-1 - Site Security Checklist	Pg 306
Figure 7.3-2 - Facility Security	Pg 307
7.4 Waste Management	Pg 308-309
Figure 7.4-1 - Waste Management Flow Chart	Pg 310
Figure 7.4-2 - General Waste Containment and Disposal Checklist	Pg 310
7.4.1 Waste Storage	Pg 311
Figure 7.4-3 - Temporary Storage Methods	Pg 311
7.4.2 Waste Transfer	Pg 312
7.4.3 Waste Disposal	Pg 313
Figure 7.4-4 - Facility Specific Disposal Locations	Pg 313
SECTION 8 - DEMOBILIZATION / POST-INCIDENT REVIEW	Pg 314
8.1 Terminating the Response	Pg 315
8.2 Demobilization	Pg 316
Figure 8.2-1 - Demobilization Checklist	Pg 316
8.3 Post-Incident Review	Pg 316
Figure 8.3-1 - Standard Incident Debriefing Form	Pg 317
8.3.1 Final Spill Cleanup Report	Pg 318

TABLE OF CONTENTS, CONTINUED

APPENDIX A - TRAINING / EXERCISES	Pg 319
A.1 Exercise Requirements and Schedules	Pg 320
Figure A.1-1 - PREP Response Plan Core Components	Pg 320-321
Figure A.1-2 - Exercise Requirements	Pg 321-322
Figure A.1-3 - Spill / Exercise Documentation Form	Pg 323-324
Figure A.1-4 - EPA Required Response Equipment Testing and Deployment Drill Log	Pg 325
Figure A.1-5 - Qualified Individual Notification Drill Log	Pg 326
Figure A.1-6 - Emergency Management Team Tabletop Exercise Log	Pg 327
A.2 Training Program	Pg 328
Figure A.2-1 - Training Requirements	Pg 328
Figure A.2-2 - PREP Training Program Matrix	Pg 329-330
Figure A.2-3 - Personnel Response Training Log	Pg 331
A.3 Additional Program	Pg 331
A.3.1 Alcohol and Drug Program	Pg 331
APPENDIX B - CONTRACTOR RESPONSE EQUIPMENT	Pg 332
B.1 Cooperatives and Contractors	Pg 333
B.1.1 OSRO Classification	Pg 333
Figure B.1-1 - Evidence of Contracts and Equipment Lists	Pg 334-410
APPENDIX C - SPCC PLAN	Pg 411
Figure C-1 - Tank Tables	Pg 412-422
Figure C-2 - Drainage Diagram	Pg 423-424
Figure C-3 - Evacuation Diagram	Pg 425-429
Figure C-4 - Discharge Prevention Meeting Log	Pg 430
Figure C-5 - Inspection Procedures	Pg 431-432
Figure C-6 - Annual Inspection Record	Pg 433
Figure C-7 - Secondary Containment Drainage Log	Pg 434
Figure C-8 - Reportable Spill History	Pg 435-469
Figure C-9 - Containment and Drainage Planning	Pg 470

TABLE OF CONTENTS, CONTINUED

APPENDIX D - HAZARD EVALUATION AND RISK ANALYSIS	Pg 471
D.1 Facility Hazard Evaluation	Pg 472
D.2 Vulnerability Analysis	Pg 472
D.2.1 Analysis of the Potential for a Spill	Pg 472
D.2.2 Site Risk Analysis	Pg 472
D.3 Inspection and Spill Detection	Pg 473-474
Figure D.3-1 - Response Equipment Inspection	Pg 475
D.4 Planning Distance Calculations	Pg 476
Figure D.4-1 - Planning Distance Calculations	Pg 476-479
D.5 Discharge Scenarios	Pg 479
D.5.1 Small and Medium Discharge Scenarios	Pg 479-484
D.5.2 Worst Case Discharge (WCD) Scenarios Discussion	Pg 485-488
D.5.3 Description of Factors Affecting Response Efforts	Pg 489
D.6 Planning Volume Calculations	Pg 490
D.7 Spill Volume Calculations	Pg 490
D.7.1 USCG Portion of Facility	Pg 490
D.7.2 EPA Portion of the Facility	Pg 490-493
D.7.3 DOT/PHMSA Portion of Pipeline/Facility	Pg 494-495
D.8 Pipeline - Abnormal Conditions	Pg 496
D.9 Product Characteristics and Hazards	Pg 496
Figure D.9-1 - Summary of Commodity Characteristics	Pg 497
APPENDIX E - CROSS-REFERENCES	Pg 498
Figure E-1 - EPA / FRP Cross-Reference	Pg 499-508
Figure E-2 - USCG / FRP Cross-Reference	Pg 509-519
Figure E-3 - DOT / PHMSA Cross-Reference	Pg 520-523
Figure E-4 - Oregon Cross-Reference	Pg 524-536
Figure E-5 - OSHA Cross-Reference	Pg 537-545
Figure E-6 - EPA Response Plan Cover Sheet	Pg 546
APPENDIX F - ACRONYMS AND DEFINITIONS	Pg 547
F.1 Acronyms	Pg 548-550
F.2 Definitions	Pg 551-559
APPENDIX G - ADDITIONAL INFORMATION	Pg 560
G.1 (To be inserted)	Pg 560+

RECORD OF CHANGES

Changes to this Plan will be documented on this page. Plan review and modifications will be initiated and coordinated by the Business Unit Health, Safety, Security & Environmental (HSS&E) Department in conjunction with the Area Supervisor/Manager of Operations.

DATE OF CHANGE	DESCRIPTION OF CHANGE	SECTION AMENDED/ PAGE NUMBER	DEPARTMENT NOTIFIED YES / NO	INITIALS OF PERSON MAKING CHANGES
3/24/2009	EPA OR FRP | G - Additional Information			
4/17/2009	EPA OR FRP | 1 - Introduction | 1.4 Certification of Adequate Resources, Appendix G - Additional Information, and Section 3 Notifications / Telephone Numbers Figure 3.1-3 - Internal Notifications and Telephone Numbers / Emergency response Personnel and Business Unit Notifications.			
6/30/2009	EPA OR FRP | 2 - Initial Response Actions | 2.2 Evacuation			
7/27/2009	EPA OR FRP | C - Tank Tables, Company Forms, & Plot Plans | Figure C-5 - Inspection Procedures			
9/10/2009	EPA OR FRP | 1 - Introduction | 1.3 Agency Submittal / Approval Letters and EPA OR FRP | 1 - Introduction | 1.4 Certification of Adequate Resources			
2/9/2010	EPA OR FRP | G - Additional Information			
3/9/2010	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-3 - Internal Notifications and Telephone Numbers | Facility Response Team			
4/2/2010	EPA OR FRP | 1 - Introduction | Figure 1-5 - Facility Site Plan and EPA OR FRP | 1 - Introduction | 1.4 Certification of Adequate Resources			
5/3/2010	EPA OR FRP | 6 - Sensitive Areas / Response Tactics | 6.10 Tactical Plans			
7/12/2010	EPA OR FRP | G - Additional Information			
8/10/2010	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-4 - External Notifications and Telephone Numbers | External Notifications			
8/26/2010	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-4 - External Notifications and Telephone Numbers | External Notifications			
1/26/2011	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification			

	Procedures | Figure 3.1-3 - Internal Notifications and Telephone Numbers | Emergency Response Contractors, Figure 3.1-4 - External Notifications and Telephone Numbers | USCG Classified OSRO´s / Non-Classified OSRO´s, Figure 7.1-1 - Regional Company and Response Contractor's Equipment List / Response Time, B.1.1 OSRO Classification, and Figure B.1-1 Evidence of Contracts and Equipment Lists			
5/5/2011	EPA OR FRP | 6 - Sensitive Areas / Response Tactics | 6.5 Wildlife Protection and Rehabilitation, EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-3 - Internal Notifications and Telephone Numbers | Facility Response Team, EPA OR FRP | 7 - Sustained Response Actions | 7.1 Response Resources | 7.1.1 Facility Response Equipment			
6/3/2011	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-3 - Internal Notifications and Telephone Numbers | Emergency Response Personnel and Business Unit Notifications			
8/8/2011	Updated Internal Notification List, Updated Initial Response Tactic Description and Sketch, updated aerial photograph of facility, updated Notification List and Drill Exercise documentation in Appendix G			
10/12/2011	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-4 - External Notifications and Telephone Numbers | External Notifications			
11/3/2011	EPA OR FRP | 1 - Introduction | 1.3 Agency Submittal / Approval Letters			
12/12/2011	Updated Appendix G: Added new response equipment checklists.			
8/24/2012	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-3 - Internal Notifications and Telephone Numbers | Facility Response Team			
8/24/2012	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-3 - Internal Notifications and Telephone Numbers | Facility Response Team			
9/28/2012	EPA OR FRP | C - Tank Tables, Company Forms, & Plot Plans | Figure C-1 - Tank Tables			
10/8/2012	EPA OR FRP | C - Tank Tables,			

	Company Forms, & Plot Plans | Figure C-1 - Tank Tables			
11/6/2012	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-3 - Internal Notifications and Telephone Numbers | Facility Response Team			
3/7/2013	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-4 - External Notifications and Telephone Numbers | External Notifications			
3/29/2013	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-4 - External Notifications and Telephone Numbers | External Notifications			
5/22/2013	EPA OR FRP | 1 - Introduction | 1.4 Certification of Adequate Resources			
5/24/2013	EPA OR FRP | G - Additional Information			
5/24/2013	EPA OR FRP | G - Additional Information			
7/23/2013	EPA OR FRP | G - Additional Information			
7/23/2013	EPA OR FRP | G - Additional Information			
7/23/2013	EPA OR FRP | G - Additional Information			
9/24/2013	EPA OR FRP | G - Additional Information			
9/24/2013	EPA OR FRP | G - Additional Information			
10/15/2013	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-3 - Internal Notifications and Telephone Numbers | Emergency Response Personnel and Business Unit Notifications			
10/16/2013	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-3 - Internal Notifications and Telephone Numbers | Emergency Response Personnel and Business Unit Notifications			
11/15/2013	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-3 - Internal Notifications and Telephone Numbers | Facility Response Team			
12/11/2013	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-3 - Internal Notifications and Telephone Numbers |			

	Emergency Response Personnel and Business Unit Notifications			
12/11/2013	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-3 - Internal Notifications and Telephone Numbers | Emergency Response Personnel and Business Unit Notifications			
1/7/2014	EPA OR FRP | 1 - Introduction | Figure 1-2 - Information Summary | Information Summary			
1/7/2014	EPA OR FRP | D - Hazard Evaluation and Risk Analysis | D.9 Product Characteristics and Hazards | Figure D.9-1 - Summary of Commodity Characteristics			
1/7/2014	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-3 - Internal Notifications and Telephone Numbers | Emergency Response Contractors			
1/7/2014	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-4 - External Notifications and Telephone Numbers | USCG Classified OSRO´s / Non-Classified OSRO´s			
1/7/2014	EPA OR FRP | 7 - Sustained Response Actions | 7.1 Response Resources | Figure 7.1-1 - Regional Company and Response Contractor's Equipment List / Response Time			
1/7/2014	EPA OR FRP | B - Contractor Response Equipment | B.1 Cooperatives and Contractors | B.1.1 OSRO Classification			
1/7/2014	EPA OR FRP | B - Contractor Response Equipment | B.1 Cooperatives and Contractors | Figure B.1-1 - Evidence of Contracts and Equipment Lists			
1/16/2014	EPA OR FRP | 1 - Introduction | 1.3 Agency Submittal / Approval Letters			
1/20/2014	EPA OR FRP | 3 - Notifications / Telephone Numbers | 3.1 Emergency Information and Notification Procedures | Figure 3.1-3 - Internal Notifications and Telephone Numbers | Emergency Response Personnel and Business Unit Notifications			

OREGON FINANCIAL RESPONSIBILITY FORM

Click here to view the file (No Form Available)

SECTION 1
INTRODUCTION

Last Revised: May 2013

© Technical Response Planning Corporation 2006

Figure 1-1 - Distribution List

Figure 1-2 - Willbridge Information Summary

Figure 1-3 - Facility Area Map

Figure 1-4 - Facility Photograph

Figure 1-5 - Facility Site Plan

1.1 Purpose / Scope of Plan

1.2 Plan Review and Update Procedure

1.3 Agency Submittal / Approval Letters

1.4 Certification of Adequate Resources

1.5 Interface with Other Plans

FIGURE 1-1 - DISTRIBUTION LIST

PLAN HOLDER	ADDRESS	NUMBER OF COPIES			
		PAPER	DISTRIBUTION DATE	ELECTRONIC	DISTRIBUTION DATE
Willbridge Terminal	5924 NW Front Ave. Portland, OR 97210	2	6/11/2010	1	6/11/2010
USCG, Facilities Branch Sector Portland	6767 N. Basin Ave. Portland, OR 97217-3992	1	6/11/2010		
Oregon DEQ Spill Response Dept.	811 SW Sixth Ave. Portland, OR 97204	1	6/11/2010	1	6/11/2010
U.S. EPA Region X, Oil Spill Response Section	1200 6th Ave Seattle, WA 98101-3188	1	6/11/2010	0	
U.S. Department of Transportation - Office of Pipeline Safety	1200 New Jersey Avenue, S.E. - Room 22-210 Washington, D.C. 20590	0		1	6/11/2010
Oregon Department of Energy	Emergency Preparedness Manager 625 Marion Street NE Salem, Oregon 97301-3742	0		1	6/11/2010

FIGURE 1-2 - WILLBRIDGE INFORMATION SUMMARY

Owner/Operator:	Chevron Products Company a division of Chevron USA, Inc. 6001 Bollinger Canyon Road San Ramon, CA
Owner Telephone:	(925) 842-1000
Facility Name:	Willbridge
Facility Address:	5924 NW Front Ave. Portland, Oregon 97210
Facility Latitude/Longitude:	(b) (7)(F)
Facility Telephone/Fax:	(503) 221-7866 / (503) 222-9766
EPA Facility FRP #:	ORD000831701
PHMSA Facility OSRP #:	1697
USCG Facility FRP #:	PDX20008
Description of Facility:	The Chevron Willbridge Terminal is located at 5531 NW Doane Avenue, Portland, Oregon 97210. (b) (7)(F) The Chevron Willbridge Terminal is a light product terminal located in Portland, Oregon. The Terminal provides a distribution center for petroleum products to customers in Oregon and Washington. Bulk petroleum products are received and shipped at the terminal by marine vessel, pipeline, railcar and truck. Products handled include the following: Gasoline-various grades, Ethanol, Diesel Fuel-various grades, Biodiesel, Jet fuel, Aviation Gasoline, Transmix, Gasoline additive, Lubricating oils-various grades, Crude oils; various- Group III, Refined base oils; various- Group IV and Crude oils; various- Group V.
River Mile:	7.6
Starting Date of Operations:	1914
(b) (7)(F)	
Size, Type and Number of Vessels the Facility can Transfer Oil to or from Simultaneous:	Tankers, barges, tugboats, and equipment barges are handled at this facility. Each side of the facility dock can accommodate up to (b) (7)(F) (one ship on each side of the dock).

FIGURE 1-2 - WILLBRIDGE INFORMATION SUMMARY, CONTINUED

Qualified Individuals: (Refer to APPENDIX A, FIGURE A.2-3 for QI Training Records)	Facility		
	Name and Contact Information	**Work Address**	**(b) (6)**
	Jerry Henderson Terminal Manager Response Coordinator (503) 221-7866 (Operations No.) (503) 283-5601 (Radio Phone) (503) 221-7714 (Office) (b) (6) (503) 539-4019 (Mobile)	5924 NW Front Ave. Portland, OR 97210	(b) (6)
	Todd Osterberg TESH Specialist Safety (503) 221-6582 (Office) (925) 951-7109 (Mobile)	5924 NW Front Ave Portland, OR 97210	(b) (6)
	Shane Partain HES TECHNICAL CL #10 (503) 221-7855 (Office) (b) (6) (503) 504-5754 (Mobile)	5531 NW Doane Ave Portland, OR 97210	

FIGURE 1-2 - WILLBRIDGE INFORMATION SUMMARY, CONTINUED

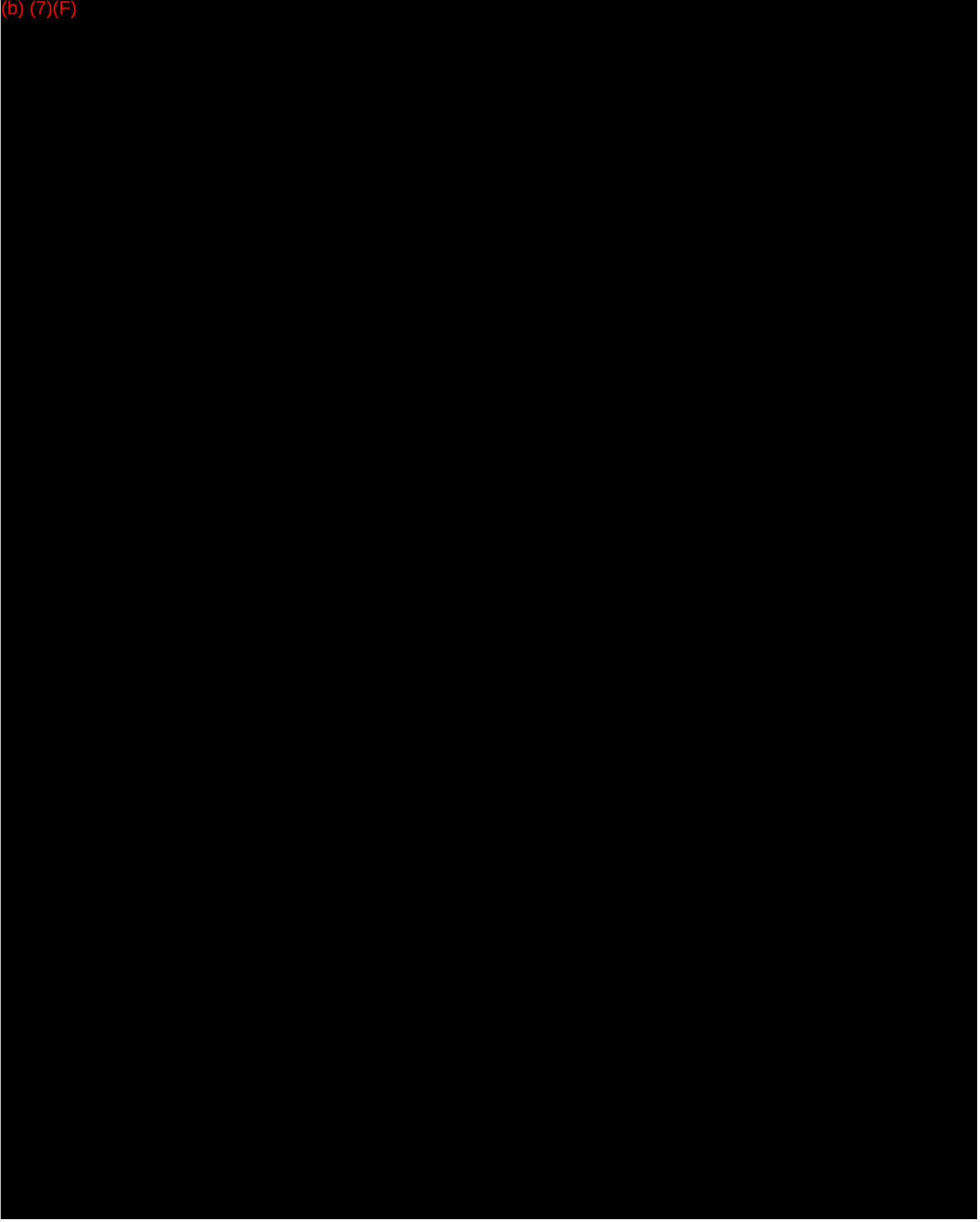
Line Sections/ Products Handled: (Refer to Product Characteristic and Hazards, FIGURE D.9-1)	**SECTION** / **PRODUCTS** Not Applicable
Facility Data: (See FIGURE C-1 for date and type of substantial expansion)	**Location (Address and County)** / **Hours of Operations/ Manning** / **Date of Startup** / **Wellhead Protection Area** 5924 NW Front Ave. Portland, Multnomah, Oregon 97210 / 24/7 / 1914 / N/A (b) (7)(F) [redacted] **Current Operations** Willbridge Distribution Center (WDC) operates as a light products terminal and lube oil blending facility.
Description of Zone:	The pipeline carries refined oil (including Gasoline, Turbine Fuel, Low Sulfur Diesel, Diesel Fuel, Kerosene, Denatured Ethanol, Jet A, Ethanol, AvGas, Jet Fuel, Chevron Techron (R) Concentrate, Transmix, Chevron Techron Concentrate, Neutral Oil, Delo® 400 Synthetic SAE 5W-40, Ultra Low Sulfur Diesel Fuel No. 2) in the areas shown in **FIGURE 1-3** and **FIGURE 1-4**
Response Zone Consists of the Following Counties:	Multnomah
Alignment Maps (Piping, Plan Profiles):	Maintained at: Not Applicable
(b) (7)(F) [redacted]	[redacted]
Statement of Significant and Substantial Harm:	The response zone in this system contains pipelines greater than 6 5/8 inches and is longer than ten miles or break out tanks. At least one section of pipeline or breakout tanks in each response zone crosses a major waterway or comes within five miles of a public drinking water intake or is located within a 1 mile radius of potentially affected environmentally sensitive areas, and could reasonably be expected to reach these areas. Therefore, in accordance with 49 CFR 194.103(c), each entire response zone described in this Plan will be treated as if expected to cause significant and substantial harm. Refer to **SECTION 6.7** and **SECTION 6.11** for the site-specific sensitive areas.
Spill Detection and Mitigation Procedures:	Refer to **SECTION 2.1.1**, **APPENDIX D.2.1** and **APPENDIX D.3**.
Date Prepared:	

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

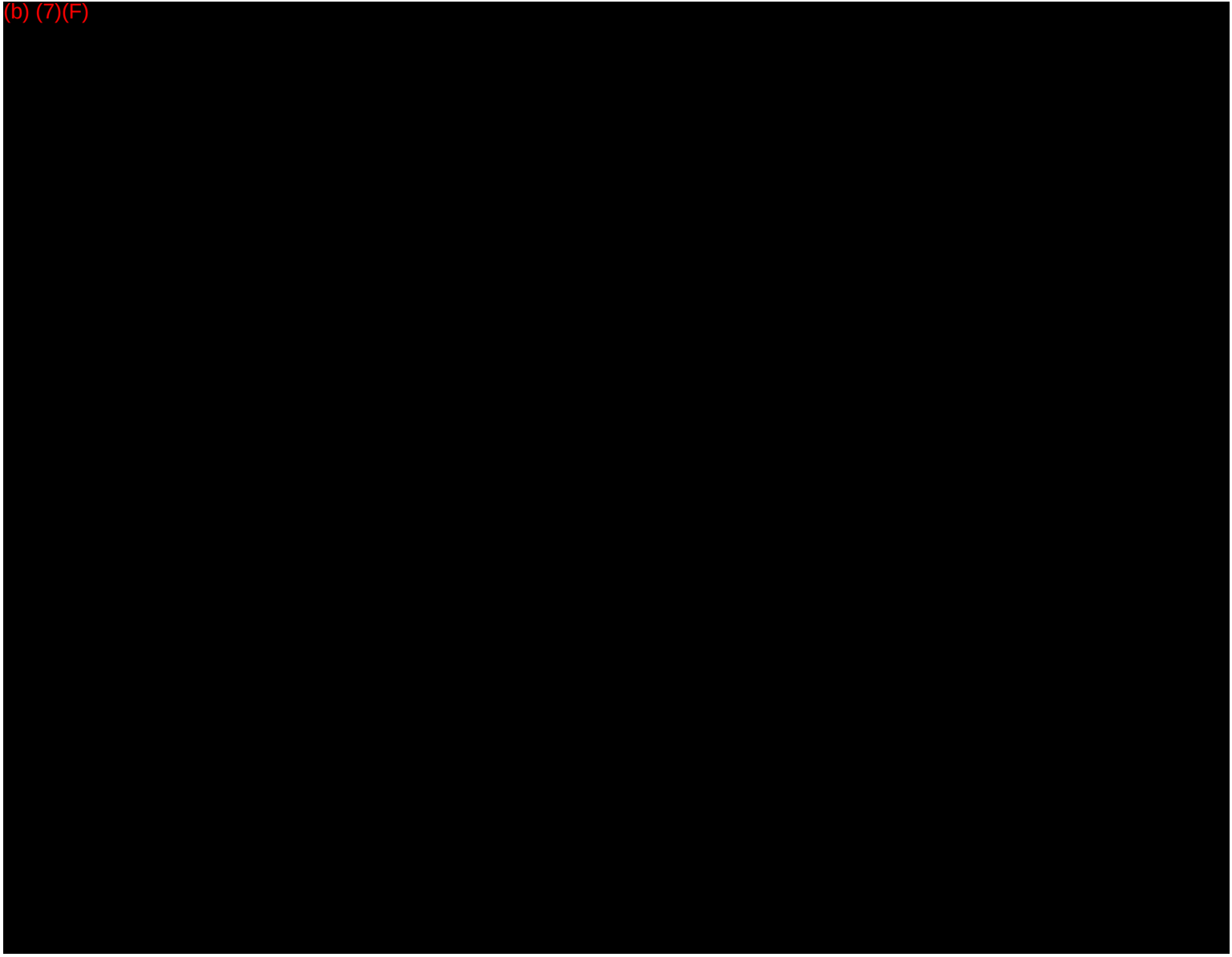
Approval must be received from the Oregon Department of Environmental Quality before conducting any major aspect of the Plan, unless:

- Such actions are necessary to protect human health and safety;
- Such actions must be performed immediately in response to unforeseen conditions to avoid additional environmental damage; or
- The Oregon Department of Environmental Quality or the United States Coast Guard has directed the Plan holder.

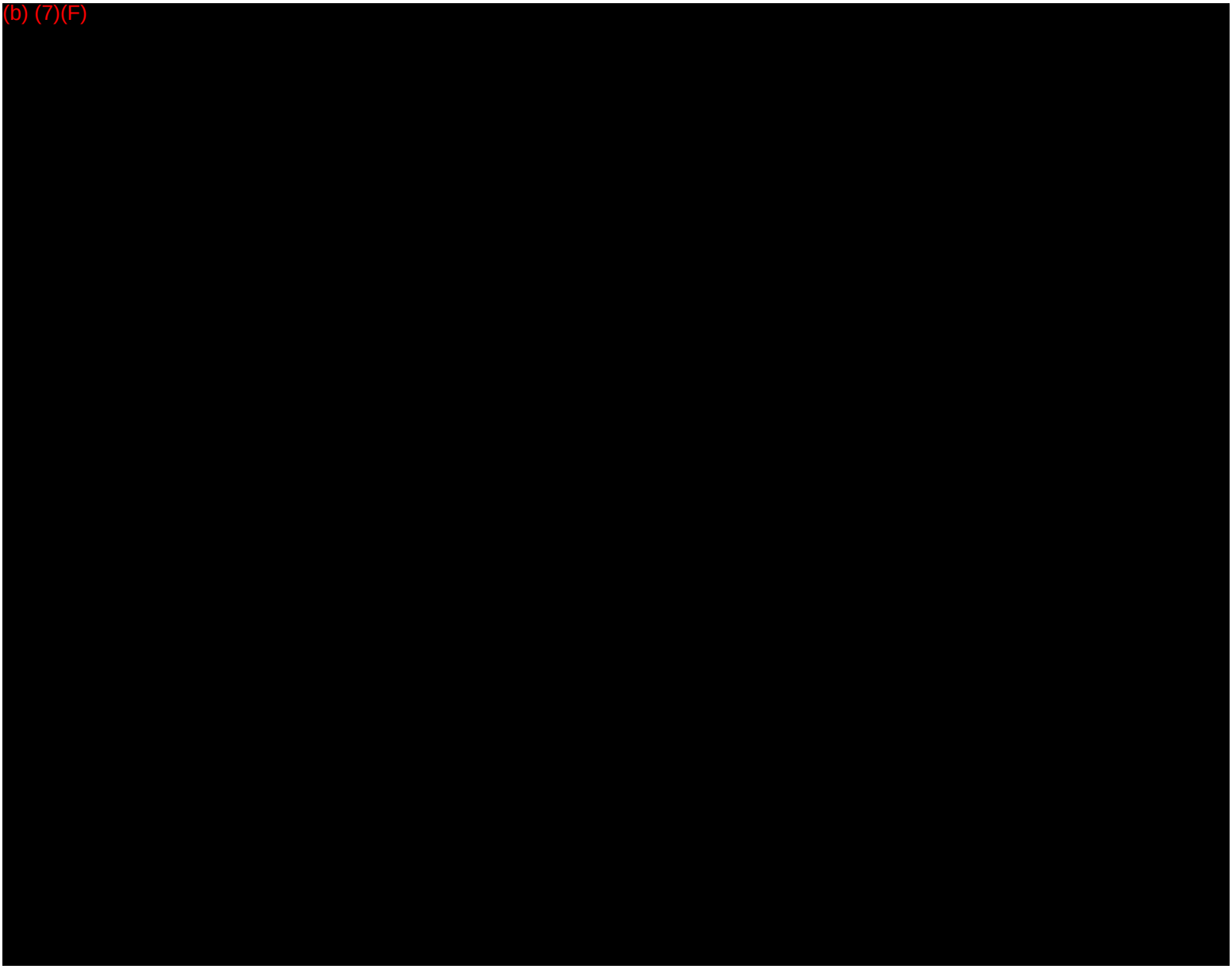
NOTE: For further information on the Qualified Individuals' training and qualifications, refer to **SECTION 4.5** and **APPENDIX A.2** in this Plan.


(b) (7)(F)


(b) (7)(F)


(b) (7)(F)




(b) (7)(F)

1.1 PURPOSE / SCOPE OF PLAN

The purpose of this Emergency Response Plan (Plan) is to provide guidelines to quickly, safely, and effectively respond to a spill. The Facility is owned and operated by Chevron Products Company a division of Chevron USA, Inc., herein referred to as "Company."

This Plan is intended to satisfy the requirements of the Oil Pollution Act of 1990 (OPA 90), and has been prepared in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and applicable Area Contingency Plans (ACP), EPA Region X Regional Contingency Plan . Specifically, this Plan is intended to satisfy:

- U.S. Environmental Protection Agency (EPA) requirements for an OPA 90 Plan (40 CFR 112.20)
- U.S. Environmental Protection Agency (EPA) requirements for a Spill Prevention Control and Countermeasures (SPCC) Plan (40 CFR 112.7)
- U.S. Coast Guard (USCG) requirements for an OPA 90 Plan (33 CFR 154.1035)
- Pipeline and Hazardous Materials Safety Administration (PHMSA), U.S. Department of Transportation requirements for an OPA 90 Plan (49 CFR 194)
- Occupational Safety and Health Administration (OSHA) requirements for emergency response plans (EAP and ERP) (29 CFR 1910)
- State of Oregon Department of Environmental Quality Division 141 Oil Spill Contingency Planning and 340-141-0140

1.2 PLAN REVIEW AND UPDATE PROCEDURE

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

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

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

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

CONDITIONS REQUIRING REVISIONS AND SUBMISSIONS	EPA	PHMSA	USCG
Relocation or replacement of the transportation system in a way that substantially affects the information included in the Plan, such as a change to the Worst Case Discharge volume.	X	X	
A change in the Facility's configuration that materially alters the information included in the Plan.	X		X
A change in the type of oil handled, stored, or transferred that materially alters the required response resources.	X	X	X
A change in key personnel (Qualified Individuals).	X	X	
Material change in capabilities of the Oil Spill Removal Organization(s) (OSROs) that provide equipment and personnel.	X	X	
Material change in the Facility's spill prevention and response equipment or emergency response procedures.	X		X
Any other changes that materially affect the implementation of the Plan.	X	X	X
A change in the NCP or ACP that has significant impact on the equipment appropriate for response activities.		X	
A change in the name of the Oil Spill Removal Organization (OSRO).			X
A change in the Facility's operating area that includes ports or geographic area.			X

All requests for changes must be made through the Terminal Manager.

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

1.3 AGENCY SUBMITTAL / APPROVAL LETTERS – *USCG*

U.S. Department of Homeland Security
United States Coast Guard

Captain of the Port
United States Coast Guard
Sector Columbia River

2185 SE 12TH Place
Warrenton, OR 97146-9311
Phone: 503-861-6209
Fax: 503-861-6355

16611
APR 28 2011
FIN#: PDX20008
MISLE#: 3959767

Chevron Willbridge
Attn: Gerald Henderson
5924 NW Front Ave
Portland, OR 97210

Dear Sir:

My office has completed a final review of the facility response plan that was submitted to meet the requirements of the Oil Pollution Act of 1990 (OPA 90). No deficiencies were noted, and the plan is hereby approved. The expiration date of this approval is five years from the date of this letter. You must resubmit the plan to the Coast Guard for re-approval two months prior to expiration as required by Title 33 Code of Federal Regulations (CFR) Section 154.1060(e).

You are reminded to review your response plan annually as required in 33 CFR Section 154.1065 (a). If revisions are necessary, then you must submit the revisions to the Captain of the Port (COTP) and all other plan holders for information or approval, as appropriate. Changes at the facility that significantly affect the implementation of your plan must be submitted to the COTP within 30 days of the change.

I commend your efforts in developing a response plan that reflects your company's operating procedures and organizational structure. I remind you that your plan is a vital working document and that implementing the plan will help ensure effective oil spill response and mitigation. Please ensure that all parties with responsibilities under the plan are familiar with the plan's procedures and requirements.

A copy of this letter shall be kept with your approved Facility Response Plan.

If you have any questions, please contact the Facility Inspections Branch at (503) 240-9333.

Sincerely,

D. E. Kaup

D. E. KAUP
Captain, U.S. Coast Guard
Captain of the Port

Chevron

Global Marketing

Gerald S. Henderson
Terminal Manager

North America Logistics
Willbridge Terminal
5924 NW Front Ave
Portland, OR 97210

CERTIFIED MAIL – RETURN RECIEPT REQUESTED: 7009 2250 0003 0201 2258

June 11, 2010

United States Coast Guard
6767 N. Basin Avenue
Portland, OR 97217-3992

RE: Willbridge Terminal Facility Response Plan Submittal – (Update)
EPA Facility FRP # ORD000831701; PHMSA Facility OSRP # 1697;
USCG Facility FRP # PDX20008

Enclosed is an updated Facility Response Plan for:

Chevron Products Company
Willbridge Terminal
5924 NW Front Avenue
Portland, OR 97210

The Manual was updated in response to facility changes and as part of Chevron's annual compliance document review process. Revisions include updates to the facility diagrams, tank tables, and other associated text in response to a completed Tank Construction Project as well as general updates per regulators requests.

Comments or questions relative to the Facility Response Plan should be directed to Jerry Henderson at (503) 221-7714 (HEGS@chevron.com) or Todd Kushner at (503) 221-6582 (TKEW@chevron.com).

Sincerely,

Gerald S. Henderson
Terminal Manager
(503) 221-7714

Chevron

Global Marketing

Gene P. Ketcham
HES Specialist

North America Logistics
OE/ HES
5924 NW Front Ave
Portland, OR 97210

CERTIFIED MAIL – RETURN RECEIPT REQUESTED: 7007 1490 0004 6464 2844

December 20, 2008

USCG
6767 N. Basin Ave.
Portland, OR 97217-3992
RE: EPA Facility FRP #: ORD000831701; **PHMSA Facility OSRP #:**1697; **USCG Facility FRP #:** PDX20008

Enclosed 2 electronic copies of the Facility Response Plan for:

Chevron Products Company
Willbridge Terminal
5924 NW Front Ave.
Portland, OR 97210

Comments or questions relative to the FRP should be directed to Gene Ketcham at (503) 221-6579 or GPKE@chevron.com.

Sincerely,

Gene Ketcham
HES Specialist
Chevron Products Company

U.S. Department of Homeland Security
United States Coast Guard

Commander
United States Coast Guard
Sector Portland

6767 N. Basin Ave
Portland, Oregon 97217-3992
Phone: 503-240-2333
Fax: 503-240-2586

16474
08 September 2008

FIN # PDX20008

Chevron Willbridge
Attn: Mr. Gene Ketcham
5924 NW Front Ave
Portland, OR 97210

Dear Sir:

This office has completed a final review of Chevron Willbridge's facility response plan that was submitted to meet the requirements of the Oil Pollution Act of 1990 (OPA 90). No deficiencies were noted, and the plan is hereby approved. The expiration date of this approval is five years from the date of this letter. You must resubmit the plan to the Coast Guard for re-approval six months prior to expiration as required by Title 33 Code of Federal Regulations (CFR) Section 154.1065.

You are reminded to review your response plan annually as required in 33 CFR Section 154.1065 (a). If revisions are necessary, then you must submit the revisions to the Captain of the Port (COTP) and all other plan holders for information or approval, as appropriate. Changes at the facility that significantly affect the implementation of your plan must be submitted to the COTP within 30 days of the change.

I commend your efforts in developing a response plan that reflects your company's operating procedures and organizational structure. I remind you that your plan is a vital working document and that implementing the plan will help ensure effective oil spill response and mitigation. Please ensure that all parties with responsibilities under the plan are familiar with the plan's procedures and requirements.

Please keep in mind that Chevron Willbridge is prohibited from handling, storing, transporting, transferring, or lightering oil unless it is operating in full compliance with this plan.

A copy of this letter shall be kept with your approved Facility Response Plan.

If you have any questions, please contact the Facilities Inspection Branch at (503) 240-2333.

Sincerely,

Frederick G. Myer
Captain, U. S. Coast Guard
Captain of the Port

1.3 AGENCY SUBMITTAL / APPROVAL LETTERS - *DEQ*

Oregon
Theodore R. Kulongoski, Governor

Department of Environmental Quality
Headquarters
811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696
FAX (503) 229-6124
TTY (503) 229-6993

June 25th, 2010

Jerry Henderson
Chevron Products Willbridge Terminal
5924 NW Front Ave
Portland, OR 97210

RE: Approval of Oil Spill Contingency Plan

Dear Mr. Henderson:

Based upon our review, the Department of Environmental Quality grants Approval to your submitted contingency plan pursuant to Oregon Revised Statutes 468B.300-500 and Oregon Administrative Rules 340-141.

Approval does not constitute an express assurance regarding the adequacy of this plan nor does it constitute a defense to liability imposed under state law. Further, in accordance with OAR 340-141-0220, the Department of Environmental Quality must be notified as soon as possible and within 24 hours of any significant change which could affect implementation of the plan, including a substantial decrease in available spill response equipment or personnel. The plan holder shall also provide a schedule for the prompt return of the plan to full operational status. A facsimile will be considered written notice for the purposes of this subsection.

Congratulations in developing an excellent plan. We look forward to working with Chevron Willbridge to participate in drills and update your plan annually or as appropriate. Please do not hesitate to contact Scott Smithof my staff at (503) 229-5370 or e-mail smith.scott@deq.state.or.us with any questions or concerns.

Sincerely,

Jeff Christensen
Program Manager
Land Quality Division

Enclosures:
Approval Certificate

cc: MSTC Andrew Dryer, USCG Sector Portland
Richard Franklin, USEPA Region 10
DEQ Northwest Region

The Oil Spill Contingency Plan

for

Chevron Products Willbridge Facility
5924 NW Front Ave
Portland, OR 97210

State of Oregon
Department of Environmental Quality

Has been approved pursuant to
Oregon Revised Statutes 468B.300-.500
and
Oregon Administrative Rules 340-141
by the
Oregon Department of Environmental Quality

Jeff Christensen
Manager
Emergency Response Program

6/25/10
Approval Date

6/25/15
Expiration Date

Chevron

Global Marketing

Our family of Brands

Gerald S. Henderson
Terminal Manager

North America Logistics
Willbridge Terminal
5924 NW Front Ave
Portland, OR 97210

CERTIFIED MAIL – RETURN RECIEPT REQUESTED: 7009 2250 0003 0201 2227

June 11, 2010

Oregon DEQ Spill Response Department
811 SW Sixth Avenue
Portland, OR 97204

RE: Willbridge Terminal Facility Response Plan Submittal – (Update)
EPA Facility FRP # ORD000831701; PHMSA Facility OSRP # 1697;
USCG Facility FRP # PDX20008

Enclosed is an updated Facility Response Plan for:

Chevron Products Company
Willbridge Terminal
5924 NW Front Avenue
Portland, OR 97210

The Manual was updated in response to facility changes and as part of Chevron's annual compliance document review process. Revisions include updates to the facility diagrams, tank tables, and other associated text in response to a completed Tank Construction Project as well as general updates per regulators requests.

Comments or questions relative to the Facility Response Plan should be directed to Jerry Henderson at (503) 221-7714 (HEGS@chevron.com) or Todd Kushner at (503) 221-6582 (TKEW@chevron.com).

Sincerely,

Gerald S. Henderson
Terminal Manager
(503) 221-7714

Oregon
Theodore R. Kulongoski, Governor

Department of Environmental Quality
Headquarters
811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696
FAX (503) 229-6124
TTY 1-800-735-2900

May 11th, 2010

Gerald Henderson
Terminal Manager
Chevron Willbridge Terminal
5924 NW Front Ave
Portland, OR 97210

RE: Oil Spill Contingency Plan Amendments

Dear Jerry:

The amendments submitted on 5/7/2010, for the Chevron Willbridge Terminal Oil Spill Contingency Plan, identified as Items #10 & #11 have been reviewed and approved by this office. Once you have formally submitted final revisions to the oil spill contingency plan, your terminal will be awarded a certificate stating that compliance with appliciable spill contingency regulations has been met.

Please retain a copy of this letter for verification that this submission has been received and approved. If you have any questions, please contact me at (503) 229-5370. I look forward to reviewing the final edition of the plan, and awarding your certificate.

Congratulations!

Scott A. Smith
Oil Spill Contingency Planner
Oregon Department of Environmental Quality

Cc: Todd Kushner

Oregon
Theodore R. Kulongoski, Governor

Department of Environmental Quality
Headquarters
811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696
FAX (503) 229-6124
TTY (503) 229-6993

December 29, 2008

Mr. Gene Ketcham, HSE Specialist
Chevron Products Company
5924 NW Front Ave
Portland, OR 97210

RE: Oil Spill Contingency Plan Review

Dear Mr. Ketcham:

This letter is to acknowledge that the Department has received the Chevron Products Company Oil Spill Contingency Plan submitted on December 20, 2008. I have been assigned to review the plan and will be your contact at DEQ throughout the approval process.

As we have questions about the plan you submitted, we will send all requests in letter format and identify a timeline for response. Once plan review is complete, we will notify you of any conditions of approval and how to address them. Plans that are determined adequate receive a certificate and letter of approval valid for a period not to exceed five years. DEQ will judge the effectiveness of the plan throughout the five year approval cycle by participating in, observing, and evaluating the drills, exercises, and inspections required by Oregon Administrative Rule 340-141-0200

Please contact me at (503) 229-5370 if there are any questions regarding the review of this plan.

Sincerely,

Joshua M. Scruggs
Oil Spill Contingency Planner
Oregon Department of Environmental Quality

Chevron

Global Marketing

Gene P. Ketcham
HES Specialist

North America Logistics
OE/ HES
5924 NW Front Ave
Portland, OR 97210

CERTIFIED MAIL – RETURN RECEIPT REQUESTED: 7007 1490 0004 6464 2837

December 20, 2008

Oregon DEQ Spill Response Dept
811 SW Sixth Ave.
Portland, OR 97204

RE: EPA Facility FRP #: ORD000831701; **PHMSA Facility OSRP #:**1697; **USCG Facility FRP #:** PDX20008

Enclosed is a paper and an electronic copy of the Facility Response Plan for:

Chevron Products Company
Willbridge Terminal
5924 NW Front Ave.
Portland, OR 97210

Comments or questions relative to the FRP should be directed to Gene Ketcham at (503) 221-6579 or GPKE@chevron.com.

Sincerely,

Gene Ketcham
HES Specialist
Chevron Products Company

3 AGENCY SUBMITTAL / APPROVAL LETTERS - *EPA*

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

OFFICE OF
COMPLIANCE AND ENFORCEMENT

Reply To: OCE-133

OCT 4 2011

CERTIFIED MAIL-7011 0470 0002 9128 0242
RETURN RECEIPT REQUESTED

Mr. Todd Kushner
Operations Manager
Chevron Products Company – Willbridge Terminal
5924 NW Front Avenue
Portland, Oregon 97210

Re: Chevron Products Company – Willbridge Terminal
Government-Initiated Unannounced Exercise (GIUE) Inspection

Dear Mr. Kushner:

On October 27, 2010, U.S. Environmental Protection Agency (EPA) representatives conducted an unannounced exercise at the Chevron Products Willbridge Facility/Terminal located in Portland, Oregon. The purpose of that inspection was to gather information regarding your operation as part of an overall evaluation of the compliance status of your facility with the Oil Pollution Prevention regulations. The GIUE was conducted in accordance with the National Preparedness and Response Exercise Program (PREP) and 40 C.F.R. Part 112, Appendix E.

We have evaluated the exercise findings, and I want to convey to you that that the exercise did not reveal any site-specific deficiencies that need to be addressed to meet the requirements of the Facility Response Plan (FRP) regulation (40 C.F.R. Part 112). Overall, EPA believes that Chevron Products Company staff and contractor's efforts during the exercise fully met the objectives of the GIUE.

As a result of having successfully completed the GIUE, the Chevron Products Willbridge Facility/Terminal will not be subject to another GIUE under the PREP Guidelines for 36 months from the date of this exercise. This letter should be maintained for three years as verification of

Rec'd KDL 10/12/11

your participation in the exercise. EPA appreciates your participation and cooperation during the exercise. Any questions regarding this matter should be directed to Kate Spaulding, EPA Region 10 SPCC Enforcement Officer, at (206) 553-5429, or Mike Sibley, EPA On-scene Coordinator, at (206) 553-1886.

Sincerely,

Kimberly A. Ogle

Kimberly A. Ogle, Manager
NPDES Compliance Unit

cc: Mike Zollitsch
Oregon Department of Environmental Quality
State Office

Captain Bruce C. Jones
U.S. Coast Guard Commander
Sector Columbia River

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

May 11, 2011

Gerald S. Henderson
Chevron
5924 NW Front Ave
Portland, OR 97210

RE: 5-Year Review of Facility Response Plan FRP 58

Dear Mr.Henderson:

Pursuant to the Clean Water Act, 33 U.S.C. Section 1321(j)(5), as amended by the Oil Pollution Act of 1990, the United States Environmental Protection Agency (U.S. EPA) has reviewed your Facility Response Plan (FRP) and finds that it meets the requirements of Section 311(j)(5) of the Clean Water Act and 40 CFR 112.20(c)(4). Your next 5 year review will be March 2, 2016.

Note that, pursuant to 40 CFR 112.20(d)(1), the owner or operator of a facility for which a response plan is required shall revise and resubmit revised portions of the response plan to U.S. EPA within 60 days of each facility change that may materially affect the response to a worst-case discharge.

In addition, 40 CFR Section 112.20(d)(2) provides that changes in personnel and telephone number lists included in an FRP do not require U.S. EPA approval, but should be supplied to U.S. EPA as the revisions occur.

If you have questions regarding this correspondence, please contact Michael Sibley, at (206)-556-1886 or Janet Wien (206)-553-8634.

Sincerely,

Michael Sibley, OSC
Emergency Response

REF.: frp_5yearreview_approved

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

April 5, 2011

Chevron USA Products Company
Chevron Corp - Willbridge Terminal
Todd Kushner
5924 NW Front Ave
Portland, OR 97210

RE: Government-Initiated Unannounced Exercise (FRP# **FRP000058**)

Dear Todd

On October 27 2010, staff of the United States Environmental Protection Agency (U.S. EPA) conducted a government-initiated unannounced exercise at the above referenced facility, in accordance with the National Preparedness and Response Exercise Program (PREP) and 40 CFR Part 112, Appendix E, Section 3.3.1.

The exercise involved the small spill scenario.

Your facility met the minimum required objectives of (1) having adequately trained personnel implement the response plan, (2) making response equipment and resources available and in operating condition, and (3) demonstrating that the response can be conducted in a timely manner. This letter should be maintained for three years as verification of your participation in the exercise.

Thank you for your participation and cooperation during the exercise. If you have questions regarding this correspondence, please contact Michael Sibley, OSC, at 206-553-1886 or by email at sibley,michael@epa.gov.

Sincerely,

For

Wally Moon, Unit Manager
Prevention, Preparedness and Response Unit
Office of Environmental Cleanup

REF.: gine_success

Chevron

Global Marketing

Gerald S. Henderson
Terminal Manager

North America Logistics
Willbridge Terminal
5924 NW Front Ave
Portland, OR 97210

CERTIFIED MAIL – RETURN RECIEPT REQUESTED: 7009 2250 0003 0201 2241

June 11, 2010

U.S. EPA Region X
Oil Spill Response Section
1200 6th Ave
Seattle, WA 98101-3188

RE: Willbridge Terminal Facility Response Plan Submittal – (Update)
EPA Facility FRP # ORD000831701; PHMSA Facility OSRP # 1697;
USCG Facility FRP # PDX20008

Enclosed is an updated Facility Response Plan for:

Chevron Products Company
Willbridge Terminal
5924 NW Front Avenue
Portland, OR 97210

The Manual was updated in response to facility changes and as part of Chevron's annual compliance document review process. Revisions include updates to the facility diagrams, tank tables, and other associated text in response to a completed Tank Construction Project as well as general updates per regulators requests.

Comments or questions relative to the Facility Response Plan should be directed to Jerry Henderson at (503) 221-7714 (HEGS@chevron.com) or Todd Kushner at (503) 221-6582 (TKEW@chevron.com).

Sincerely,

Gerald S. Henderson
Terminal Manager
(503) 221-7714

Chevron

Global Marketing

Gene P. Ketcham
HES Specialist

North America Logistics
OE/ HES
5924 NW Front Ave
Portland, OR 97210

CERTIFIED MAIL – RETURN RECEIPT REQUESTED: 7007 1490 0004 6464 2820

December 20, 2008

U.S. EPA Region X, Oil Spill Response Section
1200 6th Ave
Seattle, WA 98101-3188

RE: EPA Facility FRP #: ORD000831701; **PHMSA Facility OSRP #:**1697; **USCG Facility FRP #:** PDX20008

Enclosed is a paper copy of the Facility Response Plan for:

Chevron Products Company
Willbridge Terminal
5924 NW Front Ave.
Portland, OR 97210

Comments or questions relative to the FRP should be directed to Gene Ketcham at (503) 221-6579 or GPKE@chevron.com.

Sincerely,

Gene Ketcham
HES Specialist
Chevron Products Company

1.3 AGENCY SUBMITTAL / APPROVAL LETTERS - *DOT*

Chevron

Global Marketing

Gerald S. Henderson
Terminal Manager

North America Logistics
Willbridge Terminal
5924 NW Front Ave
Portland, OR 97210

CERTIFIED MAIL – RETURN RECIEPT REQUESTED: 7009 2250 0003 0201 2234

June 11, 2010

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

RE: Willbridge Terminal Facility Response Plan Submittal – (Update)
EPA Facility FRP # ORD000831701; PHMSA Facility OSRP # 1697;
USCG Facility FRP # PDX20008

Enclosed is an updated Facility Response Plan for:

Chevron Products Company
Willbridge Terminal
5924 NW Front Avenue
Portland, OR 97210

The Manual was updated in response to facility changes and as part of Chevron's annual compliance document review process. Revisions include updates to the facility diagrams, tank tables, and other associated text in response to a completed Tank Construction Project as well as general updates per regulators requests.

Comments or questions relative to the Facility Response Plan should be directed to Jerry Henderson at (503) 221-7714 (HEGS@chevron.com) or Todd Kushner at (503) 221-6582 (TKEW@chevron.com).

Sincerely,

Gerald S. Henderson
Terminal Manager
(503) 221-7714

Chevron

Global Marketing

Gene P. Ketcham
HES Specialist

North America Logistics
OE/ HES
5924 NW Front Ave
Portland, OR 97210

CERTIFIED MAIL – RETURN RECEIPT REQUESTED: 7007 1490 0004 6464 2851

December 20, 2008

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

RE: EPA Facility FRP #: ORD000831701; **PHMSA Facility OSRP #:**1697; **USCG Facility FRP #:** PDX20008

Enclosed 2 electronic copies of the Facility Response Plan for:

Chevron Products Company
Willbridge Terminal
5924 NW Front Ave.
Portland, OR 97210

Comments or questions relative to the FRP should be directed to Gene Ketcham at (503) 221-6579 or GPKE@chevron.com.

Sincerely,

Gene Ketcham
HES Specialist
Chevron Products Company

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

OPS Sequence Number: 1697
Facility Response Plan Version Date: 10/23/2008
Pipeline Operator Name: **ChevronTexaco Products Company a division of Chevron USA, Inc.**
Contact Name: Jerry Henderson
Contact Office, Fax, and Cellular Telephone Numbers: **(O): 503.221.7714 / (F): 503.222.9766 / (C): 503.539.4019**
Contact Mailing Address: **5924 NW Front Ave., Portland, OR 97210**
Contact Electronic Mail Address: **hegs@chevron.com**
If different from the Contact Name, Facility Response Plan Author Name:
Technical Response Planning Corporation (TRP)
Facility Response Plan Author Office, Fax, and Cellular Phone Numbers:
(O): 281.95.9600 / (F): 281.95.0369
Facility Response Plan Author Mailing Address:
9720 Cypresswood Drive #340, Houston, TX 77070
Facility Response Plan Author Electronic Mail Address: **info@trpcorp.com**
Date of Review: 12/20/08

National Contingency Plan and Area Contingency Plan Certifications
For Sequence Number: 1697

---

1. A. Has the operator reviewed the National Contingency Plan (NCP) and each applicable Area Contingency Plan (ACP)? Yes

B. Does the Facility Response Plan follow the Area Contingency Plans? Yes

C. Please list the names of the Area Contingency Plans and the pages in the Facility Response Plan that relate to the Area Contingency Plans. (49 CFR 194.107(b))

Area Contingency Plans and Related Pages: Northwest Area Contingency Plan (NWACP), Section 1.5 and Appendix A

Comment:

Recommendation:

Plan Information Summary
For Sequence Number: 1697

---

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

- The Operator Name, Street Address, City, State, and Zip Code: Yes
- A list of response zones that meet the criteria for significant and substantial harm (49 CFR 194.113(a)(2)) and a list of response zones in which a worst-case discharge could cause substantial harm: Yes
- The basis for the operator's determination that the response zone meets the criteria for significant and substantial harm and a statement that a worst-case discharge in the response zone can be expected to cause significant and substantial harm for each response zone:
- Description of each response zone, including the County(s) or Parish(es) and State(s): Yes
- Explanation for each response zone designation: Yes
- Name(s), title(s), and office and cellular telephone number(s) for the Qualified Individual(s) twenty-four hours a day in each response zone: Yes
- Name(s), title(s), and office and cellular telephone number(s) for the Alternate Qualified Individual(s) twenty-four hours a day in each response zone: Yes
- List of line sections in each response zone by milepost, survey station number, or other operator designation: Yes
- If any response zone contains multiple pipeline systems, all pipeline systems are described and the oils they transport are listed: Yes
- The type of oil and the volume of the worst-case discharge in each response zone? Yes

Page Reference: Section 1 Introduction, Figure 1-2 – Willbridge Information Summary
Comment:

Recommendation:

Notifications

For Sequence Number: 1697

3.1 What person, position, or facility is responsible for starting immediate notification? (49 CFR 194.107(c)(1)(ii)) Please list the person's, position's, or facility's mailing and electronic mail addresses and office, fax, and cellular telephone information.
Qualified Individual (Terminal Manager) or his/hers alternate as listed in Section 3 pg 3-6.

QI Name	Jerry Henderson
Title	Terminal Manager
Work Address	5924 NW Front Ave, Portland, OR 97210
Work Phone	503.221.7714
Cell Phone	503.539.4019
Email	hegs@chevron.com

Page Reference: Section 1, Fig. 1-2, pg. 1-4; Section 3, Fig. 3.1-3, pg. 3-6

Comment:

Recommendation:

3.2 Is the person, position, or facility capable of starting immediate notification twenty-four hours a day, three hundred sixty-five days a year? (49 CFR 194.107(c)(1)(ii)) Please describe your immediate notification plan. Yes. Facility personnel will identify and control the source of a spill, if safe to do so, then will notify the Supervisory Personnel. The Qualified Individual will conduct notifications as illustrated in the Emergency Notification Flow Chart QIs are available on-call 24/7.

Page Reference: Section 3.1, Emergency Information and Notification Procedures, pg. 3-2.

Comment:

Recommendation:

3.3 Do the Facility Response Plan notification procedures include telephone numbers so that the qualified individual(s) and oil spill removal organization(s) can be reached twenty-four hours a day, three hundred sixty-five days a year? (49 CFR 194.107(b)(1) and (2), 194.107(c)(1)(ii) and 194.113(b)(2))

- Qualified Individual(s)?: Yes
- Oil Spill Removal Organization(s)?: Yes
- Are the National Response Center numbers correctly listed as 1-800-424-8802 and 202-267-2675 in the plan?: Yes
- Company personnel?: Yes

Page Reference: Section 3, Figure 3.1-3 Internal Notifications and Telephone Numbers, pgs. 3-6 – 3-8; Section 3 Figure 3.1-4 External Notifications and Telephone Numbers, pgs. 3-9 – 3-12.

Comment:

Recommendation:

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

- Name of pipeline operator?: Yes
- Time of discharge?: Yes
- Location of discharge?: Yes
- Name of oil involved?: Yes
- Reason for discharge?: Yes
- Estimated volume of oil discharged?: Yes
- Weather conditions on scene?: Yes

Page Reference: Section 3, Fig 3.1-2 Oil Spill Report Form

Comment:

Recommendation:

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

- Name(s)?: Yes
- Address(es)?: Yes
- Telephone Number(s)?: Yes

Page Reference: Section 3 Figure 3.1-4 External Notifications and Telephone Numbers, pgs. 3-9 – 3-12.

Comment:

Recommendation:

Spill Detection and Mitigation Procedures

For Sequence Number: 1697

4.1 Does the Facility Response Plan contain procedures to name and mitigate or prevent a substantial threat of a worst-case discharge? (49 CFR 194.107(a) and (b)(2)(i)): Yes

Page Reference: Figure 2.1-2 Spill/Release Response Action Checklist

Comment:

Recommendation:

4.2 Does the Facility Response Plan name personnel, equipment, and procedures for detecting leaks and spills and locating spills throughout the response zone? (49 CFR 194.107(c)(1)(iii)): Yes
Page Reference: Section 2.1.1 Spill Detection and Mitigation Procedures; Appendix D-3

Comment:

Recommendation:

4.3 Does the Facility Response Plan name the maximum time to detect the spill and shut down flow in affected pipeline(s) in bad weather? (49 CFR 194.105(b)(1)): Yes

Page Reference: Section 2.1.1 Spill Detection and Mitigation Procedures; Appendix D-7

Comment:

Recommendation:

4.4 Does the Facility Response Plan have procedures to mitigate spills appropriate for the response zone(s) and consistent with applicable Area Contingency Plan(s)? (49 CFR 194.107(b)(2)(i), and (c)(1)(iii) and (v)): Yes

Page Reference: Section 2.1 Spill/Release Response

Comment:

Recommendation:

Spill Containment

For Sequence Number: 1697

5.1 Does the Facility Response Plan name spill containment strategies appropriate for the response zone(s) and consistent with applicable Area Contingency Plans? (49 CFR 194.107(b)(1)(iii), (b)(2)(i), and (c)(1)(v)): Yes

Page Reference: Section 2.1.5 Initial Containment Actions; Appendix C

Comment:

Recommendation:

5.2 Can planned spill containment activities be accomplished within the appropriate tier times? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115): Yes

Page Reference: Section 4.3 Tiers of Response; Appendix D-5

Comment:

Recommendation:

5.3 Are containment equipment capacities described in sufficient detail and does the Facility Response Plan identify enough spill containment equipment to respond to a worst-case discharge to the maximum extent practicable? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115): Yes

Page Reference: Section 7.1.1 Facility Response Equipment; Figure 7.1-1; ERAP Fig 5-2 Facility Equipment; Appendix D-5, D-7; Appendix B

Comment:

Recommendation:

Spill Recovery

For Sequence Number: 1697

6.1 Does the Facility Response Plan identify the spill recovery strategies appropriate for the response zone(s) and consistent with applicable Area Contingency Plan(s)? (49 CFR 194.107(b)(1)(iii), (b)(2)(i) and (iv), and (c)(1)(v)): Yes

Page Reference: Section 4 Response Team Organization; Section 6 Sensitive Areas/Response Tactics;

Comment:

Recommendation:

6.2 Can planned spill recovery activities be accomplished within the appropriate tier times? (49 CFR 194.107(b)(2)(i) and(c)(1)(v), and 194.115): Yes

Page Reference: Section 4.3 Tiers of Response; Appendix D-5

Comment:

Recommendation:

6.3 Are recovery equipment capacities described in sufficient detail and does the Facility Response Plan identify sufficient spill recovery equipment to respond to a worst-case discharge to the maximum extent practicable? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115): Yes

Page Reference: Section 7.1.1 Facility Response Equipment; Figure 7.1-1; ERAP Fig 5-2 Facility Equipment; Appendix D-5, D-7; Appendix B

Comment:

Recommendation:

Disposal

For Sequence Number: 1697

7.1 Does the Facility Response Plan identify disposal procedures, including temporary storage equipment for recovered oil appropriate for the response zone and consistent with applicable Area Contingency Plans? (49 CFR 194.107(b)(1)(iii), (b)(2)(i), and (c)(1)(v)): Yes

Page Reference: Section 7.4 Waste Management

Comment:

Recommendation:

7.2 Can planned temporary storage and waste disposal activities be accomplished within the appropriate tier times? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115): Yes

Page Reference: Section 7.4.1 Waste Storage; Figure 7.4-3; Section 4.3 Tiers of Response; Appendix D-5

Comment:

Recommendation:

7.3 Does the Facility Response Plan identify sufficient temporary storage capabilities to respond to a worst-case discharge to the maximum extent practicable? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115): Yes

Page Reference: Section 4.1 Waste Management; Appendix D-5

Comment:

Recommendation:

Sensitive Area Protection

For Sequence Number: 1697

8.1 Does the Facility Response Plan identify the protection strategies appropriate for the response zone and consistent with applicable Area Contingency Plans? (49 CFR 194.107(b)(1)(iii), (b)(2)(i) and (ii), and (c)(1)(v)): Yes

Page Reference: Section 6 Sensitive Areas/Response Tactics

Comment:

Recommendation:

8.2 Can planned protection activities be accomplished within the appropriate tier times? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115) Yes

Page Reference: Section 6 Sensitive Areas/Response Tactics; Section 4.3 Tiers of Response; Appendix D-5

Comment:

Recommendation:

Response Management
For Sequence Number: 1697

9.1 Is the response management system described in the Facility Response Plan based on an Incident Command System? (49 CFR 194.107(b)(1)(i), (b)(2)(iii), and (c)(3)): Yes

Page Reference: Section 5 Incident Planning

Comment:

Recommendation:

9.2 Does the operator's response organization describe roles and responsibilities for (49 CFR 194.107(b)(1)(i), (b)(2)(iii), and (c)(3)):

- Qualified Individual?: Yes
- Other operator response personnel including the spill management team?: Yes
- Contracted Oil Spill Removal Organization(s)?: Yes

Page Reference: Section 4.6 Qualified Individual; Section 4.8 Emergency management Team Job Description Checklists; Section 4 Response Team Organization

Comment:

Recommendation:

9.3 Does the operator's response organization describe how the operator works with the Unified Command and with responders including (49 CFR 194.107(b)(1)(i), (b)(2)(iii), and (c)(3)):

- Oil Spill Removal Organization(s)?: Yes
- State and Local responders?: Yes
- Federal On-Scene Coordinator?: Yes

Page Reference: Section 4.5 Unified Command System

Comment:

Recommendation:

Communications, Response Equipment and Transportation
For Sequence Number: 1697

10.1 Does the Facility Response Plan describe appropriate communications procedures and system(s) adequate for notifications and response operations? (49 CFR 194.107(c)(1)(ii) and (v)): Yes

Page Reference: Section 3 Notifications/Telephone Numbers; Section 4 Response Team Organization; Section 4.7.3 Communications Equipment

Comment:

Recommendation:

10.2 Does the Facility Response Plan identify response equipment that the operator owns and maintains? (49 CFR 194.107(c)(1)(v) and 194.115(a)): Yes

Page Reference: Section 7.1 Response Resources

Comment:

Recommendation:

10.3 Does the Facility Response Plan describe procedures for maintaining response equipment the operator owns? (49 CFR 194.107(c)(1)(viii)): Yes

Page Reference: Section 7.1 Response Resources

Comment:

Recommendation

10.4 Does the Facility Response Plan identify Oil Spill Removal Organization(s)' response equipment when the U.S. Coast Guard has not classified the Oil Spill Removal Organization? (49 CFR 194.107(c)(1)(v) and 194.115(a)) Yes

Page Reference: Section 7.1.3 Contractors, Contractor Equipment, and Labor

Comment:

Recommendation:

10.5 Does the Facility Response Plan describe procedures for maintaining Oil Spill Removal Organization(s)' response equipment when the U.S. Coast Guard has not classified the Oil Spill Removal Organization? (49 CFR 194.107(c)(1)(viii)): Yes

Page Reference: Section 7.1.3 Contractors, Contractor Equipment, and Labor

Comment:

Recommendation:

10.6 Does the Facility Response Plan identify location(s) for operator-owned and Oil Spill Removal Organization-owned response equipment? (49 CFR 194.115(b)) Yes

Page Reference: Section 7.1 Response Resources; Section 7.1.3 Contractors, Contractor Equipment, and Labor

Comment:

Recommendation:

10.7 Does the Facility Response Plan describe mobilizing and deploying response equipment within the appropriate tier times consistent with the plan's response activities? (49 CFR 194.107(c)(1)(v) and 194.115(b)) Yes

Page Reference: Section 4.3 Tiers of Response; Appendix D-5

Comment:

Recommendation:

10.8 Does the size of the response zone permit planned response activities, including equipment mobilization and deployment, within the appropriate tier times? (49 CFR 194.115(b)) Yes

Page Reference: Section 7.1.5 Staging Area

Comment:

Recommendation:

Response Personnel and Mobilization
For Sequence Number: 1697

11.1 Does the Facility Response Plan identify enough trained personnel to respond to the worst-case discharge consistent with the Plan's response activities? (49 CFR 194.107(a), (c)(1)(v), and (c)(3), 194.115, and 194.117): Yes

Page Reference: Appendix A

Comment:

Recommendation:

11.2 Does the Facility Response Plan describe procedures for mobilizing and deploying response personnel throughout the response zone(s) consistent with the Plan's response activities? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115): Yes

Page Reference: Section 6 Sensitive Areas/Response Tactics

Comment:

Recommendation:

Response Documentation and Worst Case Discharge
For Sequence Number: 1697

12.1 Does the operator describe procedures the response management organization must use to document response decisions, activities, and costs? (49 CFR 194.107(c)(3)) Yes

Page Reference: Section 5.3 ICS Forms

Comment:

Recommendation:

12.2 Does the Facility Response Plan provide the calculations and methodology used for determining the worst-case discharge for the response zone(s)? (49 CFR 194.105): Yes

Page Reference: Figure 1-2 Willbridge Information Summary

Comment:

Recommendation:

12.3 Is the worst-case discharge volume calculated using the three specified methods in the Department of Transportation regulation? Are the calculations accurate and as prescribed? (49 CFR 194.105(b)) Yes

Page Reference: Appendix D.7.3

Comment:

Recommendation:

Training: Program and Procedures

For Sequence Number: 1697

13.1 Does the Facility Response Plan describe a training program that teaches response personnel about the Plan and their responsibilities under the Plan? (49 CFR 194.107(b)(1)(ii), (c)(1)(vii) and (c)(3), and 194.117) : Yes

Page Reference: Appendix A Training/Exercises

Comment:

Recommendation:

13.2 Does the Facility Response Plan describe a training program that teaches response personnel about matters including (49 CFR 194.117(a)(3)): Yes

- Oil characteristics and hazards?: Yes
- Conditions that are likely to worsen emergencies, including the consequences of facility malfunctions or failures and appropriate corrective actions?: Yes
- Steps necessary to control an accidental discharge of oil?: Yes
- Steps necessary to minimize the potential for fire, explosion, or environmental damage?: Yes
- Proper fire-fighting procedures and use of personal protective equipment?: Yes

Page Reference: Appendix A Training/Exercises

Comment:

Recommendation:

13.3 Does the Facility Response Plan describe a response-training program that addresses the appropriate levels of training and the requirements in OSHA 29 CFR 1910.120? (49 CFR 194.107(b)(1)(ii) and 194.117(c)): Yes

Page Reference: Appendix A Training/Exercises

Comment:

Recommendation:

13.4 Does the Facility Response Plan describe the operator's procedures for maintaining records for response personnel? (49 CFR 194.117(b)): Yes

Page Reference: Appendix A Training/Exercises

Comment:

Recommendation:

Spill Response Drill Program
For Sequence Number: 1697

14.1 Does the Facility Response Plan describe procedures for conducting internal and external drills that include (49 CFR 194.107(c)(1)(ix)): Yes

- Responsibility for planning, carrying out, and monitoring drills? : Yes
- Announced drills? : Yes
- At least one unannounced internal drill? : Yes
- Quarterly Qualified Individual notifications drills? : Yes
- Annual spill management team tabletop drills? : Yes
- Annual Oil Spill Removal Organization(s) equipment deployment drills of representative types and amounts of key equipment in the Facility Response Plan? : Yes
- At least one drill that tests the entire response plan for each response zone at least once every three years? : Yes

Page Reference: Appendix A Training/Exercises

Comment:

Recommendation:

14.2 Does the Facility Response Plan describe a three-year drill and exercise cycle and the frequencies for each type of drill in that cycle? (49 CFR 194.107(c)(1)(ix)): Yes

Page Reference: Appendix A Training/Exercises

Comment:

Recommendation:

14.3 Does the Facility Response Plan describe procedures for maintaining drill documentation for three years? (49 CFR 194.107(c)(1)(ix)): Yes

Page Reference: Appendix A Training/Exercises

Comment:

Recommendation:

Response Plan Maintenance
For Sequence Number: 1697

15.1 Does the Facility Response Plan describe the requirements and procedures for the operator to (a) review the Facility Response Plans at least once every five years from the date the Office of Pipeline Safety approves the plan, (b) modify the Facility Response Plan to address new or different operating conditions or information in the Facility Response Plan, and (c) submit the plan for the Office of Pipeline Safety to review, require changes, and approve? (49 CFR 194.107(c)(1)(x) and 194.121(a)) Yes

Page Reference: Section 1.2 Plan Review and Update Procedure

Comment:

Recommendation:

15.2 Does the Facility Response Plan identify key factors that may cause revisions to the response plan and require the operator to submit revisions to the Office of Pipeline Safety within 30 days of making the revisions for factors including: (49 CFR 194.121(b)):

- New pipeline construction or purchase?: Yes
- Different worst-case discharge volume?: Yes
- Change in commodities transported?: Yes
- Change in Oil Spill Removal Organization(s)?: Yes
- Change in Qualified Individual(s)?: Yes
- Change in a National Contingency Plan or Area Contingency Plan that has a significant impact on the appropriateness of response equipment or response strategies?: Yes
- Change in response procedures?: Yes

Page Reference: Section 1.2 Plan Review and Update Procedure

Comment:

Recommendation:

15.3 Does the Facility Response Plan describe procedures for incorporating improvements in the following? (49 CFR 194.121(b)(8))

- Post-drill evaluation results? : Yes
- Post-incident evaluation results? : Yes

Page Reference: Appendix A-1; Section 8.3 Post-Incident Review

Comment:

Recommendation:

National Contingency Plan and Area Contingency Plan Consistency and Concept of Operations
For Sequence Number: 1697

16.1 Is the Plan consistent with the National Contingency Plan in effect at the time of submission? (49 CFR 194.107(b)(1)) Please answer yes or no. Yes

Page Reference: Section 1.1 Purpose/Scope of Plan

Comment:

Recommendation:

16.2 Is the Plan consistent with the Area Contingency Plans in effect for each response zone at the time of submission? (49 CFR 194.107(b)(2)) Please answer yes or no. Yes

Page Reference: Section 1.1 Purpose/Scope of Plan

Comment:

Recommendation:

16.3 Is the Plan's concept of operations adequate to carry out a response to the worst-case discharge under 49 CFR 194? (49 CFR 194.107) Please answer yes or no. Yes

Page Reference: Section 1.4 Certification of Adequate Resources

Comment:

Recommendation:

U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

May 23, 2006

Certified Mail –7005 1160 0004 7587 5778-Return Receipt Requested

Mr. Gerald Henderson
Chevron USA Products Co.
5924 NW Front Avenue
Portland, OR 97210

Re: OPS Sequence Number 1697 (Wilbridge Distribution Center)

Dear Mr. Henderson,

The Pipeline and Hazardous Materials Safety Administration (PHMSA) has reviewed the Facility Response Plan (FRP) referenced above and is presenting the enclosed review findings. The review evaluated the adequacy of your plan for spill response preparedness and implementation as required by the Final Rule, 49 CFR Part 194, *Response Plans for Onshore Transportation-Related Oil Pipelines*. We have determined that the plan does not fully satisfy the regulation's planning standards.

The enclosed findings are in our standard format for reviewing "significant and substantial harm" plans. The checklist is a review instrument to confirm that the plan satisfactorily addresses each regulatory requirement. Items marked "No" are followed by specific instructions regarding how to revise the plan to bring it into compliance. Items marked "NA" are elements that are not applicable to this particular plan. Each standard has the regulatory citations for the checklist item.

We hope that providing our review findings in this format will help you to address the findings. We will approve this plan after you have satisfactorily corrected the deficiencies noted in the review findings. If you are going to provide your response to these findings as updated pages to the plan, please put them in a format suitable for insertion into our copy of the plan and indicate which pages are being replaced or added.

Within 90 days of receiving this letter, please send two copies of your plan revisions to my attention. We will then evaluate the adequacy of the revised plan for complying with 49 CFR 194. If 90 days are not enough time to comply, please provide a written request for an extension, specifying how much additional time will be required and the reason the extension is needed. Submit two copies of your plan revisions to:

Response Plans Officer
Pipeline and Hazardous Material Safety
U.S. Department of Transportation
400 7th St SW Room 2103
Washington, DC 20590

Ext. # 10841 File #2311, 2453 Act. #10465

It is PHMSA's objective to help you bring your plan into full regulatory compliance. Please refer to the "OPS Plan Sequence Number" listed above in all plan-related correspondence, including e-mails. E-mail is the preferred method for submitting inquiries, questions and comments to PHMSA at phmsa.frp@dot.gov. You can also telephone PHMSA at (202) 366-~~9545~~ 4595 or fax to (202) 366-4566. Thank you for your cooperation.

Sincerely,

L. E. Herrick
Response Plans Officer

Enclosure

cc: EPA Region X
USCG MSO Portland
Oregon DEQ

Ext. # 10841 File #2311, 2453 Act. #10465

Checklist: Facility Response Plan
Review Protocols
Department of Transportation
Pipeline and Hazardous Materials Safety Administration (PHMSA)
Office of Pipeline Safety

OPS Sequence Number: 1697
Plan Version Date: May 20, 2005
Name of Operator: Chevron USA Products Company
Contact Name: Mr. Gerald Henderson
Contact Phone Number: (503) 221 – 7714
Date of Review: May 23, 2006

Summary of Review Findings: The Office of Pipeline Safety (OPS) has reviewed the Wilbridge Distribution Center Facility Response Plan (FRP). The checklist following this summary is the product of this review.

There are findings related to the specific planning aspects and the provisions in the FRP that the operator must satisfactorily address in the form of revisions to the plan before OPS can consider the plan as minimally adequate to comply with 49 CFR 194. The required revisions to the plan must address the findings summarized below for your convenience. The completed review checklist follows this summary.

- Required Plan Certifications- The plan does not identify the applicable Area Contingency Plan (ACP).
- Plan Information Summary- The plan does not include an information summary providing all key information as specified in 49 CFR 194.113; the section that could serve as the required summary does not identify the environmental harm determination and its basis, the county where the facility is located, information for the Qualified Individual and Alternate Qualified Individual, the 49 CFR 194-regulated breakout tanks, or the type of oil and worst case discharge based on the regulated breakout tanks.
- Notifications- The plan does not provide 24-hour contact information for all of the contracted OSROs and has superceded USCG OSRO classification information for one USCG classified OSRO.
- Substantial Threat Of Worst Case Discharge- The plan does not establish the procedures or provisions for Chevron USA Products Co. to address threats of the worst case discharge to or arising from the operation of the breakout tanks, including, in conjunction with the operators of the pipelines, threats posed by abnormal operations in the onshore pipelines connected to the breakout tanks.
- Response Management- The plan does not name the Command Staff positions using ICS terminology; the plan does not describe the responsibilities of the Qualified Individual or the members of the operator's spill management team; the operator's spill management team does not address the Source Control function consistent with the ICS; the plan does not describe the organizational interfaces between the operator's response organization and the Federal On-Scene Coordinator and state and local responders.
- Communications- The plan does not describe sufficient communications equipment to establish and maintain communications during response operations and does not describe the procedures to establish and maintain communications.
- Response Equipment And Transportation- The plan does not adequately describe operator-owned response equipment.

- Response Documentation And Worst Case Discharge- The plan does not calculate the worst case discharge for the Part 194-regulated breakout tanks as specified in 49 CFR 194.105 (b)(3).
- Training- The plan does not establish that the operator will maintain training documentation and records for as long as personnel have responsibilities in the response plan.
- Response Plan Maintenance- The plan does not address the requirement to submit the plan to OPS for review and approval every five years from the date of the latest plan approval; the plan does not address adequately the required plan revisions resulting from key changes and submission of the revisions resulting from the changes to OPS for review within 30 days of making the revisions.
- Consistency With the NCP and ACP and Concept Of Operations- The plan is not entirely consistent with the applicable ACP and the plan's concept of operations has deficiencies. Specific areas of inconsistency with the applicable ACP and the deficiencies in the concept of operations are summarized above, and explained in greater detail in Protocol 16.

Checklist: FRP Review Protocol No. 1

Plan Certifications

For Sequence Number: 1697

1.1 Does the FRP contain a statement certifying that the operator has reviewed the current National Contingency Plan (NCP) and each applicable Area Contingency Plan (ACP) and that the FRP is consistent with them? (49 CFR 194.107(b)) (Yes/No/NA): Yes.

Page Ref.: Section 101.

1.2 Does the FRP identify each applicable ACP? (49 CFR 194.107(b)) (Yes/No/NA): No.

Page Ref.: Section 100.

Applicable ACP(s): Northwest Area Contingency Plan and its Lower Columbia River Geographic Response Plan (GRP).

Comment: Section 101 states that the plan is consistent with the National Contingency Plan and other applicable Federal, state, and local contingency and emergency response plans. However, the plan does not specifically identify the applicable Area Contingency Plan (ACP). The applicable ACP for this plan is the Northwest Area Contingency Plan and its Lower Columbia River Geographic Response Plan.

Recommendation: Identify the Northwest Area Contingency Plan and its Lower Columbia River GRP as the applicable ACP.

Checklist: FRP Review Protocol No. 2

Plan Information Summary

For Sequence Number: 1697

2.1 Is there a Plan Information Summary with the following information (49 CFR 194.107(c)(1), (c)(1)(i) and (c)(2) and 49 CFR 194.113):

- Name of Operator? (Yes/No/NA): Yes.

- Street Address of Operator? (Yes/No/NA): Yes.

- City, State, Zip Code? (Yes/No/NA): Yes.

- A list of response zones that meet the criteria for significant and substantial harm (49 CFR 194.113(a)(2)) and a list of response zones in which a worst case discharge could cause substantial harm? (Yes/No/NA): Yes.

- The basis for the operator's determination that the response zone meets the criteria for significant and substantial harm and a statement that a worse case discharge in the response zone can be expected to cause significant and substantial harm for each such response zone? (Yes/No/NA): No.

- Description of each response zone, including the county(s) and state(s) and is each response zone designation appropriate? (Yes/No/NA): No.

- Name and/or title and the telephone number of the Qualified Individual available on a 24-hour basis in each response zone? (Yes/No/NA): No.

- Name and/or title and telephone number of the Alternate Qualified Individual available on a 24-hour basis in each response zone? (Yes/No/NA): No.

- List of line sections in each response zone identified by milepost, survey station number, or other operator designation? (Yes/No/NA): No.

- If any response zone contains multiple pipeline systems, are they all described and if multiple oils transported, are they listed? (Yes/No/NA): No.

- The type of oil and the volume of the worst case discharge in each response zone? (Yes/No/NA): No.

Page Ref.: Section 104.

Comment: The facility response plan for the Wilbridge Distribution Center was submitted to OPS subsequent to a 2004 Integrity Management Program (IMP) audit that determined the facility included breakout tanks regulated by 49 CFR 194 (OPS December 27, 2004 letter). Part 194.113 requires plans to have a readily identifiable section called the Information Summary, which is a quickly accessible means within the plan to obtain key information. The Wilbridge Distribution Center plan does not contain a specific Information Summary. However, Section 104 of the plan, Facility Information, contains some of the information Part 194.113 requires in

the Information Summary as indicated above in the answers to the review questions.

Section 104 can serve as the summary. However, although the section establishes that the facility is in Portland, Oregon, it does not identify the county the facility is in, Multnomah County. Section 104 also does not provide the determination of environmental harm and the basis for the determination, which are in Section 102. Section 102 establishes that breakout tank spills meet the criteria for causing significant and substantial harm to the environment. Likewise, Section 104 does not give the names and/or titles and telephone numbers of the Qualified Individual and Alternate Qualified Individual available on a 24-hour basis, and the type of oil and the volume of the worst case discharge from the Part 194-regulated breakout tanks. Note that the plan does not identify a Qualified Individual and an alternate. Also, the plan Introduction and not Section 104 establishes that the facility has Part 194-regulated breakout tanks. Part 194.113 requires the plan Information Summary, in this case Section 104, to list these breakout tanks as the definition of a pipeline in Part 194.5 includes breakout tanks. In the 2004 IMP audit, OPS determined that Tanks 1, 3, 45, 47, 51, 59, 60, 62, 64, 75, and 86 are the breakout tanks regulated by Part 194.

Recommendation: Develop the Information Summary that provides the key information specified in 49 CFR 194.113 or revise Section 104 as discussed to ensure that the section serves as the required Information Summary.

Checklist: FRP Review Protocol No. 3

Notifications

For Sequence Number: 1697

3.1 Do notification procedures identify a person, position, or facility responsible for initiating immediate notification? (49 CFR 194.107(c)(1)(ii)) (Yes/No/NA): Yes.

Page Ref.: Section 200.2.

3.2 Do notification procedures indicate that the person, position, or facility is capable of initiating notification on a 24-hour basis? (49 CFR 194.107(c)(1)(ii)) (Yes/No/NA): Yes.

Page Ref.: Page 200-6.

3.3 Does the FRP contain appropriate notification procedures? (49 CFR 194.107(b)(1) and (2) and 194.107(c)(1)(ii)) (Yes/No/NA): Yes.

Page Ref.: Section 200.

3.4 Do the FRP notification procedures include the following telephone numbers and do they indicate that the following required contacts can be reached on a 24-hour basis? (49 CFR 194.107(b)(1) and (2), 194.107(c)(1)(ii) and 194.113(b)(2)):

- Qualified Individual? (Yes/No/NA): Yes.
- Oil Spill Removal Organization(s)? (Yes/No/NA): No.
- Is the National Response Center number correctly listed as 1-800-424-8802 and/or 202-267-2675 in the plan? (Yes/No/NA):Yes.
- Company personnel (spill management team)? (Yes/No/NA): Yes.

Page Ref.: Pages 200-6 through 200-8, Appendix 201.1, Appendix 201.1b, and Section 203.4.

Comment: Appendix 201.1 identifies the operator's contracted OSROs, and Sections 200.2 and 203.4 provide notification and contact information for Clean Rivers Cooperative, Cowlitz Clean Sweep, and Marine Spill Response Corporation (MSRC). However, the plan does not indicate that the phone number for MSRC is a 24-hour number. Appendix 201.1 also provides contact information for Tidewater Barge Lines, listed here as Tidewater Environmental Services, but does not indicate that the indicated phone number is a 24-hour number. Finally, Appendix 201.1b provides a phone number for Baker Tanks Continental, Inc. but the plan also does not

indicate that this number is a 24-hour number.

Recommendation: Provide the 24-hour telephone numbers for Marine Spill Response Corporation, Tidewater Barge Lines, and Baker Tanks Continental, Inc.

3.5 Does the notification section include the following information (49 CFR 194.107(b)(1) and (2), and 194.107(c)(1)(ii)):

- Name of pipeline operator? (Yes/No/NA): Yes.
- Time of discharge? (Yes/No/NA): Yes.
- Location of discharge? (Yes/No/NA): Yes.
- Name of oil involved? (Yes/No/NA): Yes.
- Reason for discharge? (Yes/No/NA): Yes.
- Estimated volume of oil discharged? (Yes/No/NA): Yes.
- Weather conditions on scene? (Yes/No/NA): No.

Page Ref.: Figure 200-1.

Comment: Figure 200-1 in the plan is a Discharge Notification Form that addresses critical spill information to be documented and provided to the Incident Commander. However, the on-scene weather conditions are not included among the information to be collected on this form.

Recommendation: Revise Figure 200-1 so the on-scene weather conditions are collected along with other spill information.

3.6 Does the FRP identify the operator's Oil Spill Removal Organization(s)? (49 CFR 194.107(c)(1)(iv) and 194.115):

- Name(s)? (Yes/No/NA): No.
- Address(es)? (Yes/No/NA): No.

- Telephone Number(s)? (Yes/No/NA): No.

Page Ref.: Appendix 201.1, Appendix 201.1b and Section 203.4.

Comment: Appendix 201.1, Appendix 201.1b and Section 203.4 include information on the operator's contracted OSROs. OPS assessed the answers to the above review questions as "No" because Appendix 201.1b presents OSRO classification information for Marine Spill Response Corporation (MSRC) that is based on the superceded USCG OSRO classification system. In the new USCG OSRO classification program and according to the 22 August 2005 USCG's list of OSRO Classifications, MSRC is classified MM through W3 for River/Canal, Inland, Open Ocean, Offshore, and Nearshore environments in the Portland, OR COTP Zone.

Recommendation: Revise MSRC's USCG OSRO classification information in Appendix 201.1b to reflect their classifications in the new USCG OSRO classification program.

Checklist: FRP Review Protocol No. 4
Substantial Threat of Worst Case Discharge
Spill Detection and Mitigation Procedures
For Sequence Number: 1697

4.1 Does the FRP contain procedures to identify and mitigate or prevent a substantial threat of a worst case discharge? (49 CFR 194.107(a) and (b)(2)(i)) (Yes/No/NA): No.

Page Ref.: Entire Plan.

Comment: According to Appendix 202.1, Chevron USA Products Co. does not operate products pipelines connected to the facility; BP Pipelines North America, Kinder Morgan Energy Partners, and ChevronTexaco Pipeline Company are the products pipeline operators. However, as defined in Part 194.5, a breakout tank is part of a pipeline, and consequently the response plan does not address procedures to identify and mitigate a substantial threat of a worst case discharge. Under the Oil Pollution Act of 1990 (OPA 90), a facility response plan required by the Act must be a plan for responding to not only a worst case discharge but also to a substantial threat of such a discharge. OPS incorporated the provision for response plans to address a response to such substantial threats in 49 CFR 194, specifically as established in Part 194.107(a). As the regulation specifies, the "substantial threat" term in 49 CFR 194.107(a) is equivalent to the "abnormal operations" term under 49 CFR 195.402(d).

Although Chevron USA Products Co. may not operate the products pipelines connected to the breakout tanks, the company operates the breakout tanks that are integral to the operations of the pipelines. As such, the plan has to identify threats of a worst case discharge to or arising from the operation of the breakout tanks and address the procedures to prevent or mitigate the discharge posed by such threats. Such procedures include the necessary notifications of and coordination with the products pipeline operators involved to carry out safely each party's responsibilities and procedures in the event of pipeline abnormal operations. The notification information in Section 200 does include contact information for Kinder Morgan, but does not include contact information for or address notification of BP Pipelines North America and Chevron Texaco Pipeline Company, the other products pipeline operators. Kinder Morgan Energy Partners, BP Pipelines North America, and ChevronTexaco Pipeline Company have Facility Response Plans on file with OPS that address abnormal operations in their respective pipelines. Chevron USA Products Co. must establish procedures to take in the event of notification of an abnormal pipeline operation from a products pipeline operator.

Recommendation: Establish the procedures or provisions for Chevron USA Products Co. to address threats of the worst case discharge to or arising from the operation of the breakout tanks, including, in conjunction with the operators of the pipelines, threats posed by abnormal operations in the onshore pipelines connected to the breakout tanks.

4.2 Does the FRP identify personnel, equipment and procedures for detecting leaks and spills and locating spills throughout the response zone? (49 CFR 194.107(c)(1)(iii)) (Yes/No/NA): Yes.

Page Ref.: Section 404.

4.3 Does the FRP identify the maximum time to detect spill and shutdown flow in affected pipeline in adverse weather? (49 CFR 194.105(b)(1)) (Yes/No/NA): NA.

Page Ref.: Appendix 202.1.

Comment: As discussed above in Protocol 4.1, Chevron USA Products Co. does not operate the products pipelines connected to the facility.

4.4 Does the FRP identify procedures to mitigate spills appropriate for the response zone and consistent with applicable ACP(s)? (49 CFR 194.107(b)(2)(i), and (c)(1)(iii) and (v)) (Yes/No/NA): Yes.

Page Ref.: Section 202.

Checklist: FRP Review Protocol No. 5

Spill Containment

For Sequence Number: 1697

5.1 Does the FRP identify spill containment strategies appropriate for the response zone and consistent with applicable ACP(s)? (49 CFR 194.107(b)(1)(iii), (b)(2)(i), and (c)(1)(v)) (Yes/No/NA): Yes.

Page Ref.: Section 200.3 and Appendix 202.2.

5.2 Can planned spill containment activities be accomplished within the appropriate tier times? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115) (Yes/No/NA): Yes.

Page ref.: Section 200.3 and Appendix 202.2.

5.3 Are containment equipment capacities described in sufficient detail and does the FRP identify sufficient spill containment equipment to respond to a worst case discharge to the maximum extent practicable? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115) (Yes/No/NA): Yes.

Page Ref.: Appendix 201.1 and Appendix 201.1b.

Comment: Appendices 201.1 and 201.1b establish that the operator owns response equipment and has contracted with USCG classified OSROs and OSROs without USCG classifications. The table below lists the operator's USCG classified OSROs and their classification information based on the August 22, 2005 list of USCG classified OSROs. In addition, the operator has contracted with Baker Tanks Continental, Inc. and Tidewater Barge Lines. Combined, these resources provide the operator with sufficient response capability to respond to the worst case discharge for the response zone under 49 CFR 194. As discussed later in Protocols 12.2 and 12.3 in this report, the plan does not derive the worst case discharge as specified by Part 194.105(b)(3). Based on the capacity of the facility's largest DOT-regulated breakout tank, the worst case discharge would be as high as 162,400 bbls.

Company	COTP Zone	USCG Classifications
Marine Spill Response Corporation	Portland, OR	River/Canal: MM through W3 Inland: MM through W3
	Portland, OR (Coos Bay, OR)	River/Canal: MM through W3 Inland: MM through W3
Cowlitz Clean Sweep	Portland, OR	River/Canal: MM
	Portland, OR (Coos Bay, OR)	River/Canal: MM

Clean Rivers Cooperative, Inc.	Portland, OR	River/Canal: MM through W3 Inland: MM through W2
	Portland, OR (Coos Bay, OR)	River/Canal: MM through W3 Inland: MM through W2

Checklist: FRP Review Protocol No. 6

Spill Recovery

For Sequence Number: 1697

6.1 Does the FRP identify the spill recovery strategies appropriate for the response zone and consistent with applicable ACP(s)? (49 CFR 194.107(b)(1)(iii), (b)(2)(i) and (iv), and (c)(1)(v)) (Yes/No/NA): Yes.

Page Ref.: Section 200.3, Appendix 201.2, and Section 204.3.

6.2 Can planned spill recovery activities be accomplished within the appropriate tier times? (49 CFR 194.107(b)(2)(i) and(c)(1)(v), and 194.115) (Yes/No/NA): Yes.

Page Ref.: Section 200.3, Appendix 201.2, and Section 204.3.

6.3 Are recovery equipment capacities described in sufficient detail and does the FRP identify sufficient spill recovery equipment to respond to a worst case discharge to the maximum extent practicable? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115) (Yes/No/NA): Yes.

Page Ref.: Appendix 201.1 and Appendix 201.1b.

Checklist: FRP Review Protocol No. 7

Disposal

For Sequence Number: 1697

7.1 Does the FRP identify disposal procedures, including temporary storage equipment for recovered oil appropriate for the response zone and consistent with applicable ACP(s)? (49 CFR 194.107(b)(1)(iii), (b)(2)(i), and (c)(1)(v)) (Yes/No/NA): Yes.

Page Ref.: Section 205.

7.2 Can planned temporary storage and waste disposal activities be accomplished within the appropriate tier times? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115) (Yes/No/NA): Yes.

Page Ref.: Section 205.

7.3 Does the FRP identify sufficient temporary storage capabilities to respond to a worst case discharge to the maximum extent practicable? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115) (Yes/No/NA): Yes.

Page Ref.: Appendix 201.1 and Appendix 201.1b.

Checklist: FRP Review Protocol No. 8

Sensitive Area Protection

For Sequence Number: 1697

8.1 Does the FRP identify the protection strategies appropriate for the response zone and consistent with applicable ACP(s)? (49 CFR 194.107(b)(1)(iii), (b)(2)(i) and (ii), and (c)(1)(v)) (Yes/No/NA): Yes.

Page Ref.: Section 204, Appendix 400.1.

8.2 Can planned protection activities be accomplished within the appropriate tier times? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115) (Yes/No/NA): Yes.

Page Ref.: Section 204, Appendix 400.1.

Checklist: FRP Review Protocol No. 9

Response Management

For Sequence Number: 1697

9.1 Is the response management system described in the FRP an ICS-based system? (49 CFR 194.107(b)(1)(i), (b)(2)(iii), and (c)(3)) (Yes/No/NA): No.

Page Ref.: Section 203.

Comment: Section 203 establishes that the operator's response organization consists of the Onsite Response Team (ORT) and the Emergency Spill Response Team (ESRT). Based on the description of these teams, the ORT responds to minor spills and is the first responder in larger spills serving as the base team to form the ESRT to manage the response as it escalates. Figure 203.1 indicates that the IC alone manages the ORT's response to minor spills. Figure 203.5 outlines the ESRT's organizational structure, which follows the ICS structure for organizing the five main ICS functions.

However, the plan does not describe the roles and responsibilities of the members of the ESRT. Section 203.2 states that the response team is organized as described in Chevron U.S.A.'s Incident Command Manual, but only referencing this manual does not meet 49 CFR 194.107(c)(3), which requires operators to describe their response management systems in their response plans. Although, Section 203.2.3 indicates that the response team members' responsibilities are discussed in subsections of Section 203, this information is missing from the plan.

In addition, the operator's Command Staff as illustrated in Figure 203.2 designates some positions using terminology inconsistent with the ICS. The operator's Command Staff includes a Public/Government Affairs Representative and Site Safety Representative; in ICS terminology, the positions in the Command Staff are designated as the Liaison Officer, Safety Officer, and Information Officer. The operator's Command Staff also includes a Source Control Representative, but the ICS organizes the function likely to be carried out by this position in the Operations Section under the Source Control Group (Section 3100 of the Northwest ACP).

Recommendation: Establish the responsibilities of the members of the operator's response management team consistent with the ICS; rename the Public/Government Affairs Representative as the Liaison Officer and the Site Safety Representative as the Safety Officer and include the Information Officer in the Command Staff; organize Source Control function in the Source Control Group under the Source Control Group Supervisor in the Operations Section consistent with the ICS.

9.2 Does the operator's response organization include a description of roles and responsibilities for (49 CFR 194.107(b)(1)(i), (b)(2)(iii), and (c)(3)):

- Qualified Individual? (Yes/No/NA): No.

- Other operator response personnel including personnel on the spill management team? (Yes/No/NA): No.

- Contracted Oil Spill Removal Organization(s)? (Yes/No/NA): Yes.

Page Ref.: Section 203.

Comment: Section 203 describes the operator's response management organization, but the plan does not describe the responsibilities of the Qualified Individual. The responsibilities of the Qualified Individual are defined in 49 CFR 194.5. At a minimum, the Qualified Individual must have the full authority to activate and contract with required oil spill removal organizations, activate personnel and equipment maintained by the operator, act as a liaison with the On-Scene Coordinator, and obligate any funds required to carry out all required and directed oil spill response activities. In addition, as discussed in Protocol 9.1, the plan does not establish the responsibilities of the operator's response personnel. Addressing the recommendations for Protocol 9.1 will address this part of the finding for Protocol 9.2.

Recommendation: Establish all required responsibilities of the Qualified Individual as listed in Part 194.5.

9.3 Does the operator's response organization include a description of the organizational interfaces with external parties in a Unified Command (49 CFR 194.107(b)(1)(i), (b)(2)(iii), and (c)(3)):

- Oil Spill Removal Organization(s)? (Yes/No/NA): Yes.

- State and local responders? (Yes/No/NA): No.

- Federal On-Scene Coordinator? (Yes/No/NA): No.

Page Ref.: Section 203.

Comment: Figures 203.1 and 203.2 show one organizational interface, i.e., the Incident Commander's coordination with government agencies. But as discussed for Protocol 9.1, the plan does not establish the roles and responsibilities of the spill management team members, which help identify and explain the organizational interfaces with the federal, state and local

agencies and responders. For instance, the Liaison Officer serves as the initial point of contact for participating federal, state, and local agencies with a vested interest in the response, and the Information Officer is responsible for developing and releasing incident information to relevant agencies and organizations.

In addition, the plan does not establish the operator's role as the Responsible Party in the Unified Command (UC) in relation to the roles of the FOSC and state and local responders. For instance, Section 1000 in the Northwest ACP establishes that the type ICS/UC outlined in the ACP for the federal, state, and local governments response to oil and hazardous substances spills is consistent and compatible with the National Incident Management System (NIMS). Related to the responsible party's role, Section 1540 in the ACP indicates that the responsible party is responsible for using an ICS that is compatible with and can integrate readily into the NIMS based ICS/UC established in the ACP. According to Section 1760, using such an ICS is one of the conditions for the responsible party to maintain primary responsibility for managing the response. Likewise, other parts of Sections 1700, 2200 and 2210 address the roles and responsibilities of the federal government, state, native American tribes, and responsible party, including the respective On-Scene Coordinators (OSCs). Section 1722 identifies the Oregon Department of Environmental Quality as the lead state agency, and therefore provides the State On-Scene Coordinator (OSC), for oil and hazardous substances spills in the state. Section 2200 establishes that the UC will include a Tribal OSC in spills that have the potential to impact native American tribal lands and resources.

Recommendation: Establish the organizational interfaces between the operator's response organization and the FOSC and state and local responders.

Checklist: FRP Review Protocol No. 10
Communications, Response Equipment and Transportation
For Sequence Number: 1697

10.1 Does the FRP describe appropriate communications procedures and system(s) adequate for notifications and response operations? (49 CFR 194.107(c)(1)(ii) and (v)) (Yes/No/NA): No.

Page Ref.: Appendix 201.1, Appendix 201.4, and Section 203.

Comment: Appendix 201.1 Attachment 5 describes the types and quantities of communications equipment available to the operator from a Spill Trailer at the Wilbridge Distribution Center. However, this Spill Trailer's communications equipment consists of only one cellular phone and one marine VHF radio. OPS does not consider one radio sufficient equipment to establish and maintain communications during response operations. In addition, the plan does not describe the procedures the operator will use to establish and maintain communications. While the plan does refer to the responsibilities of the Communications Unit Leader, as discussed for Protocol 9.1, the plan does not establish or describe the responsibilities of spill management team members. One way to meet the requirement for communications procedures is to describe the responsibilities of the spill management team personnel responsible for establishing and maintaining response communications. For instance, Section 5230 of the Northwest ACP describes the responsibilities of the Communications Unit Leader. This position's responsibilities include developing plans for effective use of incident communications equipment and facilities, installing and testing communications equipment, supervising the Incident Communications Center, distributing communications equipment to incident personnel, and communications equipment maintenance and repair. In addition, Annex E of the Northwest ACP assigns radio frequencies for use by various response entities during response operations.

Recommendation: Obtain sufficient radio equipment to establish and maintain communications during response operations; describe procedures the operator will use to establish and maintain response communications.

10.2 Does the FRP identify response equipment that is operator-owned and maintained? (49 CFR 194.107(c)(1)(v) and 194.115(a)) (Yes/No/NA): No.

Page Ref.: Appendix 201.1.

Comment: Appendix 201.1 identifies the response equipment that the operator maintains at the Wilbridge Distribution Center. However, the plan does not adequately describe the operator's response equipment. The plan lists a Conex Box that has two containment booms, but does not specify the lengths and types of the boom. The Conex Box also has two slickbar skimmers and the Spill Trailer equipment has one skim-pak skimmer, but the plan does not provide the effective daily recovery capacities (EDRCs) for these skimmers.

OPS does not require operators to identify specific response equipment owned and operated by USCG-classified OSROs since OPS relies on the USCG classification system to assess adequacy of response resources and capability of classified OSROs. However, OPS requires operators who contracts with or have other approved means to obtain sufficient response resources from OSROs who are not USCG-classified OSROs, including operator-owned response capability, to adequately describe such OSROs' response equipment in their response plans. This is necessary to allow OPS to assess and confirm if response resources are sufficient to respond to worst case discharges identified in response plans and adequately supports the operator's concept of operation. It also allows the operators to establish and confirm this planning requirement in written form.

Recommendation: Provide the lengths and types of operator-owned containment booms and the EDRCs for the operator-owned skimmers identified above.

10.3 Does the FRP describe procedures for maintaining response equipment owned by operator? (49 CFR 194.107(c)(1)(viii)) (Yes/No/NA): Yes.

Page Ref.: Section 201.1-1.

10.4 Does the FRP identify response equipment that will be provided by Oil Spill Removal Organization(s) that is not USCG-classified? (49 CFR 194.107(c)(1)(v) and 194.115(a)) (Yes/No/NA): Yes.

Page Ref.: Appendix 201.1 and Appendix 201.1b.

10.5 Does the FRP describe procedures for maintaining response equipment owned by Oil Spill Removal Organization(s) that is not USCG-classified? (49 CFR 194.107(c)(1)(viii)) (Yes/No/NA): Yes.

Page Ref.: Section 201.1-1.

10.6 Does the FRP identify the location of both operator-owned and Oil Spill Removal Organization-owned response equipment? (49 CFR 194.115(b)) (Yes/No/NA): Yes.

Page Ref.: Appendix 201.1 and Appendix 201.1b.

10.7 Does the FRP describe mobilization and deployment of response equipment within the appropriate tier times consistent with the plan's response activities? (49 CFR 194.107(c)(1)(v) and 194.115(b)) (Yes/No/NA): Yes.

Page Ref.: Section 200.3 and Appendix 202.2.

10.8 Does the size of the response zone permit planned response activities to be accomplished, including equipment mobilization and deployment, within the appropriate tier times? (49 CFR 194.115(b)) (Yes/No/NA): Yes.

Page Ref.: Section 104.

Checklist: FRP Review Protocol No. 11
Response Personnel and Mobilization
For Sequence Number: 1697

11.1 Does the FRP identify sufficient numbers of trained personnel to conduct the response to the WCD consistent with the plan's response activities? (49 CFR 194.107(a), (c)(1)(v), and (c)(3), 194.115, and 194.117) (Yes/No/NA): Yes.

Page Ref.: Section 200.

11.2 Does the FRP describe procedures for mobilizing and deploying response personnel throughout the response zone consistent with the plan's response activities? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115) (Yes/No/NA): Yes.

Page Ref.: Section 200.

Checklist: FRP Review Protocol No. 12
Response Documentation and Worst Case Discharge
For Sequence Number: 1697

12.1 Does the operator describe procedures to be used by the response management organization to document response decisions, activities and costs? (49 CFR 194.107(c)(3)) (Yes/No/NA): Yes.

Page Ref.: Appendix 201.6.

12.2 Does the FRP provide the calculations and methodology used for determining the worst case discharge for the response zone? (49 CFR 194.105) (Yes/No/NA): No.

Page Ref.: Appendix 202.1.

Comment: The plan does not derive the worst case discharge for the facility's Part 194-regulated breakout tanks as specified in 49 CFR 194.105(b)(3).

Recommendation: Calculate the worst case discharge for the Part 194-regulated breakout tanks as specified in 49 CFR 194.105(b)(3).

12.3 Is the worst case discharge volume calculated using the three specified methods as applicable in the Interim Final Rule and are the derivations accurate and as prescribed? (49 CFR 194.105(b)) (Yes/No/NA): No.

Page Ref.: Section 202.

Comment: As indicated earlier in this report, OPS' December 27, 2004 letter informed the operator that an IMP audit had determined that 49 CFR 194 applies to the Wilbridge Distribution Center's breakout tanks. 49 CFR 194.105(b)(3) establishes that the worst case discharge for regulated breakout tanks is the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels. However, Section 202 of the plan derives the worst

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

Recommendation: Accurately derive the worst case discharge for the Part 194-regulated breakout tanks as specified in 49 CFR 194.105(b)(3).

Checklist: FRP Review Protocol No. 13
Training: Program and Procedures
For Sequence Number: 1697

13.1 Does the FRP describe a training program that provides training for response personnel including their responsibilities under the plan? (49 CFR 194.107(b)(1)(ii), (c)(1)(vii) and (c)(3), and 194.117) (Yes/No/NA): Yes.

Page Ref.: Section 500.

13.2 Does the FRP describe a training program that provides training for response personnel including (49 CFR 194.117(a)(3)):

- Characteristics and hazards of oil? (Yes/No/NA): Yes.

- Conditions that are likely to worsen emergencies, including the consequences of facility malfunctions or failures and appropriate corrective actions? (Yes/No/NA): Yes.

- Steps necessary to control an accidental discharge of oil? (Yes/No/NA): Yes.

- Steps necessary to minimize the potential for fire, explosion, or environmental damage? (Yes/No/NA): Yes.

- Proper fire-fighting procedures and use of personal protective equipment? (Yes/No/NA): Yes.

Page Ref.: Section 500.

13.3 Does the FRP describe a response training program that addresses the appropriate levels of training and the requirements specified in OSHA 29 CFR 1910.120? (49 CFR 194.107(b)(1)(ii) and 194.117(c)) (Yes/No/NA): Yes.

Page Ref.: Section 502.

13.4 Does the FRP describe the operator's procedures for maintenance of response training records for response personnel? (49 CFR 194.117(b)) (Yes/No/NA): No.

Page Ref.: Section 502.2.

Comment: Section 502.2 discusses the operator's procedures for maintaining training documentation, establishing that training documents shall be maintained for three years. However, 49 CFR 194.117(b) requires operators to maintain training records for response personnel as long as they have assigned duties in the response plan.

Recommendation: Revise the period for maintaining training records from three years to as long as personnel have assigned duties in the response plan.

Checklist: FRP Review Protocol No. 14
Spill Response Drill Program
For Sequence Number: 1697

14.1 Does the FRP describe procedures for conducting internal and external drills that include (49 CFR 194.107(c)(1)(ix)):

- Responsibility for planning, carrying out and monitoring drills? (Yes/No/NA): Yes.

- Announced drills? (Yes/No/NA): Yes.

- At least one unannounced internal drill? (Yes/No/NA): Yes.

- Quarterly Qualified Individual notifications drills? (Yes/No/NA): Yes.

- Annual spill management team tabletop drills? (Yes/No/NA): Yes.

- Annual Oil Spill Removal Organization(s) equipment deployment drills of representative types of key equipment identified in the FRP? (Yes/No/NA): Yes.

- At least one drill that tests the entire response plan for each response zone at least every three years? (Yes/No/NA): Yes.

Page Ref.: Section 504.

14.2 Does the FRP describe a 3-year drill and exercise cycle and the frequencies for each type drill in that cycle? (49 CFR 194.107(c)(1)(ix)) (Yes/No/NA): Yes.

Page Ref.: Section 504.

14.3 Does the FRP describe procedures for maintaining drill documentation for 3 years? (49 CFR 194.107(c)(1)(ix)) (Yes/No/NA): Yes.

Page Ref.: Section 504.5.

Checklist: FRP Review Protocol No. 15

Response Plan Maintenance

For Sequence Number: 1697

15.1 Does the FRP describe the requirements and procedures that the operator will review the FRP at least once every 5 years after the last plan approval date by OPS, modify the FRP to address new or different operating conditions or information in the response plan and submit the plan for review/approval by OPS? (49 CFR 194.107(c)(1)(x) and 194.121(a)) (Yes/No/NA): No.

Page Ref.: Section 600.

Comment: Section 600 addresses the review and update procedures for the plan, establishing that the plan will be reviewed and resubmitted for approval to EPA, USCG and Oregon DEQ. However, the plan does not establish that the operator will review and resubmit the FRP for approval by OPS. The operator must review the plan, modify the plan to address changes in operating conditions or information, and submit the plan for review and approval by OPS every 5 years after the last approval date.

Recommendation: Establish that the operator will review the plan, modify the plan to address changes in operating conditions or information, and submit the plan for review and approval by OPS every 5 years after the last approval date.

15.2 Does the FRP identify key factors that may cause revisions to the response plan and require the operator to submit revisions to OPS within 30 days of making the revisions for factors such as (49 CFR 194.121(b)):

- New pipeline construction or purchase? (Yes/No/NA): Yes.
- Different worst case discharge volume? (Yes/No/NA): Yes.
- Change in commodities transported? (Yes/No/NA): Yes.
- Change in Oil Spill Removal Organization(s)? (Yes/No/NA): Yes.
- Change in Qualified Individual(s)? (Yes/No/NA): No.
- Change in a NCP/ACP that has a significant impact on the appropriateness of response equipment or response strategies? (Yes/No/NA): No.

- Change in response procedures? (Yes/No/NA): No.

Page Ref.: Section 601.

Comment: Section 601 lists changes that require revisions to the plan and the operator to submit the revisions to the regulatory agency of concern. However, the plan does not address the submission of the required plan revisions to OPS for review. 49 CFR 194.121(b) requires operators to submit plan revisions to OPS within 30 days of making revisions for the changes listed above. Subsequently, the list of changes requiring the operator to revise the plan in Section 601 does not include a change in the Qualified Individual(s), a change in the NCP/ACP that has a significant impact on the appropriateness of response equipment or response strategies, or a change in response procedures.

Recommendation: Specify that plan revisions required by the changes listed in Section 601 will require submission of the plan revisions to OPS within 30 days of making revisions to the plan; include among the changes in Section 601 a change in the Qualified Individual(s), a change in the NCP/ACP that has a significant impact on the appropriateness of response equipment or response strategies, and a change in response procedures.

15.3 Does the FRP describe procedures for incorporating improvements identified in the following (49 CFR 194.121(b)(8)):

- Post-drill evaluation results? (Yes/No/NA): Yes.

- Post-incident evaluation results? (Yes/No/NA): Yes.

Page Ref.: Page 200-43, Section 601.

Checklist: FRP Review Protocol No. 16
NCP/ACP Consistency and Concept of Operations
For Sequence Number: 1697

16.1 Is the plan consistent with the NCP in effect at the time of submission? (49 CFR 194.107(b)(1)) (Yes/No): Yes.

Page Ref.: Entire Plan.

16.2 Is the plan consistent with the ACP(s) in effect for each response zone at the time of submission? (49 CFR 194.107(b)(2)) (Yes/No): No.

Page Ref.: Entire Plan.

Comment: OPS assesses certain protocols in the preceding sections of this report that deal with the areas outlined in Part 194.107(b)(2) to determine if the plan is consistent with the applicable ACP. As noted in the report, the plan is not minimally adequate to address Protocols 4.1, 9.1, 9.2, and 9.3. After the operator satisfactorily revises the plan to address the protocols, OPS will consider the plan consistent with the applicable ACP.

Recommendation: See the recommendations for Protocols 4.1, 9.1, 9.2, and 9.3.

16.3 Is the plan's concept of operations minimally adequate to carry out a response to the WCD under 49 CFR 194? (49 CFR 194.107)(Yes/No): No.

Page Ref.: Entire Plan.

Comment: OPS assessed the plan's concept of operations as not minimally adequate because there are specific areas in the concept of operations that are not minimally adequate as described throughout the preceding sections of this checklist. After operator satisfactorily revises the plan to address these specific protocol questions, OPS will assess the plan's concept of operations as minimally adequate.

Recommendation: See the recommendations for Protocols 3.4, 3.5, 3.6, 10.1, and 10.2.

U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

June 1, 2005

Certified Mail –7003 3110 0003 2602 9726-Return Receipt Requested

Mr. Gerald Henderson
North America Products Company
5924 NW Front Ave.
Portland, OR 97210

Re: OPS Plan Sequence Number 1697 (Willbridge Distribution Center)

Dear Mr. Henderson,

The Pipeline and Hazardous Materials Safety Administration (PHMSA) has received your May 20, 2005 revisions to the Facility Response Plan (FRP) for the above-referenced response zone submitted with your May 20, 2005 letter. We also acknowledge receipt of your certification of spill response capability as required by 49 CFR 194.119(e). This letter provides temporary approval for the Facility Response plan (FRP) referenced above. This temporary approval allows Chevron USA Products Company to operate the onshore pipeline facility covered by the response plan while we review the plan to determine whether it is minimally adequate for complying with all the requirements of 49 CFR 194. We will review the revision to determine whether the revised plan fully satisfy the planning standards established by 49 CFR Part 194, *Response Plans for Onshore Oil Pipelines*.

Please refer to the "OPS Plan Sequence Number" listed above in all plan-related correspondence, including e-mails. E-mail is the preferred method for submitting inquiries, questions and comments to me at le.herrick@dot.gov. You can also telephone me at (202) 366-5523 or fax me at (202) 366-4566. Thank you for your cooperation.

Sincerely,

L. E. Herrick
Response Plans Officer

North America Products Company
Marketing
5924 NW Front Ave.
Portland, OR 97210
Tel 503.221.7714
Fax 503.221.9766
hegs@ChevronTexaco.com

Gerald Henderson
Terminal Manager

Chevron

May 20, 2005

CERTIFIED MAIL # 7002 0860 0004 8834 9258 – RETURN RECEIPT REQUESTED

L. E. Herrick, Response Plans Officer
Office of Pipeline Safety
400 Seventh St. S.W.
Washington DC 20590

RE: OPS Plan Sequence Number 1697

Dear Ms. Herrick

This letter is in response to your March 18, 2005 correspondence, which surfaced in our mail system on May 19, 2005.

Unfortunately, this is the first time I've seen your letter and I am quite concerned. I am at a loss to understand how our internal mail system failed to correctly process such important correspondence. Please accept my apology for the delay.

Enclosed with this letter is a revised page 100-1 stating that "The pipeline segment at the Willbridge Terminal includes breakout storage tanks that constitute a significant or substantial threat to the adjacent waterway or shoreline…"

I certify that Chevron U.S.A. Inc., Willbridge Terminal is a member of Clean Rivers Cooperative, Inc. a member-based, USCG approved OSRO dedicated to professional spill response and the prevention of maritime petroleum spills. As such, this facility has the necessary private personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge or a substantial threat of such a discharge.

ChevronTexaco Product Company Willbridge Terminal looks forward to working with your office to produce a Facility Response Plan that meets or exceeds the intent of the law.

Gerald Henderson
Terminal Manager

U.S. Department
of Transportation

400 Seventh St. S.W.
Washington, D.C. 20590

Pipeline and
Hazardous Materials
Safety Administration

March 16, 2005

Certified Mail – 7003 3110 0003 2603 4904 Return Receipt Requested

Mr. Gerald Henderson
North America Products Company
5924 NW Front Ave.
Portland, OR 97210

Re: OPS Plan Sequence Number 1697 (Willbridge Distribution Center)

Dear Mr. Henderson,

The Office of Pipeline Safety (OPS), Pipeline and Hazardous Materials Safety Administration (PHMSA), has received the ChevronTexaco Products Company's November 2004 Facility Response Plan (FRP) enclosed with your 27 December 2004 letter. We have assigned the plan sequence number referenced above to your plan.

According to the FRP on page 100-1, spills from the onshore pipeline do not present "a significant or substantial threat" to adjacent water and shoreline. This determination of the environmental harm in the FRP, which is required by 49 CFR 194.103(a), is not entirely clear with respect to the two categories of harm established by the Oil Pollution Act of 1990 (OPA 90) and Part 194. Spills from pipelines can be expected to cause either significant and substantial harm or substantial harm to the environment based on the criteria in Part 194.103(c).

(b) (7)(F)



Consequently, request that ChevronTexaco revise the harm determination posed by spills from the onshore pipeline facility, which includes the breakout tanks, on page 100-1 as discussed above and submit the revision to us to update the FRP filed with OPS. Also, pending our review and final approval of the FRP, ChevronTexaco has to have a temporary approval for the plan according to Part 194.119(e). To obtain a temporary approval, within 72 hours of receiving this letter, fax a signed certification to us establishing that the operator has obtained through contract or other approved means the necessary private personnel and equipment to respond to the worst case discharge as specified in Part 194.119(e). The Qualified Individual or an appropriate corporate officer must sign this certification. When we receive a proper certification, we will give you temporary approval for the plan.

We will review the plan to determine whether it fully satisfies the planning standards established by 49 CFR 194, Response Plans for Onshore Oil Pipelines. After we complete the review, we will notify you of any deficiencies for you to correct to bring the plan into full compliance. When we determine that the plan is minimally adequate for complying with the regulation, we will approve the plan for five years.

Please refer to the "OPS Plan Sequence Number" listed above in all plan-related correspondence, including e-mails. E-mail is the preferred method for submitting inquiries, questions and comments to me at le.herrick@dot.gov. You can also telephone me at (202) 366-5523 or fax me at (202) 366-4566. Thank you for your cooperation.

Sincerely,

L. E. Herrick
Response Plans Officer

Enclosure

North America Products Company
Marketing
5924 NW Front Ave.
Portland, OR 97210
Tel 503.221.7714
Fax 503.221.9766
hegs@ChevronTexaco.com

Gerald Henderson
Terminal Manager

Chevron

December 27, 2004

CERTIFIED MAIL # 7004 1160 0004 2018 9104 – RETURN RECEIPT REQUESTED

Office of Pipeline Safety, Research and Special
Programs Administration, U.S. Department of Transportation
400 Seventh Street, S.W., Rm. 2103
Washington D.C. 20590-0001

RE: FACILITY RESPONSE PLANS

Dear Sir or Madam,

This correspondence is to provide RSPA with two copies of the Facility Response Plan for ChevronTexaco Product Company Willbridge Terminal, located at 5924 NW Front Ave., Portland, OR 97210.

During a recent IMP audit conducted by Mr. Wade Nguyen, the subject of Response Plans came up. This facility had not submitted an FRP to RSPA and a RSPA number had not been assigned to the FRP.

Enclosed with this letter is a copy of a July 1, 1997 letter from DOT ruling that the Willbridge facility is not RSPA jurisdictional. The letter, signed by Mr. James Taylor, Response Plans Officer provided the basis for not submitting Facility Response Plans as required by 49CFR Part 194 for facilities that are jurisdictional.

However, subsequent to Mr. Taylor's determination, much debate occurred within ChevronTexaco Marketing Operations about RSPA jurisdiction, especially with regard to the subject of breakout tanks and the extent to which ChevronTexaco Willbridge Terminal must comply with 49CFR Part 194 or 49CFR Part 195.

In a December 23, 2004 communication with Chevron, Mr. Nguyen said: "Regarding your breakout tank facility, the definition of breakout tank is defined under Part 195.2. In addition, please review the court case number 96-CS-204-AAM dated April 04, 1997. My suggestion to you that ChevronTexaco needs to resubmit their OPA 90 plan to RSPA."

Regardless of jurisdiction or the date of Mr. Taylor's letter being subsequent to the court decision referenced by Mr. Nguyen, ChevronTexaco Products Company Willbridge Terminal has operated with the intent of meeting all applicable Federal, State and local laws, including 49CFR Part 194 or 49CFR Part 195.

ChevronTexaco Product Company Willbridge Terminal looks forward to working with your office to clarify RSPA jurisdiction and provides the plan to RSPA as suggested by Mr. Nguyen.

Gerald Henderson
Terminal Manager

CERTIFIED MAIL # 7004 1160 0004 2018 9104 – RETURN RECEIPT REQUESTED

U.S. Department
of Transportation

**Research and
Special Programs
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

July 1, 1997

Certified Mail # P 150 927 250 - Return Receipt Requested

Mr. H. E. Welty
Chevron Products Company
Room L2056
6001 Bollinger Canyon Road
San Ramon CA 94583

Re: Request for Ruling of Jurisdiction - Chevron Willbridge Terminal

Dear Mr. Welty:

In response to your letter dated 7 May 1997, we have examined the information provided on the "breakout tankerage" in question. Based on this information, your facility receives product from tanker ships and from the Olympic Pipeline from Washington state. Your facility then distributes product via tank trucks and the Santa Fe and Airport Pipelines. The maps provided indicate that the product custody transfer points between your facility tanks and the Olympic and Santa Fe pipelines are within your facility's property lines.

This leaves the question of where the change of custody occurs between your facility tanks and the Chevron Pipe Line Company's Airport Pipeline, which delivers product to the airport. We reviewed the Chevron Pipe Line Company facility response plan (FRP) for the Northwestern Business Unit - Products System (RSPA Sequence Number 0212) . This plan does show an 8.5 mile pipeline that originates at the Chevron USA barge and tanker truck terminal at the Willbridge Port, and terminates at the Portland International Airport, at a fuel storage facility operated by Aircraft Services International, Inc. The plan does not show details of the connections to your facility tanks, but the plan does say that "there are no storage facilities, truck facilities, or ship and barge loading/unloading facilities owned or operated by Chevron Pipe Line Company associated with this pipeline."

Since Chevron Products Company does not appear to operate or own any pipelines associated with the "breakout tankerage" that leave the facility property, RSPA's determination is that your facility's "breakout tanks" are not under RSPA's jurisdiction. Also, 49 CFR Part 194 does not apply to your facility. There is no requirement for you to submit a response plan to RSPA.

Please contact me at (202) 366-8860 if you have any questions, or wish to discuss this matter further. Thank you for your cooperation and patience.

Sincerely,

James S. Taylor
Response Plans Officer

1.3 AGENCY SUBMITTAL / APPROVAL LETTERS - *DOE*

Chevron

Global Marketing

Gerald S. Henderson
Terminal Manager

North America Logistics
Willbridge Terminal
5924 NW Front Ave
Portland, OR 97210

CERTIFIED MAIL – RETURN RECIEPT REQUESTED: 7009 2250 0003 0201 2210

June 11, 2010

Oregon Department of Energy
Emergency Preparedness Manager
625 Marion Street NE
Salem, Oregon 97301-3742

RE: Willbridge Terminal Facility Response Plan Submittal – (Update)
EPA Facility FRP # ORD000831701; PHMSA Facility OSRP # 1697;
USCG Facility FRP # PDX20008

Enclosed is an updated Facility Response Plan for:

Chevron Products Company
Willbridge Terminal
5924 NW Front Avenue
Portland, OR 97210

The Manual was updated in response to facility changes and as part of Chevron's annual compliance document review process. Revisions include updates to the facility diagrams, tank tables, and other associated text in response to a completed Tank Construction Project as well as general updates per regulators requests.

Comments or questions relative to the Facility Response Plan should be directed to Jerry Henderson at (503) 221-7714 (HEGS@chevron.com) or Todd Kushner at (503) 221-6582 (TKEW@chevron.com).

Sincerely,

Gerald S. Henderson
Terminal Manager
(503) 221-7714

1.4 CERTIFICATION OF ADEQUATE RESOURCES

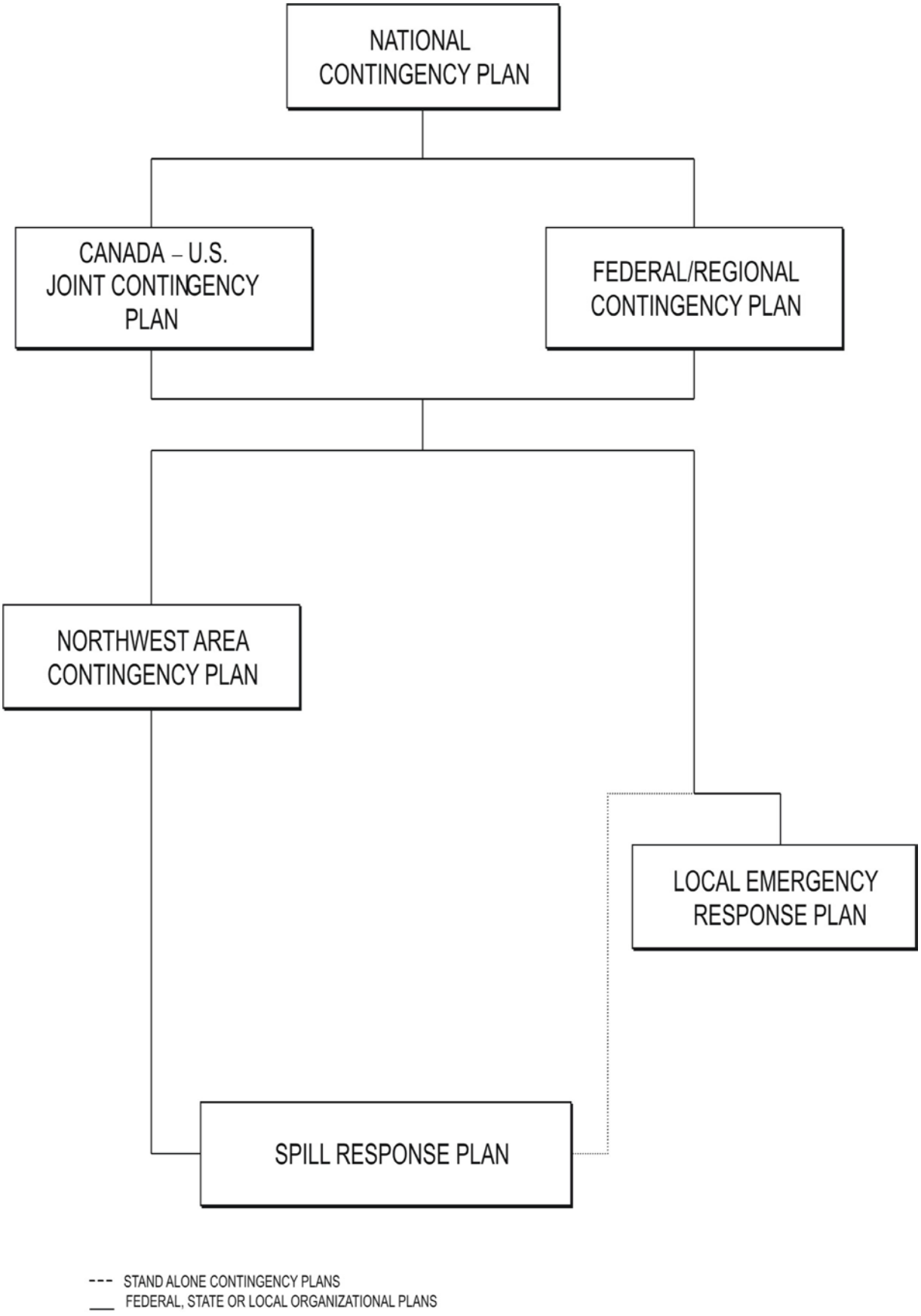
CERTIFICATION
Pursuant to the Clean Water Act Section 311(j)(5)(F)
Chevron Products Company a division of Chevron USA, Inc.

The Chevron Products Company a division of Chevron USA, Inc., hereby certify to the Pipeline and Hazardous Materials Safety Administration (PHMSA) of the Department of Transportation that they have obtained, through contract or other approved means, the necessary private personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge or a substantial threat of such a discharge.



Marty Gilles
General Manager, Americas Products

1.5 INTERFACES WITH OTHER PLANS



SECTION 2

Last Revised: June 2009

INITIAL RESPONSE ACTIONS

© Technical Response Planning Corporation 2006

2.1 Spill / Release Response

Figure 2.1-1 - Spill Release Flowchart

Figure 2.1-2 - Spill / Release Response Action Checklist

2.1.1 Spill Detection and Mitigation Procedures

Figure 2.1-3 - Spill Mitigation Procedures

2.1.2 Spill Surveillance Guidelines

Figure 2.1-4 - Spill Surveillance Checklist

2.1.3 Spill Volume Estimating

Figure 2.1-5 - Spill Estimation Factors

2.1.4 Estimating Spill Trajectories

2.1.5 Initial Containment Actions

2.2 Evacuation

2.3 Tornado

2.4 Flood

2.5 Medical

(b) (7)(F)

2.7 Fire and/or Explosion

2.8 Fire Pre-Plans

2.1 SPILL / RELEASE RESPONSE

Site Command and Control

- [ ] Designated On-Scene Commander
- [ ] Established TRT Command Post
- [ ] Delineated isolation perimeter
- [ ] Secured isolation perimeter
- [ ] Established staging area
- [ ] Instituted check-in procedures

Site Safety

- [ ] Designated Site Safety Officer
- [ ] Characterized chemical, physical, and operational hazards
- [ ] Established hazard control zones
- [ ] Identified PPE requirements
- [ ] Set up decontamination station
- [ ] Set up first aid station
- [ ] Conducted Tailgate Safety Briefing
- [ ] Instituted personnel accountability procedure
- [ ] Conducted medical screening

Site Management

- [ ] Understood problems
- [ ] Identified solutions
- [ ] Defined tasks
- [ ] Assigned resources to tasks
- [ ] Set priorities

Communications

- [ ] Designated Aide
- [ ] Established Networks:
  - [ ] Tactical
  - [ ] Command
  - [ ] Supply
- [ ] Defined communications protocols
- [ ] Prepared Field Report Form (ICS 201)

FIGURE 2.1-1 - SPILL RESPONSE FLOWCHART

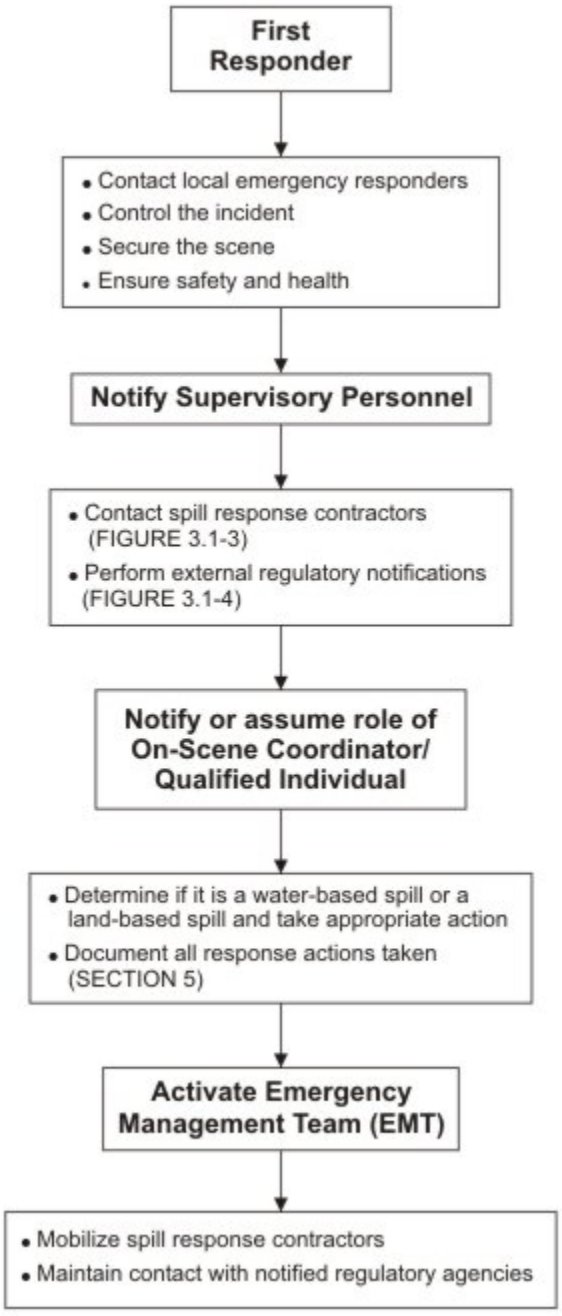


FIGURE 2.1-2 - SPILL / RELEASE RESPONSE ACTION CHECKLIST

RESPONSE ACTION	PERSON TAKING ACTION (INITIALS)	DATE/TIME ACTION TAKEN
First Person to Discover Spill		
Immediately notify Supervisory Personnel. Take appropriate action to protect life and ensure safety of personnel. Contact the appropriate local emergency responders or request the office to do so.		
Immediately shut down terminal operations (if applicable). (b) (7) (F) [redacted]		
Secure the scene. Isolate the area and assure the safety of people and the environment. Keep people away from the scene and outside the safety perimeter.		
Supervisory Personnel		
Assume role of Incident Commander until relieved.		
Conduct preliminary assessment of health and safety hazards.		
Evacuate nonessential personnel, notify emergency response agencies to provide security, and evacuate surrounding area (if necessary).		
Call out spill response contractors (**FIGURE 3.1-3**).		
If safe to do so, direct facility responders to shut down potential ignition sources in the vicinity of the spill, including motors, electrical pumps, electrical power, etc. Keep drivers away from truck rack if spill occurs there.		
If safe to do so, direct facility responders to shut down and control the source of the spill. Be aware of potential hazards associated with product and ensure that lower explosive limits (LELs) are within safe levels before sending personnel into the spill area.		
If safe to do so, direct facility responders to stabilize and contain the situation. This may include berming or deployment of containment and/or sorbent boom.		
For low flash oil (<100ºF), consider applying foam over the oil, using water spray to reduce vapors, grounding all equipment handling the oil, and using non-sparking tools.		
If there is a potential to impact shorelines, consider lining shoreline with sorbent or diversion boom to reduce impact.		
Notify Local Emergency Responders. Obtain the information necessary to complete the Oil Spill Report Form (**FIGURE 3.1-2**).		
Make appropriate notifications: • National Response Center (800) 424-8802 • External regulatory notifications (**FIGURE 3.1-4**)		

FIGURE 2.1-2 - SPILL / RELEASE RESPONSE ACTION CHECKLIST, CONTINUED

RESPONSE ACTION	PERSON TAKING ACTION (INITIALS)	DATE/TIME ACTION TAKEN
On-Scene Coordinator		
Activate all or a portion of Emergency Management Team (EMT) (as necessary). Environmental Specialist will maintain contact with notified regulatory agencies.		
Ensure the EMT has mobilized spill response contractors (if necessary). It is much better to demobilize equipment and personnel if not needed, than to delay contacting them if they are needed.		
If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes or other equipment, wherever this appropriate.		
Document all response actions taken, including notifications, agency/media meetings, equipment and personnel mobilization and deployment, and area impacted. (Refer to **SECTION 5** for documentation.)		
Water based Spills: Initiate spill tracking and surveillance operations. Determine extent of pollution via surveillance aircraft or vehicle. Estimate volume of spill utilizing information in **SECTION 2.1.3**. Send photographer / videographer if safe.		
Land based Spills: Initiate spill tracking and surveillance if applicable.		
SECONDARY RESPONSE ACTIONS (Refer to EMT job descriptions in **SECTION 4.8**)		
FACILITY SPECIFIC RESPONSE CONSIDERATIONS (Refer to **SECTION 6** for maps (**SECTION 6.11**), tactical plans (**SECTION 6.9**), and sensitivity information (**SECTION 6.6**).		

SITE SPECIFIC ACTIONS	
DOCUMENT ALL ACTIONS TAKEN	**INITIALS**
First Priority	
Account for all personnel and visitors	
Identify and assess fire/safety hazards	
Second Priority	
Secure spill source if possible	
Assure all required notifications are conducted	
Secure all drainage leading from facility	
Third Priority	
Facility drainage and secondary containment will be adequate to contain a spill of small or medium size preventing it from reaching the Willamette River. Once the spill has been contained, resources are present at the facility to recover spilled product, safety conditions permitting.	
If unable to contain spill to facility property, refer to SECTION 6.8 of the FRP or SECTION 9.0 of the ERAP for location of strategy.	
Once deployment of response equipment has been completed, initiate recovery of product	
Upon arrival of EMT, assure all information is accurate and complete prior to being released	
Assure proper documentation has been completed from initial discovery of spill to finish; reference **SECTION 5**	

2.1.1 Spill Detection and Mitigation Procedures

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

Each spill mitigation situation is unique and must be treated according to the circumstance present. In every situation, however, personnel safety must be assessed as the first priority. The potential for ignition and/or toxic exposure must be promptly evaluated. Spill mitigation procedures are listed in **FIGURE 2.1-3**. Discharge volume calculations are provided in **APPENDIX D.7**.

FIGURE 2.1-3 - SPILL MITIGATION PROCEDURES

TYPE	MITIGATION PROCEDURE
Failure of Transfer Equipment	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Terminate transfer operations and close block valves. 3. Drain product into containment areas if possible. 4. Eliminate sources of vapor cloud ignition by shutting down all engines and motors.
Tank Overfill/Failure	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Shut down or divert source of incoming flow to tank. 3. Transfer fluid to another tank with adequate storage capacity (if possible). 4. Shut down source of vapor cloud ignition by shutting down all engines and motors. 5. Ensure that dike discharge valves are closed. 6. Monitor diked containment area for leaks and potential capacity limitations. 7. Begin transferring spilled product to another tank as soon as possible.
Piping Rupture/Leak (under pressure and no pressure)	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Shut down pumps. Close the closest block valves on each side of the rupture. 3. Drain the line back into contained areas (if possible). Alert nearby personnel of potential safety hazards. 4. Shut down source of vapor cloud ignition by shutting down all engines and motors. 5. If piping is leaking and under pressure, then relieve pressure by draining into a containment area or back to a tank (if possible). Then repair line according to established procedures.
Fire/Explosion	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at risk of injury. 2. Notify local fire and police departments. 3. Attempt to extinguish fire if it is in incipient (early) stage and **if it can be done safely**. 4. Shut down transfer or pumping operation. Attempt to divert or stop flow of product to the hazardous area (if it can be done safely). 5. Eliminate sources of vapor cloud ignition by shutting down all engines and motors. 6. Control fire before taking steps to contain spill. Also refer to fire/explosion response procedures in **SECTION 2.7**.
Manifold Failure	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Terminate transfer operations immediately. 3. Isolate the damaged area by closing block valves on both sides of the leak/rupture. 4. Shut down source of vapor cloud ignition by shutting down all engines and motors. 5. Drain fluids back into containment areas (if possible).

2.1.2 Spill Surveillance Guidelines

- Surveillance of an oil spill should begin as soon as possible following discovery to enable response personnel to assess spill size, movement, and potential impact locations.
- Dispatch observers to crossings downstream or down gradient to determine the spill's maximum reach.
- Clouds, shadows, sediment, floating organic matter, submerged sand banks or wind-induced patterns on the water may resemble an oil slick if viewed from a distance.
- Sorbent pads may be used to detect oil on water.
- Use surface vessels to confirm the presence of any suspected oil slicks (if safe to do so); consider directing the vessels and photographing the vessels from the air, the latter to show their position and size relative to the slick.
- It is difficult to adequately observe oil on the water surface from a boat, dock, or shoreline.
- Spill surveillance is best accomplished through the use of helicopters or small planes; helicopters are preferred due to their superior visibility and maneuverability.
- If fixed-wing planes are to be used, high-wing types provide better visibility than low-wing types.
- All observations should be documented in writing and with photographs and/or videotapes.
- Describe the approximate dimensions of the oil slick based on available reference points (i.e., vessel, shoreline features, facilities); use the aircraft or vessel to traverse the length and width of the slick while timing each pass; calculate the approximate size and area of the slick by multiplying speed and time.
- Record aerial observations on detailed maps, such as topographic maps.
- In the event of reduced visibility, such as dense fog or cloud cover, boats may have to be used to patrol the area and document the location and movements of the spill; however, this method may not be safe if the spill involves a highly flammable product.
- Surveillance is also required during spill response operations to gauge the effectiveness of response operations; to assist in locating skimmers; and to assess the spill's size, movement, and impact.

A Spill Surveillance Checklist is provided in **FIGURE 2.1-4**

FIGURE 2.1-4 - SPILL SURVEILLANCE CHECKLIST

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

General Information	
Date:	Tidal or river stage (flood, ebb, slack, low water):
Time:	On-scene weather (wind, sea conditions, visibility):
Incident name:	Platform (helicopter, fixed-wing aircraft, boat, shore):
Observers name:	Flight path/track line:
Observer's affiliation:	Altitude where observation taken:
Location of source (if known):	Areas not observed (i.e., foggy locations, restricted air spaces, shallow water areas):
Oil Observations	
tion(s):	Color and appearance (i.e., rainbow, dull or silver sheen, black or brown in color or mousse):
Slick dimensions:	Percent coverage:
Orientation of slick(s):	Is oil recoverable (Y/N)?
Distribution of oil (i.e., windrows, streamers, pancakes or patches):	
Considerations	
• During surveillance, travel beyond known impacted areas to check for additional oil spill sites • Include the name and phone number of the person making the observations • Clearly describe the locations where oil is observed and the areas where no oil has been seen	
Other Observations	
Response Operations	
Equipment deployment (general locations where equipment is working and whether they are working in the heaviest concentration of oil):	
Boom deployment (general locations of boom, whether the boom contains oil, and whether the oil entrains under the boom):	

FIGURE 2.1-4 - SPILL SURVEILLANCE CHECKLIST, CONTINUED

Observation- This checklist is an aid for organizing your observations.

Environmental Observations
Locations of convergence lines, terrain, and sediment plumes:
Locations of debris and other features that could be mistaken for oil:
Wildlife present in area (locations and approximate numbers):
Spill Sketch

2.1.3 Spill Volume Estimating

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

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

Some rapid methods to estimate spill size are:

- Transfer operations: Multiply the pumping rate by the elapsed time that the leak was in progress, plus the drainage volume of the line between the two closest valves or isolation points (volume loss = pump rate [bbls/min] x elapsed time [min] + line contents [bbl])
- Tank overfills: Elapsed time multiplied by the pumping rate
- Visual assessment of the surface area and thickness (**FIGURE 2.1-5**); the method may yield unreliable results because:
    - Interpretation of sheen color varies with different observers
    - Appearance of a slick varies depending upon amount of available sunlight, sea-state, and viewing angle
    - Different products may behave differently, depending upon their properties
    - Tank volumes are contained in **FIGURE C-1** to estimate spill volumes

FIGURE 2.1-5 - SPILL ESTIMATION FACTORS

OIL THICKNESS ESTIMATIONS				
Standard Form	Approx. Film Thickness		Approx. Quantity of Oil in Film	
	Inches	Mm	Gallons/mile²	Liters/km²
Barely Visible	0.0000015	0.00004	25	44
Silvery	0.000003	0.00008	50	88
Slightly colored	0.000006	0.00015	100	179
Brightly colored	0.000012	0.0003	200	351
Dull	0.00004	0.001	666	1,167
Dark	0.00008	0.002	1,332	2,237
Thickness of light oils: 0.0010 inches to 0.00010 inches				
Thickness of heavy oils: 0.10 inches to 0.010 inches				

NOAA, 09/2000

2.1.4 Estimating Spill Trajectories

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

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

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

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

- National Oceanic and Atmospheric Administration (NOAA) through the Federal On-Scene Commander (FOSC)
- Private consulting firms

2.1.5 Initial Containment Actions

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

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

Selection of the appropriate location and method will depend upon:

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

Site specific actions are contained in **SECTION 6.10**

2.2 EVACUATION

EVACUATION CHECKLIST	
TASK	**INITIALS**
Facility Evacuation **Note:** the Terminal Manager usually implements the procedure described below. An On-scene Commander may have to implement some or all of the procedure in the absence of the Terminal Manager.	
Initial actions	
• Establish command and control	
• Ensure safety of responders	
• Organize and manage response operations	
• Communicate effectively	
Designate and activate emergency channel on radios	
Assess threat to facility personnel	
Activate Warden(s)	
Determine need to initiate muster and/or shelter-in-place operations	
Determine effect of following factors on safety of muster and/or shelter area(s):	
• Fire	
• Smoke	
• Toxic vapors or gas or vapor	
• Structural damage	
If appropriate, initiate muster and/or shelter-in-place procedure	
Receive regular status reports from Muster and/or Shelter Area Manager(s)	
• Headcount	
• Missing personnel	
• Injured personnel	
• Problems or needs	
Determine availability of transportation resources that may be needed to evacuate facility	
Review weather conditions	
Review status of escape route(s)	
Determine need for offsite resources needed to assist in evacuation:	
• Nature	
• Number	
• Capacity	

• Mobilization time	
Notify offsite resources:	
• Place on standby	
• Activate	
Constantly evaluate nature and severity of incident and status of at-the-scene tactical response operations	
Constantly assess threat to TRT responders and personnel in muster and/or shelter area(s)	
Keep Muster and/or Shelter Area Manager(s) informed of status	

2.2 EVACUATION, CONTINUED

EVACUATION CHECKLIST	
TASK, CONTINUED	**INITIALS**
Facility Evacuation **Note:** the Terminal Manager usually implements the procedure described below. An On-scene Commander may have to implement some or all of the procedure in the absence of the Terminal Manager.	
Determine need for evacuation	
If evacuation is appropriate, notify Muster and/or Shelter Area Manager(s)	
If evacuation is appropriate, recheck:	
• Status of muster and/or shelter-in-place activities	
• Status of transportation resources	
• Status of escape route(s)	
• Status of weather	
• Status of offsite resources needed to assist in evacuation	
Review personnel allocations to transportation resources to be used for evacuation	
Advise reception facility (ies)	
Provide regular updates to EMT Operations	
Note: Muster and/or Shelter Area Manager(s) also will be providing regular status reports to EMT Operations	
Determine whether a partial or full evacuation is appropriate	
Establish direct line of communications with and receive regular updates from contact person on each transportation resource being used to evacuate personnel until they reach destination point	
If partial evacuation is appropriate:	
• Order evacuation	
• Confirm names of personnel abandoning facility	
• Confirm names of personnel remaining at/on facility	
• Monitor morale of personnel remaining at/on facility	
If full evacuation is appropriate:	
• Order evacuation	
• Confirm names of personnel abandoning facility	
• Ensure that all personnel are accounted for and abandon facility	
• Notify EMT Operations	
• Arrange for a transfer of command to appropriate person/position	

2.2 EVACUATION, CONTINUED

EVACUATION FACTORS	
FACTOR	**DESCRIPTION**
Stored material location	• Located in oil storage area • Identified in facility Plot Plan (**FIGURE 1-5**)
Spilled material hazards	• Hazard is fire/explosion
Water currents, tides or wave conditions	• See Section 6.1.1 for a specific description of potential currents and wave conditions
Evacuation routes	• Routes are summarized on Evacuation Plan Diagram (**FIGURE C-3**) • Criteria for determining safest evacuation routes from facility may include: wind direction, potential exposure to toxins and carcinogens, intense heat, potential for explosion/fire, and blockage of planned route by fire, debris, or released liquid
Alternate evacuation routes	• Alternate routes may exist; refer to Evacuation Plan Diagram (**FIGURE C-3**)
Injured personnel transportation	• Emergency services can be mobilized to the facility (**FIGURE 3.1-4**)
Alarm/Notification system location	• In the event of an emergency an activation alarm will be signaled by the plant alarm system, by radio, and/or other means. To activate the Plant Alarm dial one of the following numbers from a landline phone: 1) 5888 for Fire Alarm Activation 2) 5777 for Shelter in Place Activation

2.2 EVACUATION, CONTINUED

EVACUATION FACTORS	
FACTOR	**DESCRIPTION**
Community evacuation plans	• Company may request local police, county sheriff and/or state police assistance (**FIGURE 3.1-4**). Community evacuations are the responsibility of these agencies.
Spill flow direction	• Northeast. Oil will flow downhill or in the direction of winds or currents. • Identified in facility drainage diagram (**FIGURE C-2**)
Prevailing wind direction and speed	• East Southeast, 8mph. Monitor wind direction by looking at flags, windsock, or other means. Move upwind of the emergency to prevent potential exposure to releases of vapors, gases, or particulates. If it is not possible to move upwind, move at a 90-degree angle from the emergency. • Because wind direction varies with weather conditions, consideration for evacuation routing will depend in part on wind direction
Emergency personnel/response equipment arrival route	• Emergency personnel may arrive from several directions including: 1. NW Yeon Ave to NW Kittridge to NW Front Ave to Doane Ave. 2. SE from NW Mt. St Helens Rd to NW Kittridge to NW Front Ave to Doane Ave. 3. NW from NW Front Ave to Doane Ave. 4. NW from NW Mt. St. Helens Rd to Balboa to NW Culebra to 61st Ave. to NW Front Ave. ** Access to Balboa has been blocked to all local traffic. Limited Emergency Responders do have access to this crossing over the railroad tracks. Emergency Personnel that do not knowingly have immediate access to the crossing at Balboa should use alternate routes. NOTE: (b) (7)(F) [redacted] Operations office located at 5531 NW Doane Ave. • Directions to nearest medical facility provided below

2.2 EVACUATION, CONTINUED

EVACUATION FACTORS	
FACTOR	**DESCRIPTION**
Centralized check-in area (Personnel assembly area)	• The first location for centralized check-in area is in the Truck Staging Area on the Corner of Doane Ave and NW Front Ave. If that location is to close to the emergency, the parking lot area across the street at the MTD building will be used as the centralized check-in area. • Supervisor/Senior employee is responsible for head count
Mitigation Command Center location	• Initial Command Center located at Engineering Office • Mobile Command Posts may be established as necessary
(b) (7)(F) [redacted]	• (b) (7)(F) [redacted]
Directions to nearest medical facility	Directions to Emanuel Hospital and Good Samaritan: • DIRECTIONS FROM TERMINAL TO GOOD SAMARITAN: 1: Start out going SOUTHEAST on NW FRONT AVE toward NW DOANE AVE. 0.6 miles 2: Turn RIGHT onto NW KITTRIDGE AVE. 0.2 miles 3: NW KITTRIDGE AVE becomes NW ST HELENS RD. 1.5 miles 4: NW ST HELENS RD becomes NW NICOLAI ST. 0.1 miles 5: Turn SLIGHT RIGHT onto NW WARDWAY ST. 0.1 miles 6: NW WARDWAY ST becomes NW VAUGHN ST. 0.5 miles 7: Turn RIGHT onto NW 23RD AVE. 0.3 miles 8: Turn LEFT onto NW OVERTON ST. <0.1 miles 9: Turn RIGHT onto NW 22ND AVE. 0.1 miles 10: End at Good Samaritan Hospital & Med: 1015 NW 22nd Ave, Portland, OR 97210, US Total Est. Time: 9 minutes Total Est. Distance: 3.79 miles DIRECTIONS FROM TERMINAL TO EMANUEL HOSPITAL: 1: Start out going SOUTHEAST on NW FRONT AVE toward NW DOANE AVE. 0.6 miles 2: Turn RIGHT onto NW KITTRIDGE AVE. 0.2 miles 3: Turn LEFT onto NW YEON AVE / US-30 / COLUMBIA RIVER HWY. Continue to follow US-30 E. 2.5 miles 4: Merge onto I-405 N via the exit on the LEFT toward THE DALLES / SEATTLE. 0.8 miles 5: Take the exit toward KERBY AVE. 0.5 miles 6: Turn RIGHT onto N KERBY AVE. 0.3 miles 7: Turn LEFT onto N GRAHAM ST. <0.1 miles 8: End at Legacy Emanuel Hospital & Hlth: 501 N Graham St, Portland, OR 97227, US Total Est. Time: 11 minutes Total Est. Distance: 5.28 miles

2.3 TORNADO

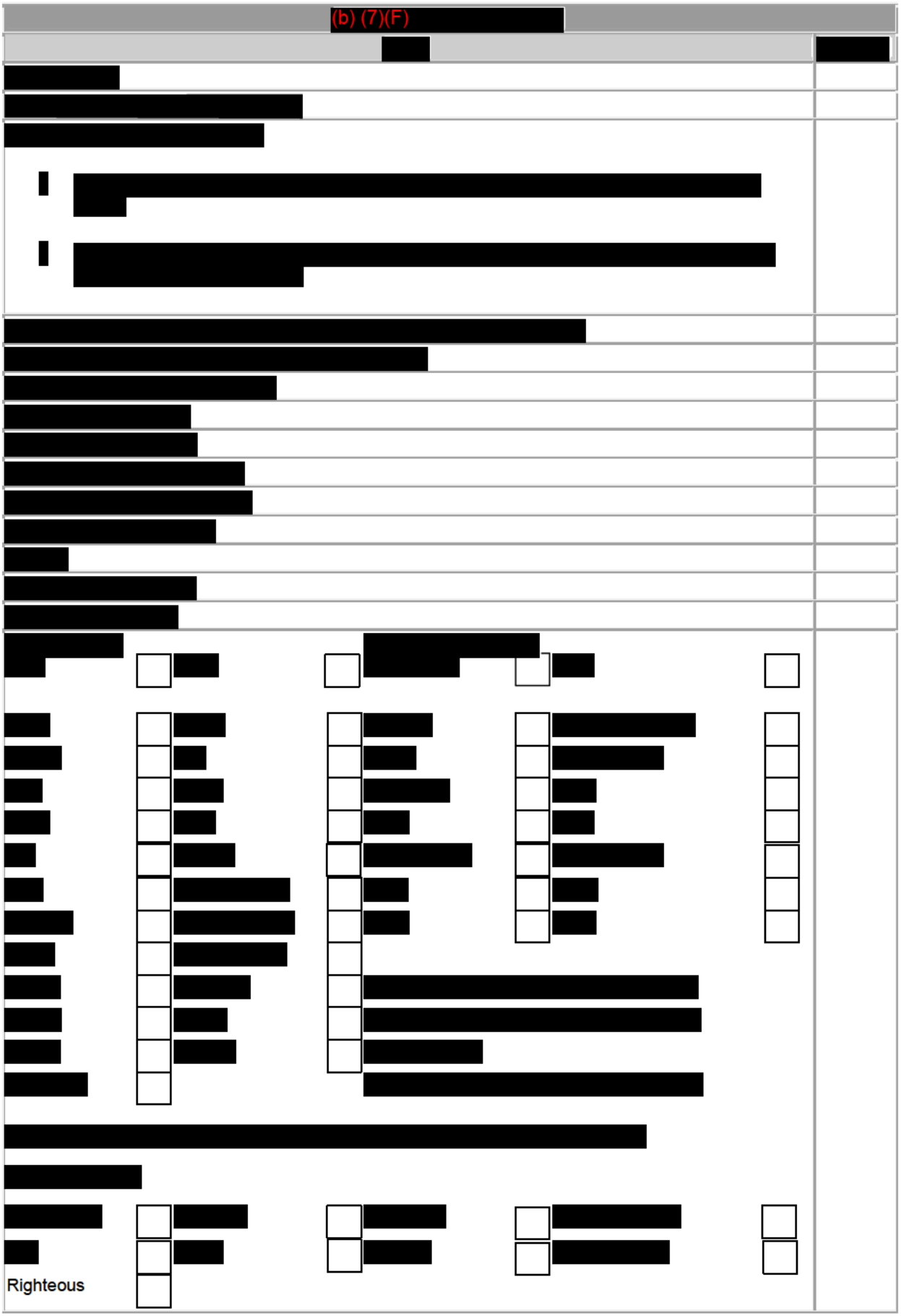
TORNADO CHECKLIST	
TASK	**INITIALS**
Monitor news media reports (**FIGURE 3.1-4**) • Tornado watch means conditions are favorable for tornadoes • Tornado warning means a tornado has been sighted	
When a tornado warning is issued, sound the local alarm	
Take shelter: • Go to an interior room on the lowest floor • Get under a sturdy piece of furniture • Use your arms to protect head and neck	
Have location personnel report to the designated area	
Account for all personnel on duty	
Look for funnel formations on the ground or in the clouds; listen for a roar that sounds like a jet aircraft or rail traffic	
If the facility is damaged by the tornado, notify Supervisory Personnel	
Go to the scene of the incident to evaluate the situation • Be aware of broken glass and downed power lines • Check for injuries • Use caution entering a damaged building	
Update Supervisory Personnel/Management	
Perform Initial Response Actions functions as stated in **SECTION 2**	
Conduct post-emergency evaluation and report	

2.4 FLOOD

FLOOD CHECKLIST	
TASK	**INITIALS**
Perform continuous monitoring of the situation by listening to radio and/or television reports (**FIGURE 3.1-4**) • Flash flood watch means flooding is possible • Flash flood warning means flooding is occurring or is imminent	
Update Supervisory Personnel when flooding is imminent	
Establish an evacuation plan (**SECTION 2.2**)	
Take preliminary actions to secure the facility before flooding and mandatory evacuation	
Consider having sandbags brought to sites that could be affected by the flooding	
Consider obtaining portable pumps and hoses from local suppliers or from other petroleum service locations in the area	
Remove product from underground storage tanks (i.e., sumps and separators, if applicable) and replace with water to prevent them from floating out of the ground	
Keep at least a normal bottom in all above ground tankage, more if possible	
Plug all rack drains and facility drains connected to the sump	
Anchor all bulk additive tanks, fuel barrels, empty drums, and propane tanks (if applicable)	
Notify Supervisory Personnel/Management that the facility will be closed	
Back up computer files	
Remove assets such as files, computers, and spare parts	
Shut off high voltage power and natural gas lines	
Close all valves on product and additive storage tanks	
Before evacuation, know where all the employees will be residing and obtain phone numbers so they can be contacted if additional emergencies occur	
Conduct a post-emergency evacuation and report	
Maintain hazards awareness: • Structural damage • Downed power lines • Leaking natural gas, water, and sewer lines • Poisonous snakes and other wildlife sheltering in structures, vehicles, and furniture • Avoid direct contact with flood water, mud, and animal carcasses	

2.5 MEDICAL

MEDICAL CHECKLIST	
TASK	**INITIALS**
Summon Emergency Medical Services (EMS) to the scene (**FIGURE 3.1-4**)	
Do not move the patient unless a situation (such as a fire) threatens patient's life	
If trained, provide first aid until the EMS arrives at the scene	
As the situation warrants, try to stop the bleeding and keep the patient breathing until the EMS arrives at the scene	
The rescuer's role includes: • Removing the patient from any situation threatening patient's life or the lives of rescuers • Correcting life-threatening problems and immobilizing injured parts before transporting the patient • Transporting the patient in a way that minimizes further damage to injured parts • Administering essential life support while the patient is being transported • Observing and protecting the patient until medical staff can take over • Administering care as indicated or instructed	



2.6 BOMB THREAT, CONTINUED

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

[redacted]

2.7 FIRE AND/OR EXPLOSION

Your first consideration is always the safety of people

in the immediate area, including your own. **The first responder's initial objectives are listed in FIGURE 2.1-2.**

FIRE AND/OR EXPLOSION CHECKLIST	
TASK	**INITIALS**
At a manned facility	
Evaluate the situation; approach cautiously from upwind; do not rush in	
Notify the local police and fire departments	
Notify Supervisory Personnel	
Appropriately trained personnel may attempt to extinguish the fire if it is in the incipient (early) stage and **if it can be done safely**	
If the fire/explosion is a result of a pipe rupture, isolate product release by closing valves	
Undertake basic site control: • Make an assessment of hazards • Isolate the area • Keep people away from the scene and outside the safety perimeter • Establish safety zones and escape routes	
Respond to the fire: • Establish a Command Post and lines of communication • Maintain site control • Establish Incident Command/Unified Command as necessary, refer to **SECTION 4.5**	
Call in additional resources if on scene personnel and equipment are inadequate to handle the emergency	
Conduct a post-emergency evaluation and report	

2.7 FIRE AND/OR EXPLOSION, CONTINUED

Your first consideration is always the safety of people

in the immediate area, including your own. **The first responder's initial objectives are listed in FIGURE 2.1-2.**

FIRE AND/OR EXPLOSION CHECKLIST, CONTINUED	
TASK	**INITIALS**
At an unmanned facility	
Handle the call	
Notify the local police and fire departments	
Notify Supervisory Personnel	
Go to the incident scene to evaluate the situation; approach cautiously from upwind; do not rush in	
Undertake basic site control: • Make an assessment of hazards • Isolate the area • Keep people away from the scene and outside the safety perimeter • Establish safety zones and escape routes	
If roads or railroads are in the affected area, assist the sheriff or local emergency officials with halting traffic	
Update Supervisory Personnel/Management	
If the fire/explosion is a result of a pipe rupture, isolate the product release by closing valves	
Respond to the fire: • Establish a Command Post and lines of communication • Maintain site control • Establish Incident Command/Unified Command as necessary, refer to **SECTION 4.5**	
Call in additional resources if on scene personnel and equipment are inadequate to handle the emergency	
Conduct a post-emergency evaluation and report	

2.8 FIRE PRE-PLANS

The facility is evaluation the need for Pre plans to be developed

Name:	Willbridge
Address:	5924 NW Front Ave. Portland OR 97210
Latitude/Longitude	(b) (7)(F)
Phone/Fax	(503) 221-7866 / (503) 222-9766

DESCRIPTION:

DRIVING DIRECTIONS:

Container/Source	Product Stored	Total Capacity (gal)	Tank Type	Roof Type	Roof Material	Diameter	Height

Site Consideration:

Water Source Description (Firefighting/Cooling)

External Exposures

Other

		Parameters	Rim Seal Fire	Full Surface Fire
Product Name		Foam Percentage		
NFPA Classification		Foam Solution Application Rate (Gal Per Min)		
Vapor Pressure		Minimum Application Duration (min)		
Flash Point		Foam/Water Solution Flow Rate (Gal Per Min)		
Upper Explosive Limit		Foam Concentrate Flow Rate (Gal Per Min)		
Lower Explosive Limit		Total Foam Concentrate Required		
Vapor Density		Total Water Required (Gals)		
IDLH ppm.				
Auto Ignition Temp				
Water Solubility				
API Gravity				
Physical State				
Storage Temp				
Specific Gravity				

FIRE FIGHTING TACTICS

Full Surface Fire

Rim Seal Fire

Sunken External Floating Roof Non-Fire

SECTION 3

Last Revised: March 2013

NOTIFICATIONS / TELEPHONE NUMBERS

© Technical Response Planning Corporation 2006

3.1 Emergency Information and Notification Procedures

Figure 3.1-1 - Emergency Notification Flow Chart

Figure 3.1-2 - Oil Spill Report Form

Figure 3.1-3 - Internal Notifications and Telephone Numbers

Figure 3.1-4 - External Notifications and Telephone Numbers

3.1 EMERGENCY INFORMATION AND NOTIFICATION PROCEDURES

The notification sequence for a spill is as follows:

- Facility personnel will identify and control the source of a spill, if safe to do so, then will notify the Supervisory Personnel.
- The Qualified Individual will conduct notifications as illustrated in the Emergency Notification Flow Chart (**FIGURE 3.1-1**).

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

This section also contains the following:

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

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

- Familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;
- Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;
- Agreements with State emergency response teams, emergency response contractors, and equipment suppliers; and
- Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

FIGURE 3.1-1 - EMERGENCY NOTIFICATION FLOW CHART

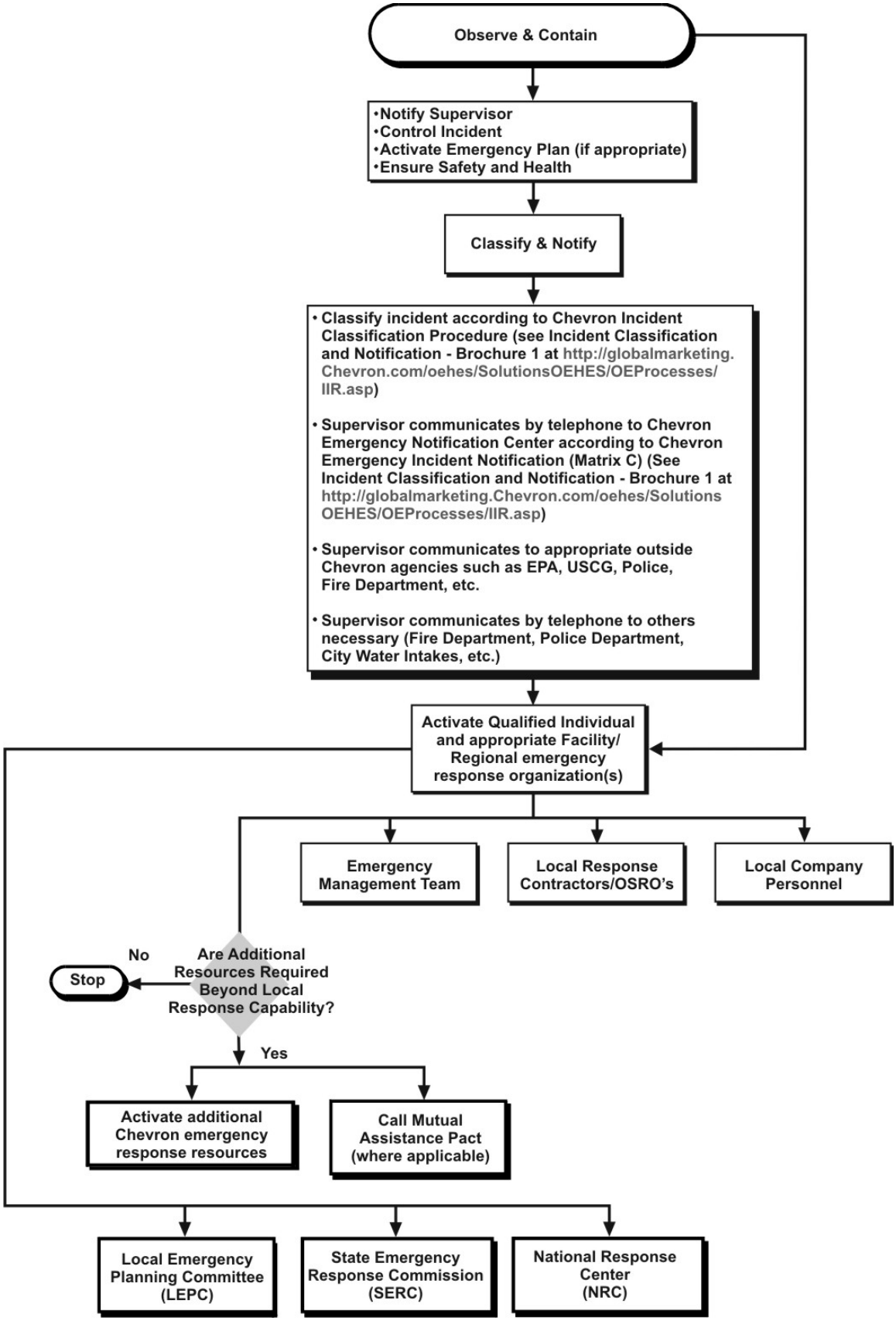


FIGURE 3.1-2 OIL SPILL REPORT FORM

INVLOVED PARTIES						
REPORTING PARTY:			**SUSPECTED RESPONSIBLE PARTY:**			
NAME:			NAME:			
PHONE: (DAY)			PHONE: (DAY)			
(EVENING)			(EVENING)			
POSITION:			COMPANY:			
COMPANY:			ORGAINZATION TYPE:	PRIVATE CITIZEN: ☐		
ADDRESS:				PRIVATE ENTERPRISE ☐		
PERSON DISCOVERING INCIDENT				PUBLIC UTILTY: ☐		
NAME:				LOCAL GOVERNMENT: ☐		
COMPANY/ORANIZATION:				STATE GOVERNMENT: ☐		
CITY:	STATE	ZIP		FEDERAL GOVERNMENT: ☐		
WERE MATERIALS RELEASED?	YES	NO	CALLING FOR RESPONSIBLE PARTY?	YES ☐	NO ☐	
INCIDENT DESCRIPTION						
DATE:	TIME:	AM PM	WEATHER:			
INCIDENT ADDRESS/LOCATION:			LATITUDE:	DEGREE	MIN	SEC
			LONGITUDE:	DEGREE	MIN	SEC
MILES POST/RIVER MAKER:						
CITY/COUNTY:			DIRECTION FROM CITY:			
			DIRECTION FROM CITY:			
STATE:						
SOURCE AND CAUSE OF INCIDENT:						
TANK CAPACITY:			FACILITY CAPACITY:			

MATERIAL INFORMATION			
CHRIS CODE	PRODUCT RELEASED	RELEASED QUANITY (INCLUDE UNITS OF MEASURE)	QUANTITY IN WATER (INCLUDE UNITS OF MEASURE)

NOTE: REFER TO THE INCIDENT DATABASE FOR SPILL HISORY AND SPILL REPORTING.

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

FIGURE 3.1-2-SPILL REPORT FORM, CONTINUED

INITIAL IMPACT			
NUMBER OF INJURIES:			NUMBER OF DEATHS:
WERE THERE EVACUATIONS?	YES	NO	NUMBER EVACUATE:
WAS THERE ANY DAMAGE?	YES	NO	
DAMAGE IN DOLLARS (ESTIMATE):			
IS THE SPILL CONTAINED WITHIN THE BOUNDARIES OF THE FACILITY?		YES	NO
DIRECTION OF FLOW:			

RESPONSE ACTION (S)
ACTION (S) TAKEN TO CORRECT, CONTROL OR MITIGATE INCIDENT:

ADDITIONAL INFORMATION
ANY INFORMATION ABOUT THE INIDENT NOT RECORDED ELSEWHERE IN THE REPORT (E.G., DURATION OF SPILL, TREATMENT OR DISPOSAL MEASURES).

COMPLETED NOTIFICATIONS

REPORT	PHONE NUMBER	DATE	CASE NUMBER	TIME	NAME	TITLE
NRC	(800) 424-8802					

NOTE: REFER TO THE INCIDENT DATABASE FOR SPILL HISTORY AND SPILL REPORTING

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

FIGURE 3.1-3 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

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

*24 Hour Number

FACILITY RESPONSE TEAM		
NAME/TITLE	**PHONE NUMBER**	**RESPONSE TIME (hours)**
Jerry Henderson Terminal Manager **Qualified Individual**	(503) 221-7866 (Operations No.) (503) 283-5601 (Radio Phone) (503) 221-7714 (Office) (b) (6) (503) 539-4019 *(Mobile)	1
Todd Osterberg TESH Specialist **Qualified Individual**	(503) 221-6582 (Office) (925) 951-7109 *(Mobile)	5
Shane Partain HES TECHNICAL CL #10 **Qualified Individual**	(503) 221-7855 (Office) (b) (6) (503) 504-5754 *(Mobile)	1
Reggie Bailey Terminal Engineer	(925) 842-5263 *(Mobile)	5
James Weider Operations Manager Chevron Lubricants	(503) 221-7705 (Office) (b) (6) (503) 490-9158 *(Mobile)	1

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

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

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

*24 Hour Number

EMERGENCY RESPONSE PERSONNEL AND BUSINESS UNIT NOTIFICATIONS						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	ICS POSITION	RESPONSE TRAINING TYPE[1]		
				1	2	3
Sara Porter Manager, Operations Northwest	(925) 842-5481 (Office) (b) (6) (925) 250-3367 *(Mobile)	8	Incident Commander	x	x	x
Chevron Emergency Information Center (CEIC), Chevron World Wide Emergency Response Team	(800) 231-0623* (Office) (510) 231-0623 (Office)	8		x	x	x
Kevin Lucke GM SUPPLY CHAIN AMERICAS (Lubes)	(786) 552-6184 (Office) (925) 786-7815 *(Mobile)	12				
Marty Gilles General Manager, Americas Transportation & Operations	(925) 842-1725 (Office) (925) 997-4982 *(Mobile)					
CHEMTREC	(800) 424-9300 (Office)					
Chevron Insurance and Claims For Tier 2 and 3 Response	(888) 415-2052 (Pager)					

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

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

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

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

*24 Hour Number

EMERGENCY RESPONSE CONTRACTORS						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	RESPONSIBILITY DURING RESPONSE ACTION	RESPONSE TRAINING TYPE[1]		
				1	2	3
Clean Rivers Cooperative, Inc. (CRC)	(503) 220-2040* (503) 295-3660 (fax)	2		x	x	x
Marine Spill Response Corp. (MSRC)	(800) 259-6772 *	5		x	x	x

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

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

FIGURE 3.1-4 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

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

*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Initial		
National Response Center	(800) 424-8802*	
Oregon Emergency Response System (OERS)	(800) 452-0311	
Recommended		
Federal Agencies		
Environmental Protection Agency - Region X	206-553-1263 (24-hr Duty Officer) 206-442-1263 (ER Office)	
U.S. Coast Guard Sector Portland	(503) 861-6211 (Command Center) (503) 861-6212 (Command Center) (503) 240-9370 (Marine Env. Resp.) (503) 861-6360 (Command Center Fax)	
State Agencies		
Oregon Department of Energy	503-370-3500 (ODOE Duty Officer) 503-932-4428 (ODOE Emergency Preparedness Mgr.)	
Oregon Dept. of Environmental Quality	(503) 229-5696 (800) 452-4011	
Fire Departments		
Portland Fire & Rescue	911 (503) 823-3700	
Emergency Medical Services		
HOEM Urgent Care (Local Doctors)	(707) 442-2500	
Hospitals		
Emanuel Hospital Good Samaritan Hospital	(503) 413-2200 (503) 413-7711	
Law Enforcement		
Portland Police Department	911 (503) 823-3333	
USCG Classified OSRO's		
Clean Rivers Cooperative, Inc. (CRC) Portland, OR	(503) 220-2040* (503) 295-3660 (fax)	
Marine Spill Response Corp. (MSRC) Everett, WA	(800) 259-6772 *	
Accommodations		
Best Western Oak Meadows Inn - St Helens	(503) 397-3000 (800) 780-7234	
Embassy Suites-Portland	(503) 279-9000	

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

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

*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended		
Accommodations		
Hilton-Portland	(503) 226-1611	
Red Lion Hotel At The Quay	(360) 694-8341	
Red Lion Hotel Portland-Convention Center	(503) 235-2100	
Silver Cloud Inn	(503) 242-2400	
General Equipment Rental		
American Sani-Can	(503) 252-0550	
Barbur Blvd Rentals (Oregon Event & Tent Co.)	(503) 246-4268 (503) 246-9375 (fax)	
Bob's Rentals & Sales	(503) 255-4671	
Oregon Tractor	(503) 282-7211 (503) 281-2596 (fax)	
Smith Crane Co	(503) 243-1353	
United Rentals	(503) 796-1235	
Neighboring Facilities		
BNSF Railroad	800-832-5452 (Signal Crossing Emergency Line)	
BP Arco	(503) 286-5711	
Certain Teed	503-222-1307 ext. 321 or 239 503-969-8289 Safety Rep Cell	
Conoco Phillips	(503) 849-9065 (Head Operator cell) (503) 248-1565 (office)	
K&M Pipeline	(503) 224-3390	

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

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

*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended		
Neighboring Facilities		
Kinder Morgan	(503) 220-1246 (503) 224-0319 Radio	
Mc Call Oil & Chemical Corporation	503-221-6400 office	
NuStar	(503) 969-4555	
Olympic Pipeline	112*2316*20 (PTT) 425-235-7726 (Dispatch Renton)	
Paramount Petroleum	(503) 273-4700	
Shell Oil Products US	(503) 225-4217 (503) 294-1160 Radio Phone	
Wacker Siltronic Corporation	503-219-7801 HES Mgr.	
Radio Stations		
KEX 1190 AM	(503) 242-1190 * (studio) (800) 345-1190	
KUPL 98.7	(503) 733-5000 * (studio) (503) 517-6400 (business)	
Service Providers		
Hazen Hardware, 136 N Nehalem, Clatskanie, OR	(503) 728-3233	
Home Depot, 1728 Jantzen Beach Ctr., Portland, OR	(503) 289-9200	
Home Depot, 580 7th Ave., Longview, WA	(360) 578-1030	
Hutchinson Kalama Hardware, 173 N 1st St., Kalama, WA	(360) 673-3000	
Parr Lumber Co., , 1320 NW 19th Ave., Portland, OR	(503) 223-8141	
Portland Contractors Supply, 120 NE 9th Ave., Portland, OR	(503) 232-5173	

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

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

*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended		
Surveillance		
Air National Guard	(503) 335-4000	
Hillsboro Aviation, Inc.	(503) 489-1142 (Troutdale) (800) 345-0949 (Hillsboro)	
Transwestern Aviation	503-543-3121 (office) 503-543-5296 (fax) Frequencies: UNICOM 122.8; ASOS - Radio 135.875; FAA - McMinnville Flight Service, Radio 122.6	
Television Stations		
KATU (Channel 2)	(503) 231-4222	
KGW (Channel 8)	(503) 226-5000	
Transport Companies		
Sause Bros	800-234-5841	
Shaver	503-228-8847	
Tidewater	503-289-4274	
Vacuum Truck Services		
Ccs-Cowlitz Sweep, St Helens, OR	(503) 247-9466	
Jammie's Environmental, Inc.	360-577-5691 800-577-5691 (toll free)	
National Response Corporation (NRC)	(503) 283-1150 (office) (503) 289-6568 (fax)	
Waste Management		
Veolia ES Technical Solutions, LLC	425.272.0744 (business) 425.272.0777 (fax)	
Water Intakes		
Portland Water Bureau	(503) 823-7368*	
Weather		
National Weather Service	(503) 261-9246	
Wildlife Rehabilitation		
International Bird Rescue Research Center (IBRRC) Headquarters	(707) 207-0380	

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

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

*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended		
Wildlife Rehabilitation		
Marine Mammal Center	415-289-7325 (24-hr)	
Oiled Wildlife Care Network	877-823-6926 (24-hr)	
Tri-State Bird Rescue	800-424-8802 (NRC 24-hr) (302) 737-9543 (O)	

SECTION 4

Last Revised: January 2007

RESPONSE TEAM ORGANIZATION

© Technical Response Planning Corporation 2006

4.1 Emergency Management Team (EMT) Description

4.2 Activation Procedures

4.3 Tiers of Response

4.3.1 Tier 1 (Minor) Spills

4.3.2 Tier 2 (Moderate) Spills

4.3.3 Tier 3 (Major) Spills

4.4 Team Member Response Times

4.5 Unified Command System

4.6 Qualified Individual (QI)

4.7 Additional Company Resources

4.7.1 Advisory and Resource Team

4.7.2 Chevron Emergency Information Center (CEIC)

4.7.3 Communications Equipment

4.7.4 Cultural Resources (Historic Properties)

4.7.5 Emergency Response Staff

4.7.6 Fire and Process Safety (ETC, OpCo, and Third Party)

4.7.7 Functional Teams

4.7.8 Worldwide Emergency Response Team

Figure 4-1 - Emergency Management Team (EMT) Activation Procedure

Figure 4-2 - Emergency Management Team (EMT) Organizational Chart

4.8 Emergency Management Team (EMT) Job Description Checklists

4.1 EMERGENCY MANAGEMENT TEAM (EMT) DESCRIPTION

The Company uses the National Incident Management System (NIMS), which utilizes the Incident Command System (ICS).

The Incident Command System is used to manage incident response activities. ICS is readily expandable to help manage small incidents as well as larger more complex incidents. ICS is an effective safety and incident management tool and should be implemented for all emergency incidents that may cause potential harm to responders, the public, the environment or property. Staffing and resources needed to meet specific incident needs will be based on the size, complexity and severity of the incident. At minimum, HAZWOPER regulations require the ICS positions of Incident Commander and Safety Officer to be implemented during a response to a hazardous or potentially hazardous substance.

Company will utilizes the latest version of the Incident Management Handbook (IMH) as the only guide for incident response. The IMH is available electronically on the internet and a description of the National Incident Command System (NIMS) is available at http://www.fema.gov/emergency/nims/index.shtm.

Members of the EMT are listed in **FIGURE 3.1-3**. Job descriptions for each EMT member are provided in **SECTION 4.8**. The EMT will train by participating in exercises as noted in **APPENDIX A**.

4.2 ACTIVATION PROCEDURES

Activation of the EMT may be accomplished in stages as illustrated in **FIGURE 4.1** and described below:

- First Responder discovers the spill and notifies the Supervisor.
- Supervisor assumes IC and notifies QI. QI and IC determine whether to activate EMT.
- QI goes to Command Post and assumes IC.
- IC notifies the EMT Section Chiefs and Command Staff.
- Section Chiefs and Command Staff notify necessary personnel.
- IC briefs EMT upon arrival at Command Post.
- IC and Section Chiefs continually assess staffing needs.
- IC activates additional EMT personnel, if needed.
- IC de-activates EMT personnel that are not needed.

4.3 TIERS OF RESPONSE

Action to control, contain, remove, cleanup and/or track oil spills will begin immediately upon the discovery of any oil spill or slick originating on a company lease or property and will be conducted simultaneously with agency reporting and notification of Company management. Response activities will be selected and implemented to deal with the particular conditions of a spill. In general, the sizes of oil spills will fall within three broad categories, which for purpose of this plan will be called Tier 1 (minor), Tier 2 (serious), and Tier 3 (major).

4.3.1 Tier 1 (Minor) Spills

A minor incident is small in size and short in duration, and has limited impacts to personnel safety, the environment, and the affected facility or operation. A minor incident can be handled exclusively by a TRT.

4.3.2 Tier 2 (Moderate) Spills

A moderate incident has broader impacts and requires the shut down of all or a portion of the affected facility or operation, results in mustering, shelter-in-place or evacuation operations, and requires the acquisition of resources not immediately available to a TRT. A moderate incident requires the activation of an EMT at the facility level.

4.3.3 Tier 3 (Major) Spills

A major incident is one that cannot be handled exclusively by the affected facility or operation, and requires the activation of a robust EMT. A major incident also may trigger the conduct of crisis management operations.

4.4 TEAM MEMBER RESPONSE TIMES

The Incident Commander and on-site EMT will mobilize to the Command Post initially. The EMT's maximum expected arrival time during off hours is 1-2 hours. Refer to **FIGURE 3.1-3** for specific times.

4.5 UNIFIED COMMAND SYSTEM

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

- Federal On-Scene Coordinator
- State On-Scene Coordinator
- Company Incident Commander

These three persons share decision-making authority within the Incident Command System and are each responsible for coordinating other Federal, State, and Company personnel to form an effective and integrated Emergency Management Team (EMT).

4.6 QUALIFIED INDIVIDUAL (QI)

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

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

4.7 ADDITIONAL COMPANY RESOURCES

The Company's Corporate Emergency Response Staff based in San Ramon, California provides the content for the following resources. Further assistance can be found by contacting the Emergency Response Staff.

The resource sheets are placed in this section according to the following list:

4.7.1 Advisory and Resource Team
4.7.2 Chevron Emergency Information Center (CEIC)
4.7.3 Communications Equipment
4.7.4 Cultural Resources (Historic Properties)
4.7.5 Emergency Response Staff
4.7.6 Fire and Process Safety (CRTC)
4.7.7 Functional Teams
4.7.8 Worldwide Emergency Response Team

4.7.1 Advisory and Resource Team

DESCRIPTION:

The Advisory and Resource Team can provide expert advice during the initial stages of an incident and assist in marshaling a wide variety of internal and external resources as needed. The team is composed of a management representative from the impacted operating company and experts in emergency response, ecology, law, public affairs, safety and health, and if needed, marine transportation.

Once activated, Members are prepared to arrive at their local commercial airport within two hours of notification. The Team will report to the Incident Commander upon arrival at the incident.

HOW TO ACCESS:

To activate the team, call the Chevron Emergency Information Center at 1 (800) 231-0623 or 1 (510) 231-0623 and ask to speak to the Corporate Emergency Response Staff Duty Contact.

ADDITIONAL INFORMATION:

The Advisory and Resource Team is organized to function only during the initial stage of an incident. As the response progresses, the responding organization may request individual members to become part of the local response team.

Team members who may respond to foreign incidents are prepared to travel internationally on short notice. They have passports and inoculations recommended by the Medical Staff.

The emergency response, safety and health, and ecology team members have received the required level of HAZWOPER training for their expected duties.

4.7.2 Chevron Emergency Information Center (CEIC)

DESCRIPTION: The Chevron Emergency Response Teams are administered by the Corporate ER Staff to assist the operating companies' response organizations during spills and other incidents.

HOW TO ACCESS: All teams can be activated quickly and are available globally to any operating company by contacting Chevron Emergency Information Center (CEIC) at (800) 231-0623 or (510) 231-0623.

ADDITIONAL INFORMATION: When activated, they will work directly for the operating company managing the incident.

We have a variety of external and internal resources available to assist in any emergency situation. Please reference our Library section for all resources available.

4.7.3 Communications Equipment

DESCRIPTION: The Communications Functional Team maintains (in Bakersfield, California) a cache of communications equipment emergency response anywhere in the world. The equipment includes a complete data network, phone systems, satellite terminals, and support equipment in addition to a land/sea/air transportable communications trailer.

HOW TO ACCESS: Contact the Communications Functional Team directly or contact the Emergency Response Staff (see **SECTION 4.7.5**).

ADDITIONAL INFORMATION: Half the equipment is mounted in the trailer, which may be driven, loaded aboard a ship, or flown (on C-130 aircraft) to an incident. The other half is packaged in weatherproof shipping cases ready for quick transport. Each half includes a VSAT Satellite Terminal, Telephone system (75 digital and 25 analog lines), Data System with 56 LAN drops, Shared file servers for files, video, and web applications, UHF and VHF radio base stations, marine and aviation radio scanners. Trained personnel will accompany, set-up, and operate the equipment.

To gain familiarity with the equipment and services of the Communications Functional Team, operating companies are encouraged to use this resource during drills. For a complete listing of the equipment, contact the Communications Functional Team.

4.7.4 Cultural Resources (Historic Properties)

DESCRIPTION: Cultural Resources (Historic Properties) may be adversely affected during a spill or release and the ensuing response. Laws exist in many jurisdictions around the world protecting these sites and establishing a protocol for their preservation and treatment.

Expertise in the identification, location, and conservation of these sites is available through Chevron's Environmental Functional Team and retained external consultants.

HOW TO ACCESS: During regular work hours contact Tina Toriello of the Environmental Functional Team (EFT) directly:

Alternatively contact the Environmental Functional Team or a member of the Emergency Response Staff (see **SECTION 4.7.2**).

ADDITIONAL INFORMATION: Tina Toriello is available for consulting to draft studies and other projects during pre-planning for potential incidents. Vance Bente and his staff of archeologists and historians have an international network of experts available to carryout studies, remediation, identification, and evaluation of cultural resources. Training for spill responders in identification and preservation of sites is also available. All are HAZMAT qualified.

4.7.5 Emergency Response Staff

DESCRIPTION: The Emergency Response Staff is available to assist Chevron and its affiliate companies in securing emergency assistance from the company-wide resource teams and from external emergency resources, such as consultants and contractors.

A member of the Emergency Response Staff will also function as the Team Leader when an Advisory and Resource Team is dispatched (see Advisory and Resource Team Resource Sheet).

HOW TO ACCESS: Contact the Emergency Response Staff either by calling the Chevron Emergency Information Center (CEIC - See **SECTION 4.7.2**).

ADDITIONAL INFORMATION: The Emergency Response Staff is part of the Corporate Health, Environment and Safety Department. It reports to the Vice President, Health, Environment and Safety for the Chevron Corporation.

4.7.6 Fire and Process Safety (ETC, OpCo, and Third Party)

DESCRIPTION:

This ETC Loss Prevention team, along with OpCo Fire Chiefs and outside fire suppression consultants, provide technical consultation for an emergency in progress, or for pre-emergency planning. The ETC team can also provide assistance with incident investigation and litigation. **It is especially important to obtain advice from a Chevron resource when retaining an outside fire suppression consultant for a fire in progress, since the charges for services and foam can vary greatly depending on whether a standing Chevron contract is used for the supplies and services.**

Note: For field assistance during an emergency, also refer to the resource sheet covering Functional Teams - Safety, Fire & Health Team. The SF&H Team includes three regional "Fire Strike Task Forces," which are teams of seasoned fire fighters and hazardous materials specialists who can respond to an incident in progress.

HOW TO ACCESS:

Call the Chevron Emergency Information Center (Refer to **FIGURE 3.1-3**). They will be able to place you in contact with a team member.

Alternatively, contact the Emergency Response Staff (see **SECTION 4.7.5**), which will in turn notify the team for you.

4.7.7 Functional Teams

DESCRIPTION:

Thirteen Functional Teams are available to provide expert, specialized services that are essential to support a response organization. Each team has developed a ready organization to assist an operating company in responding to incidents worldwide. Functional Teams may assemble at the incident site and/or at the operating company's headquarters or other facility. Contract personnel or consultants when necessary to assure worldwide coverage expertise augment functional Teams.

The 13 Functional Teams are:

Communications	Law
Comptroller's	Public Affairs
Documentation	Purchasing
Environmental	Safety, Fire & Health
Facilities	Security
Human Resources	Transportation
Insurance/Claims	

Operating companies may activate one or as many people as they feel they need for the response. When activated, team members will report to and work directly for the organization handling the incident.

HOW TO ACCESS:

The best way to activate any or all of the Functional Teams is by contacting the Corporate Emergency Response Staff Person On-Duty by calling CEIC at (800) 231-0623 or (510) 231-0623. Emergency Response Staff team members are familiar with all Functional Team capabilities and can help ensure a good match between your needs and the people mobilized. They can also relieve you of the task of making the necessary calls, allowing you to focus on your emergency. However, you can call the teams out directly if preferred by contacting the respective functional team coordinators.

Team members are preauthorized to respond to a call from any operating company and are prepared to arrive at their local commercial airport within 24 hours of notification.

ADDITIONAL INFORMATION:

Team members are prepared to travel internationally. They have passports and inoculations recommended by the Medical Staff.

Team members who may work in the field during spill response have received the required HAZWOPER training for their expected duties.

Team Services: The emergency response support services, which the Functional Teams can provide, are summarized below.

Communications: Set-up and operation of an integrated communications network using radios, telecommunications, and other technology.

Comptroller's (Finance): Accounting, cost control, office support functions.

Documentation: Responsible for maintenance of accurate, up-to-date incident files, Incident Action Plan (IAP) record keeping, situation status report documentation, and administrative support. Ensures each section provides and maintains appropriate documents.

Environmental: Environmental impact assessment, permitting, modeling, environmental monitoring, wildlife rescue and rehabilitation, response and remediation technology (dispersants, solidifiers, bioremediation), waste management.

Facilities: Offices, warehouses, housing, potable water, food, sanitation facilities.

Human Resources: Staffing of the response team, direct human resources services to response team members, emergency relief assistance to affected parties.

Insurance/Claims: Receive and resolve third-party injury and property damage claims, management of insurance-related matters.

Law: Advice on actual and potential legal and liability actions from governmental agencies and third parties, verify compliance with legal requirements, and other legal support.

Public Affairs: Media relations, press releases, government agency and community leaders interface, advice on communication to the public, volunteer referrals.

Purchasing: Procurement and storage of equipment and material management.

Safety, Fire & Health: Technical advice and direct field support on safety, industrial hygiene, fire protection, toxicology, medical support to response personnel and medical liaison with community public health authorities. Also includes three regional "Fire Strike Task Forces" that can respond to a fire or similar incident in their geographical area.

Security: Liaison with local law enforcement, site security, guard services, site access control, theft prevention, personal security.

Transportation: Transportation for personnel, equipment, and supplies.

4.7.8 Worldwide Emergency Response Team

DESCRIPTION:

Worldwide Emergency Response Team (WWERT) members are on-call to fill and provide backup for key spill response and cleanup management positions. The team is a select group of about 35 experienced and highly trained individuals from the spill response organizations of the various operating companies.

Operating companies may activate one or as many people they feel they need for the response. When activated, team members will report to and work directly for the operating company handling the incident.

HOW TO ACCESS:

To activate WWERT members, contact the Emergency Response Staff (see **SECTION 4.7.5**).

Team members are preauthorized to respond to a call from any operating company and are prepared to arrive at their local commercial airport within six hours of notification.

ADDITIONAL INFORMATION:

All team members are prepared to travel internationally on short notice. They have passports and inoculations recommended by the Medical Staff.

The team members are also certified as having at least received Level 5 (Incident Commander), Low Hazard Worker, and Management/Supervisor level HAZWOPER training.

FIGURE 4-1 - EMERGENCY MANAGEMENT TEAM (EMT) ACTIVATION PROCEDURE

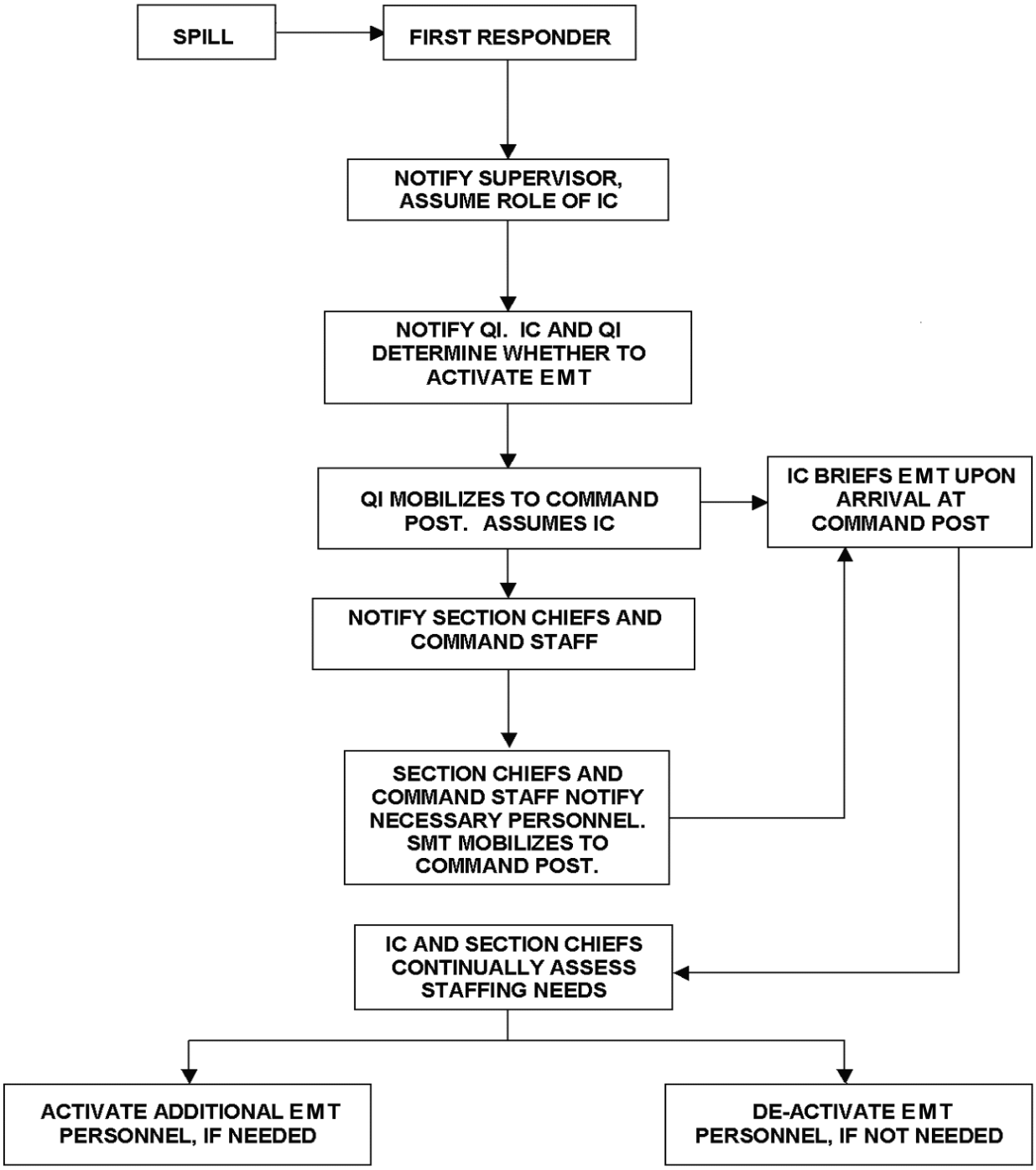
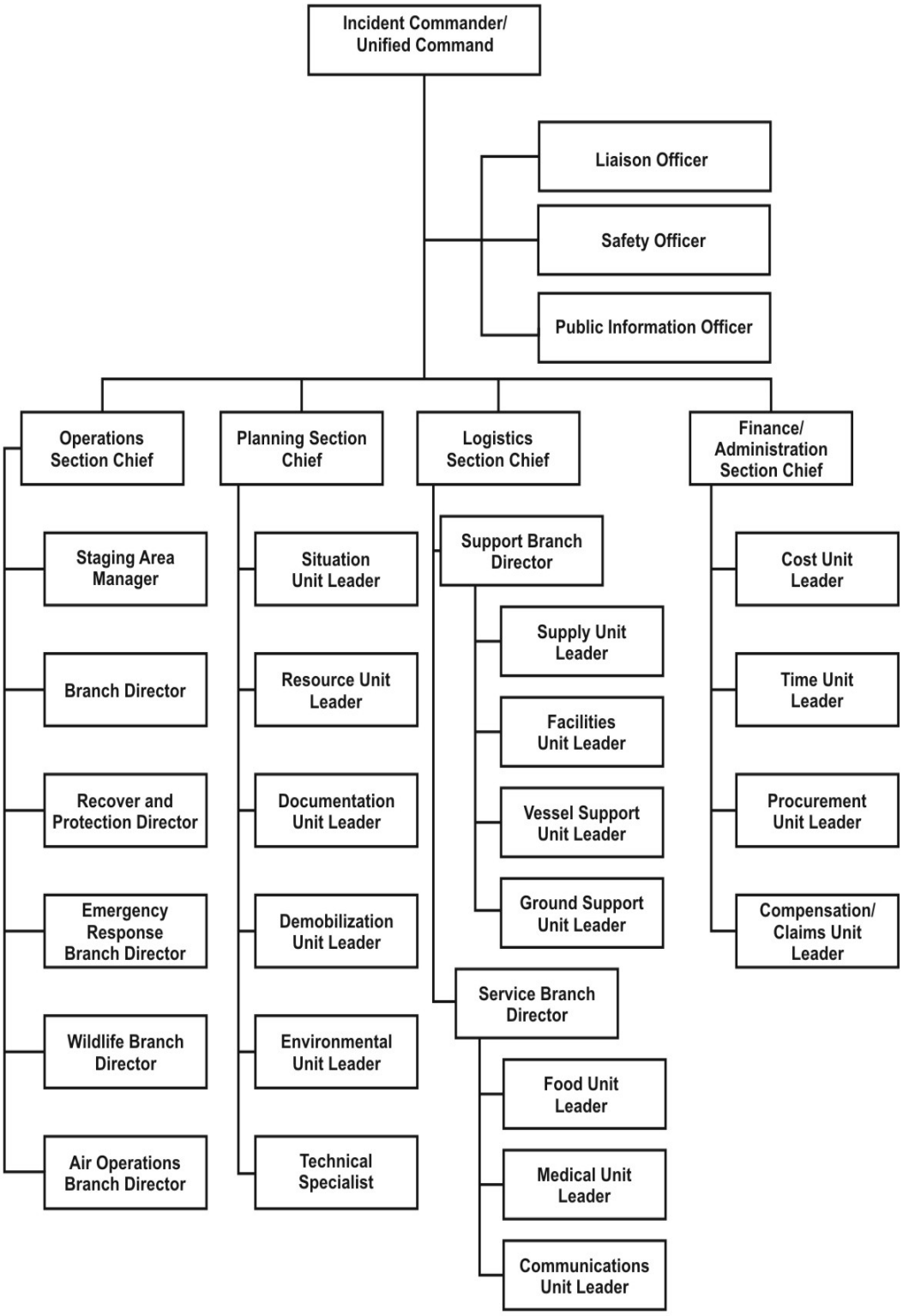


FIGURE 4-2 - EMERGENCY MANAGEMENT TEAM (EMT) ORGANIZATIONAL CHART



Note: Refer to **FIGURE 3.1-3** for EMT Team Members

4.8 EMERGENCY MANAGEMENT TEAM (EMT) JOB DESCRIPTION CHECKLISTS

The following job description checklists are intended to be used as a tool to assist EMT members in their particular positions within the Incident Command System (ICS).

- Common Responsibilities
- Unit Leader Responsibilities

Command Staff

- Incident Commander
- Public Information Officer
- Safety Officer
- Liaison Officer

Operations Section

- Operations Section Chief
- Staging Area Manager
- Recovery and Protection Branch Director
- Emergency Response Branch Director
- Air Operations Branch Director
- Wildlife Branch Director

Planning Section

- Situation Unit Leader
- Resource Unit Leader
- Documentation Unit Leader
- Demobilization Unit Leader
- Environmental Unit Leader
- Technical Specialists

Logistics Section

- Logistics Section Chief
- Support Branch Director
- Supply Unit Leader
- Facilities Unit Leader
- Vessel Support Unit Leader
- Group Support Unit Leader
- Service Branch Director
- Food Unit Leader
- Medical Unit Leader
- Communications Unit Leader

Finance/Admin Section

- Finance/Administration Section Chief
- Cost Unit Leader
- Time Unit Leader
- Procurement Unit Leader
- Compensation/Claims Unit Leader

COMMON RESPONSIBILITIES

The following checklist is applicable to all personnel in an ICS organization:

Responsibilities:

- [ ] Receive assignment from your agency, including:
- [ ] Job assignment (e.g. designation, position, etc.).
- [ ] Brief overview of type and magnitude of incident.
- [ ] Resource order number and request number/Travel Orders (TONO).
- [ ] Travel instructions including reporting location and reporting time.
- [ ] Any special communications instructions (e.g., travel, radio frequency).
- [ ] Monitor incident related information from media, internet, etc., if available.
- [ ] Assess personal equipment readiness for specific incident and climate (e.g., medications, money, computer, medical record, etc.). Maintain a checklist of items and possibly a personal Go-Kit.
- [ ] Inform others as to where you are going and how to contact you.
- [ ] Review Coast Guard Incident Management Handbook.
- [ ] Take advantage of available travel to rest prior to arrival.
- [ ] Upon arrival at the incident, check in at the designated check-in location. Check-in may be found at any of the following locations:
- [ ] Incident Command Post (ICP).
- [ ] Base.
- [ ] Staging Areas.
- [ ] Helibases.
- [ ] **Note:** If you are instructed to report directly to an on-scene assignment, check in with the Division/Group Supervisor or the Operations Section Chief.
- [ ] Receive briefing from immediate supervisor.
- [ ] Agency representatives from assisting or cooperating agencies report to the Liaison Officer (LNO) at the ICP after check-in.
- [ ] Acquire work materials.
- [ ] Abide by organizational code of ethics.
- [ ] Participate in Incident Management Team (IMT) meetings and briefings as appropriate.

COMMON RESPONSIBILITIES, CONTINUED

Responsibilities, Continued:

- [ ] Ensure compliance with all safety practices and procedures. Report unsafe conditions to the Safety Officer.
- [ ] Supervisors shall maintain accountability for their assigned personnel with regard as to exact location(s), personal safety, and welfare at all times, especially when working in or around incident operations.
- [ ] Organize and brief subordinates.
- [ ] Know your assigned communication methods and procedures for your area of responsibility and ensure that communication equipment is operating properly.
- [ ] Use clear text and ICS terminology (no codes) in all radio communications.
- [ ] Complete forms and reports required of the assigned position and ensure proper disposition of incident documentation as directed by the Documentation Unit.
- [ ] Ensure all equipment is operational prior to each work period.
- [ ] Report any signs/symptoms of extended incident stress, injury, fatigue or illness for yourself or coworkers to your supervisor.
- [ ] Brief shift replacement on ongoing operations when relieved at operational periods or rotation out.
- [ ] Respond to demobilization orders and brief subordinates regarding demobilization.
- [ ] Prepare personal belongings for demobilization.
- [ ] Return all assigned equipment to appropriate location.
- [ ] Complete Demobilization Checkout process before returning to home base.
- [ ] Participate in After-Action activities as directed.
- [ ] Carry out all assignments as directed.
- [ ] Upon demobilization, notify RESL at incident site and home unit of your safe return.

UNIT LEADER RESPONSIBILITIES

In the National Incident Management System (NIMS) ICS, a number of the Unit Leader's responsibilities are common to all functions within the ICS organization. Common responsibilities of Unit Leaders are listed below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Upon check-in, receive briefing from Incident Commander, Section Chief, Unit Leader, or Branch Director, as appropriate.
- [ ] Participate in incident meetings and briefings, as required.
- [ ] Determine current status of unit activities.
- [ ] Determine resource needs.
- [ ] Order additional unit staff, as appropriate.
- [ ] Confirm dispatch and estimated time of arrival of staff and supplies.
- [ ] Assign specific duties to staff and supervise staff.
- [ ] Develop and implement accountability, safety and security measures for personnel and resources.
- [ ] Supervise demobilization of unit, including storage of supplies.
- [ ] Provide Supply Unit Leader with a list of supplies to be replenished.
- [ ] Maintain unit records, including Unit Log (ICS 214-CG).
- [ ] Individual responders may want to maintain personal log of actions, decisions and events.
- [ ] Carry out all assignments as directed.

INCIDENT COMMANDER

The Incident Commander (IC)‘s responsibility is the overall management of the incident. On many incidents, a single IC carries out the command activity. The IC is selected based on qualifications and experience.

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

The major responsibilities of the IC are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Obtain a briefing from the prior IC (201 Briefing).
- [ ] Determine Incident Objectives and general direction for managing the incident.
- [ ] Establish priorities.
- [ ] Establish an ICP.
- [ ] Brief Command Staff and Section Chiefs.
- [ ] Establish an appropriate organization.
- [ ] Ensure planning meetings are scheduled as required.
- [ ] Approve and authorize the implementation of an IAP.
- [ ] Ensure that adequate safety measures are in place.
- [ ] Coordinate activity for all Command and General Staff.
- [ ] Coordinate with key people and officials.
- [ ] Approve requests for additional resources or for the release of resources.
- [ ] Keep agency administrator informed of incident status.
- [ ] Approve the use of trainees, volunteers, and auxiliary personnel.
- [ ] Authorize release of information to the news media.
- [ ] Ensure Incident Status Summary (ICS 209-CG) is completed and forwarded to appropriate higher authority.
- [ ] Order the demobilization of the incident when appropriate.
- [ ] Maintain Unit Log (ICS 214-CG).

PUBLIC INFORMATION OFFICER

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

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

Agencies have different policies and procedures relative to the handling of public information. The following are the major responsibilities of the PIO, which would generally apply on any incident.

Responsibilities:

- [ ] Review Common Responsibilities
- [ ] Determine from the IC if there are any limits on information release.
- [ ] Develop material for use in media briefings.
- [ ] Obtain IC approval of media releases.
- [ ] Inform media and conduct media briefings.
- [ ] Arrange for tours and other interviews or briefings that may be required.
- [ ] Manage a Joint Information Center (JIC), if established.
- [ ] Obtain media information that may be useful to incident planning.
- [ ] Maintain current information summaries and/or displays on the incident and provide information on the status of the incident to assigned personnel.
- [ ] Ensure that all required agency forms, reports and documents are completed prior to demobilization.
- [ ] Brief Command on PIO issues and concerns.
- [ ] Have debriefing session with the IC prior to demobilization.
- [ ] Maintain Unit Log (ICS 214-CG).

SAFETY OFFICER

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

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

The major responsibilities of the SOFR are below.

Responsibilities:

- [ ] Review Common Responsibilities
- [ ] Participate in tactics and planning meetings, and other meetings and briefings as required.
- [ ] Identify hazardous situations associated with the incident.
- [ ] Review the IAP for safety implications.
- [ ] Provide safety advice in the IAP for assigned responders.
- [ ] Exercise emergency authority to stop and prevent unsafe acts.
- [ ] Investigate accidents that have occurred within the incident area.
- [ ] Assign assistants, as needed.
- [ ] Review and approve the Medical Plan (ICS 206-CG).
- [ ] Develop the Site Safety Plan and publish Site Safety Plan Summary (ICS 208-CG) as required.
- [ ] Develop the Work Safety Analysis Worksheet (ICS-215a-CG) as required.
- [ ] Ensure that all required agency forms, reports and documents are completed prior to demobilization.
- [ ] Brief Command on safety issues and concerns.
- [ ] Have debriefing session with the IC prior to demobilization.
- [ ] Maintain Unit Log (ICS 214-CG).

LIAISON OFFICER

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

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

The major responsibilities of the LNO are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Be a contact point for Agency Representatives.
- [ ] Maintain a list of assisting and cooperating agencies and Agency Representatives, including name and contact information. Monitor check-in sheets daily to ensure that all Agency Representatives are identified.
- [ ] Assist in establishing and coordinating interagency contacts.
- [ ] Keep agencies supporting the incident aware of incident status.
- [ ] Monitor incident operations to identify current or potential inter-organizational problems.
- [ ] Participate in planning meetings, providing limitations and capability of assisting agency resources.
- [ ] Coordinate response resource needs for Natural Resource Damage Assessment and Restoration (NRDAR) activities with the OSC during oil and HAZMAT responses.
- [ ] Coordinate response resource needs for incident investigation activities with the OSC.
- [ ] Coordinate activities of visiting dignitaries.
- [ ] Ensure that all required agency forms, reports and documents are completed prior to demobilization.
- [ ] Brief Command on agency issues and concerns.
- [ ] Have debriefing session with the IC prior to demobilization.
- [ ] Maintain Unit Log (ICS 214-CG).

OPERATIONS SECTION CHIEF

The Operations Section Chief (OSC), a member of the General Staff, is responsible for the management of all tactical operations directly applicable to the primary mission. The OSC will normally be selected from the organization/agency with the most jurisdictional responsibility for the incident.

The OSC activates and supervises organization elements in accordance with the IAP and directs its execution. The OSC also directs the preparation of operational plans; requests or releases resources, monitors operational progress and make expedient changes to the IAP, as necessary; and reports such to the IC.

The OSC may have Deputy OSC's, who may be from the same agency or from an assisting agency. The Deputy OSC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time. In complex incidents, the OSC may assign a Deputy OSC to supervise on-scene operations (major responsibilities from "Supervise Operations Section field personnel" through "Identify/utilize staging areas" listed below) while the OSC participates in the incident planning process (major responsibilities from "Evaluate and monitor current situation" through "Participate in operational briefings" listed below).

The major responsibilities of the OSC are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Obtain briefing from IC.
- [ ] Evaluate and request sufficient Section supervisory staffing for both operational and planning activities.
- [ ] Supervise Operations Section field personnel.
- [ ] Implement the IAP for the Operations Section.
- [ ] Evaluate on-scene operations and make adjustments to organization, strategies, tactics, and resources as necessary.
- [ ] Ensure the Resources Unit is advised of changes in the status of resources assigned to the section.
- [ ] Ensure that Operations Section personnel execute work assignments following approved safety practices.
- [ ] Monitor need for and request additional resources to support operations as necessary.
- [ ] Assemble/dissemble task force/strike teams, as appropriate.
- [ ] Identify/utilize staging areas.
- [ ] Evaluate and monitor current situation for use in next operational period planning.
- [ ] Convert operational incident objectives into strategic and tactical options. These options may be documented on a Work Analysis Matrix (ICS-234-CG)

OPERATIONS SECTION CHIEF, CONTINUED

Responsibilities, Continued:

- ☐ Coordinate and consult with the PSC, SOFR technical specialists, modeling scenarios, trajectories, etc., on selection of appropriate strategies and tactics to accomplish objectives.
- ☐ Identify kind and number of resources required to support selected strategies.
- ☐ Subdivide work areas into manageable units.
- ☐ Develop work assignments and allocate tactical resources based on strategic requirements (i.e., develop the ICS-215-CG).
- ☐ Coordinate planned activities with the SOFR to ensure compliance with safety practices.
- ☐ Participate in the planning process and the development of the tactical portions (ICS 204-CG and ICS 220-CG) of the IAP.
- ☐ Assist with development of long-range strategic, contingency, and demobilization plans.
- ☐ Develop recommended list of Section resources to be demobilized and initiate recommendation for release when appropriate.
- ☐ Receive and implement applicable portions of the incident Demobilization Plan.
- ☐ Participate in operational briefings to IMT members as well as briefings to media, and visiting dignitaries.
- ☐ Maintain Unit Log (ICS 214-CG).

STAGING AREA MANAGER

The Staging Area Manager (STAM) is under the direction of the OSC and is responsible for managing all activities within a Staging Area.

The major responsibilities of the STAM are below.

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Proceed to Staging Area.
- ☐ Obtain briefing from person you are relieving.
- ☐ Establish Staging Area layout.
- ☐ Determine any support needs for equipment, feeding, sanitation and security.
- ☐ Establish check-in function as appropriate.
- ☐ Ensure security of staged resources.
- ☐ Post areas for identification and traffic control.
- ☐ Request maintenance service for equipment at Staging Area as appropriate.
- ☐ Respond to request for resource assignments. (Note: This may be direct from the OSC or via the Incident Communications Center.)
- ☐ Obtain and issue receipts for radio equipment and other supplies distributed and received at Staging Area.
- ☐ Determine required resource levels from the OSC.
- ☐ Advise the OSC when reserve levels reach minimums.
- ☐ Maintain and provide status to Resource Unit of all resources in Staging Area.
- ☐ Maintain Staging Area in orderly condition.
- ☐ Demobilize Staging Area in accordance with the Incident Demobilization Plan.
- ☐ Debrief with OSC or as directed at the end of each shift.
- ☐ Maintain Unit Log (ICS 214-CG).

RECOVERY AND PROTECTION BRANCH DIRECTOR

The Recovery and Protection Branch Director is responsible for overseeing and implementing the protection, containment and cleanup activities established in the Incident Action Plan (IAP).

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Obtain briefing from person relieving.
- ☐ Receive briefing from the OSC.
- ☐ Identify Divisions, Groups, and resources assigned to the Branch.
- ☐ Ensure that Division and/or Group Supervisors (DIVS) have a copy of the IAP.
- ☐ Implement IAP for the Branch.
- ☐ Develop with subordinate's alternatives for Branch control operations.
- ☐ Review Division/Group Assignment Lists (ICS 204-CG) for Divisions/Groups within the Branch. Modify lists based on effectiveness of current operations.
- ☐ Assign specific work tasks to DIVS.
- ☐ Supervise Branch operations.
- ☐ Resolve logistic problems reported by subordinates.
- ☐ Attend planning meetings as requested by the OSC.
- ☐ Ensure through chain of command that Resources Unit is advised of changes in the status of resources assigned to the Branch.
- ☐ Report to OSC when: the IAP is to be modified; additional resources are needed; surplus resources are available; or hazardous situations or significant events occur.
- ☐ Approve accident and medical reports (home agency forms) originating within the Branch.
- ☐ Consider demobilization well in advance.
- ☐ Debrief with OSC and/or as directed at the end of each shift.
- ☐ Maintain Unit Log (ICS 214-CG).

EMERGENCY RESPONSE BRANCH DIRECTOR

The Emergency Response Branch Director is primarily responsible for overseeing and implementing emergency measures to protect life, mitigate further damage to the environment, and stabilize the situation.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Obtain briefing from person relieving.
- [ ] Receive briefing from the OSC.
- [ ] Identify Divisions, Groups, and resources assigned to the Branch.
- [ ] Ensure that Division and/or Group Supervisors (DIVS) have a copy of the IAP.
- [ ] Implement IAP for the Branch.
- [ ] Develop with subordinates alternatives for Branch control operations.
- [ ] Review Division/Group Assignment Lists (ICS 204-CG) for Divisions/Groups within the Branch. Modify lists based on effectiveness of current operations.
- [ ] Assign specific work tasks to DIVS.
- [ ] Supervise Branch operations.
- [ ] Resolve logistic problems reported by subordinates.
- [ ] Attend planning meetings as requested by the OSC.
- [ ] Ensure through chain of command that Resources Unit is advised of changes in the status of resources assigned to the Branch.
- [ ] Report to OSC when: the IAP is to be modified; additional resources are needed; surplus resources are available; or hazardous situations or significant events occur.
- [ ] Approve accident and medical reports (home agency forms) originating within the Branch.
- [ ] Consider demobilization well in advance.
- [ ] Debrief with OSC and/or as directed at the end of each shift.
- [ ] Maintain Unit Log (ICS 214-CG).

AIR OPERATIONS BRANCH DIRECTOR

The Air Operations Branch Director (AOBD) is ground-based and is primarily responsible for preparing the Air Operations Summary Worksheet (ICS 220-CG), the air operations portion of the IAP and for providing logistical support to incident aircraft. The Air Operations Summary Worksheet (ICS 220-CG) serves the same purpose as the Work Assignment (ICS 204-CG) does for other operational resources, by assigning and managing aviation resources on the incident. The Air Operations Summary Worksheet (ICS-220-CG) may or may not be completed depending on the needs of the incident.

The AOBD will ensure that agency directives, to include Coast Guard Air Operations Manual, COMDTINST M3710.1 (series), flight manuals, unit restrictions, and other agency directives will not be violated by incident aircraft, e.g., flight hours, hoist limitations, night flying, etc. Individual aircrews retain primary responsibility to ensure their aircraft are operated in accordance with their own agency's restrictions and directives. It is also the responsibility of individual aircrews to keep the AOBD informed of their agency's restrictions and directives that may affect their ability to execute incident assignments.

After the IAP is approved, the AOBD is responsible for overseeing the tactical and logistical assignments of the Air Operations Branch. In coordination with the Logistics Section, the AOBD is responsible for providing logistical support to aircraft operating on the incident.

The major responsibilities of the AOBD are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Organize preliminary air operations.
- [ ] Coordinate airspace use with the FAA. Request declaration (or cancellation) of Temporary Flight Restriction (TFR) IAW FAR 91.173 and post Notice to Airmen (NOTAM), as required.
- [ ] Attend the tactics meeting and planning meeting to obtain information for completing the Air Operations Summary Worksheet (ICS 220-CG), if needed.
- [ ] Participate in preparation of the IAP through the OSC. Insure that the air operations portion of the IAP takes into consideration the Air Traffic Control requirements of assigned aircraft.
- [ ] Coordinate with the Communications Unit Leader (COML) to designate air tactical and support frequencies.
- [ ] Perform operational planning for air operations.
- [ ] Prepare and provide Air Operations Summary Worksheet (ICS 220-CG), if completed, to the Air Support Group and Fixed-Wing Bases.
- [ ] Supervise all air operations activities associated with the incident.
- [ ] Evaluate helibase and helispot locations.
- [ ] Establish procedures for emergency reassignment of aircraft.
- [ ] Coordinate approved flights of non-incident aircraft in the TFR.

AIR OPERATIONS BRANCH DIRECTOR, CONTINUED

Responsibilities, Continued:

- ☐ Coordinate Coast Guard air assets with the appropriate Command Center(s) through normal channels on incident air operations activities.
- ☐ Consider requests for logistical use of incident aircraft.
- ☐ Report to the OSC on air operations activities.
- ☐ Report special incidents/accidents.
- ☐ Develop Aviation Site Safety Plan in concert with SOFR.
- ☐ Arrange for an accident investigation team when warranted.
- ☐ Debrief with OSC as directed at the end of each shift.
- ☐ Maintain Unit Log (ICS 214-CG).

WILDLIFE BRANCH DIRECTOR

The Wildlife Branch Director is responsible for minimizing wildlife injuries during spill responses; coordinating early aerial and ground reconnaissance of the wildlife at the spill site and reporting results to the SUL; advising on wildlife protection strategies, including diversionary booming placements, in-situ burning, and chemical countermeasures; removing of oiled carcasses, employing wildlife hazing measures as authorized in the IAP; and recovering and rehabilitating impacted wildlife.

A central Wildlife Processing Center should be identified and maintained for, evidence tagging, transportation, veterinary services, treatment and rehabilitation storage, and other support needs. The activities of private wildlife care groups, including those employed by the RP, will be overseen and coordinated by the Wildlife Branch Director.

Responsibilities:

- [ ] Review Branch Director responsibilities.
- [ ] Develop the Wildlife Branch portion of the IAP.
- [ ] Supervise Wildlife Branch operations.
- [ ] Determine resource needs.
- [ ] Review the suggested list of resources to be released and initiate recommendation for release of resources.
- [ ] Assemble and disassemble teams/task forces assigned to the Wildlife Branch.
- [ ] Report information about special activities, events, and occurrences to the OPS.
- [ ] Assist the Volunteer Coordinator in determining training needs of wildlife recovery volunteers.
- [ ] Maintain Unit Log (ICS 214-CG)

PLANNING SECTION CHIEF

The Planning Section Chief (PSC), a member of the General Staff, is responsible for the collection, evaluation, dissemination and use of incident information and maintaining status of assigned resources. Information is needed to:

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

The PSC may have Deputy PSC's, who may be from the same agency or from an assisting agency. The Deputy PSC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time.

The major duties of the PSC are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Collect, process, and display incident information.
- [ ] Assist OSC in the development of response strategies.
- [ ] Supervise preparation of the IAP.
- [ ] Facilitate planning meetings and briefings.
- [ ] Supervise the tracking of incident personnel and resources through the Resources Unit.
- [ ] Assign personnel already on-site to ICS organizational positions, as appropriate.
- [ ] Establish information requirements and reporting schedules for Planning Section Units (e.g., Resources, Situation).
- [ ] Determine the need for any specialized resources in support of the incident.
- [ ] Establish special information collection activities as necessary (e.g., weather, environmental, toxics, etc.).
- [ ] Assemble information on alternative strategies.
- [ ] Provide periodic predictions on incident potential.
- [ ] Keep IMT apprised of any significant changes in incident status.
- [ ] Compile and display incident status information.
- [ ] Oversee preparation and implementation of the Incident Demobilization Plan.
- [ ] Incorporate plans (e.g., Traffic, Medical, Communications, and Site Safety) into the IAP.
- [ ] Develop other incident supporting plans (e.g., salvage, transition, security).
- [ ] Maintain Unit Log (ICS 214-CG).

SITUATION UNIT LEADER

The Situation Unit Leader (SITL) is responsible for collecting, processing and organizing incident information relating to the growth, mitigation or intelligence activities taking place on the incident. The SITL may prepare future projections of incident growth, maps and intelligence information.

The major responsibilities of the SITL are below.

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Review Unit Leader Responsibilities.
- ☐ Begin collection and analysis of incident data as possible.
- ☐ Prepare, post, or disseminate resource and situation status information as required, including special requests.
- ☐ Prepare periodic predictions or as requested by the PSC.
- ☐ Prepare the Incident Status Summary Form (ICS 209-CG).
- ☐ Provide photographic services and maps, if required.
- ☐ Conduct situation briefings at meetings and briefings as required by the PSC.
- ☐ Develop and maintain master chart(s)/map(s) of the incident.
- ☐ Maintain chart/map of incident in the common area of the ICP for all responders to view.
- ☐ Maintain Unit Log (ICS 214-CG).

RESOURCE UNIT LEADER

The Resource Unit Leader (RESL) is responsible for maintaining the status of all assigned tactical resources and personnel at an incident. This is achieved by overseeing the check-in of all tactical resources and personnel, maintaining a status-keeping system indicating current location and status of all these resources.

The major responsibilities of the RESL are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Review Unit Leader Responsibilities.
- [ ] Establish the check-in function at incident locations.
- [ ] Prepare Organization Assignment List (ICS 203-CG) and Organization Chart (ICS 207-CG).
- [ ] Prepare appropriate parts of Division Assignment Lists (ICS 204-CG).
- [ ] Maintain and post the current status and location of all tactical resources.
- [ ] Maintain master roster of all tactical resources checked in at the incident.
- [ ] Attend meetings and briefings as required by the PSC.
- [ ] Maintain Unit Log (ICS 214-CG).

DOCUMENTATION UNIT LEADER

The Documentation Unit Leader (DOCL) is responsible for the maintenance of accurate, up-to-date incident files. Examples of incident documentation include: Incident Action Plan(s), incident reports, communication logs, injury claims, situation status reports, etc. Thorough documentation is critical to post-incident analysis. Some of the documents may originate in other sections. The DOCL shall ensure each section is maintaining and providing appropriate documents. The DOCL will provide duplication and copying services for all other sections. The Documentation Unit will store incident files for legal, analytical, and historical purposes.

The major responsibilities of the DOCL are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Review Unit Leader Responsibilities.
- [ ] Set up work area; begin organization of incident files.
- [ ] Establish duplication service; respond to requests.
- [ ] File all official forms and reports.
- [ ] Review records for accuracy and completeness; inform appropriate units of errors or omissions.
- [ ] Provide incident documentation as requested.
- [ ] Organize files for submitting final incident documentation package.
- [ ] Maintain Unit Log (ICS 214-CG).

DEMOBILIZATION UNIT LEADER

The Demobilization Unit Leader (DMOB) is responsible for developing the Incident Demobilization Plan. On large incidents, demobilization can be quite complex, requiring a separate planning activity. Note that not all agencies require specific demobilization instructions.

The major responsibilities of the DMOB are below.

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Review Unit Leader Responsibilities.
- ☐ Review incident resource records to determine the likely size and extent of demobilization effort and develop a resource matrix.
- ☐ Coordinate demobilization with Agency Representatives.
- ☐ Monitor the on-going Operations Section resource needs.
- ☐ Identify surplus resources and probable release time.
- ☐ Establish communications with off-incident facilities, as necessary.
- ☐ Develop an Incident Demobilization Plan that should include:
    - General information section
    - Responsibilities section
    - Release priorities
    - Release procedures
    - Demobilization Checkout Form (ICS-221-CG)
    - Directory
- ☐ Prepare appropriate directories (e.g., maps, instructions, etc.) for inclusion in the demobilization plan.
- ☐ Distribute demobilization plan (on- and off-site).
- ☐ Provide status reports to appropriate requestors.
- ☐ Ensure that all Sections/Units understand their specific demobilization responsibilities.
- ☐ Supervise execution of the Incident Demobilization Plan.
- ☐ Brief the PSC on demobilization progress.
- ☐ Maintain Unit Log (ICS 214-CG).

ENVIRONMENTAL UNIT LEADER

The Environmental Unit Leader (ENVL) is responsible for environmental matters associated with the response, including strategic assessment, modeling, surveillance, and environmental monitoring and permitting. The ENVL prepares environmental data for the Situation Unit. Technical Specialists frequently assigned to the Environmental Unit may include the Scientific Support Coordinator and Sampling, Response Technologies, Trajectory Analysis, Weather Forecast, Resources at Risk, Shoreline Cleanup Assessment, Historical/ Cultural Resources, and Disposal Technical Specialists.

The major responsibilities of the ENVL are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Review Unit Leader Responsibilities.
- [ ] Obtain a briefing and special instructions from the PSC.
- [ ] Identify sensitive areas and recommend response priorities.
- [ ] Following consultation with natural resource trustees, provide input on wildlife protection strategies (e.g., removing oiled carcasses, pre-emptive capture, hazing, and/or capture and treatment).
- [ ] Determine the extent, fate, and effects of contamination.
- [ ] Acquire, distribute, and provide analysis of weather forecasts.
- [ ] Monitor the environmental consequences of response actions.
- [ ] Develop shoreline cleanup and assessment plans. Identify the need for, and prepare any special advisories or orders.
- [ ] Identify the need for, and obtain, permits, consultations, and other authorizations, including Endangered Species Act (ESA) provisions.
- [ ] Following consultation with the FOSC's Historical/Cultural Resources Technical Specialist identify and develop plans for protection of affected historical/cultural resources.
- [ ] Evaluate the opportunities to use various response technologies.
- [ ] Develop disposal plans.
- [ ] Develop a plan for collecting, transporting, and analyzing samples.
- [ ] Maintain Unit Log (ICS 214-CG).

TECHNICAL SPECIALISTS

Certain incidents or events may require the use of Technical Specialist (THSP)'s who have specialized knowledge and expertise. THSP's may function within the Planning Section or be assigned wherever their services are required.

The major responsibilities of the THSP are below.

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Provide technical expertise and advice to Command and General Staff, as needed.
- ☐ Attend meetings and briefings as appropriate to clarify and help to resolve technical issues within area of expertise.
- ☐ Maintain Unit Log (ICS 214-CG).

Other major responsibilities that might apply to the THSP as appropriate:

- ☐ Provide technical expertise during the development of the IAP and other support plans.
- ☐ Work with the Safety Officer to mitigate unsafe practices.
- ☐ Work closely with Liaison Officer to help facilitate understanding among stakeholders and special interest groups.
- ☐ Be available to attend press briefings to clarify technical issues.
- ☐ Research technical issues and provide findings to decision makers.
- ☐ Trouble shoots technical problems and provides advice on resolution.
- ☐ Review specialized plans and clarify meaning.

TECHNICAL SPECIALISTS, CONTINUED

The following are examples of Technical Specialists. This is not a complete list, but examples of the many kinds of THSP's that may be used with a possible location for the position in the ICS organization. However, the IC may assign THSP's to any location within the ICS organization based on incident need. For example, the CISM Specialist is normally assigned in Logistics under the Medical Unit Leader; however, an additional CISM Specialist is often assigned in the Command Staff working directly for the IC.

Command Staff:

- Auxiliary Liaison Specialist
- Legal specialist
- Volunteer Specialist/Coordinator

Operations:

- Air Tanker/Fixed Wing Coordinator
- Helicopter Coordinator
- Helibase Manager
- Helispot Manager

Planning:

- Documentation Specialist
- Environmental Specialist
- Geographic Information System Specialist
- Historian
- Public Health Specialist
- Salvage and Engineering Technical Specialist
- Situation Report Specialist
- Training Specialist
- Weather Observer

Logistics:

- Berthing Manager
- Camp Manager
- Cashier Manager
- Communications Restoration Manager
- Contingency Communications Manager
- Chaplain
- Critical Incident Stress Management (CISM) Specialist/Coordinator
- Damage Assessment Teams
- Evacuation Teams/Specialists
- Entitlement Specialist
- Facility Repair and Reconstruction Manager
- Facility Maintenance/Repair Teams/Specialists
- Family Assistance Specialist/Coordinator
- Food Teams/Specialists
- Human Resource Specialist
- Receiving and Distribution Manager
- Legal Support Teams/Specialists
- Medical Teams/Specialists
- Personnel Accountability Manager
- Personnel Support Teams/Specialists

LOGISTICS SECTION CHIEF

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

The LSC may have Deputy LSC's, who may be from the same agency or from an assisting agency. The Deputy LSC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time.

The major responsibilities of the LSC are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Plan the organization of the Logistics Section.
- [ ] Assign work locations and preliminary work tasks to Section personnel.
- [ ] Notify the Resources Unit of the Logistics Section Units activated, including names and locations of assigned personnel.
- [ ] Assemble and brief Logistics Branch Directors and Unit Leaders.
- [ ] Determine and supply immediate incident resource and facility needs.
- [ ] In conjunction with Command, develop and advise all Sections of the IMT resource approval and requesting process.
- [ ] Review proposed tactics for upcoming operational period for ability to provide resources and logistical support.
- [ ] Identify long-term service and support requirements for planned and expected operations.
- [ ] Advise Command and other Section Chiefs on resource availability to support incident needs.
- [ ] Provide input to and review the Communications Plan, Medical Plan and Traffic Plan.
- [ ] Identify resource needs for incident contingencies.
- [ ] Coordinate and process requests for additional resources.
- [ ] Track resource effectiveness and make necessary adjustments.
- [ ] Advise on current service and support capabilities.
- [ ] Request and/or set up expanded ordering processes as appropriate to support incident.
- [ ] Develop recommended list of Section resources to be de-mobbed and initiate recommendation for release when appropriate.
- [ ] Receive and implement applicable portions of the incident Demobilization Plan.
- [ ] Ensure the general welfare and safety of Logistics Section personnel.
- [ ] Maintain Unit Log (ICS 214-CG).

SUPPORT BRANCH DIRECTOR

The Support Branch Director (SUBD), when activated, is under the direction of the LSC, and is responsible for the development and implementation of logistics plans in support of the Incident Action Plan. The SUBD supervises the operations of the Supply, Facilities, Ground Support and Vessel Support Units.

The major responsibilities of the SUBD are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Review Unit Leader Responsibilities.
- [ ] Obtain work materials.
- [ ] Identify Support Branch personnel dispatched to the incident.
- [ ] Determine initial support operations in coordination with the LSC and the Service Branch Director.
- [ ] Prepare initial organization and assignments for support operations.
- [ ] Assemble and brief Support Branch personnel.
- [ ] Determine if assigned Branch resources are sufficient.
- [ ] Maintain surveillance of assigned Units work progress and inform the LSC of their activities.
- [ ] Resolve problems associated with requests from the Operations Section.
- [ ] Maintain Unit Log (ICS 214-CG).

SUPPLY UNIT LEADER

The Supply Unit Leader (SPUL) is primarily responsible for receiving, storing and distributing all supplies for the incident; maintaining an inventory of supplies; and storing, disbursing and servicing non-expendable supplies and equipment. The major responsibilities of the ENVL are below.

The major responsibilities of the SPUL are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Review Unit Leader Responsibilities.
- [ ] Participate in Logistics Section/Support Branch planning activities.
- [ ] Determine the type and amount of supplies in route.
- [ ] Review the IAP for information on operations of the Supply Unit.
- [ ] Develop and implement safety and security requirements.
- [ ] Order, receive, distribute and store supplies and equipment.
- [ ] Receive and respond to requests for personnel, supplies and equipment.
- [ ] Maintain an inventory of supplies and equipment.
- [ ] Service reusable equipment.
- [ ] Submit reports to the SUBD.
- [ ] Maintain Unit Log (ICS 214-CG).

FACILITIES UNIT LEADER

The Facilities Unit Leader (FACL) is primarily responsible for the set up, maintenance and demobilization of incident facilities, e.g., Base, ICP and Staging Areas, as well as security services required to support incident operations. The FACL provides sleeping and sanitation facilities for incident personnel and manages Base operations. Each facility is assigned a manager who reports to the FACL and is responsible for managing the operation of the facility. The FACL reports to the SUBD. The major responsibilities of the ENVL are below.

The major responsibilities of the FACL are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Review Unit Leader Responsibilities.
- [ ] Obtain a briefing from the SUBD or the LSC.
- [ ] Receive and review a copy of the IAP.
- [ ] Participate in Logistics Section/Support Branch planning activities.
- [ ] In conjunction with the Finance/Admin Section, determine locations suitable for incident support facilities and secure permission to use through appropriate means.
- [ ] Inspect facilities prior to occupation and document conditions and preexisting damage.
- [ ] Determine requirements for each facility, including the ICP.
- [ ] Prepare layouts of incident facilities.
- [ ] Notify Unit Leaders of facility layout.
- [ ] Activate incident facilities.
- [ ] Provide Facility Managers and personnel to operate facilities.
- [ ] Provide sleeping facilities.
- [ ] Provide security services.
- [ ] Provide food and water service.
- [ ] Provide sanitation and shower service, as needed.
- [ ] Provide facility maintenance services, e.g., sanitation, lighting, clean up, trash removal, etc.
- [ ] Inspect all facilities for damage and potential claims.
- [ ] Demobilize incident facilities.
- [ ] Maintain facility records.
- [ ] Maintain Unit Log (ICS 214-CG).

VESSEL SUPPORT UNIT LEADER

The Vessel Support Unit Leader (VESS) is responsible for implementing the Vessel Routing Plan for the incident and coordinating transportation on the water and between shore resources. Since most vessels will be supported by their own infrastructure, the Vessel Support Unit may be requested to arrange fueling, dockage, maintenance and repair of vessels on a case-by-case basis.

The major responsibilities of the VESS are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Review Unit Leader Responsibilities.
- [ ] Obtain a briefing from the SUBD or the LSC.
- [ ] Participate in Support Branch/Logistics Section planning activities.
- [ ] Coordinate development of the Vessel Routing Plan.
- [ ] Coordinate vessel transportation assignments with the Protection and Recovery Branch or their sources of vessel transportation.
- [ ] Coordinate water-to-land transportation with the Ground Support Unit, as necessary.
- [ ] Maintain a prioritized list of transportation requirements that need to be scheduled with the transportation source.
- [ ] Support out-of-service vessel resources, as requested.
- [ ] Arrange for fueling, dockage, maintenance and repair of vessel resources, as requested.
- [ ] Maintain inventory of support and transportation vessels.
- [ ] Maintain Unit Log (ICS 214-CG).

GROUND SUPPORT UNIT LEADER

The Ground Support Unit Leader (GSUL) is primarily responsible for ensuring: repair of primary tactical equipment, vehicles, mobile ground support equipment and fueling services; transportation of personnel, supplies, food and equipment in support of incident operations; recording all ground equipment usage time, including contract equipment assigned to the incident; and implementing the Traffic Plan for the incident.

The major responsibilities of the GSUL are below.

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Review Unit Leader Responsibilities.
- ☐ Participate in Support Branch/Logistics Section planning activities.
- ☐ Develop and implement the Traffic Plan.
- ☐ Support out-of-service resources.
- ☐ Notify the Resources Unit of all status changes on support and transportation vehicles.
- ☐ Arrange for and activate fueling, maintenance and repair of ground resources.
- ☐ Maintain Support Vehicle Inventory and transportation vehicles (ICS-218).
- ☐ Provide transportation services IAW requests from the LSC or SUBD.
- ☐ Collect use information on rented equipment.
- ☐ Requisition maintenance and repair supplies, e.g., fuel, spare parts.
- ☐ Maintain incident roads.
- ☐ Submit reports to SUBD as directed.
- ☐ Maintain Unit Log (ICS 214-CG).

SERVICE BRANCH DIRECTOR

The Service Branch Director (SVBD), when activated, is under the supervision of the LSC and is responsible for the management of all service activities at the incident. The Branch Director supervises the operations of the Communications, Medical and Food Units.

The major responsibilities of the SVBD are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Review Unit Leader Responsibilities.
- [ ] Obtain working materials.
- [ ] Determine the level of service required to support operations.
- [ ] Confirm dispatch of Branch personnel.
- [ ] Participate in planning meetings of Logistics Section personnel.
- [ ] Review the IAP.
- [ ] Organize and prepare assignments for Service Branch personnel.
- [ ] Coordinate activities of Branch Units.
- [ ] Inform the LSC of Branch activities.
- [ ] Resolve Service Branch problems.
- [ ] Maintain Unit Log (ICS 214-CG).

FOOD UNIT LEADER

The Food Unit Leader (FDUL) is responsible for supplying the food needs for the entire incident, including all remote locations, e.g., Staging Areas, as well as providing food for personnel unable to leave tactical field assignments.

The major responsibilities of the FDUL are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Review Unit Leader Responsibilities.
- [ ] Determine food and water requirements.
- [ ] Determine the method of feeding to best fit each facility or situation.
- [ ] Obtain necessary equipment and supplies.
- [ ] Ensure that well-balanced menus are provided.
- [ ] Order sufficient food and potable water from the Supply Unit.
- [ ] Maintain an inventory of food and water.
- [ ] Maintain food service areas, ensuring that all appropriate health and safety measures are being followed.
- [ ] Supervise Food Unit personnel, as appropriate.
- [ ] Maintain Unit Log (ICS 214-CG).

MEDICAL UNIT LEADER

The Medical Unit Leader (MEDL), under the direction of the Service Branch Director or Logistics Section Chief, is primarily responsible for the development of the Medical Plan; providing medical care and overseeing health aspects of response personnel; obtaining medical aid and transportation for injured and ill response personnel; coordinating with other functions to resolve heath and safety issues; and preparation of reports and records.

The major responsibilities of the MEDL are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Review Unit Leader Responsibilities.
- [ ] Participate in Logistics Section/Service Branch planning activities.
- [ ] Establish the Medical Unit.
- [ ] Prepare the Medical Plan (ICS 206-CG).
- [ ] Provide any relevant medical input into the planning process for strategy development.
- [ ] Coordinate with Safety Officer, Operations, hazmat specialists, and others on proper personnel protection procedures for incident personnel.
- [ ] Prepare procedures for major medical emergency.
- [ ] Develop transportation routes and methods for injured incident personnel.
- [ ] Ensure incident personnel patients are tracked as they move from origin, care facility, and disposition.
- [ ] Provide continuity of medical care for incident personnel.
- [ ] Declare major medical emergency, as appropriate.
- [ ] Provide or oversee medical and rehab care delivered to incident personnel.
- [ ] Monitor health aspects of incident personnel including excessive incident stress.
- [ ] Respond to requests for medical aid, medical transportation, and medical supplies.
- [ ] In conjunction with Finance/Admin Section, prepare and submit necessary authorizations, reports and administrative documentation related to injuries, compensation, or death of incident personnel.
- [ ] Coordinate personnel and mortuary affairs for incident personnel fatalities.
- [ ] Provide oversight and liaison as necessary for incident victims among emergency medical care, medical examiner, and hospital care.
- [ ] Provide for security and proper disposition of incident medical records.
- [ ] Maintain Unit Log (ICS 214-CG).

COMMUNICATIONS UNIT LEADER

The Communications Unit Leader (COML) is responsible for developing plans for the effective use of incident communications equipment and facilities; installing and testing of communications equipment; supervision of the Incident Communications Center; distribution of communications equipment to incident personnel; and the maintenance and repair of communications equipment.

The major responsibilities of the COML are below.

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Review Unit Leader Responsibilities.
- ☐ Determine Unit personnel needs.
- ☐ Prepare and implement the Incident Radio Communications Plan (ICS 205-CG).
- ☐ Ensure the Incident Communications Center and the Message Center is established.
- ☐ Establish appropriate communications distribution/maintenance locations within the Base.
- ☐ Ensure communications systems are installed and tested.
- ☐ Ensure an equipment accountability system is established.
- ☐ Ensure personal portable radio equipment from cache is distributed per Incident Radio Communications Plan.
- ☐ Provide technical information as required on:
    - Adequacy of communications systems currently in operation.
    - Geographic limitation on communications systems.
    - Equipment capabilities/limitations.
    - Amount and types of equipment available.
    - Anticipated problems in the use of communications equipment.

- ☐ Supervise Communications Unit activities.
- ☐ Maintain records on all communications equipment, as appropriate.
- ☐ Ensure equipment is tested and repaired.
- ☐ Recover equipment from Units being demobilized.
- ☐ Maintain Unit Log (ICS 214-CG).

FINANCE/ADMINISTRATION SECTION CHIEF

The Finance/Administration Section Chief (FSC), a member of the General Staff, is responsible for all financial, administrative and cost analysis aspects of the incident and for supervising members of the Finance/Admin Section.

The FSC may have Deputy FSC's, who may be from the same agency or from an assisting agency. The Deputy FSC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time.

The major responsibilities of the FSC are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Participate in incident planning meetings and briefings, as required.
- [ ] Review operational plans and provide alternatives where financially appropriate.
- [ ] Manage all financial aspects of an incident.
- [ ] Provide financial and cost analysis information as requested.
- [ ] Gather pertinent information from briefings with responsible agencies.
- [ ] Develop an operating plan for the Finance/ Admin Section; fill supply and support needs.
- [ ] Determine the need to set up and operate an incident commissary.
- [ ] Meet with Assisting and Cooperating Agency Representatives, as needed.
- [ ] Maintain daily contact with agency(s) administrative headquarters on Finance/Admin matters.
- [ ] Ensure that all personnel time records are accurately completed and transmitted to home agencies, according to policy.
- [ ] Provide financial input to demobilization planning.
- [ ] Ensure that all obligation documents initiated at the incident are properly prepared and completed.
- [ ] Brief agency administrative personnel on all incident-related financial issues needing attention or follow-up prior to leaving incident.
- [ ] Develop recommended list of Section resources to be de-mobbed and initial recommendation for release when appropriate.
- [ ] Receive and implement applicable portions of the incident Demobilization Plan.
- [ ] Maintain Unit Log (ICS 214-CG).

COST UNIT LEADER

The Cost Unit Leader (COST) is responsible for collecting all cost data, performing cost effectiveness analyses and providing cost estimates and cost saving recommendations for the incident.

The major responsibilities of the COST are below.

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Review Unit Leader Responsibilities.
- ☐ Obtain a briefing from the FSC.
- ☐ Coordinate with agency headquarters on cost reporting procedures.
- ☐ Collect and record all cost data.
- ☐ Develop incident cost summaries.
- ☐ Prepare resources-use cost estimates for the Planning Section.
- ☐ Make cost-saving recommendations to the FSC.
- ☐ Ensure all cost documents are accurately prepared.
- ☐ Maintain cumulative incident cost records.
- ☐ Complete all records prior to demobilization.
- ☐ Provide reports to the FSC.
- ☐ Maintain Unit Log (ICS 214-CG).

TIME UNIT LEADER

The Time Unit Leader (TIME) is responsible for equipment and personnel time recording and for managing the commissary operations.

The major responsibilities of the TIME are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Review Unit Leader Responsibilities.
- [ ] Determine incident requirements for time recording function.
- [ ] Determine resource needs.
- [ ] Contact appropriate agency personnel/ representatives.
- [ ] Ensure that daily personnel time recording documents are prepared and in compliance with agency(s) policy.
- [ ] Establish time unit objectives.
- [ ] Maintain separate logs for overtime hours.
- [ ] Establish commissary operation on larger or long-term incidents, as needed.
- [ ] Submit cost estimate data forms to the Cost Unit, as required.
- [ ] Maintain records security.
- [ ] Ensure that all records are current and complete prior to demobilization.
- [ ] Release time reports from assisting agency personnel to the respective Agency Representatives prior to demobilization.
- [ ] Brief the FSC on current problems and recommendations, outstanding issues and follow-up requirements.
- [ ] Maintain Unit Log (ICS 214-CG).

PROCUREMENT UNIT LEADER

The Procurement Unit Leader (PROC) is responsible for administering all financial matters pertaining to vendor contracts, leases and fiscal agreements.

The major responsibilities of the PROC are below.

Responsibilities:

- [ ] Review Common Responsibilities.
- [ ] Review Unit Leader Responsibilities.
- [ ] Review incident needs and any special procedures with Unit Leaders, as needed.
- [ ] Coordinate with local jurisdiction on plans and supply sources.
- [ ] Obtain the Incident Procurement Plan.
- [ ] Prepare and authorize contracts, building and land-use agreements.
- [ ] Draft memoranda of understanding, as necessary.
- [ ] Establish contracts and agreements with supply vendors.
- [ ] Provide for coordination between the Ordering Manager and all other procurement organizations supporting the incident.
- [ ] Ensure that a system is in place that meets agency property management requirements. Ensure proper accounting for all new property.
- [ ] Interpret contracts and agreements; resolve disputes within delegated authority.
- [ ] Coordinate with the Compensation/Claims Unit for processing claims.
- [ ] Complete final processing of contracts and send documents for payment.
- [ ] Coordinate cost data in contracts with the COST.
- [ ] Brief the FSC on current problems and recommendations, outstanding issues and follow-up requirements.
- [ ] Maintain Unit Log (ICS 214-CG).

COMPENSATION/CLAIMS UNIT LEADER

The Compensation/Claims Unit Leader (COMP) is responsible for the overall management and direction of all administrative matters pertaining to compensation for injury and claims related activities (other than injury) for an incident.

The major responsibilities of the COMP are below.

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Review Unit Leader Responsibilities.
- ☐ Obtain a briefing from the FSC.
- ☐ Establish contact with the incident MEDL, SOFR, and LNO (or Agency Representatives if no LNO is assigned).
- ☐ Determine the need for Compensation for Injury and Claims Specialists and order personnel, as needed.
- ☐ Establish a Compensation for Injury work area within or as close as possible to the Medical Unit.
- ☐ Review Incident Medical Plan (ICS 206-CG).
- ☐ Ensure that the Claims Specialist (CLMS)'s have adequate workspace and supplies.
- ☐ Review and coordinate procedures for handling claims with the Procurement Unit.
- ☐ Brief the CLMS's on incident activity.
- ☐ Periodically review logs and forms produced by the CLMS's to ensure that they are complete, entries are timely and accurate, and that they are in compliance with agency requirements and policies.
- ☐ Ensure that all Compensation for Injury and Claims logs and forms are complete and routed to the appropriate agency for post-incident processing prior to demobilization.
- ☐ Keep the FSC briefed on Unit status and activity.
- ☐ Demobilize unit in accordance with the Incident Demobilization Plan.
- ☐ Maintain Unit Log (ICS 214-CG).

SECTION 5
INCIDENT PLANNING

Last Revised: January 2007

© Technical Response Planning Corporation 2006

5.1 Documentation Procedures

5.2 Incident Action Plan Process and Meetings

Figure 5.2-1 Operational Period Planning Cycle

5.2.1 Incident Occurs / Notifications

5.2.2 Initial Response and Assessment

5.2.3 Unified Command Objectives Meeting

5.2.4 Tactics Meeting

5.2.5 Planning Meeting

5.2.6 Incident Action Plan (IAP) Preparation and Approval

5.2.7 Operations Briefing

5.2.8 Assess Progress

5.2.9 Initial Unified Command Meeting

5.2.10 Command Staff Meeting

5.2.11 Command General Staff Breakfast/Supper

5.2.12 Business Management Meeting

5.2.13 Agency Representative Meeting

5.2.14 News Briefing

5.3 ICS Forms

5.3.1 Incident Briefing ICS 201-OS

5.3.2 Incident Action Plan (IAP) Cover Sheet

5.3.3 Incident Objectives ICS 202-OS

SECTION 5
INCIDENT PLANNING, CONTINUED

5.3.4 Organization Assignment List ICS 203-OS

5.3.5 Assignment List ICS 204-OS

5.3.6 Communications Plan ICS 205-OS

5.3.7 Medical Plan ICS 206-OS

5.3.8 Incident Status Summary ICS 209-OS

5.3.9 Unit Log ICS 214-OS

5.3.10 Individual Log ICS 214a-OS

5.4 Site Safety and Health Plan

5.5 Decontamination Plan

5.6 Disposal Plan

5.7 Dispersant Plan Authorization Checklist

5.8 Bioremediation

5.9 In-Situ Burning

5.10 Decanting

5.11 Incident Security Plan

5.12 Demobilization Plan

5.1 DOCUMENTATION PROCEDURES

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

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

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

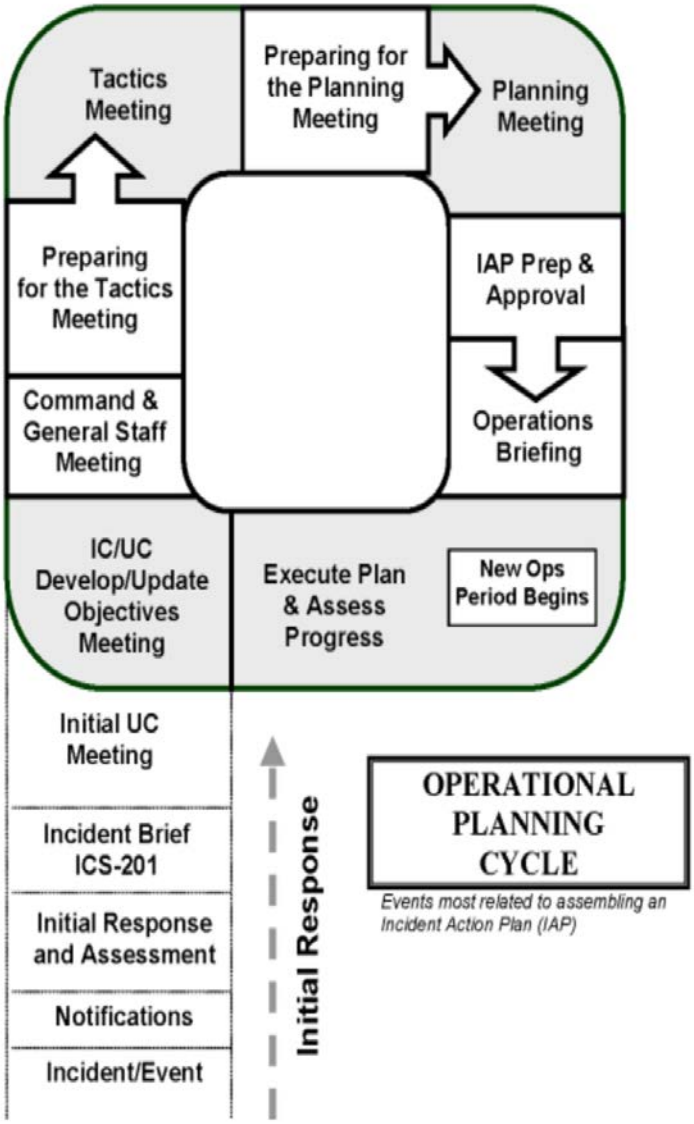
5.2 INCIDENT ACTION PLAN PROCESS AND MEETINGS

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

Longer-term, more complex responses will likely require a dedicated Planning Section Chief (PSC) who must arrange for transition into the OPERATIONAL PERIOD PLANNING CYCLE. Certain meetings, briefings, and information gathering during the Cycle lead to the Incident Action Plan (IAP) that guides operations of the next operational period. Only the meetings and events directly relevant to assembling the IAP are described. The IC/UC specifies the operational periods (e.g., 12 hour shifts, sunrise to sunset, 24 hour shifts, etc.).

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

FIGURE 5.2-1 OPERATIONAL PERIOD PLANNING CYCLE



5.2.1 Incident Occurs / Notifications

When an incident occurs, notifications will be made to the appropriate Federal, State, and Local agencies and the initial assessment and response actions will begin.

5.2.2 Initial Response and Assessment

INCIDENT BRIEFING (ICS 201)

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

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

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

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

5.2.3 Unified Command Objectives Meeting

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

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

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

5.2.4 Tactics Meeting

This 30-45 minute meeting creates the blueprint for tactical deployment during the next operational period. In preparation for the Tactics Meeting, the Planning Section Chief and Operations Section Chief review the current IAP and situation status information, as provided through the Situation Unit, to assess work progress against IAP objectives. The Operations Section Chief/Planning Section Chief will jointly develop primary and alternate strategies to meet objectives for consideration at the next Planning Meeting.

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

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

5.2.5 Planning Meeting

This meeting defines incident objectives, strategies, and tactics and identifies resource needs for the next operational period. Depending on incident complexity, this meeting should last no longer than 45 minutes. This meeting fine-tunes objectives and priorities, identifies and solves problems, and defines work assignments and responsibilities on a completed ICS Form 215 (Operations Planning Worksheet). Meeting preparations include conducting a Tactics Meeting. Displays in the meeting room should include Objectives (ICS 202) for the next operational period, large sketch maps or charts clearly dated and timed, poster-size Operational Planning Worksheet (ICS 215), current resource inventory prepared by Resources Unit, and current situation status displays prepared by Situation Unit. After the meeting, the ICS 215 is used by the Logistics Section Chief to prepare the off-incident tactical and logistical resource orders, and used by Planning Section Chief to develop IAP assignment lists.

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

5.2.5 Planning Meeting, Continued

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

5.2.6 Incident Action Plan (IAP) Preparation and Approval

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

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

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

Optional Components (use as pertinent):

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

5.2.7 Operations Briefing

This less-than-30-minute meeting conveys the IAP for the oncoming shift to the response organization. After this meeting, off-going field supervisors should be interviewed by their reliefs and by Operations Section Chief in order to further confirm or adjust the course of the new shift's IAP. The operations section supervisors may make shifts in tactics. Similarly, a supervisor may reallocate resources within a division or group to adapt to changing conditions.

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

	Agenda:	Responsible to Present
1.	Review of IC/UC Objectives, changes to IAP.	[Planning Section Chief]
2.	Current response actions and last shift's accomplishments.	[Operations Section Chief]
3.	Weather and sea conditions forecast.	[Situation Unit Leader]
4.	Division/Group and air operations assignment.	[Operations Section Chief]
5.	Trajectory analysis.	[Situation Unit Leader]
6.	Transport, communications, supply updates.	[Logistics Section Chief]
7.	Safety message.	[Safety Officer]
8.	Financial report.	[Finance/Administration Section Chief]
9.	News Media report.	[Information Officer]
10.	Assisting/cooperating organization/agency reports of concern.	[Liaison Officer]
11.	Incident Action Plan endorsement and motivational remarks.	[IC/UC]

5.2.8 Assess Progress

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

SPECIAL PURPOSE MEETINGS

5.2.9 Initial Unified Command Meeting

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

5.2.9 Initial Unified Command Meeting, Continued

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

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

5.2.10 Command Staff Meeting

Coordinate Command Staff functions, responsibilities and objectives. It is scheduled as necessary by the IC/UC. Command Staff (IC/UC, Safety Officer, Liaison Officer, Information Officer) attend.

5.2.11 Command and General Staff Breakfast/Supper

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

5.2.12 Business Management Meeting

This under-30-minute meeting is for participants to develop and update the operating plan for finance and logistics support. The agenda could include: finance requirements and criteria imposed by contributing organizations, business operating plan for resource procurement and incident funding, cost analysis and financial summary data. Attendees include: Finance/Administration Section Chief, Cost Unit Leader, Logistics Section Chief, Supply Unit Leader, Demobilization Unit Leader. It is generally conducted before the PLANNING MEETING.

5.2.13 Agency Representative Meeting

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

5.2.14 News Briefing

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

5.3 ICS FORMS

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

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

  For use by the Command Staff to gather information on the Emergency Management Teams (EMT) efforts to implement applicable response plans. The initial Incident Commander (IC) for providing documentation of the initial response prepares it.

- **INCIDENT ACTION PLAN**

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

  In addition, these Incident Command System (ICS) forms may be found on the U.S. Coast Guard web page: http://homeport.uscg.mil/mycg/portal/ep/browse.do?channelId=-17668

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

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

  - **INCIDENT OBJECTIVES - ICS 202**

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

  - **ORGANIZATION ASSIGNMENT LIST - ICS 203**

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

  - **ASSIGNMENT LIST - ICS 204**

    Submits assignments at the level of Division and Groups.

  - **COMMUNICATIONS PLAN - 205**

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

  - **MEDICAL PLAN - ICS 206**

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

5.3 ICS FORMS, CONTINUED

All ICS Forms are available electronically via the Forms Navigator.

- **INCIDENT STATUS SUMMARY - ICS 209**

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

- **UNIT LOG - ICS 214**

  Used to log activities for an entire unit.

- **INDIVIDUAL LOG - ICS 214a**

  Used to log activities for an individual.

5.3.1 Incident Briefing ICS 201-OS

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

3. Map/Sketch

(Include maps drawn here or attached, showing the total area of operations, the incident site/area, over flight results, trajectories, impacted shorelines or other graphics depicting situational and response status)

5.3.1 Incident Briefing ICS 201-OS, Continued

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

4. Initial Incident Objectives

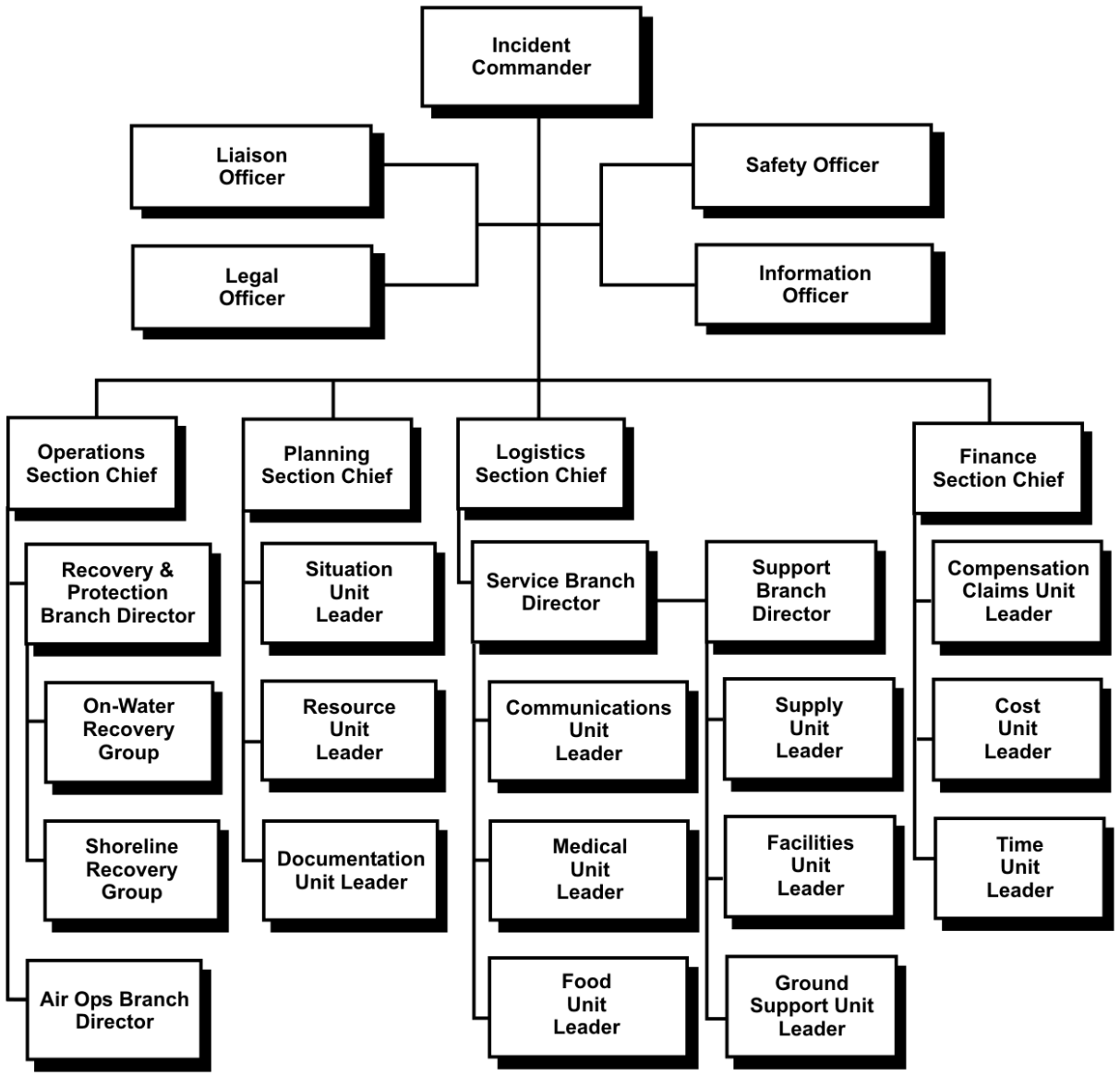
5. Summary of Current Actions

Time	Action/Note

5.3.1 Incident Briefing ICS 201-OS, Continued

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

6. Current Organization



5.3.1 Incident Briefing ICS 201-OS, Continued

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

7. Resources Summary

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

5.3.2 Incident Action Plan (IAP) Cover Sheet

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

3. Approved by:
FOSC
SOSC
IC

INCIDENT ACTION PLAN

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

ICS 202-OS (Incident Objectives)

ICS 203-OS (Organization Assignment List)

ICS 204-OS (Assignment List)

ICS 205-OS (Communications Plan)

ICS 206-OS (Medical Plan)

ICS 209-OS (Incident Status Summary)

ICS 214-OS (Unit Log)

ICS 214a-OS (Individual Log)

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

5.3.3 Incident Objectives ICS 202-OS

1. Incident Name	2. Operational Period (Date/Time) From: To:	INCIDENT OBJECTIVES ICS 202-OS

3. Overall Incident Objective(s)

4. Objectives for Specified Operational Period

5. Safety Message for Specified Operational Period

Approved Site Safety Plan Located at:

6. Weather: See Attached Weather Sheet

7. Tides/Currents: See Attached Tide/Current Data

8. Time of Sunrise:	Time of Sunset:

9. Attachments (check if attached)

203-	☐	Organization List (ICS OS)	☐	Assignment List (ICS 204-OS)	☐ Communications Plan (ICS 205-OS)
Medical	☐	Plan (ICS 206-OS)	☐	Weather	

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

5.3.4 Organization Assignment List ICS 203-OS

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

3. Incident Commander and Staff

	Primary	Deputy
Federal:		
State:		
IC:		
Safety Officer :		
Information Officer		
Liaison Officer:		

4. Agency Representatives

Agency	Name

5. Planning Section

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

6. Logistics Section

Chief	
Deputy	
Time Unit	
Procurement Unit	
Compensation Unit	
Cost Unit	

a. Support Branch

Director	
Supply Unit	
Facilities Unit	
Transportation Unit	
Vessel Support Unit	
Ground Support Unit	

b. Service Branch

Director	
Communications Unit	
Medical Unit	
Food Unit	

7. Operations Section

Chief		
Deputy		

a. Branch I - Division/Groups

Branch Director		
Deputy		
Division / Group		
Division / Group		
Division / Group		
Division / Group		
Division / Group		

b. Branch II - Division/Groups

Branch Director		
Deputy		
Division / Group		
Division / Group		
Division / Group		
Division / Group		
Division / Group		

c. Branch III - Division/Groups

Branch Director		
Deputy		
Division / Group		
Division / Group		
Division / Group		
Division / Group		
Division / Group		

d. Air Operations Branch

Air Operations Br. Dir.	
Air Tactical Supervisor	
Air Support Supervisor	
Helicopter Coordinator	
Fixed-wing Coordinator	

8. Finance Section

Chief	
Deputy	
Time Unit	
Procurement Unit	
Compensation Unit	
Cost Unit	

9. Prepared by: (Resources Unit)	Date/Time

5.3.5 Assignment List ICS 204-OS

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

3. Branch	4. Division/Group

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

6. Resources Assigned This Period	X indicates 204a attachment with special instructions

Strike Team/Task Force/ Resource Identifier	Leader	Contact Info. #	# of Persons	Notes/Remarks

7. Assignments

8. Special Instruction for Division/Group

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

Name/Function	Radio: Freq./System/Channel	Phone	Pager

Emergency Communications			
Medical	Evacuation	Other	

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

5.3.6 Communications Plan ICS 205-OS

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

3. Basic Radio Channel Use

SYSTEM/CACHE	CHANNEL	FUNCTION	FREQUENCY	MAXIMUM GEOGRAPHIC RANGE	ASSIGNMENT	REMARKS

4. Prepared By (Communications Unit)	Date/Time

25.3.7 Medical Plan ICS 206-OS

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

3. Medical Aid Stations

Name	Location	Contact #	Paramedics On Site (Y/N)

4. Transportation

Ambulance Service	Address	Contact #	Paramedics On Board (Y/N)

5. Hospitals

Hospital Name	Address	Contact #	Travel Time		Burn Ctr?	Heli-Pad?
			Air	Ground		

6. Special Medical Emergency Procedures

7. Prepared By (Medical Unit Leader)	Date/Time	8. Reviewed By (Safety Officer)	Date/Time

5.3.8 Incident Status Summary ICS 209-OS

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

3. Spill Status (Estimated, in Barrels) [OPS/EUL/SSC]

Source Status:	Remaining Potential (bbl):
	Rate of Spillage (bbl/hr):

Secured	☐	Unsecured	☐

	Since Last Report	Total
Volume Spilled		

Mass Balance/Oil Budget

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

4. Waste Management (Estimated) [OPS/Disposal]

	Recovered	Stored	Disposed
Oil (bbl)			
Oily Liquids (bbl)			
Liquids (bbl)			
Oily Solids (tons)			
Solids (tons)			

5. Shoreline Impacts (Estimated, in miles) [PSC/EUL/SSC]

Degree of Oiling	Affected	Cleaned	To Be Cleaned
Light			
Medium			
Heavy			
Total			

6. Wildlife Impacts [OPS/Wildlife Br.]

Numbers in ( ) indicate subtotal that are threatened / endangered species.				Died in Facility	
	Captured	Cleaned	Released	DOA	Euth.	Other
Birds						
Mammals						
Reptiles						
Fish						
Total						

7. Safety Status [Safety Officer]

	Since Last Report	Total
Responder Injury		
Public Injury		

8. Equipment Resources [RUL]

Description	Ordered	Available / Staged	Assigned	Out of Service
Spill Resp. Vsls				
Fishing Vessels				
Tugs				
Barges				
Other Vessels				
Skimmers				
Boom (ft.)				
Sbnt/Snr Bm. (ft.)				
Vacuum Trucks				
Helicopters				
Fixed Wing				

9. Personnel Resources [RUL]

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

10. Special Notes

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

INCIDENT STATUS SUMMARY ICS 209-OS

5.3.9 Unit Log ICS 214-OS

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

5. Personnel Assigned

Name	ICS Position	Home Base

6. Activity Log (Continue on Reverse)

Time	Major events

7. Prepared by:	Date / Time

5.3.9 Unit Log ICS 214-OS, Continued

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

5. Personnel Assigned

Name	ICS Position	Home Base

6. Activity Log (Continue on Reverse)

Time	Major events

7. Prepared by:	Date / Time

5.3.10 Individual Log ICS 214a-OS

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

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

6. Activity Log	Page	Of

TIME	MAJOR EVENTS

7. Prepared by:	Date / Time

5.4 SITE SAFETY AND HEALTH PLAN

PLAN REVIEW:		
Incident Safety Officer:		
APPROVALS:		
Incident Commander:		
Operations Officer:		
Haz Mat Division Officer:		
PLAN PREPARED:	**DATE:**	**TIME:**
Incident Location:		
Incident Number:		
HAZARDOUS SITUATION:	(Known or suspected, contaminated media, type storage container, type occupancy, obvious leaks, spills or breaches, physical damage)	
RESPONDING AGENCIES:		
Agency:	Name:	
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

All government and contractor personnel who enter the exclusion zones or use air-purifying respirators must be enrolled in a medical monitoring program.

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

GENERAL SAFETY RULES AND EQUIPMENT:

1. There will be no eating, drinking, or smoking in the exclusion zone or the contamination reduction zone.
2. All personnel must pass through the contamination reduction zone to enter or exit the exclusion zone (hot zone).
3. At a minimum, Decontamination Team members must be in one (1) level of protection lower than that of the entry teams.
4. All decontamination equipment and systems must be in place before an entry can be made.
5. Entry team will consist of a minimum of two members with the same number of personnel assigned to a backup team. All entry personnel will adhere to the buddy system.
6. At the end of the incident, or directly after a possible exposure, each entry team member will take a full body shower and launder any personal clothing used at the scene.
7. All breathing air shall be certified as Grade D or better.
8. Where practical, all tools shall be of the non-sparking type.
9. Fire equipment shall be on hand when the situation warrants such support. At a minimum, fire extinguishers shall be available on scene.
10. Since incident evacuation may be necessary if an explosion, fire, or other event occurs; an individual shall be assigned to sound, alert, and notify the responsible command personnel and public officials (if required). The evacuation signal shall be four short blasts on an air horn every 30 seconds until all personnel are known to be evacuated.

11. An adequately stocked Emergency Medical Services (EMS) Unit shall be on site at all times.

12. The location and telephone number of the nearest medical facility shall be posted and known to all personnel.

GENERAL SAFETY BRIEFING:

Before any incident actions are taken, a briefing from the Command Staff will be accomplished with all personnel present. Personnel will sign a log sheet, attesting to being present at the briefing. Topics discussed should include, but not limited to known and suspected hazards along with the operation's goals and objectives.

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

EMERGENCY ACTION CONDITIONS:

Code Green All conditions are normal and incident work may continue.

Code Red All or specific work activities must cease at once due to one of the following:

- Indications of emissions from the incident such as CGI readings of 25% or greater, less than 19.5% oxygen, or one Mr./Hr. of ionizing radiation are present
- Current or projected meteorological data indicates that a probable impact on working conditions could occur
- If background readings obtained during cessation of activities worsen, reassessment of the findings should be confirmed; actions to lower levels of contaminant or contingencies for further incident monitoring must take place
- If this condition exists, incident personnel will immediately notify command staff

Officials making evacuation/public health decisions will address the need for a public health advisory to potentially affected areas. This is because incident control methods may or may not reduce the source of contamination or threat to the general public.

If needed, a temporary sheltering or evacuation plan should be considered until levels of contamination are reduced or contained to levels deemed safe by all responsible authorities. Confirmation of these levels will be done by generally approved monitoring methods agreed to by the authorities in charge.

Sheltering/Evacuation Plan:
Ordered By:

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

LIST OF ACCESS AUTHORIZED PERSONNEL (Outside Agencies):
SPECIALIZED TASK ASSIGNMENTS:
LEVELS OF PROTECTION SELECTED:

Initial Site Survey:	A	B	C	D
Entry Team:	A	B	C	D
Backup Team:	A	B	C	D
Decon Team:	A	B	C	D

Level A - To be selected when the greatest level of skin, respiratory, and eye protection is required.

Level B - The highest level of respiratory protection is necessary but a lesser level of skin protection is needed.

Level C - The concentration(s) and type(s) of airborne substance(s) is known and the criteria for using air-purifying respirators are met.

Level D - A work uniform affording minimal protection: used for nuisance contamination only.

SKETCH OR ATTACH PLOT PLAN HERE:

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

RESPONSE SAFETY CHECK-OFF SHEET

TYPE OF RESPONSE:	
Highway	Industrial
Railway	Marine
Residential	Other
Specify:	
TYPE OF SAFETY PLAN:	
Federal	State
Local	Other
Specify:	
SUSPECTED CHEMICAL (S) INVOLVED:	
1.	2.
3.	4.
5.	6.
7.	8.
9.	10.
INITIAL LEVEL OF PROTECTION: (If level D you must justify)	
A **B** **C** **D**	
INITIAL MEDICAL SCREENING COMPLETE: Yes No	
If no, justify:	
In the event of fire or explosion:	
In the event of potential or actual ionizing radiation exposure:	

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

In the event migration and contamination beyond the boundaries of the incident:
EMERGENCY SERVICES:
Emergency medical facility:
Ambulance service:
Poison Control Center:
Chemical manufacturers representative:
EMERGENCY PROCEDURES (in the event of personnel exposure):
EMERGENCY PROCEDURES (in the event of personnel injury):
HAZARD ASSESSMENT:
Attach Hazardous Materials Safety Data Sheets (MSDS), or other reference materials, for chemicals involved to this document.
MONITORING PROCEDURES:
Monitoring the incident to identify concentration of contaminants in all media. List the instruments to be used and what areas to be monitored.
Hot Zone (Excursion Zone)
Warm Zone (Contamination Reduction Zone)
Cold Zone (Support Zone)

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

MEDICAL MONITORING: (Procedures to be used to monitor personnel for evidence of personal exposure.)
PERSONNEL POTENTIALLY EXPOSED TO HAZARDOUS MATERIALS:

NAME	POSITION	DATE/TIME

DECONTAMINATION PROCEDURES: (Contaminated personnel, surfaces, materials, instruments, other equipment.)
DECONTAMINATION SOLUTIONS USED:
DISPOSAL PROCEDURES:
Authorized By:

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

POST RESPONSE:			
Level of protection used:			
A	**B**	**C**	**D**
Rationale:			
EQUIPMENT DECONTAMINATION:			

	Clothing	SCBA/Resp.	Monitoring
Disposed:			
Cleaned:			
No Action:			

Specify:		
TOTAL APPROXIMATE TIME IN HOT ZONE:	Days	Hours
DATE PREPARED:	PREPARED BY:	
Reviewed By:		
Assistance in preparing this safety plan can be obtained from Haz Mat personnel.		

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

HEALTH AND SAFETY/RESPONSE PLAN

APPLIES TO SITE:							
DATE:							
PRODUCTS:							**(ATTACH MSDS)**
SITE CHARACTERIZATION:	Marine vessel	☐	Pipeline	☐	Storage facility	☐	
	Truck/Rail car	☐	Other	☐			
Water:	Shoreline	☐	Wetlands	☐	Ocean	☐	Bay ☐
	Rocky	☐	Sandy	☐	Muddy	☐	Other ☐
	River	☐	Creek	☐	Cannel	☐	
Land:	Mountains	☐	Hills	☐	Brush lands	☐	Forest ☐
	Grassland	☐	Other	☐			
Use:	Public	☐	Government	☐	Residential	☐	Commercial ☐
	Recreational	☐	Industrial	☐	Farmland	☐	Other ☐
Weather:	Temp	☐	Wind/Dir.____mph		Rain	☐	
	Snow	☐	Ice		Other	☐	
Pathways for Dispersion/Site Hazards	Air	☐	Water	☐	Land	☐	Other ☐
SITE HAZARDS	Boats	☐	Helicopters	☐	Slips, trips, falls	☐	Heat Stress ☐
	Cold Stress	☐	Noise	☐	Pumps, Hoses	☐	Weather ☐
	Steam, hot water	☐	Drowning	☐	Fire/ Explosion	☐	Heavy Equipment ☐
	Poor Visibility	☐	Drum handling	☐	Motor Vehicles	☐	Wildlife/ Plants ☐
	Confined spaces (see attachment/appendix)	☐	Hand/power Tools	☐	Ionizing Radiation	☐	Lifting ☐
	Chemical hazards		Other	☐			
Air Monitoring	% LEL	☐	% O_2	☐	PPM Benzene	☐	PPM H_2S ☐
	Other (specify)	☐					
See attachment- **Monitoring Results/Methods**							
CONTROL MEASURES: Engineering Controls							
	Source of release Secured	☐	Valve(s) Closed	☐	Facility Shut down	☐	
	Site secured	☐	Other	☐			
Personal Protective Equipment (PPE) HAZWOPER Coordination with OSRO							
	PVC suits	☐	PE/TYVEK Suits	☐	Respirator	☐	Eye protection ☐
	Site secured	☐	PVC gloves	☐	Hard hats	☐	Other ☐

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

HEALTH ANDSAFETY/RESPONSE PLAN

CONTOL MEASURES (cont'd):										
Decontamination										
	Stations established (see site map)									
Sanitation										
	Facilities provided per OSHA 1910.120(n)									
Illumination										
	Facilities provided per OSHA 1910.120(m)									
Medical Surveillance										
	Facilities provided per OSHA 1910.120(f)									
Work Plan: (Buddy system must be used)										
Booming	☐	Skimmers	☐	Vac. Trucks	☐	Pumping	☐	Excavation	☐	
Heavy equipment	☐	Sorbent Pads	☐	Patching	☐	Hot work	☐	Shoring	☐	
Appropriate permits issued	☐	Other (Describe)	☐							
Training (HAZWOPER training program)										
Verified site workers trained per OSHA 1910.120										
O**RGANIZATION** (See Incident Command System Chart):										
EMERGENCY PLAN (See site map and Daily Medical Plan – ICS 206)										
Site Security:										
Low	☐	Medium	☐	High	☐					
Pre-entry briefing	☐	Security level	☐	Other topics	☐					

Date/Time/Plan completed:	By:

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

HEALTH AND SAFETY / RESPONSE PLAN

CONTROL MEASURES (cont'd):
Decontamination

Sanitation

Illumination

Medical Surveillance

☐ Facilities provided per OSHA 1910.120(f)

WORK PLAN: (Buddy system must be used.)

☐ Booming ☐ Skimmers ☐ Vac. trucks ☐ Pumping ☐ Excavation
☐ Heavy equipment ☐ Sorbent pads ☐ Patching ☐ Hot work ☐ Shoring
☐ Appropriate permits issued
☐ Other (describe):

TRAINING (HAZWOPER training program):

Verified ☐ site workers trained per OSHA 1910.120

ORGANIZATION (See Incident Command System chart.):

EMERGENCY PLAN (See site map and Daily Medical Plan - ICS 206.):

SITE SECURITY:

☐ Pre-entry briefing
☐ Security level Low Medium High
☐ Other topics

DATE/TIME/PLAN COMPLETED: **By:**

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

SITE DIAGRAM

GENERAL DIAGRAM INSTRUCTIONS

1. Site Diagram should include the following (label the items drawn with corresponding letter):

   A. Sketch with major feature locations (buildings, drainage paths, roads, etc.)
   B. Hazardous substance location
   C. Work zones (exclusion, contamination reduction, support)
   D. Command center and decontamination area
   E. Access and access restrictions
   F. Routes of entry
   G. Wind direction
   H. Emergency evacuation routes
   I. Assembly points
   J. First aid locations
   K. Communication system

5.5 DECONTAMINATION PLAN

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

- **Work Zones:**

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

    Signs, barrier tape or other means identifies these zones. Decontamination is performed in the contamination reduction zone. When responders exit the exclusion zone they must be decontaminated.

    Crews are available to assist in decontamination procedures as needed. The crews must wear appropriate personal protective equipment (PPE) and are responsible for packaging and labeling of contaminated PPE.

- **Decontamination Stations:**

    Decontamination is performed within the contamination reduction zone, which is appropriately lined to prevent the spread of contaminants. Dikes are installed under the lining to contain runoff.

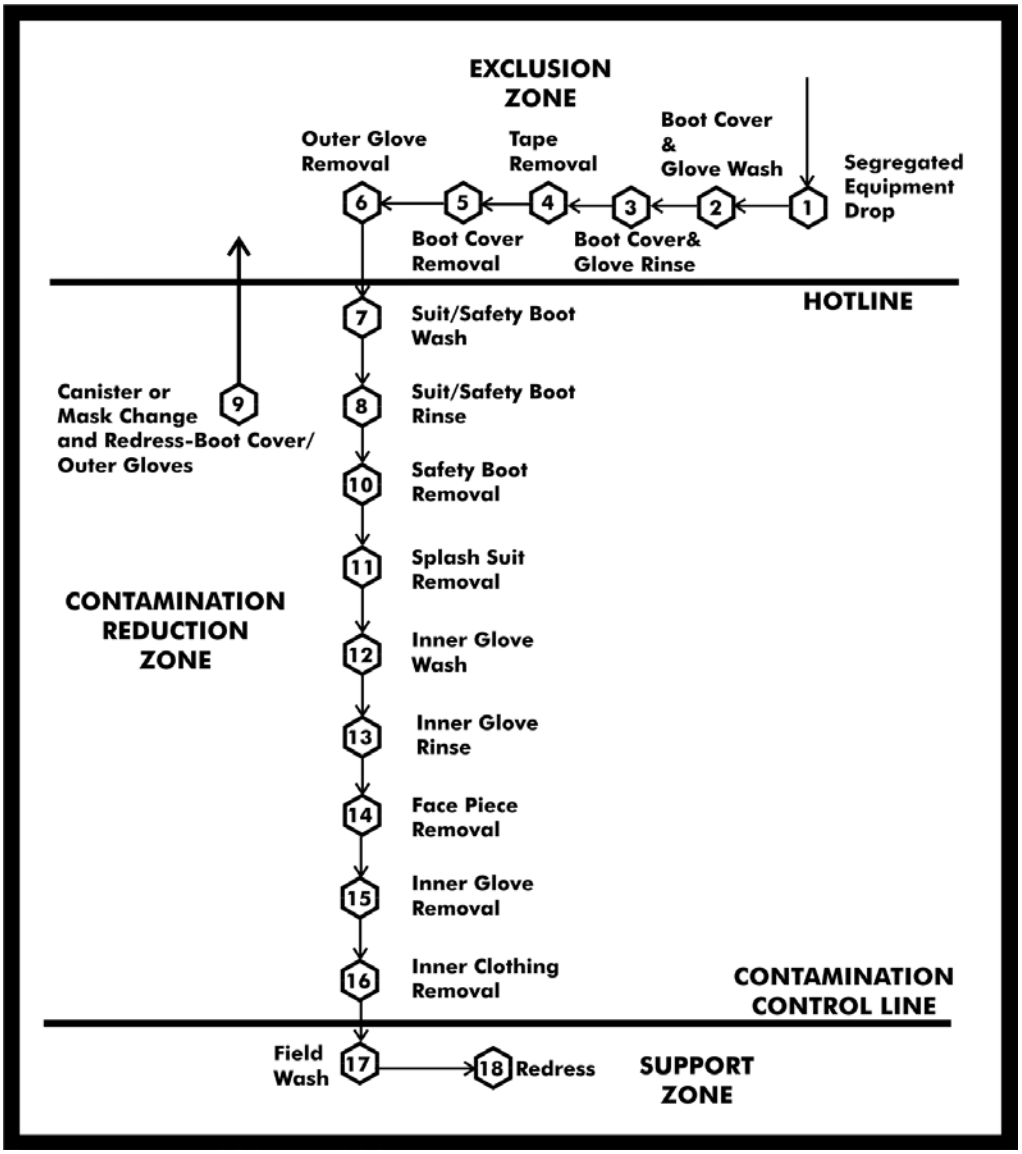
5.5 DECONTAMINATION PLAN, CONTINUED

Procedures for these stations are as follows:

MAXIMUM MEASURES FOR DECONTAMINATION		
STATION 1	Segregated equipment drop	Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths or in different containers with plastic liners. Segregation at the drop reduces the probability of cross contamination. During hot weather operations, a cool down station may be set up within this area.
STATION 2	Boot cover and glove wash	Scrub outer boot cover and gloves with decontamination solution or detergent and water.
STATION 3	Boot cover and glove rinse	Rinse off decontamination solution from Station 2 using copious amounts of water.
STATION 4	Tape removal	Remove tape around boots and gloves and deposit in container with plastic liner.
STATION 5	Boot cover removal	Remove boot covers and deposit in containers with plastic liner.
STATION 6	Outer glove removal	Remove outer gloves and deposit in container with plastic liner.
STATION 7	Suit and boot wash	Wash splash suit, gloves, and safety boots. Scrub with long-handled scrub brush and decontamination solution.
STATION 8	Suit, boot, and glove rinse	Rinse off decontamination solution using water. Repeat as many times as necessary.
STATION 9	Canister or mask change	If worker leaves exclusion zone to change canister or this is the last step in the decontamination procedure, workers canister is exchanged, new outer gloves and boot covers are donned, joints are taped, and the worker returns to duty.
STATION 10	Safety boot removal	Remove safety boots and deposit in container with plastic liner.
STATION 11	Splash suit removal	With assistance of helper, remove splash suit. Deposit in container with plastic liner.
STATION 12	Inner glove wash	Wash inner gloves with decontamination solution.
STATION 13	Inner glove rinse	Rinse inner gloves with water.
STATION 14	Face piece removal	Remove face piece. Deposit in container with plastic liner. Avoid touching face with fingers.
STATION 15	Inner glove removal	Remove inner gloves and deposit in lined container.
STATION 16	Inner clothing removal	Remove clothing soaked with perspiration and place in lined container. Do not wear inner clothing off-site since there is a possibility that small amounts of contamination might have been transferred in removing the protective suit.
STATION 17	Field wash	Shower if highly toxic, skin-corrosive or skin-absorbable materials are known or suspected to be present. Wash hands and face if shower is not available.
STATION 18	Re-dress	Put on clean clothes.

5.5 DECONTAMINATION PLAN, CONTINUED

DECONTAMINATION PROCEDURES, MAXIMUM DECONTAMINATION LAYOUT

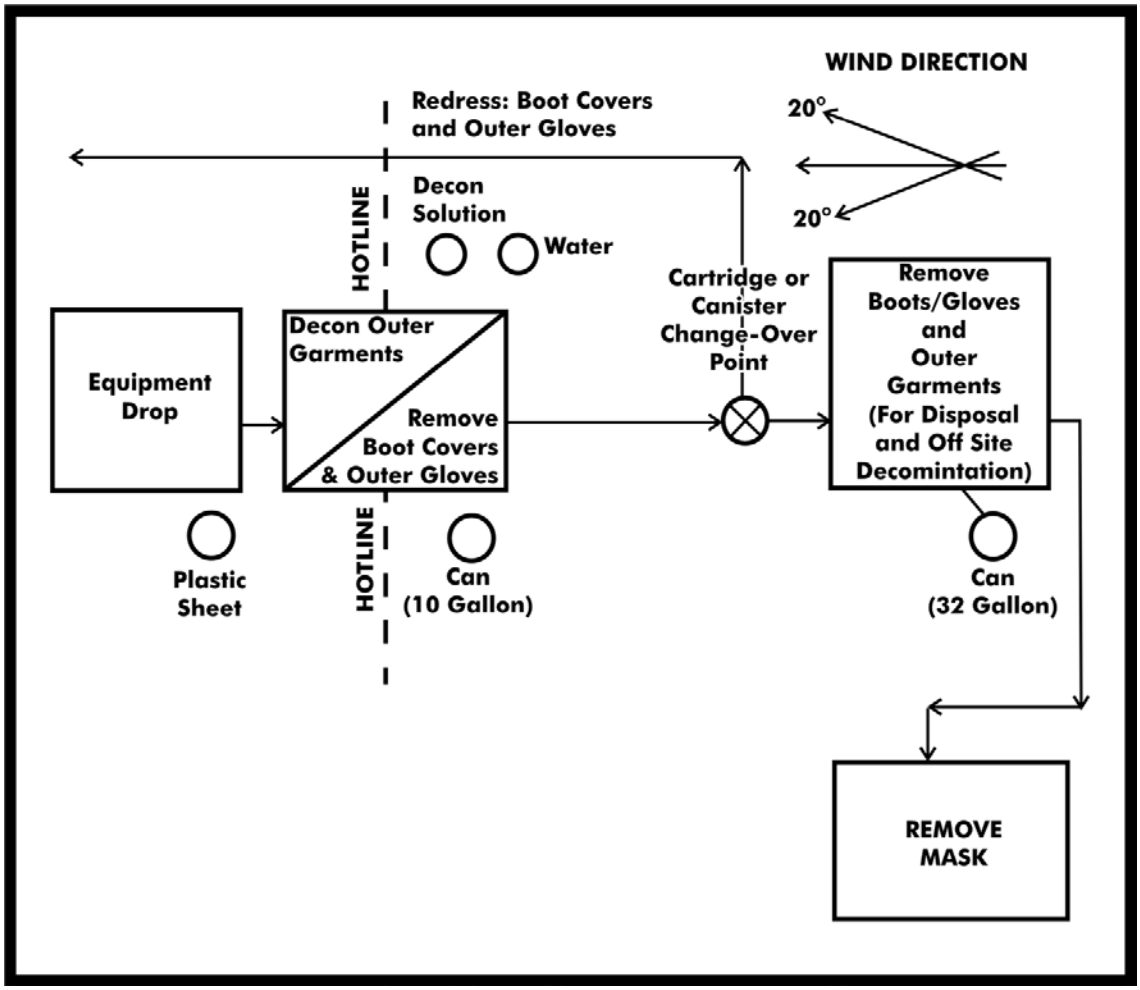


5.5 DECONTAMINATION PLAN, CONTINUED

MINIMUM MEASURES FOR DECONTAMINATION		
STATION 1	Equipment drop	Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths. Segregation at the drop reduces the probability of cross contamination. During hot weather operations, a cool down station may be set up within this area.
STATION 2	Outer garment, boots, and gloves wash and rinse	Scrub outer boots, outer gloves, and splash suit with decontamination solution or detergent and water. Rinse off using copious amounts of water.
STATION 3	Outer boot and glove removal	Remove outer boots and gloves. Deposit in container with plastic liner.
STATION 4	Canister or mask change	If worker leaves exclusion zone to change canister (or mask) or this is the last step in the decontamination procedures, worker's canister is exchanged, new outer gloves and boot covers are donned, joints are taped, the worker returns to duty.
STATION 5	Boot, gloves, and outer garment removal	Boots, chemical-resistant splash suit, inner gloves removed and deposited in separate containers lined with plastic.
STATION 6	Face piece removal	Face piece is removed. Avoid touching face with fingers. Face piece deposited on plastic sheet.
STATION 7	Field wash	Hands and face are thoroughly washed. Shower as soon as possible.

5.5 DECONTAMINATION PLAN, CONTINUED

DECONTAMINATION PROCEDURES, MINIMUM DECONTAMINATION LAYOUT



5.6 DISPOSAL PLAN

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

Disposal priorities:

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

Disposal and Treatment Options:

	Available	Likely	Possible	Unlikely
Landfill:				
In-situ/ bio-remediation:				
Centrifuge / Filter Press:				
Off site incineration:				
Reclaim:				
Recycle:				

Resources required for disposal options:

General information:

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

5.6 DISPOSAL PLAN, CONTINUED

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

PPE required for waste handling:	
Waste coordinator:	Date:

Resources required for disposal options:

Incident name:	
Sample number:	Date sent:
Source of sample:	
Date sample data received:	
Waste hazardous:	Non-hazardous:
Permits/variances requested:	
Approval received on waste profile:	
Date disposal can begin:	
Disposal facilities:	
Profile number:	
Storage contractors:	
Waste transporters:	
PPE designated and agrees with Site Safety and Health Plan:	

5.6 DISPOSAL PLAN, CONTINUED

Additional information:
Waste coordinator:

5.7 DISPERSANT PLAN AUTHORIZATION CHECKLIST

1.	**Dispersible:** Available technical information or experience suggests that the spilled product is dispersible and will still be dispersible in the time frame of anticipated application of dispersants.
2.	**National Contingency Plan (NCP) Listed Dispersant:** The dispersant to be used is listed on the current NCP Product Schedule and is considered appropriate for the oil type and conditions. www.epa.gov/oilspill/ncp
3.	**Inadequacy of other options:** Mechanical response equipment alone is not deemed adequate (due to the magnitude of the spill, availability, or timeliness) to protect potential resources at risk. Environmental trade-offs of dispersant use have been considered.
4a. 4b.	**Dispersant Availability and Timeliness:** Enough dispersant and application equipment has been confirmed to be available to: **a)** Make an impact on the spilled product, and **b)** be deployable within the proposed time frame.
5.	**Weather Conditions:** Weather and sea conditions are conducive to dispersant application by the chosen system or platform. (Generally, for aerial application: wind ≤25 knots, visibility ≥3 statute miles, and ceiling ≥1000 feet. Generally for boat application**,** a sea state that will allow the vessel to be used to conduct an effective and safe spray operation.)
6.	**PPE:** Personal protective equipment for personnel on-site will conform to the appropriate dispersant's MSDS and safe industry practice.
7a.	**General Adequacy of Dispersant Spray System and Personnel Competency:** In addition to any other requirements of the Region X RRT and Northwest Area Committee, the general criteria for evaluating the suitability for use of any dispersant system should be the ability of the party or parties requesting approval to demonstrate to the satisfaction of the FOSC, the following: **a)** That the application system has been i. Specifically designed for its intended purpose, or ii. If not specifically designed for dispersant use, has been used previously and was deemed to be effective and appropriate, and will be used again in a similar manner, or iii. By some other specific means of documentation or experience reasonably deemed to be effective and appropriate under the circumstances.
7b.	**b)** That the design and operation of the application system can reasonably be expected to apply the chemical dispersant in a manner consistent with the dispersant manufacturer's recommendations, especially with regard to dosage rates, and concentrations.
7c.	**c)** That the operation will be supervised or coordinated by personnel who have experience, knowledge, specific training, and/or recognized competence with chemical dispersants and the type of system to be used.
8a.	**Aerial Application Operational and Technical Issues:** In the case of Aerial Application of dispersants: **a)** The FOSC must ensure that the Responsible Party's dispersant operation provides for a dispersant controller over the spray zone able to effectively direct the dispersant aircraft in carrying out the dispersant operation, including avoiding the spraying of birds and marine mammals that may be in the area.
8b.	**b)** Aircraft spray systems must be capable of producing dispersant droplet sizes that provide for optimal dispersant effectiveness as described in ASTM guidelines or as supported by peer-reviewed research.

5.7 DISPERSANT PLAN AUTHORIZATION CHECKLIST, CONTINUED

9.	**Boat Application Operational Technical Issues:** If the system involves spray arms or booms that extend out over the edge of a boat and have fan type nozzles that spray a fixed pattern of dispersant, the dispersant operator has confirmed that application will comply with the following ASTM standards as appropriate: a) ASTM F 1413-92 Standard Guide for Oil Spill Dispersant Application Equipment: Boom and Nozzle Systems b) ASTM F 1460-93 Standard Practice for Calibrating Oil Spill Dispersant Application Equipment Boom and Nozzle Systems c) ASTM F 1737-96 Standard Guide for Use of Oil Spill Dispersant Application Equipment during Spill Response: Boom and Nozzle Systems.
10.	**Fire Monitor Operational and Technical Issues:** If the system involves the use of a fire monitor and or fire nozzle to apply the dispersants from a boat, the dispersant operator has confirmed that application will comply with ASTM Standard F 2465-05 for fire monitors and has provided the information in paragraph 7 of the Standard titled “Information to be provided by the user” to ensure that the fire monitor meets the standard and is acceptable for use. The specific fire monitor system(s) intended for use must have been specifically designed for dispersant application and/or must have been specifically calibrated via field trial for dispersant use.
11.	**SMART Deployment:** The FOSC has activated Special Monitoring of Applied Response Technologies (SMART), including a SMART observer, at a minimum, to fly over the response zone to visually assess effectiveness of the dispersant applications (Tier I). See Section 4612 and 9670.
12.	**Wildlife Observation:** A specialist in aerial surveillance of wildlife or over flight observation should accompany the SMART observer in order to observe birds and marine mammals that should be avoided in the potential dispersant application area. Both U.S. Fish and Wildlife Service and NOAA have been given the opportunity to provide such specialists. The DOI and NOAA RRT representatives have been notified of the spill and are responsible for notifying and mobilizing their respective qualified wildlife observation specialists in time for the dispersant application. If specialists with U.S. Fish and Wildlife Service and NOAA are not available at the time of dispersant application, the FOSC has designated an aerial surveillance specialist, preferably from a Federal or State Trustee agency. For case-by-case approval zones, the state RRT representative with jurisdiction and/or tribe with off reservation treaty rights has been given the opportunity to provide a wildlife aerial surveillance observer. The state RRT representative with jurisdiction and/or the tribe(s) with off reservation treaty rights in the area threatened by the discharge have been notified and are responsible for mobilizing their respective qualified wildlife observation specialist in time for the dispersant application.
13.	**Endangered Species Act (ESA) and Essential Fish Habitat (EFH) Consultations:** RRT representatives of DOI and DOC have been notified and, if listed species and/or critical habitat are present in the area or could be present, emergency consultation has been initiated. FWS and NMFS representatives have provided recommendations to avoid and/or minimize impacts to listed species and/or critical habitat, advised the FOSC whether incidental take related to response actions is anticipated and, if so, advised the FOSC to document incidental take for use in formal consultation post-response. Both the FOSC and FWS/NMFS representatives will maintain records of oral and written communications. In case-by-case approval zones, the state RRT representative with jurisdiction and/or the tribe(s) with off reservation treaty rights in the area threatened by the discharge has been given the opportunity to provide input on listed species and/or critical habitat.

*** If the answer to any item on the checklist is "N," explanation and justification for authorization of dispersant use must be included in After-Action Report. (NACP 4611.2)**

5.8 BIOREMEDIATION

The use of bioremediation in open water is an unproven technology that currently shows little or no promise of removing significant quantities of oil from the surface of the water prior to shoreline impact or natural dispersion. Bioremediation by nutrient enhancement or seeding of biodegrading organisms is therefore not allowed on the surface of open water. This policy can be reviewed by the RRT if there is new and significant evidence that bioremediation can be a significant factor in oil removal on open water.

Bioremediation of Shorelines

Seeding of exotic organisms for pollution response is prohibited in Response Region Ten. This is due to unproven efficacy of such procedures and the unknown ecological effects resulting from the implementation of such.

Bioremediation is an effective technique for the encouragement of oil biodegradation on some contaminated shorelines. Nonetheless, this strategy is unlikely to lead to rapid decontamination of beaches. Consequently, bioremediation should be used as the primary treatment only when oil concentrations are low (less than 15 grams of oil for every kilogram of sediment) and conventional forms of cleanup (heavy equipment use or manual cleaning) are likely to do more damage than good. Bioremediation should be considered as a polishing technique after gross contamination is removed by conventional means.

The use of bioremediation for oil spill clean up will be allowed only on a case-by-case basis.

5.9 IN-SITU BURNING

The following checklist and worksheet are provided as a summary of important information to be considered by the Unified Command in reviewing any request to conduct in-situ burning in response to an oil spill in Washington, Oregon, and Idaho waters. The flowchart shown in **FIGURE 6.4-1** summarizes the process for making a burn decision. The decision to burn involves three basic factors. If the oil has ignited due to collision or another means, allowing continued burning may be unavoidable or beneficial. Second, the decision to burn must consider whether this tool will offer a greater level of efficiency in removing oil on water and/or reducing oil impacts to sensitive resources. Third, the decision must evaluate whether it is practical, feasible, and safe to burn given the spill and conditions involved.

The application process begins with a simple preliminary feasibility analysis. If that analysis concludes that in-situ burning may be feasible, the application checklist and window-of-opportunity worksheet should be completed. The checklist is divided into several sections of information about the spill, weather, proposed burning plan, and potential impacts. Most checklist questions reference items on the worksheet. When completed, the checklist and worksheet will identify the window-of-opportunity when in-situ burning would be allowed based on environmental, public health, and operational constraints. Note that the checklist must be updated for each new burn scenario proposed. It is important to note that even if the checklist and worksheet fail to show that in-situ burning is appropriate at one point in time (i.e., a “NO” answer), changes in environmental or other factors may make in-situ burning a feasible option at a later time.

5.9 IN-SITU BURNING, CONTINUED

Preliminary Feasibility Analysis

1. Is the spilled oil already burning? Yes ___ No ___

⇒ If yes, skip remaining questions and proceed with the rest of application.

2. Are prevailing and forecasted winds and atmospheric conditions likely to cause heavy smoke exposure to populated areas? Yes___ No ___

⇒ If no, proceed with Question 3.

3. Do natural resource managers concur that in-situ burning will cause less overall harm to marine resources (e.g., heat, burn residue) than the harm to those resources anticipated if in-situ burning does not occur (e.g., oiling of shorelines, wildlife, kelp, etc.)? Yes___ No ___

⇒ If yes, proceed with Question 4.

4. Are equipment and trained personnel available to conduct in-situ burning operations? Yes___ No ___

⇒ If yes, proceed with Question 5.

5. Is the oil concentration and type suitable for containment and burning? Yes___ No___

⇒ If yes, proceed with rest of application.

If any answer to the above questions does not result in instructions to proceed with the application, approval of an in-situ burning application is very unlikely at this point of time until conditions change.

5.9 IN-SITU BURNING, CONTINUED

Application Checklist

Spill Data

Date of incident (month/date/year): _____ Time of incident: _____

Name of incident/responsible party:

Location of incident _____ Latitude: _____ N Longitude _____ W

Type(s) of oil spilled:

Estimated volume of oil spilled into water: _____

Estimated volume of oil at risk of spilling: _____

Release status: Stopped __ Intermittent __ Continuous __ Outflow Rate: _____

Forecasted surface area of spill at time of projected burn: _____

Continuous slick ___ Large patches ___ Ribbons/streamers ____

Will oil concentration be sufficient to burn? Yes ___ No ___

⇒ **See #1 on worksheet**

Anticipated oil trajectory (attach NOAA forecasts if available):

Forecasted oil distance/direction to nearest land at time of projected burn:

Expected areas and times of shoreline oil impact:

⇒ **See #2 on worksheet**

Estimated percentage of natural dispersion and evaporation during:

First 24 hours _____ second 24 hours _____

Oil emulsification at this time:

Unknown ___ None ___ Light (*0-20%)* ___

Moderate (*21-50%)*__ Heavy (*over 50%)* ___

Will emulsification likely be less than 50% at projected time of burn?

Yes __ No __ Unknown __ ⇒ **See #3 on worksheet**

Distance (*in miles*) and direction to nearest population center

(> 100 people per sq. mile):

Name of nearest population center:

Weather/Environmental Conditions <u>at time of projected burn</u>

Temperature: Air = _____ °F Water = _____ °F

Weather: Clear __ Partly cloudy __ Overcast __ Rain __ Fog __

Snow __ Freezing __

5.9 IN-SITU BURNING, CONTINUED

Surface visibility _____ Ceiling level _____

Is prevailing and forecasted visibility more than 500 ft. vertically and 0.5 mile

Horizontally? Yes ___ No ___ ⇒ **See #4 on worksheet**

Surface current: Speed _____ Direction _____

Wind conditions: Speed _____ Direction (from) _____

Are prevailing and forecasted winds less than 25 knots? Yes ___ No ___

⇒ **See #5 on worksheet**

Tide state: Flood ____ Ebb ____ Slack Water ____

Sea State: Calm ___ Choppy ____ Swell (in feet) ____

Waves: Less than 1 ft. __ 1-3 ft. __ More than 3 ft. __

Direction (from) ____ ⇒ **See #6 on worksheet**

Other weather/sea condition information:

Proposed Burning Plan

Location of the proposed burn relative to the spill site:

Location of the proposed burn relative to nearest ignitable slick(s):

Location and direction of the proposed burn relative to nearest land:

Can accidental fires be avoided? Yes ___ No ____ If yes, what actions are planned:

Can ignition/burn occur at a safe distance from other response operations and public, recreational, and commercial activities? Yes ___ No ___

⇒ **See #7 on worksheet**

Method(s) used to notify residents living within the potential smoke plume trajectory:

⇒ **See #8 on worksheet**

Method(s) used to notify mariners and aircraft pilots:

Method(s) used to avoid impacts to marine life in vicinity of burn:

Type of ignition system proposed for use:

When will ignition system, fire-resistant boom, and deployment equipment/vessels be on-scene and available for use?

⇒ **See #9 on worksheet**

5.9 IN-SITU BURNING, CONTINUED

How will ignition be carried out:

If a heli-torch ignition system is to be used, is the helicopter qualified for offshore flight and does it meet FAA certification requirements?
Yes ___ No ____

Method used to collect/concentrate oil, if any:

Amount of fire boom available for use at time of projected burn:
_____ feet ⇒ **See #9 on worksheet**

Number of boom-towing vessels and support vessels available:

Proposed location of oil containment relative to spill source:

Proposed burning strategy:

___ Immediate ignition at or near source

___ Ignition away from source after containment and movement to safe location

___ Controlled burning in boom or natural collection site at or near shore

___ Possible need for multiple ignition attempts.

Are floating debris and other safety hazards acceptable? Yes ___ No ___

Are sufficient numbers of trained personnel available on-scene to conduct safe and effective burn?

Yes ___ No ___ ⇒ **See #10 on worksheet**

Estimated amount of oil to be burned:

Estimated duration of burn:

Method of collecting burned oil residue:

Estimated amount of burned oil residue to be collected:

Proposed interim storage and disposal of burned oil residue:

Back-up plan for collecting contained oil if burn fails:

Burn Impacts

Is adequate air modeling support available? Yes ___ No ___

Do prevailing conditions and air modeling results indicate that PM-10 standards can be met?
Yes ___ No ___⇒ **See #11 on worksheet**

c. Will visibility remain safe at sensitive locations (e.g., airports, freeways)?

Yes __ No __

d. Are adequate air support and burn monitoring equipment on-scene and available?

Yes ___ No __⇒ **See #12 on worksheet**

e. How will operational impacts to wildlife in vicinity be monitored?

5.9 IN-SITU BURNING, CONTINUED

Name of Application Preparer: _____

Date/Time Submitted to Planning Section Chief: _____

Approval by Planning Chief: _____

Unified Command Decision:

____ Approval to implement burn plan

____ Approval to conduct small pilot burn

____ Burn plan disapproved at this time

5.9 IN-SITU BURNING, CONTINUED

Window of Opportunity Worksheet

Spill Time and Date:

Spill Name:

This worksheet should be filled out in conjunction with the In-Situ Burning Application Checklist. Fill in top row based on time of incident (e.g., if incident is at 0300, fill that in for hour 1; 0400 for hour 2, etc.). For each worksheet item, mark in each time segment where the item applies. The likely window-of-opportunity equates to those time segments where all items are marked.

Window of Opportunity Feasibility Factors	Hr. __ Time	Hr. __ Time	Hr. __ Time	Hr. __ Time	Hr. __ Time	Hr. __ Time	Hr. __ Time	Hr. __ Time	Hr. __ Time	Hr. __ Time	Hr. __ Time	Hr. __ Time
Spill Data/Environmental Conditions												
1. Oil concentration is suitable for containment & burning												
2. Burning can still reduce significant shoreline impacts												
3. Oil emulsification is less than 50%												
4. Visibility > 500 ft. vertically & > 0.5 mile horizontally												
5. Wind speed is less than 25 knots												
6. Wave height less than 3 feet												
Proposed Burning Plan												
7. Burn can occur at safe distance from public & activities												
8. Public notification needs have been addressed												
9. All burn equipment on-scene and ready												
10. Trained personnel on-scene & ready												
Burn Impacts												
11. PM-10 standards can be met												
12. Air monitoring equipment & support are set up & ready												

5.10 DECANTING

OIL SPILL DECANTING AUTHORIZATION FORM
The federal and state OSCs, under authority of RCW 90.56.320(1) and WAC 173-201A-110 (in Washington), or ORS/OAR _____ (in Oregon), hereby approve the use of decanting as a means of expediting the recovery of oil during the following spill cleanup operation:
Date(s) Approval Effective:
Name of Spill Incident:
Federally Defined Response Area:
Name of Requester:
Location and Description of Proposed Decanting Operation: (continue on reverse, if necessary)

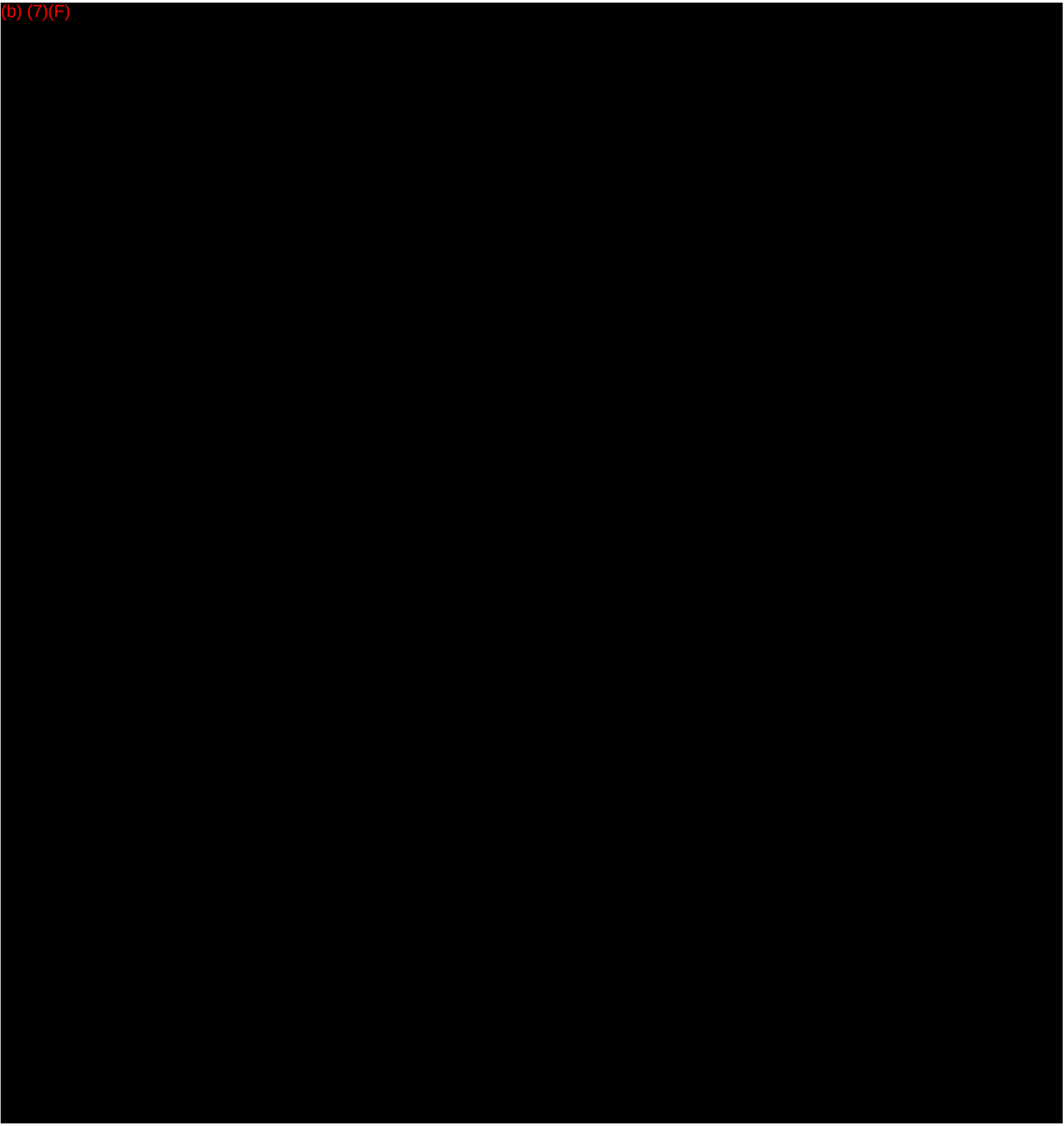
The decanting operation must meet the following conditions:

1. All decanting should be done in a designated "Response Area" within a collection area, vessel collection well, recovery belt, weir area, or directly in front of a recovery system.
2. Vessels employing sweep booms with recovery pumps in the apex of the boom shall decant forward of the recovery pumps.
3. Vessels not equipped with an oil/water separator should allow retention time for oil held in internal or portable tanks before decanting commences.
4. Containment boom must / need not (circle one) be deployed around the collection area to prevent loss of decanted oil or entrainment.
5. Visual monitoring of the decanting shall be maintained at all times so that discharge of oil in the decanted water is detected promptly.
6. Decanting in areas where vacuum trucks, portable tanks, or other collection systems are used for shore cleanup will be subject to the same rules as vessels.
7. Additional conditions: (continue on reverse if necessary)

SIGNATURE: Federal OSC	Date:
SIGNATURE: State OSC	Date:

NOTE: When verbal authorization is given, a copy of this form must be immediately expedited to the requester (must be a person of authority in the cleanup organization) to ensure that the conditions and limitations are clearly understood by all parties.

(b) (7)(F)



(b) (7)(F)



5.12 DEMOBILIZATION PLAN

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

Demobilization procedures:

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

SECTION 6

Last Revised: May 2011

SENSITIVE AREAS / RESPONSE TACTICS

© Technical Response Planning Corporation 2006

6.1 Area Description

6.1.1 Hydrographic and Climatic Conditions

6.1.2 Physical Geographic Features

6.2 Spill Containment / Recovery

Figure 6.2-1 - Response Tactics for Various Shorelines

6.3 Sensitive Area Protection

Figure 6.3-1 - Sensitive Area Protection Implement Sequence

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

6.4 Alternative Response Strategies

6.4.1 Dispersants

6.4.2 Bioremediation

6.4.3 In-Situ Burn

Figure 6.4-1 - In-Situ Burn Decision Process

6.4.4 Decanting

6.5 Wildlife Protection and Rehabilitation

6.6 Endangered and Threatened Species By State

6.7 Vulnerability Analysis (Detailed)

6.8 Tactical Overview Map

6.9 Tactical Plan Index

6.10 Tactical Plans

6.11 Sensitivity Maps

6.12 Protection / Response Strategies

6.1 AREA DESCRIPTION

Site-specific maps and response tactics are included in **SECTION 6.7** and **SECTION 6.9**. Description of shoreline types and specific shoreline protection and cleanup techniques are presented in **FIGURE 6.2-1** and **FIGURE 6.3-2**. The strategies and response examples are guidelines and must be evaluated during the response to ensure that the selected response methods are appropriate for the situation.

6.1.1 Hydrographic and Climatic Conditions

HYDROGRAPHIC AND CLIMATIC CONDITIONS	
Wind:	Winds along the coast at the mouth of the Columbia River are steady onshore winds, which shift from a summer northwesterly direction to a southwesterly direction in the winter. Further inland along the Columbia River, the summer winds are typically from the northwest with some diurnal variations in direction. During the winter months, the prevailing flow is from the east as the colder air drains out of the inland basin of eastern Washington. Wind velocities can reach a steady 15-20 knots. Maximum wind velocities have been recorded at 50-60 miles per hour.
Temperature:	Maritime air dominates the area creating a climate with mild temperatures, heavy precipitation from October to May, and dry summers. The mean annual temperature is approximately 51°F. Average temperatures for the region are: Summer Maximum 70 - 80°F Summer Minimum 45 - 55°F Winter Maximum 35 - 45°F
Tides and Currents:	The lower Columbia River has a complex system of currents with varying velocities and directions. Current velocity in the main channel of the lower Columbia and Willamette Rivers is typically between 1-6 knots. This velocity varies throughout the year, heavily influenced by the season runoff, the strength of the tidal current, and the volume of water released by the dams. In the upper segment of the lower Columbia River, currents have been recorded as high as 7 knots during seasonal floods. Current flow in the sloughs and back channels are generally much less than the main channels. Tidal influence is significant for most of the lower Columbia and Willamette Rivers. The diurnal rise and fall of the tides create a tidal current, which, during low river flow conditions, can create a reversal in the downstream current. The rivers current, on the other hand, will increase significantly on an outgoing tide, especially when coupled with a heavy spring run-off. (During high river flows, current reversals by tidal influences are limited to the Columbia Rivers estuary). Salt-water intrusion at the mouth of the Columbia River and the estuary has a limited effect on water movement, usually by creating a two-layered circulation pattern. Salt water will flow inland near the bottom of the river and estuary while the river continues to flow downstream at the top layer. The extent of salt-water intrusion is largely influenced by the rate and volume of river discharge, tides, and water depth. Offshore or coastal currents affect oil movements as soon as it is discharged from the river into the ocean. Generally, the surface currents drift southward along the Oregon Coast in the summer and are pushed northward along the coast of Washington during the winter. However, the prevailing winds, tidal forces, and the local topography will continue to affect the surface movement of water and oil, creating a complex and constantly changing pattern of movement.
Local Visibility Problems:	Annual precipitation around the lower Columbia River is characterized by an intermittent dry season in the summer followed by a wet winter season. Precipitation increases inland with the rise in elevation from the Coast Range then decreases in the valley between the coast range and the Cascade Mountain Range. Precipitation increases again going up the western slopes of the Cascade Mountains. Average annual rainfall within the Portland Harbor area is forty-two (42) inches.

6.1.2 Physical Geographic Features

PHYSICAL GEOGRAPHIC FEATURES / NAVIGATION HAZARDS	
Bathymetry:	The width of the Columbia River varies from one-half mile to six miles wide just east of Astoria, whereas the Willamette maintains a fairly uniform width of approximately a quarter of a mile. River depths average 40 feet in the Willamette. Depth on the Columbia is maintained at approximately 40 feet within the dredged ship channel.
Beach Types:	Rip rap, coarse-grained sand beaches, gravel beaches, mixed sand and gravel beaches
Type of Soil and Terrain:	Sand, gravel, rip rap, exposed rocky shores, exposed solid man-made structures, sheltered solid man-made structures
Buoys, Moorings or other Underwater Structures:	Refer to the NOAA Nautical Map in section 6.11.
Navigational Hazards:	The Multnomah Channel runs from the Willamette River to the Columbia River on the southwest side of Sauvie Island. During the spring and early summer when flow rates down the Columbia River are high, the water level of the Columbia River may be higher than the level in the Willamette River at the junction where both rivers meet. When this occurs, part of the Columbia River will actually flow up the Willamette River until it reaches the Multnomah Channel where the combined flow of both rivers will be directed downstream through Multnomah Channel until it converges again with the mainstream of the Columbia River. Oil spilled in the Willamette river or upriver on the Columbia River from the junction between the Willamette and Columbia Rivers will flow down the Multnomah Channel. At the junction of the Willamette River and Multnomah Channel, the converging currents create a slack water, which tends to disperse the pollutants to both sides of the Willamette River. Areas, which will be affected by the Multnomah Channel effect during an oil spill, are Kelly Point Park, Columbia Slough, numerous marinas and houseboat moorages, and log rafts along Multnomah Channel.
Traffic Patterns:	Today's river bustles with activity. Commercial tugs and barges navigate the locks to move wood chips, logs, sand and gravel, and other products to market. Huge freighters and oceangoing barges move tons of cargo through the Port of Portland and private docks in the Portland harbor. Recreation is now the fastest-growing use of the river. Pleasure boating, skiing and angling are increasing. Portland, Lake Oswego, Salem, Albany, Corvallis, Harrisburg, Eugene and Springfield are among the cities and towns that have greatly increased parklands and public access along the Willamette. The public is reclaiming its river.

6.2 SPILL CONTAINMENT / RECOVERY

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

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

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

For terrestrial spills, trenches and earthen berms or other dams are most often used to contain oil migration on the ground surface. Recovery of free oil is best achieved by using pumps, vacuum sources, and/or sorbents.

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

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

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

Containment/Diversion Berming	• Berms are constructed ahead of advancing surface spills to contain spill or divert spill to a containment area • May cause disturbance of soils and some increased soil penetration
Blocking/Flow-Through Dams	• Construct dam in drainage course/stream bed to block and contain flow of spill. Cover with plastic sheeting. If water is flowing, install inclined pipes during dam construction to pass water underneath dam • May increase soil penetration
Culvert Blocking	• Block culvert with plywood, sandbags, sediments, etc. to prevent oil from entering culvert

Interception Trench

- Excavate ahead of advancing surface spill to contain spill and prevent further advancement; cover bottom and gradients with plastic
- May cause disturbance of soils and increased soil penetration

Containment booming

- Boom is deployed around free oil
- Boom may be anchored or left to move with the oil

Diversion booming

- Boom is deployed at an angle to the approaching oil
- Oil is diverted to a less sensitive area
- Diverted oil may cause heavy oil contamination to the shoreline downwind and down current
- Anchor points may cause minor disturbance to the environment

Exclusion booming

- Boom is placed around a sensitive area or across an inlet, a river mouth, a creek mouth, or a small bay
- Approaching oil is contained or deflected (diverted) by the boom
- Anchor points may cause minor disturbance to the environment

Sorbent booming

- Used only on quiet water with minor oil contamination
- Boom is anchored along a shoreline or used in a manner described above
- May use boom made of sorbent material or may pack sorbent material between multiple booms placed parallel to each other

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

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

FIGURE 6.2-1 - RESPONSE TACTICS FOR VARIOUS SHORELINES

TYPES	DESCRIPTION	PREDICTED OIL IMPACT	RECOMMENDED CLEANUP ACTIVITY

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

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

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

Swamp	• Swamps are freshwater wetlands having varying water depths with vegetation types ranging from shrubs and scrubs to poorly drained forested wetlands. Major vegetative types include scrubs, shrubs, evergreen trees, and hardwood forested woodlands • Birds and mammals use swamps during feeding and breeding activities	• Even small amounts of spilled oil can spread through the swamp • Large spills will cover more area and may persist for decades since water-flushing rates are low • Oil, particularly the heavy fuel oils, will adhere to swamp vegetation • Unl ke mangroves, the roots of swamp forest trees are not exposed; thus, little damage to trees is expected. Any underbrush vegetation, however, would be severely impacted	• No cleanup recommended under light conditions • Under moderate to heavy accumulations, to prevent chronic oil pollution of surrounding areas placement of sorbent along fringe swamp forest (to absorb oil as it is slowly released) may be effective under close scientific supervision • Proper strategic boom placement may be highly effective in trapping large quantities of oil, thus reducing oil impact to interior swamp forests • Oil trapped by boom can be reclaimed through the use of skimmers and vacuums

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

TYPES	DESCRIPTION	PREDICTED OIL IMPACT	RECOMMENDED CLEANUP ACTIVITY
Open water	• Have ocean-like waves and currents • Weather changes effect on-water conditions • River mouths present problems • Thermal stratification occurs	• Most organisms are mobile enough to move out of the spill area • Aquatic birds are vulnerable to oiling • Human usage (such as transportation, water intakes, and recreational activities) may be restricted	• Booming, skimming, vacuuming, and natural recovery are the preferred cleanup methods • Should not use sorbents, containment booming, skimming, and vacuuming on gasoline spills • Cleanup options include physical herding, sorbents, and debris/vegetation removal
Large rivers	• May have varying salinities, meandering channels, and high flow rates • May include man-made structures (such as dams and locks) • Water levels vary seasonally • Floods generate high suspended sediment and debris loads	• Fish and migratory birds are of great concern • Under flood conditions, may impact highly sensitive areas in floodplains • Human usage may be high • When sediments are contaminated, oil may persist for years	• Booming, skimming, and vacuuming are the preferred cleanup methods • Should not use sorbents, containment booming, skimming, and vacuuming on gasoline spills • Cleanup options include natural recovery, physical herding, sorbents, and debris/vegetation removal
Small lakes and ponds	• Water surface can be choppy • Water levels can fluctuate widely • May completely freeze in winter • Bottom sediments near the shore can be soft and muddy • Surrounding area may include wet meadows and marshes	• Wildlife and socioeconomic areas l kely to be impacted • Wind will control the oil's distribution	• Booming, skimming, vacuuming, and sorbents are the preferred cleanup methods • Should not use containment booming, vacuuming, sorbents, and skimming on gasoline spills • Cleanup options include physical herding, sorbents, and debris/vegetation removal
Small rivers and streams	• Wide range of water bodies - fast flowing streams to slow moving bayous with low muddy banks and fringed with vegetation • May include waterfalls, rapids, log jams, mid-channel bars, and islands • Weathering rates may be slower because spreading and evaporation are restricted	• Usually contaminate both banks and the water column, exposing a large number of biota to being oiled • Water intakes for drinking water, irrigation, and industrial use likely to be impacted	• Booming, skimming, vacuuming, sorbents, barriers, and berms are the preferred cleanup methods • Should not use containment booming, sorbents, vacuuming, and skimming on gasoline spills • Cleanup options include physical herding, natural recovery, debris removal, vegetation removal, and in-situ burn

6.3 SENSITIVE AREA PROTECTION

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

FIGURE 6.3-1 - SENSITIVE AREA PROTECTION IMPLEMENT SEQUENCE

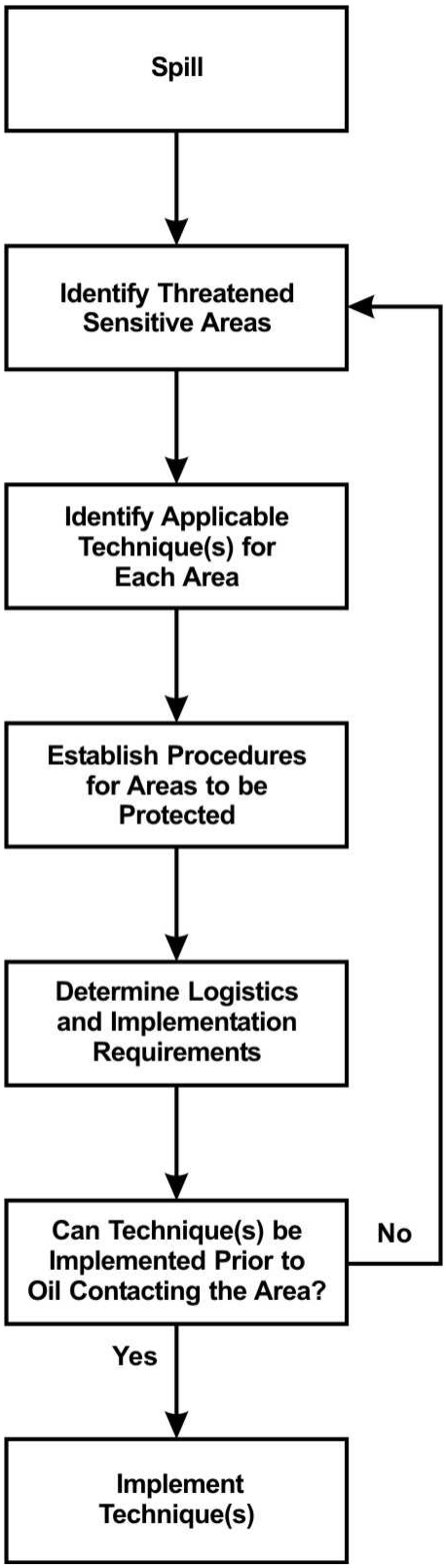


FIGURE 6.3-2 - SUMMARY OF SHORELINE AND TERRESTRIAL CLEANUP TECHNIQUES

TECHNIQUE	DESCRIPTION	RECOMMENDED EQUIPMENT	APPLICABILITY	POTENTIAL ENVIRONMENTAL EFFECTS
Removal				
1. Manual Removal	Hand tool (scrapers, wire brushes, shovels, cutting tools, wheel barrows, etc.) are used to scrape oil off surfaces or recover oiled sediments, vegetation, or debris where oil conditions are light or sporadic and/or access is limited.	Equipment misc. hand tools Personnel 10-20 workers	• Can be used on all habitat types • Light to moderate oiling conditions for stranded oil or heavy oils that have formed semi-solid to solid masses • In areas where roosting or birthing animals cannot or should not be disturbed	• Sediment disturbance and erosion potential
2. Mechanical Removal	Mechanical earthmoving equipment is used to remove oiled sediments and debris from heavily impacted areas with suitable access.	Equipment motor grader, backhoe, dump truck elevating scrapers Personnel 2-4 workers plus equipment operators	• On land, wherever surface sediments are accessible to heavy equipment • Large amounts of oiled materials	• Removes upper 2 to 12 inches of sediments
3. Sorbent Use	Sorbents are applied manually to oil accumulations, coatings, sheens, etc. to remove and recover the oil.	Equipment misc. hand tools misc. sorbents Personnel 2-10 workers	• Can be used on all habitat types • Free-floating oil close to shore or stranded on shore, secondary treatment method after gross oil removal • Sensitive areas where access is restricted	• Sediment disturbance and erosion potential • Trampling of vegetation and organisms • Foot traffic can work oil deeper into soft sediments
4. Vacuum / Pumps / Skimmers	Pumps, vacuum trucks, skimmers are used to remove oil accumulations from land or relatively thick floating layers from the water.	Equipment 1-2 50- to 100-bbl vacuum trucks w/hoses 1-2 nozzle screens or skimmer heads Personnel 2-6 workers plus truck operators	• Can be used on all habitat types • Stranded oil on the substrate • Shoreline access points	• Typically does not remove all oil • Can remove some surface organisms, sediments, and vegetation

Washing				
5. Flooding	High volumes of water at low pressure are used to flood the oiled area to float oil off and out of sediments and back into the water or to a containment area where it can be recovered. Frequently used with flushing.	Equipment 1-5 100- to 200-gpm pumping systems 1 100-ft perforated header hose per system 1-2 200-ft containment booms per system 1 oil recovery device per system Personnel 6-8 workers per system	• All shoreline types except steep intertidal areas • Heavily oiled areas where the oil is still fluid and adheres loosely to the substrate • Where oil has penetrated into gravel sediments • Used with other washing techniques	• Can impact clean down gradient areas • Can displace some surface organisms if present • Sediments transported into water can affect water quality

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

TECHNIQUE	DESCRIPTION	RECOMMENDED EQUIPMENT	APPLICABILITY	POTENTIAL ENVIRONMENTAL EFFECTS
Washing, Continued				
6. Flushing	Water streams at low to moderate pressure, and possibly elevated temperatures, are used to remove oil from surface or near-surface sediments through agitation and direct contact. Oil is flushed back into the water or a collection point for subsequent recovery. May also be used to flush out oil trapped by shoreline or aquatic vegetation.	Equipment 1-5 50- to 100-gpm/ 100-psi pumping systems with manifold 1-4 100-ft hoses and nozzles per system 1-2 200-ft containment booms per system 1 oil recovery device per system Personnel 8-10 workers per system	• Substrates, riprap, and solid man-made structures • Oil stranded onshore • Floating oil on shallow intertidal areas	• Can impact clean down gradient areas • Will displace many surface organisms if present • Sediments transported into water can affect water quality • Hot water can be lethal to many organisms • Can increase oil penetration depth
7. Spot (High Pressure Washing)	High-pressure water streams are used to remove oil coatings from hard surfaces in small areas where flushing is ineffective. Oil is directed back into water or collection point for subsequent recovery.	Equipment 1-5 1,200- to 4,000-psi units with hose and spray wand 1-2 100-ft containment booms per unit 1 oil recovery device per unit Personnel 2-4 workers per unit	• Bedrock, man-made structures, and gravel substrates • When low-pressure flushing is not effective • Directed water jet can remove oil from hard to reach sites	• Will remove most organisms if present • Can damage surface being cleaned • Can affect clean down gradient or nearby areas

In Situ				
8. Passive Collection	Sorbent/snare booms or other sorbent materials are anchored at the waterline adjacent to heavily oiled areas to contain and recover oil as it leaches from the sediments.	Equipment 1,000- to 2,000- ft sorbent/snare boom 200-400 stakes or anchor systems Personnel 4-10 workers	• All shoreline types • Calm wave action • Slow removal process	• Significant amounts of oil can remain on the shoreline for extended periods of time
9. Sediment Tilling	Mechanical equipment or hand tools are used to till lightly to moderately oiled surface sediments to maximize natural degradation processes.	Equipment 1 tractor fitted with tines, dicer, ripper blades, etc. or 1-4 rototillers or 1 set of hand tools Personnel 2-10 workers	• Any sedimentary substrate that can support heavy equipment • Sand and gravel beaches with subsurface oil • Where sediment is stained or lightly oiled • Were oil is stranded above normal high waterline	• Significant amounts of oil can remain on the shoreline for extended periods of time • Disturbs surface sediments and organisms

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

TECHNIQUE	DESCRIPTION	RECOMMENDED EQUIPMENT	APPLICABILITY	POTENTIAL ENVIRONMENTAL EFFECTS
In Situ, Continued				
10. In Situ Bioremediation	Fertilizer is applied to lightly to moderately oiled areas to enhance microbial growth and subsequent biodegradation of oil.	Equipment 1-2 fertilizer applicators 1 tilling device if required Personnel 2-4 workers	• Any shoreline habitat type where nutrients are deficient • Moderate to heavily oiled substrates • After other techniques have been used to remove free product on lightly oiled shorelines • Where other techniques are destructive or ineffective	• Significant amounts of oil can remain on the shoreline for extended periods of time • Can disturb surface sediments and organisms

11. Log/Debris Burning	Oiled logs, driftwood, vegetation, and debris are burned to minimize material handling and disposal requirements. Material should be stacked in tall piles and fans used to ensure a hot, clean burn.	Equipment 1 set of fire control equipment 2-4 fans 1 supply of combustion promoter Personnel 2-4 workers	• On most habitats except dry muddy substrates where heat may impact the biological productivity of the habitat • Where heavily oiled items are difficult or imposs ble to move • Many potential applications on ice	• Heat may impact local near-surface organisms • Substantial smoke may be generated • Heat may impact adjacent vegetation
12. Natural Recovery	No action is taken and oil is allowed to degrade naturally.	None required	• All habitat types • When natural removal rates are fast • Degree of oiling is light • Access is severely restricted or dangerous to cleanup crews • When cleanup actions will do more harm than natural removal	• Oil may persist for significant periods of time • Remobilized oil or sheens may impact other areas • Higher probability of impacting wildlife
13. Dispersants (use of dispersants requires Federal or State approval)	Dispersants are used to reduce the oil/water interfacial tension thereby decreasing the energy needed for the slick to break into small particles and mix into the water column. Specially formulated products containing surface-active agents are sprayed from aircraft or boats onto the slick.	Dispersants Boat or aircraft	• Water bodies with sufficient depth and volume for mixing and dilution • When the impact of the floating oil has been determined to be greater than the impact of dispersed oil on the water-column community	• Use in shallow water could affect benthic resources • May adversely impact organisms in the upper 30 feet of the water column • Some water-surface and shoreline impacts could occur
1 Per 1000 feet of shoreline or oiled area				

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

6.4 ALTERNATIVE RESPONSE STRATEGIES

While mechanical cleanup and recovery is always the initial and primary response tool, other response technologies are considered by the Region X RRT and Northwest Area Committee to be integral components of effective spill response that should to be available for use, as appropriate, in a timely and efficient manner. The use of response technologies such as in-situ burning, dispersants, and other oil spill cleanup agents should be considered when the environmental benefit of their use is expected to outweigh adverse effects.

As required by Section 300.905 of the NCP, in order for a FOSC to authorize the use of a dispersing, surface washing, surface collecting or bioremediation agent, it must be listed on the NCP Product Schedule. Burning agents are not listed on the NCP Product Schedule. The U.S. EPA maintains the NCP Product Schedule and it can be found at http://www.epa.gov/oilspill/ncp.

6.4.1 Dispersants

Dispersants - Applying chemical agents, usually by aircraft, to aid in breaking up surface slicks and dispersing oil within the water column. (See Section 4610 of the NWAC for more policy on dispersant use)

Areas within the Region X RRT and Northwest Area Committee area of responsibility fall into three different zones with respect to dispersant use: a pre-approval zone, case-by-case approval zones, or no dispersant use zones (See NWAC Section 4610 “Region X RRT Dispersant Use Zones Summary Table”).

Within a designated pre-approval zone, the FOSC may authorize the use of dispersants without further concurrence or consultation with the RRT. The FOSC will determine whether to authorize the use of dispersants through the information gathering and decision-making process outlined in the “FOSC Dispersant Authorization Checklist” (NWACP Section 4611).

The Dispersant **Pre-Approval Zone** is as follows:

- Marine waters 3 to 200 nautical miles from the coastline or an island shoreline ***except*** for waters designated as a part of a National Marine Sanctuary and the Makah Tribe Usual and Accustom marine area or waters within three miles of the border of the Country of Canada, the State of California, or the Makah Tribe Usual and Accustom marine area.

The Dispersant **Case-by-Case Approval Zones** are as follows:

- All marine waters that are both within 3 nautical miles from the coastline or an island shoreline and greater than 10 fathoms (60 feet) in depth.
- Waters designated as a part of a National Marine Sanctuary and waters that are part of the Makah Tribe Usual and Accustom marine area, which are also greater than 10 fathoms (60 feet) in depth.
- Waters of the Strait of Juan de Fuca and North Puget Sound from Point Wilson to Admiralty Head and north, and greater than 10 fathoms (60 feet) in depth.
- Marine waters within 3 miles of the borders of the State of California, Makah Tribe Usual and Accustom marine area, and the country of Canada. In considering the use of dispersants within 3 miles of border of State of California, the Region X RRT will consult with the Region IX RRT. In consideration of the use of dispersants within 3 miles of the Makah Tribe Usual and Accustom marine area, the Region X RRT will consult with the Makah Tribal government. In considering the use of dispersants within 3 miles of the International border with Canada, the Region X RRT will consult with the Joint Coastal Pollution Response Team (Coastal JRT) comprised of representatives of the U.S. and Canadian governments.

6.4.1 Dispersants, Continued

The **No Dispersant Use Zones** are as follows:

- Marine waters that are both less than three nautical miles from the coastline and less than or equal to 10 fathoms (60 feet) in depth.
- Marine waters south of a line drawn between Point Wilson (48° 08' 41" N, 122° 45' 19" W) and Admiralty Head (48° 09' 20" N, 122° 40' 70" W).
- Freshwater environments.

The Northwest Area Contingency Plan Checklist for gathering dispersant use information is provided in **SECTION 5.7**.

6.4.2 Bioremediation

The use of bioremediation in open water is an unproven technology that currently shows little or no promise of removing significant quantities of oil from the surface of the water prior to shoreline impact or natural dispersion. Bioremediation by nutrient enhancement or seeding of biodegrading organisms is therefore not allowed on the surface of open water. This policy can be reviewed by the RRT if there is new and significant evidence that bioremediation can be a significant factor in oil removal on open water.

Bioremediation of Shorelines
Seeding of exotic organisms for pollution response is prohibited in Response Region Ten. This is due to unproven efficacy of such procedures and the unknown ecological effects resulting from the implementation of such.

Bioremediation is an effective technique for the encouragement of oil biodegradation on some contaminated shorelines. Nonetheless, this strategy is unlikely to lead to rapid decontamination of beaches. Consequently, bioremediation should be used as the primary treatment only when oil concentrations are low (less than 15 grams of oil for every kilogram of sediment) and conventional forms of cleanup (heavy equipment use or manual cleaning) are likely to do more damage than good. Bioremediation should be considered as a polishing technique after gross contamination is removed by conventional means.

The use of bioremediation for oil spill clean up will be allowed only on a case-by-case basis.

6.4.3 In-Situ Burn

The purpose of the policy is to define the conditions under which burning may occur on a pre-approved or case-by-case basis and define conditions under which burning will not be allowed. The complete policy defines the procedure for arriving at the decision to burn or not to burn, describes the regulatory and statutory framework, and provides background information on logistics, environmental impacts, health and safety, and monitoring. The policy applies to all marine waters as well as inland areas covered by the Northwest Area Plan. This section summarizes key sections of the policy.

It is the policy of the Northwest Area Committee to use, and in certain cases, encourage in-situ burning, provided that requirements specified herein have been met. A primary consideration in the decision to burn is the protection and safety of human life. The authority to approve a burn rests with the Unified Command, who must determine that an application to burn conforms to these guidelines. The decision to burn or not burn must be made expeditiously.

Pre-approval areas are defined as those areas, which are more than three miles from population. All other areas will be considered on a case-by-case basis. Monitoring and sampling will be conducted where there is the potential for people to be exposed to the smoke. As general guidance, people should not be exposed to small particles (PM-10) in concentrations that exceed 150 micrograms per cubic meter of air averaged over one hour. The concentrations should never exceed 150 micrograms per cubic meter averaged over 24 hours.

6.4.3 In-Situ Burn, Continued

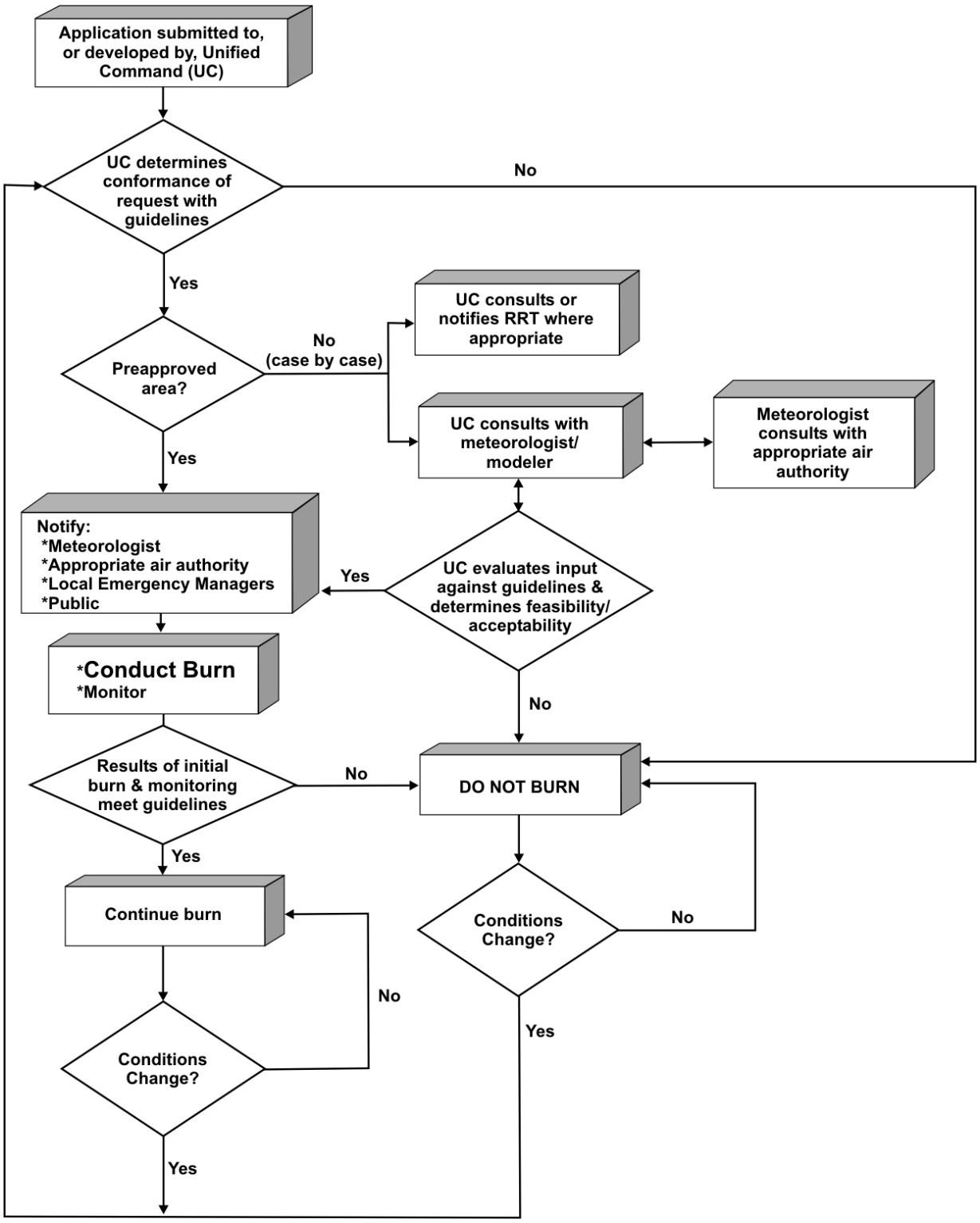
Authorization Procedures

These guidelines provide a common decision-making process to evaluate the appropriateness of using in-situ burning during a spill response. The process is based on the premise that a rapid decision is essential if in-situ burning is ever to be used since oil emulsifies (becomes mixed with water) and is more difficult to ignite as time goes on. Therefore, the fewest number of decision-makers as possible are involved in deciding whether or not to burn.

Under these guidelines, authorization to use in-situ burning rests with the Unified Command (UC). The UC consists of federal, state, and responsible party on-scene coordinators as well as local and tribal on-scene coordinators, as appropriate. The UC, as part of the Incident Command System (ICS), is responsible for overseeing the entire response effort, which includes the decision to use in-situ burning. The decision process is greatly expedited by the use of the unified command structure, by the establishment of a single application (see attached checklist and worksheet located after the decision process flowchart), and mutually agreed upon operational controls. **FIGURE 6.4-1** summarizes the in-situ burn decision process.

Refer to NWAC Section 4621 for In-Situ Burn Policy detail.

FIGURE 6.4-1 - IN-SITU BURN DECISION PROCESS



6.4.4 Decanting

When oil is spilled on the water, mechanical recovery of the oil is the principal approved method of responding. However, the mechanical recovery process and associated systems necessarily involve placing vessels and machinery in a floating oil environment. Incidental returns of oil into the response area, such as oil that falls back into the recovery area from vessels and machinery that are immersed and working in the oil, are an inevitable part of the mechanical recovery process. Similarly, separation or "decanting" of water from recovered oil and return of excess water into the response area can be vital to the efficient mechanical recovery of spilled oil because it allows maximum use of limited storage capacity, thereby increasing recovery operations.

This practice is currently recognized as a necessary and routine part of response operations that is appropriately addressed in Area Contingency Plans. (See National Contingency Plan Revisions, 59 F.R. 47401, Sept. 15, 1994.) In addition, some activities, such as those associated with oil recovery vessels, small boats, and equipment-cleaning operations, may result in incidental discharges. These activities may be necessary to facilitate response operations on a continuing basis, and all of these activities are considered to be "incidental discharges."

Decanting Policy

This policy addresses "incidental discharges" associated with spill response activities. "Incidental discharge" means the release of oil and/or oily water within the response area in or proximate to the area in which oil recovery activities are taking place during and attendant to oil spill response activities.

Incidental discharges include, but are not limited to, the decanting of oily water, oil and oily water returns associated with runoff from vessels and equipment operating in an oiled environment, and the wash down of vessels, facilities, and equipment used in the response. "Incidental discharges" as addressed by this policy do not require additional permits and do not constitute a prohibited discharge. See 33 CFR 153.301, 40 CFR 300, RCW 90.56.320(1), WAC 173-201A-110, ORS 468b.305 (2)(b).

The following criteria should be considered by the FOSC and/or SOSC in determining whether to approve decanting unless circumstances dictate otherwise:

- All decanting should be done in a designated "Response Area" within a collection area, vessel collection well, recovery belt, weir area, or directly in front of a recovery system.
- Vessels employing sweep booms with recovery pumps in the apex of the boom should decant forward of the recovery pump.
- All vessels, motor vehicles, and other equipment not equipped with an oil/water separator should allow retention time for oil held in internal or portable tanks before decanting commences.
- When deemed necessary by the FOSC and/or SOSC or the response contractor a containment boom will be deployed around the collection area to minimize loss of decanted oil or entrainment.
- Visual monitoring of the decanting area shall be maintained so that discharge of oil in the decanted water is detected promptly.
- Decanting in areas where vacuum trucks, portable tanks, or other collection systems are used for shore cleanup will be subject to the same rules as vessels.

6.4.4 Decanting, Continued

The response contractor or responsible party will seek approval from the FOSC and/or SOSC prior to decanting by presenting the Unified Command with a brief description of the area for which decanting approval is sought, the decanting process proposed, the prevailing conditions (wind, weather, etc.) and protective measures proposed to be implemented. The FOSC and/or SOSC will review such requests promptly and render a decision as quickly as possible. FOSC authorization is required in all cases and SOSC authorization is required for decanting activities in state waters.

The FOSC and/or SOSC will review and provide directions and authorization as appropriate to requests to wash down vessels, facilities, and equipment to facilitate response activities.

Other activities related to possible oil discharges associated with an oil spill event, such as actions to save a vessel or protect human life, which may include such actions as pumping bilges on a sinking vessel are not covered by this policy.

6.5 WILDLIFE PROTECTION AND REHABILITATION

- The Company will support wildlife protection and rehabilitation efforts during the response, and assist in these efforts in alignment with local, state, and federal authorities and certified contractors.
- Company personnel will not attempt to rescue or clean affected wildlife, because such actions may cause harm to the individuals or may place the animals at further risk.
- Federal and state agencies responsible for wildlife capture and rehabilitation will typically coordinate capturing and rehabilitating oiled wildlife; a list of these agencies is included in **FIGURE 3.1-4**.
- Wildlife rehabilitation specialists may be utilized to assist in capturing and rehabilitating oiled animals as well as deterring unaffected animals away from the spill site.

6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Albatross, short-tailed	*Phoebastria (=Diomedea) albatrus*	Pelagic; often in regions of high productivity	E	Oregon
Butterfly, Fender's blue	*Icaricia icarioides fenderi*	Pine barrens and oak savannas on sandy soils	E	Oregon
Chub, Borax Lake	*Gila boraxobius*	Borax Lake, with its highly variable thermal springs	E	Oregon
Daisy, Willamette	*Erigeron decumbens var. decumbens*	Heavy soils in seasonally wet native or dry upland prairie grasslands	E	Oregon
Deer, Columbian white-tailed Columbia River DPS	*Odocoileus virginianus leucurus*	Farmlands, brushy areas, woods, and suburbs and gardens	E	Oregon
Desert-parsley, Bradshaw's	*Lomatium bradshawii*	Open, clay soil bottomland with seasonal standing water	E	Oregon
Fritillary, Gentner's	*Fritillaria gentneri*	Open, somewhat dry, low elevation, mixed oak-madrone woodlands	E	Oregon
Lily, Western	*Lilium occidentale*	Pacific coastal wetlands	E	Oregon
Lomatium, Cook's	*Lomatium cookii*	Bottoms of vernal pools or the tops of the mounds	E	Oregon
Meadowfoam, large flowered wooly	*Limnanthes floccosa grandiflora*	Vernal pools	E	Oregon
Milk-vetch, Applegate's	*Astragalus applegatei*	Flat seasonally moist remnants of alkaline floodplain grasslands of the Klamath Basin	E	Oregon
Popcornflower, rough	*Plagiobothrys hirtus*	Open, moist, poorly drained clay soils	E	Oregon
Rock-cress, McDonald's	*Arabis mcdonaldiana*	Rocky serpentine areas	E	Oregon
Salmon, sockeye U.S.A. (Snake River, ID stock wherever found.)	*Oncorhynchus (=Salmo) nerka*	Adult sockeye oceanic; kokanee do best in high, cold, large mountain lakes	E	Oregon
Sea turtle, leatherback	*Dermochelys coriacea*	Warm sands of tropical beaches	E	Oregon
Sucker, Lost River	*Deltistes luxatus*	Deep water lakes and impoundments; deep pools of small to medium rivers	E	Oregon
Sucker, Modoc	*Catostomus microps*	Shallow mud-bottomed pools of cool creeks	E	Oregon
Sucker, short-nose	*Chasmistes brevirostris*	Open waters of large shallow lakes and river channels	E	Oregon
Whale, humpback	*Megaptera novaeangliae*	Surface of the ocean	E	Oregon

T - Threatened
E - Endangered

6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Whale, killer Southern Resident DPS	*Orcinus orca*	Open ocean and coastal waters	E	Oregon
Wire-lettuce, Malheur	*Stephanomeria malheurensis*	Broad hilltop composed of volcanic tuff	E	Oregon
Wolf, gray Western Distinct Population Segment	*Canis lupus*	Open tundra and forests	E	Oregon
Butterfly, Oregon silverspot	*Speyeria zerene hippolyta*	Coastal salt spray meadows, stabilized dunes, montane meadows	T	Oregon
Catchfly, Spalding's	*Silene spaldingii*	Grasslands intermingled with ponderosa pine woodlands	T	Oregon
Checker-mallow, Nelson's	*Sidalcea nelsoniana*	Moist, open ground, prairie merges with deciduous woodland	T	Oregon
Chub, Hutton Tui	*Gila bicolor ssp.*	Springs in the Alkali sub basin	T	Oregon
Chub, Oregon	*Oregonichthys crameri*	Slow-moving pools, sloughs, backwaters, ponds, and reservoirs	T	Oregon
Dace, Foskett speckled	*Rhinichthys osculus ssp.*	Foskett Spring and its outflow; very small spring holes and rivulets	T	Oregon
Fairy shrimp, vernal pool	*Branchinecta lynchi*	Ephemeral water of swales and vernal pools	T	Oregon
Four-o'clock, MacFarlane's	*Mirabilis macfarlanei*	Gentle to very steep, open river canyon slopes	T	Oregon
Howellia, water	*Howellia aquatilis*	Bottom sediments of ponds and sloughs	T	Oregon
Lupine, Kincaid's	*Lupinus sulphureus (=oreganus) ssp. kincaidii (=var. kincaidii)*	Remnant upland and wetland prairies	T	Oregon
Lynx, Canada (Contiguous U.S. DPS)	*Lynx canadensis*	Mature forests with dense undergrowth	T	Oregon
Murrelet, marbled CA, OR, WA	*Brachyramphus marmoratus*	Coastal, old-growth forests of the Pacific Northwest	T	Oregon
Owl, northern spotted	*Strix occidentalis caurina*	Forest, woodlands	T	Oregon
Paintbrush, golden	*Castilleja levisecta*	Open grasslands	T	Oregon
Plover, western snowy Pacific coastal pop.	*Charadrius alexandrinus nivosus*	Coastal wetlands and coastal dune	T	Oregon
Salmon, Chinook fall Snake R.	*Oncorhynchus (=Salmo) tshawytscha*	Mainly oceanic, gravel riffles in main streams	T	Oregon

T - Threatened
E - Endangered

6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Salmon, Chinook lower Columbia R.	*Oncorhynchus (=Salmo) tshawytscha*	Mainly oceanic, gravel riffles in main streams	T	Oregon
Salmon, Chinook spring/summer Snake R.	*Oncorhynchus (=Salmo) tshawytscha*	Mainly oceanic, gravel riffles in main streams	T	Oregon
Salmon, Chinook upper Willamette R.	*Oncorhynchus (=Salmo) tshawytscha*	Mainly oceanic, gravel riffles in main streams	T	Oregon
Salmon, chum Columbia R.	*Oncorhynchus (=Salmo) keta*	Coastal waters; enters streams to spawn	T	Oregon
Salmon, Coho OR, CA pop.	*Oncorhynchus (=Salmo) kisutch*	Inshore waters at mid-depths or near surface; spawns in coastal streams, sometimes far inland	T	Oregon
Sea turtle, green except where endangered	*Chelonia mydas*	Coasts, open sea	T	Oregon
Sea turtle, loggerhead	*Caretta caretta*	Estuaries, coastal streams and salt marshes	T	Oregon
Sea lion, Steller eastern pop.	*Eumetopias jubatus*	Coastal waters near shore and over the continental slope	T	Oregon
Steelhead lower Columbia R.	*Oncorhynchus (=Salmo) mykiss*	Small headwater streams, large rivers, lakes, or reservoirs	T	Oregon
Steelhead middle Columbia R.	*Oncorhynchus (=Salmo) mykiss*	Small headwater streams, large rivers, lakes, or reservoirs	T	Oregon
Steelhead Snake R. Basin	*Oncorhynchus (=Salmo) mykiss*	Small headwater streams, large rivers, lakes, or reservoirs	T	Oregon
Steelhead upper Willamette R.	*Oncorhynchus (=Salmo) mykiss*	Small headwater streams, large rivers, lakes, or reservoirs	T	Oregon
Sturgeon, North American green U.S.A. (CA) Southern Distinct Population Segment	*Acipenser medirostris*	Freshwater and Saltwater	T	Oregon
Sucker, Warner	*Catostomus warnerensis*	Spawns over silt-free gravel substrate in low gradient streams	T	Oregon
Thelypody, Howell's spectacular	*Thelypodium howellii spectabilis*	Moist, moderately well-drained, somewhat alkaline meadows	T	Oregon
Trout, bull U.S.A., conterminous, lower 48 states	*Salvelinus confluentus*	Bottom of deep pools in cold rivers and large tributary streams	T	Oregon
Trout, Lahontan cutthroat	*Oncorhynchus clarki henshawi*	Inshore marine and estuarine waters; lakes; coastal, inland, and alpine streams	T	Oregon

T - Threatened
E - Endangered

6.7 VULNERABILITY ANALYSIS (DETAILED)

(b) (7)(F) [redacted]
Schools:
Medical Facilities:

6.7 VULNERABILITY ANALYSIS (DETAILED) , CONTINUED

VULNERABILITY ANALYSIS (DETAILED)
Residential Areas:
There are minor residential areas nearby.
Businesses:
64 SCAPPOOSE BAY MARINA
Wetlands or Other Sensitive Environments:
109 RIDGEFIELD NWR USFWS REFUGE 54 VANCOUVER REGION FIVE OFFICE

6.7 VULNERABILITY ANALYSIS (DETAILED), CONTINUED

VULNERABILITY ANALYSIS (DETAILED)
Fish and Wildlife:
Refer to SECTION 6.6
Lakes and Streams:
Endangered Flora and Fauna:
Refer to SECTION 6.6

6.7 VULNERABILITY ANALYSIS (DETAILED), CONTINUED

VULNERABILITY ANALYSIS (DETAILED)
Recreational Areas:
20 BOAT RAMP 29 MULTNOMAH CHANNEL BOAT RAMP 21 BOAT RAMP 25 BOAT RAMP 74 KELLY POINT PARK
Transportation Routes (Air, Water, Land):
Willamette River Channel
Utilities:
Other Applicable Areas:

6.8 TACTICAL OVERVIEW MAP

Please see section 6.10 for tactical response plans

6.9 TACTICAL PLAN INDEX

SITE #	SITE NAME
Site 1	Willbridge Initial Response
Site 2	Initial Response - Group V Oil

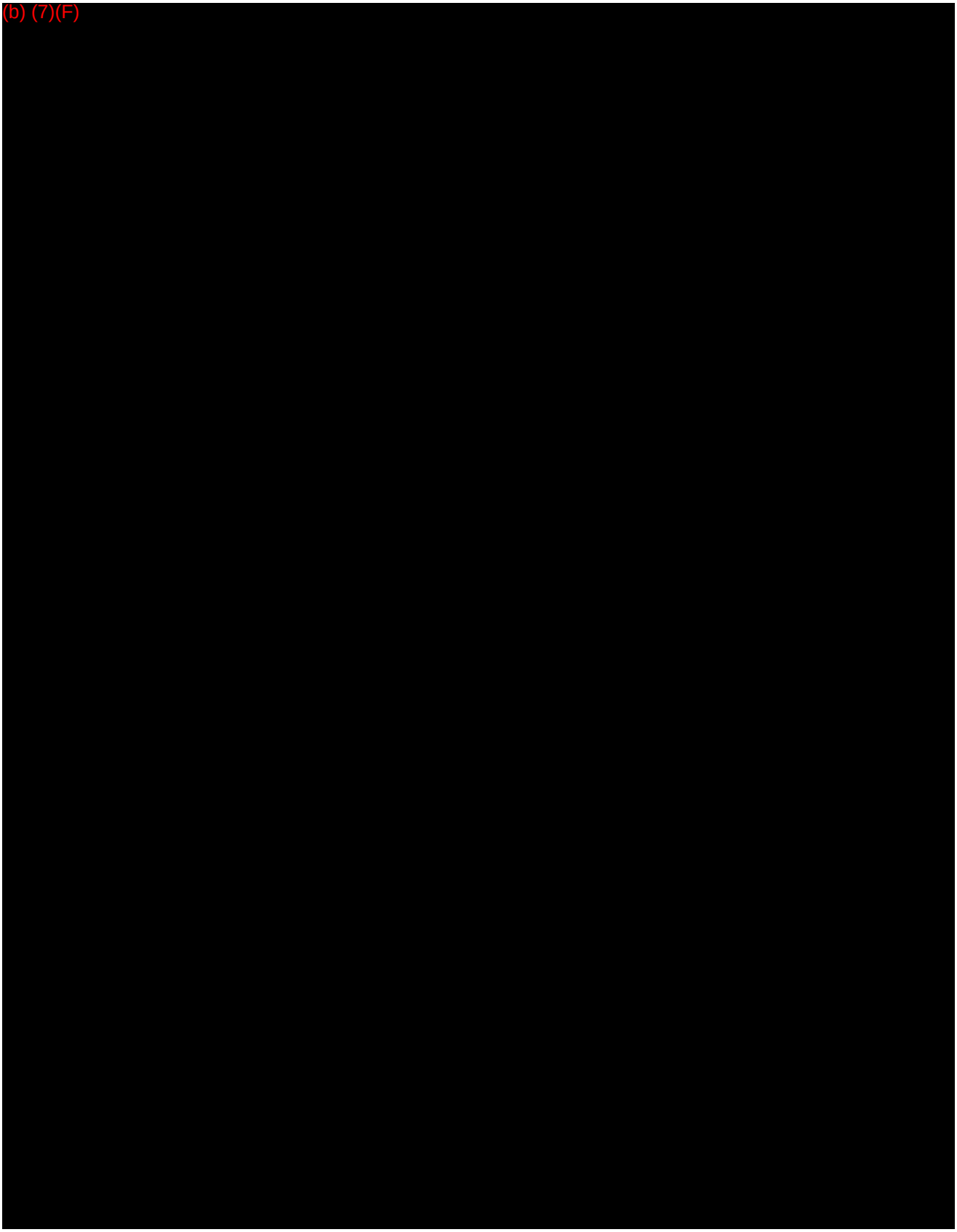
6.10 TACTICAL PLANS

(b) (7)(F)

[redacted]

6.10 TACTICAL PLANS , CONTINUED

(b) (7)(F)

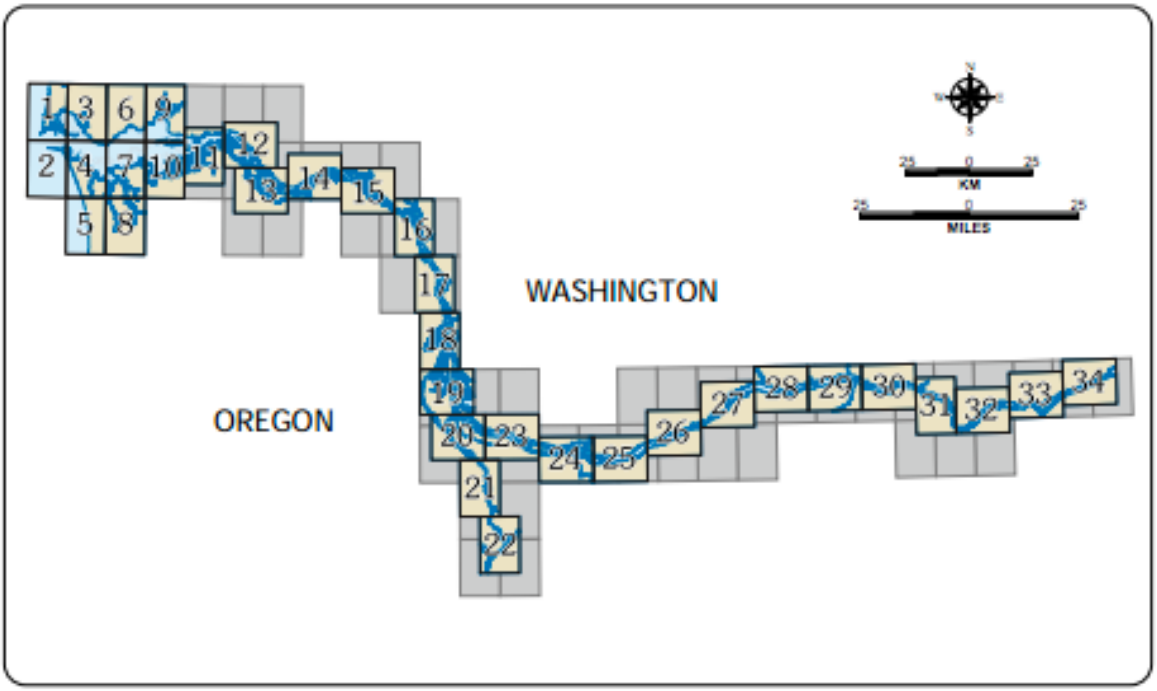


6.11 SENSITIVITY MAPS

Sensitivity of Estuarine and Riverine Environments and Wildlife to Spilled Oil

COLUMBIA RIVER

Atlas



Supported by:

National Oceanic and Atmospheric Administration

National Ocean Service

Coastal Storms Initiative

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

In cooperation with:

U.S. Fish and Wildlife Service

NOAA Fisheries

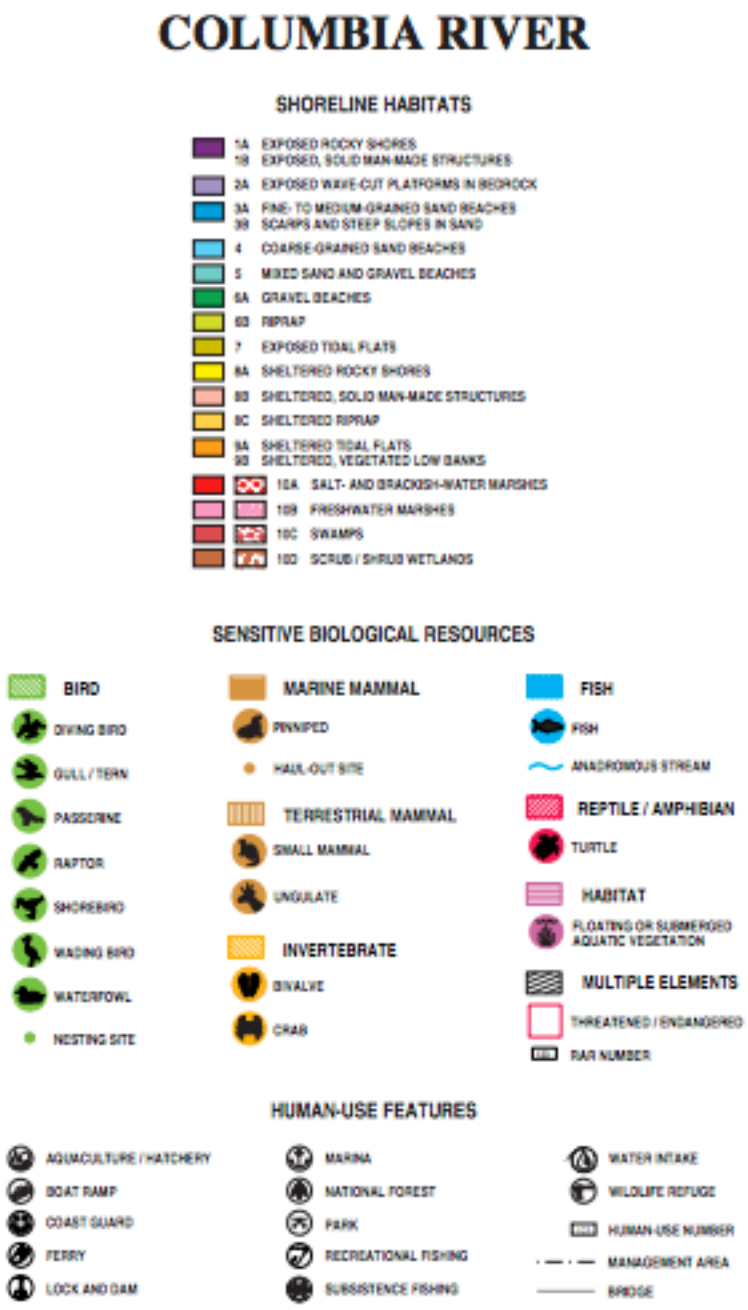
State of Oregon

State of Washington

The Columbia River ESI was supported with funds from NOAA's Coastal Storms Initiative. The Coastal Storms Initiative is a nationwide effort led by the National Oceanic and Atmospheric Administration to lessen the impacts to coastal communities from storms.

JUNE 2004

6.11 SENSITIVITY MAPS



Guidelines for Interpreting ESI Maps

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

• Shoreline Habitats. The "shoreline," representing the boundary between land and water, is color-coded with the ESI classification. Most shoreline habitats are shown as a line, with no areal dimension. Where there is more than one shoreline type (e.g., a beach in front of a seawall), the colors for each habitat are shown, with the color for the landward habitat on the land side of the shoreline and the color for the seaward habitat on the water side. In areas where the intertidal zone is wide (e.g., wide tidal flats, wave-cut rocky platforms), the habitat from high to low water is filled with the ESI classification color. When data are available, the entire extent of wetlands are filled with colored patterns. The seaward edge of the wetland is color-coded with the ESI classification; the landward extent of the wetland is indicated by a dashed, colored line.

• Biological Resources. The distribution of biological resources is shown using many different conventions. The major convention is an icon associated with a point, line, or polygon that shows the species' areal distribution. The icon's reference number corresponds to a data table with details on species and life history. Biological resource data are organized into six major groups, each with a reference color: birds (green), mammals (brown), fish (blue), shellfish (orange), reptiles (red), and rare/endangered plants and special habitats (purple). These colors are used to fill hatched polygons and the icons. Each major group has subgroups with unique icons to visually indicate the type of organism or feature present. The icon or group of icons is usually located inside the polygon it represents; however, sometimes a line is connected between the icon and the polygon or point to make it easier to relate the two. Note that icons are used to indicate the types of resources present, but the actual data are the points and polygons. A red box around an icon indicates the presence of a species on the state or Federal list of threatened or endangered species.

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

A data table has a separate listing for every unique combination of species, concentration, seasonality, life-history stage, and source. By looking at the monthly seasonality data in the table for each map, the species present at the time of concern can be easily identified. An 'X' or number is placed under each month in which any life stage of the species is present in the area represented by the point or polygon. Numbers are used typically for fish and shellfish where data on relative abundance are available. The final columns in the data tables include the months when reproductive activities occur or early life stages are present. Users should pay close attention to the data tables because they contain much of the information needed to identify the most sensitive resources at different times of the year.

Points, lines, and polygons on a map represent the distribution of the resources. Green points show bird nesting sites, including bald eagle nests and dense colonial nesters (e.g., heron rookeries and seabird nesting colonies). Animals and habitats are also represented as: 1) hatched polygons in the color for the animal group (e.g., green for birds); 2) black hatched polygons which contain multiple groups of resources (birds and fish in the same tidal channels); 3) solid lines (usually used for fish in small streams); or 4) in "common in ..." boxes. When showing the biological resource polygons would make the maps too difficult to read (usually when multiple polygons cover a large area), the polygons are not plotted and the presence of the resource is indicated by placing the icon in a box labeled "common in ..." The box contains an appropriate geographic reference. Different boxes can be used on the same map when, for example: "common in Winyah Bay" or "common in tidal creeks." The data for these resources are still fully present in the database but are not shown to make the maps more readable.

▪ Human-use Resources. Most of the human-use resources are point features indicated by a black-and-white icon. Managed lands, such as refuges and sanctuaries, have their boundaries shown as a dot-dash line with an icon and name placed inside. Where the feature is a known point location (e.g., a drinking water intake, boat ramp, marina), the exact location is shown as a small black dot and a line is drawn from it to the icon. Activities such as commercial and recreational fishing and areas such as recreational beaches are also indicated by an icon placed in the general area without any lines to points or polygons since the boundaries are not readily defined.

Some features, like historic and archaeological sites, are location-sensitive: the agency managing the resource believes the exact location should not be shown in order to protect the site. In these cases, the icon is placed in the general area of the resource, but the exact location is not shown.

06.11 SENSITIVITY

Columbia River: ESIMAP 18

BIOLOGICAL RESOURCES:

BIRD:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
7	Canada goose					X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
	Common goldeneye					X	X									X	X	-	-	-
	Scaup					X	X	X	X	X			X	X	X	X		-	-	-
	Dabbling ducks					X	X	X	X	X			X	X	X	X		-	-	-
17	Bald eagle	T	T		1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
19	Bald eagle	T	T		3 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
30	Bald eagle	T	T		2 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
71	Dusky Canada goose					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Geese				35000	X	X									X	X	-	-	-
	Greater white-fronted goose					X	X	X	X	X			X	X	X	X	X	-	-	-
	Tundra swan					X	X	X	X	X				X	X	X	X	-	-	-
	Ducks				50000	X	X									X	X	-	-	-
	Swans				3500	X	X	X	X	X				X	X	X	X	-	-	-
	Canada goose				400N	X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
72	Sandhill crane				4200	X	X	X	X	X					X	X	X	-	-	-
73	Sandhill crane				400N	X	X	X	X	X					X	X	X	-	-	-
	Peregrine falcon					X	X	X							X	X	X	FEB-MAR	-	-
74	Great egret				2-5 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Great blue heron				500 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
76	Sandhill crane				225	X	X	X	X	X					X	X	X	-	-	-
	Green-winged teal				150	X	X	X	X	X				X	X	X	X	-	-	-
	Ducks				650	X	X									X	X	-	-	-
	Canada goose				1300	X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
77	Killdeer					X	X				X	X	X	X	X	X	X	-	-	-
	Trumpeter swan					X	X	X	X	X				X	X	X	X	-	-	-
	Tundra swan					X	X	X	X	X				X	X	X	X	-	-	-
	Waterfowl				250000	X	X									X	X	-	-	-
	Bald eagle	T	T			X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Shorebirds				15000			X	X	X				X	X	X		-	-	-
	Spotted sandpiper					X	X	X	X	X				X	X	X	X	-	-	-
79	Waterfowl				800	X	X									X	X	-	-	-
	Purple martin							X	X	X	X	X	X	X	X			MAY-SEP	-	-
81	Sandhill crane				PRESENT	X	X	X	X	X					X	X	X	-	-	-
82	Killdeer					X	X				X	X	X	X	X	X	X	-	-	-
	Geese					X	X									X	X	-	-	-
	Shorebirds				10000			X	X	X				X	X	X		-	-	-
	Waterfowl					X	X									X	X	-	-	-
	Spotted sandpiper					X	X	X	X	X				X	X	X	X	-	-	-
83	Bald eagle	T	T		5 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
84	Osprey						X	X	X	X	X	X	X					MAR-SEP	-	-

FISH:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
7	Chinook salmon (summer)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	SEP-APR	-	MAR-SEP	JUN-NOV
	Sockeye salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	-	-	JAN-DEC	AUG-FEB
	White sturgeon					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Coastal Cutthroat trout	C		SA		X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	JAN-JUN	-	JAN-DEC	JAN-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Chum salmon	*	*			X	X	X	X	X				X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Chinook salmon (spring)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP
	Steelhead (summer)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	JAN-JUN	-	JAN-DEC	MAR-OCT
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Bull trout	C	T			X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	SEP-JAN	-	JAN-DEC	JAN-DEC
79	White crappie					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Smallmouth bass					X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-	-	JAN-DEC
	Walleye					X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	-	-	-	JAN-DEC
80	Salmon				400N	X	X	X	X	X	X	X	X	X	X	X	X	-	-	JAN-DEC	JAN-DEC	JAN-DEC
	White sturgeon				400N	X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	-	JAN-DEC
84	Salmon					X	X	X	X	X	X	X	X	X	X	X	X	-	-	JAN-DEC	JAN-DEC	JAN-DEC
85	Chum salmon	*	*			X	X	X	X	X				X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
138	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
209	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
220	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
221	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
222	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
226	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Chinook salmon (spring)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP
228	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Chum salmon	*	*			X	X	X	X	X				X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
233	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Chinook salmon (spring)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP
	Chum salmon	*	*			X	X	X	X	X				X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Smelt	C		SA		X	X	X	X	X	X						X	DEC-APR	JAN-MAR	-	JAN-MAY	DEC-APR

HABITAT:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
75	Water howellia	T	T	WA	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X
81	Water howellia	T	T	WA	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X

REPTILE:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Intersesting	Juveniles	Adults
77	Western painted turtle					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-

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

MAPS

Columbia River: ESIMAP 18 (cont.)

BIOLOGICAL RESOURCES: (cont.)

TERRESTRIAL MAMMAL:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
71	Northern river otter					X	X	X	X	X	X	X	X	X	X	X	X
	Beaver					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Muskrat					X	X	X	X	X	X	X	X	X	X	X	X
	Mink					X	X	X	X	X	X	X	X	X	X	X	X
77	Northern river otter				PRESENT	X	X	X	X	X	X	X	X	X	X	X	X
	Beaver				PRESENT	X	X	X	X	X	X	X	X	X	X	X	X
	Mink				PRESENT	X	X	X	X	X	X	X	X	X	X	X	X

HUMAN USE RESOURCES:

BOAT RAMP:

HUM#	Name	Contact	Phone
28	BOAT RAMP		
29	MULTNOMAH CHANNEL BOAT RAMP		

MARINA:

HUM#	Name	Contact	Phone
64	SCAPPOOSE BAY MARINA	MARINA MANAGER	503/397-2888

WATER INTAKE:

HUM#	Name	Contact	Phone
103	RIDGEFIELD NWR WATER INTAKES	REFUGE MANAGER	360/887-3883
104	SAUVIE ISLAND, ODFW	MARK NEDEKER	503/621-3488

WILDLIFE REFUGE:

HUM#	Name	Contact	Phone
109	RIDGEFIELD NWR	USFWS REFUGE MANAGER	360/887-4106
110	SAUVIE ISLAND WILDLIFE AREA	ODFW	503/621-3488

Columbia River: ESIMAP 19

BIOLOGICAL RESOURCES:

BIRD:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
7	Canada goose					X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
	Common goldeneye					X	X								X	X		-	-	-
	Scaup					X	X	X	X	X			X	X	X	X		-	-	-
	Dabbling ducks					X	X	X	X	X			X	X	X	X		-	-	-
17	Bald eagle	T	T		1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
30	Bald eagle	T	T		2 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
77	Killdeer					X	X			X	X	X	X	X	X	X	X	-	-	-
	Trumpeter swan					X	X	X	X	X			X	X	X	X		-	-	-
	Tundra swan					X	X	X	X	X			X	X	X	X		-	-	-
	Waterfowl				250000	X	X									X	X	-	-	-
	Bald eagle	T	T			X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Shorebirds				15000			X	X	X			X	X	X			-	-	-
	Spotted sandpiper					X	X	X	X	X			X	X	X	X		-	-	-
81	Sandhill crane				PRESENT	X	X	X	X	X					X	X	X	-	-	-
84	Osprey							X	X	X	X	X	X	X				MAR-SEP	-	-
86	Great blue heron				6 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
87	Sandhill crane				180-200	X	X	X	X	X					X	X	X	-	-	-
	Greater white-fronted goose					X	X	X	X	X			X	X	X	X	X	-	-	-
	Ducks				1000	X	X									X	X	-	-	-
	Tundra swan					X	X	X	X	X					X	X	X	-	-	-
	Canada goose				10000	X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
88	Waterfowl				4100	X	X									X	X	-	-	-
	Sandhill crane					X	X	X	X	X					X	X	X	-	-	-
	Canada goose					X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
90	Bald eagle	T	T			X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Waterfowl				3100	X	X									X	X	-	-	-
91	Great blue heron					X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
92	Great blue heron					X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
93	Bald eagle	T	T		1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-

FISH:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
7	Chinook salmon (summer)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	SEP-APR	-	MAR-SEP	JAN-NOV
	Sockeye salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	-	-	JAN-DEC	AUG-FEB
	White sturgeon					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Coastal Cutthroat trout	C		OR		X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	JAN-JUN	-	JAN-DEC	JAN-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Chum salmon	*	*			X	X	X	X	X				X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Chinook salmon (spring)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP
	Steelhead (summer)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	JAN-JUN	-	JAN-DEC	MAR-OCT
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Bull trout	C	T			X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	SEP-JAN	-	JAN-DEC	JAN-DEC
84	Salmon					X	X	X	X	X	X	X	X	X	X	X	X	-	-	JAN-DEC	JAN-DEC	JAN-DEC
89	White sturgeon					X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	-	JAN-DEC
90	Salmon				4100	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
138	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
222	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
224	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Chum salmon	*	*			X	X	X	X	X				X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
226	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Chinook salmon (spring)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP

HABITAT:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
81	Water howellia	T	T	WA	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X

REPTILE:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Intersesting	Juveniles	Adult
77	Western painted turtle					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
90	Western pond turtle	E	C	WA		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Western pond turtle	C	C	OR		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Western painted turtle					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-

TERRESTRIAL MAMMAL:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
77	Northern river otter				PRESENT	X	X	X	X	X	X	X	X	X	X	X	X
	Beaver				PRESENT	X	X	X	X	X	X	X	X	X	X	X	X
	Mink				PRESENT	X	X	X	X	X	X	X	X	X	X	X	X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
21	BOAT RAMP		
25	BOAT RAMP		

PARK:

HUN#	Name	Contact	Phone
74	KELLY POINT PARK	PARK MANAGER	503/823-2223

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
109	RIDGEFIELD NWR	USFWS REFUGE MANAGER	360/887-4106
110	SAUVIE ISLAND WILDLIFE AREA	ODFW	503/621-3488

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

Columbia River: ESIMAP 20

BIOLOGICAL RESOURCES:

BIRD:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
7	Canada goose					X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
	Common goldeneye					X	X									X	X	-	-	-
	Scaup					X	X	X	X	X				X	X	X	X	-	-	-
	Dabbling ducks					X	X	X	X	X				X	X	X	X	-	-	-
13	Bald eagle	T	T		1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
84	Osprey							X	X	X	X	X	X	X				MAR-SEP	-	-
90	Bald eagle	T	T			X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Waterfowl				HIGH	X	X									X	X	-	-	-
99	Waterfowl				HIGH	X	X									X	X	-	-	-
101	Waterfowl					X	X									X	X	-	-	-

FISH:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
7	Chinook salmon (summer)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	SEP-APR	-	MAR-SEP	JUN-NOV
	Sockeye salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	-	-	JAN-DEC	AUG-FEB
	White sturgeon					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Coastal Cutthroat trout	C		CO		X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	JAN-JUN	-	JAN-DEC	JAN-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Chum salmon	*	*			X	X	X	X	X				X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Chinook salmon (spring)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP
	Steelhead (summer)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	JAN-JUN	-	JAN-DEC	MAR-OCT
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Bull trout	C	T			X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	SEP-JAN	-	JAN-DEC	JAN-DEC
84	Salmon					X	X	X	X	X	X	X	X	X	X	X	X	-	-	JAN-DEC	JAN-DEC	JAN-DEC
90	Salmon				HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
96	Common carp					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	White crappie					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Smallmouth bass					X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-	-	JAN-DEC
	Walleye					X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	-	-	-	JAN-DEC
102	Salmon				HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
103	Salmon				HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
130	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
209	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
213	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
220	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
221	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
222	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
226	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Chinook salmon (spring)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP

REPTILE:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Intersesting	Juveniles	Adults
90	Western pond turtle	E	C	WA		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Western pond turtle	C	C	CO		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Western painted turtle					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
100	Western painted turtle				PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-

HUMAN USE RESOURCES:

BOAT RAMP:

HUM#	Name	Contact	Phone
26	BOAT RAMP		

HATCHERY:

HUM#	Name	Contact	Phone
54	VANCOUVER REGION FIVS OFFICE	WDFW	

PARK:

HUM#	Name	Contact	Phone
74	KELLY POINT PARK	PARK MANAGER	503/823-2223

Columbia River: ESIMAP 21

BIOLOGICAL RESOURCES:

BIRD:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
7	Canada goose					X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
	Common goldeneye					X	X									X	X	-	-	-
	Scaup					X	X	X	X	X			X	X	X	X		-	-	-
	Dabbling ducks					X	X	X	X	X			X	X	X	X		-	-	-
30	Bald eagle	T	T		2 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
106	Great blue heron				10 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
108	Waterfowl				HIGH	X	X									X	X	-	-	-
	Mallard					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
110	Waterfowl					X	X									X	X	-	-	-

FISH:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
7	Chinook salmon (summer)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	SEP-APR	-	MAR-SEP	JUN-NOV
	Sockeye salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	-	-	JAN-DEC	AUG-FEB
	White sturgeon					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Coastal Cutthroat trout	C		CD		X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	JAN-JUN	-	JAN-DEC	JAN-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Chum salmon	*	*			X	X	X	X	X			X	X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Chinook salmon (spring)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP
	Steelhead (summer)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	JAN-JUN	-	JAN-DEC	MAR-OCT
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Bull trout	C	T			X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	SEP-JAN	-	JAN-DEC	JAN-DEC
10	Salmon					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
104	Chinook salmon (spring)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Coho salmon	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
105	White crappie					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Chinook salmon (spring)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Coho salmon	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Smallmouth bass				HIGH	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-	-	JAN-DEC
107	Chinook salmon (spring)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP
	Coho salmon	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Steelhead (winter)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Steelhead (summer)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	JAN-JUN	-	JAN-DEC	MAR-OCT
109	Coho salmon	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Steelhead (winter)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Steelhead (summer)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	JAN-JUN	-	JAN-DEC	MAR-OCT
111	White crappie					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Chinook salmon (spring)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Coho salmon	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Smallmouth bass				HIGH	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-	-	JAN-DEC
	Steelhead (winter)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Steelhead (summer)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
209	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
220	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR

TERRESTRIAL MAMMAL:

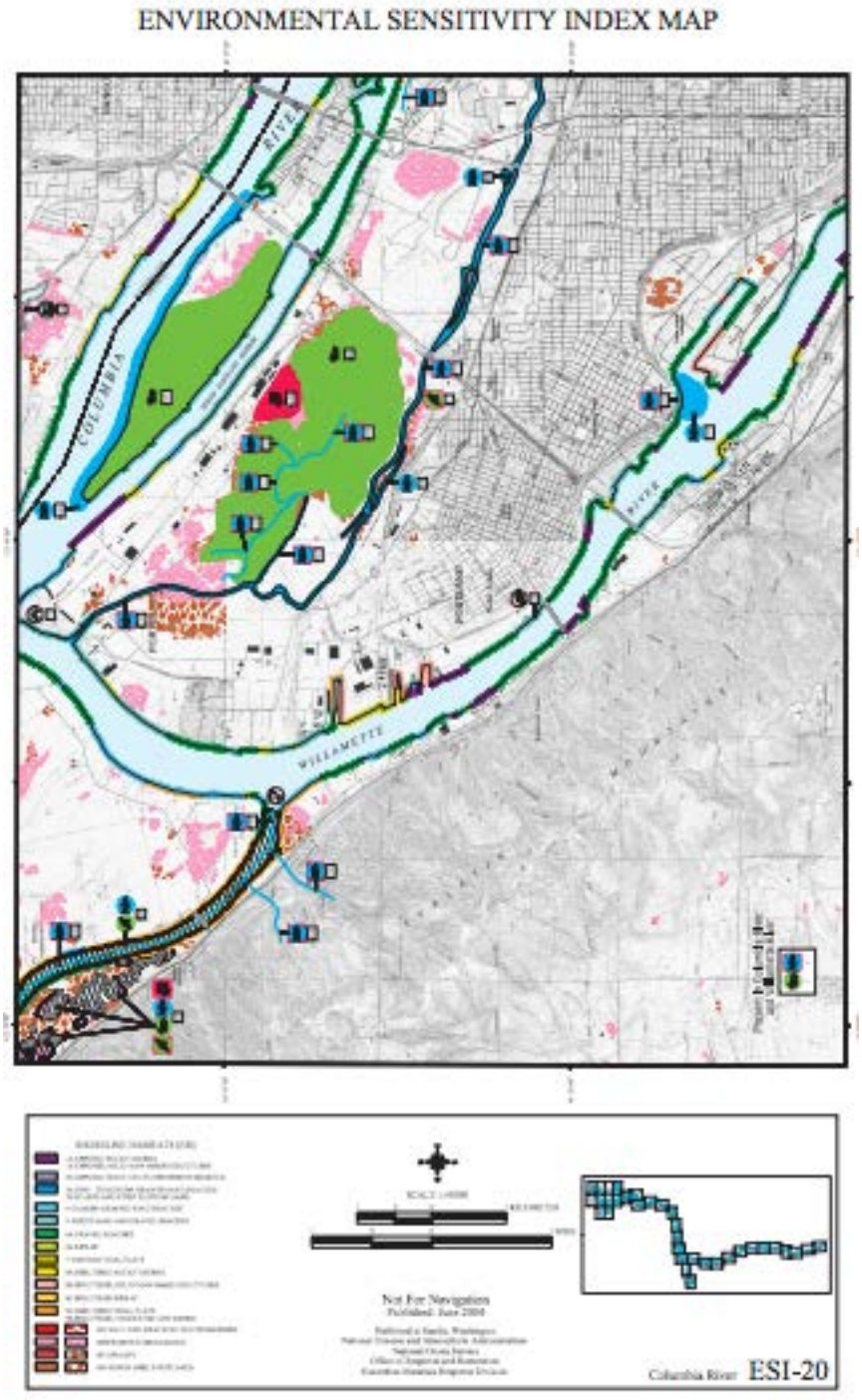
MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
108	Beaver					X	X	X	X	X	X	X	X	X	X	X	X
110	Northern river otter					X	X	X	X	X	X	X	X	X	X	X	X
	Beaver					X	X	X	X	X	X	X	X	X	X	X	X
	Mink					X	X	X	X	X	X	X	X	X	X	X	X

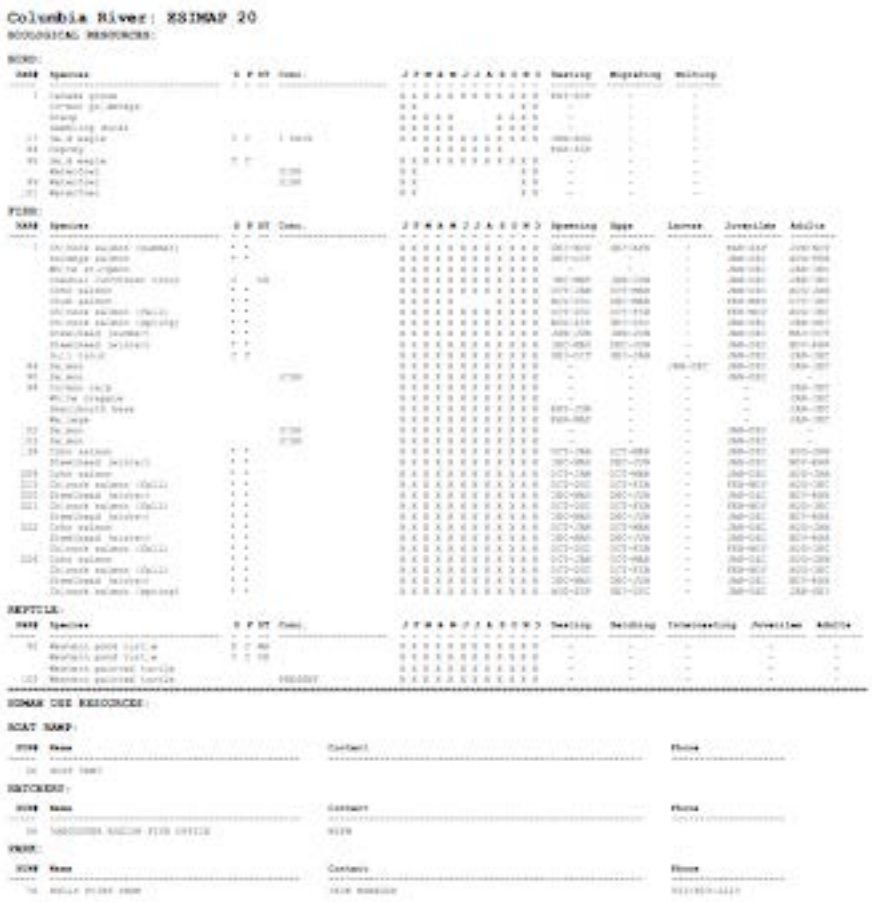
HUMAN USE RESOURCES:

BOAT RAMP:

HUM#	Name	Contact	Phone
26	BOAT RAMP		

6.11 SENSITIVITY MAPS





Columbia River: ESIMAP 20

ECOLOGICAL RESOURCES:

BIRD:

MAP#	Species	S	F	ST	Comments	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Wintering
1	Canada goose					X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Harbor porpoise					X	X									X	X		-	-
	Osprey					X	X	X	X	X	X	X	X	X	X	X	X		-	-
	Peregrine falcon					X	X	X	X	X	X	X	X	X	X	X	X		-	-
	Purple martin								X	X	X	X	X	X	X				-	-
	Red-tailed hawk					X	X	X	X	X	X	X	X	X	X	X	X		-	-
	Sandhill crane					X	X	X	X	X				X	X	X	X		-	-
11	Bald eagle	X	X		1 nest	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
44	Osprey								X	X	X	X	X	X	X			MAY-SEP	-	-
95	Bald eagle	X	X			X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Waterfowl				2,000	X	X							X	X	X	X	-	-	-
97	Waterfowl				2,000	X	X							X	X	X	X	-	-	-
101	Waterfowl					X	X							X	X	X	X	-	-	-

FISH:

MAP#	Species	S	F	ST	Comments	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
1	Chinook salmon (summer)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-NOV	OCT-APR	-	MAR-SEP	JUN-NOV
	Columbia salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-NOV	-	-	JAN-DEC	JAN-DEC
	White sturgeon					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Coastal cutthroat trout	C	YR			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	JAN-JUN	-	JAN-DEC	JAN-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	ALL YEAR
	Chum salmon	*	*			X	X	X	X	X	X			X	X	X	X	NOV-JAN	DEC-MAR	-	FEB-MAY	OCT-DEC
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-MAY	ALL YEAR
	Chinook salmon (spring)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-DEC
	Steelhead (summer)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	JAN-JUN	-	JAN-DEC	MAY-OCT
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	DEC-JUN	-	JAN-DEC	MAY-OCT
	Pacific lamprey	*	*			X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	JUN-SEP	-	JAN-DEC	JAN-DEC
44	Sea bass					X	X	X	X	X	X	X	X	X	X	X	X	-	-	JAN-DEC	JAN-DEC	JAN-DEC
90	Sea bass				2,000	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
98	Turbot jack					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	White croaker					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Smelt/shiner bass					X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-	-	JAN-DEC
	Ma_rage					X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	-	-	-	JAN-DEC
72	Sea bass				2,000	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
73	Sea bass				2,000	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
19	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	ALL YEAR
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	DEC-JUN	-	JAN-DEC	MAY-OCT
104	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	ALL YEAR
107	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-MAY	ALL YEAR
105	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	DEC-JUN	-	JAN-DEC	MAY-OCT
121	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-MAY	ALL YEAR
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	DEC-JUN	-	JAN-DEC	MAY-OCT
122	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	ALL YEAR
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	DEC-JUN	-	JAN-DEC	MAY-OCT
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-MAY	ALL YEAR
124	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	ALL YEAR
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-MAY	ALL YEAR
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	DEC-JUN	-	JAN-DEC	MAY-OCT
	Chinook salmon (spring)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-DEC

REPTILE:

MAP#	Species	S	F	ST	Comments	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Basking	Intersesting	Juveniles	Adults
91	Western pond turtle	C	C	MA		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Western pond turtle	C	C	OR		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Western painted turtle					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
123	Western painted turtle				PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-

HUMAN USE RESOURCES:

BOAT RAMP:

MAP#	Name	Contact	Phone
36	West Sand		

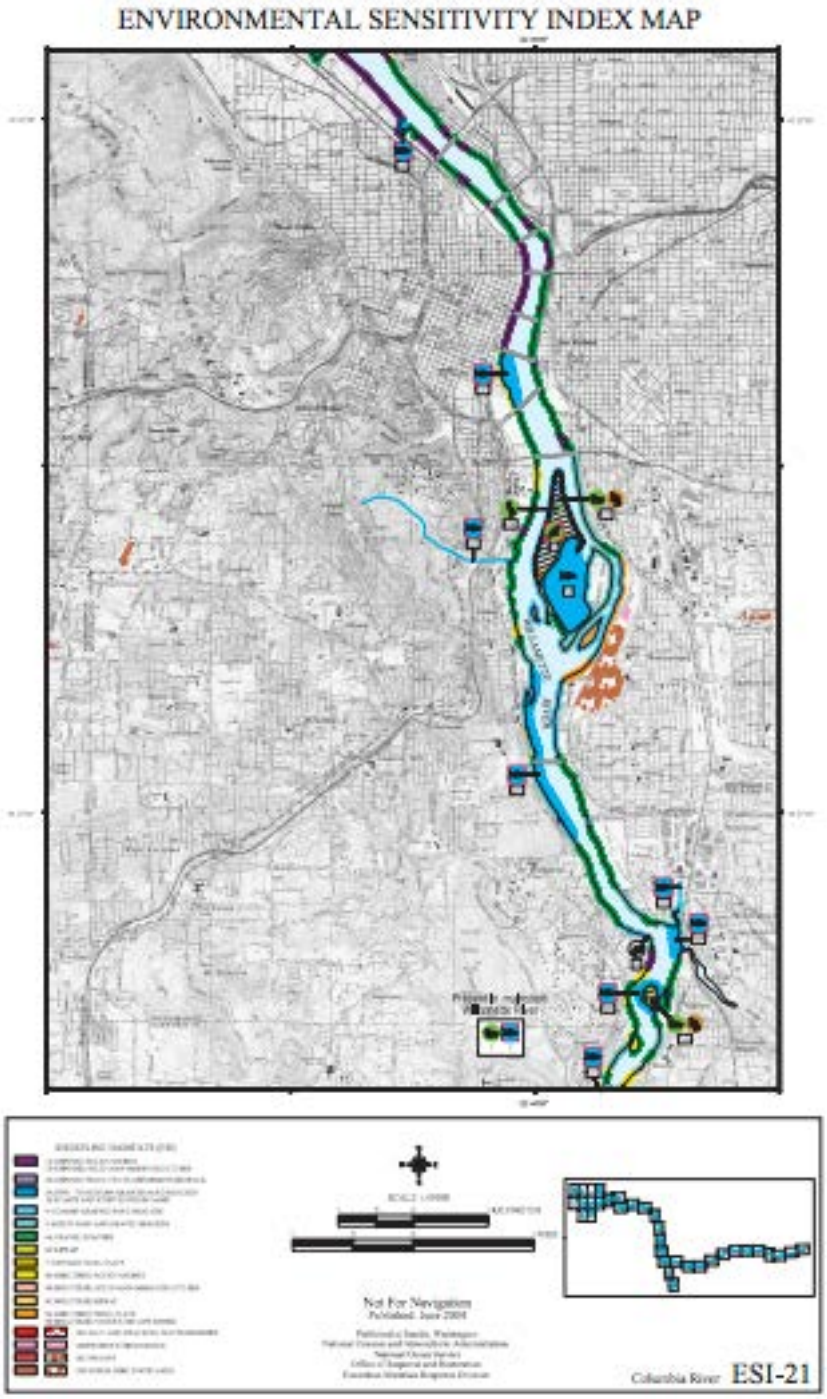
HATCHERY:

MAP#	Name	Contact	Phone
56	WASHOUGAL RIVER FISH OFFICE	MIKE	

PARK:

MAP#	Name	Contact	Phone
74	Wells State Park	Jack Hanson	503/861-1111

6.11 SENSITIVITY MAPS



Columbia River: ESIMAP 21

BIOLOGICAL RESOURCES:

BIRD:

RARE	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
7	Canada goose					X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
	Common goldeneye					X	X								X	X		-	-	-
	Scaup					X	X	X	X	X			X	X	X	X		-	-	-
	Dabbling ducks					X	X	X	X	X			X	X	X	X		-	-	-
30	Bald eagle	T	T		2 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
106	Great blue heron				10 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
108	Waterfowl				HIGH	X	X								X	X		-	-	-
	Mallard					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
110	Waterfowl					X	X								X	X		-	-	-

FISH:

RARE	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
7	Chinook salmon (summer)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	SEP-APR	-	MAR-SEP	JUN-NOV
	Sockeye salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	-	-	JAN-DEC	AUG-FEB
	White sturgeon					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Coastal Cutthroat trout	C		CO		X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	JAN-JUN	-	JAN-DEC	JAN-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Chum salmon	*	*			X	X	X	X	X			X	X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Chinook salmon (spring)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP
	Steelhead (summer)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	JAN-JUN	-	JAN-DEC	MAR-OCT
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Bull trout	C	T			X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	SEP-JAN	-	JAN-DEC	JAN-DEC
10	Salmon					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
104	Chinook salmon (spring)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Coho salmon	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
105	White crappie					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Chinook salmon (spring)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Coho salmon	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Smallmouth bass				HIGH	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-	-	JAN-DEC
107	Chinook salmon (spring)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP
	Coho salmon	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Steelhead (winter)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Steelhead (summer)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	JAN-JUN	-	JAN-DEC	MAR-OCT
109	Coho salmon	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Steelhead (winter)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Steelhead (summer)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	JAN-JUN	-	JAN-DEC	MAR-OCT
111	White crappie					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Chinook salmon (spring)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Coho salmon	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Smallmouth bass					X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-	-	JAN-DEC
	Steelhead (winter)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
	Steelhead (summer)	*	*		HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
209	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
220	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR

TERRESTRIAL MAMMAL:

RARE	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
108	Beaver					X	X	X	X	X	X	X	X	X	X	X	X
110	Northern river otter					X	X	X	X	X	X	X	X	X	X	X	X
	Beaver					X	X	X	X	X	X	X	X	X	X	X	X
	Mink					X	X	X	X	X	X	X	X	X	X	X	X

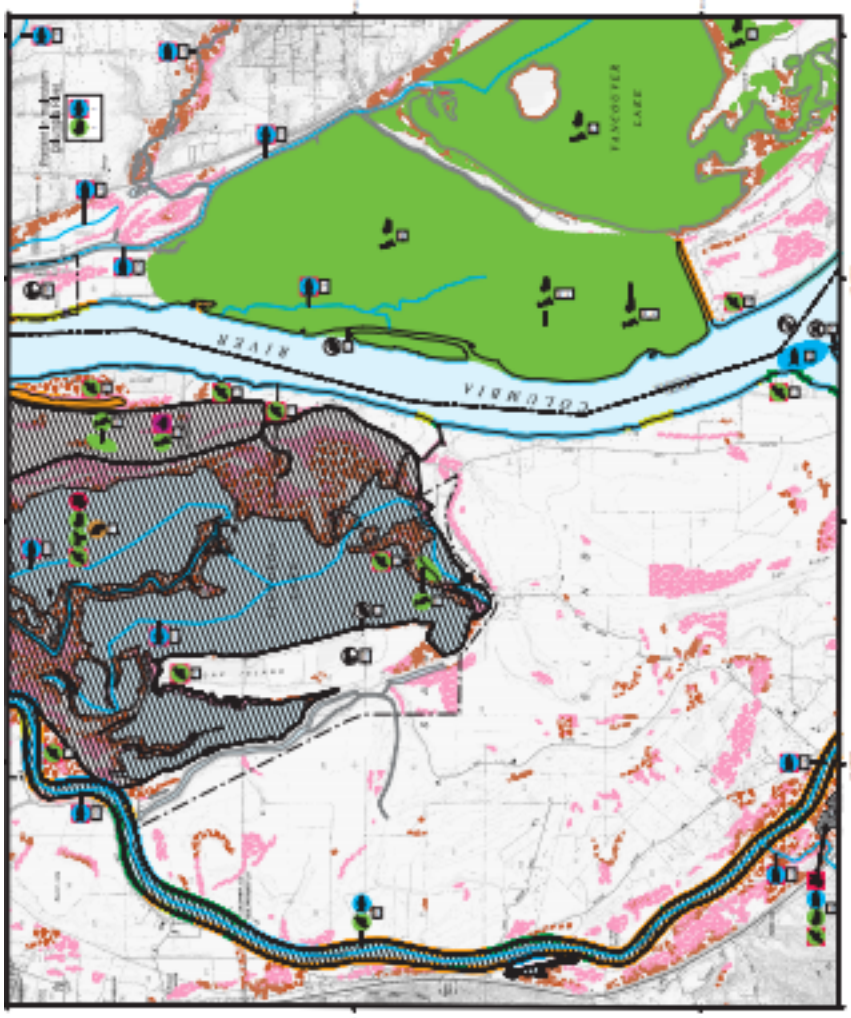
HUMAN USE RESOURCES:

BOAT RAMP:

RUN#	Name	Contact	Phone
26	BURT RAMP		

6.11 SENSITIVITY MAPS

ENVIRONMENTAL SENSITIVITY INDEX MAP





Columbia River: ESIMAP 19

BIOLOGICAL RESOURCES:

BIRD:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
7	Canada goose					X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
	Common goldeneye					X	X									X	X	-	-	-
	Scaup					X	X	X	X	X				X	X	X	X	-	-	-
	Pebbling ducks					X	X	X	X	X				X	X	X	X	-	-	-
17	Bald eagle	T	T		1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
30	Bald eagle	T	T		2 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
77	Killdeer					X	X			X	X	X	X	X	X	X	X	-	-	-
	Trumpeter swan					X	X	X	X	X				X	X	X	X	-	-	-
	Tundra swan					X	X	X	X	X				X	X	X	X	-	-	-
	Waterfowl				250000	X	X									X	X	-	-	-
	Bald eagle	T	T			X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Shorebirds				15000			X	X	X				X	X	X		-	-	-
	Spotted sandpiper					X	X	X	X	X				X	X	X	X	-	-	-
81	Sandhill crane				PRESENT	X	X	X	X	X					X	X	X	-	-	-
84	Osprey							X	X	X	X	X	X	X				MAR-SEP	-	-
86	Great blue heron				6 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
87	Sandhill crane				100-200	X	X	X	X	X					X	X	X	-	-	-
	Greater white-fronted goose					X	X	X	X	X			X	X	X	X	X	-	-	-
	Ducks				1000	X	X									X	X	-	-	-
	Tundra swan					X	X	X	X	X				X	X	X	X	-	-	-
	Canada goose				10000	X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
88	Waterfowl				8000	X	X									X	X	-	-	-
	Sandhill crane					X	X	X	X	X					X	X	X	-	-	-
	Canada goose					X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
90	Bald eagle	T	T			X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Waterfowl				8000	X	X									X	X	-	-	-
91	Great blue heron					X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
92	Great blue heron					X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
93	Bald eagle	T	T		1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-

FISH:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
7	Chinook salmon (summer)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	SEP-APR	-	MAR-SEP	JUN-NOV
	Sockeye salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	-	-	JAN-DEC	AUG-FEB
	White sturgeon					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Coastal Cutthroat trout	C		OR		X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	JAN-JUN	-	JAN-DEC	JAN-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Chum salmon	*	*			X	X	X	X	X				X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Chinook salmon (spring)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP
	Steelhead (summer)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	JAN-JUN	-	JAN-DEC	MAR-OCT
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Bull trout	C	T			X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	SEP-JAN	-	JAN-DEC	JAN-DEC
64	Salmon					X	X	X	X	X	X	X	X	X	X	X	X	-	-	JAN-DEC	JAN-DEC	JAN-DEC
89	White sturgeon					X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	-	JAN-DEC
90	Salmon				8000	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	-
130	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
222	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
224	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Chum salmon	*	*			X	X	X	X	X				X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
226	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Chinook salmon (spring)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP

HABITAT:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
81	Water howellia	T	T	WA	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X

REPTILE:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Intermesting	Juveniles	Adults
77	Western painted turtle					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
90	Western pond turtle	E	C	WA		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Western pond turtle	C	C	OR		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Western painted turtle					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-

TERRESTRIAL MAMMAL:

MAP#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
77	Northern river otter				PRESENT	X	X	X	X	X	X	X	X	X	X	X	X
	Beaver				PRESENT	X	X	X	X	X	X	X	X	X	X	X	X
	Mink				PRESENT	X	X	X	X	X	X	X	X	X	X	X	X

HUMAN USE RESOURCES:

BOAT RAMP:

HUM#	Name	Contact	Phone
21	BOAT RAMP		
25	BOAT RAMP		

PARK:

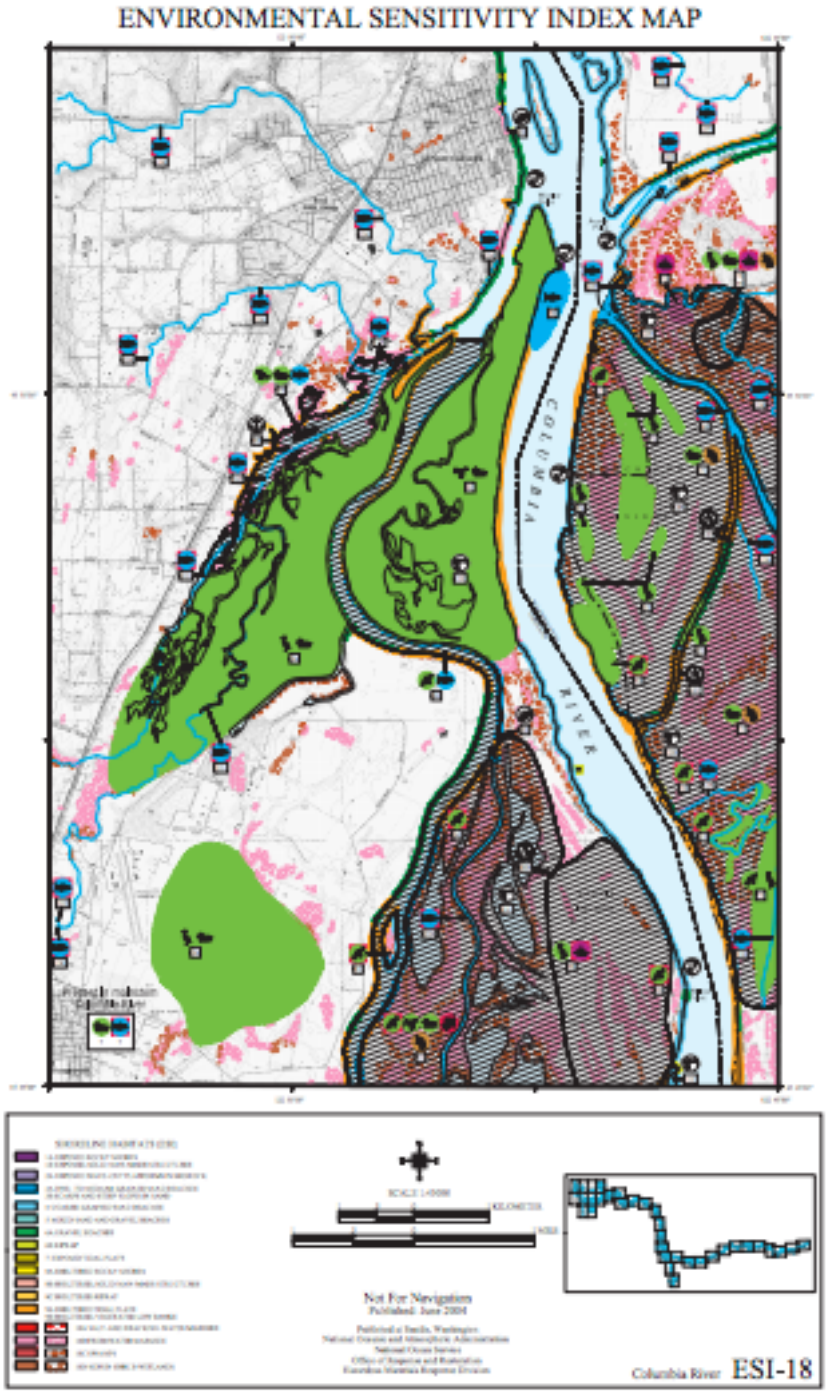
HUM#	Name	Contact	Phone
74	KELLY POINT PARK	PARK MANAGER	503/823-2223

WILDLIFE REFUGE:

HUM#	Name	Contact	Phone
109	RIDGEFIELD NWR	USFWS REFUGE MANAGER	360/887-4106
110	SAUVIE ISLAND WILDLIFE AREA	ODFW	503/621-3488

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

6.11 SENSITIVITY MAPS



Columbia River: ESIMAP 18

BIOLOGICAL RESOURCES:

BIRD:

RANK	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
7	Canada goose					X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
	Common goldeneye					X	X								X	X		-	-	-
	Scaup					X	X	X	X	X				X	X	X	X	-	-	-
	Dabbling ducks					X	X	X	X	X				X	X	X	X	-	-	-
17	Bald eagle	T	T		1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
19	Bald eagle	T	T		3 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
30	Bald eagle	T	T		2 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
71	Dusky Canada goose					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Geese				35000	X	X								X	X		-	-	-
	Greater white-fronted goose					X	X	X	X	X			X	X	X	X	X	-	-	-
	Tundra swan					X	X	X	X	X			X	X	X	X	X	-	-	-
	Ducks				50000	X	X								X	X		-	-	-
	Swans				3500	X	X	X	X	X			X	X	X	X	X	-	-	-
	Canada goose				4000	X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
72	Sandhill crane				6200	X	X	X	X	X					X	X	X	-	-	-
73	Sandhill crane				4000	X	X	X	X	X					X	X	X	-	-	-
	Peregrine falcon					X	X	X							X	X	X	FEB-MAR	-	-
74	Great egret				2-5 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Great blue heron				500 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
76	Sandhill crane				225	X	X	X	X	X					X	X	X	-	-	-
	Green-winged teal				150	X	X	X	X	X				X	X	X	X	-	-	-
	Ducks				600	X	X								X	X		-	-	-
	Canada geese				1300	X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-
77	Killdeer					X	X			X	X	X	X	X	X	X	X	-	-	-
	Trumpeter swan					X	X	X	X	X				X	X	X	X	-	-	-
	Tundra swan					X	X	X	X	X				X	X	X	X	-	-	-
	Waterfowl				250000	X	X								X	X		-	-	-
	Bald eagle	T	T			X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Shorebirds				15000			X	X	X				X	X	X		-	-	-
	Spotted sandpiper					X	X	X	X	X				X	X	X	X	-	-	-
79	Waterfowl				8000	X	X								X	X		-	-	-
	Purple martin							X	X	X	X	X	X	X				MAY-SEP	-	-
81	Sandhill crane				FREQUNT	X	X	X	X	X					X	X	X	-	-	-
82	Killdeer					X	X			X	X	X	X	X	X	X	X	-	-	-
	Geese					X	X								X	X		-	-	-
	Shorebirds				10000			X	X	X				X	X	X		-	-	-
	Waterfowl					X	X								X	X		-	-	-
	Spotted sandpiper					X	X	X	X	X				X	X	X	X	-	-	-
83	Bald eagle	T	T		5 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	-	-
84	Osprey						X	X	X	X	X	X	X					MAR-SEP	-	-

FISH:

RANK	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
7	Chinook salmon (summer)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	SEP-APR	-	MAR-SEP	JUN-NOV
	Sockeye salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	-	-	JAN-DEC	AUG-FEB
	White sturgeon					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Coastal Cutthroat trout	C		SR		X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	JAN-JUN	-	JAN-DEC	JAN-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Chum salmon	*	*			X	X	X	X	X				X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Chinook salmon (spring)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP
	Steelhead (summer)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	JAN-JUN	-	JAN-DEC	MAR-OCT
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Bull trout	C	T			X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	SEP-JAN	-	JAN-DEC	JAN-DEC
79	White crappie					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Smallmouth bass					X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-	-	JAN-DEC
	Walleye					X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	-	-	-	JAN-DEC
80	Salmon				400M	X	X	X	X	X	X	X	X	X	X	X	X	-	-	JAN-DEC	JAN-DEC	JAN-DEC
	White sturgeon				400M	X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	-	JAN-DEC
84	Salmon					X	X	X	X	X	X	X	X	X	X	X	X	-	-	JAN-DEC	JAN-DEC	JAN-DEC
85	Chum salmon	*	*			X	X	X	X	X				X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
138	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
309	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
320	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
321	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
322	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
326	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Chinook salmon (spring)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP
328	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Chum salmon	*	*			X	X	X	X	X				X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
333	Chinook salmon (fall)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-DEC	OCT-FEB	-	FEB-NOV	AUG-DEC
	Steelhead (winter)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-JUN	-	JAN-DEC	NOV-MAR
	Chinook salmon (spring)	*	*			X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-DEC	-	JAN-DEC	JAN-SEP
	Chum salmon	*	*			X	X	X	X	X				X	X	X	X	NOV-DEC	DEC-MAR	-	FEB-MAY	OCT-DEC
	Coho salmon	*	*			X	X	X	X	X	X	X	X	X	X	X	X	OCT-JAN	OCT-MAR	-	JAN-DEC	AUG-JAN
	Smelt	C		SR		X	X	X	X	X	X					X		DEC-APR	JAN-MAR	-	JAN-MAY	DEC-APR

HABITAT:

RANK	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
75	Water howellia	T	T	MA	FREQUNT	X	X	X	X	X	X	X	X	X	X	X	X
81	Water howellia	T	T	MA	FREQUNT	X	X	X	X	X	X	X	X	X	X	X	X

REPTILE:

RANK	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Intermesting	Juveniles	Adults
77	Western painted turtle					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-

---

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

Columbia River: ESIMAP 18 (cont.)

BIOLOGICAL RESOURCES: (cont.)

TERRESTRIAL MAMMAL:

MAM#	Species	S	F	ST	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
71	Northern river otter					X	X	X	X	X	X	X	X	X	X	X	X
	Beaver					X	X	X	X	X	X	X	X	X	X	X	X
	Muskrat					X	X	X	X	X	X	X	X	X	X	X	X
	Mink					X	X	X	X	X	X	X	X	X	X	X	X
77	Northern river otter				PRESENT	X	X	X	X	X	X	X	X	X	X	X	X
	Beaver				PRESENT	X	X	X	X	X	X	X	X	X	X	X	X
	Mink				PRESENT	X	X	X	X	X	X	X	X	X	X	X	X

HUMAN USE RESOURCES:

BOAT RAMP:

HUM#	Name	Contact	Phone
28	BOAT RAMP		
29	MULTNOMAH CHANNEL BOAT RAMP		

MARINA:

HUM#	Name	Contact	Phone
64	SCAPPOOSE BAY MARINA	MARINA MANAGER	503/397-2888

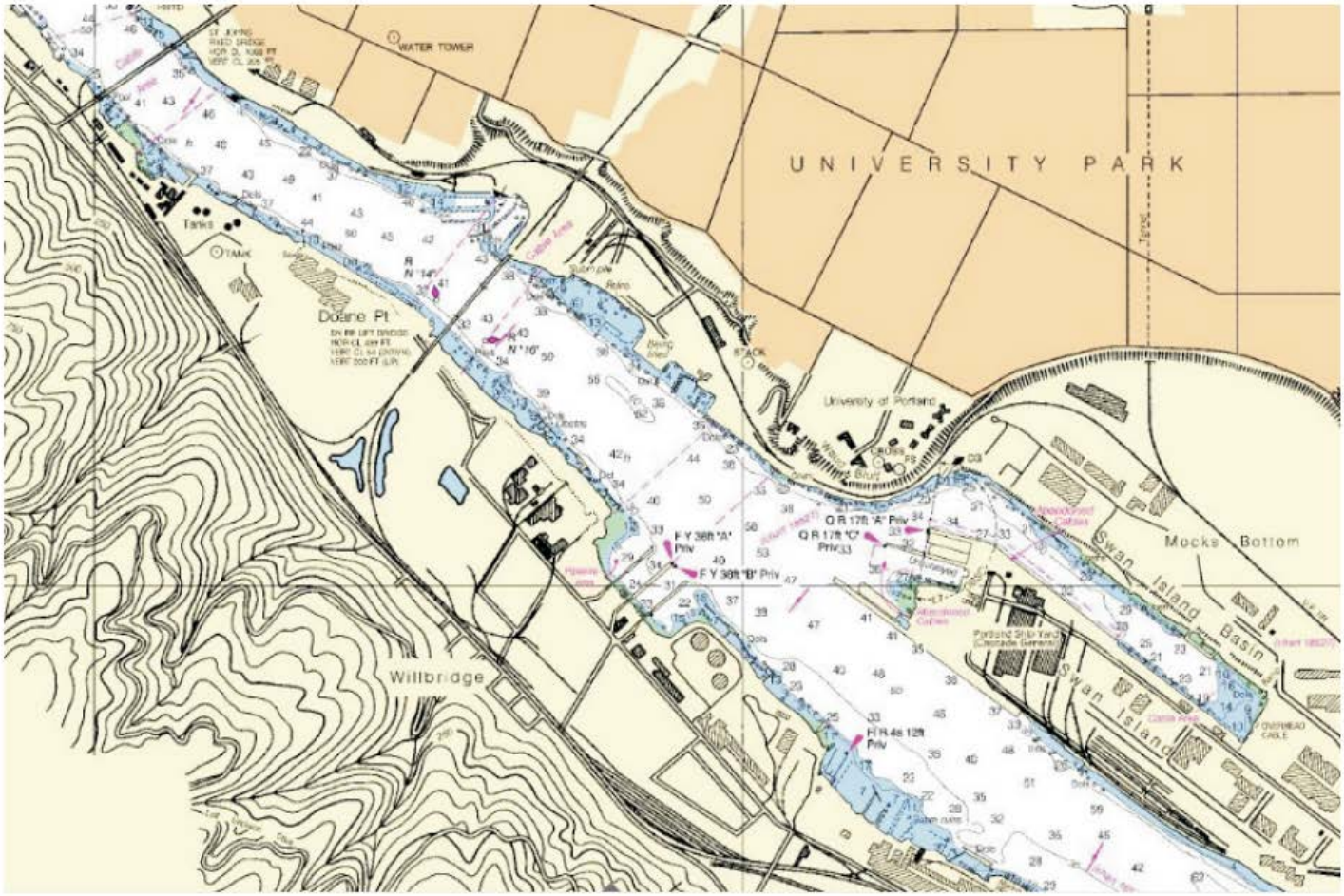
WATER INTAKE:

HUM#	Name	Contact	Phone
103	RIDGEFIELD NWR WATER INTAKES	REFUGE MANAGER	360/887-3883
104	SAUVIE ISLAND, ODFW	MARK SEEKER	503/621-3488

WILDLIFE REFUGE:

HUM#	Name	Contact	Phone
109	RIDGEFIELD NWR	USFWS REFUGE MANAGER	360/887-4106
110	SAUVIE ISLAND WILDLIFE AREA	ODFW	503/621-3488

6.11 SENSITIVITY MAPS



6.12 PROTECTION / RESPONSE STRATEGIES

Detailed protection and response strategies are contained in the Northwest Area Contingency Plan (NWACP) Geographic Response Plan.

SECTION 7

Last Revised: January 2007

SUSTAINED RESPONSE ACTIONS

© Technical Response Planning Corporation 2006

7.1 Response Resources

7.1.1 Facility Response Equipment

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

7.1.2 Response Equipment Inspection and Maintenance

7.1.3 Contracts, Contractor Equipment, and Labor

7.1.4 Command Post

Figure 7.1-2 - Command Post Checklist

7.1.5 Staging Area

7.1.6 Communications Plan

Figure 7.1-3 - Communications Checklist

7.2 Public Affairs

Figure 7.2-1 - Incident Fact Sheet

7.3 Site Security Measures

Figure 7.3-1 - Site Security Checklist

Figure 7.3-2 - Facility Security

7.4 Waste Management

Figure 7.4-1 - Waste Management Flow Chart

Figure 7.4-2 - General Waste Containment and Disposal Checklist

7.4.1 Waste Storage

Figure 7.4-3 - Temporary Storage Methods

7.4.2 Waste Transfer

7.4.3 Waste Disposal

Figure 7.4-4 - Facility Specific Disposal Locations

7.1 RESPONSE RESOURCES

7.1.1 Facility Response Equipment

CATEGORY	TYPE/MODEL	QUANTITY	SIZE	YEAR PURCHASED	OPERATIONAL STATUS	LOCATION AT FACILITY
Terminal						
Boats/Vehicles	Truck	1	1/2 ton	2002	Operational	Maintenance Shop
Boats/Vehicles	Spill Trailer Wells Cargo	1	20 ft.	1993	Operational	Maintenance Shop
Boats/Vehicles	Duckworth Spill Response Boat w/ 2-115 hp outboards	1	22 ft.	1997	Operational	Boat House
Boats/Vehicles	Boom Trailer	1	40 ft. box trailer	1996	Operational	Boat Ramp
Boats/Vehicles	Boom Trailer	1	40 ft. box trailer	2008	Operational	Boat Ramp
Boats/Vehicles	Spill Response (skiff) Boat	1	14 ft.	1973	Operational	Boat House
Boats/Vehicles	Zodiac Inflatable Boat	1	14 ft.	1997	Operational	Boat House
Boats/Vehicles	Spill Response (skiff) Boat	1	14 ft.	1992	Operational	Boat House
Boats/Vehicles	Boston Whaler w/ 30-hp outboard	1	14 ft.	2011	Operational	Boat House
Boom	Containment Boom	Minimum 4400 ft.		Multiple	Operational	Shore
Boom	Containment Boom Reel	1 w/ 1200 ft. boom		2007	Operational	Boat House
Communications Equipment	Marine VHF Radio	3		1996 and newer	Operational	Spill Trailer, Dock Office, and Spill Boat
Decon Kit	Decon Kit	2		2011	Operational	Maintenance Shop
Motor	Outboard Motor	2	15 hp		Operational	Boat House

***Note:** Response equipment is tested and deployed as described in **FIGURE A.1-2** and **FIGURE A.1-4**.

7.1.1 Facility Response Equipment

CATEGORY	TYPE/MODEL	QUANTITY	SIZE	YEAR PURCHASED	OPERATIONAL STATUS	LOCATION AT FACILITY
Terminal						
Skimmers/Pumps	Honda 5 HP Gas Powered Water Pump w/ Hoses			1996	Operational	Spill Trailer
Skimmers/Pumps	Skim-Pak Weir Skimmer, w/ floats and hoses	1	EDRC approx. 466 bbls/day	1993	Operational	Spill Trailer
Skimmers/Pumps	Manta Ray Weir Skimmer, w/ floats and hoses	1	EDRC approx. 1029 bbls/day	1993	Operational	Boat House
Sorbents	Absorbent Pads	50 bales (minimum)	100 sheets per bale		Operational	Dock Shed, Spill Trailer, and Maintenance Shop
Sorbents	Oil Snare Pom-Poms	35	2 cu ft boxes		Operational	Dock Shed
Sorbents	Absorbent Boom	10 rolls	50 ft rolls		Operational	Dock Shed, Spill Truck

***Note:** Response equipment is tested and deployed as described in **FIGURE A.1-2** and **FIGURE A.1-4**.

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

* USCG Classified OSRO for facility

COMPANY/CONTRACTOR	EQUIPMENT	RESPONSE TIME*
*Clean Rivers Cooperative, Inc. (CRC) Portland, OR	Full Response Capability	2 hours
*Marine Spill Response Corp. (MSRC) Everett, WA	Full Response Capability	5 hours

Note: Response times are based on 35 mph and take into account traffic, weather, and other environmental conditions that could restrict response efforts.

7.1.2 Response Equipment Inspection and Maintenance

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

Containment boom	During semiannual boom deployment exercises, boom will be inspected for signs of structural deficiencies. If tears in fabric or rotting are observed, boom will be repaired or replaced. In addition, end connectors will be inspected for evidence of corrosion. If severe corrosion is detected, equipment will be repaired or replaced.
Miscellaneous equipment	Other response equipment identified in this Plan will be inventoried and tested on a semiannual basis to ensure that the stated quantities are in inventory and in proper working order. The equipment inspection and deployment exercises are recorded and maintained at the facility and retained for a period of five years. Exercise requirements are listed in **APPENDIX A.1**. A Spill/Exercise Documentation form is in **FIGURE A.1-3**. **FIGURE A.1-4** provides a log for response equipment testing and deployment drills.

7.1.3 Contractors, Contractor Equipment, and Labor

- The Company's primary response contractors' names and phone numbers, as well as other companies who can provide spill response services are provided in **FIGURE 3.1-4**.
- The Company has ensured by contract the availability of private personnel and equipment necessary to respond, to the maximum extent practicable, to the worst-case discharge or the substantial threat of such discharge.
- Contractors without USCG classification deploy and inspect boom to meet PREP guidelines. Company requires that these exercises be completed annually.
- **APPENDIX B** contains evidence of contracts for the Company's primary response contractors and equipment lists of contractors without USCG classification.

7.1.4 Command Post

In the event of a major spill or other emergency, both a company off-site EMT Command Center and a Command Post (located close to but at a safe distance back from the incident scene) may be established. For a minor emergency, only a Command Post may be established. Refer to **FIGURE 7.1-2** for guidelines in establishing a Command Post.

FIGURE 7.1-2 - COMMAND POST CHECKLIST

COMMAND POST CHECKLIST	INITIALS	DATE/TIME STARTED	DATE/TIME COMPLETED
Ensure adequate space for size of staff.			
Ensure 24 hour accessibility.			
Ensure personal hygiene facilities.			
Ensure suitability of existing communications resources (phone/fax/radio).			
Ensure suitability of private conference and briefing rooms.			
Identify Command Post security requirements, safe location.			
Notify other parties of Command Post location; provide maps/driving directions.			
Determine staging areas and incident base locations.			
Identify future need to move, upgrade facilities.			

Command Posts for this facility are located at "list location": Engineering Office, Lubes Training Room or appropriate location off-site that is outside the defined Hot or Warm Zone

7.1.5 Staging Area

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

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

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

In addition, the staging area should:

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

Staging areas for this facility are located at "list location": Motor Transport Department (MTD), Lubes or appropriate location off-site that is outside the defined Hot or Warm Zone

7.1.6 Communications Plan

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

At this facility the following approximate number of communication lines are available pending the scenario/location of the emergency:

- 15 land line telephones
- 15 Motorola 2-way intrinsically safe radios
- 1 Operator Cell Phone and all personnel cell phones
- 10 Computers
- 3 Fax Machines

The following identifies the radio frequencies that can be utilized in the event of an emergency from the facilities 2-way radios:

- Channel 1 - Light Products Operations (repeater) - Transmitting 456.550 / Receiving 451.550
- Channel 2 - Lubes Operations - Transmitting/Receiving 451.2875
- Channel 3 - Intercompany - Transmitting/Receiving 463.7125
- Channel 4 - Available Channel - Transmitting/Receiving 451.6125
- Channel 5 - Available Channel - Transmitting/Receiving 464.025

All of the transmitting radio frequencies identified can be heard up to a mile away from the facility. Additionally, Channel 1 has repeater functionality that allows the frequency to be heard for up to 15 miles away from the facility if transmitted within one mile of the repeater station. Geographic ranges for the communications equipment utilized during an emergency will be documented in the communications plan as applicable.

If Clean Rivers Cooperative has responded to the emergency with vessels, VHF Channel "CR" (found below Channel 1 on channel frequency) will be utilized for the facilities vessel to communicate with Clean Rivers Vessel Response Teams.

Depending on the circumstances of the emergency, response contractor’s communications trailer, third-party communication systems, or other available resources may be utilized. The defined communications systems, channels, functions, etc., will be documented in the Communications Plan and other defined Forms as applicable.

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

The Communications Plan, written at the time of an incident, will identify telephone numbers and radio frequencies used by responders, see **SECTION 5.3.6**. This may also involve activation of multiple types of communications equipment and coordination among multiple responding agencies and contractors.

FIGURE 7.1-3 - COMMUNICATIONS CHECKLIST

COMMUNICATIONS CHECKLIST	INITIALS	DATE/TIME STARTED	DATE/TIME COMPLETED
Develop a Communications Plan.			
Ensure adequate phone lines per staff element - contact local provider.			
Ensure adequate fax lines - contact local provider.			
Evaluate need for internet access.			
Ensure recharging stations for cellular phones.			
VHF radio communications: • Establish frequencies • Assign call signs • Distribute radios • Establish communications schedule			
Ensure recharging stations for VHF radios.			
Determine need for VHF repeaters.			
Ensure copy machine available.			
Ensure communications resource accountability.			
Ensure responders have capability to communicate with aircraft.			

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

7.2 PUBLIC AFFAIRS

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

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

GUIDELINES FOR DEALING WITH THE MEDIA

- You as a Company Manager are the most logical person for reporters to seek out for information
- Reporters will look elsewhere to find out what happened if you do not answer their questions; however, if you do not have this information or are not prepared to answer a particular question, say so then say when they can expect the answers to their questions (such as one hour)
- It is important to be courteous to all media representatives and to provide a safe place for them to wait until a company representative can meet them; you may need to provide an initial statement

Provide

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

Don't provide

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

Other considerations

- Safety considerations should always receive priority in determining access to company property
- Anticipate likely questions
- There are only six questions that can be asked about any subject: who, what, when, where, why, and how
- Keep answers short and understandable
- Answer only the question that is asked by the reporter
- Give the most important facts first
- Talk to the public's concern about the incident such as whether these were deaths, injuries, any threat to the public, or danger of explosion or fire
- If you don't know the answer to a question, don't be afraid to say "I don't know"; make note of the question and tell the reporter that you will try to get the answer - then do it
- Don't be defensive

Other considerations, continued:

- There is no such thing as "Talking off the record"; assume that anything and everything you say to a reporter is going to be printed and/or used in the story
- Avoid "What If?" or speculative questions; these questions should be answered with a restatement of the problem and what is being done to control it
- Don't speculate about the cause of the incident
- Don't minimize the situation

FIGURE 7.2-1 - INCIDENT FACT SHEET

What occurred:
When (time):
Where (location):
What are hazards:
How is the situation being handled:
How many people involved:
Confirmed injuries/fatalities:
Treatment location:
Name of injured (release only after next of kin are notified):
Name of fatalities (release only after next of kin are notified):
What agencies have been notified:
On scene? (yes/no):
Who is in-charge:
Has outside help been requested:
Who:
On scene? (yes/no):
Is there danger to the plant:
Is there danger to the community:
What:
Is there an environmental hazard:
What is the environmental hazard:
What is being done to minimize environmental threat:
Is there a need for evacuation:

7.3 SITE SECURITY MEASURES

Due to the large amount of public attention created at an oil spill site, additional security measures are

required. Several measures should be planned in advance to prepare security personnel for possible events that may occur at the spill site. A checklist for site security is provided in **FIGURE 7.3-1**. A model Incident Security Plan is provided in **SECTION 5.11**.

(b) (7)(F)

[redacted]

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

FACTOR	DESCRIPTION
(b) (7)(F) [redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

7.4 WASTE MANAGEMENT

The general policy of the Department of Environmental Quality is that, whenever possible, recovered oil and oily debris be recycled and reused, thereby reducing the amount of oily debris to be burned on-site or disposed of at a solid waste landfill. Spilled oils and oil contaminated materials resulting from control, treatment, and cleanup shall be handled and disposed of in a manner approved by the Department.

Initial oil and waste handling and disposal needs cannot be overlooked in the emergency phase of a response; doing so could result in delays and interruptions of cleanup operations. It could also possibly create a hazardous situation (e.g. incompatible types of waste commingling). Initially, waste management concerns should address:

- Equipment capacity
- Periodic recovery of contained oil
- Classifying and containerizing wastes
- Adequate supply of temporary storage capacity and materials.
- Segregation of incompatible waste types

The following action items should be conducted during a spill response or a hazardous waste incident involving a fire explosion, or release which could threaten human health or the environment:

- Development of a Site Safety and Health Plan (**SECTION 5.4**) addressing the proper PPE and waste handling procedures
- Development of a Disposal Plan (**SECTION 5.6**) in accordance with any federal, state, and/or local regulations. Facility-specific disposal locations for different types of materials are listed in **FIGURE 7.4.4**.
- Continuous tracking of oil disposition in order to better estimate amount of waste that could be generated over the short and long-term and proper disposal / treatment
- Organization of waste collection, segregation, storage, transportation, and proper disposal
- Minimization of risk of any additional pollution
- Regulatory review of applicable laws to ensure compliance and (if appropriate) obtain permits
- Documentation of all waste handling and disposal activities
- Disposal of all waste in a safe and approved manner

Good hazardous waste management includes:

- Reusing materials when possible
- Recycling or reclaiming waste. A hazardous waste treatment permit is not needed during immediate response to an emergency or imminent, but may be needed when the immediate response phase is over.

- Treating waste to reduce hazards or reducing amount of waste generated. A hazardous waste treatment permit is not needed during immediate response to an emergency or imminent, but may be needed when the immediate response phase is over.

- The management of the wastes generated in cleanup and recovery activities must be conducted with the overall objective of ensuring:
    - Worker safety
    - Waste minimization
    - Cost effectiveness
    - Minimization of environmental impacts
    - Compliance with environmental and safety regulations and company policies and practices.

- Proper disposal

- Minimization of present and future environmental liability

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

- Storage

- Accumulation

- Waste segregation

- Waste Classification

- Packaging

- Transportation

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

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

FIGURE 7.4-1 - WASTE MANAGEMENT FLOW CHART

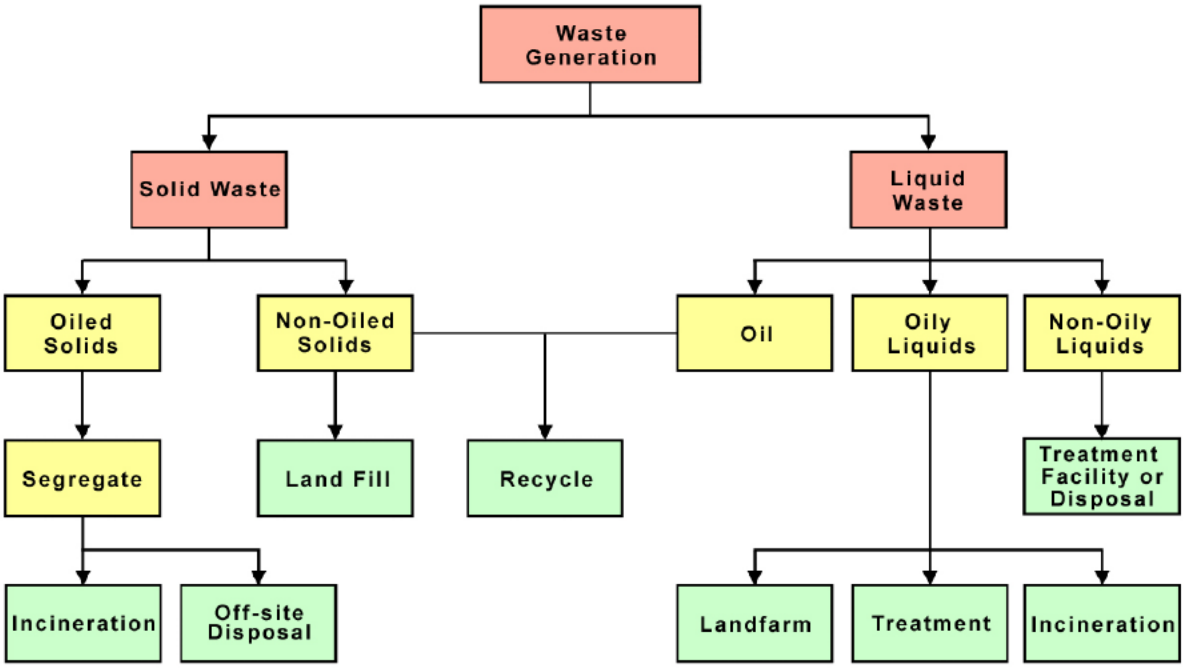


FIGURE 7.4-2 - GENERAL WASTE CONTAINMENT AND DISPOSAL CHECKLIST

CONSIDERATION	YES/NO/NA
Is the material being recovered a waste or reusable product?	
Has all recovered waste been containerized and secured so there is no potential for further leakage while the material is being stored?	
Has each of the discrete waste streams been identified?	
Has a representative sample of each waste stream been collected?	
Has the sample been sent to an approved laboratory for the appropriate analysis, (i.e. hazardous waste determination)?	
Has the appropriate waste classification and waste code number(s) for the individual waste streams been received?	
Has a temporary EPA identification number and generator number(s) been received, if they are not already registered with EPA?	
Have the services of a registered hazardous waste transporter been contracted, if waste is hazardous? Transporter is required to have an EPA ID number.	
If the waste is non-hazardous but is a DOT-defined hazardous material is the transporter registered?	
Is the waste being taken to an approved disposal site?	
Is the waste hazardous or nonhazardous?	
If the waste is hazardous, a hazardous waste manifest is required, but if it is non-hazardous, a bill of lading or non-hazardous manifest is to be used?	
Is the manifest properly completed?	
Are all federal, state, and local laws/regulations being followed?	
Are all necessary permits being obtained?	
Has a Disposal Plan been submitted for approval/review?	
Has PPE and waste-handling procedures been included in the Site Safety and Health Plan to protect the health and safety of waste handling personnel?	

7.4.1 Waste Storage

During an oil spill, the volume of oil that can be recovered depends on the storage capacity available. Typical short-term (temporary) storage methods are provided in **FIGURE 7.4-3**. If storage containers such as bags or drums are used, the containers must be labeled with a hazardous waste label if hazardous/or color-coded to indicate the type of material or waste contained and/or the ultimate disposal option.

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

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

FIGURE 7.4-3 - TEMPORARY STORAGE METHODS

CONTAINMENT	PRODUCT						
	OIL	OIL/WATER	OIL/SOIL	OIL/DEBRIS (Small)	OIL/DEBRIS (Medium)	OIL/DEBRIS (Large)	CAPACITY
Drums	X	X	X	X			0.2-0.5 yd^3
Bags			X	X			1.0-2.0 yd^3
Boxes			X	X			1-5 yd^3
Open top roll off			X	X	X	X	8-40 yd^3
Roll top roll off			X	X	X	X	15-25 yd^3
Vacuum box	X	X					15-25 yd^3
Frac tank	X	X					500-20,000 gal
Poly tank	X	X					200-4,000 gal
Vacuum truck	X	X	X				2,000-5,000 gal
Tank trailer	X	X					2,000-4,000 gal
Barge	X	X					3,000+ gal
Berm, 4 ft.			X	X	X	X	1 yd^3
Bladders	X	X					25 gal-1,500 gal

7.4.2 Waste Transfer

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

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

There are four general classes of transfer systems that could be employed to effect oily waste transfer operations. The following is a brief description of the four transfer systems:

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

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

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

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

Wheeled Vehicles
Wheeled vehicles may be used to transfer liquid waste of oily debris to storage or disposal sites. These vehicles are readily available but have a limited rate (i.e., 100 bbls) and require good site access.

7.4.3 Waste Disposal

In order to obtain the best overall Incident Disposal Plan, a combination of methods should be used. There is no template or combination of methods that can be used in every spill situation. Each incident should be reviewed carefully to ensure an appropriate combination of disposal techniques are employed.

The state of Oregon will utilize its access to federal samples taken by the Coast Guard. As necessary, the state will also utilize sampling capabilities of the DEQ laboratory. All oily waste and debris is classified as a specified waste in the state of Oregon. The segregation of oily waste and debris is a key part of the disposal process. Oil recovered from an aquatic area will typically contain large amounts of water and debris. Excess water needs to be removed; it increases the amount of material to be transported and can cause problems for disposal facilities. It is most productive to segregate the waste on site to facilitate transportation and disposal. An oil/water separator or a vacuum truck should be available on site to complete this process. Oiled debris needs to be separated out as well.

Recycling
Recycling involves processing discarded materials for continued use.

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

In Situ Burning / Open Burning
Burning techniques entail igniting oil or oiled debris allowing it to burn under ambient conditions. These disposal techniques are subject to restrictions and permit requirements established by federal, state, and local laws. Permission for in situ burning may be difficult to obtain when the burn takes place near populated areas.

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

Landfill Disposal
This technique entails burying the recovered oil in a approved landfill in accordance with regulatory procedures. Federal law in the United States prohibits landfill disposal of free liquids.

FIGURE 7.4-4 - FACILITY SPECIFIC DISPOSAL LOCATIONS

MATERIAL	DISPOSAL FACILITY	LOCATION
Recovered Product	Waste Management Inc. (formerly CWM)	Arlington, OR
Contaminated Soil	Waste Management Inc. (formerly CWM)	Arlington, OR
Contaminated Equipment	Waste Management Inc. (formerly CWM)	Arlington, OR
Personnel Protective Equipment	Waste Management Inc. (formerly CWM)	Arlington, OR
Decontamination Solutions	Waste Management Inc. (formerly CWM)	Arlington, OR
Adsorbents and Spent Chemicals	Waste Management Inc. (formerly CWM)	Arlington, OR

SECTION 8

Last Revised: January 2007

DEMOBILIZATION / POST-INCIDENT REVIEW

© Technical Response Planning Corporation 2006

8.1 Terminating the Response

8.2 Demobilization

Figure 8.2-1 - Demobilization Checklist

8.3 Post-Incident Review

Figure 8.3-1 - Standard Incident Debriefing Form

8.3.1 Final Spill Cleanup Report

8.1 TERMINATING THE RESPONSE

- A team of federal, state, and Company personnel must certify that each area is clean before halting cleanup operations.
- Demobilize equipment and personnel at the first opportunity in order to reduce cost.
- Consider which resources should be demobilized first; for example, demobilizing out-of-area contractors before local ones can save berthing expenses.
- Equipment may need both maintenance and decontamination before being demobilized.
- All facilities (staging area, Command Post, etc.) should be returned to their pre-spill condition before terminating operations.
- Determine what documentation should be maintained, where, and for how long.
- Contract personnel may be more susceptible to "suffering" injuries as they approach termination.
- Some activities will continue after the cleanup ends; examples include incident debriefing, bioremediation, NRDA studies, claims, and legal actions.
- Consider expressing gratitude to the community, police department, fire department, and emergency crews for their work during the response.
- Hazardous Waste Incident (ONLY) -The Company must notify the Regional Administrator, and appropriate State and local authorities, that the facility is in compliance with paragraph (h) of this section before operations are resumed in the affected area(s) of the facility.
    - The Company must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, he must submit a written report on the incident to the Regional Administrator. The report must include:
        - Name, address, and telephone number of the owner or operator;
        - Name, address, and telephone number of the facility;
        - Date, time, and type of incident (e.g., fire, explosion);
        - Name and quantity of material(s) involved;
        - The extent of injuries, if any;
        - An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
        - Estimated quantity and disposition of recovered material that resulted from the incident.

8.2 DEMOBILIZATION

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

FIGURE 8.2-1 - DEMOBILIZATION CHECKLIST

DEMOBILIZATION CHECKLIST	INITIALS	DATE/TIME STARTED	DATE/TIME COMPLETED
Assign personnel to identify surplus resources and probable release times.			
Establish demobilization priorities.			
Develop decontamination procedures.			
Initiate equipment repair and maintenance.			
Develop a Disposal Plan.			
Identify shipping needs.			
Identify personnel travel needs.			
Develop impact assessment and statements.			
Obtain concurrence of Planning and Operations Group Leaders before release of personnel or equipment.			

8.3 POST-INCIDENT REVIEW

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

FIGURE 8.3-1 - STANDARD INCIDENT DEBRIEFING FORM

Name of incident:
Date:
PERSONNEL DEBRIEFED
Name:
Normal duty:
Summary of duties performed during incident (list date, time, and location):
Positive aspects of the response:
Aspects of the response which could be improved:
Name:
Title:
Signature:

8.3.1 Final Spill Cleanup Report

The Incident Commander or designee shall prepare a final, comprehensive report after completion of spill cleanup activities for internal use. It should be written in the narrative form and include the information listed below (as appropriate):

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

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

Name:
Title:
Signature:
Date:

APPENDIX A
TRAINING / EXERCISES

Last Revised: January 2007

© Technical Response Planning Corporation 2006

A.1 Exercise Requirements and Schedules

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

Figure A.1-2 - Exercise Requirements

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

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

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

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

A.2 Training Program

Figure A.2-1 - Training Requirements

Figure A.2-2 - PREP Training Program Matrix

Figure A.2-3 - Personnel Response Training Log

A.3 Additional Program

A.3.1 Alcohol and Drug Program

A.1 EXERCISE REQUIREMENTS AND SCHEDULES

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

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

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

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

FIGURE A.1-2 - EXERCISE REQUIREMENTS

EXERCISE TYPE	EXERCISE CHARACTERISTICS
Internal phone number verification	• Company will test and document internal call out procedures at least once every 90 calendar days.
Facility/QI notification	• Conducted quarterly • The facility initiates mock spill notification to QI • The Qualified Individual documents time/date of notification, name, and phone number of individual contacted • Document in accordance with form in **FIGURE A.1-3**
Equipment deployment	• Conducted semiannually • Response contractors listed in the plan must participate in annual deployment exercise • Document in accordance with form in **FIGURE A.1-3**
EMT tabletop	• Conducted annually • Tests EMTs response activities/responsibilities • Documents Plans effectiveness • Must exercise worst case discharge scenario once every three years • Must test all Plan components at least once every three years • Document in accordance with form in **FIGURE A.1-3**
Unannounced	• Company will either participate in unannounced tabletop exercise or equipment deployment exercise on an annual basis, if selected • Company may take credit for participation in government-initiated unannounced drill in lieu of drill required by PREP guidelines • Plan holders who have participated in a PREP government-initiated unannounced exercise will not be required to participate in another one for at least 36 months from the date of the exercise
Area	• An industry plan holder that participates in an Area Exercise would not be required to participate in another Area Exercise for a minimum of six years
OTHER EXERCISE CONSIDERATIONS	
Drill program evaluation procedures	• Company conducts post-exercise meetings to discuss positive items, areas for improvement, and to develop action item checklist to be implemented later

Records of drills	• Company will maintain exercise records for five years following completion of each exercise • Records will be maintained in the Training/Exercise tool in the electronic interface • Company will verify appropriate records are kept for each spill response contractor listed in Plan as required by PREP guidelines (annual equipment deployment drill, triennial unannounced drill, etc.)
Oregon Department of Environmental Quality notification	• Company will send post drill reports for all tabletop exercises or deployment drills to the Oregon Department of Environmental Quality no later than 60 days after the completion of the drill or exercise. The executive summary from National Preparedness for Response Exercise Program (N-PREP) report may be submitted to meet this requirement when the N-PREP staff has designed the exercise. • Company will notify the Department of drills and exercises, at least 60 days before full deployment and tabletop drills, and 10 days prior to equipment exercises. • Prior notice to the Department is not required before notification drills and internal phone number verification exercises.

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

Retain this form for a minimum of five years.

1. Date(s) performed:									
2. Exercise	☐	Actual spill	☐						
If exercise: Announced	☐	Unannounced	☐	Deployment	☐	Notification	☐	Tabletop	☐
If exercise, frequency: Quarter	1st	☐	2nd	☐	3rd	☐	4th	☐	Annual ☐
3. Location of exercise/spill:									
4. Time started:									
5. Description of scenario or spill including volume and content (crude oil, condensate, etc.):									
6. Describe how the following objectives were exercised:									

Team's knowledge of the Oil Spill Response Plan:	**Yes**	**No**
Was briefing meeting conducted	☐	☐
Established field Command Post	☐	☐
Confirmed source was stopped	☐	☐
Developed Site Safety and Health Plan	☐	☐
Prepared ICS 201	☐	☐
Established work zones and perimeter security	☐	☐
Developed short range tactical plan	☐	☐
Developed long range tactical plan	☐	☐
Proper Notifications:		
Qualified Individual (or designee)	☐	☐
Terminal Manager	☐	☐
Release/Spill Report Form completed	☐	☐
Notification to agencies completed (attach log)	☐	☐
Transportation/Communication System:		
Established primary/secondary communication system	☐	☐

Primary: cellular phone two way radio land telephone line	☐
Secondary: cellular phone two way radio land telephone line	☐
Other	☐

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

Transportation/Communication System, Continued:		
	Yes	No
Motor vessel deployed	☐	☐
Provider name:		
Helicopter/Sea plane deployed	☐	☐
Call sign:		
Describe function (i.e., transportation, surveillance, dispersant application):		
Ability to access contracted Oil Spill Removal Organizations (OSROs):		
Who contacted - (name of individual and OSRO):		
When contacted:		
Response time projection for deployment:		
Type and amount of containment used:		
Spill material recovered	☐	☐
Spilled material disposed	☐	☐
Where?		
Ability to coordinate spill response with on-scene coordinator, state, and applicable agencies:		
Was regulatory on-scene coordinator(s) contacted	☐	☐
List person and agency represented:		
Ability to access sensitive site and resource information in the Area Contingency Plan (ACP):		
Was pre-impact assessment conducted?	☐	☐
Were pre-impact samples taken?	☐	☐
Were pre-impact photographs taken?	☐	☐
Were NRDA specialists mobilized?	☐	☐
Were deficiencies identified?	☐	☐
If yes, changes implemented?	☐	☐
If no, why were changes not implemented?		

LESSONS LEARNED	PERSON RESPONSIBLE FOR FOLLOW-UP OF CORRECTIVE MEASURES

Name:
Position:
Certifying Signature:

FIGURE A.1-4 - EPA REQUIRED RESPONSE EQUIPMENT TESTING

AND DEPLOYMENT DRILL LOG

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

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

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

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

FIGURE A.1-5 - QUALIFIED INDIVIDUAL NOTIFICATION DRILL LOG

Company:	Date:
ACTIVITY	**INFORMATION**
Qualified Individual(s) Contacted	
Evaluation	
Changes to be Implemented	
Time Table for Implementation	

Company:	Date:
ACTIVITY	**INFORMATION**
Qualified Individual(s) Contacted	
Evaluation	
Changes to be Implemented	
Time Table for Implementation	

Company:	Date:
ACTIVITY	**INFORMATION**
Qualified Individual(s) Contacted	
Evaluation	
Changes to be Implemented	
Time Table for Implementation	

Company:	Date:
ACTIVITY	**INFORMATION**
Qualified Individual(s) Contacted	
Evaluation	
Changes to be Implemented	
Time Table for Implementation	

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

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

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

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

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

A.2 TRAINING PROGRAM

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

FIGURE A.2-1 - TRAINING REQUIREMENTS

TRAINING TYPE	TRAINING CHARACTERISTICS
Training in use of spill response plan	• All field personnel will be trained to properly report/monitor spills • Plan will be reviewed annually with all employees and contract personnel • The Personnel Response Training Log is located in **FIGURE A.2-3**
OSHA training requirements	• All Company responders designated in Plan must have 24 hours of initial spill response training • Laborers having potential for minimal exposure must have 24 hours of initial oil spill response instruction and eight hours of actual field experience • Spill responders having potential exposure to hazardous substances at levels exceeding permissible exposure limits must have 40 hours of initial training offsite and 24 hours of actual field experience • On-site management/supervisors required to receive same training as equipment operators/general laborers plus eight hours of specialized hazardous waste management training • Managers/employees require eight hours of annual refresher training
Spill management team personnel training	• See recommended PREP Training Matrix (**FIGURE A.2-2**)
Training for casual laborers or volunteers	• Company will not use casual laborers/volunteers for operations requiring HAZWOPER training
Wildlife	• Only trained personnel approved by USFWS and appropriate state agency will be used to treat oiled wildlife
Training documentation and record maintenance	• Training activity records will be retained five years for all personnel following completion of training • Company will retain training records indefinitely for individuals assigned specific duties in the Plan • Training records will be maintained in the Training/Exercise tool in the electronic interface

FIGURE A.2-2 - PREP TRAINING PROGRAM MATRIX

TRAINING ELEMENT	QUALIFIED INDIVIDUAL	EMERGENCY MANAGEMENT	FACILITY PERSONNEL

	(QI)	TEAM (EMT)	
Captain of the Port (COTP) Zones or Environmental Protection Agency (EPA) Regions in which the facility is located	x	x	x
Notification procedures and requirements for facility owners or operators, internal response organizations, federal and state agencies, and contracted oil spill removal organizations (OSROs) and the information required for those organizations	x	x	x
Communication system used for the notifications	x	x	x
Information on the products stored, used, or transferred by the facility, including familiarity with the material safety data sheets (MSDS), special handling procedures, health and safety hazards, spill and fire fighting procedures	x	x	x
Procedures the facility personnel may use to mitigate or prevent any discharge or a substantial threat of a discharge of oil resulting from facility operational activities associated with internal or external cargo transfers, storage, or use	x		
Facility personnel responsibilities and procedures for use of facility equipment which may be available to mitigate or prevent an oil discharge	x	x	x
Operational capabilities of the contracted OSROs to respond small, medium, and large discharges	x	x	x
Responsibilities and authority of the Qualified Individual (QI) as described in the Spill Response Plan and Company response organization	x	x	x
The organization structure that will be used to manage the response actions including: • Command and control • Public information • Safety • Liaison with government agencies • Spill response operations • Planning • Logistics support • Finance	x	x	x
The responsibilities and duties of each Emergency Management Team (EMT) within the organization structure	x	x	
The drill and exercise program to meet federal and state regulations as required under Oil Pollution Act of 1990 (OPA 90)	x	x	x
The role of the QI in the post discharge review of the Plan to evaluate and validate its effectiveness	x		
The Area Contingency Plan (ACP) for the area in which the facility is located	x	x	x
The National Contingency Plan (NCP)	x	x	x
Roles and responsibilities of federal and state agencies in pollution response	x	x	x

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

TRAINING ELEMENT	QUALIFIED	EMERGENCY	FACILITY

	INDIVIDUAL (QI)	MANAGEMENT TEAM (EMT)	PERSONNEL
Available response resources identified in the Plan	x	x	
Contracting and ordering procedures to acquire OSRO resources identified in the Plan	x	x	
OSHA requirements for worker health and safety (29 CFR 1910.120)	x	x	x
Incident Command System/Unified Command System	x	x	
Public affairs	x	x	
Crisis management	x	x	
Procedures for obtaining approval for dispersant use or in-situ burning of the spill	x		
Oil spill trajectory analyses	x		
Sensitive biological areas	x	x	
This training procedure as described in the Plan for members of the EMT		x	
Procedures for the post discharge review of the plan to evaluate and validate its effectiveness		x	
Basic information on spill operations and oil spill cleanup technology including: • Oil containment • Oil recovery methods and devices • Equipment limitations and uses • Shoreline cleanup and protection • Spill trajectory analysis • Use of dispersants, in-situ burning, bioremediation • Waste storage and disposal considerations		x	
Hazard recognition and evaluation		x	
Site safety and security procedures		x	
Personnel management, as applicable to designated job responsibilities		x	
Procedures for directing the deployment and use of spill response equipment, as applicable to designated job responsibilities		x	x
Specific procedures to shut down effected operations			x
Procedures to follow in the event of discharge, potential discharge, or emergency involving the following equipment or scenarios: • Tank overfill • Tank rupture • Piping or pipeline rupture • Piping or pipeline leak, both under pressure or not under pressure, if applicable • Explosion or fire • Equipment failure • Failure of secondary containment system			x
QI's name and how to contact him or her			x

FIGURE A.2-3 - PERSONNEL RESPONSE TRAINING LOG

Training records are maintained at the terminal office.

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

*Qualified Individual

A.3 ADDITIONAL PROGRAMS

A.3.1 Alcohol and Drug Program

Chevron has developed and implemented an Alcohol and Drug Program. It provides for the random testing of all terminal employees. The program also offers rehabilitation, treatment and follow-up testing for workers who seek assistance or who are found to be out of compliance. The program is run under complete confidentiality and is aimed at providing a drug-free workplace.

APPENDIX B

Last Revised: January 2007

CONTRACTOR RESPONSE EQUIPMENT

© Technical Response Planning Corporation 2006

B.1 Cooperatives and Contractors

B.1.1 OSRO Classification

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

B.1 COOPERATIVES AND CONTRACTORS

The Company has contracted with additional Oil Spill Removal Organizations (OSROs) to provide personnel and equipment in the event of a spill. The classification, response capabilities, and equipment are described below.

Other contingency plans rely on the same equipment. Therefore, the Company has contracted with multiple companies to fulfill its spill response resource needs.

B.1.1 OSRO Classification

The OSRO classification process was developed by the U.S. Coast Guard (USCG) to provide guidelines to enable USCG and plan preparers to evaluate OSROs potential to respond to oil spills. Plan holders that utilize USCG classified OSRO services are not required to list response resources in their plans.

The following is a listing of the USCG classified OSROs that may respond to incidents for areas listed in this Plan. For a detailed listing of USCG classified OSROs and other contractors by terminal, refer to **FIGURE 3.1-4** and **FIGURE 7.1-1**.

COMPANY / CONTRACTOR / TERM	APPLICABLE COTP ZONE (S)	USCG CLASSIFICATIONS	RESPONSE TIME*
Clean Rivers Cooperative, Inc. (CRC) 200 S.W. Market St., Suite 190 Portland OR 97201 Term of contract: To	Portland, OR		2 hours
Marine Spill Response Corp. (MSRC) 1330 Industry Street Suite 100 Everett WA 98203 Term of contract: To	Portland, OR		5 hours

	Facilities				Vessels			
	MM	W1	W2	W3	MM	W1	W2	W3
River/Canal	✓	✓	✓	✓	✓	✓	✓	✓
Inland	✓	✓	✓		✓	✓	✓	
Open Ocean								
Offshore								
Near shore								
Great Lakes								

	Facilities				Vessels			
	MM	W1	W2	W3	MM	W1	W2	W3
River/Canal	✓	✓	✓	✓	✓	✓	✓	✓
Inland	✓	✓	✓	✓	✓	✓	✓	✓
Open Ocean	✓	✓	✓	✓	✓	✓		✓
Offshore	✓	✓	✓	✓	✓	✓		✓
Near shore	✓	✓	✓	✓	✓	✓	✓	✓
Great Lakes								

***Note: Response times are based on 35 mph and take into account traffic, weather, and other environmental conditions that could restrict response efforts.**

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

FIGURE 7.1-1 provides both OSRO and non-OSRO summarized equipment lists and response times.

FIGURE B.1-1 provides evidence of contracts with OSROs and equipment lists for contractors without USCG classification.

FIGURE B.1-1 - EVIDENCE OF CONTRACTS AND EQUIPMENT LISTS

CLEAN RIVERS COOPERATIVE, INC (CRC) PORTLAND, OR CONTRACT

BYLAWS
OF
CLEAN RIVERS COOPERATIVE, INC.

(Amended and adopted by the members December 16, 2004.)

ARTICLE 1
Definitions

As used in these bylaws, the following terms shall have the following respective meanings:

"**Area of Interest**" shall mean the Snake River up to the Idaho border, the Columbia River from its confluence with the Snake River to the mouth of the Columbia, and the Willamette River up to Willamette Falls.

"**Contractor(s)**" shall mean, where applicable, the entity or entities engaged by the Cooperative to maintain and operate all or any portion of the vessels, equipment and materials owned or leased by the Cooperative or who are retained under contract to provide oil spill response and related services to the Cooperative or its Members.

"**Cooperative**" shall mean Clean Rivers Cooperative, Inc.

"**Former Member**" shall mean any person whose membership has been terminated either voluntarily or involuntarily pursuant to **Article 3**.

"**Manager**" shall mean the person or entity designated from time to time by the Cooperative to provide general administrative services to the Cooperative under independent contract to the Cooperative.

"**Member**" shall mean any company, person or entity admitted as a Member of the Cooperative pursuant to **Article 3**, which has not had its membership terminated or assigned pursuant to **Article 3**.

"**Membership Interest**" shall mean the interest of a Member expressed as a percentage and calculated pursuant to **Section 7.1**.

"**Oil**" means oil of any kind or in any form including, but not limited to, crude oil, petroleum, fuel oil, sludge, slops, oil refuse, oil mixed with wastes other than dredged soil, and non-petroleum edible oils.

"**Representative(s)**" shall mean any person(s) appointed by a Member to act as its representative(s) or alternate representative pursuant to **Section 3.2**.

ARTICLE 2
Offices

2.1 **Principal Office**. The principal office of the Cooperative shall be located in the City of Portland, Oregon.

2.2 **Other Offices**. The Cooperative may also have offices and a registered office at such other places both within and without the State of Oregon as the Board of Directors may from time to time determine or the activities of the Cooperative may require.

ARTICLE 3
Members

3.1 **Qualifications**. Individuals, partnerships, corporations and other entities operating or owning an interest in any oil or gasoline pipeline, oil storage, refining or processing facility or oil terminal facility in the Area of Interest, or who, as a petroleum owner or seller, have "through put" transfers at petroleum facilities within the Area of Interest, are eligible to become Members of the Cooperative and may be admitted to membership by a vote of the existing Members under the bylaws.

3.2 **Representatives of Members**. Every Member shall designate to the Manager a Representative and one or more alternates, who shall for all purposes hereof have full power and authority to represent such Member in all matters dealing with the affairs of the Cooperative and upon whom any notices, statements of costs and expenses or any other communications with respect to the Cooperative may be given, delivered or served. The power and authority of such Representative (or alternate) shall continue until the Member represented by him or her shall designate another Representative or until the membership of the Member is terminated or assigned as provided below.

3.3 **Admission of Members**. Any person or entity meeting the requirements set forth in **Section 3.1** shall be eligible to become a Member by a vote of the existing Members. A vote of 75% of the number of participating Members, irrespective of Membership Interest, shall be required to approve the admission of all new Members into the Cooperative. Membership shall become effective upon payment by such new Member of all amounts required pursuant to **Section 7.2**. The requirements of this subsection shall not apply to Members that are voting Members in good standing as of the date of enactment of these bylaws. Any Former Member seeking readmittance as a Member shall be subject to the same requirements as any other person or entity applying for membership.

3.4 **Voluntary Termination of Membership**. Any Member may terminate its membership in the Cooperative by filing a written notice thereof with the Manager. Such withdrawal shall become effective immediately upon receipt of said notice or as provided in said notice, whichever occurs later in time.

3.5 **Involuntary Termination of Membership**. The Members may expel any other Member if approved by a vote of 75% of the remaining Members, for any reasons in the interests of the Cooperative, including, but not limited to:

(a) Failure to pay assessments, expenses or service fees properly attributable to such Member when due;

(b) A finding that the Member no longer meets the qualifications for membership eligibility as described in **Section 3.1**.

(c) Conduct which impairs the Cooperative's spill response and equipment programs.

A Member shall have at least 15 days notification by registered or certified mail prior to any vote on the Member's expulsion. The Cooperative's remedy of expulsion is in addition to any other remedies at law or equity that the Cooperative may have.

3.6 **Obligations on Termination**. Upon any termination of membership, whether voluntary or involuntary, the Former Member shall pay in full all outstanding Cooperative assessments, costs or service fees due and payable as of the effective date of the termination of membership. By such termination, the Former Member forfeits all rights the Former Member may have acquired in the Cooperative, including rights to any property owned by the Cooperative. Such termination shall not relieve the Former Member from its proportionate share of any liabilities, if any, incurred by or rights or claims accruing against the Cooperative as of the effective date of the termination of membership.

3.7 **Adjustment of Membership Interest upon Admission or Termination**. The Membership Interest of each Member shall be adjusted pursuant to **Section 7.1** as of the effective date of the admission of a new Member or termination of an existing Member.

3.8 **Assignment and Transfer of Membership Interest**. No Member may assign or otherwise transfer in whole or in part its Membership Interest without the assignee or other transferee being admitted as a new Member pursuant to **Section 3.3**. A corporate reorganization of a Member, by merger, consolidation, or otherwise, shall not constitute an assignment or transfer for the purposes of this subsection, provided such reorganization does not cause the Cooperative to be in violation of applicable law.

3.9 **Associates**. The Cooperative may invite vendors and other persons or entities that are not eligible for membership to become associated with the Cooperative. Associates shall have no membership rights respecting voting, equipment programs, emergency procedure programs or contingency planning, but may otherwise participate in Cooperative meetings and other activities designated as open to associates or the public by the Board of Directors. Associates may be assessed annual fees set from time to time by the Board of Directors.

ARTICLE 4
Meetings of Members

4.1 **Place of Meeting**. All Member meetings shall be held in Portland, Oregon or at any other place, either within or without the State of Oregon, as may be designated by the Board of Directors.

4.2 **Annual Meeting**. The annual Member meeting shall be held in the last quarter of each calendar year on such date and at such time as shall be designated by the Board of Directors and stated in the notice of the meeting. At each annual Member meeting, the Members shall (i) elect a Chairman, a Vice Chairman and members of the Board of Directors to succeed those whose terms expire in that year to serve until their successors are elected, (ii) approve the capital and expense forecast for the following year and (iii) transact such other business as may properly be brought before the meeting.

4.3 **Notice of Annual Meeting**. Written notice of the annual Member meeting stating the place, date and hour of the meeting shall be given to each Member entitled to vote at such meeting not less than seven (7) or more than thirty (30) days before the date of the meeting. Notice by electronic transmission is written notice. Such notice shall be given either personally or by mail. "Personally," as used in this subsection, shall include electronic transmission. Notice shall be deemed to have been given at the time when delivered personally, or if mailed, when deposited in the United States mail, postage prepaid, directed to each Member entitled to vote at such meeting at the address of such Member appearing on the books of the Cooperative or given by it to the Cooperative for the purpose of such notice. The notification requirements for a vote on expulsion of a Member under **Section 3.5** are in addition to the notice requirement stated herein.

4.3.1 **Waiver of Notice.** A written waiver of notice signed by the Representative of the Member entitled to the notice, whether before or after the time stated in the notice, is equivalent to the giving of the notice.

4.4 **List of Members**. The Manager who has charge of the membership ledger of the Cooperative shall prepare and make a complete list of Members entitled to vote at the Member meeting, showing the Membership Interest registered in the name of each Member. Such list shall be open to the examination of any Member at the place where the meeting is to be held.

4.5 **Regular and Special Meetings**.

4.5.1 **Regular Meetings.** In addition to the annual meeting, the Cooperative shall hold regular Member meetings during the year as may be called by the Chairman. Subject to the notice provisions in **Section 4.6**, the Chairman and/or Manager shall notify the Members of a schedule of regular meetings to be held throughout the year. Any business of the Cooperative may be conducted at regular meetings either in the open meeting or, at the election of the Chairman, in executive session for Members only. The Chairman may designate one or more regular meetings open to associates and non-Members, and may invite associates and non-Members to any regular or special meeting.

4.5.2 **Special Meetings.** The Chairman or the Board of Directors may call special Member meetings for any purpose or purposes. The Secretary shall call a special Member meeting upon the filing of a petition stating the business to be brought before the meeting signed by not less than 10 percent of the Members.

4.6 **Notice of Regular and Special Meetings**. Written notice of regular and special meetings stating the place, date and hour of the meeting shall be given to each Member entitled

to vote at such meeting not less than seven (7) or more than thirty (30) days before the date of the meeting. Notice of special meetings shall also state the purposes for which the meeting is called. Notice by electronic transmission is written notice. Notice of regular and special meetings shall be given either personally or by mail. "Personally," as used in this subsection, shall include electronic transmission. Notice shall be deemed to have been given at the time when delivered personally, or if mailed, when deposited in the United States mail, postage prepaid, directed to each Member entitled to vote at such meeting at the address of such Member appearing on the books of the Cooperative or given by it to the Cooperative for the purpose of such notice. The notification requirements for a vote on expulsion of a Member under **Section 3.5** are in addition to the notice requirement stated herein.

4.6.1 **Waiver of Notice.** A written waiver of notice signed by the Representative of the Member entitled to the notice, whether before or after the time stated in the notice, is equivalent to the giving of the notice.

4.7 **Business at Special Meetings**. The business transacted at any special Member meeting shall be limited to the purpose or purposes stated in the notice.

4.8 **Adjourned Meetings and Notice Thereof**. Any Members' meeting (annual, regular or special), whether or not a quorum is present, may be adjourned from time to time by the vote of 66 2/3% of the Membership Interest present by Representative, but in the absence of a quorum, no other business may be transacted at such meeting, except as provided in **Section 4.12** and **4.13**.

When a Members' meeting is adjourned to another time or place, a notice of the adjourned meeting need not be given if the time and place thereof are announced at the meeting at which the adjournment is taken; except that if the adjournment is for more than thirty (30) days or, if after the adjournment a new record date is fixed for the adjourned meeting, notice of the adjourned meeting small be given to each Member of record entitled to vote at such meeting.

At the adjourned meeting, the Cooperative may transact any business that might have been transacted at the original meeting.

4.9 **Quorum**. A majority (at least 50½%) of the Members representing at least 66 2/3% of the Membership Interest, present by Representative, shall constitute a quorum at all Member meetings for the transaction of business.

4.10 **Vote Required for Member Approval**. In all matters other than the admission or expulsion of a Member, a quorum must be present and Members holding at least 75% of the Membership Interest present in such quorum shall be required for approval of matters submitted to the Members.

4.11 **Voting Rights of Membership**

4.11.1 Subject to **Section 4.10**, each Member shall be entitled to one vote for each percentage point and a fractional vote equivalent to any fractional percentage point (rounded to the nearest 1/100th of a percentage point) of the Membership Interest held by such Member as determined pursuant to **Section 7.1**. Voting may be by voice or written ballot.

4.11.2 No voting by proxy is allowed. However, the Board of Directors may cause to be submitted by mail ballot any question to be voted on at any Member meeting, including the election of Directors. In such event, the Secretary shall mail to each Member along with the notice of the meeting, the ballot on each such question and a voting envelope. The ballot may be cast only in a sealed envelope which is authenticated by the Member's signature. A vote so cast shall be counted as if the Member were present and voting in person.

4.12 **Member Action Without Meeting**. Any action required to be taken at any Members' meeting or which may be taken at any Members' meeting, may be taken without a meeting if a consent in writing setting forth the action so taken is signed by all of the Members entitled to vote with respect to the subject matter thereof. Such consent shall have the same force and effect as a unanimous vote at a meeting. Unless the consent specifies a different effective date, action taken under this subsection is effective when the last Member entitled to vote signs the consent.

4.13 **Ratification by Absentees**. Members may ratify any vote or action taken at a membership meeting from which the Members were absent if done in writing and filed with the Manager.

ARTICLE 5
Board of Directors

5.1 **Board of Directors**. The business and affairs of the Cooperative shall be managed by or under the direction of the Board of Directors which may exercise all such powers of the Cooperative and do all such lawful acts and things as are directed by these bylaws or to be exercised or done by the Members. The Board of Directors shall consist of the following persons: Chairman, Vice Chairman, current past chairman, Training Committee representative and Equipment Committee representative. The Board of Directors may also include up to two Directors nominated from the Member Representatives at large. The Directors shall be nominated by the current Chairman and elected at the annual meeting of the Members, or the Board of Directors may be elected at any special meeting of the Members held for that purpose. Each Director shall be elected annually and hold office until his or her successor is elected and qualified.

5.2 **Vacancies**. In the event of a vacancy of any position on the Board of Directors, the Chairman shall designate a person to fill such Board of Directors position for the balance of the pending term for such position until the annual meeting.

5.3 **Compensation of Directors**. Directors shall not receive any stated salary for their services but may, upon approval of the Board of Directors, be paid their expenses, if any, of attendance at each meeting of the Board of Directors.

5.4 **Resignation**. Any Director may resign effective upon giving written notice to the Chairman or the Manager, unless the notice specifies a later time for the effectiveness of such resignation.

5.5 **Meetings**. The Board of Directors shall meet as deemed necessary by the Chairman. Notices of regular and special meetings of the Board of Directors shall be delivered personally to each Director or sent to each Director by facsimile, U.S. mail or e-mail at least four (4) days prior to the time of holding of the meeting provided, however, that the Board of Directors may meet and conduct business at any annual, regular or special meeting of Members without such notice and provided further that the Chairman may declare an oil-spill emergency and conduct a meeting without such prior written notice. Notice of a meeting need not be given to any Director who waives notice, whether before or after the meeting, or who attends or participates in the meeting without protesting the lack of notice prior thereto or at its commencement.

5.6 **Quorum**. At any meeting of the Board of Directors a majority of the total authorized number of Directors shall constitute a quorum. Matters to be decided by the Board of Directors shall be on vote of the majority of the Directors present including the Chairman, and in case of a tie, the vote of the Chairman or in his absence, the Vice Chairman shall be considered the deciding vote. Any meeting of the Board of Directors, whether or not a quorum is present, may be adjourned to another time and place by vote of the majority of Directors present.

5.7 **Action Without Meeting**. Unless otherwise restricted by these bylaws, any action required or permitted to be taken at a meeting of the Board of Directors or any committee thereof may be taken without a meeting if all Directors entitled to vote on the matter give their consent in writing, and such consent is filed with the minutes of proceedings of the Board of Directors maintained by the Manager.

5.8 **Meeting by Conference Telephone or Similar**. Unless otherwise restricted by these bylaws, Directors may participate in any meeting of the Board of Directors by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other. Participation pursuant to this subsection shall constitute presence in person at the meeting.

5.9 **Manager**. The Manager or the Manager's designated representative shall be an ex officio member of the Board of Directors and, unless otherwise stated by the Chairman, may attend all meetings of the Board of Directors. The Manager shall perform such secretarial and administrative duties as requested by the Chairman at such meetings but shall have no vote in business or matters before the Board of Directors.

ARTICLE 6
Officers

6.1 **Officers**. The Cooperative shall have a President, Vice President, Secretary/Treasurer and such other officers as may be determined by the Board of Directors from time to time. The offices of Chairman and President shall be combined in one person, and the offices of Vice Chairman and Vice President shall be combined in one person.

6.2 **Election and Term of Office**. The officers shall be elected annually at the first meeting of the Directors held after each annual meeting of the Members, or as soon thereafter as conveniently may be. Each officer shall hold office until a qualified successor to the officer is

duly elected or appointed, until the death or resignation of the officer, or until the officer is removed in the manner provided for in these bylaws; provided that a Chairman may only serve up to two consecutive years before replacement.

6.3 **Removal.** Any officer elected or appointed by the Board of Directors may be removed by the Board of Directors whenever in its judgment the best interests of the Cooperative will be served thereby.

6.4 **Vacancies.** The Board of Directors may fill a vacancy in any office for the unexpired portion of the term.

6.5 **Duties.** All officers shall have such authority and perform such duties as the Board of Directors may determine, not inconsistent with these bylaws.

ARTICLE 7
Finance

7.1 **Calculation of Membership Interest**. Each Member's voting rights, obligations to pay dues, assessments for similar contributions, and rights and duties upon merger, consolidation or dissolution of the Cooperative shall be based on such Member's Membership Interest. The Member's Membership Interest shall be determined by calculating such Member's participation percentage of the total Membership Interest held by all Members in accordance with the Participation Formula set forth on **Exhibit C** attached hereto and made a part hereof. The Members may amend **Exhibit C** from time to time pursuant to **Article 14** of these bylaws.

Membership Interest shall be calculated to the nearest one/one hundredth (1/100) of one (1) percent and computed annually using the best available data from the previous calendar year. The Membership Interest for new Members shall be based on data from the previous calendar year and shall be effective on the first day of the next calendar quarter following the acceptance of the new Member. The new Member shall be assessed for its proportionate share of the approved budget for the remaining part of the year following acceptance to membership.

The annually recalculated participation percentages shall be effective on July 1st of each year and January 1st if Member(s) are accepted or dropped during the fourth calendar quarter. Actual performance statistics for the immediate past year shall be submitted to the principal office of the Cooperative by March 31 of each year. The Cooperative shall have the right, at any reasonable time, to inspect and audit records of any Member to verify performance statistics reported by the Member for purposes of calculating participation percentage. Inspection and audit may be made by the Manager or by an independent public accounting firm or auditors selected by the Manager. The results of any inspection or audit, when conducted by an independent public accounting firm or auditor, shall be final and binding unless acceptance of such results is altered or modified by membership vote in accordance with regular membership voting procedures. The costs of any such audits shall be borne by the Cooperative unless the audit results in modification of reported transfer volumes in excess of 5%, in which case the costs of the audit may be charged to the affected Member.

7.2 **Payment by New Members**. Except where permitted by **Section 3.8**, a person admitted as a new Member shall make payment to the Cooperative for its Membership Interest in an amount determined as follows:

Its proportionate share determined in accordance with the Participation Formula of the then current replacement value of all major capital vessels, equipment and materials owned by the Cooperative, determined as follows:

$$\text{Current Replacement value} = \text{Original Cost} \times \frac{N_2}{N_1} \times \frac{\text{Remaining life yrs)}}{\text{Total life (yrs)}}$$

* N_1 = Nelson inflation index at end of year equipment purchased.

* N_2 = Latest available Nelson inflation index.

*or substitute some other appropriate index at the option of the Cooperative, such as:

(i) Producers Price index;

(ii) Nelson Miscellaneous Equipment Average; or

(iii) Marshall Equipment Index.

The equipment and materials to be included and the economic life of each shall be established by the Manager, subject to approval by the Board of Directors.

The amount can be paid either in cash, or in oil spill containment of recovery equipment or services, acceptable to the Board of Directors, of equal value.

For the purpose of this subsection, the new Member's Membership Interest shall be determined by the Participation Formula based upon the best available projection of the new Member's annual transfers. It shall be subject to approval by the Members in accordance with **Section 3.3**.

The requirements of this subsection may be partially or totally waived upon approval by the existing Members.

7.3 **Capital and Expense Forecasts**. The Board of Directors shall, each year, prior to the annual meeting of the Members, submit to the Members a capital and expense forecast, including equipment and material acquisitions plans, for operations of the Cooperative for the following year. Approval by the Members of the forecasts shall be by vote of the Members under **Section 4.10**.

7.4 **Capital Dues Assessments**. Each Member shall be assessed dues or assessments based on such Member's Membership Interest. Assessments shall be paid within the invoicing cycle established by the Board of Directors. Dues assessments shall be based, as near as possible, on the capital and expense forecasts for the applicable calendar year.

7.5 **Additional Capital and Expense Requirements**. Upon approval of the Members, additional monies may from time to time be added to the charges or assessments against the Members in accordance with their Membership Interest. Any Member which has given notice of withdrawal in accordance with **Section 3.4** or which has had its membership terminated pursuant to **Section 3.5** shall not be required to advance additional monies after the effective date of such withdrawal or termination.

ARTICLE 8
Cleanup Policies

8.1 **Emergency Procedures**. The Cooperative shall maintain a statement of emergency procedures to be followed in the event of an oil spill emergency in the Area of Interest involving any Member, for which a Member is or may be legally or contractually responsible, or to which the Cooperative is otherwise contractually obligated to respond (the "**Emergency Procedures**"). The Emergency Procedures may be amended from time to time by vote of the Members independently of any change or amendment to these bylaws. The benefits of the Cooperative's equipment and Emergency Procedures programs are limited to Members as stated in these bylaws and as may otherwise be stated in the Emergency Procedures provisions of any membership agreement of the Cooperative.

8.2 **Unidentified Spills**. The Cooperative and its Members assume no responsibility for spills from unidentified sources. The Board of Directors may, without further approval of the Members, authorize use of Cooperative equipment and material, or authorize a Contractor to use Cooperative equipment or materials, in cleanup of spills from unidentified sources within the Area of Interest at the request and under the direction of the governmental agency having jurisdiction over the spill, all for the account of the governmental agency or the Contractor, as the case may be. The Contractor shall at all times indemnify the Cooperative and the Members against all liability in connection with such use of Cooperative equipment and materials.

8.3 **Spills Originating Outside of the Area of Interest**. The Board of Directors may, with the Members' approval, release equipment and material to a Contractor or a governmental agency for use in the cleanup of spills originating outside the Area of Interest, subject, however, to the requirements of any applicable Contingency Plan maintained by the Cooperative or the Members.

8.4 **Charges for Cleanup Operations by Cooperative**. Any charges for cleanup services provided by the Cooperative to Members or non-Members shall be based on actual costs incurred by the Cooperative. The foregoing shall not apply to charges by Contractors.

8.5 **Member-Owned Equipment and Materials**. The Manager, with the assistance of the Members, shall collect and maintain current lists of oil-spill equipment and the materials owned by Members which are designated by such Members for purposes of the Emergency Procedures. The Manager shall arrange for distribution and updating of these lists to all Members. The information collected and maintained by the Manager shall include the following:

8.5.1 **Equipment Lists**. There shall be furnished by each Member a list of the equipment (recovery devices, skimmers, vacuum trucks, oil booms, etc.) which it would be willing to make available for use by a Member affected by an oil spill, or for use by the Cooperative, as the case may be. All listed equipment shall be released on authority of the contact personnel of the respective Member unless that Member clearly designates on the list that certain equipment can be released only on higher authority, together with the name, title and contact information of such higher authority. Members' inventory of designated equipment is subject to reasonable periodic inspection by the Manager.

In addition to Member-owned equipment, the Cooperative also has contractually-guaranteed access to equipment which is maintained by Contractor(s). This equipment is to be released by the Manager or the Chairman only pursuant to the Emergency Procedures and/or contingency plans maintained by the Cooperative.

8.5.2 **Materials Lists**. There shall be furnished by each Member company a list of the materials (approved chemicals, sorbents, etc.) which it would be willing to make available for use by a Member affected by an oil spill, or for use by the Cooperative, as the case may be. All listed materials shall be released on authority of the contact personnel of the respective Member unless that company clearly designates on the list that certain materials can be released only on higher authority, together with the name, title and contact information of such higher authority. Members' inventory of designated materials is subject to reasonable periodic inspection by the Manager.

In addition to Member-owned materials, the Cooperative also has contractually-guaranteed access to materials which are maintained by Contractor(s). These materials are to be released by the Manager or the Chairman only pursuant to the Emergency Procedures and/or contingency plans maintained by the Cooperative.

8.5.3 **Personnel**. Each Member shall provide the Manager with current and updated lists of Member personnel trained in oil spill response. It is not anticipated that the Cooperative will supply personnel to operate Member-owned equipment, except in the case of specialized equipment. Each Member shall indicate on its equipment list which items of equipment require specially trained personnel. The Cooperative may furnish such personnel on a voluntary basis only, subject to the Emergency Procedures.

8.5.4 **Authorized Contact Lists**. Each Member shall exercise its best efforts to provide and regularly update the Manager with the names and/or titles, facility emergency telephone numbers and home telephone numbers of responsible personnel in its facility who are authorized to release material and equipment for such Member. This list should be prioritized in order of those to be called. The first item on the list, if possible, should be the name(s) and/or title(s) of personnel who are on duty at all times. Except for the normal workweek (Monday through Friday, excluding holidays), this person should be called to request material or equipment. The second name on the list should be the company's representative in the Cooperative who would normally be called during regular office hours. This should be followed by his or her alternate in the Cooperative, and other officials such as Facility Managers, General Superintendents, etc.

to be advanced under the terms of any other indemnity agreement, insurance or right held by the person which is not provided by or through the Cooperative, including any insurance policy not procured by or provided for the benefit of the Cooperative; and when the Cooperative advances expenses of defense under this subsection, the Cooperative shall have the right to designate or approve counsel, major items of expense, and any proposed settlement, in advance.

10.8 **Other Commitments**. The authorizations of this article shall not be deemed exclusive of any other provisions for indemnification of directors, officers, managers, employees or agents that may be provided by statute or agreement not inconsistent with the restrictions herein.

ARTICLE 11
Cooperative Nonprofit Operation

11.1 **Nonprofit Operation and Tax-Exempt Status**. It is the intent of the Cooperative to operate on a cooperative nonprofit basis for the mutual benefit of its Members, as a tax-exempt organization in compliance with section 501(c)(4) of the Internal Revenue Code.

11.2 **Distribution of Net Proceeds or Savings.** The Cooperative shall periodically distribute the net proceeds or savings of the Cooperative to the Members in accordance with the Oregon Cooperative Corporation Act. Such distributions shall be apportioned in accordance with each Member's membership interest during that period. Such distributions shall be in the form of a credit toward the Member's dues, assessments, or other similar required contributions, unless otherwise determined by the Board of Directors.

ARTICLE 12
General Provisions

12.1 **Contracts**. The Board of Directors may authorize the Manager or any officer or officers of the Cooperative, in addition to the officers so authorized by these bylaws, to enter on behalf of the Members into any contract or execute and deliver any instrument in the name of and on behalf of the Cooperative, and such authority may be general or confined to specific instances.

12.2 **Checks, Drafts or Orders for Payment**. All checks, drafts or orders for the payment of money, notes or other evidences of indebtedness issued in the name of the Cooperative shall be signed by such officer or officers of the Cooperative and in such manner as shall from time to time be determined by resolution of the Board of Directors. In the absence of such determination by the Board of Directors, such instruments shall be signed by the Chairman, Vice Chairman, Secretary/Treasurer or Manager.

12.3 **Deposits**. All funds of the Cooperative shall be deposited from time to time to the credit of the Cooperative on behalf of the Members in such banks, trust companies or other depositaries as the Board of Directors may select.

12.4 **Gifts**. The Cooperative shall not accept any grant, contribution, gift, bequest or devise offered for the general purposes of or for any special purpose of the Cooperative without the prior approval of the Board of Directors.

12.5 **Books and Records**. The Cooperative shall keep correct and complete books and records of account of all transactions conducted hereunder and shall also keep minutes of the proceedings of its Members and Board of Directors and shall keep at the registered or principal office a record giving the names and addresses of the Members, Directors and officers. These bylaws and amendments thereto shall be filed in a minute book that shall be kept at the principal office. All books and records of the Cooperative may be inspected by any Member for any proper purpose at any reasonable time.

12.6 **Severability**. If any provision of these bylaws or portion thereof should be declared invalid for any reason, the invalid provision or portion thereof shall be deemed omitted and the remaining terms shall nevertheless be carried into effect. If any transfer of any interest or control of any vessel contemplated hereunder would require the approval of any governmental authority in order to be lawful, obtaining such approval is a condition precedent to the effectiveness of any agreement to so transfer, and any actual such transfer.

ARTICLE 13
Dissolution

13.1 **Election by Members**. The Cooperative may elect to wind up its affairs and voluntarily dissolve by the vote of the Members pursuant to **Section 4.10** at a meeting of the Members specially called for that purpose, or by written consent of all Members without a meeting pursuant to **Section 4.12**.

13.2 **Disposition**. Upon the dissolution or winding up of the Cooperative, after paying or adequately providing for the debts and contractual obligations of the Cooperative, the remaining assets being held by the Cooperative for and on behalf of the Members shall be divided among the Members in accordance with each Member's respective Membership Interest as determined pursuant to **Section 7.1** at the time of dissolution.

ARTICLE 14
Amendments

14.1 **Amendments**. These bylaws may be altered, amended, or repealed or new bylaws may be adopted only by an affirmative vote of the Members pursuant to **Section 4.10** of these bylaws. Members may vote to alter, amend, or repeal or adopt new bylaws at any regular meeting of the Members, or at any special meeting of the Members if notice of such action is contained in the notice of such special meeting.

Exhibits

Exhibit A - Membership List (Date: _____)
Exhibit B - Equipment Lists (Date: _____)
Exhibit C - Participation Formula for Determining Membership Interest (7/1/92)
Exhibit D - Emergency Procedures (Date: _____)

CERTIFICATE OF THE SECRETARY

The undersigned Secretary of the Cooperative hereby certifies that the foregoing bylaws were adopted by the Members as of the _____ day of _____, 2000, replacing any and all prior versions or editions thereof.

The Members of the Cooperative each certify that the foregoing bylaws are acceptable and agreed to by signature of an authorized representative of each Member on the attached acknowledgement signature pages. The acknowledgment signature pages for the Members may be signed in counterparts by the various Members and all such counterparts executed by the Members shall, taken together, be considered a fully executed original of the bylaws and membership acknowledgment.

Upon the admission of each new Member, such new Member shall also execute an acknowledgment copy of these bylaws in the form and version then current as of the time of the new Member's admission.

_____
Secretary

EXHIBIT A

Membership List

CLEAN RIVERS
COOPERATIVE, INC.

Membership List

BP

Boise White Paper

Cascade General

Chevron

Conoco-Phillips

Emerald Materials

Exxon/Mobil

Georgia – Pacific (Camas)

Kinder Morgan Energy Partners, Ltd.

Longview Fibre Co.

Olympic Pipe Line Company

Owens Corning Sales LLC

Pacific Terminal Services, Inc.

Paramount Petroleum

Port of Portland

Portland General Electric

Shell Oil Products

Tesoro Refining and Marketing Co. – Vancouver Terminal

Tidewater Barge Lines

Valero Terminals - Portland

Valero Terminals - Vancouver

West Linn Paper Co

Weyerhaeuser Paper Co

EXHIBIT B

Equipment List

CRC Equip List - Appendix B Standard Identification Inst.

RESOURCE INVENTORY / TRACKING FOR SPILL RESPONSES

Revised: 1 March 2001

COMPLETING THE EQUIPMENT INVENTORY FORM (EXCEL spreadsheet):

REVISED:	Please manually enterthe date you update / submit the equipment list, e.g. 15 July 2001, or 7-15-01
CONTACT / OSRO [person]	Please enter a name, telephone number and e-mail address, e.g. John Doe / (206) 555-1234 /doe@xyz.com
OSRO	Abbreviate (limited to 6 letters), e.g. Clean Sound = CSCI; Foss Environmental = FES; MSRC, etc.
RESOURCE	See attached "Standardized Resource Identification" The abbreviations are practically intuitive.
KIND & TYPE	See Field Operations Guide (FOG), 2000 Edition – Chapter 13. http://www.uscg.mil/hq/g-m/nmc/response/index.htm#Guides
IDENTIFICATI	See attached example sheet *Tab 3 Inventory Example*
SPECIFICATI	See attached example sheet *Tab 4 Resource Tracking Example*
BPD-EDRC	Barrels Per Day – Efficiency Derated Recovery Capability, e.g. 20% (standard) of name plate capacity, converted to BPD
STORAGE	Expressed in BARRELS only. Convert gallons (x 42) to barrels.
BOOM LENGTH	Expressed in feet only. Convert meters (x 3.281) to feet.
W / OPS OR PEOPLE	Number of operators automatically included (required) for this equipment
HOME BASE	Self-explanatory, i.e. city or region…. Tacoma, North Puget Sound (operating area),
STATE or PROVINCE	Abbreviate, WA, OR, CA, BC 2 letters only
STAGED	How equipment is stored, on or inside)/ maintained in readiness, e.g. dock, warehouse (w-house), 20' container (cont.), trailer, yard, vessel (name)
LATITUDE	Without degree and minute symbols, e.g. 48-58.80N
LONGITUDE	Without degree and minute symbols, e.g. 122-45.05W
NOTE:	The following columns are reserved for resource tracking only If you elect to use the Excel spreadsheet in lieu of T-cards, or some other tracking syste
ASSIGNED	Example: Task Force 1 (TF-1), Division A (DIV-A), Staging-1, Geographic Response Plan S23 (GRP-S23), Helibase, etc.
ETA (DATE /	You must use date and time, e.g. 14 OCT 1630 For long-term responses, the month is beneficial.
O/S (DATE /	You must use date and time, e.g. 14 OCT 1630 For long-term responses, the month is beneficial.
DEPARTED (DATE /	You must use date and time, e.g. 14 OCT 1630 For long-term responses, the month is beneficial.

CRC Equip List - Appendix B Standard Identification Inst.

Standardized Resource Identification

PRIMARY	SECONDARY	SPEC'S	COMMENTS
A (aircraft)	C – cargo P – passenger D – dispersant	10T (ton capacity) 05P (pass.seats) 5000G (gal.cap.)	C-130 Otter, Cesna, Beaver, B-737, etc. Dispersant application aircraft
B (boom)	- 20 (inch), or 42.... - XX (special type...) - FIRE (boom)	<describe separately>	- 20 (inch) boom, or 42 inch, etc.... - XX (special, e.g. Inter-Tidal, NOFI Trawl, etc.) - FIRE (boom)
C (comms)			< not a key tracking item during spill responses> VHF radios, repeaters Cell phones, NEXTEL system, Pagers
E (equipment)	TP SP GEN PLS OWS DD PW SC ATV ER EM	175 gpm, diesel 950 gpm, hydraulic 7.5 KW 1,400 psi	Transfer Pump (gas, diesel, electric, hydraulic, pneumatic, submersible) Salvage Pump (same as above) Generator Portable Lighting Sets Oil / Water Separator Dispersant Delivery Equipment Power Washer Steam Cleaner All-Terrain Vehicle Earth Removal (back hoe, excavator....) Earth Moving (bulldozer, grader....)
H (helicopter)	4P (pass. seats) 3P 1P HL		USCG H-65 Ranger Bell Heavy Lift (cargo)
M (misc.)			
P (personnel)	A – overhead (ICS) M – management S – supervisory R – responders O – operators T – technicians C – hand crews L – laborers		< to be further developed >
R	VS (vessel) SWB (SW barge) VT (vac-truck)	BPD-EDRC	+ column for storage amount SWB = shallow water barge w/ recovery device onboard

CRC Equip List - Appendix B Standard Identification Inst.

	TB	15,000 bbls	TB – Tank Barge (requires move assist)
	SWB	400 bbls	SWB – Shallow Water T/B (no recovery device)
	VT	120 bbls	VT – Vacuum Truck
	TT	150 bbls	TT – Tank Truck
	PT	250 bbls	PT – Portable Tank, e.g. Baker, Frac, R-for-Rent
	PB	100 bbls	PB – Portable Bladder
	PD	1 bbl	PD – Portable Drum
	PX	.5 bbl	PX – Portable, other (fish tote, etc.)
T (trucks / trailers) <vehicles>	DT	XX cu. yds.	Dump Truck
	ED	XX cu. yds.	End-Dump
	DB	XX cu. yds.	Drop-Box
	PV-12	12 pass.	Passenger Vehicle / Van, 12 passenger
	TC-2	02 ton (cargo truck)	Truck, cargo – 2 ton (flat bed), or 1 ton pick-up
	T4x4	4 wheel drive	Pick-up truck; crew-cab, etc.
	CR	06 ton (SWL)	Crane / boom truck, 6T Safe Working Load
	TR-28 (ft)	28 ft. trailer	Trailer, e.g. boom, equipment, cargo
	ERV or ERT-32 (ft)		Emergency Response Van or Trailer (32 ft)
	COM-28 (ft)		COM – Communications trailer
	SC-45 (ft)		SC – Shoreline Clean-up trailer
	WR-42 (ft)		WR – Wildlife Rescue / Triage trailer
	FO-42(ft)		FO – Field Office (trailer); might be part of ICP
	XX	<other, describe>	
V (vessel)	Tug-119 (ft)	… + 3000 HP, TS	Tug BARBARA FOSS <has towing capability>
	WB-165 (ft)	165 ft. (supply boat)	MV ACME (off-shore supply boat, i.e. a big WB)
	WB-32 (ft)	32 ft. / 30 kts	FRV-7 "Tacoma"
	WB-12 (ft)	12 ft. skiff w/ OB	WN-2345-SL
	SKF-12 (ft)	12 ft. skiff, NO-OB	# 1023

Revised: 1 March 2001 / jcc

RESOURCE INVENTORY / TRACKING FOR SPILL RESPONSES

This paper proposes a better way to catalog and track resources during a spill response. The primary purpose is to bring manually prepared T-cards into the computer age. The recommended standardization also facilitates inventory control, OSRO application, computer sorting, mathematical tabulations and cost accounting.

Standardized Resource Identification

The first priority is to standardize the resource terminology. Equipment specifications can easily be included as a secondary or tertiary identification feature. Abbreviations conserve space on the Excel spreadsheet. This is an important feature. See Attachment (1) for examples.

By grouping or cataloging key equipment, it is quick and easy to determine:

(1) How much boom do we have?
(2) How much recovery capability do we have -- on-scene, or enroute?
(3) How much storage is available, and what types are available?

Other resources are easily grouped and tracked by type, e.g. aircraft, helicopters, vessels, vehicles (trucks / trailers), personnel and special equipment such as bulldozers, graders, transfer pumps, power washers and steam cleaners.

Resource Tracking

Once the basic inventory is compiled, this same information can be used for tracking and cost accounting. See Attachment (2) for a tracking example, used during a drill or spill response. Since the basic list has been copied for resource tracking, several columns of needless information have been deleted, and additional columns have been added to record assignment, date and time.

The computer allows this data to be displayed, and sorted by type, location, date / time, etc. The Excel spreadsheet can be manipulated to easily and accurately tabulate total numbers for t he three questions posed above. The spreadsheet also maintains a chronological record of all changes. Post-incident audits can track each piece of equipment as it was mobilized and transferred between divisions and task forces, right down to final demobilization.

The spreadsheet performs the same function as the proven T-cards, with an electronic enhancement. But, it absolutely requires, and begins with, a standardized nomenclature.

If there are questions or suggestions for improvement, please feel free to contact any member of the NW_Ad Hoc Equipment Workgroup:

Wayne Clapper	MSRC Everett, WA	(425) 304-1523	clapper.west@msrc.org
John Crawford	Foss Maritime Seattle, WA	(206) 281-3781	john@foss.com
Jim Haugen	MSRC Everett, WA	(425) 304-1524	haugen.west@msrc.org
Scott Knutson	USCG – D13 Seattle, WA	(206) 220-7219	sknutson@pacnorwest.uscg.mil
Jim Peschel	Foss Environmental Seattle, WA	(206) 768-1483	jepeschel@fossenv.com
Marin Streeter	Clean Sound Everett, WA	(425) 304-1561	marins@cleansound.com

EXHIBIT C

Participation Formula for Determining Membership Interest

TYPE "A" MEASUREMENT: WATER TRANSFERS

Contributions under this method shall be based on the sum of all transfers of petroleum products across a dock within the Clean Rivers Cooperative, Inc. Area of Interest. The custodian of the product at the time of transfer shall record the volume involved.

$$\frac{\text{Water transfer volume x 65}}{\text{Total volume of water transfers plus adjusted land transfers}}$$

TYPE "B" MEASUREMENT: DOCKINGS

Contributions under this method shall be based on the total number of dockings that involve the transfer of petroleum products within the Clean Rivers Cooperative, Inc. Area of Interest. Each docking will be recorded by the owner of the facility.

$$\frac{\text{Number of dockings x 35}}{\text{Total of dockings}}$$

TYPE "C" MEASUREMENT: LAND TRANSFERS

Contributions under this method are based on volumes transferred over land by companies involved in the transportation of petroleum products (pipeline companies, tank truck operators, etc.)

Tank truck operations shall report their total volume transported within the Clean Rivers Cooperative, Inc. Area of Interest. The volume is adjusted by a factor of 30.

$$\frac{\text{Total Volume}}{\text{Factor 30}} = \text{Adjusted land transfers}$$

Pipeline companies shall report their total volume of product transported within the Clean Rivers Cooperative, Inc. Area of Interest. The volume is adjusted by a factor of 50.

$$\frac{\text{Total volume}}{\text{Factor 50}} = \text{Adjusted land transfers}$$

Contribution portion is calculated by:

$$\frac{\text{Individual adjusted land transfers x 65}}{\text{Total volume of water transfers plus adjusted land transfers}} = \text{Percentage}$$

PARTICIPATION PERCENTAGES

Volume percentage + Docking percentage = Participation Percentage

Adjusted total: The total of all participating pipeline companies' and tank truck companies' reported transfer volumes after division by the appropriate factor.

Pipeline Companies: 50 Tank truck Companies: 30

EMERGENCY PROCEDURES

Emergency Phone Number: (503) 220-2040 (24 hours)

Emergency Response Operations

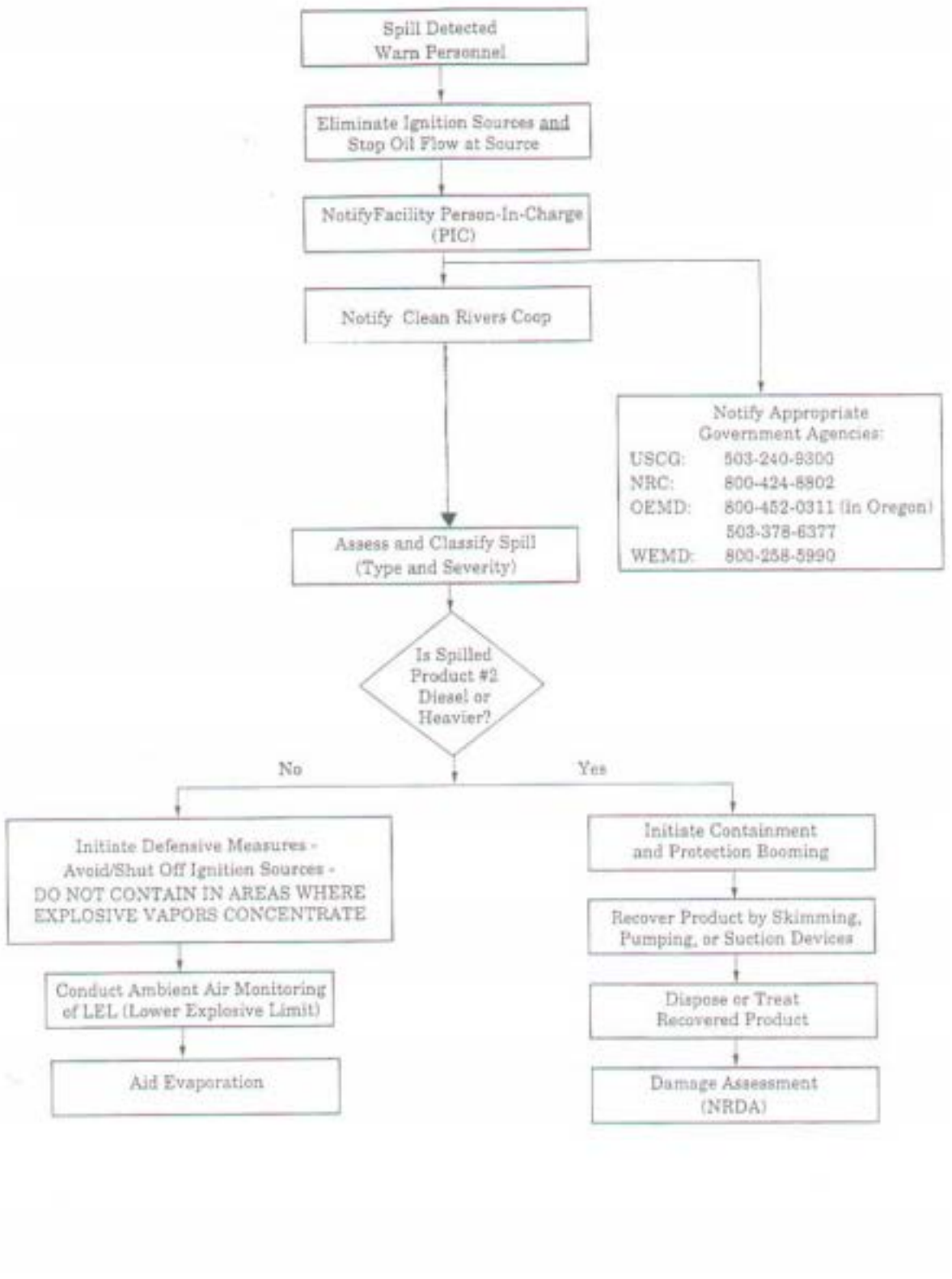
1) Upon detection of spill, the facility will initiate response actions in accordance with the applicable Facility Response Plan.

2) Agency notifications are the responsibility of the facility from which the incident occurred. Note: Clean Rivers can make initial notifications to the National Response Center, Oregon Emergency Response System and Washington Department of Emergency Management if requested by the member, but the facility will need to follow up with notifications as well.

3) Member facility will notify Clean Rivers by calling (503) 220-2040

4) Clean Rivers will activate response personnel and equipment based on preliminary assessment information reported. Clean Rivers will also notify mutual aid resources if requested. Note: Level of response initiated by Clean Rivers will vary on the capabilities and needs of the member – at least one Clean Rivers representative will be dispatched to the scene regardless of size.

5) Initial response actions and notification responsibilities are illustrated in the Emergency Response operations flow chart on following page.


Spill Detected
Warn Personnel
Eliminate Ignition Sources and
Stop Oil Flow at Source
NotifyFacility Person-In-Charge
(PIC)
Notify Clean Rivers Coop
Notify Appropriate
Government Agencies:
USCG: 503-240-9300
NRC: 800-424-8802
OEMD: 800-452-0311 (in Oregon)
503-378-6377
WEMD: 800-258-5990
Assess and Classify Spill
(Type and Severity)
Is Spilled
Product #2
Diesel or
Heavier?
No
Yes
Initiate Defensive Measures -
Avoid/Shut Off Ignition Sources -
DO NOT CONTAIN IN AREAS WHERE
EXPLOSIVE VAPORS CONCENTRATE
Conduct Ambient Air Monitoring
of LEL (Lower Explosive Limit)
Aid Evaporation
Initiate Containment
and Protection Booming
Recover Product by Skimming,
Pumping, or Suction Devices
Dispose or Treat
Recovered Product
Damage Assessment
(NRDA)

ACKNOWLEDGMENT AND ACCEPTANCE OF THE BYLAWS OF CLEAN RIVERS COOPERATIVE, INC. BY ITS MEMBERS

Chevron
(Member Company)

By: _____

Name: Gerald Henderson

Title: Terminal Manage

Date: 9/17/2007

CERTIFICATE OF THE SECRETARY

The undersigned Secretary of the Cooperative hereby certifies that the foregoing bylaws were adopted by the Members as of the 12TH day of DECEMBER, 2000, replacing any and all prior versions or editions thereof.

The Members of the Cooperative each certify that the foregoing bylaws are acceptable and agreed to by signature of an authorized representative of each Member on the attached acknowledgement signature pages. The acknowledgment signature pages for the Members may be signed in counterparts by the various Members and all such counterparts executed by the Members shall, taken together, be considered a fully executed original of the bylaws and membership acknowledgment.

Upon the admission of each new Member, such new Member shall also execute an acknowledgment copy of these bylaws in the form and version then current as of the time of the new Member's admission.

John W. Sherman
Secretary

CLEAN RIVERS COOPERATIVE, INC (CRC)- EQUIPMENT LIST

Organization	wrrlID	Resource	KindType	Indentification	Specifications	Recovery	LiquidStorage	Boom	People	HomeBase	State	Staging	OwnerID
CRC	29029	Workboat	WB3	FRV Columbia Responder	32' Kvichak	0	0	0	2	Longview	WA	Jack Fowler's	006-27
CRC	29030	Workboat	WB3	FRV Independence	32' Browns	0	0	0	2	Astoria	OR	West Mooring Basin	004-24
CRC	29031	Workboat	WB3	FRV Protector	34' Munson	0	0	0	2	St. Helens	OR	St. Helens Marina	004-25
CRC	29032	Skimmer V	RV3	OSRV HW Zarling	34' Kvichak	3720	24	0	2	Portland	OR	Fred's Marina	002-22
CRC	29033	Skimmer V	RV3	OSRV Mark O. Hatfield	34' Kvichak	3720	24	0	2	Cathlamet	WA	Elochoman Marina	003-23
CRC	29034	Skimmer V	RV3	OSRV MFSA 1	34' Kvichak	3720	24	0	2	Portland	OR	Sause Bros.	000-20
CRC	29035	Skimmer V	RV3	OSRV Clean Rivers 1	34' Kvichak	3720	24	0	2	Rainier	OR	Foss Dock	001-21
CRC	29037	Workboat	WB4	16' Workboat	16' Boston Whaler w/40 hp	0	0	0	1	Portland	OR	Portland Base	007-28
CRC	29038	Workboat	WB4	21' Workboat	21' Boston Whaler w/150 hp	0	0	0	1	Portland	OR	Portland Base	008-28
CRC	29039	Workboat	WB4	20' Workboat	20' Alumaweld w/115 hp	0	0	0	1	Portland	OR	Portland Base	009-31
CRC	29040	Workboat	WB4	Elizabeth Furse	27' Alday	0	0	0	2	Portland	OR	Portland Base Boat Trailer (36-160)	005-26
CRC	29041	Skiff	WB5	14' Skiff	14' Skiff w/15 hp	0	0	0	1	Portland	OR	Portland Base Boat Trailer (36-164)	010-58
CRC	29042	Skiff	WB5	14' Skiff, Shoreline Clean-up Trailer	14' Skiff w/15 hp	0	0	0	1	Portland	OR	Shoreline Clean-up Trailer (316-40)	011-58
CRC	29043	Skiff	WB5	14' Skiff, Spill Response Trailer (315-40)	14' Skiff w/15 hp	0	0	0	1	Portland	OR	Spill Response Trailer (315-40)	012-58
CRC	29044	Workboat	WB5	16' Skiff	16' Skiff w/25 hp	0	0	0	1	Portland	OR	Portland Base Boat Trailer (36-163)	013-58
CRC	29045	Workboat	WB5	16' Skiff	16' Skiff w/ 25hp	0	0	0	1	Portland	OR	Portland Base Boat Trailer (36-164)	014-58
CRC	29046	Wildlife	Wildlife	Widlife Rehabilitation Shelter	19' x 35' Western Shelters Gatekeeper 1935	0	0	0	0	Portland	OR	CRC Wildlife Rehabilitation Trailer	
CRC	29047	RESERVED	VHO	1 Ton Service Truck	2008 GMC	0	0	0	1	Portland	OR	Portland Base	212-65
CRC	29048	RESERVED	NT			0	0	0	0				
CRC	29049	RESERVED	NT			0	0	0	0				
CRC	29050	Skimmer P	SK3	Shallow Water Recovery Barge	30' American Eagle w/ Lori Skimmer	2473	100	0	2	Vancouver	WA	Tesoro Facility	105-29
CRC	29051	Skimmer P	SK3	Shallow Water Recovery Barge	30' Kvichak w/ Lori Skimmer	2473	100	0	2	Portland	OR	Portland Base	104-29
CRC	29052	Skimmer P	SK3	Shallow Water Recovery Barge	30' Kvichak w/ Lori Skimmer	2473	100	0	2	Longview	WA	Weyerhaeuser	103-29
CRC	29053	Skimmer P	SK3	Shallow Water Recovery Barge	30' Kvichak w/ Lori Skimmer	2473	100	0	2	Longview	WA	Weyerhaeuser	102-29
CRC	29054	Skimmer P	SK3	Shallow Water Recovery Barge	30' American Eagle w/ Lori Skimmer	2473	100	0	2	Astoria	OR	Tongue Point	101-29
CRC	29055	Skimmer P	SK3	Shallow Water Recovery Barge	30' Kvichak w/ Lori Skimmer	2473	100	0	2	Astoria	OR	Tongue Point	100-29
CRC	29056	Barge	TV3	Shallow Water Barge	30' American Eagle	0	100	0	0	Longview	WA	Weyerhaeuser	107-29
CRC	29057	Barge	TV3	Shallow Water Barge	30' American Eagle	0	100	0	0	Portland	OR	Portland Base	106-29
CRC	29058	Barge	TV3	Shallow Water Barge	30' American Eagle	0	100	0	0	Portland	OR	Portland Base	108-29
CRC	29059	Barge	TV3	Shallow Water Barge	30' American Eagle	0	100	0	0	Portland	OR	Portland Base	110-29
CRC	29060	Barge	TV3	Shallow Water Barge	30' Kvichak	0	100	0	0	Portland	OR	Fire Station #6 Moorage	109-29
CRC	29061	RESERVED	NT			0	0	0	0				
CRC	29062	RESERVED	NT			0	0	0	0				
CRC	29063	Storage P	PS4	2500 gal. Towable Bladder	American Marine	0	60	0	0	Portland	OR	Portland Base	722-62
CRC	29064	Storage P	PS4	2500 gal. Towable Bladder	American Marine	0	60	0	0	Portland	OR	Portland Base	723-62
CRC	29065	Storage P	PS4	2500 gal. Towable Bladder	American Marine	0	60	0	0	Portland	OR	Portland Base	724-62
CRC	29066	Storage P	PS4	1000 gal. Towable Bladder	American Marine	0	60	0	0	Portland	OR	Portland Base	720-62
CRC	29067	Storage P	PS4	2500 gal. Towable Bladder	American Marine	0	60	0	0	Portland	OR	Portland Base	725-62
CRC	29068	Storage P	PS4	2500 gal. Bladder	American Marine	0	60	0	0	Astoria	OR	Tongue Point	721-62
CRC	29069	Storage P	PS4	2500 gal. Bladder	American Marine	0	60	0	0	Astoria	OR	Tongue Point	726-62
CRC	29070	RESERVED	NT			0	0	0	0				
CRC	29071	RESERVED	NT			0	0	0	0				
CRC	29072	Storage P	PS4	1000 gal. Portable Fast tanks	FastTanks	0	24	0	0	Portland	OR	Portland Base	(62-1007)
CRC	29073	Storage P	PS4	1000 gal. Portable Fast tanks	FastTanks	0	24	0	0	Portland	OR	Portland Base	(62-1008)
CRC	29074	Storage P	PS4	1000 gal. Portable Fast tanks	FastTanks	0	24	0	0	Portland	OR	Portland Base	(62-1009)
CRC	29075	Storage P	PS4	1000 gal. Portable Fast tanks	FastTanks	0	24	0	0	Portland	OR	Portland Base	(62-1010)
CRC	29076	Storage P	PS4	1000 gal. Portable Fast tanks	FastTanks	0	24	0	0	Portland	OR	Portland Base	(62-1011)
CRC	29077	Storage P	PS4	1000 gal. Portable Fast tanks	FastTanks	0	24	0	0	Portland	OR	Portland Base	(62-1012)
CRC	29078	Storage P	PS4	1000 gal. Portable Fast tanks	FastTanks	0	24	0	0	Portland	OR	Portland Base	(62-1013)
CRC	29079	Storage P	PS4	1000 gal. Portable Fast tanks	FastTanks	0	24	0	0	Portland	OR	Portland Base	(62-1014)
CRC	29080	Storage P	PS4	1000 gal. Portable Fast tanks	FastTanks	0	24	0	0	Portland	OR	Portland Base	(62-1015)
CRC	29081	Storage P	PS4	1000 gal. Portable Fast tanks	FastTanks	0	24	0	0	Portland	OR	Portland Base	(62-1016)
CRC	29082	RESERVED	NT			0	0	0	0				
CRC	29083	RESERVED	NT			0	0	0	0				
CRC	29084	Delete??	TV2	duplicate - Tank Barge (Under Contract) 7K bbl	Barge "1728"	0	12958	0	3	Wauna	OR	Tidewater Barge Lines 4	(TBL 4)
CRC	29085	Delete??	TV3	duplicate - Tank Barge (Under Contract) 12K bbl	Barge	0	5356	0	3	Vancouver	WA	Tidewater Barge Lines 1728	(TBL 1728)
CRC	29086	RESERVED	NT			0	0	0	0				

(b) (7)(F)

(b) (7)(F)

Organization	wrrlID	Resource	KindType	Indentification	Specifications	Recovery	LiquidStorage	Boom	People	HomeBase	State	Staging	OwnerID
CRC	29087	Skimmer P	SKP	API Drum Skimmer	Hydraulic Power Unit (56-453)	2400	0	0	1	Portland	OR	Portland Base	500-56
CRC	29088	Skimmer P	SKP	API Drum Skimmer	Hydraulic Power Unit (56-454)	2400	0	0	1	Portland	OR	Portland Base	501-56
CRC	29089	Skimmer P	SKP	Desmi Terminator 250	Hydraulic Power Unit (250) (57-251)	3017	0	0	1	Portland	OR	Portland Base	529-56
CRC	29090	Skimmer P	SK2	Desmi Terminator 250	Hydraulic Power unit (250) (57-252)	3017	0	0	1	Portland	OR	Portland Base	530-56
CRC	29091	Skimmer P	SK3	Douglas 18000 (56-391)	3" Yanmar Diesel (57-283) 300 GPM	2057	0	0	0	Portland	OR	Portland Base	(56-391)
CRC	29092	Skimmer P	SK3	Douglas 18000 (56-392)	3" Yanmar Diesel (57-276) 300 GPM	2057	0	0	0	Portland	OR	Portland Base	(56-392)
CRC	29093	Skimmer P	SK3	Douglas 18000 (56-389)	3" Yanmar Diesel (57-277) 300 GPM	2057	0	0	0	Portland	OR	Portland Base	(56-389)
CRC	29094	Skimmer P	SK3	Douglas 18000 (56-376)	3" Yanmar Diesel (57-278) 300 GPM	2057	0	0	0	Longview	WA	Weyerhaeuser	(56-376)
CRC	29095	Skimmer P	SK3	Douglas 18000 (56-393)	3" Yanmar Diesel (57-279) 300 GPM	2057	0	0	0	Astoria	OR	Tongue Point	(56-393)
CRC	29096	Skimmer P	SK3	Douglas 18000 (56-383)	3" Yanmar Diesel (57-280) 300 GPM	2057	0	0	0	Longview	WA	Weyerhaeuser	(56-383)
CRC	29097	Skimmer P	SK3	Douglas 18000 (56-384)	3" Yanmar Diesel (57-281) 300 GPM	2057	0	0	0	Astoria	OR	Tongue Point	(56-384)
CRC	29098	Skimmer P	SK3	Douglas 18000 (56-377)	3" Yanmar Diesel (57-282) 300 GPM	2057	0	0	0	Longview	WA	Weyerhaeuser	(56-377)
CRC	29099	Skimmer P	SK3	Douglas 18000	3" Yanmar Diesel (57-284) 300 GPM	2057	0	0	0	Portland	OR	Portland Base	(56-390)
CRC	29100	Skimmer P	SK3	Douglas 18000	CounterVac 3315 (57-303)	2057	0	0	0	Wauna	OR	Tidewater Barge Lines 1728	(56-378)
CRC	29101	Skimmer P	SK3	Douglas 18000	CounterVac 3315 (57-303)	2057	0	0	0	Wauna	OR	Tidewater Barge Lines 1728	(56-379)
CRC	29102	Skimmer P	SK3	Tidewater Barge Lines 1728, Douglas 18000	CounterVac 3315 (57-302)	2057	0	0	0	Vancouver	WA	Tidewater Barge Lines 4	(56-380)
CRC	29103	Skimmer P	SK3	Tidewater Barge Lines 1728, Douglas 18000	CounterVac 3315 (57-302)	2057	0	0	0	Vancouver	WA	Tidewater Barge Lines 4	(56-381)
CRC	29104	Skimmer P	SK3	Douglas 18000	CounterVac 3315 (57-301)	2057	0	0	0	Portland	OR	Portland Base	(56-385)
CRC	29105	Skimmer P	SK3	Douglas 18000	CounterVac 3315 (57-301)	2057	0	0	0	Portland	OR	Portland Base	(56-386)
CRC	29106	Skimmer P	SK3	Douglas 18000 (56-388)	3" Yanmar Diesel (57-285) 300 GPM	2057	0	0	0	Astoria	OR	Portland Base	(56-388)
CRC	29107	Skimmer P	SK3	Douglas 18000 (56-387)	3" Yanmar Diesel (57-286) 300 GPM	2057	0	0	0	Astoria	OR	Portland Base	(56-387)
CRC	29108	Skimmer P	SK3	Douglas 18000	3" Yanmar Diesel (57-286) 300 GPM	2057	0	0	0	Portland	OR	Portland Base	(56-382)
CRC	29109	Skimmer P	SK4	Douglas 4200	2" Yanmar Diesel (57-252) Diaphragm	457	0	0	0	Portland	OR	Portland Base	(56-401)
CRC	29110	Skimmer P	SK4	Douglas 4200	2" Yanmar Diesel (57-253) Diaphragm	457	0	0	0	Portland	OR	Portland Base	(56-402)
CRC	29111	Skimmer P	SK4	Douglas 4200	2" Yanmar Diesel (57-254) Diaphragm	457	0	0	0	Portland	OR	Portland Base	(56-403)
CRC	29112	Skimmer P	SK4	Douglas 4200	2" Yanmar Diesel (57-251) Diaphragm	457	0	0	0	Portland	OR	Portland Base	(56-404)
CRC	29113	Skimmer P	SK4	Douglas 4200	2" Yanmar Diesel (57-256) Peristaltic	457	0	0	0	Portland	OR	Portland Base	(56-405)
CRC	29114	Skimmer P	SKP	Ro-Clean Mop Skimmer	Hatz Diesel	30	0	0	0	Portland	OR	Portland Base	(56-507)
CRC	29115	Skimmer P	SK3	Tidewater Barge Lines 1728, Slickbar "High Capacity Oil Skimmer"	Tidewater Dedicated Barge	1714	0	0	0	Vancouver	WA	Tidewater Barge Lines 4	(56-501)
CRC	29116	Skimmer P	SK3	Slickbar "High Capacity Oil Skimmer"	Tidewater Dedicated Barge	1714	0	0	0	Wauna	OR	Tidewater Barge Lines 1728	(56-502)
CRC	29117	Skimmer P	SK3	Slickbar "High Capacity Oil Skimmer"	CounterVac 3315	1714	0	0	0	Portland	OR	Portland Base	(56-503)
CRC	29118	Skimmer P	SK3	Slickbar "High Capacity Oil Skimmer"	CounterVac 3315	1714	0	0	0	Portland	OR	Portland Base	(56-504)
CRC	29119	Skimmer P	SK3	Slickbar "High Capacity Oil Skimmer"	CounterVac 3315	1714	0	0	0	Portland	OR	Portland Base	(56-505)
CRC	29120	Skimmer P	SK3	Slickbar "Manta Ray"	CounterVac 3315	1028	0	0	0	Portland	OR	Portland Base	542-56
CRC	29121	RESERVED	NT			0	0	0	0				
CRC	29122	RESERVED	NT			0	0	0	0				
CRC	29123	RESERVED	NT			0	0	0	0				
CRC	29124	RESERVED	NT			0	0	0	0				
CRC	29125	Boom	B2	Trailer (35-101), American Marine	20"	0	0	5100	0	Astoria	OR	Trailer (35-101)	
CRC	29126	Boom	B2	Trailer (35-102), American Marine	20"	0	0	3800	0	Astoria	OR	Trailer (35-102)	
CRC	29127	Boom	B2	Trailer (35-103), American Marine	20"	0	0	4100	0	Astoria	OR	Trailer (35-103)	
CRC	29128	Boom	B2	Trailer (35-101), American Marine	40"	0	0	1000	0	Astoria	OR	Trailer (35-101)	
CRC	29129	Boom	B2	Trailer (35-105), American Marine	20"	0	0	4200	0	Longview	WA	Trailer (35-105) Weyerhaeuser	
CRC	29130	Boom	B2	Trailer (35-109), American Marine	20"	0	0	6300	0	Wauna	OR	Trailer (35-109)	
CRC	29131	Boom	B2	Trailer (35-107), American Marine	20"	0	0	5300	0	Longview	WA	Trailer (35-107) Weyerhaeuser	
CRC	29132	Boom	B3	FRV Independence, American Marine	12"	0	0	2000	0	Astoria	OR	Independence (West Mooring Basin)	
CRC	29133	Boom	B3	American Marine	12"	0	0	3000	0	Portland	OR	A-1 Moorage	
CRC	29134	Boom	B3	Trailer (40-150), American Marine	12"	0	0	2000	0	Portland	OR	Boom UtilityTrailer (40-150)	
CRC	29135	Boom	B2	Trailer (35-112), American Marine	20"	0	0	4100	0	Vancouver	WA	40' Trailer (35-112)	
CRC	29136	Boom	B3	American Marine	12"	0	0	2000	0	Portland	OR	PFB Fire Station 6 (29-235)	
CRC	29137	Boom	B2	American Marine	20"	0	0	400	0	Scappoose	OR	Scappoose Fire Bureau	
CRC	29138	Boom	B2	Trailer (35-106), American Marine	20"	0	0	2500	0	Skamokawa	WA	28' Trailer (35-106) Vista Park	
CRC	29139	Boom	B2	Trailer (35-110), American Marine	20"	0	0	5100	0	St. Helens	OR	Boise Cascade (35-110)	
CRC	29140	Boom	B2	Trailer (35-113), American Marine	20"	0	0	3300	0	Port Westward	OR	Trailer (35-113) PGE Beaver	
CRC	29141	Boom	B2	FRV Protector, American Marine	20"	0	0	1000	0	St. Helens	OR	FRV Protector	

(b) (7)(F)

Organization	wrrlID	Resource	KindType	Indentification	Specifications	Recovery	LiquidStorage	Boom	People	HomeBase	State	Staging	OwnerID
CRC	29142	Boom	B2	OSRV Mark O. Hatfield, American Marine	20'	0	0	1000	0	Cathlamet	WA	Mark O. Hatfield (Elochoman Marina)	
CRC	29143	Boom	B2	OSRV HW Zarling, American Marine	20'	0	0	1000	0	Portland	OR	HW Zarling (Fred's Marina)	
CRC	29144	Boom	B2	OSRV Clean Rivers 1, American Marine	20'	0	0	1000	0	Rainier	OR	Clean Rivers 1 (Foss Dock)	
CRC	29145	Boom	B2	OSRV MFSA 1, American Marine	20'	0	0	1000	0	Portland	OR	MFSA 1 (Sause Bros.)	
CRC	29146	Boom	B3	Shallow Water Recovery Barge (29-233), American Marine	12'	0	0	400	0	Vancouver	WA	SWRB (29-233) (Tesoro Facility)	
CRC	29147	Boom	B3	Shallow Water Recovery Barge (29-235), American Marine	12'	0	0	400	0	Portland	OR	SWRB (Portland Base) (29-235)	
CRC	29148	Boom	B3	Shallow Water Recovery Barge (29-226), American Marine	12'	0	0	400	0	Longview	WA	SWRB (Weyerhaeuser) (29-226)	
CRC	29149	Boom	B3	Shallow Water Recovery Barge (29-227), American Marine	12'	0	0	400	0	Longview	WA	SWRB (Weyerhaeuser) (29-227)	
CRC	29150	Boom	B3	Shallow Water Recovery Barge (29-229), American Marine	12'	0	0	400	0	Astoria	OR	SWRB (Tongue Point) (29-229)	
CRC	29151	Boom	B3	Shallow Water Recovery Barge (29-231), American Marine	12'	0	0	400	0	Astoria	OR	SWRB (Tongue Point) (29-231)	
CRC	29152	Boom	B2	American Marine	20'	0	0	500	0	Portland	OR	Portland Base	
CRC	29153	Boom	B2	American Marine	30'	0	0	700	0	Portland	OR	Portland Base	
CRC	29154	Boom	B2	FRV Columbia Responder, American Marine	20'	0	0	1000	0	Longview	OR	FRV Columbia Responder	
CRC	29155	RESERVED	NT			0	0	0	0				
CRC	29156	RESERVED	NT			0	0	0	0				
CRC	29157	RESERVED	NT			0	0	0	0				
CRC	29159	Equipment	VHO	4x4 Pick-up	2003 Ford F-350	0	0	0	1	Portland	OR	Portland Base	206-54
CRC	29160	Equipment	VHO	4x4 SUV	2007 Toyota 4-Runner	0	0	0	1	Portland	OR	Portland Base	208-60
CRC	29161	RESERVED	NT			0	0	0	0				
CRC	29163	Wildlife	Wildlife	Wildlife Transport Unit	1973 Ford Van 2 Ton Climate Ctrl Box	0	0	0	1	Portland	OR	Portland Base	204-47
CRC	29164	RESERVED	NT			0	0	0	0				
CRC	29165	Equipment	VHO	Flatbed Crane Truck	1980 GMC	0	0	0	1	Portland	OR	Portland Base	203-48
CRC	29166	Equipment	VHO	Tractor	1981 Kenworth	0	0	0	1	Astoria	OR	Tongue Point	200-49
CRC	29167	Equipment	VHO	Tractor	2001 Freightliner	0	0	0	1	Portland	OR	Portland Base	209-61
CRC	29168	Equipment	VHO	Tractor	1993 International	0	0	0	1	Portland	OR	Portland Base	202-52
CRC	29169	RESERVED	NT			0	0	0	0				
CRC	29170	Wildlife	Wildlife	Wildlife Rehabilitation Trailer	48'	0	0	0	1	Portland	OR	Portland Base	300-38
CRC	29171	RESERVED	NT			0	0	0	0				
CRC	29172	Equipment	VHO	Command & Communication Trailer	52'	0	0	0	1	Portland	OR	Portland Base	301-39
CRC	29173	Equipment	VHO	Trailer (35-102)	48'	0	0	0	0	Astoria	OR	Tongue Point	(35-102)
CRC	29174	Equipment	VHO	Trailer (35-101)	48'	0	0	0	0	Astoria	OR	Tongue Point	(35-101)
CRC	29175	Equipment	VHO	Trailer (35-103)	48'	0	0	0	0	Astoria	OR	Tongue Point	(35-103)
CRC	29176	Equipment	VHO	Trailer (35-106), Boom Trailer	28'	0	0	0	0	Skamokawa	WA	Vista Park	(35-106)
CRC	29177	Equipment	VHO	Trailer (35-107), Boom Trailer	48'	0	0	0	0	Longview	WA	Weyerhaeuser	(35-107)
CRC	29178	Equipment	VHO	Trailer (35-109)	42'	0	0	0	0	Wauna	OR	Georgia Pacific	(35-109)
CRC	29179	Equipment	VHO	Trailer (35-105), Boom Trailer	48'	0	0	0	0	Longview	WA	Weyerhaeuser	(35-105)
CRC	29180	Equipment	VHO	Trailer (35-110), Boom Trailer	48'	0	0	0	0	St. Helens	OR	Boise Cascade	(35-110)
CRC	29181	RESERVED	NT			0	0	0	0				
CRC	29182	RESERVED	NT			0	0	0	0				
CRC	29183	Equipment	VHO	Trailer (35-111)	40'	0	0	0	0	Longview	WA	Weyerhaeuser	(35-111)
CRC	29184	Equipment	VHO	Trailer (35-112), Boom Trailer	42'	0	0	0	0	Vancouver	WA	Port of Vancouver	(35-112)
CRC	29185	Equipment	VHO	Trailer (35-113), Boom Trailer	48'	0	0	0	0	Port Westward	OR	PGE (Beaver Facility)	(35-113)
CRC	29186	Equipment	VHO	Flatbed Trailer	28'	0	0	0	0	Portland	OR	Portland Base	314-35
CRC	29187	Equipment	VHO	Trailer (40-150), Small	30'	0	0	0	0	Portland	OR	Portland Base	(40-150)
CRC	29188	Equipment	VHO	Shoreline Clean-Up Trailer	34'	0	0	0	0	Portland	OR	Portland Base	316-40
CRC	29189	Equipment	VHO	Generator Trailers	25kw	0	0	0	0	Portland	OR	Portland Base	317-40
CRC	29190	Equipment	VHO	Generator Trailers	35kw	0	0	0	0	Portland	OR	Portland Base	318-40
CRC	29191	RESERVED	NT			0	0	0	0				
CRC	29192	RESERVED	NT			0	0	0	0				
CRC	29193	Vac Truck	VT3	CounterVac 3315	21' pull on 3" hose	4457	12	0	1	Portland	OR	Portland Base	(57-301)

(b) (7)(F)

Organization	wrrlID	Resource	KindType	Indentification	Specifications	Recovery	LiquidStorage	Boom	People	HomeBase	State	Staging	OwnerID
				Tidewater Barge Lines 1728, CounterVac									
CRC	29194	Vac Truck	VT3	3315	21' pull on 3" hose	4457	12	0	1	Vancouver	WA	Tidewater Barge Lines 4	(57-302)
CRC	29195	Vac Truck	VT3	CounterVac 3315	21' pull on 3" hose	4457	12	0	1	Wauna	OR	Tidewater Barge Lines 1728	(57-303)
CRC	29196	Equipment	SRO	Float-O-Pump	100 gpm	0	0	0	0	Portland	OR	Portland Base	618-57
CRC	29197	Equipment	SRO	Float-O-Pump	100 gpm	0	0	0	0	Portland	OR	Portland Base	619-57
CRC	29198	Equipment	SRO	Float-O-Pump	100 gpm	0	0	0	0	Portland	OR	Portland Base	622-57
CRC	29199	Equipment	SRO	Desmi DOP 160	Hydraulic Power Unit (160)	0	0	0	0	Portland	OR	Portland Base	620-57
CRC	29200	Equipment	SRO	Desmi DOP 160	Hydraulic Power Unit (160)	0	0	0	0	Portland	OR	Portland Base	621-57
CRC	29201	RESERVED	NT			0	0	0	0				
CRC	29202	RESERVED	NT			0	0	0	0				
CRC	29203	Equipment	SRO	Pressure Washer	3,500 psi, Hot, Trailer Mounted	0	0	0	0	Portland	OR	Portland Base	(40-978)
CRC	30050					0	0	0	0	Longview	WA		
CRC	30051	Boom	B3	Connex Box, American Marine	20'	0	0	2000	0	Boardman	OR	20' Connex box on chassis, Tidewater Facility in Boardman, Oregon.	
CRC	30052	Equipment	VHO	Connex Box	20' container on chassis	0	0	0	0	Boardman	OR	Tidewater Facility in Boardman, Oregon	320-25

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
TTY 711 or 800-833-6388 (for the speech or hearing impaired)

November 27, 2006

Tim Archer
General Manager
200 SW Market, #190
Portland, OR 97201

Dear Mr. Archer:

The primary response contractor application submitted by Clean Rivers Cooperative, Inc. (CRC) has been approved. Please note that Ecology will use the recovery rates listed on the attached sheet for determining adequacy of contingency plans or drills that utilize CRC skimming and recovery equipment.

If you have any questions regarding your primary response contractor approval please call me at (360) 407-7514 or by email at nhoa461@ecy.wa.gov.

Sincerely,

Nhi Hoang
Acting Plan Review Unit Supervisor

cc: Kathy Armstrong, WDOE

State of Washington
DEPARTMENT OF FISH AND WILDLIFE

Mailing Address: 600 Capitol Way N • Olympia, WA 98501-1091 • (360) 902-2200, TDD (360) 902-2207
Main Office Location: Natural Resources Building • 1111 Washington Street SE • Olympia, WA

August 13, 2008

Washington Department of Ecology
Attention Dale Jensen, Spills Program Manager
P.O. Box 47600
Olympia, WA 98504-7600

Dear Mr. Jensen,

It is the Washington Department of Fish and Wildlife's (WDFW) intent, with this letter, to verify that our oiled wildlife rescue equipment will be made available to the Washington Department of Ecology, Clean Rivers Cooperative, and the National Response Corporation to ensure the best possible response to oil spills. WDFW's equipment list is maintained on the Internet at http://www.rrt10nwac.com/equipment_spreadsheet.htm.

A responsible party, primary response contractor, other state agency, or federal agency may request WDFW equipment directly from the WDFW Oil Spill Team. In addition, the provincial and state governments of British Columbia, Alaska, California, Oregon, and Washington may request the equipment via the Pacific States/British Columbia Oil Spill Task Force Mutual Aid Plan (1993) and the Mutual Aid Agreement (1996). WDFW will continue to maintain the equipment throughout its useful life. However, WDFW currently has no plans to replace the 53' trailer should it be damaged beyond repair or after it reaches the end of its useful life.

When WDFW equipment is deployed to a spill response the costs associated with the use of the equipment must be recovered from the responsible party and/or the requesting entity, as WDFW does not have a dedicated budget to cover the cost of emergency deployment. A daily rate (cost) for each item will be provided at the time of an emergency request. WDFW will pay the cost associated with the deployment of the trailer once every three years for a worst-case equipment drill. If you have any questions please contact either Brian Edie or Andy Carlson.

Sincerely,

Greg Hueckel, Assistant Director
Habitat Program

cc: Tim Archer, Clean Rivers Cooperative
Jim Riedel, National Response Corporation
Curt Leigh, Major Projects Division Manager
Brian Edie, WDFW Oil Spill Team Manager
Andy Carlson, WDFW Oiled Wildlife Rescue Coordinator

U.S. Department of Homeland Security

United States Coast Guard

Commander
National Strike Force Coordination Ctr.

1461 North Road Street
Elizabeth City, NC 27909
Staff Symbol:
Phone: 252-331-6000
FAX: 252-331-6012

16465

Clean Rivers Cooperative, Inc.
Attn: Tim Archer
200 SW Market St.
Suite 190
Portland, OR 97201

JAN 16 2007

Dear Mr. Archer,

Your application for classification as an Oil Spill Removal Organization (OSRO) was most recently reviewed and processed, as outlined in the Coast Guard OSRO Classification Guidelines dated 27 April 2001, in November 2004. Our letter to you dated 01 November, 2004, your most recent OSRO Classification Report outlining the classifications you have received, and our contact information is in enclosure (1).

Your classifications are also listed on the OSRO Classification Matrix available on the Internet at:

http://www.uscg.mil/hq/nsfweb/nsfcc/ops/Logistics%20Inventory/RRAB/links/osroinfooneclassifiedosro.html

The Coast Guard is transitioning to a Sector organization which consolidates field operational and marine safety functions; enclosure (2) is a consolidated table that explains the changes affected by this transition.

Thank you for your participation in the OSRO program; your efforts to strengthen our national response capabilities are greatly appreciated.

Sincerely,

R.T. GORE
Chief, Response Resource Assessment Branch
U.S. Coast Guard
By direction

2 Enclosures

U.S. Department of Homeland Security
United States Coast Guard

Commanding Officer
National Strike Force
Coordination Center

1461 N. Road St. (US 17N)
Elizabeth City, NC 27909
Staff Symbol:
Phone: (252) 331-6000
FAX: (252) 331-6012

16450
04-0092
November 1, 2004

Clean Rivers Cooperative, Inc
Attention: Brent Way
200 S. W. Market #190
Portland, OR 97201

Dear Brent Way,

This letter serves as the official statement by the National Strike Force Coordination Center of your classification as an Oil Spill Removal Organization (OSRO) as outlined in the Coast Guard OSRO Classification Guidelines dated 27 April 2001. A copy of this letter will be kept in your company file on these premises. Please feel free to contact my staff anytime you would like to visit and review your file.

Enclosure (1) is a copy of the classification summary sheet that identifies the classifications you received based on the resource data that you provided. This summary contains your classifications by operating area and selected COTP zones. These classifications were determined using core resource and legal/attestation documents you provided. Enclosure (2) contains Response Resource Assessment Branch (formerly the OSRO Branch) and Response Resource Inventory (RRI) contact information.

This notification reflects the information contained in the RRI as of September 23, 2004. Any equipment updates, which may have been submitted by your company in the interim, are not yet reflected in this classification notification. Currently the RRAB is developing processes to more uniformly address common OSRO issues such as changes in company ownership and the acquisition of additional resources. In the event that there is a change in your company's classification, you will receive another letter attesting to your latest classification levels.

A summary of the resource totals for Temporary Storage Capacity (TSC), Effective Daily Recovery Capacity (EDRC), and shoreline protection & containment booming can be forwarded to you upon request. A synopsis of the OSRO Classification standing, along with other useful information, is available on our web site:

http://www.uscg.mil/hq/nsfweb/nsfcc/ops/OSRO/links/osroinfooneclssifiedosro.html

If you would like more information regarding your classifications or any other matter, please contact the Response Resource Assessment Branch.

Sincerely,

A.M. CRICKARD
Chief, Logistics Inventory Division
U.S. Coast Guard
By direction

2 Enclosures

Individual OSRO Classification Report

0092 Clean Rivers Cooperative, Inc

		Facilities				Vessels			
COTP: PORTLAND, OR		MM	W1	W2	W3	MM	W1	W2	W3
☐ High Volume Port	River/Canal	☑	☑	☑	☑	☑	☑	☑	☑
Alternate City:	Inland	☑	☑	☑	☐	☐	☐	☐	☐
	Open Ocean	☐	☐	☐	☐	☐	☐	☐	☐
	Offshore	☐	☐	☐	☐				
	Nearshore	☐	☐	☐	☐				
	Great Lakes	☐	☐	☐	☐				
COTP: PORTLAND, OR(COOS BAY, OR)		MM	W1	W2	W3	MM	W1	W2	W3
☐ High Volume Port	River/Canal	☑	☑	☑	☑	☑	☑	☑	☑
Alternate City:	Inland	☐	☐	☐	☐	☐	☐	☐	☐
	Open Ocean	☐	☐	☐	☐	☐	☐	☐	☐
	Offshore	☐	☐	☐	☐				
	Nearshore	☐	☐	☐	☐				
	Great Lakes	☐	☐	☐	☐				

Check marks indicate that your company has received classifications in the following areas. Please refer to the OSRO Guidelines for a complete discussion of the 4 classification levels that require different minimum amounts for each Environmental operating area.

MMPD(MM) = Maximum Most Probable Discharge
WCD1(W1) = Worse Case Discharge Tier 1
WCD2(W2) = Worse Case Discharge Tier 2
WCD3(W3) = Worse Case Discharge Tier 3

If an asterisk(*) is displayed after a COTP name, it denotes cities that formerly had COTP authority, but loss that authority and are being considered for designation as an Alternate Classification City(ACC).

CRC- NRCES MUTUAL AID AGREEMENT- 2009

Mobile Wildlife Response Equipment
Mutual Aid Agreement

This Mutual Aid Agreement is entered into this 21st day of July, 2009, by and between Clean Rivers Cooperative ("CRC") and Marine Spill Response Corporation ("MSRC").

CRC and MSRC (hereinafter referred to as the "Parties," or individually as a "Party") agree as follows:

1. Mobile Wildlife Response Equipment Subject to this Mutual Aid Agreement

1.1 Equipment Subject to this Agreement. The Parties agree that, in the event of an oil spill incident, they intend to make certain of their mobile wildlife response equipment available to the other, subject to the terms and conditions of this Agreement. The equipment potentially available is hereinafter referred to as the "Mutual Aid Equipment," and is listed in the table below. The CRC equipment listed below is presently owned by CRC. The MSRC equipment listed below is either presently owned by MSRC or will be purchased by MSRC by July 31, 2009. Each party will complete outfitting of their listed equipment on or before September 30, 2009.

Mutual Aid Equipment:

	Equipment Type	Regular Storage / Pre-Positioning Location
CRC Mutual Aid Equipment	One (1) Wildlife Rehabilitation Trailer One (1) Wildlife Transport Vehicle One (1) Wildlife Rehabilitation Shelter Three (3) KD-Zodiac Wildlife Pools	All to be located Lower Columbia or Willamette Rivers
MSRC Mutual Aid Equipment	One (1) Storage & Transport Trailer, Large One (1) Storage & Transport Trailer, Small Three (3) Wildlife Rehabilitation Shelters Four (4) KD-Zodiac Wildlife Pools	All to be located in Everett, Washington.

1.2 Each Party Responsible for Costs of Its Equipment. Except as provided herein, each Party will be responsible for the costs of acquiring and maintaining its equipment, and for all costs in meeting regulatory requirements for drills involving its own equipment. Provided, however, that use of one Party's equipment on the other Party's drill will be by mutual agreement, including agreement as to cost allocation.

1.3 Locations of Equipment. The Parties agree the Mutual Aid Equipment is to be regularly based at the sites provided in the table above. Each Party agrees to notify the other of any permanent change in the regular pre-positioning location of its Mutual Aid Equipment. In addition, to the extent practicable, each Party will develop procedures for notifying the other Party of temporary changes to the status of such equipment (such as due to casualty or maintenance).

2. Contingency Plan Listing.

2.1 The Parties each provide oil spill contingency planning and response services to their respective members or customers ("Plan Holders") who are required by applicable state and federal law to file oil spill response contingency plans listing the available response resources they have under contract. In addition, the Parties themselves may be required, under state or federal law, to file oil spill removal organization ("OSRO") or primary response contractor ("PRC") applications listing their available equipment. The Parties agree each shall be entitled to list the other's Mutual Aid Equipment in their OSRO and PRC applications. The Parties further agree that the member and customer Plan Holders of both Parties shall be entitled to list the Mutual Aid Equipment in their oil spill contingency plans. In each case, the listing of the other's Mutual Aid Equipment shall be subject to the terms of this Agreement, including the following:

(a) CRC may include the MSRC Mutual Aid Equipment in its resource and equipment lists for use by itself and its member or customer Plan Holders (including Maritime Fire & Safety Association, "MFSA") to meet OSRO, PRC and contingency plan requirements for wildlife response resources under the laws and regulations of the States of Washington and Oregon in the CRC/MFSA "Area of Interest." For the purposes of this Agreement, the CRC/MFSA combined Area of Interest is defined as the geographic area consisting of the Columbia River from its mouth (at river mile 0) extending 3 miles offshore, up to its confluence with the Snake River, the Snake River up to the Idaho border, and the Willamette River from its confluence with the Columbia River up to Willamette Falls. Provided, however, that the MSRC Mutual Aid Equipment may not be cited by CRC or its member or customer Plan Holders other than for (i) vessels and facilities for which the member or customer Plan Holder is legally responsible in the event of an oil spill, and (ii) for oil spill events occurring within this Area of Interest. Notwithstanding the foregoing, nothing herein shall limit CRC from extending plan citation rights for CRC-owned equipment (but not for MSRC Mutual Aid Equipment) outside this defined Area of Interest.

(b) MSRC may include the CRC Mutual Aid equipment in its resource and equipment lists for use by itself and its customer Plan Holders to meet OSRO, PRC and contingency plan requirements for wildlife response resources under the laws and regulations of the States of Washington and Oregon. Provided, however, that the CRC Mutual Aid Equipment may not be cited by MSRC or its member or customer Plan Holders other than for (i) vessels and facilities for which the member or customer Plan Holder is legally responsible in the event of an oil spill, and (ii) for oil spill events occurring within the States of Washington and Oregon. Notwithstanding the foregoing, nothing herein shall limit MSRC from extending plan citation rights for MSRC-owned equipment (but not for CRC Mutual Aid Equipment) outside the States of Washington and Oregon.

2.2 Neither Party may list, or allow its member or customer Plan Holders to list, the equipment or resources of the other Party except as provided above.

2.3 Any OSRO, PRC and/or Plan Holder contingency plan requirements not met by the Mutual Aid Equipment shall be the sole responsibility of the Plan Holder.

2.4 Neither Party may assign its rights hereunder to any other party, or extend any benefits other than the citation rights specified above to its member and customer Plan Holders, nor will either Party allow its member or customer Plan Holders to extend their citation rights to other parties or to other facilities or vessels for which the member or customer Plan Holder is not the legally responsible party.

3. Use of Mutual Aid Equipment.

3.1 A Party may request the other Party to provide the other Party's Mutual Aid Equipment only for (i) oil spill incidents, (ii) occurring within the geographic areas specified in Sections 2.1(a) and (b) above (i.e., in the case of CRC members and customer Plan Holders, occurring in the CRC/MFSA Area of Interest, and in the case of MSRC members and customer Plan Holders, occurring in the States of Oregon and Washington), (iii) for which a member or customer of the Party has accepted legal responsibility (or for which the Coast Guard or the State of Washington or Oregon has contracted with the Party), and (iv) for which Responder Immunity protections (federal and state) are available.

3.2 All requests for response assistance must come from a Party. A Party's members or customers (or a Party's contractors) may not directly request the other Party's Mutual Aid Equipment.

3.3 The Party providing its Mutual Aid Equipment (the "PROVIDER") will establish as part of its operating procedures the staffing it will provide for the physical deployment of its Mutual Aid Equipment, including the personnel required to deliver its Mutual Aid Equipment to the site of need within the States of Oregon and Washington, as well as the personnel required to set up and maintain the Mutual Aid Equipment on site.

3.4 No Representations and Warranties. PROVIDER provides the equipment AS IS and WITH ALL FAULTS. Without limitation, PROVIDER makes no representations, warranties, or covenants of FITNESS FOR A PARTICULAR USE OR PURPOSE, MERCHANTABILITY, DESIGN, CONDITION (WHETHER LATENT OR OBVIOUS) OPERATIONS, QUALITY OF WORKMANSHIP, DURABILITY, CONFORMITY TO RESPONSE PLAN OR REGULATORY REQUIREMENTS, OR OTHERWISE, EXPRESS OR IMPLIED, OR ARISING FROM THE COURSE OF PERFORMANCE, COURSE OF DEALING, USAGE OR OF TRADE OR OTHERWISE REGARDING THE EQUIPMENT.

3.5 Without limitation, and notwithstanding anything to the contrary in this Agreement, neither Party makes any representation or warranty as to the availability of any particular piece of its Mutual Aid Equipment, or as to the time that will be required to mobilize

4.2 The Mutual Aid Equipment to be provided in any particular oil spill incident shall be documented at the time of call-out for that incident. Specifically, a "Confirmation of Call-Out" form, attached as Exhibit 1, shall be prepared by the PROVIDER and delivered to the USER promptly after the call-out of the equipment. This form shall include a list of the equipment being mobilized, as well as an estimate of the personnel and other resources required to deploy the equipment. The USER will immediately advise the PROVIDER if the Confirmation of Call-out does not correctly list the Mutual Aid Equipment that the USER has requested.

4.3 PROVIDER will provide periodic invoices to the USER for all equipment and services provided by the PROVIDER. The USER agrees to pay any and all monies due and owing for use of PROVIDER equipment and services within thirty (30) days from invoice date. Late payments are subject to a finance charge of 1 1/2% per month. No verbal or written estimates or discounts are valid or enforceable to limit the amount invoiced in accordance with the rate schedule. Only an officer of PROVIDER has authority to make revisions to the terms of the rate schedule. PROVIDER may, in its discretion, cease to provide services if USER fails to make payment as required. USER will be responsible for all collection costs on past due accounts, including attorney fees.

4.4 Damage to Mutual Aid Equipment. The USER agrees to pay for any uninsured loss or damage to equipment provided by the PROVIDER, regardless of fault, including loss or damage due to the negligence of PROVIDER.

4.5 Demobilization. USER shall pay the charges (daily, hourly or otherwise, in accordance with the terms of PROVIDER's rate schedule) for PROVIDER's equipment and support services until all of PROVIDER's equipment has been cleaned and repaired and returned to its original staging location. In addition, USER shall arrange for, and shall pay directly (unless otherwise agreed with PROVIDER) all third party cleaning and repair costs.

5. Indemnification and Covenant Not to Sue

5.1 Whenever USER uses PROVIDER equipment on a spill response for one of USER's members or customers, USER will contract with its customer on terms that include an indemnity in favor of PROVIDER that is, at a minimum, reasonably equivalent to the indemnification protections provided under Schedule 5 to the MSRC Standard Form Service Agreement, attached as Exhibit 2.

5.2 The Parties agree that it is their intent that PROVIDER be entitled to the protection of Federal and State Responder Immunity Laws providing limited immunity from liability for those who respond to oil spills or a threat of an oil spill to water. Nothing herein shall be construed to allow USER, or USER's member or customer, to recover by way of contribution, indemnity or otherwise from PROVIDER, any amounts for which the USER, or USER's member or customer, is liable to or has paid to third parties and for which PROVIDER would have no liability under Responder Immunity Laws applicable in the jurisdiction where the spill and services have occurred.

5.3 Covenant Not to Sue. USER hereby irrevocably releases and forever discharges PROVIDER from liability for any and all claims whatsoever, including but not limited to claims for contribution, breach of contract, tort, or otherwise, or any claims arising from the negligence or gross negligence of PROVIDER, that USER currently has or may have against PROVIDER arising from, related to, or in connection with the equipment provided hereunder or the spill response services provided by PROVIDER. USER covenants and agrees that USER will not make such claims against PROVIDER and, in the event any claims are made against USER, agrees not to draw PROVIDER into such litigation by making cross-claims or other claims against PROVIDER.

This Section 5.3 shall not preclude USER from pursuing claims (i) relating to disputes under this Agreement, provided such claims are brought pursuant to the arbitration provisions of Section 9.2, (ii) seeking specific performance by PROVIDER, or (iii) arising from the willful, reckless, or criminal misconduct of PROVIDER.

5.4 Survival. The Parties' obligations under this Article 5 shall survive the expiration or termination of this Agreement.

6. Insurance. PROVIDER will maintain the following minimum insurance, with the insurance required under Sections 6.2 to 6.4 claused to waive subrogation in favor of USER as respects use of the PROVIDER equipment:

6.1 Oregon and Washington State, as applicable, Workers' Compensation and, as deemed applicable by Provider, United States Longshoreman and Harbor Workers' Compensation and/or Protection & Indemnity ("P&I") coverage, including compliance with laws of any other state (if applicable), with statutory limits as required by law;

6.2 Commercial General Liability insurance (on an occurrence form), including broad form contractual liability, broad form property damage, and Stop Gap Employer's Liability, all with limits of not less than $1 million for any one accident or occurrence;

6.3 Auto Liability for any PROVIDER vehicle that may be used in the performance of this Agreement, including non-owned and hired auto coverage and with limits of not less than $1 million for any one accident or occurrence; and

6.4 Excess Non-Marine Liability coverage with limits of not less than $4 million for any one accident or occurrence.

7. Term. This Agreement will commence on the last date by which this Agreement is executed ("Commencement Date") and will continue in effect for a period of one (1) year. This Agreement shall be automatically renewed for additional one (1) year periods on the Commencement Date anniversary unless either Party gives written notice to the other of termination by at least one hundred and twenty (120) days prior to the end of any annual period.

8. Default and Remedies. A default shall occur if (i) either Party breaches its material obligations under this Agreement, and that breach is not cured within thirty (30) days after written notice from the other Party, or (ii) if USER fails to make payment as required under Article 4, and that breach is not cured within ten (10) days after written notice from the PROVIDER.

In the event of a default, the non-defaulting Party may exercise its rights and remedies at law and in equity, including (i) upon 24 hours written notice, the PROVIDER may withdraw its equipment, and cease providing services, to any ongoing oil spill incident, and/or (ii) upon ten (10) days written notice, terminate this Agreement in its entirety.

In the event the PROVIDER exercises its rights to withdraw from an oil spill incident, the USER shall pay for services rendered through withdrawal, as well as all costs of demobilizing, cleaning and repairing the PROVIDER equipment.

9. Miscellaneous.

9.1 No Partnership; Independent Contractor. Nothing contained herein shall be deemed or construed as creating a partnership or joint venture of or between CRC and MSRC, or to make one Party the agent of the other, or to create any other relationship other than that an independent contractor relationship.

9.2 Arbitration. Any disputes between the parties (including any Assignee) hereto as to matters arising out of or relating to this Agreement which cannot be settled by the parties shall be submitted to binding arbitration under and in accordance with the Rules of the American Arbitration Association, in such location agreed upon by the parties or, absent such agreement, in Seattle, Washington. The party seeking arbitration shall give written notice thereof to the other party, describing in reasonable detail the nature of the dispute and naming the arbitrator selected by such party. The other party shall, by written notice within five (5) days following receipt of such notice, name its arbitrator. The arbitrators so named shall select another arbitrator, who shall be independent and unrelated to any of the parties, within five (5) days following the appointment of the last arbitrator by a party hereto. The decision of a majority of the arbitrators shall be final and binding upon the parties and judgment may be entered thereon by any court of competent jurisdiction. To the extent agreed upon by the parties to this Agreement, third parties may be joined in such arbitration and/or this arbitration otherwise may be combined with arbitration proceedings with such third party. The arbitration award shall include the allocation among the parties of the costs and expenses of arbitration.

9.3 Confidentiality. For the purposes of this Agreement, "Confidential Information" means all information obtained from the other Party (or the other Party's member or customer that is the responsible party for the oil spill incident) in the course of responding to an oil spill incident under this Agreement. Each Party agrees not to publish or disclose Confidential Information of the other Party, except to or at the direction of the other Party, or as required by law.

9.4 Force Majeure. If during the term of this Agreement there should arise or occur any event or circumstance beyond the reasonable control of PROVIDER, including without limiting the generality of the foregoing, the action of government, flood, fire, strike, lock-out or other labor unrest, riot, civil unrest, terrorism, war (whether declared or undeclared), or an act of God, which prevents, restricts or delays PROVIDER from duly performing any of its obligations under this Agreement, then during the period that such event or circumstance, or the effect thereof continues, performance by PROVIDER shall be suspended and excused to the extent that PROVIDER is so prevented restricted or delayed.

9.5 No Beneficiaries. Except for the citation rights afforded to the members and customers of the Parties as provided in Article 2 above, there are no intended beneficiaries of this Agreement other than CRC and MSRC.

IN WITNESS WHEREOF the parties have executed this Agreement as of the date first above written.

CLEAN RIVERS COOPERATIVE

Tim Archer

By: Tim Archer
Its: General Manager

MARINE SPILL RESPONSE CORPORATION

Jennie Hamm

By: Jennie Hamm
Its: Contracts & Tax Manager

Attachments:

Exhibit 1 – Confirmation of Call-Out Form

Exhibit 2 – Schedule 5 to the MSRC Standard Form Service Agreement

EXHIBIT 1

CONFIRMATION OF CALL-OUT FORM

From: **MARINE SPILL RESPONSE CORPORATION (MSRC)**

To: **CLEAN RIVERS COOPERATIVE (CRC)**

Re: **NOTICE CONFIRMING CALL-OUT**

Date: _____

MSRC hereby confirms that it has requested, under the "Mobile Wildlife Response Equipment Mutual Aid Agreement" (the "Agreement"), the following assistance from CRC.

1. Name and Location of Incident: _____

2. Call-out Time: _____

3. Equipment Requested: _____

4. Estimate of the personnel and other resources required to deploy the Equipment: _____.

5. Please deliver and stage the Equipment at _____.

6. Please report to the following MSRC supervisor: _____. His/her contact information is as follows: _____.

7. The Job Identification number for your services is _____. Please use this Job Identification Number on all of your invoices and other correspondence.

Notes: All resources are requested, and shall be provided pursuant to the terms of, the Agreement. Please advise immediately if the above does not accurately reflect your understanding of the Equipment and other resources being requested.

_____

Kris Calvin, C.P.M.
Contractor Administrator
Marine Spill Response Corporation
W: 425-304-1542
Cell: 425-308-0178
Fax: 425-339-1229
E-mail: calvin@msrc.org

CONFIRMATION OF CALL-OUT FORM

From: **CLEAN RIVERS COOPERATIVE (CRC)**

To: **MARINE SPILL RESPONSE CORPORATION (MSRC)**

Re: **NOTICE CONFIRMING CALL-OUT**

Date: _____

CRC hereby confirms that it has requested, under the "Mobile Wildlife Response Equipment Mutual Aid Agreement" (the "Agreement"), the following assistance from MSRC.

1. Name and Location of Incident: _____

2. Call-out Time: _____

3. Equipment Requested: _____

4. Estimate of the personnel and other resources required to deploy the Equipment: _____.

5. Please deliver and stage the Equipment at _____.

6. Please report to the following CRC supervisor: _____. His/her contact information is as follows: _____.

7. The Job Identification number for your services is _____. Please use this Job Identification Number on all of your invoices and other correspondence.

Notes: All resources are requested, and shall be provided pursuant to the terms of, the Agreement. Please advise immediately if the above does not accurately reflect your understanding of the Equipment and other resources being requested.

_____

[Name]
[Title]
[Contact Information, Etc. for CRC representative making the call-out]

EXHIBIT 2

SCHEDULE 5

FORM OF CONTRACTOR INDEMNIFICATION AGREEMENT

Section 1. Nature of Relationship. _____, a _____ with its principal offices located at _____ (the "COMPANY") and _____, a _____ (the "Contractor"), recognize and agree that, in connection with the Company's agreement with Marine Spill Response Corporation ("MSRC") under which MSRC is providing response services, the risks and liabilities, limitation of remedies, and the indemnification of the Contractor will be allocated as set forth in this Agreement.

Section 2. Defined Terms. As used in this Agreement, the following terms shall have the following meanings:

"Cap" means, with respect to an Oil Spill Event, the amount set forth below for the Facility or Vessel that is the source of the applicable Discharge; provided that if more than one (1) Facility or Vessel is the source of the Discharge, the amount shall be the greatest amount set forth below for any of such Facilities or Vessels; and provided further that if a Person is the "responsible party" (as defined in OPA) for more than one (1) such Facility or Vessel involved in the Discharge, the Cap shall be the sum of the amounts set forth below for each such Facility or Vessel:

(i) for a Vessel Responsibility Amount with respect to such Vessel;

(ii) for an Offshore Facility other than a Deepwater Port, the sum of (x) all removal costs under OPA for the Discharge from such Facility or Vessel and (y) $75 million; and

(iii) for a Deepwater Port or an Onshore Facility, $350 million.

"Claims" means any claims, demands, causes of action (including enforcement actions), damages of any nature, costs (including costs of investigation), expenses (including reasonable attorneys' fees and costs and allocated expenses for in-house legal services), judgments, fines, penalties, liabilities, obligations, claims by third parties for death, personal injury or illness or for loss or damage to property, of every kind and nature whatsoever under any Federal, state, local or other applicable law (statutory or common), including any claims for "removal costs" or "damages" as such terms are defined in OPA.

"Covered Entity" means the COMPANY or any other Person which is both (i) an affiliate of the COMPANY to whom the benefits of membership in MPA are extended pursuant to the MPA By-Laws and (ii) identified by the COMPANY to MSRC.

"Deepwater Port" means a deepwater port under OPA.

"Discharge" means any emission (other than natural seepage), intentional or unintentional, and includes spilling, leaking, pumping, pouring, emitting, emptying or dumping.

"MSRC Subcontractor Contract" shall mean a contractor service agreement between Contractor and MSRC pursuant to which Contractor is to provide certain services, equipment, goods and/or personnel.

"Facility" or "Facilities" means any structure, group of structures, equipment, or device (other than a Vessel) which is used for one or more of the following purposes: exploring for, drilling for, producing, storing, handling, transferring, processing, or transporting Oil. This term includes any motor vehicle, rolling stock, or pipeline used for one or more of these purposes.

"MODU" means a mobile offshore drilling unit under OPA.

"MPA" means Marine Preservation Association, an Arizona nonprofit corporation, or any successor thereto.

"MPA Member" means a Person that is a member of MPA.

"MSRC" means Marine Spill Response Corporation, a Tennessee nonprofit corporation, or any successor theretot.

"Offshore Facility" means an offshore facility under OPA.

"Oil Spill Event" means any actual or threatened Discharge of oil into or threatening waters or adjoining shorelines.

"Onshore Facility" means an onshore facility under OPA.

"OPA" means the Oil Pollution Act of 1990, Pub. L. No. 101-380, 104 Stat. 484 (1990) and, unless otherwise specified, all regulations promulgated thereunder.

"Person" means any individual, corporation, partnership, limited liability company, joint venture, association, state, county, municipality, interstate body, or any political subdivision thereof.

"Responder Immunity" means the limited immunity from liability provided by Section 4201(a) of OPA (33 U.S.C. Section 1321(c)(4)), or any other similar limitation of liability with a similar effect and scope under any other form of Federal, state, local, foreign or other law.

"Tank Vessel" means a tank vessel under OPA.

"Vessel" or "Vessels" means any and every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water, other than a public vessel as defined in OPA.

"Vessel Responsibility Amount" means at any time the greatest amount established for any Vessel of any Covered Entity at such time by applying the following computation to each such Vessel: (i)for a Tank Vessel, the greater of (x)$1,200 per gross ton of such Tank Vessel or (y)(1) if such Tank Vessel is greater than 3,000 gross tons, $10million or (2)if such Tank Vessel is less than or equal to 3,000 gross tons, $2 million; (ii)for a Vessel other than a Tank Vessel or a MODU, the greater of (x) $600 per gross ton of such Vessel or (y)-$500,000; (iii)for a MODU being used as an Offshore Facility, the amount derived in clause (i)-above if such MODU were considered a Tank Vessel; (iv) for a MODU not being used as an Offshore Facility, the amount derived in clause (ii)above if such MODU were considered a Vessel; or (v) for a Vessel less than or equal to 300 tons or a Vessel that is non-self-propelled and that does not carry oil as cargo or fuel, zero (0).

Section 3. Cover Indemnification. The COMPANY hereby agrees to defend, indemnify and hold harmless the Contractor against and from any and all Claims for "removal costs" or "damages" (as such terms are defined in OPA) that

(a) result from the Contractor's actions taken or omitted to be taken in the course of rendering care, assistance, or advice consistent with the National Contingency Plan or as otherwise directed by the President of the United States or his designee; and

(b) arise out of, or are in any manner connected with, the Contractor's performance of or alleged failure to perform its obligations under the MSRC Subcontractor Contract as a result of an Oil Spill Event.

Section 4. Excluded Obligations. The obligations of the COMPANY under Sections 2 and 3 shall not include and shall not apply to:

(a) the extent (but only to the extent) that applicable law would render such indemnity agreement void or unenforceable;

(b) any portion of a Claim where the liability was caused by the Contractor's gross negligence or willful, reckless, or criminal misconduct;

(c) any portion of a Claim arising from or related to services or equipment that were not provided by the Contractor pursuant to the MSRC Subcontractor Contract, including services or equipment provided by the Contractor to the COMPANY, a Covered Entity or some other Person after the COMPANY has, pursuant to the MSRC Subcontractor Contract, terminated the services of the Contractor at an Oil Spill Event;

(d) any Claim for personal injury or wrongful death;

(e) any portion of a Claim with respect to an Oil Spill Event where the payment of such portion of the Claim would cause the aggregate of (i)the amount of any out-of-pocket payments actually made by or on behalf of the COMPANY to or on behalf of the Contractor, any other contractor, MSRC or any indemnitees under this Agreement, or any similar agreement with a subcontractor with respect to such Oil Spill Event and (ii)the amount of any out-of-pocket payments made by the COMPANY for removal costs or damages under OPA with respect to such Oil Spill Event, to exceed the Cap with respect to such Oil Spill Event, irrespective as to whether the Cap can be maintained in any proceeding; provided that the restrictions of this Section3(e) shall not apply to any Claim for which the COMPANY has previously assumed the defense of such Claim under Section5(a);

(f) any Claim where the Contractor is a "responsible party" as defined in OPA in connection with the applicable Oil Spill Event; or

(g) any response under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq.).

Section 5. Procedure for Indemnification with Respect to Claims. The obligations and liabilities of the COMPANY with respect to Claims against the Contractor shall be subject to the following terms and conditions:

(a) The Contractor shall be obligated to give prompt (but in no event greater than sixty (60) days) written notice to the COMPANY of any Claim which is subject to the indemnification of the COMPANY under this Agreement, stating the nature and basis of the Claim, and the amount thereof, to the extent known. Within thirty (30) days of the giving of such notice, the COMPANY shall do one of the following: (i)satisfy the Claim, (ii)assume the defense of such Claim by written notice to the Contractor and by executing a litigation indemnity in form and substance reasonably acceptable to the Contractor (including an acknowledgment of the waiver by the COMPANY of the applicability of Sections 3(e) and (g) with respect to such Claim), or (iii)request by written notice to the Contractor that the Contractor assume the defense of the Claim; provided, however, that, in the event of a breach or anticipatory breach by the COMPANY of its indemnification obligations under this Agreement or the payment obligations under the MSRC Subcontractor Contract, the COMPANY shall not have the right to assume the defense of a Claim.

(b) If the COMPANY has requested that the Contractor assume the defense of a Claim, the Contractor shall be entitled to select its own counsel in connection with such Claim. If the COMPANY elects to defend any such Claim, the COMPANY shall make available to the Contractor all reports or other documents relating to the defense of the Claim and allow the Contractor, at its cost, to participate in meetings or conversations relating to the defense of the Claim; however, if the Contractor should elect to have its own counsel in connection with monitoring the defense of any such Claim or otherwise to represent the interests of the Contractor, particularly with respect to the rights of the Contractor to be indemnified by the COMPANY under this Agreement, the costs of such counsel shall be borne by the Contractor. If the Contractor assumes the defense of a Claim, the COMPANY shall be obligated to pay the invoiced reasonable fees and expenses of counsel for the Contractor, as the case may

be, as such fees and expenses are incurred. Unless otherwise required to protect the right of the Contractor to be indemnified by the COMPANY, the Contractor shall be obligated to cooperate fully in any defense to a Claim conducted by the COMPANY. Any party defending any Claim shall assert any exemption or immunity from liability that may be available, including, without limitation, any Responder Immunity.

(c) So long as the COMPANY is defending, the Contractor shall not compromise or settle any such Claim without the prior written consent of the COMPANY, and, if the Contractor should object to any compromise or settlement of such a Claim acceptable to the COMPANY, the Contractor shall thereafter assume the costs of defending the Claim and the **COMPANY's** obligations with respect to such Claim shall be limited to the compromise or settlement that was acceptable to the COMPANY. If the Contractor is defending such Claim, the Contractor shall consult with the COMPANY concerning any compromise or settlement but shall be entitled to compromise or settle such Claim without the prior consent of the **COMPANY,** but if the COMPANY objects to that compromise or settlement the COMPANY can assume the defense provided that the COMPANY secures its obligation to defend and pay such Claim in a manner satisfactory to the Contractor, and Section 3(e) is no longer applicable to such Claim.

Section 6. No Waiver. Nothing in this Agreement shall constitute a waiver or limitation of the rights of the Contractor with respect to Responder Immunity or any other statutory or common law defense to or limitation of liability of the COMPANY or Covered Entity resulting therefrom.

Section 7. Governing Law. This Agreement shall be governed by the laws of the State in which the services under the MSRC Subcontractor Contract primarily are performed.

Section 8. MSRC. MSRC shall not at any time be deemed to have any liability or obligation of any nature with respect to the obligations of the COMPANY under this Agreement.

Section 9. Disputes. Any disputes between the parties to this Agreement shall be resolved pursuant to the provisions contained in Section 10 - Arbitration set forth in the MSRC Subcontractor Contract.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the later date set forth below.

_____
[Contractor Name]

By:_____

Name:_____

Title:_____
Its duly authorized representative

SCHEDULE 5A

as of January 1, 2008

1. Crowley Marine Services, Inc.
2. Delaware Bay & River Cooperative (DBRC)
3. Foss Maritime Company
4. Barge/Storage Providers (as in future designated by MSRC)*
5. Tug Operators as needed to tow MSRC barges (such as McAllister, Moran, Dann Marine, Constellation/Foss, Savannah Marine – may include other providers as in future designated by MSRC)*
6. Augment & Other Crew Providers (such as Global, Clean Harbors, etc.; may include other providers as in future designated by MSRC)
7. Other OSROs (e.g., if engaged under a mutual aid or other arrangement) and where the other OSRO requires such indemnification*

* May be so designated if MSRC must put under contract directly with MSRC to ensure availability on short notice, or if otherwise needed for response/readiness.

CRC- Letter of Intent Membership and NPREP Documents - 2012

CLEAN RIVERS COOPERATIVE, INC.

February 15, 2012

200 SW Market Street, Suite 190
Portland, OR 97201
Phone: (503) 220-2040
Fax: (503) 295-3660

www.cleanriverscooperative.com

Re: 2011 PREP Documentation and 2012 Member Verification

Dear Member Facility,

This letter is to confirm that your facility is a member of Clean Rivers Cooperative, Inc. (CRC), and that the cooperative will provide oil containment and recovery services as a qualified Oil Spill Removal Organization (OSRO) according to the terms and conditions outlined in the Membership Bylaws. This letter encompasses OSRO coverage for the 2012 calendar year for the purposes of meeting the requirements set forth in 33 CFR 154.1028, and shall be renewed each calendar year.

As a member of CRC, however, there is no "end date" to your coverage under the Bylaws. Coverage is terminated upon member request or at the discretion of the CRC Board of Directors and Membership. For specific terms of coverage and effective periods, please reference the Bylaws.

CRC additionally confirms that it has met the PREP (Preparedness for Response Exercise Program) requirements for 2011. Through equipment deployments, contractor training, maintenance and actual responses, Clean Rivers has exceeded the minimum representative sample of these equipment deployments and training exercises.

We conduct contractor training on a monthly basis (at a minimum) and membership specific training or spill events as they arise. These trainings involve both classroom and equipment deployment exercises, with the goal of increasing the competency levels of our contracted personnel as well as meets the PREP requirements. Preventative maintenance is done in accordance with the manufacturer's written specification with repairs conducted as needed. Additional training and maintenance records can be made available upon request.

Clean Rivers is located within Sector Columbia River. Our area of interest is the mouth of the Columbia River to River Mile 125, and the Willamette River from its confluence up to Willamette Falls (Zones 1 & 2). Our area of interest also includes our 12- and 24-hour response zones which are the Columbia River from River Mile 125 to its confluence with the Snake River, and the Snake River up to the Idaho border.

Please feel free to contact me should you have any questions. For additional information, please visit us online at www.cleanriverscooperative.com.

Sincerely,
Clean Rivers Cooperative

Ernie Quesada
General Manager

MC

CLEAN RIVERS
COOPERATIVE, INC.

February 28, 2011

200 SW Market Street, Suite 190
Portland, OR 97201
Phone: (503) 220-2040
Fax: (503) 295-3660

www.cleanriverscooperative.com

Jerry Henderson
Chevron
5924 NW Front Avenue
Portland, OR 97210

Re: 2011 Membership Verification and 2010 PREP Documentation

Dear Jerry,

This letter is to confirm that Chevron is a member of Clean Rivers Cooperative, Inc. (CRC), and that the cooperative will provide oil containment and recovery services as a qualified Oil Spill Removal Organization (OSRO) according to the terms and conditions outlined in the Membership Bylaws. This letter encompasses OSRO coverage for the 2011 calendar year for the purposes of meeting the requirements set forth in 33 CFR 154.1028, and shall be renewed each calendar year.

As a member of CRC, however, there is no "end date" to your coverage under the Bylaws. Coverage is terminated upon member request or at the discretion of the CRC Board of Directors and Membership. For specific terms of coverage and effective periods, please reference the Bylaws.

CRC additionally confirms that it has met the PREP (Preparedness for Response Exercise Program) requirements for 2010. Through equipment deployments, contractor training, maintenance and actual responses, Clean Rivers has exceeded the minimum representative sample of these equipment deployments and training exercises.

We conduct contractor training on a monthly basis (at a minimum) and membership specific training or spill events as they arise. These trainings involve both classroom and equipment deployment exercises, with the goal of increasing the competency levels of our contracted personnel as well as meets the PREP requirements. Preventative maintenance is done in accordance with the manufacturer's written specification with repairs conducted as needed. Additional training and maintenance records can be made available upon request.

Clean Rivers is located within Sector Columbia River. Our area of interest is the mouth of the Columbia River to River Mile 125, and the Willamette River from its confluence up to Willamette Falls (Zones 1 & 2). Our area of interest also includes our 12- and 24-hour response zones which are the Columbia River from River Mile 125 to its confluence with the Snake River, and the Snake River up to the Idaho border.

Please feel free to contact me should you have any questions. For additional information, please visit us online at www.cleanriverscooperative.com.

Sincerely,
Clean Rivers Cooperative

Ernie Quesada
General Manager

MC

Certificate of Membership

[redacted]
COOPERATIVE, INC.

Issued to:

Chevron Willbridge Terminal

This is to certify that the above named company is a member in good standing of Clean Rivers Cooperative, Inc. and is therefore entitled to all the rights and privileges thereof.

March 3, 2011
Date

Ernie Quesada, General Manager
Clean Rivers Cooperative, Inc.
Portland, Oregon

CLEAN RIVERS
COOPERATIVE, INC.

200 S.W. Market Street
Suite 190
Portland, Oregon 97201
Phone: 503-220-2040
Fax: 503-295-3660

www.cleanriverscooperative.com

January 15, 2010

Jerry Henderson
Chevron
5924 NW Front Avenue
Portland, OR 97210

RE: Letter of Intent 2010

Dear Jerry:

The purpose of this letter is to confirm that Chevron is a member of Clean Rivers Cooperative, Inc., and that the cooperative will provide oil containment and recovery services as a qualified Oil Spill Removal Organization (OSRO) according to the terms and conditions outlined in the Membership Bylaws.

This letter encompasses OSRO coverage for the 2010 calendar year for the purposes of meeting the requirements set forth in 33 CFR 154.1028, and shall be renewed each calendar year upon request. However, as a member of Clean Rivers Cooperative, there is no "end date" to your coverage under the Bylaws. Coverage is terminated upon member request or at the discretion of the Clean Rivers Board of Directors and membership. For specific terms of coverage and effective periods, please reference the Bylaws.

If you have any questions or concerns please feel free to contact me by telephone at (503) 220-2087 or by e-mail at quesada@pdxmex.com.

Sincerely,
Clean Rivers Cooperative, Inc.

Ernie Quesada
General Manager

MC

Certificate of Membership

CLEAN RIVERS
COOPERATIVE, INC.

Issued to:

Chevron

5924 NW Front Avenue ·Portland, OR 97210

This is to certify that the above named company is a member in good standing of Clean Rivers Cooperative, Inc. and is therefore entitled to all the rights and privileges thereof.

January 15, 2010
Date

Ernie Quesada, General Manager
Clean Rivers Cooperative, Inc.
Portland, Oregon

CLEAN RIVERS
COOPERATIVE, INC.

200 S.W. Market Street
Portland, OR 97201
Phone: 503-220-2040
Fax: 503-295-3660

www.cleanriverscooperative.com

February 2, 2009

Jerry Henderson
Chevron
5924 NW Front Avenue
Portland, OR 97210

Dear Jerry:

The purpose of this letter is to confirm that Chevron is a member of Clean Rivers Cooperative, Inc., and that the cooperative will provide oil containment and recovery services as a qualified Oil Spill Removal Organization (OSRO) according to the terms and conditions outlined in the Membership Bylaws.

This letter encompasses OSRO coverage for the 2009 calendar year for the purposes of meeting the requirements set forth in 33 CFR 154.1028, and shall be renewed each calendar year upon request. However, as a member of Clean Rivers Cooperative, there is no "end date" to your coverage under the Bylaws. Coverage is terminated upon member request or at the discretion of the Clean Rivers Board of Directors and membership. For specific terms of coverage and effective periods, please reference the Bylaws.

If you have any questions or concerns please feel free to contact me by telephone at (503) 220-2097 or by e-mail at archer@pdxmex.com.

Sincerely,
Clean Rivers Cooperative, Inc.

Tim Archer

MC

Certificate of Membership

CLEAN RIVERS
COOPERATIVE, INC.

Issued to:

Chevron

5924 NW Front Avenue • Portland, OR 97210

This is to certify that the above named company is a member in good standing of Clean Rivers Cooperative, Inc. and is therefore entitled to all the rights and privileges thereof.

February 2, 2009
Date

Tim Archer
Tim Archer, General Manager
Clean Rivers Cooperative, Inc.
Portland, Oregon

Certificate of Membership

CLEAN RIVERS
COOPERATIVE, INC.

Issued to:

Chevron Willbridge

5924 NW Front Avenue, Portland, OR 97210

This is to certify that the above named company is a member in good standing of Clean Rivers Cooperative, Inc. and is therefore entitled to all the rights and privileges thereof.

January 30, 2008
Date

Tim Archer
Tim Archer, General Manager
Clean Rivers Cooperative, Inc.
Portland, Oregon

CLEAN RIVERS
COOPERATIVE, INC.

200 S.W. Market Street
Suite 190
Portland, Oregon 97201
Phone: 503-220-2040
Fax: 503-295-3660

www.cleanriverscooperative.com

February 1st, 2007

Jerry Henderson
Chevron Willbridge Terminal
5924 NW Front Avenue
Portland, OR 97210

Letter of Intent to Respond to an Oil Spill Incident

Dear Jerry,

This letter is to acknowledge that Chevron Willbridge Terminal is a member of Clean Rivers Cooperative, Inc. and that the Cooperative will provide Chevron Willbridge Terminal with oil containment and recovery services according to the terms and conditions outlined in the Membership Bylaws, as mutually agreed upon by Chevron Willbridge Terminal and the Cooperative.

As stated in Article 8.1, The Cooperative shall maintain a statement of emergency procedures to be followed in the event of an oil spill emergency in the Area of Interest involving any Member, for which a Member is or may be legally or contractually responsible, or to which the Cooperative is otherwise contractually obligated to respond.

Best Regards,

Tim Archer

Tim Archer
General Manager



Certificate of Membership

[redacted]
COOPERATIVE, INC.

Issued to:

Chevron Willbridge Terminal

5924 NW Front Avenue, Portland, OR 97210

This is to certify that the above named company is a member in good standing of Clean Rivers Cooperative, Inc. and is therefore entitled to all the rights and privileges thereof.

1-22-07
Date

Tim Archer
Tim Archer, General Manager
Clean Rivers Cooperative, Inc.
Portland, Oregon

MARINE SPILL RESPONSE CORP. (MSRC) EVERETT, WA - CONTRACT

MARINE SPILL RESPONSE CORPORATION
SERVICE AGREEMENT

EXECUTION INSTRUMENT

The **MSRC SERVICE AGREEMENT** attached hereto (together with this execution instrument, the "Agreement"), a standard form of agreement for MPA members (or their affiliates) dated as of December 1, 1994, is hereby entered into by and between

Chevron U.S.A. Inc.
[Name of COMPANY]

a **Pennsylvania Corporation**
[Type of entity and place of organization]

with its principal offices located at **575 Market Street, San Francisco, California 94105**

(the "**COMPANY**"), and **MARINE SPILL RESPONSE CORPORATION**, a nonprofit corporation organized under the laws of Tennessee ("**MSRC**"), and shall be identified as

SERVICE AGREEMENT No. 6CHUSA01 [This is to be provided by MSRC.]

IN WITNESS WHEREOF, the parties hereto each have caused this Agreement to be duly executed and effective as of the 31st day of December, 1994.

Chevron U.S.A. Inc. [COMPANY]

By: T R Moore [signature]

T. R. Moore [print name]

Title: **Attorney in Fact**

c/o Chevron Shipping Company

Address: **555 Market Street**

San Francisco, CA 94105

Telephone: **415/894-3232** Fax: **415/894-4463**

MARINE SPILL RESPONSE CORPORATION:

By: J W McGrath

John W McGrath
Director, Marketing & Client Relations
1350 I St. N.W. Suite 300
Washington, D.C. 20005

202/408-7486; Fax: 202/371-0401

MSRC PRET DEPLOYMENT DOCUMENTATION – UPDATED 20121

MSRC
Marine Spill Response Corporation

Don Toenshoff, Jr.
Executive Vice President

December 21, 2011

Mr. Jeff Patry
Chevron
6001 Bollinger Canyon Rd. Rm. K2122
San Ramon, CA 94583

Dear Mr. Patry:

The National Preparedness for Response Exercise Program (NPREP) Guidelines require a response plan holder to ensure that Equipment Deployment Exercise requirements are met on an annual basis. The NPREP Guidelines identify the minimum amount of equipment that must be deployed in Equipment Deployment Exercises.

This letter provides documentation to you that MSRC has completed the NPREP Equipment Deployment Exercise requirements for 2011. For purposes of Equipment Deployment Exercises under NPREP, each MSRC Region (including both the Atlantic and Gulf Areas for the Atlantic/Gulf Region) is considered a separate Oil Spill Removal Organization (OSRO). MSRC is divided into three Regions, Atlantic/Gulf (Maine – Texas, including the Mid-Continent, Puerto Rico and the U.S. Virgin Islands), California (self-explanatory) and Pacific/Northwest (Washington, Oregon and Hawaii). MSRC has deployed, at a minimum, the NPREP required amounts of each type of boom and one of each type of skimming system in the applicable regional inventory. This equipment has been deployed, if required, in each of the three types of operating environments listed in NPREP ("River & Canal", "Inland", and "Ocean"). Each of the three MSRC Regions (plus the Atlantic and Gulf Areas separately) has met these equipment deployment requirements in 2011. In addition, each Region has conducted extensive personnel training and has maintained its equipment according to a detailed preventative and corrective maintenance schedule.

MSRC has an aerial dispersant program, which is comprised of two contracted C-130 aircraft (based in Mesa, AZ and Kiln, MS) and four contracted King Air BE-90A aircraft (based in Concord, CA; Salisbury, MD; Kiln, MS; and San Juan, PR). MSRC's Dispersant Program, including all aircraft, are exercised through internal training and drills.

Documentation and records of the specific information relating to MSRC Equipment Deployment Exercises and Equipment Maintenance records are maintained in each MSRC Region. Additionally, highlights of when each MSRC Region satisfied the equipment deployment requirements are available on the MSRC website (www.msrc.org) in the Customer Access section.

Please feel free to contact the MSRC regions directly or me at (703) 326-5610 for additional information.

Sincerely,

220 Spring Street Suite 500 Herndon, VA 20170 Telephone 703 326 5600 Fax 703 326 5660

MSRC
Marine Spill Response Corporation®

Don Toenshoff, Jr.
Executive Vice President

December 20, 2010

Mr. John Dalton
Chevron Products Co.
601 South Vall Avenue
Montebello, CA 90640

Dear Mr. Dalton:

The National Preparedness for Response Exercise Program (NPREP) Guidelines require a response planholder to ensure that Equipment Deployment Exercise requirements are met on an annual basis. The NPREP Guidelines identify the minimum amount of equipment that must be deployed in Equipment Deployment Exercises.

This letter provides documentation to you that MSRC has completed the NPREP Equipment Deployment Exercise requirements for 2010. For purposes of Equipment Deployment Exercises under NPREP, each MSRC Region (including both the Atlantic and Gulf Areas for the Atlantic/Gulf Region) is considered a separate Oil Spill Removal Organization (OSRO). MSRC is divided into three Regions, Atlantic/Gulf (Maine – Texas, including the Mid-Continent, Puerto Rico and the U.S. Virgin Islands), California (self-explanatory) and Pacific/Northwest (Washington, Oregon and Hawaii). MSRC has deployed, at a minimum, the NPREP required amounts of each type of boom and one of each type of skimming system in the applicable regional inventory. This equipment has been deployed, if required, in each of the three types of operating environments listed in NPREP ("River & Canal", "Inland", and "Ocean"). Each of the three MSRC Regions (plus the Atlantic and Gulf Areas separately) has met these equipment deployment requirements in 2010. In addition, each Region has conducted extensive personnel training and has maintained its equipment according to a detailed preventative and corrective maintenance schedule.

MSRC has an aerial dispersant program, which is comprised of a contracted C-130 aircraft (based in Coolidge, AZ) and a contracted King Air BE-90A aircraft (based in Stennis, MS). MSRC's Dispersant Program, including the C-130 and King Air aircraft, are exercised through internal training, drills and responses. In addition to training, the aerial dispersant spray system on each aircraft was inspected monthly in accordance with Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) requirements. This letter provides documentation to you that MSRC has completed these requirements.

Documentation and records of the specific information relating to MSRC Equipment Deployment Exercises and Equipment Maintenance records are maintained in each MSRC Region. Additionally, highlights of when each MSRC Region satisfied the equipment deployment requirements and when the dispersant spray system inspections were conducted are available on the MSRC website (www.msrc.org) on the Customer Access page.

Please feel free to contact the MSRC regions directly or me at (703) 326-5610 for additional information.

Sincerely,

220 Spring Street Suite 500 Herndon, VA 20170 Telephone 703 326 5600 Fax 703 326 5660

MSRC
Marine Spill Response Corporation®

Don Toenshoff, Jr.
Executive Vice President

December 21, 2009

Mr. Jerry Henderson
Chevron Products Company
5924 N.W. Front Avenue
Portland, OR 97210

Dear Mr. Henderson:

The National Preparedness for Response Exercise Program (NPREP) Guidelines require a response planholder to ensure that Equipment Deployment Exercise requirements are met on an annual basis. The NPREP Guidelines identify the minimum amount of equipment that must be deployed in Equipment Deployment Exercises.

This letter provides documentation to you that MSRC has completed the NPREP Equipment Deployment Exercise requirements for 2009. For purposes of Equipment Deployment Exercises under NPREP, each MSRC Region is considered a separate Oil Spill Removal Organization (OSRO). MSRC is divided into four regions, Eastern (Maine – Georgia, and the Mid-Continent), Southern (Florida - Texas including Puerto Rico and the U.S. Virgin Islands), California (self-explanatory) and Pacific/Northwest (Washington, Oregon and Hawaii). MSRC has deployed, at a minimum, the NPREP required amounts of each type of boom and one of each type of skimming system in the applicable regional inventory. This equipment has been deployed, if required, in each of the three types of operating environments listed in NPREP ("River & Canal", "Inland", and "Ocean"). Each of the four MSRC Regions has met these equipment deployment requirements in 2009. In addition, each Region has conducted extensive personnel training and has maintained its equipment according to a rigid preventative and corrective maintenance schedule.

MSRC has an aerial dispersant program, which is comprised of a contracted C-130 aircraft (based in Coolidge, AZ) and a contracted King Air BE-90A aircraft (based in Stennis, MS). MSRC's Dispersant Program, including the C-130 and King Air aircraft, are frequently exercised through internal training and drills. In addition to training, the aerial dispersant spray system on each aircraft was inspected monthly in accordance with stated MMS requirements. This letter provides documentation to you that MSRC has completed these requirements.

Documentation and records of the specific information relating to MSRC Equipment Deployment Exercises and Equipment Maintenance records are maintained in each MSRC Region. Additionally, highlights of when each MSRC Region satisfied the equipment deployment requirements and when the dispersant spray system inspections were conducted are available on the MSRC website (www.msrc.org) on the Customer Access page (USER ID: skimmer / PASSWORD: transrec).

Please feel free to contact the MSRC regions directly or me at (703) 326-5610 for additional information.

Sincerely,



220 Spring Street Suite 500 Herndon, VA 20170 Telephone 703 326 5600 Fax 703 326 5660

MSRC
Marine Spill Response Corporation

Don Toenshoff, Jr.
Executive Vice President

December 19, 2008

Mr. Jerry Henderson
Chevron Products Company
5924 N.W. Front Avenue
Portland, OR 97210

Dear Mr. Henderson:

The National Preparedness for Response Exercise Program (NPREP) Guidelines requires a planholder to ensure that Equipment Deployment Exercise requirements are met on an annual basis. The NPREP Guidelines identify the minimum amount of equipment that must be deployed in Equipment Deployment Exercises.

This letter provides documentation to you that MSRC has completed the NPREP Equipment Deployment Exercise requirements for 2008. For purposes of Equipment Deployment Exercises under NPREP, each MSRC Region is considered a separate Oil Spill Removal Organization (OSRO). MSRC is divided into four regions, Eastern (Maine – Georgia, and the Mid-Continent), Southern (Florida - Texas including Puerto Rico and the U.S. Virgin Islands), California (self explanatory) and Pacific/Northwest (Washington, Oregon and Hawaii). MSRC has deployed, at a minimum, the NPREP required amounts of each type of boom and one of each type of skimming system in the applicable regional inventory. This equipment has been deployed, if required, in each of the three types of operating environments listed in NPREP ("River & Canal", "Inland", and "Ocean"). Each of the four MSRC Regions has met these equipment deployment requirements in 2008. In addition, each Region has conducted extensive personnel training and has maintained its equipment according to a rigid preventative and corrective maintenance schedule.

On January 1, 2007, MSRC initiated a new aerial dispersant program. This program is comprised of a contracted C-130 aircraft (based in Coolidge, AZ) and a contracted King Air BE-90A aircraft (based in Stennis, MS). MSRC's Dispersant Program, including the C-130 and King Air aircraft, are frequently exercised through customer, regulatory and internal drills.

Documentation and records of the specific information relating to MSRC Equipment Deployment Exercises and Equipment Maintenance records are maintained in each MSRC Region. Additionally, highlights of when each MSRC Region satisfied the equipment deployment requirements is available on the MSRC website (www.msrc.org) on the Customer Access page (USER ID: skimmer / PASSWORD: transrec).

Please feel free to contact the MSRC regions directly or me at (703) 326-5610 for additional information.

Sincerely,

220 Spring Street Suite 500 Herndon, VA 20170 Telephone 703 326 5600 Fax 703 326 5660

MSRC
Marine Spill Response Corporation®

Don Toenshoff, Jr.
Executive Vice President

December 21, 2007

Mr. John Dalton
Chevron Products Co.
145 South State College Blvd.
Brea, CA 92822

Dear Mr. Dalton:

The National Preparedness for Response Exercise Program (NPREP) Guidelines requires a planholder to ensure that Equipment Deployment Exercise requirements are met on an annual basis. The NPREP Guidelines identify the minimum amount of equipment that must be deployed in Equipment Deployment Exercises.

This letter provides documentation to you that MSRC has completed the NPREP Equipment Deployment Exercise requirements for 2007. For purposes of Equipment Deployment Exercises under NPREP, each MSRC Region is considered a separate Oil Spill Removal Organization (OSRO). MSRC is divided into four regions, Eastern (Maine – Georgia, and the Mid-Continent), Southern (Florida - Texas including Puerto Rico and the U.S. Virgin Islands), California (self-explanatory) and Pacific/Northwest (Washington, Oregon and Hawaii). MSRC has deployed, at a minimum, the NPREP required amounts of each type of boom and one of each type of skimming system in the applicable regional inventory. This equipment has been deployed, if required, in each of the three types of operating environments listed in NPREP ("River & Canal", "Inland", and "Ocean"). Each of the four MSRC Regions has met these equipment deployment requirements in 2007. In addition, each Region has conducted extensive personnel training and has maintained its equipment according to a rigid preventative and corrective maintenance schedule.

On January 1, 2007, MSRC initiated a new aerial dispersant program. This program is comprised of a contracted C-130 aircraft (based in Coolidge, AZ) and a contracted King Air BE-90A aircraft (based in Stennis, MS). MSRC's Dispersant Program, including the C-130 and King Air aircraft, are frequently exercised through customer, regulatory and internal drills.

Documentation and records of the specific information relating to MSRC Equipment Deployment Exercises and Equipment Maintenance records are maintained in each MSRC Region. Additionally, highlights of when each MSRC Region satisfied the equipment deployment requirements is available on the MSRC website (www.msrc.org) on the Customer Access page. Please feel free to contact the MSRC regions directly or me at (703) 326-5610 for additional information.

Sincerely,

220 Spring Street Suite 500 Herndon, VA 20170 Telephone 703 326 5600 Fax 703 326 5660

MSRC
Marine Spill Response Corporation

Don Toenshoff, Jr.
Executive Vice President

December 13, 2006

Mr. Fred Rullan
Chevron Corporation
6001 Bollingere Canyon Rd.
CHVPKK / K2114
San Ramon, CA 94583
USA

Fred

Dear Mr. Rullan:

The National Preparedness for Response Exercise Program (NPREP) Guidelines requires a planholder to ensure that Equipment Deployment Exercise requirements are met on an annual basis. The NPREP Guidelines identify the minimum amount of equipment that must be deployed in Equipment Deployment Exercises.

This letter provides documentation to you that MSRC has completed the NPREP Equipment Deployment Exercise requirements for 2006. For purposes of Equipment Deployment Exercises under NPREP, each MSRC Region is considered a separate Oil Spill Removal Organization (OSRO). MSRC is divided into four regions, Eastern (Maine – Georgia, and the Mid-Continent), Southern (Florida - Texas including Puerto Rico and the U.S. Virgin Islands), California (self-explanatory) and Pacific/Northwest (Washington, Oregon and Hawaii). MSRC has deployed, at a minimum, the NPREP required amounts of each type of boom and one of each type of skimming system in the applicable regional inventory. This equipment has been deployed, if required, in each of the three types of operating environments listed in NPREP ("River & Canal", "Inland", and "Ocean"). Each of the four MSRC Regions has met these equipment deployment requirements in 2006. In addition, each Region has conducted extensive personnel training and has maintained its equipment according to a rigid preventative and corrective maintenance schedule.

Documentation and records of the specific information relating to MSRC Equipment Deployment Exercises and Equipment Maintenance records are maintained in each MSRC Region. Additionally, highlights of when each MSRC Region satisfied the equipment deployment requirements is available on the MSRC website (www.msrc.org) on the Customer Access page. Please feel free to contact the MSRC regions directly or me at (703) 326-5610 for additional information.

Sincerely,

220 Spring Street Suite 500 Herndon, VA 20170 Telephone 703 326 5600 Fax 703 326 5660

CAPS APPLICABILITY REVIEW DOCUMENT – 01/16/2011

APPLICABILITY OF 33 CFR 154.1045(i) and (j) – DISPERSANT USE AND AERIAL TRACKING

Chevron T&O Terminal: Willbridge, Portland, OR

DISPERSANT APPLICATION – 33 CFR 154.1045(i)

33 CFR 154.1045(i)

"The owner or operator of a facility that handles, stores, or transports groups II through IV petroleum oils within the inland, nearshore, or off-shore areas where pre-authorization for dispersant use exists must identify in their response plan, and ensure the availability of, through contract or other approved means, response resources capable of conducting dispersant operations within those areas"

Federal Register Vo. 74, No. 167, page 45008, August 31, 2009

"One of these commenters was concerned that the regulations would require plan holders operating in inland areas to comply with the dispersant capability requirements. Another commenter supported exemptions for inland barges. One commenter believed no inland waters exist where the commenter's vessels operate that are pre-approved for dispersant use.

The Coast Guard recognizes there are no pre-authorizations in inland areas (e.g., estuarine or freshwater) at this time. It is possible, although not likely, that such pre-authorizations may be developed over time. Currently, however, facilities and vessels operating in inland areas, including ports and harbors, rivers, and the Great Lakes, will not be required to have dispersant resources available. If pre-authorization is established in any of those waters, plan holders operating in the waters covered by that pre-authorization will be expected to comply within 24 months of the date of publication of a ***Federal Register*** *notice advising of the pre-authorization."*

The Chevron Willbridge terminal is located on the Willamette River and is categorized as an "inland" facility. As stated above, "inland" facilities are exempt from this portion of the regulation.

AERIAL TRACKING – 33 CFR 154.1045(j)

33 CFR 154.1045(j)

"The owner or operator of a facility handling Groups I through IV petroleum oil as a primary cargo must identify in the response plan, and ensure the availability through contract or other approved means, of response resources necessary to provide aerial oil tracking to support oil spill assessment and cleanup activities. Facilities operating exclusively on inland rivers are not required to comply with this paragraph. Aerial oil tracking resources must:

(1) Be capable of arriving at the site of a discharge in advance of the arrival of response resources identified in the plan for tiers 1, 2, and 3 Worst-Case Discharge response times, and for a distance up to 50 nautical miles from shore (excluding inland rivers);
(2) Be capable of supporting oil spill removal operations continuously for three 10-hour operational periods during the initial 72 hours of the discharge;
(3) Include appropriately located aircraft and personnel capable of meeting the response time requirement for oil tracking from paragraph (j)(1) of this section; and
(4) Include sufficient numbers of aircraft, pilots, and trained observation personnel to support oil spill removal operations, commencing upon initial assessment, and capable of coordinating on-

scene cleanup operations, including dispersant and mechanical recovery operations. Observation personnel must be trained in:

(i) The protocols of oil-spill reporting and assessment, including estimation of slick size, thickness, and quantity; and

(ii) The use of assessment techniques in ASTM F1779–08 (incorporated by reference, see §154.106), and familiar with the use of other guides, such as NOAA's "Open Water Oil Identification Job Aid for Aerial Observation," and NOAA's "Characteristic Coastal Habitats" guide (available on the Internet at http://response.restoration.noaa.gov/ use the following links in the order presented: Home&bond;Emergency Response&bond;Responding to Oil Spills).

Federal Register Vo. 74, No. 167, page 45024, August 31, 2009

"One commenter stated that the aerial tracking requirement should not apply to vessels and facilities operating on rivers and other confined waters where the direction of movement of spilled oil is well known and easily tracked from shore and by responding vessels. Several commenters supported aerial tracking for open waters, but wanted alternatives for inland waters and rivers to avoid burdensome costs and to allow for more practical spill-tracking methods.

The Coast Guard agrees and has clarified that vessels and facilities operating on inland rivers will not be required to maintain aerial tracking capabilities. However, vessels operating on the open waters of the Great Lakes will be required to maintain these capabilities."

The Chevron Willbridge terminal is located on the Willamette River and is categorized as an "inland" facility. As stated above, "inland" facilities are exempt from this portion of the regulation.

CAPS APPLICABLILITY REVIEW USCG APPROVAL E-MAIL – 01/26/2011

----- Original Message -----
From: Dryer, Andrew MSTC [mailto:Andrew.M.Dryer@uscg.mil]
Sent: Wednesday, January 26, 2011 09:50 AM
To: Braun, Suzanne M
Cc: Zamperini, Michael CDR <Michael.B.Zamperini@uscg.mil>; Williamson, James CDR <James.A.Williamson@uscg.mil>; Sayers, Fred MST1 <Fred.E.Sayers@uscg.mil>
Subject: RE: Information regarding new CAPS regulation

Good morning Ms. Braun, we have reviewed and agree with your determination that your Chevron Facility on the Willamette River is exempt from the new response plan requirements for dispersant application and aerial tracking. You are correct, the location of your facility here is on "inland waters" for the purposes of oil spill response resource planning and we do not have pre-authorization for dispersant use inland.

R/
MSTC Andrew Dryer
USCG MSU Portland, OR
Chief, Facility Inspections Division
(503) 240-9305

-----Original Message-----
From: Suzanne.Braun@chevron.com [mailto:Suzanne.Braun@chevron.com]
Sent: Tuesday, January 25, 2011 4:19 PM
To: Zamperini, Michael CDR
Subject: Information regarding new CAPS regulation

Commander Zamperini - Thank you for your time today to discuss the new CAPS regulations, effective February 22, 2011. Below is some additional information as well as the applicability determined we made for our facility located on the Willamette River.

Link to the regulation - Please review Section 1045(i) and (j):

http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=/ecfrbrowse/Title33/33cfr154_main_02.tpl
<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=/ecfrbrowse/Title33/33cfr154_main_02.tpl>

Federal Register Vol. 74, No. 167 which reviews the new regulation

<<33CFR154_CAPS_RULE.pdf>>

Applicability Determination Sheet - This reviews the regulation, Coast Guard response to questions and makes a determination if the regulations are applicable to our facility on the Willamette River. I believe that our facility is exempt from both the dispersant application and aerial tracking regulations due to its location on a river and it being an "inland" facility.

<<APPLICABILITY sheet-willbridge.docx>>

Can you please forward to the appropriate person in your department for concurrence on my determination?

Thanks!

Suzanne

Suzanne Braun
Americas Products Emergency Management Specialist

Americas Products
Chevron Downstream & Chemicals
145 S. State College Blvd
Brea, CA 92821
Tel 714-671-3369
Mobile 714-488-0344
Fax 714-671-3438
suzanne.braun@chevron.com

APPENDIX C

Last Revised: October 2012

TANK TABLES, COMPANY FORMS, & PLOT PLANS

© Technical Response Planning Corporation 2006

Figure C-1 - Tank Tables

Figure C-2 - Drainage Diagram

Figure C-3 - Evacuation Diagram

Figure C-4 - Discharge Prevention Meeting Log

Figure C-5 - Inspection Procedures

Figure C-6 - Annual Inspection Record

Figure C-7 - Secondary Containment Drainage Log

Figure C-8 - Reportable Spill History

Figure C-9 - Containment and Drainage Planning

FIGURE C-1 - TANK TABLES

Container/ Source	Failure/Cause	(b) (7)(F)	Tank Type	Year Constructed/ Installed	(b) (7)(F)	Direction of Flow/Rate (See Plot Plan)	Product Stored
ABOVEGROUND CONTAIN							
1	Leak/ Rupture		IFR / Geodesic Dome	1997		Northeast/ Instantaneous	Unleaded Gasoline
3	Leak/ Rupture		IFR / Geodesic Dome	1999		Northeast/ Instantaneous	Unleaded Gasoline
43	Leak/ Rupture		Fx	1993		Northeast/ Instantaneous	Base Oil
44	Leak/ Rupture		Fx	1920		Northeast/ Instantaneous	Base Oil
45	Leak/ Rupture		IFR / Geodesic Dome	1999		Northeast/ Instantaneous	Ethanol
47	Leak/ Rupture		Fx	1929		Northeast/ Instantaneous	Unleaded Gasoline
48	Leak/ Rupture		IFR	1979		Northeast/ Instantaneous	Water/Oil Slop
51	Leak/ Rupture		IFR / Geodesic Dome	2000		Northeast/ Instantaneous	Ethanol
60	Leak/ Rupture		IFR / Geodesic Dome	2001		Northeast/ Instantaneous	Unleaded Gasoline
62	Leak/ Rupture		IFR / Geodesic Dome	2000		Northeast/ Instantaneous	Unleaded Gasoline
64	Leak/ Rupture		Fx	1947		Northeast/ Instantaneous	Diesel
75	Leak/ Rupture		Fx	1952		Northeast/ Instantaneous	Biodiesel
76	Leak/ Rupture		Fx	1960		Northeast/ Instantaneous	Base Oil

Area ** Curbing and containment system

Containment Type: 1-Earthen Berm and Floor, 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled, 6-Double Bottom, 7-Impervious Liner, 8-Concrete Berm and Earthen Floor

FIGURE C-1 - TANK TABLES, CONTINUED

Container/ Source	Failure/Cause	(b) (7)(F)	Tank Type	Year Constructed/ Installed	(b) (7)(F)	Direction of low/Rate (See Plot Plan)	Product Stored
ABOVEGROUND CONTAIN							
136	Leak/ Rupture		IFR	1982		Northeast/ Instantaneous	Out of Service
140	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Out of Service
141	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Out of Service
142	Leak/ Rupture		Fx	1984		Northeast/ Instantaneous	Base Oil
143	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Supreme 5W30
144	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Havoline 10W30
145	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Out of Service
150	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Delo 400-10
154	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Map 100
155	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Delo 400-15W40
156	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Delo 400-30
4	Leak/ Rupture		Fx	1913		Northeast/ Instantaneous	Neutral 220R
5	Leak/ Rupture		Fx	1913		Northeast/ Instantaneous	Neutral Oil

* Not in Containment Area ** Curbing and containment system

Containment Type: 1-Earthen Berm and Floor, 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled, 6-Double Bottom, 7-Impervious Liner, 8-Concrete Berm and Earthen Floor

FIGURE C-1 - TANK TABLES, CONTINUED

Container/ Source	Failure/Cause	(b) (7)(F)	ank ype	Year Constructed/ Installed	(b) (7)(F)	Direction of Flow/Rate (See Plot Plan)	Product Stored
ABOVEGROUND CONTAINE							
6	Leak/ Rupture		Fx	1913		Northeast/ Instantaneous	GEO HDAX L ASH 40
7	Leak/ Rupture		Fx	1913		Northeast/ Instantaneous	Famm Taro Special 70
8	Leak/ Rupture		Fx	1913		Northeast/ Instantaneous	Rykon Prem MV
9	Leak/ Rupture		Fx	1949		Northeast/ Instantaneous	Chevron 7075F
10	Leak/ Rupture		Fx	1950		Northeast/ Instantaneous	Paratone 8451
11	Leak/ Rupture		Fx	1950		Northeast/ Instantaneous	Lubrizol 4991D
12	Leak/ Rupture		Fx	1950		Northeast/ Instantaneous	ExxonMobil EM-100
13	Leak/ Rupture		Fx	unk		Northeast/ Instantaneous	Raffene 750L
14	Leak/ Rupture		Fx	1950		Northeast/ Instantaneous	Delo 6170 CFO 20W40
26	Leak/ Rupture		Fx	1913		Northeast/ Instantaneous	Rykon Prem 32
27	Leak/ Rupture		Fx	1913		Northeast/ Instantaneous	Chevron 7075F
28	Leak/ Rupture		Fx	1913		Northeast/ Instantaneous	Blend Mix / Line Wash
29	Leak/ Rupture		Fx	1949		Northeast/ Instantaneous	Empty

* Not in Containment Area ** Curbing and containment system

Containment Type: 1-Earthen Berm and Floor, 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled, 6-Double Bottom, 7-Impervious Liner, 8-Concrete Berm and Earthen Floor

FIGURE C-1 - TANK TABLES, CONTINUED

Container/ Source	Failure/Cause	(b) (7)(F)	Tank Type	Year Constructed/ Installed	(b) (7)(F)	Direction of Flow/Rate (See Plot Plan)	Product Stored
ABOVEGROUND CONTAIN							
30	Leak/ Rupture		Fx	1949		Northeast/ Instantaneous	Empty
37	Leak/ Rupture		Fx	1949		Northeast/ Instantaneous	Drive Train Fluid HD 10
38	Leak/ Rupture		Fx	1949		Northeast/ Instantaneous	Industrial EP 150
39	Leak/ Rupture		Fx	1949		Northeast/ Instantaneous	18,300
40	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Empty
41	Leak/ Rupture		Fx	1949		Northeast/ Instantaneous	Clarity Saw Guide 46
42	Leak/ Rupture		Fx	1913		Northeast/ Instantaneous	Empty
46	Leak/ Rupture		Fx	1924		Northeast/ Instantaneous	Red Chain Bar 150
56	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	GST ISO 100
57	Leak/ Rupture		Fx	1921		Northeast/ Instantaneous	Citgo Brt Stock 150
61	Leak/ Rupture		Fx	1941		Northeast/ Instantaneous	Neutral 600R
65	Leak/ Rupture		Fx	1938		Northeast/ Instantaneous	Lubrizol 4991
72	Leak/ Rupture		Fx	1959		Northeast/ Instantaneous	Saw Guide 150

* Not in Containment Area ** Curbing and containment system

Containment Type: 1-Earthen Berm and Floor, 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled, 6-Double Bottom, 7-Impervious Liner, 8-Concrete Berm and Earthen Floor

FIGURE C-1 - TANK TABLES, CONTINUED

Container/ Source	Failure/Cause	(b) (7)(F)	Tank Type	Year Constructed/ Installed	(b) (7)(F)	Direction of Flow/Rate (See Plot Plan)	Product Stored
ABOVEGROUND CONTAIN							
77	Leak/ Rupture		Fx	1960		Northeast/ Instantaneous	RPM HDMO 15W40
78	Leak/ Rupture		Fx	1960		Northeast/ Instantaneous	Paratone 8451
80	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Out of Service
81	Leak/ Rupture		Fx	1951		Northeast/ Instantaneous	Empty
82	Leak/ Rupture		Fx	1951		Northeast/ Instantaneous	Infineum M7038
83	Leak/ Rupture		Fx	1951		Northeast/ Instantaneous	RPM HDMO 15W40
84	Leak/ Rupture		Fx	1952		Northeast/ Instantaneous	Empty
85	Leak/ Rupture		Fx	1952		Northeast/ Instantaneous	Oloa 44200
87	Leak/ Rupture		Fx	1913		Northeast/ Instantaneous	Lubrizol 4991
88	Leak/ Rupture		Fx	1850		Northeast/ Instantaneous	Empty
90	Leak/ Rupture		Fx	1954		Northeast/ Instantaneous	Delo 400-15W40
92	Leak/ Rupture		Fx	1961		Northeast/ Instantaneous	Out of Service
94	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Rykon Oil 68

* Not in Containment Area ** Curbing and containment system

Containment Type: 1-Earthen Berm and Floor, 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled, 6-Double Bottom, 7-Impervious Liner, 8-Concrete Berm and Earthen Floor

FIGURE C-1 - TANK TABLES, CONTINUED

Container/ Source	Failure/Cause	(b) (7)(F)	Tank Type	Year Constructed/ Installed	(b) (7)(F)	Direction of Flow/Rate (See Plot Plan)	Product Stored
ABOVEGROUND CONTAIN							
104	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Texaco Havoline 5W30
105	Leak/ Rupture		Fx	1969		Northeast/ Instantaneous	Empty
106	Leak/ Rupture		Fx	1969		Northeast/ Instantaneous	Delo G/L 80/90
110	Leak/ Rupture		Fx	unk		Northeast/ Instantaneous	GST ISO 32
112	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Oloa 6073EV
114	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Industrial EP 220
116	Leak/ Rupture		Fx	1976		Northeast/ Instantaneous	Empty
117	Leak/ Rupture		Fx	1976		Northeast/ Instantaneous	Raffene 2000L
118	Leak/ Rupture		Fx	1976		Northeast/ Instantaneous	Blend Mix / Line Wash
122	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	1000 THF
123	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Delo 400-40
127	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	ATF dex 111
137	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Oloa 2000

* Not in Containment Area ** Curbing and containment system

Containment Type: 1-Earthen Berm and Floor, 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled, 6-Double Bottom, 7-Impervious Liner, 8-Concrete Berm and Earthen Floor

FIGURE C-1 - TANK TABLES, CONTINUED

Container/ Source	Failure/Cause	(b) (7)(F)	Tank Type	Year Constructed/ Installed	(b) (7) (F)	Direction of Flow/Rate (See Plot Plan)	Product Stored
ABOVEGROUND CONTAIN							
138	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Drive Train Fluid HD 10
139	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Blend Mix / Line Wash
146	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Transmix
147	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Delo 100-40
148	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	VER 800 Mar 30
149	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	RPM HDMO 30
151	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	MAR EO 9250-40
152	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Empty
160	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Empty
15	Leak/ Rupture		Fx	1913		Northeast/ Instantaneous	Rykon Prem 32
16	Leak/ Rupture		Fx	1913		Northeast/ Instantaneous	Clarity PM 220
17	Leak/ Rupture		Fx	1913		Northeast/ Instantaneous	ExxonMobile EHC45
18	Leak/ Rupture		Fx	1913		Northeast/ Instantaneous	Oloa 55006L

* Not in Containment Area ** Curbing and containment system

Containment Type: 1-Earthen Berm and Floor, 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled, 6-Double Bottom, 7-Impervious Liner, 8-Concrete Berm and Earthen Floor

FIGURE C-1 - TANK TABLES, CONTINUED

Container/ Source	Failure/Cause	(b) (7)(F)	Tank Type	Year Constructed/ Installed	(b) (7)(F)	Direction of Flow/Rate (See Plot Plan)	Product Stored
ABOVEGROUND CONTAIN							
19	Leak/ Rupture		Fx	0		Northeast/ Instantaneous	Empty
20	Leak/ Rupture		Fx	1914		Northeast/ Instantaneous	Pennzoil 75HC
21	Leak/ Rupture		Fx	1992		Northeast/ Instantaneous	Empty
22	Leak/ Rupture		Fx	1954		Northeast/ Instantaneous	Clarity PM 220
23	Leak/ Rupture		Fx	1997		Northeast/ Instantaneous	Empty
24	Leak/ Rupture		Fx	1993		Northeast/ Instantaneous	Empty
25	Leak/ Rupture		Fx	1913		Northeast/ Instantaneous	Clarity PM 150
31	Leak/ Rupture		Fx	1953		Northeast/ Instantaneous	SynFluid R, 4CST
32	Leak/ Rupture		Fx	1950		Northeast/ Instantaneous	Viscoplex 7-305
33	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Viscoplex 1-604
34	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Empty
35	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	FAMM Tara 30 DP 30
36	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Shell MV1 100

* Not in Containment Area ** Curbing and containment system

Containment Type: 1-Earthen Berm and Floor, 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled, 6-Double Bottom, 7-Impervious Liner, 8-Concrete Berm and Earthen Floor

FIGURE C-1 - TANK TABLES, CONTINUED

Container/ Source	Failure/Cause	(b) (7)(F)	Tank Type	Year Constructed/ Installed	(b) (7) (F)	Direction of Flow/Rate (See Plot Plan)	Product Stored
ABOVEGROUND CONTAIN							
79	Leak/ Rupture		Fx	1960		Northeast/ Instantaneous	Empty
91	Leak/ Rupture		Fx	1961		Northeast/ Instantaneous	Oloa 9740C
113	Leak/ Rupture		Fx	unk		Northeast/ Instantaneous	Hybase C414
131	Leak/ Rupture		Fx	unk		Northeast/ Instantaneous	Hybase C414
132	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Empty
133	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	CVX 3105
108	Leak/ Rupture		Fx	1970		Northeast/ Instantaneous	Techron Additive
176	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Blended Oil
177	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Blended Oil
178	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Blended Oil
179	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Blended Oil
180	Leak/ Rupture		Fx	1993		Northeast/ Instantaneous	Blended Oil
181	Leak/ Rupture		Fx	1993		Northeast/ Instantaneous	Blended Oil

* Not in Containment Area ** Curbing and containment system

Containment Type: 1-Earthen Berm and Floor, 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled, 6-Double Bottom, 7-Impervious Liner, 8-Concrete Berm and Earthen Floor

FIGURE C-1 - TANK TABLES, CONTINUED

Container/ Source	Failure/Cause	(b) (7)(F)	Tank Type	Year Constructed/ Installed	(b) (7)(F)	Direction of Flow/Rate (See Plot Plan)	Product Stored
ABOVEGROUND CONTAIN							
182	Leak/ Rupture		Fx	1994		Northeast/ Instantaneous	Blended Oil
183	Leak/ Rupture		Fx	1994		Northeast/ Instantaneous	Blended Oil
184	Leak/ Rupture		Fx	1994		Northeast/ Instantaneous	Blended Oil
185	Leak/ Rupture		Fx	1994		Northeast/ Instantaneous	Blended Oil
186	Leak/ Rupture		Fx	1994		Northeast/ Instantaneous	Blended Oil
187	Leak/ Rupture		Fx	1994		Northeast/ Instantaneous	Blended Oil
188	Leak/ Rupture		Fx	1994		Northeast/ Instantaneous	Blended Oil
121	Leak/ Rupture		IFR	1978		Northeast/ Instantaneous	Out of Service
158	Leak/ Rupture		Fx	Unk		Northeast/ Instantaneous	Out of Service
163	Leak/ Rupture		IFR	2009		Northeast/ Instantaneous	Swing Tank
164	Leak/ Rupture		IFR	2009		Northeast/ Instantaneous	Swing Tank
128	Leak/ Rupture		AST	Unk		Northeast/ Instantaneous	Rykon Prem 32
157	Leak/ Rupture		AST	Unk		Northeast/ Instantaneous	Turbine Oil

* Not in Containment Area ** Curbing and containment system

Containment Type: 1-Earthen Berm and Floor, 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled, 6-Double Bottom, 7-Impervious Liner, 8-Concrete Berm and Earthen Floor

FIGURE C-1 - TANK TABLES, CONTINUED

Container/ Source	Failure/Cause	(b) (7)(F)	Tank Type	Year Constructed/ Installed	(b) (7)(F)	Direction of Flow/Rate (See Plot Plan)	Product Stored
ABOVEGROUND CONTAIN							
159	Leak/ Rupture		IFR	1987		Northeast/ Instantaneous	Out of Service
97	Leak/ Rupture		Fx	1966		Northeast/ Instantaneous	Additive
96	Leak/ Rupture		Fx	1966		Northeast/ Instantaneous	Additive
SURFACE IMPOUNDMENT							
none	-		-			-	-
Facility Total:	(b) (7)(F)						

* Not in Containment Area ** Curbing and containment system

Containment Type: 1-Earthen Berm and Floor, 2-Concrete Berm and Floor, 3-Metal Berm and Floor, 4-Portable Containment or Inside Building, 5-Double Walled, 6-Double Bottom, 7-Impervious Liner, 8-Concrete Berm and Earthen Floor

Maps and figures have been redacted in accordance with the FOIA Exemption 7(F).

FIGURE C-4 - DISCHARGE PREVENTION MEETING LOG

Spill Prevention Briefing

- Company personnel are kept knowledgeable of equipment, safety factors, and operating conditions.
- Annual training sessions are conducted by the Terminal Manager to assure oil handling personnel understand the SPCC Plan for the facility. These documented sessions keep personnel informed of their obligation to prevent pollution incidents and to improve spill control and response techniques.

DATE	ATTENDEES

Subject/Issue Identified	Required Action	Implementation Date

FIGURE C-5 - INSPECTION PROCEDURES

INSPECTION PROCEDURE	DATE
A. ROUTINE VISUAL INSPECTION	
• Check tank connections for leaks and localized dead vegetation	
• Inspect drains for accumulation of oil	
• Check tanks for gaps between tank and foundation and damage caused by vegetation roots	
• Check valves and packing for leaks	
• Check drains and sumps for accumulation of oil and proper operation of level controls and pumps	
• Check tank seams for leaks, including drips, puddles, discolored area or localized dead vegetation	
• Check all tank and piping surfaces for signs of external corrosion	
• Check base of tanks for evidence of settling, leaks, including drips, puddles or discolored areas	
• Check piping for bowing between supports, leaks, including drips, puddles, discolored area, or localized dead vegetation	
• Check vent system outlets to ensure that they are not obstructed	
• Check secondary containment for discoloration and cracks or holes. Special attention should be given to seams and locations where piping goes through the deck, curbing or dikes. Ensure dike valves are closed and sealed	
• Check secondary containment for permeability, debris, erosion, location/status of pipes, inlets, drainage beneath tanks, and level of precipitation in dike vs. available capacity	
• Check secondary containment for presence of water in diked area. Follow appropriate Company procedures after visual inspection of the water to determine if sheen is present on the water	
• Check all gates to ensure that only the entrances/exits currently in use by authorized personnel are open and unlocked	
B. MONTHLY INSPECTIONS	
• Check facility lighting to ensure all are functioning	
• Check facility fencing for damages that would allow unauthorized entry	

• Inspect sumps for the accumulation of oil	
• Inspect diked/curbed areas for the accumulation of oil	
• Inspect drip pans on lift stations for the accumulation of oil	
• Inspect all tanks for proper operation including gauges, sight glasses, level controls and pressure controls	
• Inspect valves and valve glands for proper operation and ensure complete valve closure (leak proof)	
• Inspect sump for proper operation. Manually gauge sump and pump out if level is high	
• Examine the outside of the tank for signs of corrosion, damaged paint surfaces and signs of leaking	
• Inspect pipelines for signs of leaking or damage	
• Inspect flanges for signs of leaking or damage	
• Inspect joints for signs of leaking or damage	

FIGURE C-5 - INSPECTION PROCEDURES, CONTINUED

INSPECTION PROCEDURE	DATE
• Inspect oil-filled electrical equipment for signs of leakage of oil, corrosion, discoloration or any signs of internal electrical charge on the box, and external damage due to outside forces.	
• Inspect drums and totes for signs of leakage of oil, corrosion, discoloration, and external damage due to outside forces.	
C. RECORD KEEPING	
• All inspections, except routine, are to be documented on the forms provided in the Appendix and retained at the Facility. Records shall be maintained for a period of five (5) years. The following is a list of documentation forms available in the Appendix:	
• Monthly Review Checklist (FIGURE 4.1-3)	

Note: More stringent inspections, as required by Company procedures and documented on other forms, may be used to supplement or replace SPCC inspection records. These documents must be retained for five (5) years.

FIGURE C-6 - ANNUAL INSPECTION RECORD

(Other versions of this form may be used)

YEAR	MONTH	DATE	INITIALS	COMMENTS

FIGURE C-7 - SECONDARY CONTAINMENT DRAINAGE LOG

DATE	TIME STARTED	TIME ENDED	OPERATOR NAME	SIGNATURE	COMMENTS

SECONDARY CONTAINMENT DRAINAGE PROCEDURES

1. Inspect water inside containment for sheen. Indicate sheen/no sheen in comments.
2. Open valve or start pump.
3. Monitor drainage.
4. Close valve and secure with seal or lock/secure pump.
5. Fill out drainage log and sign.

FIGURE C-8 - REPORTABLE SPILL HISTORY*

Date of Discharge(s):	9/18/2004
Location (Equipment or Operations):	
List of Discharge Causes:	T-108 is a (b) (7)(F) tank for receiving railcar shipments of Techron into. T-135 is a 460 bbl Techron tank, which supplies the loading rack. At approximately 13:00, the (b) (7)(F)
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	170 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	9/15/2003
Location (Equipment or Operations):	
List of Discharge Causes:	Terminal operators were pumping the gasoline bottoms out of T-51 in preparation for the season service switch to ethanol. They were using a portable hydraulically driven centrifugal pump rented from a local environmental contractor, Emerald Services. H
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	1 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	9/14/1999
Location (Equipment or Operations):	
List of Discharge Causes:	Harris driver preset 3500 gallons RUL for the rear compartment on his trailer which is a 2300 gallon compartment, this resulted in an overfill and estimated spill of 20 gallons. The ESD was activated by the Terminal manager, who happened to be in the vici
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	20 ()
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	9/11/2000
Location (Equipment or Operations):	
List of Discharge Causes:	Summary- During an investigation to determine the root cause of reports of low additization on MUL and SUP, it was discovered that the underground piping from the discharge side of three Blend Pac injectors were leaking. Discussion- Beginning lat
Material(s) Discharged:	Operational Leak
Amount of Discharges in Gallons:	3260 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	8/8/2006
Location (Equipment or Operations):	
List of Discharge Causes:	The HTO was nearly finished water drawing T-60; standing at the water draw valve when he saw that Sump 3 located about 75 feet away was overflowing onto the surrounding gravel area. He immediately closed the water draw valve and investigated. The water
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	10 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	8/3/2005
Location (Equipment or Operations):	
List of Discharge Causes:	Not DOT jurisdictional. Tank 64 rebuild includes piping changes and relocating an 8-inch twin seal valve to manifold between tanks and TTLR. An accurate isolation plan was prepared and implemented. A spec blind on the downstream side of the valve was remo
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	15 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	8/16/2001
Location (Equipment or Operations):	
List of Discharge Causes:	Pressure gauge was leaking gas at the unleaded gashouse pumps. The gauge was cracked and had gas dripping from it.
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	1 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	8/1/2006
Location (Equipment or Operations):	
List of Discharge Causes:	A spill of 3 gallons of transmix to the Williamette River occurred during dewatering of a sheet pile wall construction project. A gas-powered centrifugal trash pump was used to dewater pooled groundwater from behind the recently installed sheet pile wal
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	3 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	7/30/2003
Location (Equipment or Operations):	
List of Discharge Causes:	A Terminal Operator and Head Terminal Operator had just completed the annual pressure test of the Jet cargo line that runs from the dock riser into the tank field. The HTO had just completed the line walk to visually verify no leakage along the above gro
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	1 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	7/20/2009
Location (Equipment or Operations):	Chevron Willbridge Terminal Dock and Barge
List of Discharge Causes:	Marine Hose Rupture
Material(s) Discharged:	220R Base Oil
Amount of Discharges in Gallons:	20 ()
Amount That Reached Navigable Waters (if applicable):	0 ()
Effectiveness and Capacity of Secondary Containment:	N/A
Cleanup Actions Taken:	NRC Corp was contracted for cleanup operations. Absorbent pads were used to collect oil from barge deck. These materials were put into (4) drums and removed from the barge then stored in the facility non-hazardous waste storage area.
Steps Taken to Reduce Possibility of Reoccurrence:	Marine hose was taken out of service and set to be destroyed. Marine hose practices were updated to reduce the length of life for all marine hoses used at the terminal.
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	As captured by video surveillance cameras, the tanker man and dock PIC discovered the ruptured hose almost immediately, and were able to shut down the discharge within about a minute after it began. After stopping the discharge, the hose was quickly drained and secured to minimize the impact of the incident.
Brief Summary of the Impact of the Spill:	No impact to land, water, or air. All products were contained on the barge deck.
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	6/4/1987
Location (Equipment or Operations):	
List of Discharge Causes:	Delivery hose failed
Material(s) Discharged:	Delo 6040
Amount of Discharges in Gallons:	1.5 (gals)
Amount That Reached Navigable Waters (if applicable):	N/A
Effectiveness and Capacity of Secondary Containment:	N/A
Cleanup Actions Taken:	N/A
Steps Taken to Reduce Possibility of Reoccurrence:	Hose was replaced
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	N/A
Enforcement Actions:	N/A
Effectiveness of Monitoring Equipment:	N/A
Spill Detection:	N/A
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	6/29/1989
Location (Equipment or Operations):	
List of Discharge Causes:	Pipeline rupture
Material(s) Discharged:	Diesel
Amount of Discharges in Gallons:	6,300 (gals)
Amount That Reached Navigable Waters (if applicable):	N/A
Effectiveness and Capacity of Secondary Containment:	N/A
Cleanup Actions Taken:	N/A
Steps Taken to Reduce Possibility of Reoccurrence:	Pipeline was replaced
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	N/A
Enforcement Actions:	N/A
Effectiveness of Monitoring Equipment:	N/A
Spill Detection:	N/A
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	5/22/2000
Location (Equipment or Operations):	
List of Discharge Causes:	The job being performed involved the demo of a section of the wet mix recovery line. The line was flushed with water prior to the removal of two ball valves, located upstream of the two sections of line that were to be removed. There is also a main block
Material(s) Discharged:	Release
Amount of Discharges in Gallons:	75 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	5/1/2005
Location (Equipment or Operations):	
List of Discharge Causes:	Proprietary Driver was delivering last of last compartment of delivery when tank overfilled causing delivery fitting to release spilling 5 gallons of product. Just as the overfill alarm began, the overfill flapper valve closed sending a hydraulic shock b
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	5 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	4/7/1992
Location (Equipment or Operations):	
List of Discharge Causes:	Pinhole leak in the pipeline
Material(s) Discharged:	Supreme unleaded gasoline
Amount of Discharges in Gallons:	<20 (gals)
Amount That Reached Navigable Waters (if applicable):	N/A
Effectiveness and Capacity of Secondary Containment:	N/A
Cleanup Actions Taken:	N/A
Steps Taken to Reduce Possibility of Reoccurrence:	Pipeline was replaced
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	N/A
Enforcement Actions:	N/A
Effectiveness of Monitoring Equipment:	N/A
Spill Detection:	N/A
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	4/4/2004
Location (Equipment or Operations):	
List of Discharge Causes:	While draining the dock cargo hose after loading a diesel barge, approximately 2 gallons of diesel spilled onto the surface of the dock. Most of the spilled product was contained on the surface of the dock, or into the strip drain below the risers. Howe
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	1 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	4/22/1991
Location (Equipment or Operations):	
List of Discharge Causes:	External corrosion
Material(s) Discharged:	Wet mix
Amount of Discharges in Gallons:	5 (gals)
Amount That Reached Navigable Waters (if applicable):	N/A
Effectiveness and Capacity of Secondary Containment:	N/A
Cleanup Actions Taken:	N/A
Steps Taken to Reduce Possibility of Reoccurrence:	Pipeline was replaced
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	N/A
Enforcement Actions:	N/A
Effectiveness of Monitoring Equipment:	N/A
Spill Detection:	N/A
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	3/9/2005
Location (Equipment or Operations):	
List of Discharge Causes:	While walking through the tank field, the Head Terminal Operator passed by the out of service diesel loading pump, and noticed a puddle of diesel on the containment pad below the pump suction flange. On further inspection, he found that a small amount of
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	1 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	3/31/1999
Location (Equipment or Operations):	
List of Discharge Causes:	Gary was disconnecting the loading arm from the second compartment on the truck, the API bottom loading adaptor stuck in the open position and supreme gasoline sprayed Gary in the face and chest.
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	4 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	3/29/1989
Location (Equipment or Operations):	
List of Discharge Causes:	Tug boat spill
Material(s) Discharged:	Diesel
Amount of Discharges in Gallons:	30 (gals)
Amount That Reached Navigable Waters (if applicable):	N/A
Effectiveness and Capacity of Secondary Containment:	N/A
Cleanup Actions Taken:	N/A
Steps Taken to Reduce Possibility of Reoccurrence:	Review of operating procedures
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	N/A
Enforcement Actions:	N/A
Effectiveness of Monitoring Equipment:	N/A
Spill Detection:	N/A
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	3/2/2001
Location (Equipment or Operations):	
List of Discharge Causes:	A release of gasoline was noted by operations at 1930. A small crack in the pad at the rack was emitting gasoline. A small pool of gas was surrounding the crack. No trucks were loading at the time the leak was noticed. The last trucks loaded were at 1830
Material(s) Discharged:	Operational Leak
Amount of Discharges in Gallons:	481 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	3/17/2002
Location (Equipment or Operations):	
List of Discharge Causes:	Driver went for DOT exam and DOT physician recommended he see personal physician to evaluate non-DOT disqualifying test result. Employee saw personal physician, who ran further tests and advised employee of results and prescribed medication. Employee advi
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	100 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	3/16/2000
Location (Equipment or Operations):	
List of Discharge Causes:	Driver Gary Noss was in the process of flushing the trailer in preparation to load avgas 100LL. He had loaded the flush and was draining. He had all the internal valves open and the 1/4-turn valves. When he removed the cap on the back compartment approximate
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	3 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	2/24/2004
Location (Equipment or Operations):	
List of Discharge Causes:	While walking through the tank field after shutting down a delivery of jet fuel on the Kinder-Morgan P/L, the HTO smelled jet in the area around the jet filters. Upon inspection, he found that the side of the jet clay filter vessel was wet with jet fuel.
Material(s) Discharged:	Operational Leak
Amount of Discharges in Gallons:	0.01 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	2/20/2002
Location (Equipment or Operations):	
List of Discharge Causes:	As I was refueling my car this morning a overfill of the fuel tank occurred. I was checking the oil when I heard liquid running. I went to the truck to replace the rag. I was using and observed fuel running on the ground. I shut off the pump and warned a d
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	2 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	2/11/2004
Location (Equipment or Operations):	
List of Discharge Causes:	While walking through the tank field following the startup of a marine receipt, the HTO noticed a small leak coming from the body of a 2" low point drain valve on the cargo piping at T-60. The leak appeared to be coming from the bolted body flange which c
Material(s) Discharged:	Operational Leak
Amount of Discharges in Gallons:	1 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	12/6/2003
Location (Equipment or Operations):	
List of Discharge Causes:	A small leak of jet fuel, approximately 40 gallons, occurred while draining down the jet cargo line to a barge in preparation for maintenance work on the line. The leak occurred through two open bleeder valves that were left open after being used to prov
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	40 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	12/16/2004
Location (Equipment or Operations):	
List of Discharge Causes:	Tank 1 was lined up for the tender, but because of problems on Oly's side, it didn't get started on time. Oly actually had to shut down the pipeline for reasons unrelated to us. The tank was left lined up. While waiting the air compressor problem arose
Material(s) Discharged:	Operational Leak
Amount of Discharges in Gallons:	0 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	11/30/2006
Location (Equipment or Operations):	
List of Discharge Causes:	Sump #3 overfilled, spilling 5 gallons of gasoline transmix to the gravel inside the tank field secondary containment area. The contaminated gravel was cleaned up and disposed of as waste. The sump overfilled when product gravity flowed backwards from
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	5 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	11/2/2006
Location (Equipment or Operations):	
List of Discharge Causes:	A new pressure relief line was installed since we have been removing some of are smaller tanks from services. This relief system was installed on tank 59. Contractors and operation follower procedures when placing the relief system into services. Operation
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	1 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	10/5/2004
Location (Equipment or Operations):	
List of Discharge Causes:	Two contractors were testing pressure relief valves (PRVs) in the facility. They were on their second of three planned days to complete the testing of about 75 PRVs in the terminal. When they unscrewed the 3/4" test port plug to connect the test equipment
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	100 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	10/12/2000
Location (Equipment or Operations):	
List of Discharge Causes:	The vessel United Sunrise had just completed the discharge of 270,000 bbls of Boscan crude @ 0530. Kurt came on shift at 0600, one of the two 8" x 75' hoses had already been removed from the vessel. Kurt proceeded to remove the second one, after which he
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	5.99 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	1/28/2003
Location (Equipment or Operations):	
List of Discharge Causes:	Driver released fitting lock to remove kink in delivery hose during product flow because he did not want to take time to stop product flow before removing kink. Fitting raised slightly and released .75 of a gallon onto pavement outside containment bucke
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	0.75 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	1/24/2005
Location (Equipment or Operations):	
List of Discharge Causes:	Excel Painting was setting up to apply coating inside Tank 48. They were using a Terex Telehandler (off-road telescoping forklift) rented from United Rentals to move materials and equipment at the job site. The 1/2" main hydraulic hose supplying hydraulic
Material(s) Discharged:	Spill
Amount of Discharges in Gallons:	1 (gals)
Amount That Reached Navigable Waters (if applicable):	()
Effectiveness and Capacity of Secondary Containment:	
Cleanup Actions Taken:	
Steps Taken to Reduce Possibility of Reoccurrence:	
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	()
Enforcement Actions:	
Effectiveness of Monitoring Equipment:	
Spill Detection:	
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-8 - REPORTABLE SPILL HISTORY*, CONTINUED

Date of Discharge(s):	1/16/1991
Location (Equipment or Operations):	
List of Discharge Causes:	Emergency oil spill response pump fell into the river
Material(s) Discharged:	Gas/oil
Amount of Discharges in Gallons:	1 (gals)
Amount That Reached Navigable Waters (if applicable):	N/A
Effectiveness and Capacity of Secondary Containment:	N/A
Cleanup Actions Taken:	N/A
Steps Taken to Reduce Possibility of Reoccurrence:	Reviewed equipment handling procedures
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	N/A
Enforcement Actions:	N/A
Effectiveness of Monitoring Equipment:	N/A
Spill Detection:	N/A
Brief Summary of the Impact of the Spill:	
Geographic Area:	

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

FIGURE C-9 - CONTAINMENT AND DRAINAGE PLANNING

FACTORS
Available Volume of Containment
Refer to FIGURE C-1.
Route(s) of Drainage
Refer to FIGURE C-2.
Construction Materials Used in Drainage Troughs
The facility does not have drainage troughs. Tank yard floor is dirt in the majority of the tank farm, a liner has been laid in areas of new construction. There is a 10 underground pipe from the tank yard to a (b) (7)(F) [redacted].
Type and Number of Valves Separators
There is an OWS and a depurator (hydrotreater) that directs treated PCW to the POTW. The OWS has an 8 outlet valve. The hydrotreater has an 8 outlet valve. (b) (7)(F) [redacted]
Sump Pump Capacities
None
Containment Capacity of Weirs and Booms
None
Other Clean Up Materials
Refer to SECTION 7.1.1 and APPENDIX B.

APPENDIX D

Last Revised: January 2007

HAZARD EVALUATION AND RISK ANALYSIS

© Technical Response Planning Corporation 2006

D.1 Facility Hazard Evaluation

D.2 Vulnerability Analysis

D.2.1 Analysis of the Potential for a Spill

D.2.2 Site Risk Analysis

D.3 Inspection and Spill Detection

Figure D.3-1 - Response Equipment Inspection

D.4 Planning Distance Calculations

Figure D.4-1 - Planning Distance Calculations

D.5 Discharge Scenarios

D.5.1 Small and Medium Discharge Scenarios

D.5.2 Worst Case Discharge (WCD) Scenario Discussion

D.5.3 Description of Factors Affecting Response Efforts

D.6 Planning Volume Calculations

D.7 Spill Volume Calculations

D.7.1 USCG Portion of Facility

D.7.2 EPA Portion of the Facility

D.7.3 DOT/PHMSA Portion of Pipeline/Facility

D.8 Pipeline - Abnormal Conditions

D.9 Product Characteristics and Hazards

Figure D.9-1 - Summary of Commodity Characteristics

D.1 FACILITY HAZARD EVALUATION

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

D.2 VULNERABILITY ANALYSIS

A vulnerability analysis was performed to address the potential effects of an oil spill within the planning distance of this facility. Refer to **SECTION 6.7** for a detailed list of vulnerabilities. The following features may be impacted by a spill:

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

D.2.1 Analysis of the Potential for a Spill

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

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

D.2.2 Site Risk Analysis

The Willbridge Terminal has completed various site-specific risk analyses of the equipment, operations, and safety measures in place to evaluate the potential for a spill. Conclusions from the risk analyses have been evaluated to determine whether any additional measures were necessary to reduce the potential for a failure in the operational system. The results of the site-specific risk analyses can be reviewed at the facility.

D.3 INSPECTION AND SPILL DETECTION

Inspection

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

Facility self-inspection requires two steps:

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

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

D.3 INSPECTION AND SPILL DETECTION, CONTINUED

Detection

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

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

- Visual detection by Company personnel
- Visual detection by the public

AVAILABILITY - ALL TANKS

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

[redacted]

[redacted]

[redacted]

- [redacted]
- [redacted]

(b) (7)(F)

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

D.3 INSPECTION AND SPILL DETECTION, CONTINUED

Visual detection by Company personnel

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

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

D.3 INSPECTION AND SPILL DETECTION, CONTINUED

Visual detection by the public

The facility does not own or operate segment pipe. All facility pipe is located within the facility fence line. If for some reason a leak is detected by the public the following steps will take place:

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

FIGURE D.3-1 - RESPONSE EQUIPMENT INSPECTION

(Other versions of this form may be used.)

ITEM	QUANTITY	LOCATION	TIME TO ACCESS/RESPOND	CONDITION	DATE USED/TESTED	SHELF LIFE	INSPECTION DATE

Inspector's Signature

D.4 PLANNING DISTANCE CALCULATIONS

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

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

FIGURE D.4-1 - PLANNING DISTANCE CALCULATIONS

Intermediate Calculations

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

ß = Horizontal distance from facility to receptor (or 20 mile point) in miles

s = Average steam slope = ∝ / ß / 5280

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

n = Manning's roughness coefficient from Table B

To calculate stream velocity (in ft./sec.), use: $v = 1.5/n \times r^{2/3} \times s^{1/2}$

Calculation of **PLANNING DISTANCE**

d = Calculated planning distance (miles)

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

t = Spill response time interval (from Table A)

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

d = v x t x c = planning distance equation

Table A	
Substantial Harm Planning Time (hours) Port Areas as Identified in 40 CFR § 112	
Boston, MA	15
New York, NY	15
Delaware Bay and River to Philadelphia	15
St. Croix, VI	15
Pascagoula, MS	15
Mississippi River from Southwest Pass, LA to Baton Rouge, LA	15
Louisiana Offshore Oil Port (LOOP)	15
Lake Charles, LA	15
Sabine-Natchez River, TX	16
Galveston Bay and Houston Ship Channel	16
Corpus Christi, TX	16
Los Angeles/Long Beach Harbor, CA	16
San Francisco Bay, San Pablo Bay, Carquinez Strait, and Suisun Bay to Antioch, CA	16
Straits of Juan de Fuca from Port Angeles, WA to and including Puget Sound	16
Prince William Sound, AK	16
Others are specified by RA for EPA Region	16
Allow other lakes, rivers canals inland and near shore areas	27

Table B	
Manning's Roughness Coefficient for Various Natural Stream Types (n)	
Minor Streams (Top width < 100 ft.)	
Clean:	
Straight	.03
Winding	.04
Sluggish (woody, deep pools):	
No trees/brush	.06
Trees and/or brush	.10
Major Streams (Top width > 100 ft.)	
Regular section:	
No boulders/brush	.036
Irregular section:	
Brush	.06

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

Site Investigation

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

From USGS Quad/Topo Sheets

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

From Facility

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

From maps, local/state authorities or investigation

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

The total planning distance equals d.

	Willbridge - Willamette River - Tidally Influenced
First receptor	n/a
First receptor location (miles)	n/a
∝ (Feet)	n/a
ß (miles)	n/a
s (feet/mile)	n/a
Avg. mid-channel depth (feet)	n/a
r (feet)	n/a
n	n/a
v (feet/second)	n/a
t (hours)	n/a
c (seconds per mile/hours per foot)	n/a
d (total planning distance)	15 mile radius

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

If Tidally Influenced

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

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

D.5 DISCHARGE SCENARIOS

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

D.5.1 Small and Medium Discharge Scenarios

- The purpose of this section is to identify the sources and sizes of small and medium discharges as defined by OPA 90 regulations
- Potential spill scenarios may include tank overflow, valve failure, tank failure, pipe failure, hose failure, or pump seal failure; these spills would likely be in contained areas and would be unlikely to travel offsite
- The Company would respond to these types of incidents in the same manner as a worst-case discharge, but at a level appropriate to the incident size; differences in response are described in the worst-case scenario discussion described in this Appendix. The Company's response in such an event would in no way obviate the liability of any other responsible parties.
- Resources are identified in **FIGURE 3.1-4**, **SECTION 7.1.1**, and **APPENDIX B.1.1**
- All resources shall be capable of arriving at the Facility within the applicable response tier requirements (Tier 1 = 12 hours; Tier 2 = 36 hours; Tier 3 = 60 hours)

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

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

D.5.1 Small and Medium Discharge Scenarios, Continued

The following table describes Facility-specific small discharge scenarios.

SMALL DISCHARGE SCENARIOS
At 1400 hours on May 15, 2002, 90 gallons of unleaded gasoline spills into the Willamette River from the WDC onshore facility at river mile 7.5. The spill originates when a dock valve malfunctions during a transfer operation. The weather is mild with a low temperature of 55° F and a high of 62° F. Heavy rain is falling which decreases visibility. Diurnal tides are running about 2.0 feet in height and the maximum daily current is 2.8 knots. Wave conditions are favorable for skimming operations and winds are from the northwest at 12 knots.

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

D.5.1 Small and Medium Discharge Scenarios, Continued

The following table describes Facility-specific small discharge response resource.

SMALL DISCHARGE RESPONSE RESOURCE
After the dockworker corrects the valve malfunction, thereby stopping spillage of the gasoline, he radios the terminal manager to inform him that there has been a spill. The terminal manager, who is also the facility's Spill Response Coordinator, immediately dispatches a Spill Cleanup Manager and assistant to the spill where he meets them and instructs them to train fire hose spray on the spilled product in order to move the product out into the main river current. Due to the minimal size of the spill and the potential fire danger created by the gasoline spillage under the dock, he also orders electrical power to the dock area to be cut and initiates calls to the NRC, OERS, and Portland Fire Department (PFD). He requests that the PFD stand by until the threat of fire/explosion danger is gone (once the spilled product is flushed from underneath the dock). The Spill Response Coordinator consults with the Coop Manager and Clean Rivers Cooperative (CRC) Response Manager to solicit their recommendations for further defensive measures. Both managers recommend leaving the spill alone; once it is in the main current and has increased its surface arm it will quickly evaporate. By 1700 hours, a two-man crew dispatched lo check both banks of the river downstream from the spill has ascertained that the spilled product has completely evaporated and that no threat remains to human health or the environment. No cleanup operations are necessary as the product has evaporated and no shoreline contact has been observed.

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

D.5.1 Small and Medium Discharge Scenarios, Continued

The following table describes Facility-specific medium discharge scenarios.

MEDIUM DISCHARGE SCENARIO
Shortly before dawn (0500 hours) on October 26, 2002, 150,000 gallons of #2 diesel spills into the Willamette River from the Chevron U.S.A. Willbridge Distribution Center at river mile 7.5. The spill originates from a pipeline located under the loading dock owned by Chevron, which ruptures during a transfer of diesel. Because the pipeline ruptures underneath the dock, workers are unable to stop the spillage at the dock and must close the valve at the storage lank feeding the pipeline. This takes about fifteen (15) minutes to accomplish and results in the spillage of (b) (7)(F) of product into the Willamette River. The weather is mild with low temperatures of 45-50° F and highs of 55-60° F. Light rain falls during the first three days of the spill cleanup, slowing operations slightly. Diurnal tides vary from 1.8 to 2.4 feet in height and maximum daily currents range from 1.0 to 1.5 knots. Wave conditions are favorable for skimming operations and winds are from the southwest at 8 to 10 knots.

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

D.5.1 Small and Medium Discharge Scenarios, Continued

The following table describes Facility-specific medium discharge response resource.

MEDIUM DISCHARGE RESPONSE RESOURCE
Once the dockworker notices that the pipeline has ruptured and is leaking, he radios the terminal control room operator and stops pumping. The terminal control room operator closes valves, notifies the Chevron Spill Response Coordinator, and, together with the dockworker, initiates spill containment by deploying containment boom across and between the ends of the Chevron, Kinder Morgan, and CONOCO docks. Meanwhile, the Chevron Spill Response Coordinator (SRC) has notified the National Response Center and Oregon Emergency Response System of the spill, and has activated the Spill Response Team by calling the Clean Rivers Cooperative. After making these notifications, the SRC heads for the Chevron facility and assumes command of containment and cleanup efforts. Clean Rivers Cooperative contacts all Coop members to inform them that their assistance in spill containment and cleanup efforts is required. Each member, when contacted, is instructed to coordinate containment and recovery efforts with Chevron's Spill Response Coordinator. The U.S. Coast Guard arrives at 0630, establishes a command post at the Chevron office nearest the dock, and orders Portland Harbor closed to marine traffic. The OSC requests a debriefing by the Spill Response Coordinator with respect to spill size and containment and recovery efforts initiated. The SRC informs the OSC that the source of the oil spill (ruptured pipeline) has been secured, that containment boom has been placed across and between the ends of the CONOCO, Chevron, and Kinder Morgan docks by Chevron personnel, and from the upstream end of the CONOCO dock into the beach by CONOCO personnel. Coop workers are currently initiating deployment of 300-foot sections of deflection boom at four locations downstream from the spill: 1) Kinder Morgan is deploying deflection boom at the Atochem beachhead 2) Mobil is deploying deflection boom at the Burlington Northern Railroad Bridge, west side 3) ARCO is deploying deflection boom at Cathedral Park 4) Time Oil is deploying deflection boom at Municipal Terminal No. 4 At 0700, the CRC Response Manager instructs a four-man oil spill crew to mobilize the 40-foot Marco skimming vessel and a support vessel to the Atochem beachhead area (across the river). The crew is to complete containment booming of the spill between the Kinder Morgan Oil dock and the Atochem deflection boom, incorporating the skimmer into the configuration to begin oil recovery. Another CRC crew is dispatched to Multnomah Channel to deploy step-down deflection boom. The Response Manager requests that the Coop deploy the Chempro Skimmer below the railroad bridge to free skim for oil. The Response Manager orders a helicopter service from Transwesten Helicopter, Inc. in order to perform aerial reconnaissance of spill movement, containment, and cleanup activities. Once airborne, the Response Manager uses the pre-designated working channel (81) to communicate his observations to the SRC, OSC, and Clean Rivers Cooperative crew. By 0730, the leading edge of the slick is reported to be at river mile 3.5 nearing the Multnomah Channel deflection boom. The Clean Rivers Response Manager dispatches a two-man Clean Rivers crew to mobilize Clean River's vacuum truck to the Atochem beachhead to support the Marco skimmer. Four additional two-man crews are mobilized to each of the other four oil spill recovery points with instructions to assist at these points until leased vacuum trucks can be mobilized to each point for oil recovery. All dispatched crews take portable decontamination kits.

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

D.5.1 Small and Medium Discharge Scenarios, Continued

MEDIUM DISCHARGE RESPONSE RESOURCE, CONTINUED
At 0800, the two major downriver oil collection points are observed from the helicopter to be at the Terminal No. 4 boom and the Multnomah Channel boom (which has been set up as a cascade or step-down boom configuration). Vacuum trucks with 'duckbills' are dispatched to Multnomah Channel, Cathedral Park, and the Burlington Northern Railroad collection points to begin oil recovery operations. A vacuum truck with a 'Manta Ray' flexible skimmer is dispatched to the Terminal No. 4-collection point. Additional vacuum trucks are requested to stand by for usage as full vacuum trucks off-load into a slop tank of Chevron's designation. Aerial observation of the spill movement also indicates that the Columbia Slough inlet should be protected by boom in case any oil threatens contact with the Slough entrance. A two-man crew is mobilized at 0810 to deploy protective boom across the Columbia Slough entrance. By 0930, most of the slick has been contained by deflection booms, with only isolated patches of sheen observed by aerial reconnaissance at river mile one, just above the Columbia Slough entrance. The Clean Rivers Cooperative Oil Spill Contingency Plan has been fully activated with boom deployment tasks assigned, collection points established, and recovery efforts scaling up. Ten vacuum trucks have now been activated and are busy recovering collected oil: two (2) trucks are working the Multnomah Channel collection point; three (3) trucks are working the Terminal No. 4 collection point where two (2) rope mop skimmers have been deployed, two (2) trucks are working the Cathedral Park collection point; one (1) truck is working the railroad bridge point; and two (2) trucks are working the Marco Skimmer and the Kinder Morgan and Chevron docks, where two (2) rope mop skimmers have been set up. In all, twenty-five (25) Spill Response Team workers are now working to recover the spilled oil. Four (4) rope mop skimmers have been set up, 5,000 feet of boom has been deployed, two (2) Marco Skimmers are working, ten (10) vacuum trucks are recovering oil from skimmers and collection points, eight (8) work boats are being utilized, and sorbent boom, sorbent pads, plastic bags, rakes, and pitchforks are being delivered to each collection point by two (2) stake bed trucks. Fire hoses are being used to flush trapped oil out from underneath dock structures to open areas protected by boom where recovery can be affected. By 1100, two (2) Brix Maritime tug boats have been enlisted to prop wash the dock areas, increasing the removal of trapped oil from underneath the dock areas. An interim oily debris storage area has been set up on Chevron facility property close to the Chevron dock and off to one side. Here, the Spill Response Coordinator has staged two (2) 20-cubic-yard drop boxes that have been lined with visqueen. Oil recovery operations continue throughout the day and by 1630, 120,000 gallons of oily water has been recovered and temporarily stored in Chevron's 10,000-barrel slop tank. Helicopter over flights indicate no visible fugitive" oil on the water. Floodlights and generators have been set up for night shift work at the Chevron and Kinder Morgan docks, at the Terminal No. 4-collection point, and at the Multnomah Channel collection point at the sawmill on the Channel's western shore. Agreement between the OSC, SRC and Coop and Contractor is reached with respect to maintaining night shift activity at about one half that of daytime activity, as this is the maximum considered effective at night.

D.5.1 Small and Medium Discharge Scenarios, Continued

MEDIUM DISCHARGE RESPONSE RESOURCE, CONTINUED
By daybreak of October 27, 2002, twenty-six hours after the spill, all visible spilled oil has been recovered from the Multnomah Channel, Cathedral Park, and railroad bridge collection points. Recovery efforts are now concentrated on the Terminal No. 4 and Chevron/Kinder Morgan dock areas. Small boats are used to carry laborers to clean up pockets of oil and debris in difficult areas inaccessible from the shore. Fire hoses are used to flush oil from underneath ft. docks, and vacuum trucks are used to skim oil along the face of the docks. By the end of the day shift at 1800 hours on October 27, 330,000 gallons of oily liquid wastes have been collected in the Chevron slop tank and are being sampled for possible waste oil processing at Fuel Processors, Inc. after being run through Chevron's API separator. In addition, 30 cubic yards of oily debris has been collected in the two drop boxes staged by the Chevron dock. This debris is also sampled in order to ascertain the appropriate disposal option. No night shift is scheduled this second night into the cleanup operation due to the difficulty inherent in seeing well enough to clean the docks and shoreline effectively. Therefore, only boom watch details are planned for the night hours. By daybreak of October 28, 2002, beach and shoreline cleaning operations are initiated at each of the five collection points. These efforts involve four-man crews utilizing floto pumps and hoses to flood/flush spilled product off of gravel, sand, rock, concrete, wood, and vegetation back into river areas boomed off with sorbent booms. These shoreline cleanup efforts continue daily (day shift only) until November 2, 2002, when the OSC, in conjunction with DEQ officials, pronounces the cleanup complete.

D.5.2 Worst Case Discharge (WCD) Scenario Discussion

APPENDIX D.7 provides worst-case discharge calculations. Discussion of this scenario is as follows:

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

1. The First Responder would notify Supervisory Personnel and notifications would be initiated in accordance with **FIGURE 2.1-2**.

2. The Area Supervisor/Manager of Operations would assume the role of Incident Commander until relieved and would initiate response actions and notifications in accordance with **SECTION 2**. If this were a small spill, the local/company personnel may handle all aspects of the response. Among those actions would be to:

    - Conduct safety assessment in accordance with **FIGURE 2.1-2** and evacuate personnel as needed in accordance with **SECTION 2.2**,
    - Direct facility responders to shut down ignition sources,
    - Direct facility personnel to position resources in accordance with **SECTION 6.9**,
    - Complete spill report form in accordance with **FIGURE 3.1-2**, and
    - Ensure regulatory agencies are notified (**FIGURE 3.1-4**).

3. If this were a small or medium spill, the Qualified Individual/Incident Commander may elect for the First Responder to remain the Incident Commander or to activate selected portions of the Emergency Management Team. However, for a large spill, the Qualified Individual would assume the role of Incident Commander and would activate the entire Emergency Management Team in accordance with activation procedures described in **SECTION 4.2**.

4. The Incident Commander would then initiate spill assessment procedures including surveillance operations, trajectory calculations, and spill volume estimating in accordance with **SECTION 2.1.3**.

5. The Incident Commander would then utilize checklists in **SECTION 4.7** as a reminder of ICS position responsibilities. The primary focus would be to establish incident priorities and objectives and to brief staff accordingly.

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

    - Site Safety and Health (**SECTION 5.4**)
    - Incident Action (**SECTION 5.3.2**)
    - Disposal (**SECTION 5.6**)
    - Site Security (**SECTION 5.11**)
    - Decontamination (**SECTION 5.5**)
    - Demobilization (**SECTION 5.12**)

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

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

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

(b) (7)(F)

[redacted]

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

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

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

WORST CASE DISCHARGE RESPONSE RESOURCE
(b) (7)(F) [redacted]
The Head Operator also notifies the Terminal Manager who serves as the Chevron Spill Response Coordinator (SRC). The SRC directs the Head Operator to call 911 to alert police and fire then the SRC calls the NRC, OERS, Clean Rivers Cooperative, the Chevron Emergency Information Center and other emergency contacts including neighboring terminals and the railroad. At 0435 the Terminal Operator conducting security rounds observes gasoline running into storm drains at Doane Ave. and Front Ave. The Terminal Operator calls the control room on a intrinsically safe radio, then takes refuge by walking Northwest on Front Ave to stop vehicular traffic at the corner of Balboa and Front Ave. At 0440 The Head Operator notifies Conoco and Paramount Petroleum to send Operators Southeast on Front Ave to stop vehicular traffic. He then calls BNSF again to inform the railroad of the severity of the event and request that rail traffic be immediately terminated because he anticipates a significant vapor cloud in the area. At 0443 The Head Operator decides to evacuate the facility on foot. He takes the Emergency Response Action Plan, three radios, two cell phones and directs the Terminal Operator who is with him that they must leave immediately. The terminal office has two means of ingress and egress, one of which is a set of stairs descending into the tank yard. They have no option but to exit using the front door and walking to the emergency gate at the gasoline loading rack. From there they walk toward the railroad where they meet up with personnel from Conoco, Chevron Global Lubricants and BNSF. At 0450 the Head Operator confirms by radio that traffic at the corner of Front Ave and Balboa has been stopped. At 0451 Conoco confirms by radio that traffic has been stopped at the corner of Kittridge and Front Ave. At 0452 BNSF confirms that rail traffic in the area has been stopped. At 0453 these personnel determine that the best direction to walk is toward the Northwest into the wind. At 0455 the Head Operator contacts the SRC to provide an update. Meanwhile, the SRC has notified the U.S. Coast Guard, the National Response Center, and the Oregon Emergency Response System of the spill and has activated the spill response team by calling the Clean Rivers Cooperative.

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

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

WORST CASE DISCHARGE RESPONSE RESOURCE, CONTINUED

At 0500 Portland Police have stopped traffic at US Highway 30 at Kittridge and also at the foot of the St. Johns bridge. By 0505 Portland Fire is stationed at the perimeter and determines that the area around the terminal 1,000 feet in all directions must be evacuated.

Clean Rivers Cooperative contacts all Coop members to inform them that their assistance in spill containment and cleanup efforts is required. Each member, when contacted, is instructed to coordinate containment and recovery efforts with Chevron's Spill Response Coordinator.

The U.S. Coast Guard arrives at 0515, establishes a temporary command post at the Subway parking lot at the corner of US Highway 30 and Yeon. The CRC arrives at 0520 and establishes the Unified Command. After assessing the situation the Federal On scene Commander (FOSC) orders the Columbia River below the Willamette River, the Portland Harbor and the Willamette River below Willamette Falls closed to all marine traffic. The FOSC and State On Scene Commander (SOSC) request a debriefing from the SRC with respect to the size of the spill and response efforts initiated.

The SRC informs Unified Command that the source of the spill is from a ruptured storage tank, cause unknown, and that the majority of the product was contained within the tank's secondary containment berm. However, a large unknown quantity did escape the impoundment and flowed into the Willamette River.

At 0520 NOAA is contacted to model product weathering and spill trajectories. Additional air modeling is requested to understand how the surrounding community could be affected and to guide emergency responders to decide if a larger geographic area should be evacuated.

At 0522 Portland Gas and Electric is directed to cut electrical power in the industrial area and to shut off Gas Mains to eliminate sources of ignition at residences and businesses.

By 0537, the CRC Response Manager arrives at the CRC Yard. At 0540 the first CRC crew begins to arrive and are instructed to assemble a four-man oil spill crew and mobilize the 40-foot Marco Class 11 Skimmer (Retriever) and a support vessel (16 ft. skiff) to get well ahead of the spill to warn boaters and to set diversionary booming at sensitive sites to keep gasoline moving downriver. Another CRC crew is dispatched in the Clean Rivers' 36-foot response vessel (Dasher) with 1500 feet of boom to Multnomah Channel to deploy deflection boom at the channel entrance. All additional CRC crew have been called in and contract workers have been notified by the Clean Rivers Coop to report to the SRC for assignments, if needed.

At 0525 Unified Command concludes the best action is to keep the spilled product moving downstream so that it will evaporate.

By 0630, the leading edge of ft spill is reported to be at River Mile 4. Approximately 50% of the gasoline has evaporated as it continues moving downriver.

At 0700, the Response Manager orders a helicopter service from Transwestern Aviation in order to make aerial reconnaissance flights of the spill movement, containment, and cleanup activities. Once airborne, the Response Manager uses the pre-designated working channel (81) to communicate his observations to the SRC, OSC, and Clean Rivers Cooperative crew.

At 0800, the two major downriver oil collection points are observed from the helicopter to be at their Terminal No. 4 boom and the Multnomah Channel boom (which has been set up as a cascade or step-down boom configuration). Because of the flammable nature of the product the responders are not able to collect any oil.

By 1030, a U.S. Coast Guard over flight reported the leading edge of the spill to have reached Hewlett Point on the Columbia River. The product has evaporated and all that remains is a light, dissipating sheen.

After the over flight, the SRC notified the U.S. Fish and Wildlife Services that oiled birds and wildlife are expected and that a wildlife reserve and rehabilitation program need to be initiated.

D.5.3 Description of Factors Affecting Response Efforts

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

FACTORS	CONSIDERATIONS AFFECTING RESPONSE EFFORTS
Size of spill	• Location of spill in relation to identified sensitivities and/or sensitive areas • Spread and spill movement
Proximity to down gradient water intakes	• Refer to **SECTION 6.11** for maps showing proximity to down gradient water intakes
Proximity to fish and wildlife and sensitive environments	• A release could impact fish, wildlife, and sensitive environments as described in **SECTION 6.5** and **SECTION 6.6**
Likelihood that discharge will travel off site	• A small spill is unlikely to travel offsite • A medium spill has the potential to travel offsite via adjacent waterways • A worst case discharge has the greatest potential to travel offsite if secondary containment is breached
Location of material spilled	• See facility information and drainage located in **FIGURE 1-2** and **FIGURE C-2**. Facility tankage, piping, and transfer areas are displayed on drawings provided in **FIGURE C-2**.
Material discharged	• Typically Gasoline, Jet A, Ethanol, Avgas, Jet Fuel, Chevron Techron Concentrate, Neutral Oil, Delo® 400 Synthetic SAE 5W-40, Ultra Low Sulfur Diesel Fuel No. 2 • Product is considered non-persistent but not volatile
Weather or aquatic conditions	• The areas have the potential to be affected by tornadoes, flooding, and lightning strikes
Available remediation equipment	• The Company has response equipment available • Resources are available through oil spill response contractors in quantities sufficient to meet applicable planning standards
Probability of a chain reaction or failures	• Potential for a chain reaction or failure is remotely possible but not anticipated; secondary containment, response contractors, and trained personnel minimize the potential of such events
Direction of spill pathway	• Refer to sensitivity maps in the **SECTION 6.11** • Wind direction and speed combined with currents will determine spill trajectory

D.6 PLANNING VOLUME CALCULATIONS

Once the worst-case discharge volume has been calculated, response resources must be identified to meet the requirements of 40 CFR 112.20(h). Calculations to determine sufficient amount of response equipment necessary to respond to a worst-case discharge is described below. A demonstration of the planning volume calculations is provided below.

D.7 SPILL VOLUME CALCULATIONS

D.7.1 USCG Portion of Facility

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

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

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

- **Average Most Probable Discharge**

  The Average Most Probable Discharge (AMPD) is defined by 33 CFR 154 as the lesser of 50 barrels or 1% of the Worst Case Discharge. One percent of the Worst Case Discharge is approximately (b) (7)(F) [redacted]

- **Maximum Most Probable Discharge**

  The Maximum Most Probable Discharge (MMPD) is defined by 33 CFR 154 as the discharge of the lesser of 1,200 barrels or 10% of the volume of the Worst Case Discharge. Ten percent of the Worst Case Discharge is approximately (b) (7))(F) [redacted].

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

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

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

TYPE	DESCRIPTION	PRODUCT	WCD VOLUME (BBLs)
Multiple-tank with secondary containment	(b) (7)(F) [redacted]	[redacted]	[redacted]

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

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

USCG					EPA
Product	Group	WCD	Avg. Most Probable	Max. Most Probable	
Gasoline - 12" pipeline diameter	I	(b) (7)(F)		1,200	(b) (7)
Diesel Fuel - 16" pipeline diameter	II			1,200	
Jet Fuel - 8" pipeline diameter	III			1,200	
Crude Oil - 14" pipeline diameter	V			1,200	

EPA PLANNING VOLUME DATA

STEP	PARAMETER	Willbridge
(A)	WCD (bbls)	(b) (7)
(B)	Oil group	Rivers and Canals
(C)	*Geographic area	I
(D1)	Percent lost to natural dissipation	80
(D2)	Percent recovered floating oil	10
(D3)	Percent oil onshore	10
(E1)	On water recovery (bbls)	(b) (7)(F)
(E2)	Shoreline recovery (bbls)	
(F)	Emulsification Factor	1.0
(G)	On water recovery resource mobilization factor	
(G1)	Tier I	0.30
(G2)	Tier II	0.40
(G3)	Tier III	0.60
Part II	On water recovery capacity (bbls/day)	
	Tier I	(b) (7)(F)
	Tier II	
	Tier III	
Part III	Shoreline cleanup volume (bbls/day)	
Part IV	On water response capacity by operating area (bbls/day)	
(J1)	Tier I	1,875
(J2)	Tier II	3,750
(J3)	Tier III	7,500
Part V	On water amount needed to be identified, but not contracted for in advance	(b) (7)(F)
	Tier I	
	Tier II	
	Tier III	

* R = Rivers and canals
N = Near shore/Inland

EPA PLANNING VOLUME DATA

STEP	PARAMETER	Willbridge
(A)	WCD (bbls)	(b) (7)
(B)	Oil group	II
(C)	*Geographic area	Rivers and Canals
(D1)	Percent lost to natural dissipation	40
(D2)	Percent recovered floating oil	15
(D3)	Percent oil onshore	45
(E1)	On water recovery (bbls)	(b) (7)(F)
(E2)	Shoreline recovery (bbls)	
(F)	Emulsification Factor	1.8
(G)	On water recovery resource mobilization factor	
(G1)	Tier I	0.30
(G2)	Tier II	0.40
(G3)	Tier III	0.60
Part II	On water recovery capacity (bbls/day)	(b) (7)(F)
	Tier I	
	Tier II	
	Tier III	
Part III	Shoreline cleanup volume (bbls/day)	
Part IV	On water response capacity by operating area (bbls/day)	
(J1)	Tier I	1,875
(J2)	Tier II	3,750
(J3)	Tier III	7,500
Part V	On water amount needed to be identified, but not contracted for in advance	
	Tier I	(b) (7)(F)
	Tier II	
	Tier III	

* R = Rivers and canals
N = Near shore/Inland

EPA PLANNING VOLUME DATA

STEP	PARAMETER	Willbridge
(A)	WCD (bbls)	(b) (7)(F)
(B)	Oil group	III
(C)	*Geographic area	Rivers and Canals
(D1)	Percent lost to natural dissipation	20
(D2)	Percent recovered floating oil	15
(D3)	Percent oil onshore	65
(E1)	On water recovery (bbls)	(b) (7)(F)
(E2)	Shoreline recovery (bbls)	
(F)	Emulsification Factor	
(G)	On water recovery resource mobilization factor	
(G1)	Tier I	0.30
(G2)	Tier II	0.40
(G3)	Tier III	0.60
Part II	On water recovery capacity (bbls/day)	
	Tier I	(b) (7)(F)
	Tier II	
	Tier III	
Part III	Shoreline cleanup volume (bbls/day)	
Part IV	On water response capacity by operating area (bbls/day)	
(J1)	Tier I	1,875
(J2)	Tier II	3,750
(J3)	Tier III	7,500
Part V	On water amount needed to be identified, but not contracted for in advance	
	Tier I	0
	Tier II	0
	Tier III	0

* R = Rivers and canals
N = Near shore/Inland

D.7.3 DOT/PHMSA Portion of Pipeline/Facility

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

1. The pipeline's maximum shut-down response time in hours (based on historic discharge data or in the absence of such data, the operators best estimate), multiplied by the maximum flow rate expressed in barrels per hour (based on the maximum daily capacity of the pipeline), plus the largest drainage volume after shutdown of the line section(s) in the response zone expressed in barrels; or

2. The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels (cubic meters), based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventative action taken; or

3. If the response zone contains one or more breakout tanks, the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels.

Under PHMSA's current policy, operators are allowed to reduce the worst case discharge volume derived from 49 CFR 194.105(b)(3) by no more than 75% if an operator is taking certain spill prevention measures for their breakout tanks and presents supporting information in the response plan. An operator can reduce the worst case discharge volume based on breakout tanks in the response zones as follows:

SPILL PREVENTION MEASURES	PERCENT REDUCTION ALLOWED
Secondary containment capacity greater than 100% capacity of tank and designed according to NFPA 30	50%
Tank built, rebuilt, and repaired according to API Std 620/650/653	10%
Automatic high-level alarms/shutdowns designed according to NFPA/API RP 2350	5%
Testing/cathodic protection designed according to API Std 650/651/653	5%
Tertiary containment/drainage/treatment per NFPA 30	5%*
Maximum allowable credit or reduction	75%

* Note: The facilities do not have tertiary containment.

The worst-case discharge for each response zone was based on the largest volume of the three criteria given above.

The Company has determined the worst-case discharge volume to be a catastrophic line failure of the largest line section with the greatest drainage capacity in each response zone or of the volume of the largest tank in each zone.

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

The line sections with the highest throughput and largest drainage volume between block valves on pump stations were chosen to calculate the pipeline worst case discharge. Although the entire discharge volume of each line was used for the worst-case discharge, in an actual spill event, it would take days to drain the line completely. The line would be sealed early in the response effort.

All of the breakout tanks in the pipeline system are within adequate secondary containment, therefore, the discharge volumes for the largest tank was determined by adjusting the total tank volume downward by 50% per the company guidelines.

Considering the volume of release from a line break compared to that of historic discharge in each zone and to the volumes released from a tank failure, the tank failure was found to represent the worst-case scenario.

The maximum historic discharge is not applicable for WCD covered by this plan. Given below are the tank and pipeline WCD calculations for this plan.

These tank volumes are as follows:

(b) (7)(F)

[redacted]

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

The worst case tank volume is calculated as follows:

Largest tank x Credit for containment tank standards = Tank standards credit

The Company has implemented all of the spill prevention measures, listed on the previous page, except tertiary containment. Therefore, the percent reduction allowed for credit equals and the worst case discharge volume is of the total volume.

(b) (7)(F)

[redacted]

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

(b) (7)(F)

[redacted]

D.8 PIPELINE - ABNORMAL CONDITIONS

PHMSA considers the “substantial threat” term to be equivalent to the “abnormal conditions” term under 49 CFR Part 195.402(d), procedures to identify events and conditions that can pose a threat of Worst Case Discharge, and actions to take for preventing and mitigating such events and conditions, are described in the Operating, Maintenance, and Emergency Procedures for Hazardous Liquids Manual.

D.9 PRODUCT CHARACTERISTICS AND HAZARDS

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

- AvGas
- Crude oils- Group III
- Crude oils- Group V
- Diesel fuels
- Ethanol
- Gasoline additive
- Gasolines
- Jet Fuel
- Lubricating oils
- Refined Base oils- Group IV

The key chemical and physical characteristics of each of these oils and/or other small quantity products/ chemicals are identified in MSDS. MSDS can be obtained by the facility via the company intranet.

FIGURE D.9-1 describes primary oils handled.

The key chemical and physical characteristics of each of these oils and/or other small quantity products/ chemicals are identified in MSDS. MSDS can be obtained by the facility via the company intranet

FIGURE D.9-1 Describes primary oils handled.

COMMON NAME	MSDS NAME	HEALTH HAZARD	FLASH POINT	SPECIAL HAZARD	REACTIVITY	HEALTH HAZARD WARNING STATEMENT
AvGas	Aviation Gasoline 100LL	1	3	C	0	Long term, repeated exposure may cause skin cancer and damage nervous and auditory systems. Contains material that may cause adverse reproductive effects if inhaled.
Crude oils-Group III	Black Wax crude oil	1	2		0	Combustible liquid and vapor. Harmful or fatal if swallowed. May cause severe eye irritation, conjunctivitis. May cause moderate skin irritation, defatting and dermatitis. May cause nasal and respiratory tract irritation. May cause central nervous system effects, possible secondary infection, anemia, irregular heart rhythm, behavioral changes and gastrointestinal disturbances.
Crude oils-Group V	Carbon Black	0	1	C, H2S	0	Combustible liquid and vapor May cause respiratory tract irritation if inhaled May cause dizziness, drowsiness and reduced alertness May release highly toxic and flammable Hydrogen Sulfide gas (H2S) Causes skin irritation Suspected cancer hazard, may cause cancer Do not attempt rescue without supplied air
Diesel fuels	Ultra Low Sulfur Diesel Fuel No. 2, Biodiesel	0	2	C, OX	0	Harmful or fatal if swallowed. May cause lung damage if swallowed. Causes skin irritation. May cause cancer. Toxic to aquatic organisms.
Ethanol	Ethanol-Fuel grade	1	3	C	0	Extremely flammable. May be harmful if swallowed. Not for human consumption. Causes eye, skin, respiratory tract irritation. Cancer hazard. Birth defect hazard. May cause damage to cadiovascular system and liver.
Gasoline additive	Techron additive OGA	1	2		3	Harmful or fatal if swallowed. May cause lung damage if swallowed. Causes skin irritation.
Gasolines	Regular, Mid-grade and Premium gasoline	1	3	C	0	Long term, repeated exposure may cause cancer, blood, kidney and nervous system damage, and contains benzene.
Jet Fuel	Aviation Turbine Jet Fuel	0	2	C	0	Long term, repeated exposure may cause cancer. Mists of this material may cause respiratory irritation. May irritate mouth, throat, and stomach. Causes skin irritation.
Lubricating oils	Neutral Oil, Delo® 400 Synthetic SAE 5W-40	0	2		0	Prolonged, repeated exposure may cause respiratory irritation or other pulmonary effects.
Refined Base oils- Group IV	Vacuum Gas Oil (VGO)	1	2	C, H2S	0	Combustible liquid and vapor. May cause respiratory tract irritation if inhaled. May cause dizziness, drowsiness and reduced alertnes. May release highly toxic and flammable Hydrogen Sulfide gas (H2S). Causes skin irritation. Suspected cancer hazard, may cause cancer. Do not attempt rescue without supplied air.

Health Hazard	**4 = Extremely Hazardous 3 = Hazardous 2 = Warning 1 = Slightly Hazardous 0 = No Unusual Hazard**	**Fire Hazard (Flash Point)**	**4 = Below 73°F, 22°C 3 = Below 100°F, 37°C 2 = Below 200°F, 93°C 1 = Above 200°F, 93°C 0 = Will not burn**
Special Hazard	**A = Asphyxiant C = Contains Carcinogen W = Reacts with Water Y = Radiation Hazard COR = Corrosive OX = Oxidizer H_2S = Hydrogen Sulfide P = Contents under Pressure T = Hot Material**	**Reactivity Hazard**	**4 = May Detonate at Room Temperature 3 = May Detonate with Heat or Shock 2 = Violent Chemical Change with High Temperature and Pressure 1 = Not Stable if Heated 0 = Stable**

APPENDIX E
CROSS-REFERENCES

Last Revised: January 2007

© Technical Response Planning Corporation 2006

Figure E-1 - EPA / FRP Cross-Reference

Figure E-2 - USCG / FRP Cross-Reference

Figure E-3 - DOT / PHMSA Cross-Reference

Figure E-4 - Oregon Cross-Reference

Figure E-5 - OSHA Cross-Reference

Figure E-6 - EPA Response Plan Cover Sheet

FIGURE E-1 - EPA / FRP CROSS-REFERENCE

EPA FRP REQUIREMENTS	LOCATION
Facility Information / General Information (1.0)	
• Facility Name	Figure 1-2
• FRP #	Figure 1-2
• Facility Address	Figure 1-2
• Facility Telephone	Figure 1-2
• Facility Owner	Figure 1-2
• Owner Address	Figure 1-2
• Owner Telephone	Figure 1-2
• Name of Protected Waterway/ Environmentally Sensitive Area	Section 6.6
• Distance from Facility	Figure D.4-1
Standard Facility Response Plan (sec. 1.0)	
Emergency Response Action Plan (ERAP) (sec. 1.1)	
Qualified Individual (QI) information (sec. 1.2) partial	ERAP - Figure 3-2
Emergency notification phone list (sec. 1.3.1) partial	ERAP - Figure 3-2
Spill response notification form (sec. 1.3.1) partial	ERAP - Figure 3-1
Response equipment list and location (sec. 1.3.2) complete	ERAP - Figure 5-2, Figure 5-3
Response equipment testing and deployment (sec. 1.3.3) complete	ERAP - Figure 5-4
Facility response team list (sec. 1.3.4) partial	ERAP - Figure 3-2
Facility evacuation plan (sec. 1.3.5) condensed	ERAP - Section 2.2
Immediate actions (sec. 1.7.1) complete	ERAP - Section 2.0
Facility diagrams (sec. 1.9) complete	ERAP - Section 6.0
Facility Information (sec. 1.2)	
Facility name and location (sec. 1.2.1)	Figure 1-2
Latitude and longitude (sec. 1.2.2)	Figure 1-2
Wellhead protection area (sec. 1.2.3)	Figure 1-2
Owner/ operator (both names included, if different (sec. 1.2.4)	Figure 1-2
Qualified Individual (sec. 1.2.5) (name, position, home and work address, phone numbers) and specific response training experience	Figure 1-2
Date of oil storage start-up (sec. 1.2.6)	Figure 1-2
Current operation (sec. 1.2.7)	Figure 1-2

Date and type of substantial expansion (sec. 1.2.8)	Figure 1-2

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

EPA FRP REQUIREMENTS	LOCATION
Emergency Response Information (sec. 1.3) / Notification (sec. 1.3.1)	
National Response Center phone number	Figure 3.1-4
Qualified Individual (day and evening) phone numbers	Figure 1-2, Figure 3.1-3
Company Response Team (day and evening) phone numbers	Figure 3.1-3
Federal On-Scene Coordinator (FOSC) and/ or Regional Response Center (day and evening) phone numbers	Figure 3.1-4
Local response team phone numbers (fire department/ cooperatives)	Figure 3.1-4
Fire marshal (day and evening) phone numbers	Figure 3.1-4
State Emergency Response Commission (SERC) phone number	Figure 3.1-4
State police phone number	Figure 3.1-4
Local Emergency Planning Committee (LEPC) phone number	Figure 3.1-4
Local water supply system (day and evening) phone numbers	Figure 3.1-4
Weather report phone number	Figure 3.1-4
Local TV/ radio phone number(s) for evacuation notification	Figure 3.1-4
Hospital phone number	Figure 3.1-4
Spill Response Notification Form	
• Reporter's name	Figure 3.1-2
• Company information	Figure 3.1-2
• Incident description	Figure 3.1-2
• Materials	Figure 3.1-2
• Response actions	Figure 3.1-2
• Impact	Figure 3.1-2
Response Equipment List (Identify if Facility, OSRO, CO-OP owned by letters O, F, or C) (sec. 1.3.2)	
Equipment list	Section 7.1.1, Figure 7.1-1
Equipment location	Section 7.1.1, Figure 7.1-1
Release handling capabilities and limitations	Section 7.1.1, Figure 7.1-1
Response Equipment Testing/ Deployment (sec. 1.3.3)	
Last inspection or equipment test date	Figure A.1-4
Inspection frequency	Figure A.1-4
Last deployment drill date	Figure A.1-4
Deployment frequency	Figure A.1-4

OSRO certification (if applicable)	Figure A.1-4

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

EPA FRP REQUIREMENTS	LOCATION
Response Personnel (sec. 1.3.4)	
Emergency response personnel list	Figure 3.1-3
Emergency response contractors	Figure 3.1-3, Figure 7.1-1, Appendix B
Evidence of response capability	Appendix B
Facility response team list (sec. 1.3.4)	Figure 3.1-3
Evacuation Plans (sec. 1.3.5)	
Facility-wide evacuation plan	Section 2.2
Reference to existing community evacuation plans (sec. 1.3.5.3)	Section 2.2
Evacuation routes shown on diagram	Evacuation Diagram "Figure C-3"
Qualified Individual's Duties (sec. 1.3.6)	
Description of duties	Section 4.5
Consistent with requirements	Section 4.5
Hazard Evaluation (sec. 1.4)	
Hazard Evaluation	Appendix D.1
Hazard Identification (sec. 1.4.1)	
Schematic Diagram	
Labeled schematic drawing	Drainage Diagram "Figure C-2"
Above-ground tanks identified separately	Drainage Diagram "Figure C-2"
Below-ground tanks identified separately	Drainage Diagram "Figure C-2"
Surface impoundments identified separately	Not Applicable
Tank Form:	
Tank number	Figure C-1
Substance stored	Figure C-1
Quantity stored	Figure C-1
Tank type and year installed	Figure C-1
Maximum capacity	Figure C-1
Failure/ Cause	Figure C-1
Surface Impoundment Form:	
Surface impoundment number	Figure C-1
Substance stored	Figure C-1
Quantity stored	Figure C-1

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

EPA FRP REQUIREMENTS	LOCATION
Surface Impoundment Form, Continued:	
Surface area/ year	Figure C-1
Maximum capacity	Figure C-1
Failure/ Cause	Figure C-1
Facility Operations Description:	
Loading and unloading procedures	Figure 1-2
Day to day operations	Figure 1-2
Secondary containment	Figure C-1
Daily throughput	Figure 1-2
Vulnerability Analysis (sec. 1.4.2)	
Vulnerability of:	
• Water intakes	Section 6.6, Section 6.10
• Schools	Section 6.6, Section 6.10
• Medical facilities	Section 6.6, Section 6.10
• Residential areas	Section 6.6, Section 6.10
• Business	Section 6.6, Section 6.10
• Wetlands or other environmentally sensitive areas	Section 6.6, Section 6.10
• Fish and wildlife	Section 6.6, Section 6.10
• Lakes and streams	Section 6.6, Section 6.10
• Endangered flora and fauna	Section 6.6, Section 6.10
• Recreational areas	Section 6.6, Section 6.10
• Transportation routes (air, land, and water)	Section 6.6, Section 6.10
• Utilities	Section 6.6, Section 6.10
• Other applicable areas (List below)	Section 6.6, Section 6.10
• Other areas:	Section 6.6, Section 6.10

Analysis of Potential for a Spill (sec. 1.4.3)	
Probability of spill occurring at the facility	Appendix D.2.1
Incorporates Factors:	
Tank age	Figure C-1
Spill history	Figure C-8
Horizontal range of a potential spill	Figure D.4-1
Vulnerability to natural disaster	Appendix D.2.1

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

EPA FRP REQUIREMENTS	LOCATION
Facility Reportable Oil Spill History Description (sec. 1.4.4)	
Date of discharge	Figure C-8
List of discharge causes	Figure C-8
Materials discharged	Figure C-8
Amount discharged in gallons	Figure C-8
Amount of discharge that reached navigable waters	Figure C-8
Effectiveness and capacity of secondary containment	Figure C-8
Clean-up actions taken	Figure C-8
Steps taken to reduce possibility of reoccurrence	Figure C-8
Total oil storage capacity of tank(s) or impoundment(s) from which material is discharged	Figure C-8
Enforcement actions	Figure C-8
Effectiveness of monitoring equipment	Figure C-8
Description of how each spill was detected	Figure C-8
Discharge Scenarios (sec. 1.5)	
Small and Medium Volume Discharges (sec. 1.5.1)	
Small Volume Discharges	
Small volume discharge calculation for a facility	Appendix D.5
Facility-specific spill potential analysis	Appendix D.5
Average most probable discharge for "complexes"	Not Applicable
1,000 feet of boom (1 hour deployment time)	Section 7.1.1, Figure 7.1-1, Appendix B
Correct amount of boom for "complexes"	Not Applicable
Oil recovery devices equal to small discharge (2 hour recovery time)	Section 7.1.1, Figure 7.1-1, Appendix B
Oil storage capacity for recovered material	Section 7.1.1, Figure 7.1-1, Appendix B
Medium Volume Discharges	
Medium volume discharge calculation for a facility	Appendix D.5
Facility-specific spill potential analysis	Appendix D.5
Maximum most probable discharge for "complexes"	Not Applicable
Oil recovery devices equal to medium discharge	Section 7.1.1, Figure 7.1-1, Appendix B
Availability of sufficient quantity of boom	Section 7.1.1, Figure 7.1-1, Appendix B
Oil storage capacity for recovered material	Section 7.1.1, Figure 7.1-1, Appendix B

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

EPA FRP REQUIREMENTS	LOCATION
Worst Case Discharge (WCD) (sec. 1.5.2)	
Correct WCD calculations	Appendix D.5, Appendix D.7
Correct WCD for "complexes"	Not Applicable
Sufficient response resources for WCD	Appendix D.5, Appendix D.7, Figure 7.1-1, Appendix B
Sources and quantity of equipment for response to WCD	Appendix D.5, Appendix D.7, Figure 7.1-1, Appendix B
Oil storage capacity for recovered material	Appendix D.5, Appendix D.7, Figure 7.1-1, Appendix B
Discharge Detection Systems (sec. 1.6)	
Discharge Detection by Personnel (sec. 1.6.1)	
Detection procedures	Appendix D.3
Discussion of facility inspections	Figure C-5, Appendix D.3
Initial response actions	Figure 2-1
Automated Discharge Detection (sec. 1.6.2)	
Equipment description	Appendix D.3
Alarm verification procedures	Appendix D.3
Initial response actions	Figure 2-1
Plan Implementation (sec. 1.7)	
Response Resources (sec. 1.7.1)	
Demonstration of accessibility of proper response personnel and equipment	Appendix B
Emergency plans for spill response	Section 2
Additional response training	Appendix A.2
Additional contracted help	Appendix B
Access to additional equipment/ experts	Appendix B
Ability to implement plan, including training and practice drills	Appendix A
Immediate Actions Form for small, medium, and worst-case spills	Figure 2-1
Disposal Plans (sec. 1.7.2)	
How and where materials will be disposed	Section 5.6, Section 7.4, Figure 7.4-4
Disposal permits	Section 5.6, Section 7.4
Containment and Drainage Planning (sec. 1.7.3)	
Containment and drainage plan available	Appendix C

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

EPA FRP REQUIREMENTS	LOCATION
Incorporates Factors:	
Available volume of containment	Figure C-1
Route(s) of drainage	Drainage Diagram "Figure C-2"
Construction materials used in drainage troughs	Figure C-9
Type and number of valves separators	Figure C-9
Sump pump capacities	Figure C-9
Containment capacity of weirs and booms	Figure C-9
Other clean up materials	Figure C-9
Self-Inspection, Drills/ Exercises, and Response Training (sec. 1.8)	
Facility Self-Inspection (sec. 1.8.1)	
Inspection checklist (with dates)	Figure C-6
Records maintained for five years	Figure C-5, Figure C-6
Tank Inspection (sec. 1.8.1.1)	
Tank leaks	Figure C-5
Tank foundations	Figure C-5
Tank piping	Figure C-5
Response Equipment Inspection (sec. 1.8.1.2)	
Inventory (item and quantity)	Figure D.3-1
Storage location (time to access and respond)	Figure D.3-1
Operation status/ condition	Figure D.3-1
Actual use/ testing (last test date and frequency of testing)	Maintain On-Site
Shelf life	Figure D.3-1
Secondary Containment Inspection (sec. 1.8.1.3)	
Dike or berm system	Figure C-5
Secondary containment	Figure C-5
Retention and drainage ponds	Figure C-5
Facility Drills/ Exercises (sec. 1.8.2)	
Facility drills/ exercise description	Appendix A.1
Equipment deployment exercise	Appendix A.1
Unannounced exercise	Appendix A.1
Area exercises	Appendix A.1
Qualified Individual Notification Drills	Appendix A.1
Qualified Individual Notification Drill Log (sec. 1.8.2.1) (date, company, qualified individual, other contacted, emergency scenario, evaluation)	Appendix A.1

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

EPA FRP REQUIREMENTS	LOCATION
Facility Drills/ Exercises (sec. 1.8.2), Continued	
Emergency Management Team Tabletop Exercises	Appendix A.1
Emergency Management Team Tabletop Drill Log (sec. 1.8.2.2) (date, company, qualified individual, participants, emergency scenario, evaluation, changes to be implemented, time table for implementation)	Appendix A.1
Response Training (sec. 1.8.3)	
Description of response training program (including topics)	Figure A.2-2
Personnel Response Training Logs (name, response training date/ and number of hours, prevention training date/ and number of hours)	Figure A.2-3
Discharge Prevention Meeting Log (date, attendees)	Figure C-4
Diagrams (sec. 1.9)	
Site Diagram includes:	
Entire facility to scale	Site Plan "Figure 1-5"
Above and below-ground bulk storage tanks	Site Plan "Figure 1-5"
Contents and capacities of bulk storage tanks	Site Plan "Figure 1-5"
Contents and capacities of drum storage areas	Site Plan "Figure 1-5"
Contents and capacities of surface impoundments	Site Plan "Figure 1-5"
Process buildings	Site Plan "Figure 1-5"
Transfer areas	Site Plan "Figure 1-5"
Secondary containment systems	Site Plan "Figure 1-5"
Structures where hazardous materials are used and capacity	Site Plan "Figure 1-5"
Location of communication and emergency response equipment	Site Plan "Figure 1-5"
Location of electrical equipment which contains oil	Site Plan "Figure 1-5"
If a "complex" facility, interface between EPA and other regulating agencies	Not Applicable
Site Drainage Diagram	
Major sanitary and storm sewers, manholes, and drains	Drainage Diagram "Figure C-2"
Weirs and shut-off valves	Drainage Diagram "Figure C-2"
Surface water receiving streams	Drainage Diagram "Figure C-2"

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

EPA FRP REQUIREMENTS	LOCATION
Site Drainage Diagram, Continued	
Fire fighting water sources	Drainage Diagram "Figure C-2"
Other utilities	Drainage Diagram "Figure C-2"
Response personnel ingress and egress	Evacuation Diagram "Figure C-3"
Equipment transportation routes	Drainage Diagram "Figure C-2", Evacuation Diagram "Figure C-3"
Direction of spill flow from release points	Drainage Diagram "Figure C-2"
Site Evacuation Diagram includes:	
Site plan diagram with evacuation routes	Evacuation Diagram "Figure C-3"
Location of evacuation regrouping areas	Evacuation Diagram "Figure C-3"
Site Security (sec. 1.10)	
Emergency cut-off locations	Figure 7.3-2
Enclosure	Figure 7.3-2
Guards and their duties, day and night	Figure 7.3-2
Lighting	Figure 7.3-2
Valve and pump locks	Figure 7.3-2
Pipeline connection caps	Figure 7.3-2
Response Plan Cover Sheet (sec. 2.0)	
Owner/ operator of facility	Figure E-6
Facility name	Figure E-6
Facility address	Figure E-6
Facility phone number	Figure E-6
Latitude and longitude	Figure E-6
Dun and Bradstreet number	Figure E-6
North American Industrial Classification System (NAICS) Code	Figure E-6
Largest oil tank storage capacity	Figure E-6
Maximum oil storage capacity	Figure E-6
Number of oil storage tanks	Figure E-6

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

EPA FRP REQUIREMENTS	LOCATION
Response Plan Cover Sheet (sec. 2.0), Continued	
Worst case discharge amount	Figure E-6
Facility distance to navigable waters	Figure E-6
Applicability of substantial harm criteria	Figure E-6
Certification	Figure E-6

FIGURE E-2 - USCG / FRP CROSS-REFERENCE

USCG OPA 90 REQUIREMENTS (33 CFR 154.1035)	LOCATION IN THIS PLAN
a) Introduction and Plan Content	
1. The facility's name, street address, city, county, state, ZIP code, facility telephone number, and fax number, if so equipped. Include mailing address if different from street address.	Figure 1-2
2. The facility's location described in a manner that could aid both a reviewer and a responder in locating the specific facility covered by the plan, such as, river mile or location from a known landmark that would appear on a map or chart.	Figure 1-2, Figure 1-3
3. The name, address and procedures for contacting the facility's owner or operator on a 24-hour basis.	Figure 1-2, Figure 3.1-3
4. A table of contents.	Table of Contents
5. During the period that the submitted plan does not have to conform to the subpart, a cross-index, if appropriate.	Figure E-2
6. Records of change(s) to record information on plan updates.	After Table of Contents
b) Emergency Response Action Plan	
1. Notification procedures	Figure 3.1-1, Figure 3.1-3, Figure 3.1-4
This subsection must contain a prioritized list identifying the person(s), including name, telephone number, and their role in the plan, to be notified of a discharge or substantial threat of a discharge of oil. The telephone number need not be provided if it is listed separately in the list of contacts required in the plan. This Notification Procedures listing must include—	
A. Facility response personnel, the spill management team, oil spill removal organizations, and the qualified individual(s) and the designated alternate(s); and	Figure 3.1-3
B. Federal, State, or local agencies, as required.	Figure 3.1-4
ii. This subsection must include a form, such as that depicted in Figure 1, which contains information to be provided in the initial and follow-up notifications to Federal, State, and local agencies. The form shall include notification of the National Response Center as required in part 153 of this chapter. Copies of the form also must be placed at the location(s) from which notification may be made. The initial notification form must include space for the information contained in Figure 1. The form must contain a prominent statement that initial notification must not be delayed pending collection of all information.	Figure 3.1-2

2. Facility's spill mitigation procedures	Section 2.1.1, Figure 2.1-2, Appendix D.3
This subsection must describe the volume(s) and oil groups that would be involved in the—	
A. Average most probable discharge from the MTR facility;	Appendix D.7

FIGURE E-2 - USCG / FRP CROSS-REFERENCE, CONTINUED

USCG OPA 90 REQUIREMENTS (33 CFR 154.1035)	LOCATION IN THIS PLAN
B. Maximum most probable discharge from the MTR facility;	Appendix D.7
C. Worst case discharge from the MTR facility; and	Appendix D.7
D. Where applicable, the worst case discharge from the non-transportation-related facility. This must be the same volume provided in the response plan for the non-transportation-related facility.	Appendix D.7
ii. This subsection must contain prioritized procedures for facility personnel to mitigate or prevent any discharge or substantial threat of a discharge of oil resulting from operational activities associated with internal or external facility transfers including specific procedures to shut down affected operations. Facility personnel responsible for performing specified procedures to mitigate or prevent any discharge or potential discharge shall be identified by job title. A copy of these procedures shall be maintained at the facility operations center. These procedures must address actions to be taken by facility personnel in the event of a discharge, potential discharge, or emergency involving the following equipment and scenarios:	Figure 1-1, Section 2, Figure 3.1-3
A. Failure of manifold, mechanical loading arm, other transfer equipment, or hoses, as appropriate;	Figure 2.1-2
B. Tank overfill;	Figure 2.1-2
C. Tank failure;	Figure 2.1-2
D. Piping rupture	Figure 2.1-2
E. Piping leak, both under pressure and not under pressure, if applicable;	Figure 2.1-2
F. Explosion or fire; and	Figure 2.1-2
G. Equipment failure (e.g. pumping system failure, relief valve failure, or other general equipment relevant to operational activities associated with internal or external facility transfers.)	Figure 2.1-2
iii. This subsection must contain a listing of equipment and the responsibilities of facility personnel to mitigate an average most probable discharge.	Figure 2.1-2, Section 4.8, Section 7.1.1, Figure 7.1-1, Appendix B

3. Facility's response activities	
i. This subsection must contain a description of the facility personnel's responsibilities to initiate a response and supervise response resources pending the arrival of the qualified individual.	Figure 2.1-1
ii. This subsection must contain a description of the responsibilities and authority of the qualified individual and alternate as required in §154.1026.	Section 4.6

FIGURE E-2 - USCG / FRP CROSS-REFERENCE, CONTINUED

USCG OPA 90 REQUIREMENTS (33 CFR 154.1035)	LOCATION IN THIS PLAN
iii. This subsection must describe the organizational structure that will be used to manage the response actions. This structure must include the following functional areas.	Section 4.8, Figure 4-2
A. Command and control;	Section 4.8, Figure 4-2
B. Public information;	Section 4.8, Figure 4-2
C. Safety;	Section 4.8, Figure 4-2
D. Liaison with government agencies;	Section 4.8, Figure 4-2
E. Spill Operations;	Section 4.8, Figure 4-2
F. Planning;	Section 4.8, Figure 4-2
G. Logistics support; and	Section 4.8, Figure 4-2
H. Finance.	Section 4.8, Figure 4-2
iv. This subsection must identify the oil spill removal organizations and the spill management team to:	Figure 3.1-3, Section 7.1, Appendix B
A. Be capable of providing the following response resources:	
1. Equipment and supplies to meet the requirements of §§154.1045, 154.1047 or subparts H or I of this part, as appropriate; and	Section 7.1.1, Figure 7.1-1
2. Trained personnel necessary to continue operation of the equipment and staff of the oil spill removal organization and spill management team for the first 7 days of the response.	Figure 3.1-3, Appendix B

B. This section must include job descriptions for each spill management team member within the organizational structure described in paragraph (b)(3)(iii) of this section. These job descriptions should include the responsibilities and duties of each spill management team member in a response action.	Section 4.8, Figure 4-2
v. For mobile facilities in more than one COTP zone, the plan must identify the oil spill removal organization and the spill management team in the applicable geographic-specific appendix. The oil spill removal organization(s) and the spill management team discussed in paragraph (b)(3)(IV)(A) of this section must be included for each COTP zone in which the facility will handle, store, or transport oil in bulk.	Not Applicable

FIGURE E-2 - USCG / FRP CROSS-REFERENCE, CONTINUED

USCG OPA 90 REQUIREMENTS (33 CFR 154.1035)	LOCATION IN THIS PLAN
4. Fish and wildlife and sensitive environments	
i. This section of the plan must identify areas of economic importance and environmental sensitivity, as identified in the ACP, which are potentially impacted by a worst-case discharge. ACPs are required under section 311(j)(4) of the FWPCA to identify fish and wildlife and sensitive environments. The applicable ACP shall be used to designate fish and wildlife and sensitive environments in the plan. Changes to the ACP regarding fish and wildlife and sensitive environments shall be included in the annual update of the response plan, when available.	Section 6.6, Section 6.10
ii. For a worst case discharge from the facility, this section of the plan must—	
A. List all fish and wildlife and sensitive environments identified in the ACP, which are potentially impacted by a discharge of persistent oils, non-persistent oils, or non-petroleum oils.	Section 6.5, Section 6.6,Appendix D.5
B. Describe all the response actions that the facility anticipates taking to protect these fish and wildlife and sensitive environments.	Figure 2.1-1, Section 6, Section 7.1, Appendix B, Appendix D
C. Contain a map or chart showing the location of those fish and wildlife and sensitive environments, which are potentially impacted. The map or chart shall also depict each response action that the facility anticipates taking to protect these areas. A legend of activities must be included on the map page.	Section 6.6, Section 6.7, Section 6.9, Section 6.10
iii. For a worst case discharge, this section must identify appropriate equipment and required personnel, available by contract or other approved means as described in §154.1028, to protect fish and wildlife and sensitive environments which fall within the distances calculated using the methods outlined in this paragraph as follows:	Figure 3.1-3, Section 7.1.1, Figure 7.1-1, Appendix B
A. Identify the appropriate equipment and required personnel to protect all fish and wildlife and sensitive environments in the ACP for the distances, as calculated in paragraph (b)(4)(iii)(B) of this section, that the persistent oils, non-persistent oils, or non-petroleum oils are likely to travel in the noted geographic area(s) and number of days listed in Table 2 of appendix C of this part;	Figure 3.1-3, Section 7.1.1, Figure 7.1-1, Appendix B
B. Calculate the distances required by paragraph (b)(4)(iii)(A) of this section by selecting one of the methods described in this paragraph;	Appendix D.4

FIGURE E-2 - USCG / FRP CROSS-REFERENCE, CONTINUED

USCG OPA 90 REQUIREMENTS (33 CFR 154.1035)	LOCATION IN THIS PLAN
1. Distances may be calculated as follows:	
i. For persistent oils and non-petroleum oils discharged into non-tidal waters, the distance from the facility reached in 48 hours at maximum current.	
ii. For persistent and non-petroleum oils discharged into tidal waters, 15 miles from the facility down current during ebb tide and to the point of maximum tidal influence or 15 miles, whichever is less, during flood tide.	
iii. For non-persistent oils discharged into non-tidal waters, the distance from the facility reached in 24 hours at maximum current.	
iv. For non-persistent oils discharged into tidal waters, 5 miles from the facility down current during ebb tide and to the point of maximum tidal influence or 5 miles, whichever is less, during flood tide.	
2. A spill trajectory or model may be substituted for the distances calculated under paragraph (b)(4)(iii)(B)(1) of this section. The spill trajectory or model must be acceptable to the COTP.	
3. The procedures contained in the Environmental Protection's Agency's regulations on oil pollution prevention for non-transportation-related onshore facilities at 40 CFR part 112, appendix C, Attachment C-III may be substituted for the distances listed in non-tidal and tidal waters; and	
C. Based on historical information or a spill trajectory or model, the COTP may require the additional fish and wildlife and sensitive environments also be protected.	
5. Disposal Plan.	
i. This subsection must describe any actions to be taken or procedures to be used to ensure that all recovered oil and oil contaminated debris produced as a result of any discharge are disposed according to Federal, state, or local requirements.	Section 5.6, Section 7.4
c) *Training and exercises.*	
1. Training procedures. This subsection must describe the training procedures and programs of the facility owner or operator to meet the requirements in §154.1050.	Appendix A

2. Exercise procedures. This subsection must describe the exercise program to be carried out by the facility owner or operator to meet the requirements in §154.1055.	Appendix A

FIGURE E-2 - USCG / FRP CROSS-REFERENCE, CONTINUED

USCG OPA 90 REQUIREMENTS (33 CFR 154.1035)	LOCATION IN THIS PLAN
d) *Plan review and update procedures.*	
1. This section must address the procedures to be followed by the facility owner or operator to meet the requirements of §154.1065 and the procedures to be followed for any post-discharge review of the plan to evaluate and validate its effectiveness.	Section 8.3
e) Appendices	
1. Facility-specific information. This appendix must contain a description of the facility's principal characteristics.	
There must be a physical description of the facility including a plan of the facility showing the mooring areas, transfer locations, control stations, locations of safety equipment, and the location and capacities of all piping and storage tanks.	Figure 1-2, Figure 1-5
ii. The appendix must identify the sizes, types, and number of vessels that the facility can transfer oil to or from simultaneously.	Figure 1-2
iii. The appendix must identify the first valve(s) on facility piping separating the transportation-related portion of the facility from the non-transportation-related portion of the facility, if any. For piping leading to a manifold located on a dock serving tank vessels, this valve is the first valve inside the secondary containment required by 40 CFR part 112.	Figure C-2, Figure C-3
iv. The appendix must contain information on the oil(s) and hazardous material handled, stored, or transported at the facility in bulk. A material safety data sheet meeting the requirements of 29 CFR 1910.1200, 33 CFR 154.310(a)(5) or an equivalent will meet this requirement. This information can be maintained separately providing it is readily available and the appendix identifies its location. This information must include—	Appendix D.8, Figure D.8-1
A. The generic or chemical name;	Figure D.8-1
B. A description of the appearance and odor;	Figure D.8-1
C. The physical and chemical characteristics;	Appendix D.8
D. The hazards involved in handling the oil(s) and hazardous materials. This shall include hazards likely to be encountered if the oil(s) and hazardous materials come in contact as a result of a discharge; and	Figure D.8-1
E. A list of firefighting procedures and extinguishing agents effective with fires involving the oil(s) and hazardous materials.	Appendix D.8

v. The appendix may contain any other information which the facility owner or operator determines to be pertinent to an oil spill response.	

FIGURE E-2 - USCG / FRP CROSS-REFERENCE, CONTINUED

USCG OPA 90 REQUIREMENTS (33 CFR 154.1035)	LOCATION IN THIS PLAN
2. List of contacts. This appendix must include information on 24-hour contact of key individuals and organizations. If more appropriate, this information may be specified in a geographic-specific appendix. The list must include—	
i. The primary and alternate qualified individual(s) for the facility;	Figure 1-2, Figure 3.1-3
ii. The contact(s) identified under paragraph (b)(3)(iv) of this section for activation of the response resources; and	Figure 3.1-3
iii. Appropriate Federal, State, and local officials.	Figure 3.1-4
3. Equipment list and records.	
i. The appendix must contain a list of equipment and facility personnel required to respond to an average most probable discharge, as defined in §154.1020. The appendix must also list the location of the equipment.	Figure 3.1-3, Section 7.1.1, Figure 7.1-1, Appendix B
ii. The appendix must contain a detailed listing of all the major equipment identified in the plan as belonging to an oil spill removal organization(s) that is available, by contract or other approved means as described in §154.1028(a), to respond to a maximum most probable or worst case discharge, as defined in §154.1020. The detailed listing of all major equipment may be located in a separate document referenced by the plan. Either the appendix or the separate document referenced in the plan must provide the location of the major response equipment.	Figure 7.1-1, Appendix B
iii. It is not necessary to list response equipment from oil spill removal organization(s) when the Coast Guard has classified the organization and their capacity has been determined to equal or exceed the response capability needed by the facility. For oil spill removal organization(s) classified by the Coast Guard, the classification must be noted in this section of the plan. When it is necessary for the appendix to contain a listing of response equipment, it shall include all of the following items that are identified in the response plan: Skimmers; booms; dispersant application, in-situ burning, bioremediation equipment and supplies, and other equipment used to apply other chemical agents on the NCP Product Schedule (if applicable); communications, firefighting, and beach cleaning equipment; boats and motors; disposal and storage equipment; and heavy equipment. The list must include for each piece of equipment—	Appendix B

FIGURE E-2 - USCG / FRP CROSS-REFERENCE, CONTINUED

USCG OPA 90 REQUIREMENTS (33 CFR 154.1035)	LOCATION IN THIS PLAN
A. The type, make, model, and year of manufacture listed on the nameplate of the equipment;	Figure B.1-1
B. For oil recovery devices, the effective daily recovery rate, as determined using section 6 of Appendix C of this part;	Figure B.1-1
C. For containment boom, the overall boom height (draft and freeboard) and type of end connectors;	Figure B.1-1
D. The spill scenario in which the equipment will be used for or which it is contracted;	Appendix D.5
E. The total daily capacity for storage and disposal of recovered oil;	Figure B.1-1
F. For communication equipment, the type and amount of equipment intended for use during response activities. Where applicable, the primary and secondary radio frequencies must be specified.	Figure B.1-1
G. Location of the equipment; and	Figure B.1-1
H. The dates of the last inspection by the oil spill removal organization(s).	Figure B.1-1
4. Communications plan. This appendix must describe the primary and alternate method of communication during discharges, including communications at the facility and at remote locations within the areas covered by the response plan. The appendix may refer to additional communications packages provided by the oil spill removal organization. This may reference another existing plan or document.	Section 7.1.6
5. Site-specific safety and health plan. This appendix must describe the safety and health plan to be implemented for any response location(s). It must provide as much detailed information as is practicable in advance of an actual discharge. This appendix may reference another existing plan requiring under 29 CFR 1910.120.	Section 5.4
6. List of acronyms and definitions. This appendix must list all acronyms used in the response plan including any terms or acronyms used by Federal, State, or local governments and any operational terms commonly used at the facility. This appendix must include all definitions that are critical to understanding the response plan.	Appendix F

FIGURE E-3 - DOT / PHMSA CROSS-REFERENCE

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
1. Information Summary	
a. For the core plan:	
1. Name and address of operator	Figure 1-2
2. For each Response Zone which contains one or more line sections that meet the criteria for determining significant and substantial harm (§194.103), listing and description of Response Zones, including county(s) and state(s)	Figure 1-2
b. For each Response Zone appendix:	
1. Information summary for core plan	Figure 1-2
2. QI names and telephone numbers, available on 24-hr basis	Figure 1-2, Figure 3.1-3
3. Description of Response Zone, including county(s) and state(s) in which a worst case discharge could cause substantial harm to the environment	Figure 1-2
4. List of line sections contained in Response Zone, identified by milepost or survey station or other operator designation	Figure 1-2
5. Basis for operator's determination of significant and substantial harm	Figure 1-2
6. The type of oil and volume of the worst case discharge	Appendix D.7
c. Certification that the operator has obtained, through contract or other approved means, the necessary private personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge or threat of such discharge	Section 1.4, Appendix B
2. Notification Procedures	
a. Notification requirements that apply in each area of operation of pipelines covered by the plan, including applicable state or local requirements	Figure 3.1-4
b. Checklist of notifications the operator or Qualified Individual is required to make under the response plan, listed in the order of priority	Figure 2.1-1, Figure 3.1-1, Figure 3.1-4
c. Name of persons (individuals or organizations) to be notified of discharge, indicating whether notification is to be performed by operating personnel or other personnel	Figure 3.1-1, Figure 3.1-3, Figure 3.1-4
d. Procedures for notifying Qualified Individuals	Figure 3.1-1, Section 4.2
e. Primary and secondary communication methods by which notifications can be made	Section 7.1.6

FIGURE E-3 - DOT / PHMSA CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
f. Information to be provided in the initial and each follow-up notification, including the following:	
1. Name of pipeline	Figure 3.1-2
2. Time of discharge	Figure 3.1-2
3. Location of discharge	Figure 3.1-2
4. Name of oil recovered	Figure 3.1-2
5. Reason for discharge (e.g. material failure, excavation damage, corrosion)	Figure 3.1-2
6. Estimated volume of oil discharged	Figure 3.1-2
7. Weather conditions on scene	Figure 3.1-2
8. Actions taken or planned by persons on scene	Figure 3.1-2
3. Spill Detection and On-Scene Spill Mitigation Procedures	
a. Methods of initial discharge detection	Appendix D.3
b. Procedures, listed in order of priority, that personnel are required to follow in responding to a pipeline emergency to mitigate or prevent any discharge from the pipeline	Figure 2.1-1
c. List of equipment that may be needed in response activities based on land and navigable waters including:	
1. Transfer hoses and pumps	Section 7.1.1, Appendix B
2. Portable pumps and ancillary equipment	Section 7.1.1, Appendix B
3. Facilities available to transport and receive oil from a leaking pipeline	Section 7.1.1, Appendix B
d. Identification of the availability, location, and contact phone numbers to obtain equipment for response activities on a 24-hour basis	Figure 3.1-4, Appendix B
e. Identification of personnel and their location, telephone numbers, and responsibilities for use of equipment in response activities on a 24-hour basis	Figure 3.1-3, Figure 3.1-4, Section 7.1, Appendix B
4. Response Activities	
a. Responsibilities of, and actions to be taken by, operating personnel to initiate and supervise response actions pending the arrival of the Qualified Individual or other response resources identified in the response plan	Figure 2.1-1, Figure 2.1-2, Section 4.6, Appendix B
b. Qualified Individual's responsibilities and authority, including notification of the response resources identified in the response plan	Section 4.6
c. Procedures for coordinating the actions of the operator or Qualified Individual with the action of the OSC responsible for monitoring or directing those actions	Section 4.5, Section 4.6
d. Oil spill response organizations (OSRO) available through contract or other approved means, to respond to a worst case discharge to the maximum extent practicable	Appendix B

FIGURE E-3 - DOT / PHMSA CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
4. Response Activities, Continued	
e. For each organization identified under paragraph (d), a listing of:	
1. Equipment and supplies available	Appendix B
2. Trained personnel necessary to continue operation of the equipment and staff the oil spill removal organization for the first seven days of the response	Appendix B
5. List of Contacts	
a. List of persons the Plan requires the operator to contact	Figure 3.1-1, Figure 3.1-3, Figure 3.1-4
b. Qualified individuals for the operator's areas of operation	Figure 1-2, Figure 3.1-3
c. Applicable insurance representatives or surveyors for the operator's areas of operation	Figure 3.1-3, Figure 3.1-4
d. Persons or organizations to notify for activation of response resources	Figure 3.1-1, Figure 3.1-3, Figure 3.1-4
6. Training Procedures	
• Description of training procedures and programs of the operations	Appendix A.2
• Drill Program as outlined in the National Preparedness for Response Program (PREP)	Appendix A.1
7. Drill Procedures	
a. Announced and unannounced drills	Figure A.1-2
b. Types of drills and their frequencies; for example:	
1. Manned pipeline emergency procedures and qualified individual notification drills conducted quarterly	Appendix A.1
2. Drills involving emergency actions by assigned operating or maintenance personnel and notification of qualified individual on pipeline facilities which are normally unmanned, conducted quarterly	Appendix A.1
3. Shore-based spill management team (SMT) tabletop drills conducted yearly	Appendix A.1
4. Oil spill removal organization field equipment deployment drills conducted yearly	Appendix A.1
5. A drill that exercises entire response plan for each Response Zone, would be conducted at least once every three years	Appendix A.1
8. Response Plan review and update procedures	
a. Procedures to meet §194.121	Section 1.2
b. Procedures to review plan after a worst case discharge and to evaluate and record the plan's effectiveness	Section 1.2, Section 8.3
9. Response zone appendices	
Each response zone appendix would provide the following information:	
a. Name and telephone number of the qualified individual	Figure 1-2, Figure 3.1-3

FIGURE E-3 - DOT / PHMSA CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
b. Notification procedures	Section 3
c. Spill detection and mitigation procedures	Section 2.1.1, Appendix D.3
d. Name, address, and telephone number of oil spill response organization	Figure 3.1-4, Appendix B
e. Response activities and response resources including:	
1. Equipment and supplies necessary to meet §194.115	Appendix B
2. Trained personnel necessary to sustain operation of the equipment and to staff the oil spill response organization and spill management team for the first seven days of the response	Appendix A, Appendix B
f. Names and telephone numbers of federal, state, and local agencies which the operator expects to assume pollution response responsibilities	Figure 3.1-4
g. Worst case discharge volume	Appendix D.7
h. Method used to determine the worst case discharge volume, with calculations	Appendix D.7
i. A map that clearly shows:	
1. Location of worst case discharge	Figure 1-3, Figure 1-5
2. Distance between each line section in the Response Zone:	Figure 1-2, Figure 1-5
i. Each potentially affected public drinking water intake, lake, river, and stream within a radius of five miles of the line section	Section 6.6, Section 6.9
ii. Each potentially affected environmentally sensitive area within a radius of one mile of the line section	Section 6.6, Section 6.9
j. Piping diagram and plan-profile drawing of each line section; may be kept separate from the response plan if the location is identified	Figure 1-2
k. For every oil transported by each pipeline in the response zone, emergency response data that:	
1. Include name, description, physical and chemical characteristics, health and safety hazards, and initial spill-handling and firefighting methods	Figure 2.1-2, Figure D.9-1
2. Meet 29 CFR 1910.1200 or 49 CFR 172.602	Figure 2.1-2, Figure D.9-1

FIGURE E-4 - OREGON CROSS-REFERENCE

STATE OF OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY CROSS-REFERENCE INDEX (340-141-0140)	LOCATION
Plan Content Requirements	
(1) Submittal Agreement. Each plan must contain a submittal agreement that:	
(a) Includes the name, address and phone number of the submitting party;	Figure 1-2
(b) Verifies acceptance of the plan, including any incorporated contingency plans, by the owner or operator of the facility or covered vessel by either signature of the owner or operator or a person with authority to bind the corporation that owns or operates the facility or covered vessel;	Section 1.4
(c) Commits to execution of the plan, including any incorporated contingency plans, by the owner or operator of the facility or covered vessel, and verifies authority for the plan holder to make appropriate expenditures in order to execute plan provisions; and	Section 1.4
(d) Includes:	
(A) In the case of a facility, the name, location including latitude, longitude and river mile, and address of the facility, type of facility, starting date of operations, types of oils (see definition of oil) handled, volume of oil stored and maximum volume of oil capable of being stored.	Section 1-2
(B) In the case of a covered vessel, the vessel's name, the name, location and address of the owner or operator, official identification code or call sign, country of registry, common ports of call in Oregon, type of oils (see definition of oil) handled, volume of oil transported as fuel and expected period of operation in state waters.	Not Applicable
(C) In the case of a covered vessel enrolled in a cooperative or maritime association plan, the vessel may provide evidence of coverage in lieu of paragraph (B) of this subsection.	Not Applicable
(2) Amendments. Each plan must include a log sheet to record amendments to the plan. The log sheet must be placed at the front of the plan. The log sheet must provide for a record of the section amended, the date that the old section was replaced with the amended section, verification that the Department was notified of the amendment pursuant to OAR 340-141-0220(3) and the initials of the individual making the change. A description of the amendment and its purpose must also be included in the log sheet, or filed in the form of an amendment letter immediately after the log sheet.	Record of Changes
(3) Table of Contents. Each plan must include a detailed table of contents based on chapter, section, appendix numbers and titles and tables and figures. If the plan is an integrated plan used to also satisfy USCG and USEPA requirements, a cross reference must be included.	Table of Contents
(4) Purpose and Scope. Each plan must describe the purpose and scope of that plan, including:	Section 1.1
(a) The region of operation covered by the plan;	Figure 1-2
(b) The onshore facility, offshore facility or covered vessel operations covered by the plan; and	Section 1
(c) The size and type of the average most probable spill and the worst case spill from the facility or covered vessel.	Appendix D.5

FIGURE E-4 - OREGON CROSS-REFERENCE, CONTINUED

STATE OF OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY CROSS-REFERENCE INDEX (340-141-0140), CONTINUED	LOCATION
(5) Updates. Each plan must describe the events or time periods that will trigger updates of the plan.	Section 1.2
(6) Implementation Strategy. Each plan must present a strategy for ensuring use of the plan for spill response and cleanup operations as required by OAR 340-141-0210.	Figure 1-1; Figure 1-2; Section 1.4; Emergency Response Action Plan
(7) Spill Response System. Each plan must describe the organization of the spill response system, including all task assignments anticipated by the end of the first full operational period, or necessary to manage the resources required by the 12 hour planning standard, given a response to an Average Most Probable Discharge. Plans must use a National Incident Management System (NIMS) incident management system, as described in the Northwest Area Contingency Plan (NWACP).	Section 4; Section 2.1; Section 5.3.5; Appendix D.5.2; Appendix D.7.1
(8) Contractor Identification. Each plan must identify the primary response contractor and subcontractors (except equipment rentals or supply vendors) whose services are bound to the plan by a contract or other approved means:	Figure 3.1-4; Appendix B
(a) If a plan holder is a member of an oil spill response cooperative and relies on that cooperative to perform or supplement its response operations within the regions of operations covered by the plan, the plan must state the cooperative's name, address, phone number and response capability. The plan must also include proof of cooperative membership; or	Appendix B; Figure 3.1-4
(b) If a plan holder is not a member of an oil spill response cooperative, for each contractor, the plan must state that contractor's name, address, phone number or other means of contact at any time of the day, and response capability (e.g., land spills only). For each contractor, the plan must include a letter of intent signed by the contractor which indicates the contractor's commitment to respond within the specified time period, with personnel and equipment listed in (12) and (13) of this section. Copies of written contracts or agreements with contractors must be available for inspection, if requested by the Department.	Appendix B; Figure 3.1-4
(9) Relationship to Other Plans. Each plan must briefly describe its relation to all applicable local, state, regional and federal government spill response plans. The plan must describe how the plan holder's response organization will be integrated into the Northwest Area Contingency Plan.	Section 1.5
(10) Spill Detection. Each plan must list procedures that will be used to detect and document the presence and size of a spill, including methods which are effective during low visibility conditions. The plan must also describe the use of mechanical or electronic monitoring or alarm systems (including threshold sensitivities) used to detect oil discharges into adjacent land or water from tanks, pipes, manifolds and other transfer or storage equipment.	Section 2.1; Appendix D.3
(11) Notifications. Each plan must describe procedures that will be taken to immediately notify appropriate parties that a spill has occurred.	Section 3; Figure 2.1-2
(a) The plan holder must maintain a notification call out list that must be available for inspection upon the request of the Department, and that:	Figure 3.1-3; Figure 3.1-4

FIGURE E-4 - OREGON CROSS-REFERENCE, CONTINUED

STATE OF OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY CROSS-REFERENCE INDEX (340-141-0140), CONTINUED	LOCATION
(A) Provides a contact at any time of the day for all spill response personnel identified under section (7) of this rule, including the contact's name, position title, phone number or other means of contact for any time of the day, and an alternate contact in the event the individual is unavailable;	Figure 3.1-1; Figure 3.1-3
(B) Lists the name and phone number of all government agencies that must be notified in the event of an oil spill pursuant to requirements under ORS 466.635; and	Figure 3.1-4
(C) Establishes a clear order of priority for immediate notifications.	Figure 3.1-2
(b) The plan must identify a central reporting office or individual who is responsible for implementing the call out process.	Figure 3.1-1
(12) Response Personnel. Each plan must describe the personnel, including contract personnel available, to respond to an oil spill, including:	
(a) A job description for each type of spill response position needed as indicated in the spill response organization scheme addressed in section (7) of this rule, or a reference to a recognized NIMS position;	Section 4.8
(b) The number of personnel available to perform the duties of each type of spill response position;	Figure 3.1-3; Appendix B.1.1
(A) This number must be equal to or greater than the number of persons necessary to sustain a response to the worst-case spill defined in the plan.	Section 7.1; Appendix B; Figure 3.1-3; Appendix D.5.2
(B) If 24 hour operations are expected, the number of persons available to staff the ICS must be multiplied by the proposed number of operational periods (shifts).	Figure 3.1-3
(c) Arrangements for pre-positioning personnel at strategic locations that will meet criteria pursuant to OAR 340-141-0190(3)(d); and	Section 6.12
(d) The type and frequency of spill response operations and safety training that each individual in a spill response position receives to attain the level of qualification demanded by their job description.	Appendix A
(13) Equipment and spill response resources. Each plan must describe equipment and spill resources as follows:	
(a) Each plan must list all resident equipment and resident dedicated response vessels used for oil containment, recovery, removal, shoreline and adjacent lands cleanup and wildlife rescue and rehabilitation. Each plan must also list all relied upon communication tools. The Department will accept information about equipment by reference if the equipment is being provided through a primary response contractor as part of the plan. The Department may request information about the condition and date of manufacture of any listed and referenced equipment to further evaluate its applicability to the planning standards or a response.	Section 7.1.1; Section 7.1.3; Appendix B
(b) For resident equipment and vessels listed under subsection (a) of this section that are not owned by or available exclusively to the plan holder, the plan must also estimate the extent that other contingency plans rely on the same equipment.	Appendix B

FIGURE E-4 - OREGON CROSS-REFERENCE, CONTINUED

STATE OF OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY CROSS-REFERENCE INDEX (340-141-0140), CONTINUED	LOCATION
(c) For all resident oil containment and recovery equipment, the plan also must include equipment make and model, the manufacturer's nameplate capacity of the response equipment, the EDRC (in barrels per day) and applicable design limits (e.g., maximum wave height capability, suitability for inland waters or open ocean).	Section 7.1.1
(d) Based on information described in subsection (c) of this section, the plan must state the maximum amount of oil that could be recovered per 24-hour period with the equipment used as it is designed.	Appendix D.7
(e) For purposes of determining plan adequacy under OAR 340-141-0190, and to assess realistic capabilities based on potential limitations by weather, sea state, and other variables, the Department will use the data presented in subsections (c) and (d) of this section to apply a higher efficiency factor for equipment listed in a plan if that plan holder provides adequate evidence that the higher efficiency factor is warranted for particular equipment or if the United States Coast Guard has approved a higher efficiency rating.	Not Applicable
(f) The plan must provide arrangements for pre-positioning of oil spill response equipment at strategic locations that will meet response time criteria pursuant to OAR 340-141-0190(3)(d).	Section 7.1; Appendix B
(g) When calculating the delivery time of equipment to a spill staging area, the plan must use travel speeds consistent with federal speed predictions for the equipment being moved.	Figure 7.1-1
(14) Communications. Each plan must describe the communication systems used for spill notification and response operations, including:	Section 7.1.6; Section 4.8
(a) Communication procedures that identify who will be responsible for the function, to whom and from whom communication will be established and any special instructions;	Section 4.8(Communication Unit Leader)
(b) The communication function (e.g., ground-to-air) assigned to each channel or frequency used;	Section 5.3.6; Section 7.1.6
(c) The maximum geographic range for each type of communications equipment used; and	Section 5.3.6, Section 7.1.6
(d) The communication system compatibility with key spill response agencies.	Section 7.1.6
(15) Response Operation Sites. Each plan must describe the process used by the plan holder to establish sites needed for spill response operations, including location or location selection criteria for an incident command post, a communications center if located away from the command post and equipment and personnel staging areas.	Section 7.1
(16) Response Flow Chart or Timeline. Each plan must describe the response process by:	
(a) Presenting a flowchart or decision tree describing the procession of each major stage of spill response operations from spill discovery to completion of cleanup. The flowchart or decision tree must describe the general order and priority in which key spill response activities are performed; and	Figure 2.1-1

FIGURE E-4 - OREGON CROSS-REFERENCE, CONTINUED

STATE OF OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY CROSS-REFERENCE INDEX (340-141-0140), CONTINUED	LOCATION
(b) Describing all key spill response operations in checklist forms, to be used by spill response managers in the event of an oil spill.	Section 2
(17) Authorities. Each plan must describe responsible authorities by:	
(a) Listing the local, state and other government authorities responsible for the emergency procedures peripheral to spill containment and cleanup; and	Figure 3.1-4
(b) Describing the plan holder's role in these emergency operation procedures before the proper authorities arrive, including but not limited to, control of fires and explosions, rescue activities, access restriction to the spill impact area and site security.	Figure 2.1-2; Figure 2.1-3
(18) Damage Control. Each plan must describe equipment and procedures to be used by the facility or covered vessel personnel to minimize the magnitude of the spill and minimize structural damage that could increase the quantity of oil spilled.	Figure 2.1-2; Section 7.1.1; Appendix B
(a) For facilities, damage control procedures must include methods to slow or stop pipeline, storage tank, and other leaks, and methods to achieve immediate emergency shutdown.	Figure 2.1-3
(b) For tank vessels, damage control procedures must include methods and onboard equipment to achieve vessel stability and prevent further vessel damage, slow or stop pipe, tank, and other leaks and achieve emergency shutdown during oil transfer.	Not Applicable
(c) For other covered vessels, damage control procedures must address methods to achieve vessel stability and slow or stop leaks from fuel tanks and lines.	Not Applicable
(19) Containment. Each plan must describe, in detail, any nonstandard methods specific to the plan to contain spilled oil and recover it from the environment. When a plan calls for the use of methods that have not been expressly approved by the Department, the description of the proposed options must include:	Not Applicable
(a) The surveillance methods expected to be used to detect and track the extent and movement of the spill; and	Section 2.1.2
(b) A description of methods to be used to contain and remove oil that will be effective for environmentally sensitive locations included in the Zone, or Zones, for which the plan is written.	Section 6
(20) Response Time. Each plan must briefly describe initial equipment and personnel deployment activities that will accomplish the response standard listed in OAR 340-141-0190(e)(d) and provide:	
(a) An estimate of the actual execution time;	Figure 7.1-1; Appendix B.1.1
(b) The specific location in the Zone where the resident required response equipment is stored; and	Section 7.1.1; Appendix B
(c) The source and management of personnel to deploy the initial response equipment.	Figure 2.1-2; Figure 3.1-3; Section 4; Appendix B.1.1
(21) Chemical Agents. If the plan holder proposes to use dispersants, coagulants, bio-remediants or other chemical agents for response operations under certain conditions, the plan must describe:	

FIGURE E-4 - OREGON CROSS-REFERENCE, CONTINUED

STATE OF OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY CROSS-REFERENCE INDEX (340-141-0140), CONTINUED	LOCATION
(a) Type and toxicity of chemicals, supplemented with material safety data sheets (MSDS) for each product;	Section 5.7
(b) The conditions under which the chemicals will be applied, in conformance with all applicable local, state and federal requirements, including the Northwest Area Contingency plan and OAR 340-141-0020;	Section 5.7; Section 6.4; Figure 6.3-2
(c) Methods of deployment; and	Section 5.7; Figure 6.3-2; Section 6.4
(d) Location and accessibility of supplies and deployment equipment.	Section 7.1; Appendix B
(22) In Situ-Burning. If the plan holder proposes to use in-situ burning for response operations, the plan must describe:	
(a) Type of burning operations;	Section 5.9; Section 6.4.3
(b) Conditions under which burning will be applied in conformance with all applicable local, state and federal requirements, including the Northwest Area Contingency plan and OAR 340-264-0030 to 0040;	Section 5.9; Section 6.4.3; Section 7.4.2
(c) Methods of application; and	Section 5.9; Section 6.4.3
(d) Location and accessibility of supplies and deployment equipment.	Section 7.1; Appendix B
(23) Environmental Protection. Each plan must describe how environmental protection will be achieved, including:	
(a) Protection of sensitive shoreline and island habitat by diverting or blocking oil movement;	Section 6.2
(b) Priorities for sensitive area protection in the region of operation covered by the plan as provided in a Geographic Response Strategy of the Northwest Area Contingency Plan, or designated by the Department;	Figure 6.3-1; Figure 6.12
(c) Rescue and rehabilitation of birds, marine mammals and other wildlife contaminated or otherwise affected by the oil spill; and	Section 6.5
(d) Measures taken to reduce damages to the environment caused by shoreline and adjacent land cleanup operations.	Section 6.3
(24) Interim Storage. Each plan that has identified that oil will be recovered must plan for the storage of the oil and combined oily waste material potentially created.	Section 7.4
(a) Each plan must describe site criteria and methods used for interim storage of oil recovered and oily wastes generated during response and cleanup operations, including sites available within the facility. Interim storage methods and sites must be designed to prevent contamination of the storage area by recovered oil and oily wastes.	Section 7.4
(b) If use of interim storage sites will require approval by local, state or federal officials, the plan must include information that could expedite the approval process, including a list of appropriate contacts and a brief description of procedures to follow for each applicable approval process.	Figure 3.1-4; Section 7.4
(c) Interim storage and permanent disposal methods and sites must be sufficient to sustain support for oil recovery operations and manage the entire volume of oil recovered and oily wastes generated.	Section 7.4

FIGURE E-4 - OREGON CROSS-REFERENCE, CONTINUED

STATE OF OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY CROSS-REFERENCE INDEX (340-141-0140), CONTINUED	LOCATION
(d) Interim storage and permanent disposal methods and sites must comply with all applicable local, state and federal requirements.	Section 7.4
(25) Health and Safety. Each plan must describe procedures to protect the health and safety of oil spill response workers, and other individuals on-site. Provisions for training, decontamination facilities, safety gear and a safety officer position must be addressed.	Section 4.8; Section 5.4
(26) Post Spill Review. Each plan must explain post-spill review procedures, including methods to review both the effectiveness of the plan and the need for plan amendments. Post-spill procedures must provide for a debriefing with the Department that will include any newly recognized need to amend the plan and list of any other lessons learned.	Section 8.3
(27) Drills and Exercises. Drills and exercises must verify all approved plans. Each plan must describe the schedule and type of drills and other exercises that will be practiced to ensure readiness of the plan elements, including drills that satisfy OAR 340-141-0200 (3).	Appendix A
(a) The plan holder must test and document internal call out procedures at least once every 90 calendar days. The plan holder must retain records of these drills for at least three years and make them available for Department review upon request.	Figure A.1-2
(b) The plan holder must notify the Department of drills and exercises, at least 60 days before full deployment and tabletop drills, and 10 days prior to equipment exercises. Prior notice to the Department is not required before notification drills and internal phone number verification exercises.	Figure A.1-2
(c) The plan holder must send post drill reports for all tabletop exercises or deployment drills to the Department no later than 60 days after the completion of the drill or exercise. The executive summary from a National Preparedness for Response Exercise Program (N-PREP) report may be submitted to meet this requirement when the exercise has been designed by the N-PREP staff.	Figure A.1-2
(28) Risk Variables. Each plan must list the spill risk variables within the region of operation covered by the plan, including:	
(a) Each plan for a facility must list the following:	
(A) Types, physical properties and amounts of oil handled;	Figure D.9-1; Figure C-1
(B) A written description and map indicating site topography, storm water and other drainage systems, mooring areas, pipelines, tanks, and other oil processing, storage and transfer sites and operations;	Figure C-2; Section 6.11; Figure 1-2
(C) A written description of sites or operations with a history of or high potential for oil spills, including key areas that pose significant navigation risk within the region of operation covered by the plan; and	Figure C-8; Section D.2.1
(D) Methods to reduce spills during transfer operations, including overfill prevention.	Section 7.4.2; Appendix D.3; SPCC Plan
(b) Each plan for a covered vessel must list the following:	Not Applicable

FIGURE E-4 - OREGON CROSS-REFERENCE, CONTINUED

STATE OF OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY CROSS-REFERENCE INDEX (340-141-0140), CONTINUED	LOCATION
(A) Types, physical properties and amounts of oil handled;	Not Applicable
(B) A written description and diagram showing cargo, fuel and ballast tanks; and piping, power plants and other oil storage and transfer sites and operations; and	Not Applicable
(C) A written description of operations with a history of or high potential for oil spills, including key areas that pose significant navigation risks within the region of operation covered by the plan.	Not Applicable
(29) Environmental Variables. Each plan must list the environmental variables within the region of operation covered by the plan. Facility plans required to include river or coastal areas must identify the environmental variables from the probable point of release to the point the oil could travel in 24 hours in a current of four knots. Vessel contingency plans must encompass the entire length of the Oregon waterway in the Zone or sub-Zone entered. All plans must describe:	Section 6.11
(a) Natural resources, including coastal and aquatic habitat types and sensitivity by season, breeding sites, presence of state or federally listed endangered or threatened species and presence of commercial and recreational species;	Section 6.11
(b) Public resources, including public beaches, water intakes, drinking water supplies and marinas;	Section 6.11
(c) Seasonal hydrographic and climatic conditions; and	Section 6.1.1; Section 6.1.2
(d) Physical geographic features, including relative isolation of coastal regions, beach types, and other geological characteristics. Plans may reference numbered Geographic Response Plan strategies (GRPs) in the Northwest Area Contingency Plan when identifying individual environmental features.	Section 6.1.2; Section 6.11; Section 6.12
(30) Logistical Resources. Each plan must list the logistical resources within the region of operation covered by the plan, including facilities for fire services, medical services and accommodations; and shoreline access areas, including boat launches.	Figure 3.1-4; Section 6.12
(31) Response Strategy Outline. Each plan must include a statement of the intended response activities. This statement must describe how the plan resources must be applied to adequately respond during the initial phase of the response to an average most probable and worst case spill, release or discharge. The Response Strategy Outline must begin with a description of the situation to be managed, and must describe:	Appendix D.5
(a) Deployment of resources and estimates of response times;	Appendix D.5
(b) The intended result of the activity for each person listed in section (7) and (12) of this section;	Appendix D.5
(c) Command and control arrangements;	Appendix D.5
(d) Required coordination; and	Appendix D.5

FIGURE E-4 - OREGON CROSS-REFERENCE, CONTINUED

STATE OF OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY CROSS-REFERENCE INDEX (340-141-0140), CONTINUED	LOCATION
(e) Probable obstacles and an estimate of oil movement during the first 72 hours.	Appendix D.5; Appendix D.7
(33) Technical Terms Glossary. Each plan must include a glossary of technical terms and abbreviations used in the plan.	Appendix F
Stat. Auth.: ORS 468.020 & 468B.395	
Stats. Implemented: ORS 468B.345 - 468B.390	
Hist.: DEQ 2-2003, f. & cert. ef. 1-31-03; DEQ 8-2005, f. & cert. ef. 7-14-05	

FIGURE E-4 - OREGON CROSS-REFERENCE, CONTINUED

STATE OF OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY CROSS-REFERENCE INDEX (340-141-0160)	LOCATION
Prevention Strategies for Facilities	
(1) The owner or operator of each onshore and offshore facility must develop spill prevention strategies that will, when implemented, provide the best achievable protection from damages caused by the discharge of oil into the waters of the state. The strategies may be in the form of:	
(a) Appendices to oil spill prevention and emergency response plans required under this chapter; or	
(b) A stand-alone prevention plan that meets all requirements of OAR 340-141-0100 to 340-141-0230.	SPCC Plan
(2) Spill Prevention Countermeasure and Control Plans (SPCC), Operation Manuals and other prevention documents prepared to meet federal requirements under 33 CFR 154, 33 CFR 156, 40 CFR 109, 40 CFR 112, or the Federal Oil Pollution Act of 1990 or plans prepared to meet the requirements of other states may be submitted to satisfy requirements under this chapter if the Department deems that such requirements equal or exceed those of the Department, or if the plans are modified or appended to satisfy requirements of this Division.	SPCC Plan
(3) Spill prevention strategies must at a minimum provide all of the following:	
(a) Documentation of types and frequency of spill prevention training provided to applicable personnel;	Figure A.1-1; Figure A.1-2; Figure A.1-3; Figure A.2-1; Figure A.2-2
(b) Evidence that the facility has an operations manual;	The Facility operations manual is maintained on site in the Terminal Office.
(c) A description of a drug and alcohol awareness program that provides training and information materials to all employees on recognition of alcohol and drug abuse treatment opportunities, and applicable company policies;	Appendix A.3
(d) Evidence of a maintenance and inspection program that includes:	
(A) Summary of the frequency and type of all regularly scheduled inspection and preventative maintenance procedures for tanks, pipelines, key storage, transfer, or production equipment including associated pumps, valves, and flanges, and overpressure safety devices and other spill prevention equipment;	SPCC Plan (40 CFR 112.7(e)); Figure C-12
(B) Description of integrity testing of storage tanks and pipelines using such techniques as hydrostatic testing and visual inspection, including but not limited to the frequency of tests, means of identifying that a leak has occurred and measures to reduce spill risk if test material is product;	SPCC Plan (40 CFR 112.7(e)); Figure C-5
(C) External and internal corrosion detection and repair;	SPCC Plan (40 CFR 112.7(e)); Figure C-5
(D) Damage criteria for equipment repair or replacement;	SPCC Plan (40 CFR 112.7(e)); Figure C-5
(E) Maintenance and inspection records of the storage and transfer facilities and related equipment will be made available to the Department upon request; and	SPCC Plan (40 CFR 112.7(e)); Figure C-5

FIGURE E-4 - OREGON CROSS-REFERENCE, CONTINUED

STATE OF OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY CROSS-REFERENCE INDEX (340-141-0160), CONTINUED	LOCATION
(F) Documentation required under 40 CFR 112.7(e) or 33 CFR 154, Subparts C and D may be used to address elements of this subsection.	
(e) A description of the use of containment boom at facilities transferring persistent oil, including:	
(A) Type(s) of boom used based upon the varied conditions within the region(s) of operation; and	Section 6.2; Figure 6.2-1; Figure 6.3-2
(B) Methods of boom placement and anchoring.	Section 6.2
(f) Identification of spill prevention technology currently in use, including if applicable:	
(A) Tank and pipeline materials and design;	SPCC Plan
(B) Storage tank overflow alarms, tank overflow cutoff switches, low level alarms and automatic transfer shutdown systems, including methods to alert operators, system accuracy and tank fill margin remaining at time of alarm activation before overflow would occur at maximum pumping rate (documentation required under 40 CFR 112.7(e)(2)(viii) or 33 CFR 154.310(a)(12-13) may be used to address some or all of these elements);	SPCC Plan
(C) Leak detection systems for both active and non active pipeline conditions including detection thresholds in terms of duration and percentage of pipeline flow limitations on system performance due to normal pipeline events, and procedures for operator response to leak alarms (documentation required under 40 CFR 112.7(e)(3) may be used to address some or all of these elements);	SPCC Plan
(D) Rapid pump and valve shutdown procedures, including means of ensuring that surge and overpressure conditions do not occur, rates of valve closure, sequence and time duration (average and maximum) for entire procedure, automatic and remote control capabilities utilized and visual displays of system status for operator use (documentation required under 40 CFR 112.7(e)(3) may be used to address some or all of these elements);	SPCC Plan; Appendix D.3
(E) Minimization of post-shutdown residual drain out from pipes, including criteria for locating valves, identification of all valves (including types and means of operation) that may be open during a transfer process, and any other techniques for reducing drain out;	Operations Manual
(F) Means of relieving pressure due to thermal expansion of liquid in pipes during periods of nonuse;	SPCC Plan
(G) Secondary containment, including contents of the largest tank plus space for precipitation, and material design and permeability of the containment area (documentation required under 40 CFR 112.7(e)(1) and (2)(ii) - (iv) may be used to address some or all of these elements);	Figure C-1
(H) Surge control systems;	SPCC Plan
(I) Internal and external corrosion control coatings or wrappings and instruments;	SPCC Plan

FIGURE E-4 - OREGON CROSS-REFERENCE, CONTINUED

STATE OF OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY CROSS-REFERENCE INDEX (340-141-0160), CONTINUED	LOCATION
(J) Storm water and other drainage retention, treatment and discharge systems, including maximum storage capacities and identification of any applicable discharge permits (documentation required under 40 CFR 112.7(e)(1) and (2)(iii) and (ix) may be used to address some or all of these elements); and	SPCC Plan
(K) Criteria for suspension of operations while leak detection or other spill control systems are inoperative.	SPCC Plan; Appendix D.3
(g) A description of facility site security systems, including:	
(A) Procedures for controlling and monitoring facility access;	SPCC Plan (40 CFR 112.7 (g))
(B) Lighting (documentation required under 33 CFR 154.570 may be used to address some or all of this element);	SPCC Plan (40 CFR 112.7 (g))
(C) Signage; and	SPCC Plan (40 CFR 112.7 (g))
(D) Right-of-way identification or other measures to prevent third party damage (documentation required under 40 CFR 122.7(e)(3)(v) and (9) may be used to address some or this entire element).	SPCC Plan (40 CFR 112.7 (g))
(h) History of any discharges of oil to the land or waters of the state in excess of 25 barrels (1,050 gallons) which occurred during the five-year period prior to the plan submittal date. For each discharge, describe:	Figure C-8
(A) Quantity;	Figure C-8
(B) Type of oil;	Figure C-8
(C) Geographic area;	Figure C-8
(D) Analysis of cause, including source(s) of discharged oil and contributing factors (e.g., equipment failure, employee error, adverse weather, etc.); and	Figure C-8
(E) Measures taken to remedy the cause and prevent reoccurrence.	Figure C-8
(i) A detailed and comprehensive site risk analysis that:	Appendix D.2.2
(A) Evaluates the construction, age, corrosion, inspection and maintenance, operation and oil spill risk of the transfer, production and storage system including piping, tanks, pumps, valves and associated equipment;	Appendix D.2.2
(B) Evaluates spill minimization and containment systems;	Appendix D.2.2
(C) Incorporates information required in subsection (f) of this section;	Appendix D.2.2
(D) Is prepared under the supervision of (and bears the seal of) a licensed professional engineer; and	Appendix D.2.2

FIGURE E-4 - OREGON CROSS-REFERENCE, CONTINUED

STATE OF OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY CROSS-REFERENCE INDEX (340-141-0160), CONTINUED	LOCATION
(E) Includes documentation required under 40 CFR 112.7(b) and (e) may be used to address some or all of the elements in this subsection.	Appendix D.2.2
(j) A description of how the facility will incorporate those measures that will provide best achievable protection to address the spill risks identified in the risk analyses required in subsection (i) of this section. (Information documented pursuant to 40 CFR 112.7(e) and 33 CFR 154.310 may be used to address some or all of the elements of this subsection.)	Appendix D.2.2
[Publications: Publications referenced are available from the agency.]	
Stat. Auth.: ORS 468.020, ORS 468B.395 Stats. Implemented: ORS 468B.345 - ORS 468B.390 Hist.: DEQ 2-2003, f. & cert. ef. 1-31-03	

FIGURE E-5 - OSHA CROSS-REFERENCE

EAP REQUIREMENTS (29 CFR 1910.38)	LOCATION
(a) Application. An employer must have an emergency action plan whenever an OSHA standard in this part requires one. The requirements in this section apply to each such emergency action plan.	
(b) Written and oral emergency action plans. An emergency action plan must be in writing, kept in the workplace, and available to employees for review. However, an employer with 10 or fewer employees may communicate the plan orally to employees.	Figure 1-1
(c) Minimum elements of an emergency action plan. An emergency action plan must include at a minimum:	
(1) Procedures for reporting a fire or other emergency;	Section 2.7
(2) Procedures for emergency evacuation, including type of evacuation and exit route assignments;	Section 2.2
(3) Procedures to be followed by employees who remain to operate critical plant operations before they evacuate;	Section 2.2
(4) Procedures to account for all employees after evacuation;	Section 2.2
(5) Procedures to be followed by employees performing rescue or medical duties; and	Section 2.5
(6) The name or job title of every employee who may be contacted by employees who need more information about the plan or an explanation of their duties under the plan.	Figure 3.1-3
(d) Employee alarm system. An employer must have and maintain an employee alarm system. The employee alarm system must use a distinctive signal for each purpose and comply with the requirements in §1910.165.	Section 2.2
(e) Training. An employer must designate and train employees to assist in a safe and orderly evacuation of other employees.	Figure A.2-1
(f) Review of emergency action plan. An employer must review the emergency action plan with each employee covered by the plan:	
(1) When the plan is developed or the employee is assigned initially to a job;	Figure A.2-1
(2) When the employee's responsibilities under the plan change; and	Figure A.2-1
(3) When the plan is changed.	Figure A.2-1

FIGURE E-5 - OSHA CROSS-REFERENCE, CONTINUED

ERP REQUIREMENTS (29 CFR 1910.120 [q])	LOCATION
(q) Emergency response to hazardous substance releases. This paragraph covers employers whose employees are engaged in emergency response no matter where it occurs except that it does not cover employees engaged in operations specified in paragraphs (a)(1)(I) through (a)(1)(iv) of this section. Those emergency response organizations who have developed and implemented programs equivalent to this paragraph for handling releases of hazardous substances pursuant to section 303 of the Superfund Amendments and Reauthorization Act of 1986 (Emergency Planning and Community Right-to-Know Act of 1986, 42 U.S.C. 11003) shall be deemed to have met the requirements of this paragraph.	
(1) Emergency response plan. An emergency response plan shall be developed and implemented to handle anticipated emergencies prior to the commencement of emergency response operations. The plan shall be in writing and available for inspection and copying by employees, their representatives and OSHA personnel. Employers who will evacuate their employees from the danger area when an emergency occurs, and who do not permit any of their employees to assist in handling the emergency, are exempt from the requirements of this paragraph if they provide an emergency action plan in accordance with 29 CFR 1910.38.	
(2) Elements of an emergency response plan. The employer shall develop an emergency response plan for emergencies which shall address, as a minimum, the following to the extent that they are not addressed elsewhere:	
(i) Pre-emergency planning and coordination with outside parties.	Section 2.1, Section 3, Appendix C
(ii) Personnel roles, lines of authority, training, and communication.	Figure 3.1-3, Figure 4-2, Section 4.8, Appendix A.2
(iii) Emergency recognition and prevention.	Appendix C, Appendix D.3
(iv) Safe distances and places of refuge.	Section 2.2
(v) Site security and control.	Section 5.7, Section 7.3
(vi) Evacuation routes and procedures.	Section 2.2
(vii) Decontamination.	Section 5.5
(viii) Emergency medical treatment and first aid.	Section 2.5
(ix) Emergency alerting and response procedures.	Section 2.1, Section 2.2
(x) Critique of response and follow-up.	Section 8
(xi) PPE and emergency equipment.	Section 7.1.1, Appendix B
(xii) Emergency response organizations may use the local emergency response plan or the state emergency response plan or both, as part of their emergency response plan to avoid duplication. Those items of the emergency response plan that are being properly addressed by the SARA Title III plans may be substituted into their emergency plan or otherwise kept together for the employer and employee's use.	

FIGURE E-5 - OSHA CROSS-REFERENCE, CONTINUED

ERP REQUIREMENTS (29 CFR 1910.120 [q])	LOCATION
(3) Procedures for handling emergency response. (i) The senior emergency response official responding to an emergency shall become the individual in charge of a site-specific Incident Command System (ICS). All emergency responders and their communications shall be coordinated and controlled through the individual in charge of the ICS assisted by the senior official present for each employer. Note to paragraph (q)(3)(i). The "senior official" at an emergency response is the most senior official on the site who has the responsibility for controlling the operations at the site. Initially it is the senior officer on the first-due piece of responding emergency apparatus to arrive on the incident scene. As more senior officers arrive (i.e., battalion chief, fire chief, state law enforcement official, site coordinator, etc.) the position is passed up the line of authority, which has been previously established.	Figure 2.1-1, Section 4.6, Figure E-5
(ii) The individual in charge of the ICS shall identify, to the extent possible, all hazardous substances or conditions present and shall address as appropriate site analysis, use of engineering controls, maximum exposure limits, hazardous substance handling procedures, and use of any new technologies.	Figure 2.1-1, Figure E-5
(iii) Based on the hazardous substances and/or conditions present, the individual in charge of the ICS shall implement appropriate emergency operations, and assure that the personal protective equipment worn is appropriate for the hazards to be encountered. However, personal protective equipment shall meet, at a minimum, the criteria contained in 29 CFR 1910.156(e) when worn while performing fire fighting operations beyond the incipient stage for any incident.	Section 5.5, Figure E-5
(iv) Employees engaged in emergency response and exposed to hazardous substances presenting an inhalation hazard or potential inhalation hazard shall wear positive pressure self-contained breathing apparatus while engaged in emergency response, until such time that the individual in charge of the ICS determines through the use of air monitoring that a decreased level of respiratory protection will not result in hazardous exposures to employees.	Figure 2.1-1, Figure E-5
(v) The individual in charge of the ICS shall limit the number of emergency response personnel at the emergency site, in those areas of potential or actual exposure to incident or site hazards, to those who are actively performing emergency operations. However, operations in hazardous areas shall be performed using the buddy system in groups of two or more.	Figure 2.1-1, Figure E-5
(vi) Back-up personnel shall stand by with equipment ready to provide assistance or rescue. Advance first aid support personnel, as a minimum, shall also stand by with medical equipment and transportation capability.	Figure E-5
(vii) The individual in charge of the ICS shall designate a safety official, who is knowledgeable in the operations being implemented at the emergency response site, with specific responsibility to identify and evaluate hazards and to provide direction with respect to the safety of operations for the emergency at hand.	Section 4.8, Figure E-5

FIGURE E-5 - OSHA CROSS-REFERENCE, CONTINUED

ERP REQUIREMENTS (29 CFR 1910.120 [q])	LOCATION
(viii) When activities are judged by the safety official to be an IDLH condition and/or to involve an imminent danger condition, the safety official shall have the authority to alter, suspend, or terminate those activities. The safety official shall immediately inform the individual in charge of the ICS of any actions needed to be taken to correct these hazards at the emergency scene.	Section 4.8, Figure E-5
(ix) After emergency operations have terminated, the individual in charge of the ICS shall implement appropriate decontamination procedures.	Section 5.5, Figure E-5
(x) When deemed necessary for meeting the tasks at hand, approved self-contained compressed air breathing apparatus may be used with approved cylinders from other approved self-contained compressed air breathing apparatus provided that such cylinders are of the same capacity and pressure rating. All compressed air cylinders used with self-contained breathing apparatus shall meet U.S. Department of Transportation and National Institute for Occupational Safety and Health criteria.	Figure E-5
(4) Skilled support personnel. Personnel, not necessarily an employer's own employees, who are skilled in the operation of certain equipment, such as mechanized earth moving or digging equipment or crane and hoisting equipment, and who are needed temporarily to perform immediate emergency support work that cannot reasonably be performed in a timely fashion by an employer's own employees, and who will be or may be exposed to the hazards at an emergency response scene, are not required to meet the training required in this paragraph for the employer's regular employees. However, these personnel shall be given an initial briefing at the site prior to their participation in any emergency response. The initial briefing shall include instruction in the wearing of appropriate personal protective equipment, what chemical hazards are involved, and what duties are to be performed. All other appropriate safety and health precautions provided to the employer's own employees shall be used to assure the safety and health of these personnel.	Figure E-5
(5) Specialist employees. Employees who, in the course of their regular job duties, work with and are trained in the hazards of specific hazardous substances, and who will be called upon to provide technical advice or assistance at a hazardous substance release incident to the individual in charge, shall receive training or demonstrate competency in the area of their specialization annually.	Figure E-5
(6) Training. Training shall be based on the duties and function to be performed by each responder of an emergency response organization. The skill and knowledge levels required for all new responders, those hired after the effective date of this standard, shall be conveyed to them through training before they are permitted to take part in actual emergency operations on an incident. Employees who participate, or are expected to participate, in emergency response, shall be given training in accordance with the following paragraphs:	Figure E-5

FIGURE E-5 - OSHA CROSS-REFERENCE, CONTINUED

ERP REQUIREMENTS (29 CFR 1910.120 [q])	LOCATION
(i) First responder awareness level. First responders at the awareness level are individuals who are likely to witness or discover a hazardous substance release and who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release. They would take no further action beyond notifying the authorities of the release. First responders at the awareness level shall have sufficient training or have had sufficient experience to objectively demonstrate competency in the following areas:	Figure E-5
(A) An understanding of what hazardous substances is, and the risks associated with them in an incident.	Figure E-5
(B) An understanding of the potential outcomes associated with an emergency created when hazardous substances are present.	Figure E-5
(C) The ability to recognize the presence of hazardous substances in an emergency.	Figure E-5
(D) The ability to identify the hazardous substances, if possible.	Figure E-5
(E) An understanding of the role of the first responder awareness individual in the employer's emergency response plan including site security and control and the U.S. Department of Transportation's Emergency Response Guidebook.	Figure E-5
(F) The ability to realize the need for additional resources, and to make appropriate notifications to the communication center.	Figure E-5
(ii) First responder operations level. First responders at the operations level are individuals who respond to releases or potential releases of hazardous substances as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from the effects of the release. They are trained to respond in a defensive fashion without actually trying to stop the release. Their function is to contain the release from a safe distance, keep it from spreading, and prevent exposures. First responders at the operational level shall have received at least eight hours of training or have had sufficient experience to objectively demonstrate competency in the following areas in addition to those listed for the awareness level and the employer shall so certify:	Figure E-5

FIGURE E-5- OSHA CROSS-REFERENCE, CONTINUED

ERP REQUIREMENTS (29 CFR 1910.120 [q])	LOCATION
(A) Knowledge of the basic hazard and risk assessment techniques.	Figure E-5
(B) Know how to select and use proper personal protective equipment provided to the first responder operational level.	Figure E-5
(C) An understanding of basic hazardous materials terms.	Figure E-5
(D) Know how to perform basic control, containment and/or confinement operations within the capabilities of the resources and personal protective equipment available with their unit.	Figure E-5
(E) Know how to implement basic decontamination procedures.	Figure E-5
(F) An understanding of the relevant standard operating procedures and termination procedures.	Figure E-5
(iii) Hazardous materials technician. Hazardous materials technicians are individuals who respond to releases or potential releases for the purpose of stopping the release. They assume a more aggressive role than a first responder at the operations level in that they will approach the point of release in order to plug, patch or otherwise stop the release of a hazardous substance. Hazardous materials technicians shall have received at least 24 hours of training equal to the first responder operations level and in addition have competency in the following areas and the employer shall so certify:	Figure E-5
(A) Know how to implement the employer's emergency response plan.	Figure E-5
(B) Know the classification, identification and verification of known and unknown materials by using field survey instruments and equipment.	Figure E-5
(C) Be able to function within an assigned role in the Incident Command System.	Figure E-5

FIGURE E-5 - OSHA CROSS-REFERENCE, CONTINUED

ERP REQUIREMENTS (29 CFR 1910.120 [q])	LOCATION
(D) Know how to select and use proper specialized chemical personal protective equipment provided to the hazardous materials technician.	Figure E-5
(E) Understand hazard and risk assessment techniques.	Figure E-5
(F) Be able to perform advance control, containment, and/or confinement operations within the capabilities of the resources and personal protective equipment available with the unit.	Figure E-5
(G) Understand and implement decontamination procedures.	Figure E-5
(H) Understand termination procedures.	Figure E-5
(I) Understand basic chemical and toxicological terminology and behavior.	Figure E-5
(iv) Hazardous materials specialist. Hazardous materials specialists are individuals who respond with and provide support to hazardous materials technicians. Their duties parallel those of the hazardous materials technician, however, those duties require a more directed or specific knowledge of the various substances they may be called upon to contain. The hazardous materials specialist would also act as the site liaison with Federal, state, local and other government authorities in regards to site activities. Hazardous materials specialists shall have received at least 24 hours of training equal to the technician level and in addition have competency in the following areas and the employer shall so certify:	Figure E-5
(A) Know how to implement the local emergency response plan.	Figure E-5
(B) Understand classification, identification and verification of known and unknown materials by using advanced survey instruments and equipment.	Figure E-5

FIGURE E-5 - OSHA CROSS-REFERENCE, CONTINUED

ERP REQUIREMENTS (29 CFR 1910.120 [q])	LOCATION
(C) Know of the state emergency response plans.	Figure E-5
(D) Be able to select and use proper specialized chemical personal protective equipment provided to the hazardous materials specialist.	Figure E-5
(E) Understand in-depth hazard and risk techniques.	Figure E-5
(F) Be able to perform specialized control, containment, and/or confinement operations within the capabilities of the resources and personal protective equipment available.	Figure E-5
(G) Be able to determine and implement decontamination procedures.	Figure E-5
(H) Have the ability to develop a site safety and control plan.	Figure E-5
(I) Understand chemical, radiological and toxicological terminology and behavior.	Figure E-5
(v) On scene incident commander. Incident commanders, who will assume control of the incident scene beyond the first responder awareness level, shall receive at least 24 hours of training equal to the first responder operations level and in addition have competency in the following areas and the employer shall so certify:	Figure E-5
(A) Know and be able to implement the employer's incident command system.	Figure E-5
(B) Know how to implement the employer's emergency response plan.	Figure E-5
(C) Know and understand the hazards and risks associated with employees working in chemical protective clothing.	Figure E-5

FIGURE E-5 - OSHA CROSS-REFERENCE, CONTINUED

ERP REQUIREMENTS (29 CFR 1910.120 [q])	LOCATION
(D) Know how to implement the local emergency response plan.	Figure E-5
(E) Know of the state emergency response plan and of the Federal Regional Response Team.	Figure E-5
(F) Know and understand the importance of decontamination procedures.	Figure E-5
(7) Trainers. Trainers who teach any of the above training subjects shall have satisfactorily completed a training course for teaching the subjects they are expected to teach, such as the courses offered by the U.S. National Fire Academy, or they shall have the training and/or academic credentials and instructional experience necessary to demonstrate competent instructional skills and a good command of the subject matter of the courses they are to teach.	Figure E-5
(8) Refresher training. (I) Those employees who are trained in accordance with paragraph (q)(6) of this section shall receive annual refresher training of sufficient content and duration to maintain their competencies, or shall demonstrate competency in those areas at least yearly.	Figure E-5
(ii) A statement shall be made of the training or competency, and if a statement of competency is made, the employer shall keep a record of the methodology used to demonstrate competency.	Figure E-5
(9) Medical surveillance and consultation. (i) Members of an organized and designated HAZMAT team and hazardous materials specialists shall receive a baseline physical examination and be provided with medical surveillance as required in paragraph (f) of this section.	Figure E-5
(ii) Any emergency response employees who exhibits signs or symptoms which may have resulted from exposure to hazardous substances during the course of an emergency incident, either immediately or subsequently, shall be provided with medical consultation as required in paragraph (f)(3)(ii) of this section.	Figure E-5

FIGURE E-5 - OSHA CROSS-REFERENCE, CONTINUED

ERP REQUIREMENTS (29 CFR 1910.120 [q])	LOCATION
(10) Chemical protective clothing. Chemical protective clothing and equipment to be used by organized and designated HAZMAT team members, or to be used by hazardous materials specialists, shall meet the requirements of paragraphs (g) (3) through (5) of this section.	Figure E-5
(11) Post-emergency response operations. Upon completion of the emergency response, if it is determined that it is necessary to remove hazardous substances, health hazards, and materials contaminated with them (such as contaminated soil or other elements of the natural environment) from the site of the incident, the employer conducting the cleanup shall comply with one of the following:	Section 7.4, Figure E-5
(i) Meet all of the requirements of paragraphs (b) through (o) of this section; or	Figure E-5
(ii) Where the cleanup is done on plant property using plant or workplace employees, such employees shall have completed the training requirements of the following: 29 CFR 1910.38, 1910.134, 1910.1200, and other appropriate safety and health training made necessary by the tasks they are expected to perform such as personal protective equipment and decontamination procedures. All equipment to be used in the performance of the cleanup work shall be in serviceable condition and shall have been inspected prior to use.	Section A.2, Figure E-5

FIGURE E-6 - EPA RESPONSE PLAN COVER SHEET

Owner/ operator of facility:	Chevron Products Company a division of Chevron USA, Inc.
Facility name:	Willbridge
Facility address (street address or route):	5924 NW Front Ave.
City, state, and U.S. zip code	Portland, Oregon 97210
Facility mailing address:	As above
Facility phone number.:	(503) 221-7866
(b) (7)(F) [redacted]	
Dun & Bradstreet number:	05-607-0642
Largest above ground oil storage tank capacity (gallons):	(b) (7)(F) [redacted]
Number of above ground oil storage tanks:	146 (including additive tanks)
North American Industrial Classification System (NAICS):	42271
Maximum oil storage capacity (gallons):	(b) (7)(F) [redacted]
Worst case oil discharge amount (bbls.):	

Facility distance to navigable water; mark the appropriate line.

0-1/4 ☐ 1/4-1/2 mile ☐ 1/2 - 1 mile ☐ > 1 mile ☐

APPLICABILITY OF SUBSTANTIAL HARM CRITERIA

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

☐ YES ☐ NO

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

☐ YES ☐ NO

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

☐ YES ☐ NO

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

☐ YES ☐ NO

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

☐ YES ☐ NO

CERTIFICATION

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

Signature: 	Date: 1/31/2008
Name: Gerald Henderson	Title: Terminal Manager

APPENDIX F
ACRONYMS AND DEFINITIONS

Last Revised: May 2006

© Technical Response Planning Corporation 2006

F.1 Acronyms

F.2 Definitions

F.1 ACRONYMS

ACP	Area Contingency Plan
AFFF	Aqueous Film Forming Foam
ASTM	American Society of Testing Materials
BBL	Barrel(s)
BLM	Bureau of Land Management (USDOI)
BPD	Barrels Per Day
BPH	Barrels Per Hour
CERCLA	Comprehensive Environmental Response, Compensation & Liability Act of 1980, as amended
CFR	Code of Federal Regulations
CO_2	Carbon Dioxide
COTP	Captain of the Port (USCG)
CRZ	Contamination Reduction Zone
CWA	Clean Water Act of 1977 (Federal)
EAP	Emergency Action Plan
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EPA	U. S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERAP	Emergency Response Action Plan
ERP	Emergency Response Plan
ERT	Emergency Response Team
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FOSC	Federal On-Scene Coordinator
FRP	Facility Response Plan
FRT	Facility Response Team
FWPCA	Federal Water Pollution Control Act of 1972
GIS	Geographic Information System
GPM	Gallons Per Minute
HAZMAT	Hazardous Materials
HMIS	Hazardous Material Information System
IC	Incident Commander
ICS	Incident Command System
JIC	Joint Information Center
LEL	Lower Explosive Limit

F.1 ACRONYMS, CONTINUED

LEPC	Local Emergency Planning Committee
LEPD	Local Emergency Planning District
LNG	Liquid Natural Gas
LPG	Liquefied Petroleum Gas
MSDS	Material Safety Data Sheets
MTR	Marine Transportation Related
N/A	Not Applicable
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NIIMS	National Interagency Incident Management System
NM	Nautical Miles
NOAA	National Oceanic and Atmospheric Administration
NRC	National Response Center
NRDA	National Resource Damage Assessment
NRT	National Response Team
OBA	Oxygen Breathing Apparatus
OPA 90	Oil Pollution Act of 1990
OSC	On-Scene Coordinator/Commander
OSHA	Occupational Safety and Health Administration (USDL)
PPE	Personal Protective Equipment
PREP	(National) Preparedness for Response Exercise Program
QI	Qualified Individual
RCRA	Resource Conservation and Recovery Act of 1976
RQ	Reportable Quantity
RRT	Regional Response Team (Federal)
RSPA	Research and Special Programs Administration (DOT)
SARA	Superfund Amendments and Reauthorization Act
SCADA	Supervisory Control and Data Acquisition (System)
SCBA	Self Contained Breathing Apparatus
SDWA	Safe Drinking Water Act of 1986
SERC	State Emergency Response Commission
SETS	Safety Environment and Training Services
SI	Surface Impoundment
SIC	Standard Industrial Classification (Code)
EMT	Emergency Management Team
SOSC	State On-Scene Coordinator
SPCC	Spill Prevention, Control, and Countermeasures (Plan)

F.1 ACRONYMS, CONTINUED

SSC	Scientific Support Coordinator (NOAA)
UCS	Unified Command System
UEL	Upper Explosive Limit
USACOE	U. S. Army Corps of Engineers
USCG	U. S. Coast Guard
USDOD	U. S. Department of Defense
USDL	U. S. Department of Labor
USDOE	U. S. Department of Energy
USDOI	U. S. Department of the Interior
USDOJ	U. S. Department of Justice
USDOT	U. S. Department of Transportation
USFWS	U. S. Fish and Wildlife Service (USDOI)
USGS	U. S. Geological Survey (USDOI)

F.2 DEFINITIONS

Adverse Weather
The weather conditions that will be considered when identifying response systems and equipment in a response plan for the applicable operating environment. Factors to consider include significant wave height, ice, temperature, weather-related visibility, and currents with the Captain of the Port (COTP) zone in which the systems or equipment are intended to function.

Aqueous Film Forming Foam
A fluoro-carbon surfactant that acts as an effective vapor-securing agent due to its effect on the surface tension of the water. Its physical properties enable it to float and spread across surfaces of a hydrocarbon fuel with more density than protein foam.

Average Most Probable Discharge (USCG)
A discharge of the lesser of 50 barrels (2100 gallons) or one percent of the volume of the worst-case discharge.

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

Bleve
A boiling liquid-expanding vapor explosion; failure of a liquefied flammable gas container caused by fire exposure. Pronounced "blevey."

Boil over
Occurs when the heat from a fire in a tank travels down to the bottom of the tank causing water that is already there to boil and push part of the tank's contents over the side.

Carbon Dioxide
A heavy, colorless, odorless, asphyxiating gas that does not normally support combustion. It is one and one-half times heavier than air and when directed at the base of a fire its action is to dilute the fuel vapors to a lean mixture to extinguish the fire.

Class A Fire
A fire involving common combustible materials, which can be extinguished by the use of water or water solutions. Materials in this category include wood and wood-based materials, cloth, paper, rubber and certain plastics.

Class B Fire
A fire involving flammable or combustible liquids, flammable gases, greases and similar products. Extinguishment is accomplished by cutting off the supply of oxygen to the fire or by preventing flammable vapors from being given off.

Class C Fire
A fire involving energized electrical equipment, conductors or appliances. Non-conducting extinguishing agents must be used for the protection of firefighters.

Class D Fire
A fire involving combustible metals, for example, sodium, potassium, magnesium, titanium and aluminum. Extinguishment is accomplished through the use of heat-absorbing extinguishing agents such as certain dry powders that do not react with the burning metals.

F.2 DEFINITIONS, CONTINUED

Cold (Support) Zone
An area free of contaminants so that Personal Protection Equipment (PPE) is not required for personnel working in this area. Command functions and supporting operations are carried out here.

Command Post
A site located at a safe distance from the spill site where response decisions are made, equipment and manpower deployed, and communications handled. The Incident Commander and the On-Scene Coordinators may direct the on-scene response from this location.

Communication Equipment
Equipment that will be utilized during response operations to maintain communication between employees, contractors, federal/state/local agencies.

Containment Boom
A flotation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to entrap and contain the product for recovery.

Contamination Reduction Zone
Same as the warm zone, a buffer between the hot and cold zones. Decontamination activities take place there. Equipment needed to support the primary response operation may be staged in the warm zone.

Contingency Plan
A document used by: (1) federal, state, and local agencies to guide planning and response procedures regarding spill of oil, hazardous substances, or other emergencies; (2) a document used by industry as a response plan to spills of oil, hazardous substances, or other emergencies occurring upon their vessels or at their facilities.

Contract or Other Approved Means
Includes:

- A written contractual agreement with a response contractor. The agreement should identify and ensure the availability of the specified personnel and equipment described under U.S.C.G. Regulations within stipulated response times in the specified geographic areas
- Certification by the facility owner or operator that the specified personnel and equipment described under USCG Regulations are owned, operated, or under the direct control of the facility owner or operator, and are available within stipulated times in the specified geographic areas
- Active membership in a local or regional oil spill removal organization that has identified specified personnel and equipment described under USCG Regulations that are available to respond to a discharge within stipulated times in the specified geographic areas
- A document which:
    - Identifies the personnel, equipment, services, capable of being provided by the response contractor within stipulated response times in specified geographic areas
    - Sets out the parties' acknowledgment that the response contractor intends to commit the resources in the event of a response
    - Permits the Coast Guard to verify the availability of the response resources identified through tests, inspections, drills
    - Is incorporated by reference in the Response Plan
- For a facility that could reasonably be expected to cause substantial harm to the environment, with the consent of the response contractor or oil spill removal organization, the identification of a response contractor or oil spill removal organization with specified equipment and personnel which are available within stipulated response times in specific geographic areas.

F.2 DEFINITIONS, CONTINUED

Demand Breathing Apparatus
A type of self-contained breathing apparatus that provides air or oxygen from a supply carried by the user.

Dispersants
Those chemical agents that emulsify, disperse, or solubilize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column.

Diversion Boom
A flotation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to deflect or divert the product towards a pick up point, or away from certain areas.

Environmentally Sensitive Areas
Streams and water bodies, aquifer recharge zones, springs, wetlands, agricultural areas, bird rookeries, endangered or threatened species (flora and fauna) habitat, wildlife preserves or conservation areas, parks, beaches, dunes, or any other area protected or managed for its natural resource value.

Exclusion Zone
Same as hot zone, the area where a hazard exists. This is the hazardous location on site, therefore entry requires personal protective equipment (PPE). It must be big enough for both mitigation activities and protection of personnel in the warm zone should an explosion, fire, change of wind direction, or an unexpected release occur during response activities.

Explosive Range
Flammable range; the range of the mixture of air and flammable gas or flammable vapor of liquids that must be present in the proper proportions for the mixture to be ignited. The range has upper and lower limits; any mixture above the upper explosive limit or below the lower explosive limit will not burn.

Facility
Any pipeline, structure, equipment, or device used for handling oil including, but not limited to, underground and aboveground storage tanks, impoundments, mobile or portable drilling or work over rigs, barge mounted drilling or work over rigs, and portable fueling facilities located offshore or on or adjacent to coastal waters or any place where a discharge of oil from the facility could enter coastal waters or threaten to enter the coastal waters.

Federal Fund
The oil spill liability trust fund established under OPA.

First Responders, First Response Agency
A public health or safety agency (i.e., fire service or police department) charged with responding to a spill during the emergency phase and alleviating immediate danger to human life, health, safety, or property.

Flashover
The ignition of combustibles in an area heated by convection, radiation, or a combination of the two. The action may be a sudden ignition in a particular location followed by rapid spread or a "flash" of the entire area.

F.2 DEFINITIONS, CONTINUED

Flash Point
The temperature at which a liquid fuel gives off sufficient vapor to form an ignitable mixture near its surface.

Foam
A blanket of bubbles that extinguishes fire mainly by smothering. The blanket prevents flammable vapors from leaving the surface of the fire and prevents oxygen from reaching the fuel. The water in the foam also has a cooling effect.

Hazardous Material
Any nonradioactive solid, liquid, or gaseous substance which, when uncontrolled, may be harmful to humans, animals, or the environment. Including but not limited to substances otherwise defined as hazardous wastes, dangerous wastes, extremely hazardous wastes, oil, or pollutants.

Hazardous Substance
Any substance designed as such by the Administrator of EPA pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act; regulated pursuant to Section 311 of the Federal Water Pollution Control Act.

Hazardous Waste
Any solid waste identified or listed as a hazardous waste by the Administrator of the EPA pursuant to the federal Solid Waste Disposal Act, as amended by the Resources Conservation and Recovery Act (RCRA), 42 U.S.C., Section 6901, et seq as amended. The EPA Administrator has identified the characteristics of hazardous wastes and listed certain wastes as hazardous in Title 40 of the Code of Federal Regulations, Part 261, Subparts C and D respectively.

Higher Volume Port Area
Ports of:

- Boston, MA
- New York, NY
- Delaware Bay and River to Philadelphia, PA
- St. Croix, VI
- Pascagoula, MS
- Mississippi River from Southwest Pass, LA to Baton Rouge, LA
- Louisiana Offshore Oil Port (LOOP), LA
- Lake Charles, LA
- Sabine-Nachez River, TX
- Galveston Bay and Houston Ship Channel, TX
- Corpus Christi, TX
- Los Angeles/Long Beach Harbor, CA
- San Francisco Bay, San Pablo Bay, Carquinez Strait, Suisun Bay to Antioch, CA
- Straits of Juan de Fuca and Puget Sound, WA
- Prince William Sound, AK

Hot (Exclusion) Zone
The area where a hazard exists. This is the hazardous location on site, therefore entry requires personal protective equipment (PPE). It must be big enough for both mitigation activities and protection of personnel in the warm zone should an explosion, fire, change of wind direction, or an unexpected release occur during response activities.

F.2 DEFINITIONS, CONTINUED

Hyperthermia
A dangerously high fever that can damage nerve centers. This condition can result from exposure to excessive heat over an extended period of time.

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

Incident Commander (IC)
The one individual in charge at any given time of an incident. The Incident Commander will be responsible for establishing a unified command with all on-scene coordinators.

Incident Command System
A method by which the response to an extraordinary event, including a spill, is categorized into functional components and responsibility for each component assigned to the appropriate individual or agency.

Interim Storage Site
A site used to temporarily store recovered oil or oily waste until the recovered oil or oily waste is disposed of at a permanent disposal site. Interim storage sites include trucks, barges, and other vehicles, used to store waste until the transport begins.

Lead Agency
The government agency that assumes the lead for directing the spill response.

Lead Federal Agency
The agency, which coordinates the federal response to incidents on navigable waters. The lead Federal agencies are:

- **U. S. Coast Guard (USCG):** Oil and chemically hazardous materials incidents on navigable waters
- **Environmental Protection Agency (EPA):** Oil and chemically hazardous materials incidents on most inland waters and in the inland zone

Lead State Agency
The agency, which coordinates state support to Federal and/or Local governments or assumes the lead in the absence of a Federal spill response.

Lower Flammable Limit
Minimum flammable concentration of a particular gas in the air.

Marine Transportation-Related Facility (MTR Facility)
An onshore facility, including piping and any structure used to transfer oil to or from a vessel, subject to regulation under 33 CFR Part 154 and any deep-water port subject to regulation under 33 CFR Part 150.

Maximum Extent Practicable
The planning values derived from the planning criteria used to evaluate the response resources described in the response plan to provide the on-water recovery capability and the shoreline protection and cleanup capability to conduct response activities for a worst-case discharge from a facility in adverse weather.

Maximum Most Probable Discharge (USCG)
A discharge of the lesser of 2,500 barrels or ten percent of the volume of a worst-case discharge.

F.2 DEFINITIONS, CONTINUED

Medium Discharge (EPA)
Same as maximum most probable discharge.

National Contingency Plan
The plan prepared under the Federal Water Pollution Control Act (33 United States Code '1321 et seq) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 United State Code '9601 et seq), as revised from time to time.

Near shore Area
The area extending seaward 12 miles from the boundary lines defined in 46 CFR Part 7, except in the Gulf of Mexico. In the Gulf of Mexico, it means the area extending seaward 12 miles from the line of demarcation (COLREG) lines) defined in '80.740 - 80.850 of Title 33 of the CFR.

Non-Persistent or Group I Oil
A petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions:

- At least 50% of which by volume, distill at a temperature of 340EC (645EF)
- At least 95% of which volume, distill at a temperature of 370EC (700EF)

Non-Petroleum Oil
Oil of any kind that is not petroleum-based. It includes, but is not limited to, animal and vegetable oils.

Offshore Area
The area beyond 12 nautical miles measured from the boundary lines defined in 46 CFR Part 7 extending seaward to 50 nautical miles, except in the Gulf of Mexico. In the Gulf of Mexico it is the area beyond 12 nautical miles of the line of demarcation (COLREG lines) defined in '80-740 - 80.850 of Title 33 of the CFR extending seaward to 50 nautical miles.

Oil or Oils
Naturally occurring liquid hydrocarbons at atmospheric temperature and pressure coming from the earth, including condensate and natural gasoline, and any fractionation thereof, including, but not limited to, crude oil, petroleum gasoline, fuel oil, diesel oil, oil sludge, oil refuse, and oil mixed with wastes other than dredged spoil. Oil does not include any substance listed in Table 302.4 of 40 CFR Part 302 adopted August 14, 1989, under Section 101(14) of the Federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by P.L. 99-499.

Oil Spill Removal Organization (OSRO)
An entity that provides oil spill response resources, and includes any for profit or not-for-profit contractor, cooperative, or in-house response resources that have been established in a geographic area to provide required response resources.

Operating Area
The rivers and canals, inland, near shore, Great Lakes, or offshore geographic location(s) in which a facility is handling, storing, or transporting oil.

Operating Environment
Rivers and canals, inland, Great Lakes, or ocean. These terms are used to define the conditions in which response equipment is designed to function.

Overhaul
A procedure following a fire whereby the area is examined for hidden fire and fire extension and the fire area is cleaned up.

F.2 DEFINITIONS, CONTINUED

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

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

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

Primary Response Contractor(s)
An individual, company, or cooperative that has contracted directly with the plan holder to provide equipment and/or personnel for the containment or cleanup of spilled oil.

Qualified Individual(s)
An English-speaking representative(s) of the facility identified in the plan, located in the United States, available on a 24-hour basis, familiar with implementation of the facility response plan, and trained in his or her responsibilities under the plan. This person must have full written authority to implement the facility's response plan. This includes:

- Activating and engaging in contracting with identified oil spill removal organization(s)
- Acting as a liaison with the pre-designated of Federal On-Scene Coordinator (FOCS)
- Obligating, either directly or through prearranged contracts, funds required to carry out all necessary or directed response activities

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

Reid Vapor Pressure Method
Method used by the American Society of Testing Materials to test vapor pressure. It is a measure of the volatility, or tendency to vaporize, of a liquid.

Responsible Party
Any person, owner/operator, or facility that has control over an oil or hazardous substance immediately before entry of the oil or hazardous substance into the atmosphere or in or upon the water, surface, or subsurface land of the state.

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

F.2 DEFINITIONS, CONTINUED

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

Slopover
An event that occurs when water is introduced into a tank of very hot liquid, causing the liquid to froth and spatter.

Small Discharge (EPA)
Same as average most probable discharge.

Sorbents
Materials ranging from natural products to synthetic polymeric foams placed in confined areas to soak up small quantities of oil. Sorbents are very effective in protecting walkways, boat decks, working areas, and previously uncontaminated or cleaned areas.

Emergency Management Team
The personnel identified to staff the organizational structure identified in a response plan to manage response plan implementation.

Spontaneous Ignition
A fire that occurs without a flame, spark, hot surface, or other outside source of ignition.

Staging Areas
Designated areas near the spill site accessible for gathering and deploying equipment and/or personnel.

State Emergency Response Commission (SERC)
A group of officials appointed by the Governor to implement the provisions of Title III of the Federal Superfund Amendments and Reauthorization Act of 1986 (SARA). The SERC approves the State Oil and Hazardous Substance Discharge Prevention and Contingency Plan and Local Emergency Response Plans.

Static Electricity
Charges of electricity accumulated on opposing and usually moving surfaces having negative and positive charges, respectively. A hazard exists where the static potential is sufficient to discharge a spark in the presence of flammable vapors or combustible dusts.

Support Zone
Same as cold zone, an area free of contaminants so that personal protection equipment (PPE) is not required for personnel working in this area. Command functions and supporting operations are carried out here.

Tornado Warning
A tornado has been sighted.

Tornado Watch
Conditions are favorable for tornados to form.

F.2 DEFINITIONS, CONTINUED

Unified Command
The method by which local, state, and federal agencies will work with the Incident Commander to:

- Determine their roles and responsibilities for a given incident
- Determine their overall objectives for management of an incident
- Select a strategy to achieve agreed upon objectives
- Deploy resources to achieve agreed-upon objectives

Warm (Contamination Reduction) Zone
A buffer between the hot and cold zones. Decontamination activities take place there. Equipment needed to support the primary response operation may be staged in the warm zone.

Waste
Oil or contaminated soil, debris, and other substances removed from coastal waters and adjacent waters, shorelines, estuaries, tidal flats, beaches, or marshes in response to an unauthorized discharge. Waste means any solid, liquid, or other material intended to be disposed of or discarded and generated as a result of an unauthorized discharge of oil. Waste does not include substances intended to be recycled if they are in fact recycled within 90 days of their generation or if they are brought to a recycling facility within that time.

Wildlife Rescue
Efforts made in conjunction with federal and state agencies to retrieve, clean, and rehabilitate birds and wildlife affected by an oil spill.

APPENDIX G
ADDITIONAL INFORMATION

Last Revised: May 2013

© Technical Response Planning Corporation 2006

- **Chevron Operations Initial Notification Sheet**
- **CRC Membership Contact Information**
- **CVX WWERT PREP Documentation - Updated 2008**
- **CVX WWERT PREP Documentation - Updated 2009**
- **CVX WWERT PREP Documentation - Updated 2010**
- **CVX WWERT PREP Documentation - Updated 2011**
- **CVX WWERT PREP Documentation - Updated 2012**
- **Dock Emergency Supply Locker Inspection Checklist**
- **Drill, QI and PREP Log**
- **Emergency Response Equipment Monthly Inspection**
- **Paramount-CVX MOA**
- **QI Delegation of Authority Letter**
- **Spill Boom Inspection Form**
- **Spill Trailer Checklist**