**Office of Spill Prevention and Response**

**Draft Geographic Response Plan**

**Table of Contents (11\_29\_16)**

**Spill Response Contact Sheet** (list below will be in table format, see contact sheet example)

Immediate/Mandatory Emergency Notification Phone Calls (911, NRC, Cal OES, maybe CUPA/s)

Required Notifications and Infrastructure Notifications (whomever we need to respond early on; list the infrastructure in your area; list of dispatch centers for rail, pipeline, etc.) (Table template to prompt notifications/infrastructure types)

List these based on priority (or group these based on priority for your area; include table of all applicable dispatch centers for any of the entities below)

* Rail, Pipeline, Facility
* Public Works/Traffic Control
* Water Districts and County Water Agencies
* Utilities/Infrastructure (PG&E, Hydro Dams)
* Water Intake Contacts (unless confidential)
* Oiled Wildlife Care Network

Contingency Plan Holder Notifications (approved plans only? exempt facilities?)

* Railroad
* Pipeline
* Facility

Government/Tribal Notification

* Federal Government
* State Government
* County Government
* City Government
* Parks/Managed Lands
* Tribal

**Purpose and Use of the Plan**

**Table of Contents**

**Tab 1.0 Introduction**

1.1 Site Vicinity Map/GRP Overview Map of California (sectional: Northern, Central or Southern Calif., consider putting this map on front cover like EPA Region 10 examples)

1.2 GRP Area Map (closer view of GRP area/boundary)

1.3 Introduction

1.3.1 GRP Chapters and Appendices

1.3.2 GRP Development Process

1.3.3 Standardized Response Language/ICS

1.3.4 Drills and Exercises

1.3.5 Plan Maintenance and Revision Cycle

**Tab 2.0 Site Description**

2.1 Physical Features

2.2 Climate and Winds

2.3 Hydrology

2.4 Risk Assessment

**Tab 3.0 Emergency Management/Operational and Response Considerations**

3.1 Isolation/Deny Entry/Assessment (Once hazmat determined, use ERG for guidance) (Refer to Traffic Control Contacts in Spill Response Contact Sheet)

3.2 Responder/Public Safety/Health – CUPA, Public Health Officer (air monitoring, shelter in place, etc.)

3.3 Onsite Considerations before Deploying a GRP Strategy

3.4 Spill Response Options and Considerations

Table 3-1 Spill Response Options and Considerations Matrix

3.5 General Response Priorities (including: do less harm than good)

3.6 Strategy Priorities Based on Incident Location

Table 3-2 Strategy Priorities Based on Incident Location

3.7 Water Velocity

Table 3-3 Water Speed Drift Measurement and Boom Deployment

Table 3-4 Boom Deployment Angles Based on Current Velocity

Table 3-5 Distance Covered Based on Flow Conditions

3.7.1 Historical Streamflow Ranges (*include links to USGS, CDEC, American Whitewater; real-time flow information*)

Table 3-6 Historic Streamflow for XX River

Figure 3-1 USGS Mean Monthly Discharge Measurements for the XX River and Tributaries

3.8 Water Supplies for Firefighting Operations (include contacting CalFire or USFS to find out their capabilities.  This is more important in rural areas.  Consider number of available water tenders, water storage tanks/bladders, pumps for remote monitors, etc.  Reach out to your local responders.)

**Tab 4.0 Response Area Strategies and Detail Sheets**

4.1 GRP Response Area Strategy Reference Maps/Area Overview Maps

4.2 Operational Division and/or Segment Maps (*Include location of stream gauges; real-time data only, add to segments table?*) *Include beginning and ending rail mile and/or highway marker labeled on division maps.*

4.3 Response Strategy Naming/Number Convention

4.4 Response Plan Strategy Location Matrix

4.4.1 Response Strategy Matrices

4.4.2 Notification Strategy Matrices

4.4.3 Staging Area Matrices

4.4.4 Boat Launch Matrices

4.5 Response Area Strategy Individual Detail Sheets

4.5.1 Response Strategy Detail Sheets

4.5.2 Notification Strategy Detail Sheets

4.5.3 Staging Area Detail Sheets

4.5.4 Boat Launch Location Detail Sheets

**Tab 5.0 Response Methods/Protection Techniques**

5.1 Response Methods Overview

Table 5-1 Summary of Response Methods (Matrix Table)

5.1.1 Fast-Water Booming Strategy

5.1.2 Lake or Reservoir Booming Strategy

5.1.3 Floating Oil Strategy

5.1.4 Non-floating Oil Strategies

Table 5-2 Response Options for Mapping of Oil Deposited on the Bottom

Table 5-3 Response Options for Containing Oil Suspended in the Water Column

Table 5-4 Response Options for Recovering Oil Deposited on the Bottom

5.1.5 Berming and Diking Strategies

5.1.5.1 Underflow Dams

Figure 5-1

5.1.5.2 Diversion Flows/Culvert Block and Weir

Figure 5-2

**Tab 6.0 On-Water Recovery, Shoreline Countermeasures, Shoreline Assessment, Cleanup and Waste Management**

6.1 Overview

6.2 On-Water Recovery of Product

6.3 Shoreline Clean-up And Assessment Technique (SCAT)

6.4 Shoreline Types and Cleanup Measures

6.4.1 ESI Shoreline Types (NOAA Table)

6.4.2 Shoreline Countermeasures Matrices

6.4.3 Applied Response Technologies and Oil Spill Cleanup Agents

6.5 Waste Management and Disposal (include fish/wildlife carcass disposal)

**Tab 7.0 Resources at Risk**

7.1 Public Health [drinking water intakes, contamination and shut down of water treatment facilities (no water usage in the home), beaches/parks]

7.2 Environmental (Matrix of all listed/sensitive species and habitats in the GRP area; summary of what you may find, refer to detail sheets for more specific details. Summaries of all resources at risk (RAR) for each segment or operational division, managed areas, specific critical habitat, etc., reference in ERMA).

7.2.1 Wildlife and Sensitive Habitat Information and Mitigation Strategies (part of matrix)

7.2.2 Specific Geographic Areas of Concern

7.2.3 Wildlife Response [Refer to Wildlife Response Plan (if we have web links to any referenced doc’s, add those)]

7.2.3.1 Oiled Wildlife and OWCN (make a short general statement about not capturing oiled wildlife but refer to Wildlife Response Plan)

7.3 Cultural Resources and Historical Properties at Risk (add a paragraph referencing State Historic Preservation Act, and who we would contact; won’t list specific details for the area)

7.3.1 Cultural Resources Summary

7.3.1 Discovery of Human Skeletal Remains

7.3.2 Procedures for the Discovery of Cultural Resources

7.4 Economic Resources at Risk

**7.**4.1 Industrial and Agricultural Intakes

7.4.2 Dams and Hydroelectric Facilities

7.4.3 Recreation (boat launches, campgrounds, marinas)

7.4.4 Waterfront Businesses (restaurants, gas stations, stores)

7.4.5 List/Table of Economic Resources

**Tab 8.0 Logistical Resources Available for Spill Response**

8.1 Introduction

8.2 List of Logistical Resources

8.3 Logistical Resource Details

Table 8-1. Aircraft Support

Table 8-2. Airports

Table 8-3 Ambulance Services

Table 8-4 Potential Command Posts (Established Locations)

Table 8-5 Fire Departments

Table 8-6 Catering

Table 8-7 Hardware Stores

Table 8-8 Hospitals

Table 8-9 Lodging

Table 8-10 Marinas

Table 8-11 Office Supplies

Table 8-12 Oil Spill Response Organizations

Table 8-13 Outdoor Recreation Groups

Table 8-14 Park Facilities

Table 8-15 Rental Equipment

Table 8-16 Response Equipment Stockpile Locations

Table 8-17 River Guides

Table 8-18 Security Services

Table 8-19 Tribal Resources

Table 8-20 Transportation

Table 8-21 U.S. Forest Service

Table 8-22 Wildlife Response Contractors

**Tab 9.0 References**

**Tab 10.0 Appendices**

**Tab 10.1 GRP Contributors and Acknowledgements**

**Tab 10.2 Record of Changes**

**Tab 10.3 Comments, Corrections, or Suggestions**

**Tab 10.4 Acronyms and Abbreviations**

**Tab 10.5 Web links to Information Resources (SDS’s, DOT Guidelines for Crude Oil)**

**Tab 10-6 Photos of Each Shoreline Type From ESI Table**