

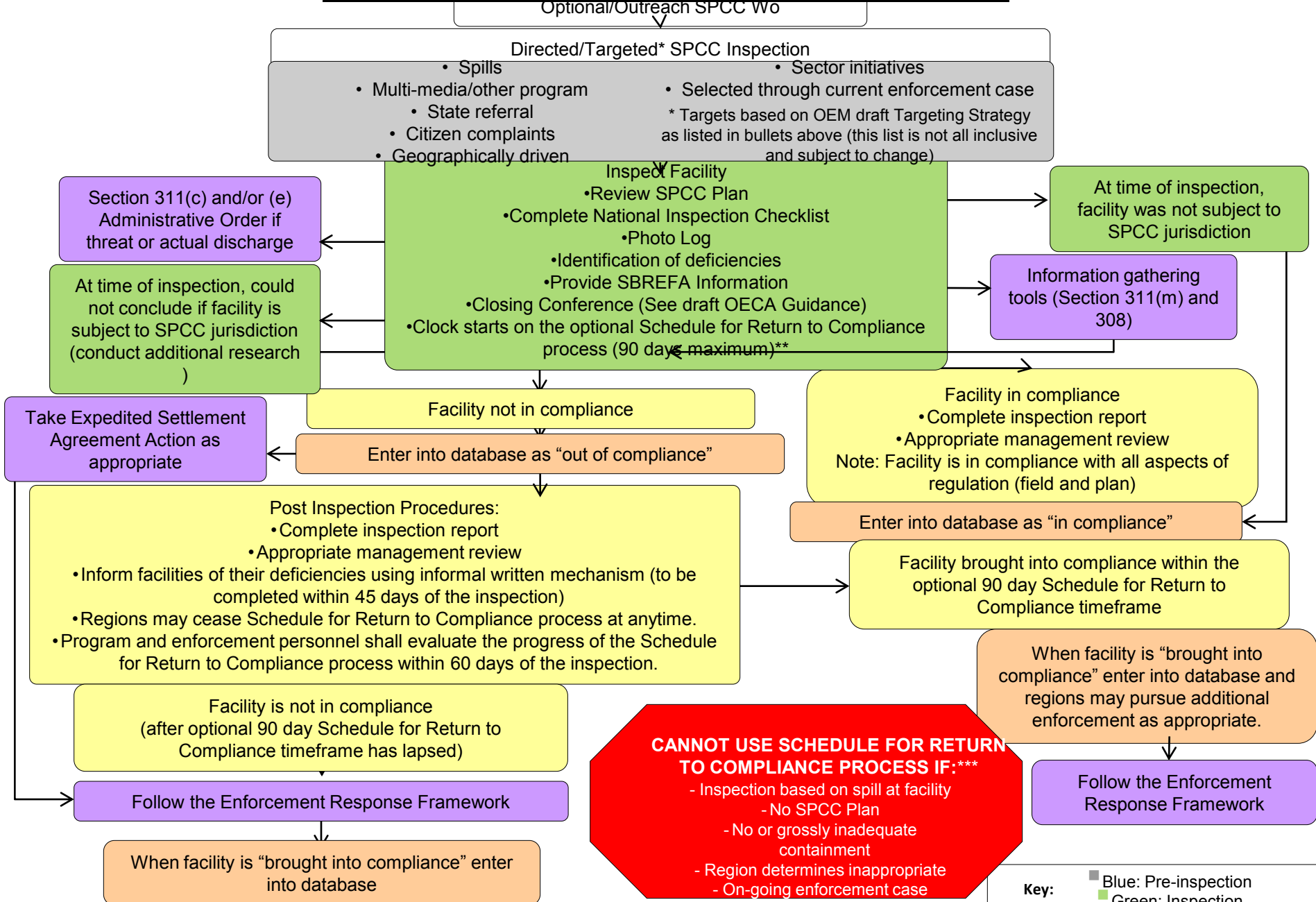
Spill Prevention, Control and Countermeasures (SPCC) 40 CFR 112



For Bulk Facilities

38 111 112

CWA 311 SPCC Compliance Determination Process Overview



** Based on consultation between program and enforcement personnel, regions may shorten or extend based on case-specific circumstances.

Regions may go directly to Enforcement Response Framework at any time.

***Based on consultation between program and enforcement personnel, regions may determine to use the Schedule for Return to Compliance process on a case-by-case basis.

CANNOT USE SCHEDULE FOR RETURN TO COMPLIANCE PROCESS IF:***

- Inspection based on spill at facility
- No SPCC Plan
- No or grossly inadequate containment
- Region determines inappropriate
- On-going enforcement case

Key:

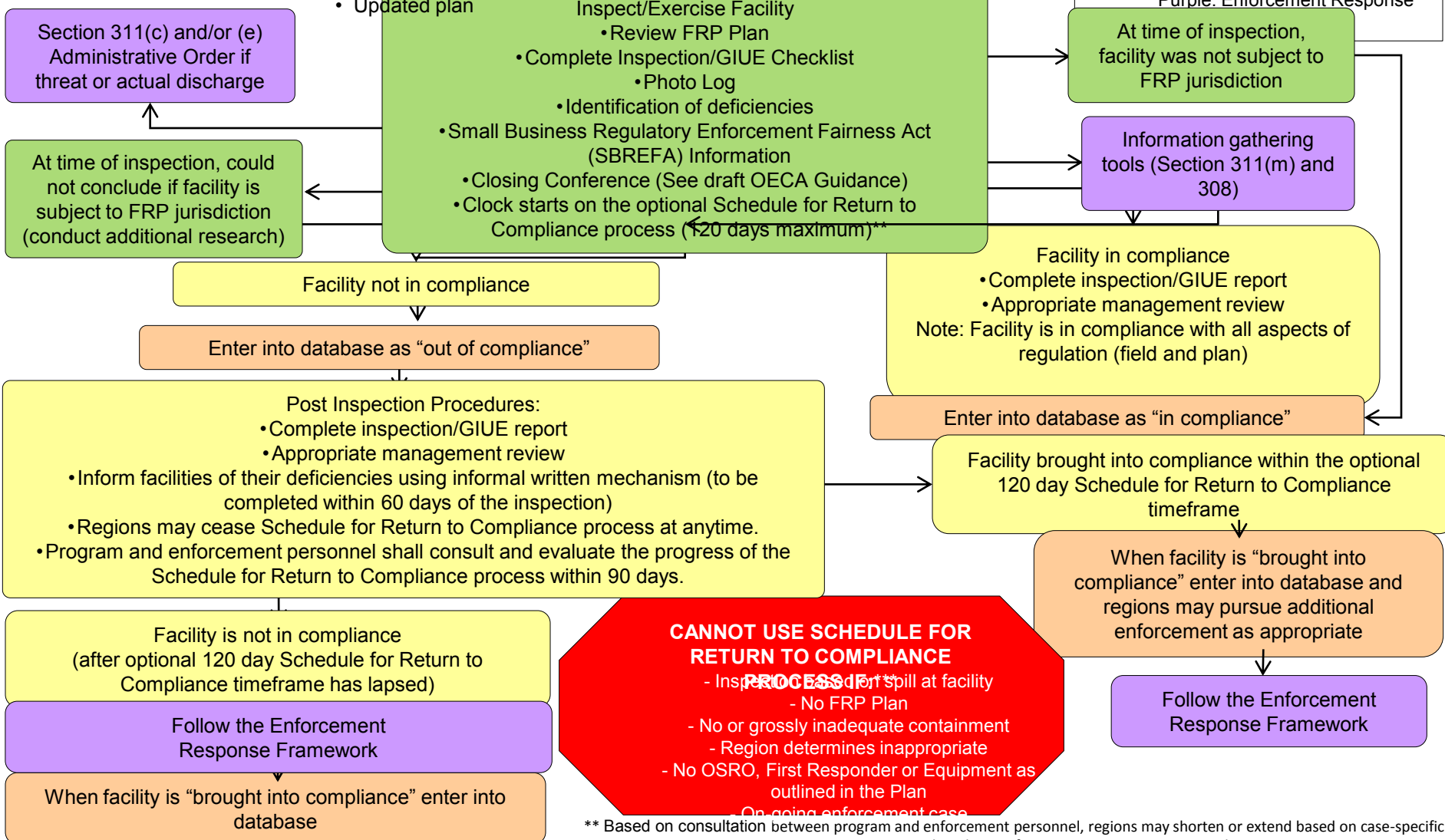
- Blue: Pre-inspection
- Green: Inspection
- Yellow: Post-inspection
- Orange: Database
- Purple: Enforcement Response

CWA 311 FRP Compliance Determination Process Overview

- Directed/Targeted* FRP Inspection and/or GIUEs
 - Spills
 - Geographically driven
- Citizen complaints
 - Sector initiative
 - Multi-media/other program
 - Selected through current enforcement case
 - State referral
 - * Targets based on OEM draft Targeting Strategy as listed in bullets above (this list is not all inclusive and subject to change)
 - 5-year review
 - Updated plan

Key:

- Blue: Pre-inspection
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** Based on consultation between program and enforcement personnel, regions may shorten or extend based on case-specific circumstances. Regions may go directly to Enforcement Response Framework at anytime.

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Do you have an oil?

- The list of Petroleum and Non-petroleum oils subject to the Clean Water Act requirements can be found at “<http://www.uscg.mil/vrp/faq/oil.shtml>”
- Oils include: gasoline, non-petroleum oils, asphalt, hexane, jet fuel, mineral spirits, edible and non-edible animal and vegetable oils, coal tar, creosote, lube oil additives, tallow, polyolefins, ethyl cyclohexane, turpentine,.....



SPCC Applicability (112.1)

- Non-Transportation-Related Facility engaged in:
- **Drilling, producing, gathering, storing**, processing, refining, transferring, distributing, using, or consuming
- **Oil** of any kind (petroleum, vegetable, animal, synthetic)
- in:
 - **Total** aboveground storage capacity **>1,320 gallons** counting only containers 55 gallons and greater; and/or
 - Total underground capacity **> 42,000** gallons not including capacity of buried tanks covered in 40 CFR part 280 or 281
 - Exempts wastewater treatment facilities

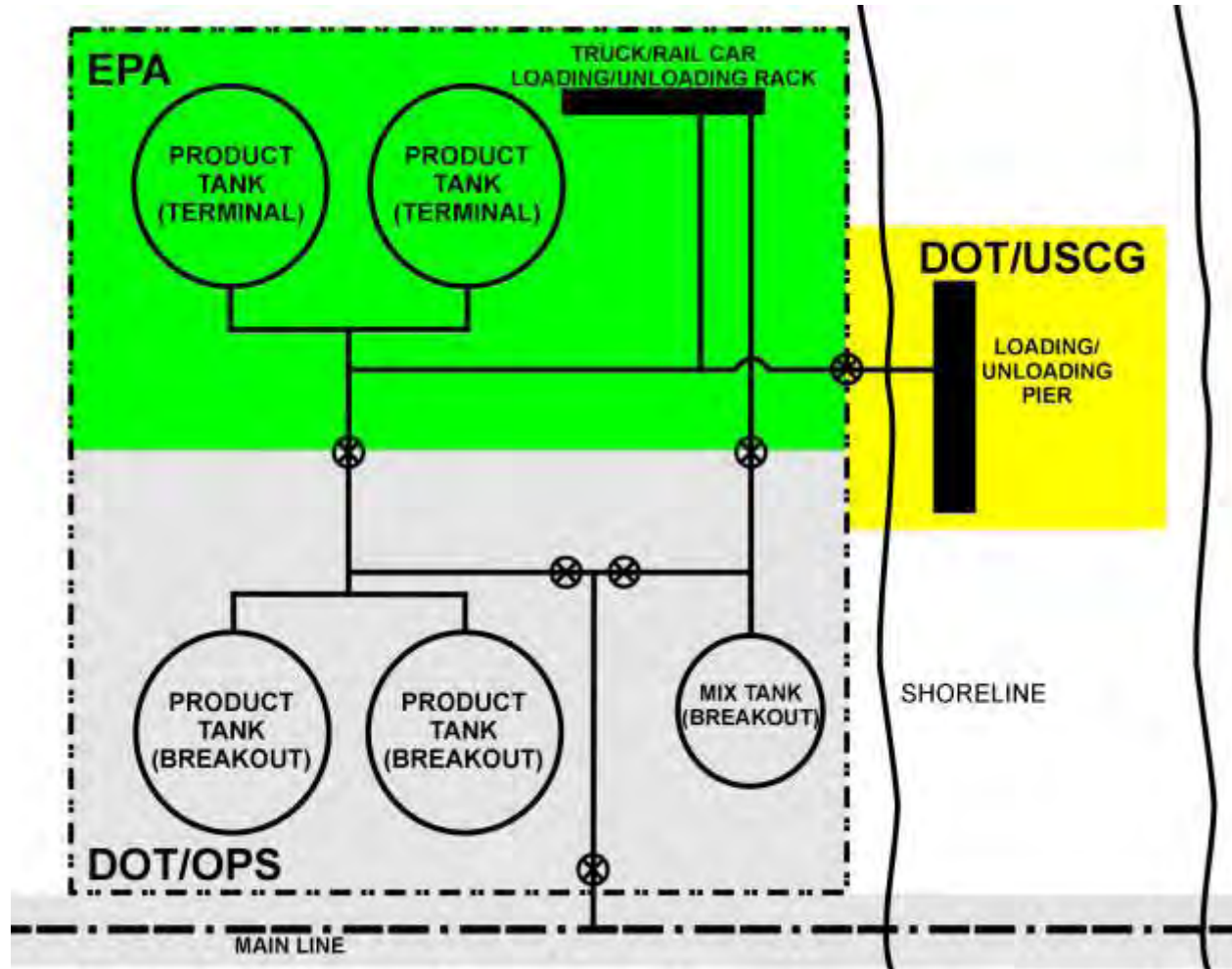


SPCC Applicability (112.1) continued

- A discharge of oil from the facility could reasonably be expected to reach **waters of the U.S.**,
- Dikes, equipment, and other manmade structures **are not considered** as reasons that oil would not be expected to reach waters of the U.S.,
- Examples of waters of the U.S. may include: lakes, rivers, streams, dry creek beds, ditches, wetlands, and tributaries to these.



OPA Jurisdiction of Federal Agencies





SPCC Requirements for Preparation and Implementation (112.3) continued,

- **Professional Engineer (PE) must certify:**
 - **Is familiar with the rule**
 - **PE or agent has visited and examined the facility**
 - **Plan is prepared in accordance with good engineering practice (considering applicable industry standards) and with the rule**
 - **Testing and inspection procedures are established**
 - **The plan is adequate for the facility**



General Requirements for Preparation and Implementation [112.7(a)]

- Plan must be **signed by owner/operator**,
- Plan must follow the sequence of the rule (112.7) or cross reference,
- Equivalent environmental protection
- Must have detailed facility diagram
- Describe prevention and countermeasures
 - Type of oil and capacity of each container
 - Prevention measures provided for all oil handling and storage
 - Discharge or drainage controls
 - Countermeasures, disposal, and reporting a discharge



General Requirements for Preparation and Implementation [112.7(b-c)]

- Plan must have a spill prediction section describing **what would be a likely cause of a spill** and where it would flow,
- Plan must describe **what containment is used** such as:
 - Dikes or berms that are **sufficiently impervious** to contain spilled oil until it is cleaned up,
 - Curbing, culverting, gutters or other drainage,
 - Weirs, booms or other barriers,
 - Spill diversion or retention ponds.



Inspection, tests and Records [112.7(e)]

- **Records must be made according to the frequency and procedures that the facility establishes in the SPCC plan,**
- **Sign and keep with the plan for 3 years,**
- **Records must include:**
 - **Tank, piping, valve inspections and testing,**
 - **Water drained from dikes,**
 - **SPCC plan 5 year review,**



Bulk Storage Tank Requirements [112.8(c)]

- **Tank's material must be compatible with the oil stored and conditions of storage,**
- **Secondary containment must:**
 - **Hold the entire contents of the largest tank,**
 - **Plus sufficient freeboard for rainfall,**
 - **Be sufficiently impervious to hold a spill until it can be detected and cleaned up,**
 - **Be free of vegetation that would compromise imperviousness and inhibit inspections,**







FRP/SPCC Deficiencies





Agency Observations



Problems commonly found in Facility Response Plans (FRPs)



Common FRP Problems

General Information

- **Name of protected waterway or environmentally sensitive area omitted**
- **Number of underground storage tanks (USTs), UST oil storage or drums/small container storage omitted**
- **Facility's status with respect to the significant and substantial harm criteria not stated**



Common FRP Problems

Worst Case Discharge Planning

- **Worksheet to Plan Volume of Response Resources for Worst Case Discharge not completed** [40 CFR 112, Attachment E-1 / E-2]



Common FRP Problems Introductory Materials

- **Inadequate cross reference sheet and table of contents**





Common FRP Problems

ERAP

- **ERAP not provided as a separate section in the front of the Response Plan, or as a separate document accompanying the Plan**
- **Qualified individual's response training experience not described**
- **Notification list items missing**
 - **Wastewater treatment facility(s) name and phone number (recommended)**
 - **Factories/utilities with water intakes**
 - **Trustees of sensitive areas (recommended)**
 - **Wrong U.S. EPA region duty officer phone number**



Common FRP Problems Response Equipment

- **Facility failed to have, or to document, the availability of 1,000 feet of boom, deployable within one hour**
 - For example, facility relies on an Oil Spill Removal Organization (OSRO) for a boom, but OSRO response time is greater than one hour
- **List of response equipment to be provided by an OSRO is not stated**
- **Response Equipment Testing and Deployment Drill Log is inadequate or incomplete**



Common FRP Problems Personnel

Inadequate or incomplete information:

- **Emergency response personnel information**
 - Type and date of response training
- **Emergency response contractor information**
 - Response time
 - Evidence of current contractual arrangements
- **Facility response team information**
 - Response time
 - Name of emergency response contractor, response time, phone/pager



Common FRP Problems

Evacuation Plans

Items missing or inadequately addressed, e.g.:

- **Location of stored materials**
- **Hazard imposed by spilled materials**
- **Spill flow direction**
- **Prevailing wind directions and speed**
- **Water currents, tides, or wave conditions**
- **Arrival route of emergency response personnel and equipment**
- **Alternate evacuation routes**
- **Transportation of injured personnel to medical facility**
- **Location of alarm/notification systems**
- **Mitigation command center location**
- **Facility shelter location**
- **Community evacuation plans referenced**



Common FRP Problems Hazard Evaluation

Items missing or inadequately addressed, e.g.:

- **Information provided on surface impoundments**
 - If a facility has no surface impoundments, it should be so stated
- **Labeled schematic drawings**
- **Secondary containment volumes**



Common FRP Problems Vulnerability Analysis

Analysis of potential effects on the following resources is missing:

- **Schools**
- **Medical facilities**
- **Residential areas**
- **Businesses**
- **Endangered flora & fauna**
- **Recreational areas**
- **Transportation routes**





Common FRP Problems

Oil Spill Potential Analysis

Items missing or inadequately addressed, e.g.:

- **Horizontal range of potential spill**
- **Vulnerability to natural disaster (earthquake zones)**
- **Tank age**
- **Other factors (unstable soils, karst topography, etc.)**



Common FRP Problems

Reportable Oil Spill History

Items missing or inadequately addressed, e.g.:

- **Amount that reached navigable waters**
- **Effectiveness and capacity of secondary containment**
- **Steps taken to reduce possibility of reoccurrence**
- **Total oil storage capacity of tank(s) from which material discharged**
- **Enforcement actions**
- **Effectiveness of monitoring equipment**
- **Spill detection**



Common FRP Problems

Discharge Detection Systems

- **Discharge detection by personnel**
 - Description of initial response actions
 - Emergency response information
- **Automated discharge detection**
 - Description of automatic spill detection equipment (overflow alarms, secondary containment sensors)
 - Description of alarm verification procedures and subsequent actions



Common FRP Problems

Discharge Detection Systems

- **Discharge detection by personnel**
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Common FRP Problems

Containment and Drainage Planning

Items missing or inadequately addressed, e.g.:

- **Containment volume**
- **Construction materials in drainage troughs**
- **Type and number of valves and separators in drainage system**
- **Sump pump capacities**
- **Containment capacities**



Common FRP Problems Diagrams

Site Plan Diagram - Items missing or inadequately addressed, e.g.:

- **Correct scale**
- **Contents and capacities of bulk oil storage tanks and drums**
- **Location and capacity of secondary containment**



Need More Info?

- **Website:** www.epa.gov/oilspill
- **National Hotline:** 1-800-424-9346
- **Regional Contacts:**
Donald P Smith – smith.donaldp@epa.gov
214-665-6489