

US Coast Guard Federal On-Scene  
Coordinator Representative:  
Coordinate Response Resources & Planning  
&  
Temporary Storage Devices

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## FOSC-R Training

- 1.0 Identify Coast Guard Jurisdiction Authority
- 2.0 Conduct Preliminary Assessment & Actions
- **3.0 Coordinate Response Resources & Planning**
- 4.0 Coordinate Response Funding
- 5.0 Coordinate Oil Removal
- 6.0 Identify Safety & Occupational Health

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## Outline Part I

- Special Teams under the NCP
- Agency Roles
- Incident Command System
- Trustees
- Federal & State Agencies
- Regional Response Team

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## Outline Part II

- Public Information
- Plans
  - Area Contingency Plan (ACP)
  - Facility Response Plan (FRP)
  - Vessel Response Plan (VRP)
  - Shipboard Oil Pollution Emergency Plan (SOPEP)
  - Qualified Individuals (QI)

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## NCP Special Teams

- USCG National Strike Force
  - NSFCC, Strike Teams, PIAT
- NOAA Scientific Support Coordinator (SSC)
- EPA Emergency Response Team
  - Radiological Emergency Response Team (RERT)
- Navy Supervisor of Salvage (SUPSALV)
- National Response Center

\*FOSC Guide pg. 51 has special team contact #'s

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## Dept. of Health & Human Services



- Preservation/protection of human of health
- Availability of essential services
- Advise on public health issues
- Center for Disease Control (CDC) – exposure prevention & mitigation...evacuation areas & exposure data (petroleum spills)
- Agency for Toxic Substances & Disease Registry (ATSDR) – health threat assessments & analysis (chemical releases)

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## Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE)

The federal agency responsible for overseeing the safe and environmentally responsible development of energy and mineral resources on the Outer Continental Shelf

- Formerly Minerals Management Service
- FOSC-Rs should understand focus and agenda of agencies that regulate one specific industry



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## Army Corps of Engineers (USACE)



- Lead agency for Emergency Support Function (ESF) 3 (debris removal) under Stafford Act; navigable waterway (dredging) and levee maintenance
- Review MOU among DHS/FEMA, EPA and USACE for Contaminated Debris Management

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## NCP Related Response Agencies

- Environmental Protection Agency (EPA)
  - Lead agency for environmental protection (air, land & water); OSC in the inland zone under the NCP; lead for ESF 10 (oil/hazmat removal) under Stafford Act
- United States Coast Guard (USCG)
  - Lead agency for environmental response (air, land & water) in the coastal zone under the NCP; supporting agency for ESF 10
- Federal Emergency Management Agency (FEMA)
  - Overall coordinator for Stafford Act disaster response, funding providers only!

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## Other Special Teams



**SERT**

- [Sert.duty@uscg.mil](mailto:Sert.duty@uscg.mil)
- SERT Duty Officer - 202-327-3985
- SERT Assistant Team Leader - 202-327-3986
- SERT Team Leader - 202-327-3987

**SALVAGE ENGINEERING RESPONSE TEAM**

The image features the SERT logo in large red letters, a circular U.S. Coast Guard Marine Safety Center emblem, and a background image of a large ship being salvaged. The text 'SALVAGE ENGINEERING RESPONSE TEAM' is at the bottom.

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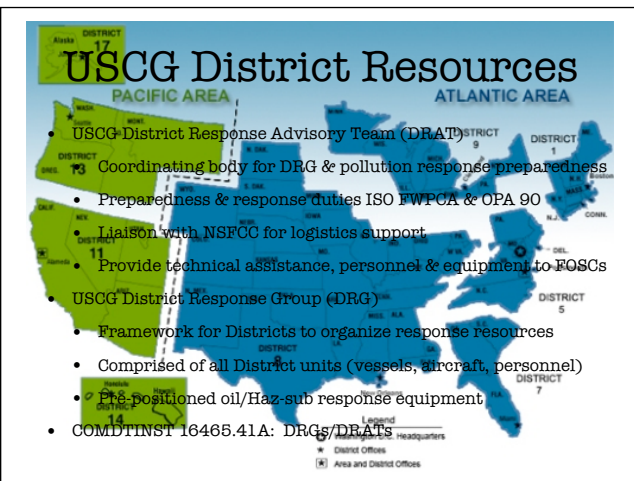


### SERT Services

- Technical solutions during marine casualty response:
  - Independent eval of a casualty situation
- Act as FOSC's salvage "tech rep"
- Review salvage plans provided by RP
- Partner with FOSC & RP to guide development of a salvage plan

The slide includes a background image of a ship at sea and a smaller image of a large red ship being salvaged with people on deck.

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### USCG District Resources

- USCG District Response Advisory Team (DRAT)
  - Coordinating body for DRG & pollution response preparedness
  - Preparedness & response duties ISO FFWPCA & OPA 90
  - Liaison with NSFCG for logistics support
  - Provide technical assistance, personnel & equipment to FOSCs
- USCG District Response Group (DRG)
  - Framework for Districts to organize response resources
  - Comprised of all District units (vessels, aircraft, personnel)
  - Pre-positioned oil/Haz-sub response equipment
- COMDTINST 16465.41A: DRGs/DRATs

The slide features a map of the United States divided into Pacific and Atlantic areas, with various USCG districts marked. A legend at the bottom identifies symbols for Headquarters, Charge Offices, and Area and District Offices.

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# ICS and MER

- As an FOSCR, where would you typically be assigned in the ICS organization?
- Where would the Sector Commander be assigned?
- Where would the Chief of Response be assigned?
- Where would the Sector/MSU's Planner be assigned?
- Where would a NOAA SSC be assigned?

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# Resource Trustees

An official of a federal natural resource management agency designated in subpart G of the National Contingency Plan (NCP) or a designated state official or Indian tribe or, in the case of discharges covered by the Oil Pollution Act of 1990 (OPA), a foreign government official, who may pursue claims for damages under Section 107(f) of CERCLA or Section 1006 of OPA.



Which require notification in your AOR? (40 CFR 300.615)

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# Federal Resource Trustees

- Federal Resource Trustees come in many flavors:
- U.S. Fish & Wildlife Service: birds, insects, plants, non-marine mammals, refuges
- NOAA: marine mammals, fish, shellfish, habitat, & sanctuaries
- DOD/DOE/National Park Service/Tribes

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## Regional Response Team

- Co-chaired by EPA & USCG joined by 14 other agencies as an advisory body or may convene incident specifically
  - Assists the OSC and Area Committees on preparedness/response issues
  - Provides the OSC with advice and recommendations on incident issues
  - Coordinate regional planning and preparedness as per the National Contingency Plan (NCP)

See page 15 of FOSC Guide and/or [www.nrt.org](http://www.nrt.org)

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## Public Affairs Policy

- Inform the public of ongoing government operations through the PIO (40 CFR 300.155)
- Coordinate closely with PIO and describe as fully as possible what YOU think the public needs to know. This will best provide the public with messages that match your priorities.
- “Maximum disclosure, minimum delay”
- Information products should be cleared for SAPP
  - Security, Accuracy, Policy, Propriety
- Coast Guard policy: If you did it or have responsibility for it, you can talk about it.

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## Facility Response Plans

- Facility Response Plan (FRP) Requirements
  - MTR that handles, stores, or transports oil in bulk
  - Transfer to/from a vessel (250 Bbls)
  - Fixed, mobile, deepwater ports, or if COTP designated
- FRP General Contents (33 CFR 154.1030)
  - Emergency response action plan
  - Notification procedures
  - Spill mitigation procedures (AMPD, MMPD & WCD)
  - Response activities
  - Fish & wildlife and sensitive environments
  - Disposal plan
  - Specific for class of facility (i.e. significant & substantial harm)

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## What is a Temporary Storage Device?

A storage device capable of being utilized on scene at a spill response and which is designed and intended for storage of flammable or combustible liquids. It does NOT include vessels or barges of opportunity for which no pre-arrangements have been made.

(Source: OSRO Classification Document)

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## Why are TSD's important?

- T/V EXXON VALDEZ OIL SPILL: Federal On Scene Coordinator's Report 1993 - CAPT Dennis Maquire, USCG
- "11.2 Million Gallon Catastrophe" (pg. xx)
- Exxon est. 17% recovered by April 1989 through Floating Oil Operations (pg. 54)
- 45,333 Barrels Recovered

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## Why are TSD's important?

"Storing recovered oil was an important component of the oil recovery operation. Oil recovery vessels with on-board storage, once full, necessitated shut down of skimming operations until they were offloaded."

"Just two tank barges were available in the south-central Alaskan area at the time of the spill. Eventually others were brought in but the lack of off-loading capability initially imposed a substantial constraint on floating oil operations."

FOSC's Report on T/V EXXON VALDEZ Oil Spill, pg 69

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## Examples of Temporary Storage

- “Securing adequate on-board storage capacity for recovered oil required innovative solutions. Cylindrical steel tanks saw heavy service, and “Fastanks,” two thousand gallon frame and fabric devices, were often used.”
- “Among others put into service were small-capacity water separator tanks, aluminum fish boxes, and large capacity (26,000 gal) rubber bladders that were towed behind skimming barges.” - pg69

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## Temporary Storage National Strike Force Inventory



- CANFLEX SEA SLUG
- F100 and F250

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## Fastanks



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# Potential Other Resources for TSDs

- Responsible Party / OSRO
- NSF Strike Team's
- Navy SUPSALV



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## U.S. Coast Guard Emergency Response Contracting Support

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Shore Infrastructure Logistics Center (pcb-1)  
Emergency Response Contracting Branch



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## General Topics

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- SILC (pcb-1)
  - Basic Ordering Agreements (BOA)
  - Funding
  - Procedures including Ordering, Payments, Subcontracts, Certification of invoices
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## Contracting Goals

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- Provide immediate FOSC accessibility to BOA Contractors
  - Not to impede response efforts
  - Broad spectrum oil/hazardous substance cleanup services, equipment, materials through BOAs
  - Ensure reasonable pricing
  - Complete and accurate cost documentation
  - Timely payments, no interest payments
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## Staffing Resources



- Five Contract Specialists dedicated to pollution response contracting
- Six Contracting Officers - Three with **Unlimited** authority to "obligate" (spend) tax dollars
- Two Storekeepers dedicated to issue Orders/Invoices/Payments

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## USCG Districts



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## Contracting Section

- Karen McElheny (757) 628-4114  
Chief, Emergency Response Contracts Branch
- Jackie Dickson (757) 628-4108  
Team Leader (1st, 5th & 7th)
- Dawn J. Dabney (757) 628-4110  
Team Leader (8th & 9th)
- Vacant (510)541-4232  
Team Leader (11<sup>th</sup>, 13<sup>th</sup>, 14<sup>th</sup> & 17<sup>th</sup>)

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**1<sup>st</sup> District**

**Team B Contracting Officer:**

**Jackie Dickson** (757)628-4108

**Contract Specialist:**

**Willie Mayo** (757)628-4262

**SK1 Keith Lewis** (757) 628-4151

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**5<sup>th</sup> District**

**Team B Contracting Officer:**

**Jackie Dickson** (757)628-4108

**Contract Specialist:**

**Vacant** (757) 628-4119

**SK1 Keith Lewis** (757) 628-4151

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**7<sup>th</sup> District**

**Team B: Contracting Officer;**

**Jackie Dickson** (757)628-4108

**Contract Specialist:**

**Pamela Barker** (757) 628-4123

**SK1 Keith Lewis** (757) 628-4151

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**8<sup>th</sup> District**

**Team A: Contracting Officer:**  
**Dawn J. Dabney** (757)628-4110

**Contract Specialists:**  
**Jerry Hendricks** (757) 628-4118  
**Cynthia Major** (757) 628-4107

**SK1 Kay Akana-Miller** (757) 628-4750

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**9<sup>th</sup> District**

**Team A: Contracting Officer:**  
**Dawn J. Dabney** (757)628-4110

**Contract Specialist:**  
**Cynthia Major** (757) 628-4107

**SK1 Kay Akana-Miller** (757) 628-4750

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**BOA Contractor Requirements**

- "First Responder" - able to respond to oil and/or Haz-Mat incidents
- Have requisite personnel, equipment & materials based on FOSC input & industry standards
- Refer interested companies to appropriate Contracting Officer
- Formally Solicit every 3 Years

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## Basic Ordering Agreements (BOAs)



- BOA is not a "contract"
- Specifically identifies personnel, equipment & supplies offered
- Identifies terms & conditions the contractor will adhere to in the event of a Federal Response
- Directs contractors how to complete dailies, obtain sub-contract/non-BOA approvals and submit invoices

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## Funding



- When an incident (spill) is identified, obtain:
  - A Federal Project Number (FPN) when using the Oil Spill Liability Trust Fund (OSLTF) for oil spills\*
  - A Comprehensive Environmental Response, Compensation, & Liability Act (CERCLA) Project Number (CPN) for hazardous substance spills\*
  - A Disaster Project Number (DPN) when responding to a Mission Assignment (MA) under the Stafford Act

\*see pages 20-21 - FFARM Field Guide, Appendix B

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## When does OSLTF Apply?

- Actual or substantial threat of a discharge
- In Navigable waters



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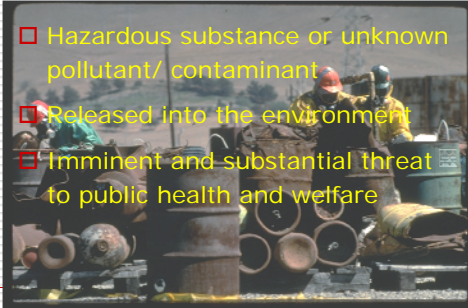
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### Does **CERCLA** Apply?



- Hazardous substance or unknown pollutant/ contaminant
- Released into the environment
- Imminent and substantial threat to public health and welfare

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### **Ceiling for FPN or CPN**

- Project ceilings are estimated to cover cost of entire project
- ATPs are issued to contractors to give "not to exceed" amount for work
  - (can be equal to Project ceiling if there are no Coast Guard Direct costs)
- Coast Guard Direct vs Indirect costs
  - TONOs / purchases for units (direct)
  - Cutters, personnel, trucks (indirect)

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### **FPN or CPN**

- What do you do if you open a Federal Project using OLSTF and identify Haz-Mat? Do you open a CERCLA case?
  - Contact NPFC Case officer
    - Depending on the amount of Haz-Mat... you may have an FPN and CPN open concurrently

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## FOSC Responsibilities

- CG Federal On-scene Coordinator (FOSC) obtains Federal/CERCLA project number (funding) via CANAPS
- Authorizations To Proceed Letter (ATP) issued by FOSC to BOA contractor for \$50,000 or less; cleanup started
- ATP message issued by FOSC to SILC (pcb-1) within 24 hrs  
**COGARD SILC NORFOLK VA //PCB-1//**
- POLREPS issued by FOSC to document response progress

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## FOSC Responsibilities, Cont'd

### MESSAGE TRAFFIC

- CANAPS funding message
  - Project dates:
    - A. Incident date:
      - when the incident happened
    - B. FOSC Action Commencement date:
      - Funds available
      - Contractor ATP is this date or later
    - C. Date Project created
      - Date you generated CANAPS message

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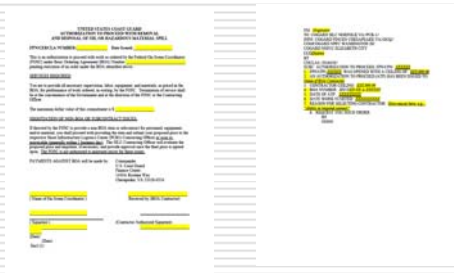
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## FOSC Responsibilities Cont'd



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## FOSC Responsibilities, Cont'd

### Reason for Selection

A BOA KTR is selected based on

- Response time
- Technical capability
- Price



CGAP 3017.9203, COMPETITION

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## FOSC Responsibilities Cont'd

- Hiring two BOA contractors...
- Issue separate ATPs under same FPN
  - Each contractor works directly for FOSC
  - Cost savings (no administrative fee)
  - Ensures contractor's offer BOA rates
- Each contractor shall monitor their ceiling
- FOSC monitors each ceiling separately

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## FOSC Responsibilities, Cont'd

In the field...



- Contractor CG 5136's
- Oversight of the contractor
- Verification of quantities & hours
- Ordering what is needed (technical)

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### **FOSC Responsibilities, Cont'd**

Potential issues during response

- Travel time (portal to portal)
- Mobilization
- Overtime
- Holidays/weekends
- Disposal
- Coast Guard dailies (CG 5136 series)

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### **FOSC Responsibilities, Cont'd**

- Monitor "Not To Exceed" ceiling
  - Notify Contracting Officer prior to exceeding ceiling IAW SOP
- Directs, monitors and inspects work
- Verifies services, equipment and materials are authorized dailies on the CG5136(e) series

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### **FOSC Responsibilities, Cont'd**

Prompt Payment act requires proper invoices to be paid within 30 days of receipt

- FOSC unit date stamps invoice upon receipt
- Reviews and certifies invoices for accuracy of labor, equipment and materials within 10 days of receipt
  - Check quantities, unit prices and extended prices for mathematical errors
  - Check dailies against summary invoice
  - \*ensure Contractor ATP ceiling is sufficient to cover invoice... if not, increase ATP**

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## **FOSC Responsibilities, Cont'd**

- FOSC does not have authority to reject an invoice.... Only Contracting Officer
- Any exceptions to the invoice must be included in the certification (letter or e-mail)
- No later than 10 days from receipt FOSC shall e-mail certification package to SILC
  - Contracting Officer, Contract Specialist, SK
- Send Cost Documentation package to NPFC

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## **FOSC Responsibilities, Cont'd**

- Proper Invoice must include:
  - (1) Name and address of the Contractor
  - (2) Invoice date
  - (3) FPN or CPN Number
  - (4) Basic Ordering Agreement number
  - (5) Description of supplies delivered or services performed.
  - (6) Signed copies of Pollution Incident Daily Resource Report(s)
  - (7) Copies of Subcontractor Invoices if any (See H.2)
  - (8) Contractor's Invoice Number
  - (9) Contractor's Data Universal Numbering System (DUNS)
  
  - (10) Hazardous Substance/Material Manifest (if applicable)
  - (11) Subcontractors Invoice if any (if applicable)
  
  - (12) Release (Attachment J. 6) (Final Invoice)

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## **Hiring of Non-BOA KTR**

- If no BOA KTR can respond the FOSC can hire a Non-BOA contractor
- FOSC can issue an ATP to non-BOA KTR up to \$50,000.00
- Contact SILC Contracting Officer ASAP
- Need to provide: Who, what, when, where, etc.
- Message traffic should flow normally
  - \*(See CGAP subchapter 1217.9208)

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## Non-BOA KTR (cont.)

- Contracting Officer contacts contractor
  - checks debarred list
  - ensures contractor is registered at CCR.gov
  - establish "Terms and Conditions"
    - Sub-contract approvals
    - Disposal, etc.
  - negotiate pricing
  - provide Coast Guard 5136s (Dailies)

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## Non-BOA KTR (cont.)

- Inventory equipment on scene
- No dailies: Use contractor Inventory Sheet
- Notify contractor of equipment not needed

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## Contracting Officer Responsibilities

- Monitor message traffic
- Issues Order under BOA citing FPN or CPN and Not-To-Exceed ceiling price in accordance with ATP message
- Negotiates/approves requests for subcontracts & non-BOA items
- Approves Payment to Contractor based on FOSC certification of invoice

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## **Contracting Officer Responsibilities**

Sub-Contracted versus Non-BOA items

- Sub-Contractor items: Contractual arrangements between BOA Contractor and 3<sup>rd</sup> Party Contractor
  - Services, equipment or products not a part of BOA
- Non-BOA items: Owned by the BOA contractor but not a part of the BOA.
  - Ex: rarely used equipment and materials

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## **Sub-Contractor versus Non-BOA items (cont'd)**

- MUST be approved by Contracting Officer....
  - BOA Section H.2. SUBCONTRACTS AND/OR NON-BOA ITEMS, SERVICES
    - Directs the Contractor to notify the Contracting Officer
  - SILC SOP #4 paragraph #7B
    - Directs FOSC to notify the Contracting Officer & Directs the contractor to do the same
- Only the Contracting Officer is authorized to approve cost

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## **Invoice Payment Approval**

- Invoice submitted in accordance with BOA G.3 (original to unit copy to SILC)
  - SILC reviews invoice package to ensure submission is in accordance with BOA G.1.(e) Proper Invoice
  - Follows up with unit for Certification of invoice per paragraph 7.A.4 SOP
  - Approves payment in accordance with Prompt Payment Act

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## **Contractor Responsibilities**

- Adheres to all Terms and Conditions of their BOA
- Responds to job site IAW time frames provided as planning factors in the CG OSRO guidelines or as otherwise agreed to with FOSC
- Uses personnel, equipment, materials in quantities as directed by FOSC/OSC representative (OSCR)



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## **Contractor Responsibilities Cont'd**

- Documents all personnel, equipment, materials used each day on CG "dailies"
- Submits dailies to FOSC/OSCR for signature indicating agreement/ disagreements
- Monitor "Not To Exceed" ceiling
  - Notify Unit and Contracting Officer prior to exceeding ceiling IAW BOA Section H.4(b)

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## **Contractor Responsibilities Cont'd**

- Submit requests for Sub-Contracts and/or Non-BOA approvals with competition to Contracting Officer prior to execution or within one business day
- Submit "Proper" invoice in accordance with BOA G.1 Invoice Requirements
  - no later than 60 days after completion of services

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## Annual Updates/Renewal

- Anniversary date of BOA award or last update; reviewed for accuracy, decision to negotiate (Contractor & Government decide)
- Performance Evaluations
- Opportunity to add/delete items
- Benefits: Simpler, faster procedures used to alleviate time problems, excess paperwork for both parties, current market rates & updated resources

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## Summary



- BOA "Basic Ordering Agreement"  
Not a Contract
- FOSC and/or Contractor decides what needed; only Contracting Officer can negotiate and approve pricing
- Invoice certification must be completed within 10 days to avoid interest payments
- Final invoices should be received within 60 days after job completed

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## What if....

- RP identified after hiring BOA Contractor...
- RP hires a contractor initially... day three: decides he cannot pay contractor anymore so we Federalize the case...

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What if....

- Why is it important to get dailies daily?
  - Ceiling Management
  - Sub-Contract / Non-BOA Management
  - Monitor personnel and equipment on-site

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What if....

- Project ceiling needs to be increased...
  - CANAPS message
  - Consult with NPFC Case Manager
  - Determine if ATP ceiling needs to be increased
    - ATP message increasing the ceiling

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What if....

- The contractor exceeds his ATP ceiling...
  - Notify contracting officer immediately
  - Increase project ceiling if needed
  - Increase ATP message
  - Discuss ceiling management with contractor

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What if....

- Contractor submits an invoice after the case is closed by NPFC....
  - Contact NPFC Case Officer
  - Contact Contracting Officer

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What if...

- Your prime BOA contractor wants to hire another BOA contractor as their sub-contractor...

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What is....

- The website to the BOA...
- East Coast BOAs  
[http://cgweb.lant.uscg.mil/FDIV/BOAs\\_Active\\_List.htm](http://cgweb.lant.uscg.mil/FDIV/BOAs_Active_List.htm)
- West Coast BOAs  
<http://cgweb.mlcpc.uscg.mil/mlcpacftp/mlcpfftp/OilSpillBOAS/boaweblist.xls>

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## Questions



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### Cell phone numbers



- Karen McElheney (757) 615-2141
- Jackie Dickson (757) 615-2135
- Dawn Dabney (757) 647-6560



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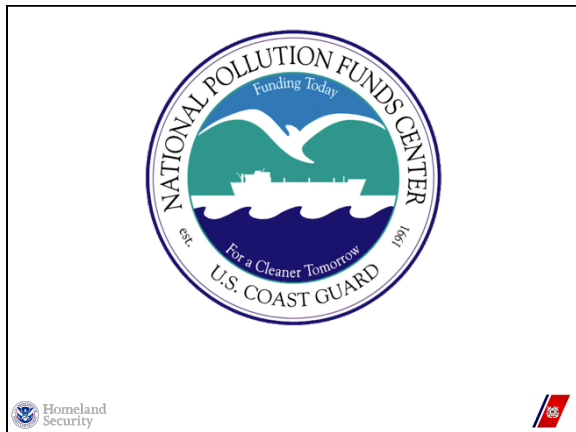
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### Agenda

- > Review NPFC Organization & OPA 90
- > Overview of the Oil Spill Liability Trust Fund
- > Oil Spill Response Funding and Financial Management
- > FOSC Responsibility

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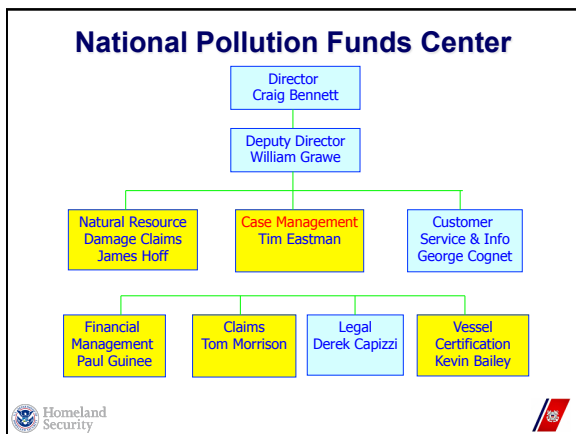
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### NPFC Summary

- CASE MANAGEMENT YOUR REGIONAL CASE OFFICER IS YOUR POC you will see how we breakout by AOR on the next slide.
- COFRs are to be taken into account when they are in play. *Your spider sense may be telling you something.*
- FINANCE runs in the background but you may hear from them on CERCLA responses.
- CLAIMS are available for both removal and damage as a direct result of the oil; loss of income; loss of revenue for public services, etc...
- If there are high probabilities for claims DESIGNATE the RP we will do it for you! Just call us.



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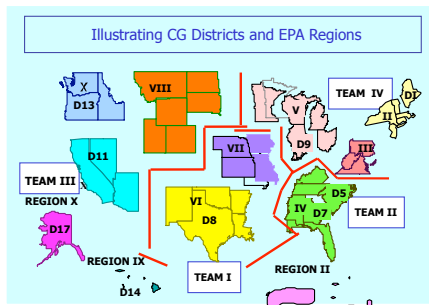
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### NPFC Case Management Regional Structure



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### Why Respond to Oil Spills?

- > To Minimize the Total Negative Impact of the Incident on Society & Environment
- > Negative Impact includes the cost of cleanup, environmental damages (NRDA), third party economic and property damage, public health and safety impacts, political actions, public perception, etc.
- > **WHO PAYS?**



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### Response Funding

➤ **Oil Spill Liability Trust Fund (OSLTF)** – is the source of funding to support (1) Federal response to an OPA 90 type incident including but not limited to, (2) the Initiation of Natural Resource Damage Assessments (INRDA) and (3) compensation for damages related to an oil discharge.

- Adequate funds
- Establish liability
- Compensation (claims)



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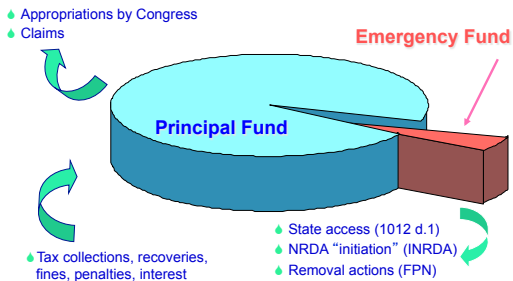
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### OSLTF \$2.7 Billion Dollar Trust Fund



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### Response Funding (“threshold items”) Does the OSLTF-OPA 90 Apply?

- Is the substance oil?
- Is there a discharge or a substantial threat of a discharge?
- Is there a discharge or a substantial threat of a discharge to navigable waters?



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### Funding

➤ When an incident is identified, the FOSC uses CANAPS to obtain:

[Ceiling and Numbering Assignment Processing System](#)

- A Federal Project Number (FPN) when using the Oil Spill Liability Trust Fund (OSLTF) for oil incidents
- A Comprehensive Environmental Response, Compensation, & Liability Act (CERCLA) Project Number (CPN) for hazardous substance incidents



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### Uses of the OSLTF ("Removal" Costs)

➤ Containment, Countermeasures and Cleanup

➤ **Direct**

- Purchases
- TAD/TDY
- Contracts
- Pollution Removal Funding Authorizations (PRFA)

➤ **In-Direct**

- CG Personnel
- CG Equipment
- Standard Rates
- CG-5136 - "GOVERNMENT"



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### Coast Guard Travel

- Obligations vs. Expenditures
- Authority
  - Travel Orders
- Actual Costs
  - Travel Voucher Summary (TVS)
- CG-5136



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### CG Contract

- Basic Ordering Agreement (BOA)
  - Routine Delivery Order/ATP
  - CG-5136 "CONTRACTOR"
- Procedures and limitations for hiring:
  - BOA contractor
  - Non-BOA contractor
  - Subcontracting



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### Pollution Removal Funding Authorizations (PRFA)



- An operational/financial document
- Two types
  - Federal agency
  - Non-Federal agency
- Work Statement (SOW)
- PRFA Amendments
- "OBLIGATION" in CAS
- Account for in "CEILING"



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### CG Personnel and Equipment

(In-Direct)

- Description - Role
- Actual hours
- Standard Rates
- CG-5136
- Document, Document, Document,.....



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### Shifting from RP Funding to OSLTF Funding

- RP funding sources may be overwhelmed by a major response
- Priority is on keeping the response moving
- Smooth transition to (“fully”) OSLTF is KEY
- Transition is NOT easy
- Contracting actions, response management team changes, roles, financial procedures, etc.
- Solution? Daily Cost Reviews = EARLY WARNING!!!!



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### FOSC Responsibility

- Required of the FOSC by:
  - 40 CFR 300.160  
“During all phases of response, the lead agency shall complete and maintain documentation to support all actions taken under the NCP and to form the basis for cost recovery.”
  - 40 CFR 300.315  
“OSC’ s shall ensure the necessary collection and safeguarding of information, samples and reports.”



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### If It Isn’ t Documented, It Didn’ t Happen

- Don’ t just turn in the tidy stuff. The original messy copy may help validate/clarify an entry on a Purchase Order, Receipt or Invoice
- Turn in all supporting documents (i.e. ICS- 211)
- Don’ t let ANYONE tell you that you don’ t need it. You are thinking ahead and for the entire “TEAM COAST GUARD”



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**USCG Costs (CG-5136 Series)**



- Completed daily for all incidents
- Consistent amount of detail required
- FOSC certification



Microsoft Excel Worksheet



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**CG-5136 (“Electronic”)**

- National Pollution Funds Center Job Aid for completing the electronic version of the CG-5136



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**FOSC Financial Summary Report Content**

- Incident Report and Transmittal
- CG-5136 (series)
- Case/Cost Documentation Checklist
- Enclosure(s) as needed (“Strike Team” – Incident Summary Report and/or Message)



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**WHAT ARE THE LATEST TOOLS**

- > **MMRT**
- > **ALMIS**
- > **AOPS**



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**MMRT**

- > **Mobilization Readiness Tracking Tool**
- > **All personnel support elements within the ICS Structure are required to implement the usage of MRTT upon the start of a contingency (per ALCOAST 160/11 - dated 8 April 2011).**
- <http://www.uscg-mrttcps.net/training/>



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**ALMIS**

- > **ASSET LOGISTICS MANAGEMENT INFORMATION SYSTEM**
- > **ALMIS –You will need User Access Authorization from Aviation Logistics Center (ALC) Elizabeth City, NC (aircraft and small boats)**
- > **You can find both AIRCRAFT AND SMALL TIME**
- <http://cgweb.almis.uscg.mil>



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### AOPS

- > CUTTER TIME VERIFICATION
- > AOPS can get you asset verification for all CUTTER asset use.
- > Password required
  
- <http://aops.osc.uscg.mil/>



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### MMRT; AOPS; ALMIS

- > THESE TOOLS ARE IN YOUR FUTURE USE THEM.
  
- > As of APRIL 2011 MMRT is required now.



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### FOSC Incident Report and Transmittal (IRAT - Five Sections)

- > Report & Transmittal
  - > Enclosures
- > Source Information
- > Contractors
- > Other Government Agencies (OGA' s)
- > Key Parties



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### Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- Purpose
- State responsibilities under PRFA  
ONE ACRONYM RCRA so....?  
The clean-up aint done til it rolls over the threshold....
- CERCLA (CPN) vs. OSLTF (FPN)



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### CERCLA

- Funding Procedures:
  - Discovery and notification
  - Removal site evaluation
  - Removal action
  - Remedial site evaluation/priorities
  - Remedial investigation feasibility studies/remedy; off-site response actions; state involvement



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### Summary

- Lots of issues take a long time to resolve
- Remember — cost documentation is just a part of the overall response documentation
- Safeguard your work



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**➤ QUESTIONS?**

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**NPFC Case Management Division**

Director (cm)  
USCG National Pollution Funds Center  
4200 Wilson Boulevard, Stop 7100, Suite 1000  
Arlington, Virginia 20598-7100

NPFC : (202) 493-6700

<http://www.uscg.mil/npfc/> (main site)  
<http://www.uscg.mil/npfc/URG/default.asp>  
(users guide)

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**Department of Homeland Security**  
U.S. Coast Guard  
National Pollution Funds Center  
4200 Wilson Boulevard, Stop 7100  
Suite 1000  
Arlington, VA 20598-7100  
202-493-6700 [www.uscg.mil/npfc](http://www.uscg.mil/npfc)

## FOSC Financial Management Checklist for Oil Spills & HAZMAT Release

*Step-by-step guidance for USCG & EPA FOSCs who are using the OPA/OSLTF or CERCLA/Superfund and must monitor cost documentation during response to a spill or release.*

### WHEN A DISCHARGE OR RELEASE OCCURS

**Determine funding source.**    \_\_\_ OPA/OSLTF    \_\_\_ CERCLA/Superfund

**OSLTF Funding is available for federal oil removal activities under the authority of Section 311(c) of the FWPCA, 33 U.S.C. 1321(c). In general, when:**

- ✓ There is a discharge of oil or a substantial threat of a discharge of oil
- ✓ EITHER into or on U.S. navigable waters, adjoining shoreline, or the waters of the U.S. exclusive economic zone.
- ✓ OR that may affect natural resources belonging to the U.S. or under U.S. exclusive management authority.

**The FOSC may:**

- ✓ Remove or arrange for removal of a discharge and mitigate or prevent a substantial threat of a discharge;
- ✓ Direct or monitor all Federal, State, and private actions to remove a discharge;
- ✓ Remove and, if necessary, destroy a vessel discharging or threatening to discharge (may require Commandant

**For Coast Guard FOSCs, Coast Guard CERCLA Funding applies if the requirements for Response Authorities in Section 104 of CERCLA, 42 U.S.C. 9604 are met. In general, when:**

- ✓ There is a release of a hazardous substance (other than oil) or substantial threat of a release into the environment that presents an imminent and substantial threat to public health or welfare.
- ✓ OR there is a release of a pollutant or contaminant that may present an imminent and substantial danger to the public health and welfare,

**The FOSC may:**

- ✓ Take action to remove or arrange for the removal of and provide for remedial action relating to such hazardous substance, pollutant, or containment at any time.

For more information on OPA, the OSLTF, CERCLA, and Superfund, see About NPFC on NPFC's home page ([http://www.uscg.mil/npfc/About\\_NPFC/default.asp](http://www.uscg.mil/npfc/About_NPFC/default.asp)).

**Collect incident information.**

Name of incident: \_\_\_\_\_

Date of incident: \_\_\_\_\_

Date of discovery: \_\_\_\_\_

Location (body of water, city, state): \_\_\_\_\_

Latitude and longitude: \_\_\_\_\_

Type of oil/substance: \_\_\_\_\_

\_\_\_\_\_ Visual Observation

\_\_\_\_\_ Field Testing

\_\_\_\_\_ Lab analysis

\_\_\_\_\_ Report by knowledgeable party

\_\_\_\_\_ Other: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Quantity of oil/substance: \_\_\_\_\_

\_\_\_\_\_

Description of substantial threat: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Potential quantity of total oil discharge/HAZMAT release: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Collect source and responsible party information.**

**Note:** The information collected by Coast Guard personnel should be recorded on the NPFC Incident Report and Transmittal Form (IRAT) (page 2). The checklist below is provided to help guide you through what information is needed.

- Name of vessel, facility, private residence, etc.:  
\_\_\_\_\_
- How was source/RP identified? \_\_\_\_ FOSC investigation      \_\_\_\_ Visual Observation  
\_\_\_\_ Reported by third party  
\_\_\_\_ Reported by RP  
\_\_\_\_ Other: \_\_\_\_\_
- Collect the following information on all parties connected to this incident, whether individual or company (record on IRAT):
  - Name
  - SSN/TIN\*
  - Address (address, city, state, zip code, & phone number)

\* Social Security/Tax Identification Number (SSN/TIN). The Debt Collection Improvement Act (31U.S.C. 3701) requires the FOSC/IC to obtain the SSN or TIN of the RP in order to pursue cost recovery.

**Estimate the OSLTF/CERCLA funding ceiling required (These totals should include all Coast Guard resources, if deployed to the response, e.g. Strike Team, PIAT, NPFC, etc.). THE COAST GUARD CEILING "ONLY" REPRESENTS ESTIMATED "DIRECT COSTS", AS DESCRIBED BELOW.**

**Estimated CG Direct Costs**  
(reflected against the ceiling):

Contractor costs: \_\_\_\_\_

Travel costs: \_\_\_\_\_

Purchases: \_\_\_\_\_

PRFA (OGA) costs: \_\_\_\_\_

**Total (Ceiling): \_\_\_\_\_**

**(To be requested via CANAPS)**

**Estimated CG Indirect Costs**  
(tracked, but NOT reflected against ceiling)

Personnel: \_\_\_\_\_

Equipment: \_\_\_\_\_

**For more information on direct and indirect costs and tracking these on the Electronic 5136 workbook, click here:**  
[www.uscg.mil/NPFC/Response/Cost%20Documentation/CG5136.ASP](http://www.uscg.mil/NPFC/Response/Cost%20Documentation/CG5136.ASP)

**Access CANAPS to get FPN/CPN and request ceilings**  
(<https://npfc.uscg.mil/CANAPS/>).**OSLTF Responses**Federal Project Number: \_\_\_\_\_  
Final Authorized ceiling: \_\_\_\_\_**CERCLA Responses**CERCLA Project Number: \_\_\_\_\_  
Final Authorized ceiling: \_\_\_\_\_

Refer to CANAPS message for accounting line and Document Control Number (DCN) construction.

If you cannot access CANAPS:

1. Contact another FOSC who can submit the request as a surrogate for you.

Any FOSC can be a surrogate for any other FOSC in their agency; any EPA FOSC can open an FPN for any other EPA FOSC, and any USCG FOSC can open a project for any other USCG FOSC. In addition, a USCG FOSC can open a project for an EPA FOSC.

2. Contact the NPFC Command Duty Officer (CDO).
3. As the FOSC, you are authorized to obligate up to \$25,000 for response actions.

**CERCLA Only. If the estimated ceiling is:**

- Equal to or greater than \$250,000, contact your NPFC Regional Manager for assistance in submitting an Action Memorandum to EPA before obligating the amount,
- Less than \$250,000, document the finding of imminent and substantial endangerment in POLREP one.

The finding at a minimum must include:

- The hazardous substance(s), pollutant(s), or contaminant(s) involved;
- A description of what is affected or threatened (people, animals, crops, drinking water, etc.);
- A statement indicating that this situation presents an imminent and substantial threat to public health, welfare, or the environment; and
- A description of the response action necessary to neutralize the threat.

**Contact the NPFC for assistance. Assigned Case Officer:** \_\_\_\_\_

Gulf Coast & Midwest	Team I	202-493-6745	On weekends, holiday, and after hours, you will hear recorded instructions for paging.
Southeast	Team II	202-493-6726	
West Coast, Alaska, Hawaii	Team III	202-493-6729	
Northeast & Great Lakes	Team IV	202-493-6732	
If your regional manager is not available:			
Call the duty officer's cell phone at (202) 494-9118 or e-mail at NPFC.CDO@uscg.mil.		or	Call the NPFC Command Duty Officer (CDO) by contacting the National Response Center (NRC) at 1-800-424-8802 or (202) 267-2675.

- Download the Electronic CG-5136 Workbook for ceiling management and for documenting all the costs on both FPN and CPN cases:**  
([www.uscg.mil/npfc/Response/Cost%20Documentation/cg5136.asp](http://www.uscg.mil/npfc/Response/Cost%20Documentation/cg5136.asp))

The workbook consists of three levels of information:

- ◆ Project Summary – used to monitor ceiling, track overall costs and provides a burn rate of costs.
- ◆ Summary Page – provides an overall summary of cost for each day and each cost category.
- ◆ Daily Summary – is where all the cost data is entered which rolls up to the two levels above.

**Note:** If the electronic work book is not available, you have to use to paper version of this document (CG-5136B through 5136E) to capture all the Coast Guard costs.

- Follow the NPFC's guidance for use of funds and to arrange response actions. Contract through SILC (pcb1) and use Pollution Removal Funding Authorizations (PRFAs) for other government agencies (OGAs). EPA FOSCs use their START (Superfund Technical and Response Team) or ERRS (Emergency and Rapid Response Services) contractor's, but may use USCG BOA contracts, if needed.**

Resources on NPFC's Web Site ([www.uscg.mil/npfc](http://www.uscg.mil/npfc))

The NPFC's User Reference Guide (URG) includes guidance on contracting ([www.uscg.mil/npfc/urg/default.asp](http://www.uscg.mil/npfc/urg/default.asp)).

PRFA forms and instructions are available on NPFC's Web site ([www.uscg.mil/npfc/Response/Cost%20Documentation/prfa.asp](http://www.uscg.mil/npfc/Response/Cost%20Documentation/prfa.asp)) as well as in the URG.

## During Cleanup – Every Day

### Monitor Contractors.

- Collect contractor daily worksheets or delivery tickets and/or Pollution Incident Daily Resource Reports.

Oil spill response contractors may use the Parts E1 to E4 of the CG-5136 form to track and submit daily costs. These forms are available on NPFC's Web site: ([www.uscg.mil/npfc/Response/Cost%20Documentation/cg5136.asp](http://www.uscg.mil/npfc/Response/Cost%20Documentation/cg5136.asp)) as well as in the URG.

Follow the 10-10-10 Rule!

- 1) Forward invoices to SILC (pcb1) within 10 days.
- 2) SILC (pcb1) forwards payment authorization to FINCEN within 10 days of receipt.
- 3) FINCEN pays the contractor within 10 days of receipt.

- Date-stamp all invoices upon receipt. (Prompt Payment act applies; payment is due to the contractor within 30 days.) Within 10 days of receipt of invoices, certify that work was performed as ordered (as FOSC, you should not certify work that was not ordered) and forward to SILC (pcb1).

**Monitor Coast Guard Units.**

- Consolidate all daily reports for your unit onto the Pollution Incident Daily Resource Reports. (This should cover all unit resources involved in removal activity).
  - To expedite tracking all CG costs, you should use the Electronic CG-5136 Workbook. See job aid for completing the electronic 5136 workbook located at this website:  
  
[www.uscg.mil/NPFC/Response/Cost%20Documentation/CG5136.ASP](http://www.uscg.mil/NPFC/Response/Cost%20Documentation/CG5136.ASP)
- Collect Pollution Incident Daily Resource Reports or official records (i.e. aircraft utilization records and cutter navigation logs) from other Coast Guard units.
- Keep copies of all travel claim packages. (Member are also required to keep copies of**  
Each travel claim package must include:
  - Copy of signed original orders (which **must** be signed by an approving official and Funds Certifying Officer, including those generated by Direct Access).
  - Copy of all signed amendments.
  - Copy of Travel Voucher Summary (TVS)In addition, if a Government Travel Request (GTR) was used, include a copy of the airfare itinerary

 **Monitor other government agencies (OGAs).**

- Issue Pollution Removal Funding Authorizations (PRFAs) and definitive scopes of work (SOWs) to other Federal and state agencies participating in the FOSC-directed response.  
  
PRFA forms and instructions are available on NPFC's Web site:  
[www.uscg.mil/npfc/Response/Cost%20Documentation/prfa.asp](http://www.uscg.mil/npfc/Response/Cost%20Documentation/prfa.asp) as well as in the URG.
- Collect OGA SF-1080 or SF-1081 vouchers and supporting documentation in accordance with the PRFA.  
  
SF-1080 or SF-1081 forms and instructions are available on NPFC's Web site:  
[www.uscg.mil/npfc/Response/Cost%20Documentation/sf1080.asp](http://www.uscg.mil/npfc/Response/Cost%20Documentation/sf1080.asp) as well as in the URG.
- Review OGA SF-1080 or SF-1081 voucher and certify that work was performs as ordered.

**Validate all obligations and track them against the ceiling.**

- 
- Ensure all direct expenses (obligations) are entered on the CG Dailies or the Electronic CG-5136 Workbook and have been entered into Finance Procurement Desktop (FPD) by the unit.

Note: Obligations include:

- Travel orders;
- GTR's;
- Contractors;
- PFRAs (for OGAs);
- MIPRs;
- Purchase Orders;
- Credit Card Purchases;

- 
- In addition, enter all indirect expenses (anticipated costs/estimates of Coast Guard resources based on Coast Guard Standard Rates such as CG Personnel, vehicles, aircraft, boats, cutters, and Strike Team resources). Note: These costs are tracked but do not impact the ceiling of the incident.

USCG Standard Rates are available on NPFC's Web site:

[www.uscg.mil/npfc/Response/Cost Documentation](http://www.uscg.mil/npfc/Response/Cost%20Documentation) as well as in the URG.

 **Use CANAPS if you must increase the ceiling (<https://npfc.uscg.mil/CANAPS/>)**

For example, if you have reached \$40K against the \$50K ceiling, and you expect the total costs to exceed \$50K, increase your ceiling to accommodate the anticipated needs of the response.

 **Contact your NPFC Case Officer or the SILC (pcb) Contracting Officer, as appropriate, anytime you need assistance.****After the Response Action Is Completed** **Certify contractor invoices within 10 working days of receipt of invoices.**

Ensure that all certification for receipt of services is in accordance with the standard SILC (pcb) and Finance Center procedures. (Contact appropriate SILC (pcb) contracting officer if questions arise, or if invoice cannot be certified. The FOSC certifies receipt of invoiced goods and services in quantities indicated; the cognizant contracting officer verifies costs).

 **Forward certified contractor invoices to SILC (pcb), as appropriate.** **Keep copies of all certified contractor invoices for the unit's files.**



**Compile an inventory of all equipment purchases.**

- All reportable property and highly pilferable property must be disposed of at DRMO and should not be kept at the unit.
- Provide disposition reports on all property and comply with COMDTINST M4500.5

 **Within 120 days of completion of cleanup, send the Financial Summary report to the NPFC.**

- The Financial Summary report includes:

- Incident Report and Transmittal (IRAT)

The Incident Report and Transmittal form serves as a coversheet to the project's Financial Summary report. It is available on NPFC's Web site:  
([www.uscg.mil/npfc/Response/Cost%20Documentation/irat.asp](http://www.uscg.mil/npfc/Response/Cost%20Documentation/irat.asp)) as well as in the URG.

- FOSC Pollution Daily Resource Reports.
- Contractor Invoices & Daily Resource Reports
- Other Government Agencies Resource Documentation (SF1080/1081 with invoices, Daily Resource Reports, PRFAs with SOWs)
- Inventory of Equipment Purchased

- If you are using the Electronic CG-5136 form (i.e., the Excel spreadsheets) in lieu of the manually completed CG-5136B-F forms, do NOT throw away the original.

 **Retain records according to the USCG's Records Schedule; keep case file for:**

- **Major spills** for 10 years before forwarding them to NARA as permanent records.
- **Medium and minor spills** for 20 years before destroying them.
- The NPFC may request a longer retention period for a particular case to support cost recovery or other litigation efforts.

OSLTF case files are subject to auditing by the NPFC; they must contain all paperwork relevant to the response effort, including but not limited to:

- Procurement paperwork
- Travel documentation
- News clips
- Credit card information paperwork
- Polreps

## COST DOCUMENTATION SCENARIO

### Coast Guard Members

You are MST1 K. MacGyver and are a FOSCR at Sector Hampton Roads. MK2 P. Wrenchitt is working on his FOSCR qual and will be responding with you. LT S. Dilbert is the Assistant Branch Chief and will provide administrative support for your team.

### Contractor

Charleston Marine Services  
BOA – DTCG84-99-A-700052

Ted Nugent – Supervisor  
Billy Cassidy – Laborer  
Fred Sanford – Laborer

Thursday morning you receive a report of diesel fuel in the public boat ramp at Point Desolate State Park on the York River. You leave the Sector at 0915 in a Dodge Durango 4x4 with 17,321 miles. LT Dilbert contacts Station Goose Point and gets a 47' MLB to conduct a river patrol to assess impact along the York River. 47564 is underway at 1045 with 04 POB (BM2, MK3, 02 SN). You arrive on scene at 1050 and your investigation reveals approximately 25 gallons of red diesel partially contained in a natural collection point. No responsible party is obvious so at 1115 you recommend hiring a contractor for clean up. LT Dilbert then accesses CANAPS for \$7,500 and at 1130 hires Charleston Marine Services to respond under their BOA. ATP is \$5,000.

You contact Ted Nugent, the crew supervisor, and request a total of three contractor personnel (supervisor and 02 laborers) and equipment for a manual cleanup. Contractor arrives on scene at 1300 after a 45 minute, 27 mile ride with a 1 ton pulling an ER and boom trailer and a 1 ton pulling a 16' boat. They dress out in Tyvek coveralls, disposable boots, nitrile gloves, taping the gloves and boots on with duct tape, and deploy 250' of 18" boom to contain the diesel during the cleanup. You meet with the supervisor and decide the best procedure to recover the fuel would be to spread sorbent pads, turn them until saturated, manually recover, and place in lined, open top drums. A recovery site is set up with plastic sheeting to protect the ground, a roll of barricade tape is used around the site, and cleanup begins. At 1415, 47564 returns to base with no additional diesel or an RP found. Contractors replace their gloves three times during the response. After using 2.5 bags of sorbent pads you decide that all recoverable oil has been collected and at 1900 the boom is recovered. By 1930, all contaminated materials have been collected in 06 plastic lined, open head metal drums and you secure the scene. Charleston Marine departs and returns to their office at 2020 where they secure for the day. Disposal of contaminated materials is handled by SWS through a subcontract in place between Charleston Marine and SWS. The cost for disposal is \$1,129.05.

Your team departs at 1930 and returns to the Sector at 2015, mileage in 17,465, and after debriefing the CDO, you secure for the day. LT Dilbert left a note on your desk stating that she spent 02 hours working on the case with you and would like to see the cost documentation before the end of the week.

## NOAA's Role in Emergency Response

(Charlie Henry, NOAA Scientific Support Coordinator)



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## Origins of NOAA HAZMAT Program...

- 1976

*Argo Merchant* oil spill,  
Nantucket, Massachusetts

The tanker broke into two pieces Dec. 21, 1976, after running aground six days earlier on its way to Salem with a load of 7.3 million gal. of heavy fuel oil.



*Spilled Oil Research (SOR)  
Team* established

- Nov 16, 1977 *Scientific Support Team* established for emergency spill response assistance to the U.S. Coast Guard and EPA

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## AGENCY MISSION STATEMENT

The NOAA Office of Response and Restoration is guided by three goals in carrying out its stewardship responsibilities:

- Reducing threats to coastal resources and human health through planning and response.
- Protecting coastal resources and human health by recommending and implementing appropriate response actions.
- Restoring injured trust resources.

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## Other than just another NOAA Scientist...

...what is a Scientific Support Coordinator (SSC)?

...see IMH, p15-22

...total of 9 SSCs



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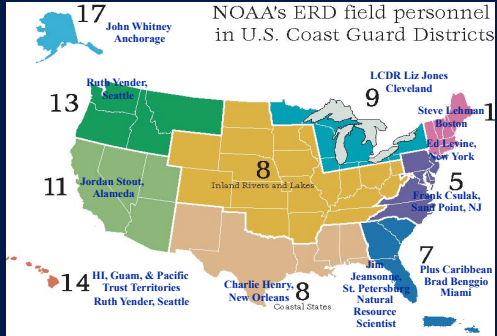
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## DISTRIBUTION OF NOAA SSCs



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## Scientific Support Coordinator (SSC):

- SSCs provide the Federal On Scene Coordinator (FOSC) with scientific advice with regard to the best course of action during a spill response.
  - FOSC is most often the USCG COTP or an EPA OSC
  - SSC's do not restrict support to only the USCG and EPA
- The SSCs are essentially scientific-technical consultants to the FOSC for oil and hazardous material incidents. SSCs may be requested to respond to any emergency (all hazards).
- One of the identified Special Forces (just like the USCG Strike teams...)

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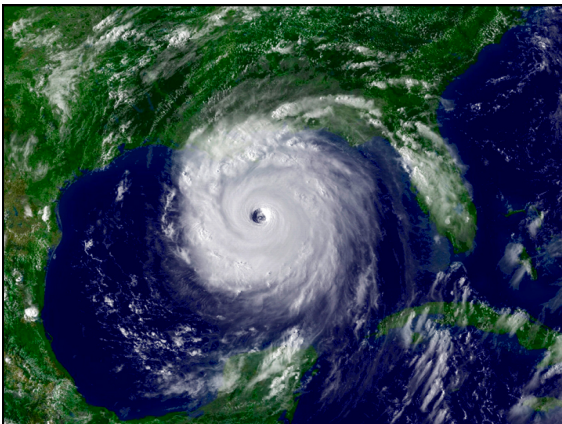
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## NOAA Scientific Support Includes:

- *Weather Forecast*
- *Tides and Currents*
- *Hazard Characterization*
- *Tactical Trajectory*
- *Natural Resources at Risk (RAR)*
- *Overflight Obs.*
- *SCAT*
- *Environmental issues and trade-offs*
- *Consultation*




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## Science Team Composition

(the guys and gals who make the SSC look good)

- SSC's often manage a team of scientist:
  - » Oceanographers
  - » Modelers
  - » Biologists
  - » Chemists
  - » Weather Forecasters
  - » Info. Management Specialists



- Each spill is unique and the team composition highly variable to meet the needs and demands of the FOSC.

(30 years of corporate knowledge)

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## Pollutant Transport/Weathering Modeling

- Interpretive Oil Trajectories (Forecasts)
  - Verbal Forecast
  - Written Forecast

- Modeling Products
  - ALOHA
  - OSSM
  - GNOME
  - ADIOS2



surface transport drivers include wind, currents, and tides

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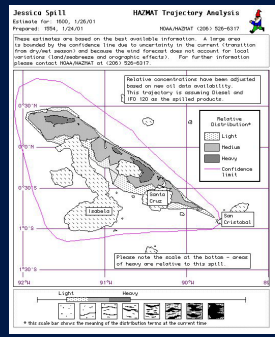
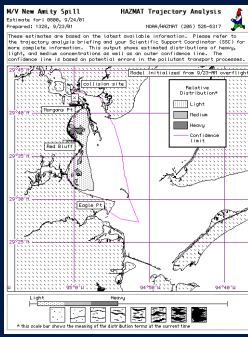
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## Tactical Planning - Trajectory Analysis



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## HAZMAT Chemical Products Aloha

CAMEO

Chemical Library

Chemical Name: CHLORINE

Chemical Identification Information

Firefighting	Fire Hazards	Non-Fire Response	Health Haz
Operator Description	Properties	Reactivity	Reactive Hazards

Response Data

First Aid

Marplo

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## Natural Resources at Risk

- ESIs
- ESI Maps
- RARs
- Endangered Species
- Manager Consultations
  - Planning
  - Spill Response
  - Post-Incident
  - Ecological Risk Assessments



[NOAA Trust Resources](#)

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## Research Efforts



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## Factsheets, Manuals & Job Aids

A collage of various NOAA job aids and manuals. The items include: "OPEN WATER OIL IDENTIFICATION JOB AID for aerial observation", "Shoreline Assessment Job Aid", "Trajectory Analysis", "Dispersant Application Observer Job Aid", "Oil Spills in Mangroves", "Oil and Sea Turtles", "Oil Spills in Coral Reefs", and "Managing Seafood Safety after an Oil Spill". Each item features a small image related to the topic.

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National Oceanic and Atmospheric Administration  
Stewards of the Nation's Coastal Environment



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### WHAT ARE NOAA TRUST RESOURCES ?

- Commercial and recreational fishery resources
- Anadromous species (such as the Gulf Sturgeon)
- Endangered and threatened marine species and their habitats (sea turtles)
- Marine mammals including whales, dolphins, and seals
- Marshes, mangroves, seagrass beds, coral reefs
- Resources associated with National Marine Sanctuaries and National Estuarine Resource Reserves

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**"I have never been to the same oil spill twice."**  
Jacqui Michel

Two side-by-side photographs showing a person wearing a full-body yellow protective suit and a hood, working on a beach. The person is using a tool to clean up a spill of dark oil on the sand. The background shows the ocean and a cloudy sky.

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## Contacting your NOAA SSC

- ☞ There are only nine NOAA SSCs for all the US and US Territories.
- ☞ For support call:

**(206) 526-4911**

- ☞ For Information (Website):

<http://response.restoration.noaa.gov/>

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## Preliminary Assessment & Actions Continued...

Role of NOAA  
Scientific Support Coordinator



Federal On-Scene Coordinator Representative Training



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When things go bump in the night...



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Thought process... asking the right questions.

- What got spilled? -
- Where's it going? -
- Who's going to get hit? -
- How will it hurt? -
- What can be done? -



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### Preliminary Assessment & Actions

2.1 Plot an oil spill trajectory based on a recent pollution response.

- **What Information Drives a Good Oil Spill Trajectory?**
  - **Spill Source and Pollution (Surface Slick) Observations**
    - Point Source Location (Lat./Long.)
    - Slick Position and Heading
    - Slick Distribution and Weathering Observations
    - On-Scene Weather Observations (Wind Direction, Sea State)
    - Multiple Observations (Time Sequence)
  - **Pollution Type (Oil Type and Characterization)**
    - Density (API Gravity)
    - Persistence (API Gravity, Sim. Distillation Curve)
  - **Understanding of Pollution Transport**
    - Marine Currents
    - Tidal Currents
    - Wind (for Surface Oil)
    - Bathymetry (Conversion Zones, Coastal Currents, etc.)



Federal On-Scene Coordinator Representative Training




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### Trajectory Analysis

"If I were to guess, I would guess that the oil slick went that way."




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### (More Than Just a Guess) Pollutant Transport and Oil Weathering Modeling

- **Interpretive Oil Trajectories (Mental Model-Verbal Trajectory)**
  - Verbal Forecast
  - Written Forecast
- **Modeling Products**
  - OSSM
  - GNOME
  - ADIOS2



surface transport drivers include wind, currents, and tides




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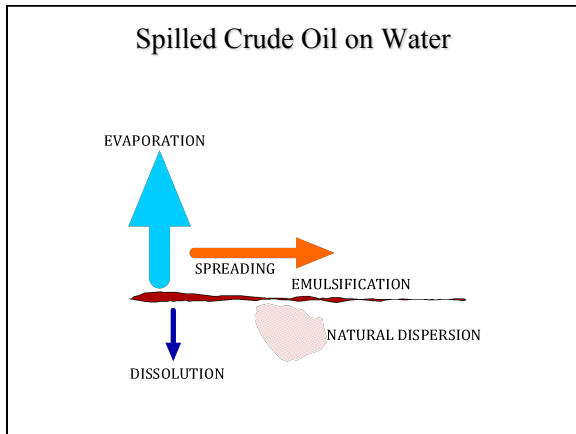
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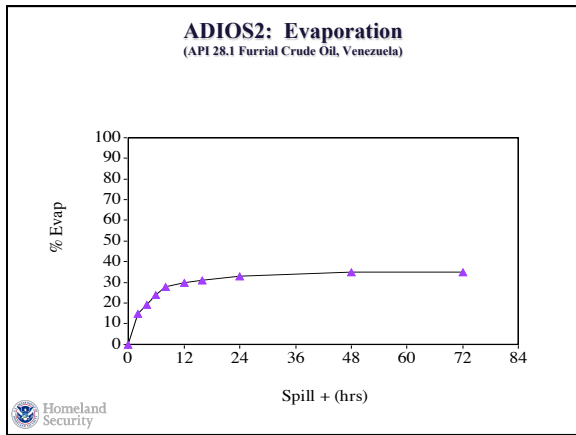
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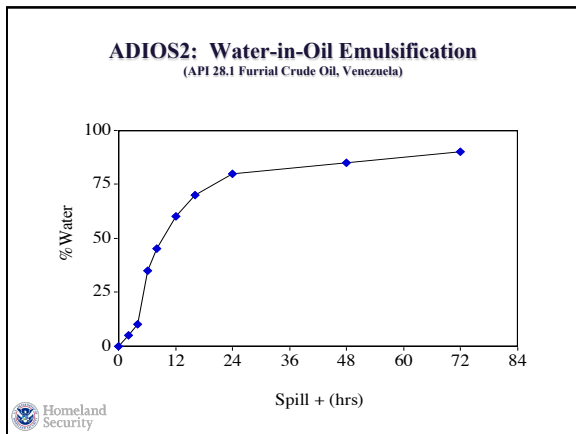
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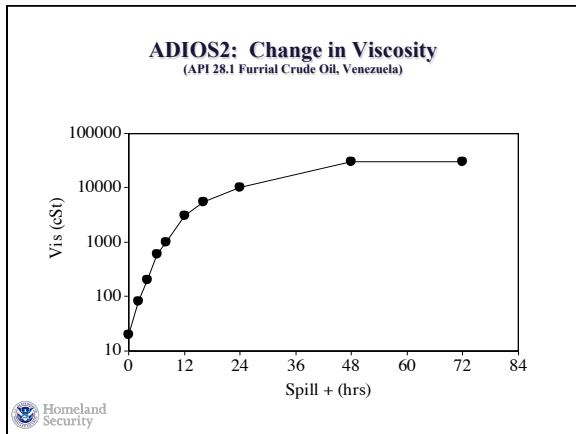
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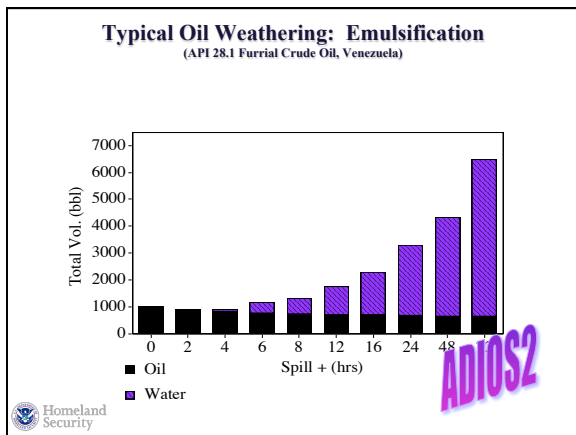
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### Some thoughts...

- ✓ Record time and lat./long.
- ✓ Use common terminology for describing oil sightings.
- ✓ Record direction of slick (heading).
- ✓ Beware of false positives.
- ✓ Avoid making volume estimates based on slick color.
- ✓ Always have the sun at your back when taking photographs.

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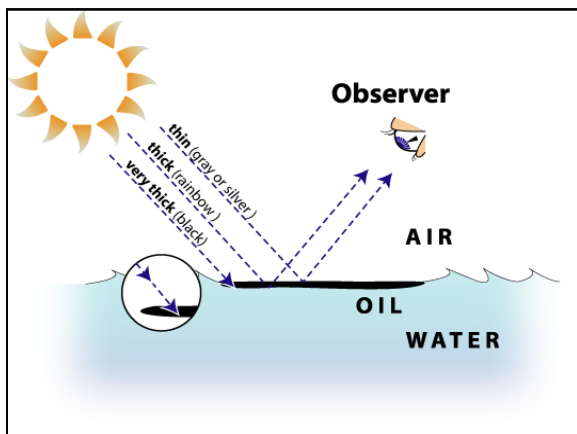
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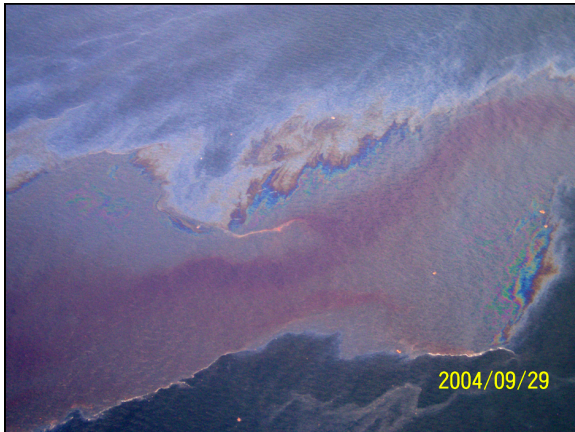
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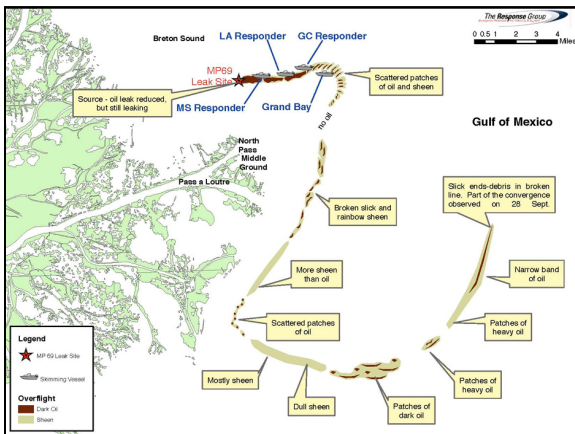
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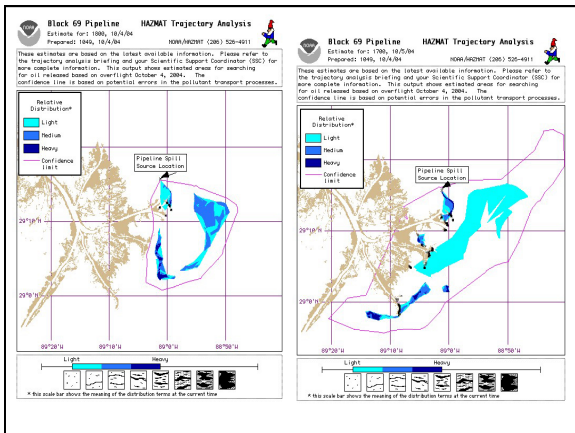
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### Preliminary Assessment & Actions

2.1 Plot an oil spill trajectory based on a recent pollution response.

**“Good field intel and observations set up the trajectory analysis, but what moves the oil onshore?”**



Federal On-Scene Coordinator Representative Training



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### 2D On-Water, Surface Transport Drivers:

- Winds (Weather Information from NOAA Marine Forecaster)
  - Ocean Currents (TABS, Earth Observing Systems, Observations)
  - Tidal Currents (NOAA Tide Predictions, Real-Time Monitoring)
- Oil generally moves at 2.5 to 3.5% (3%) of the wind speed and at 100% of the current speed.
  - To put oil onshore, you generally need an on-shore wind and slack or flooding tides.
  - Remember: “Winds are the direction from... currents are the direction of movement.”



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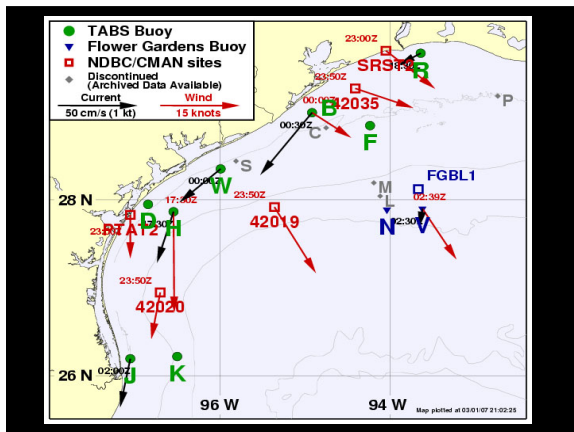
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**Exercise**

Homeland Security Federal On-Scene Coordinator Representative Training

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**Preliminary Assessment & Actions**  
2.3 Create an air plume model for a Hazardous Substance in your AOR.

- **What Information Drives a Good Plume Trajectory?**
  - First, Are You Asking the Right Question?
  - Release Source Information and Field Observations
    - Point Source Location (Lat./Long.)
    - Source Strength (Release Rate, Pool Area, Etc)
    - Plume Observations and Heading
    - "Is this an actual release or are we planning for possible release?"
    - On-Scene Weather Observations (Wind Direction, Ceiling)
    - Released on land, water, into the air...
  - Pollution Type (Chemical Type and Characterization)
    - Density (Heavy Gas or Vapor)
    - Vapor Pressure
    - Reactivity
  - Understanding of Pollution Transport
    - Wind (Dispersion)
    - Humidity (Reactivity)
    - Stability Factors
    - Topography (ALOHA Doesn't Include Topography)

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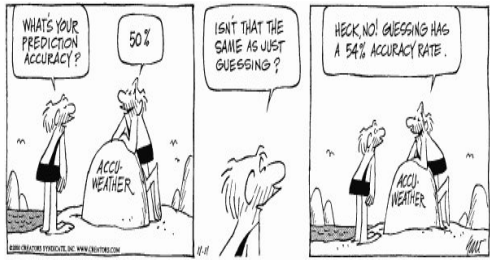
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Weather forecast for tonight: dark. Continued dark overnight, with widely scattered light by morning.  
George Carlin (1937 - )



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### Hydrogen Sulfide Release (Barge FT-22)



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### USCG Strike Team Deployment



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### Coordinate Oil Removal

5.3 Describe the advantages and disadvantages of pressure washing shoreline oil contamination using high and low pressures and high and low temperatures.

- **Philosophy for Shoreline Washing**
  - Lowest pressure required at ambient temperature best.
  - Increase temperature and pressure as required.
    - (increased environmental damage... cost, logistics, etc.)
  - Chemical shoreline cleaning agents are last choice.



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### Shoreline Cleaning: The Driving Factor

“Just how clean does it have to be.”

before - - - - - hot water high pressure - - - - - after



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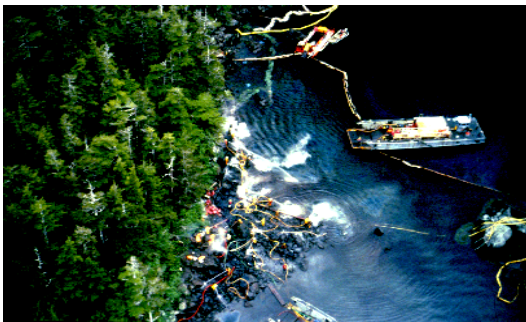
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### Shoreline Cleaning:

Low-Pressure Ambient-Water Flushing



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**Shoreline Cleaning:**

High Pressure Flushing (Ambient or Hot Water)



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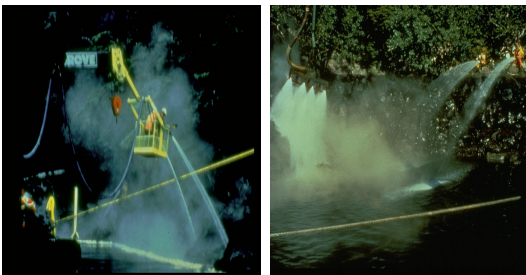
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**Shoreline Cleaning:**

Low-Pressure Hot-Water Flushing (Omni Boom)



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**Shoreline Cleaning:**

Steam Cleaning



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### Coordinate Oil Removal

5.3 Describe the advantages and disadvantages of pressure washing shoreline oil contamination using high and low pressures and high and low temperatures.

- Advantages
- Disadvantages
- Alternatives



Federal On-Scene Coordinator Representative Training



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### ESI-06B Oiled Riprap

(M/V Westchester Spill)



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### Ambient Water Flushing:

Big Bertha (Westchester Oil Spill, Mississippi River)



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**Coordinate Oil Removal**  
(5.4 - 5.6 Alternative Countermeasures for Oil Spill Response.)

- **5.4 Explain** the conditions and criteria necessary for implementing the following removal methods:
  - **In-situ burning**
  - **Bioremediation**
  - **Dispersion**


 Federal On-Scene Coordinator Representative Training 

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**Coordinate Oil Removal**  
(5.4 - 5.6 Alternative Countermeasures for Oil Spill Response.)

- **5.5 Explain** when the following removal methods should be used:
  - **In-situ burning**
  - **Bioremediation**
  - **Dispersion**


 Federal On-Scene Coordinator Representative Training 

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### Coordinate Oil Removal

(5.4 - 5.6 Alternative Countermeasures for Oil Spill Response.)

- **5.6 Contact** the appropriate agencies when the following the removal methods are used:
  - **In-situ burning**
  - **Bioremediation**
  - **Dispersion**



Federal On-Scene Coordinator Representative Training



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### Coordinate Oil Removal

(5.4 - 5.6 Alternative Countermeasures for Oil Spill Response.)

### DISPERSANTS



Federal On-Scene Coordinator Representative Training



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### What are the Function of Dispersants?

- ◆ The function of dispersants is to greatly enhance the transfer of oil from the water surface into the water column to mitigate oil spill impacts.
- ◆ The use of dispersants for oil spill response is often a **trade-off**: increased short-term injury to water column resources to minimize injury to surface water and shoreline resources.



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Why the bad reputation for dispersants?  
The *Torrey Canyon* maybe?

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At 17 knots, the *Torrey Canyon* hits Pollard's Rock in the Seven Stones Reef, and rips open 6 tanks... the year is 1967.



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“That was then...”

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**Dispersant applications in U.S.A. GOM since the 1989 Exxon Valdez Oil Spill:**

- T/V Mega Borg 1990 (**Dispersant Test Only**)
- (Passage of OPA90)
- West Cameron Block 168 Oil Spill 1995
- High Island Pipeline System Spill 1998
- T/V Red Seagull 1998
- BP-Chevron Pipeline 1999
- Blue Master 1999
- Poseidon Pipeline 2000
- Main Pass 69 Oil Spill 2004
- Deep Water Horizon Disaster 2010

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**Dispersants are Chemical Agents**

◆ - mixtures of solvents and surfactants

LIPOPHOBIC  
HYDROPHILIC  
(WATER LOVING)



HYDROPHOBIC  
LIPOPHILIC  
(OIL LOVING)




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**“...just Like Dawn™ Detergent (?)”**

- ◆ Dispersants, like detergents, are simply surfactants. Surfactants reduce the interfacial tension between water and oil, permitting the oil to break into tiny droplets. The function of the solvent is to reduce the viscosity of the surfactants. The solvent may also aid in surfactant-oil interaction.
- ◆ Dispersants enhance a natural process.
- ◆ The ultimate fate of oil spilled in the marine environment is biodegradation. Dispersion enhances the rate of natural biodegradation by increasing the surface area of the spilled oil.




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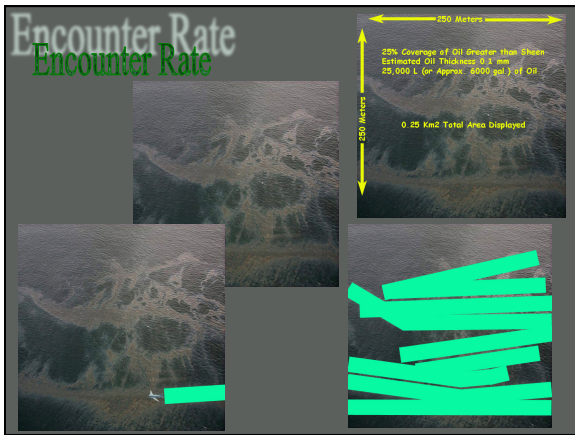
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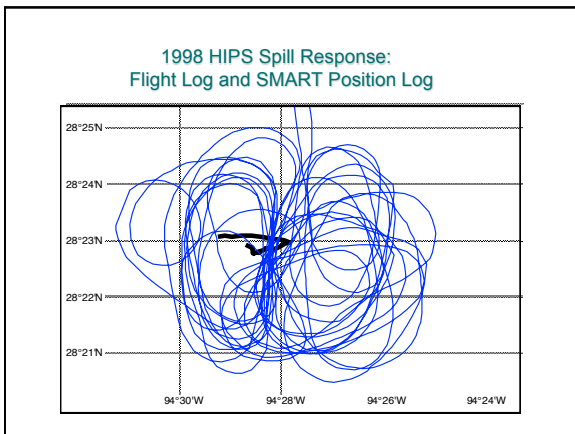
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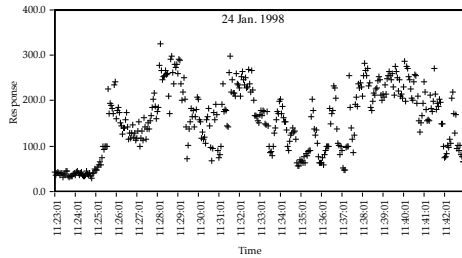
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### Tier II SMART Data: HIPS



Note the "patchy" nature of a dispersed oil plume.

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### Again, why consider using dispersants?

- ✓ Aerial application of dispersants can mitigate large amounts of oil if treated promptly.
- ✓ Mitigate -- reduce the overall impact of an oil spill to the environment as a whole.
- ✓ Clearly, dispersant use is a trade-off: increased risked to the water column to reduce injury to surface water and shoreline resources.
- ✓ Principal biological benefit of dispersant use is the reduction of oil impact on sensitive shorelines habitat and near shore resources.



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### Other reasons to consider dispersant use:

- ✓ Reduces potential damage to birds, marine mammals, and other natural resources that could be impacted by oil on the water surface.
- ✓ Provides a response option when other techniques are not available (such as remote locations, sea state too great for effective skimming).
- ✓ Enhances microbial degradation.
- ✓ Reduces formation of tar balls and mousse.



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**Dispersion Effectiveness Factors**

- **Oil Properties**
  - Initial oil composition (viscosity, etc.)
  - Changes due to oil weathering
  - Slick thickness
- **Operational Factors\***
  - Dispersant selection and application concentration
- **Environmental Factors**
  - Surface wave energy
  - Surface water salinity
  - Temperature

 Homeland Security

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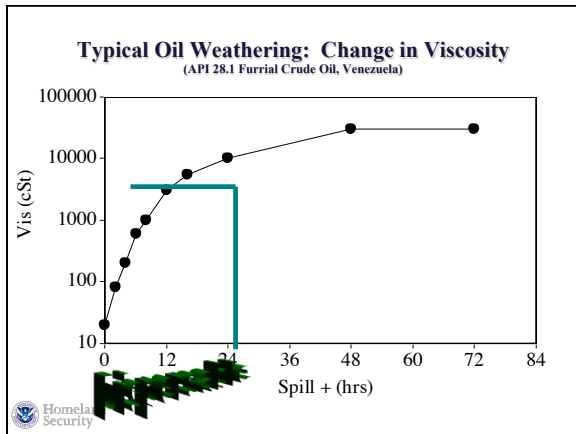
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**Why were dispersants not used?**

- ✗ Season - environmental balance against dispersant use.
- ✗ Oil type - nondispersable oil.
- ✗ Trajectory - low potential for land or other environmental impact.
- ✗ Weather - winds >25 knots.
- ✗ Logistics - no application system.
- ✗ Other - unable to reach a consensus with RRT and trustees that there was an environmental benefit for dispersant use.

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CASE STUDY: Poseidon Pipeline 2000

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**Incident Overview: Poseidon Pipeline Oil Spill**

- The discharge source was determined to be a 24" pipeline which transports approximately 500,000 barrels of crude oil per day for numerous production companies.
- Despite quick actions by the RP, approximately 2000 barrels of a medium API crude oil were discharged into the Gulf of Mexico.
- The cause of the incident was later determined to be an 8.8 metric ton anchor which dragged across and imbedded under the pipeline. The flukes of the anchor slid under the pipeline, dragging it approximately 670 feet from its original position. This shift caused the pipeline to leak at three separate discharge points; two of the discharge points were located on the riser and the third at the anchor impact point.
- Over flights provided by three different airborne platforms provided excellent, timely intelligence to the incident command. As a result, tactical decision making and command and control over all field operations were highly successful.

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Oil Slick Originating From Near Platform on the Afternoon of 21 Jan. 2000  
(Photo credit: PO Figs, MSO Morgan City)

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Oil slick on the Afternoon of 21 Jan. 2000  
(Photo credit: PO Figs, MSO Morgan City)

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Dispersant Application on the Afternoon of 21 Jan. 2000  
(Photo credit: PO Fegan, MSO Morgan City)

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DC-3 Dispersant Aircraft During Possidon Pipeline Spill Response  
(Photo credit: PO Flood USCG GST, photos taken by SMART On-water Team)  
Aircraft owned and operated by Airborne Support, Houma, LA

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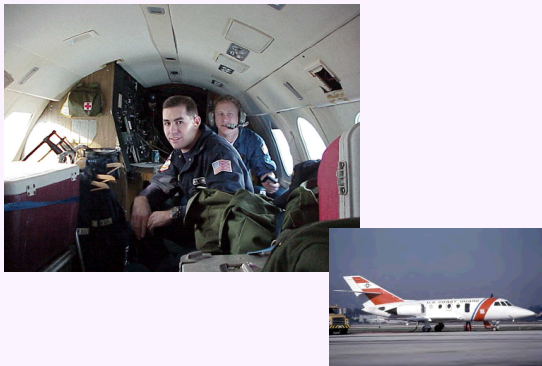
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USCG GST SMART Team Deploying at the Request of MSO Morgan City  
(Photo credits: PO Flood, USCG GST and USCG Web Site)

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Partially Treated Slick on the Afternoon of 21 Jan. 2000  
(Photo credit-PO Piper, MSD Morgan City)

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USCG GST Setting up the On-water SMART Monitoring Equipment  
(Photo credit-PO Flood, USCG GST)

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Post-dispersant Application Showing Changes in Surface Slick and Dispersion  
(Photo credit-PO Flood, USCG GST)

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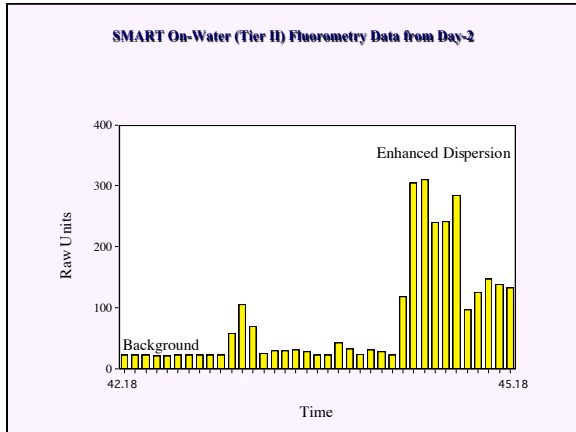
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**Overview of Dispersant Operations**

- This response should be considered highly successful. The dispersant operations were very effective as documented by observation and scientific measurement. In fact, some estimates by field observers concluded that only an estimated five barrels of oil (mostly light sheen and small streamers of emulsified oil) remained on the surface following Day-2 dispersant operations.
- It should be noted; however, that it is virtually impossible to accurately determine the overall effectiveness and volume of the remaining emulsified oil.

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**Dispersant must be on the NCP Product Schedule**



- COREXIT 9527
- NEOS AB 3000
- MARE CLEAN 200
- COEXIT 9500
- DISPERSIT SPC 1000
- JD-109
- JD-2000
- NOKOMIS 3-F4
- PETROBIDISPERS
- SEA BRAT #4
- FINASOL OSR 52




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### RRT6's Current Dispersant Philosophy

- ◆ The trade-offs for offshore dispersant use is generally accepted and preauthorization has been granted to the FOSC.
- ◆ Recognizing that there are times that oil spill injury can be reduced by near shore dispersant use, RRT6 has approved an Expedited Decision Process.
- ◆ There is no inshore approval process, and the use of dispersants inshore is unlikely.



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### Current RRT6 Dispersant Use Guidelines and Contingency Planning

Offshore (>3 miles, >30 feet depth)	Nearshore	Bay/Estuary
Preapproval Granted to FOSC	Expedited Decision Process	None (TX Spill of Op)

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**Coordinate Oil Removal**  
(5.4 - 5.6 Alternative Countermeasures for Oil Spill Response.)

**BIOREMEDIATION**

 **Federal On-Scene Coordinator Representative Training** 

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**Coordinate Oil Removal**  
(5.4 - 5.6 Alternative Countermeasures for Oil Spill Response.)

**In-Situ Burning**

 **Federal On-Scene Coordinator Representative Training** 

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
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**In-Situ Burning**

"So , why can we not just burn the oil?"

 **Federal On-Scene Coordinator Representative Training** 

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### Application of In-Situ Burning:

- *In-Situ Burning Oil Offshore*
- *In-Situ Burning Oil in Coastal Marshes*
- *In-Situ Burning Oil Inland*
- *In-Situ Burning Oil Debris*



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In-Situ Burning at Sea

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### Proof of Concept: In-Situ Burning of Oil at Sea

- *Extensive testing*
  - *oil types*
  - *boom systems*
  - *Ignition systems*
  - *Plume dynamics*
- *...but, used only twice in US waters and that was during the 1989 Exxon Valdez Oil Spill and Deep Water Horizon.*
- *RRT Preauthorization Offshore (Conditions Vary)*



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**Exxon Valdez, PWS, Alaska (1989)**



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**Basics of Burning Oil at Sea**

- Oil must be several mm thick to support combustion on water.
- Oil must not be emulsified (water in oil) more than 50%.
- Requires mechanical recovery prior to burning.
- Ignition systems maybe hand held or helio-torch (jellied gasoline).
- Plume monitoring may be required.



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**Burn Effectiveness**

- 90-98% Effective at removing surface oil.
- Some 5% of that removed are incomplete combustion by-products.
- Surface residues may sink.



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**Case Study: Vermillion Parish Burn (1997)**



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**Case Study: Vermillion Parish Burn (1997)**



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**Case Study: Vermillion Parish Burn (1997)**



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**Case Study: Vermillion Parish Burn (1997)**



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**Case Study: Vermillion Parish Burn (1997)**



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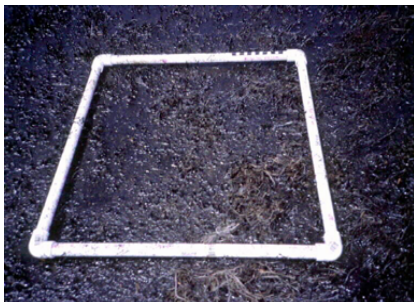
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**Case Study: Vermillion Parish Burn (Post-Burn)**



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**Case Study: Vermillion Parish Burn (Recovery?)**



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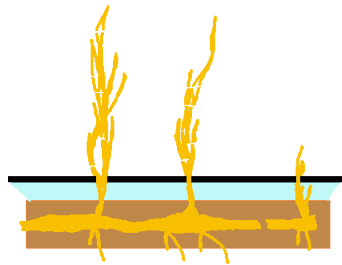
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**How much water is adequate?**

- "about an inch"



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**Why Consider *In-Situ* Burning in Wetlands?**

- ◇ Reduce the potential for spreading
- ◇ Prevent or reduce collateral damage from conventional cleanup methods
- ◇ Wildlife exclusion
- ◇ Cost (not an environmental factor, but a reality in spill response)

"Bottom line: consider *in-situ* burning when conventional containment and oil recover techniques would result in unacceptable environmental injury."



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**TRADEOFFS**

**“Spill response is a series of tradeoffs”**



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**PROS:**

- ◇ Removes a large amounts of oil very fast (>2000 bbl/hr)
- ◇ “Doesn’ t require specialized or highly trained personnel or equipment”
- ◇ If implemented early, reduces area of impact and injury to marsh
- ◇ Provides wildlife exclusion
- ◇ Broad window of opportunity (days)
- ◇ Has progressed past the “test” stage



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**CONS:**

- ◇ Moves pollution from water to air
- ◇ Highly visible plume (public is often alarmed)
- ◇ Combustible liquids only (no emulsions)
- ◇ Marsh type and season should be considered
- ◇ Water level (avoid root or peat burn)
- ◇ Risk of uncontrolled fire (fire breaks and back fire should be considered)
- ◇ May require monitoring (SMART)
- ◇ May require RRT approval



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**My In-Situ Burn Checklist:**

- ◇ Is there adequate water in the marsh?
- ◇ Is there at least 2 mm of oil?
- ◇ Is there a downwind concern? (NIST LOFT)
- ◇ Do I need a monitoring plan? (SMART)
- ◇ Do I have fire containment and control?
- ◇ Have I thought about the oil type?
- ◇ Have I considered oil weathering (emulsions)?
- ◇ Have I thought about a safety plan?
- ◇ Have I really considered all the key ecological factors?




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**Review Coordinate Oil Removal**

(5.4 - 5.7 Alternative Countermeasures for Oil Spill Response.)

- **5.4 Explain** the conditions and criteria necessary for implementing [alternative] removal methods.
- **5.5 Explain** when the [alternative] removal methods should be used.
- **5.6 Contact** the appropriate agencies when [alternative] removal methods are used.
- **5.7 Identify** involvement of RRT in removal methods.



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**Coordinate Oil Removal**

5.12 Explain on-site decanting procedures and regulations.

- **What is on-site decanting anyway?**
- **Why would we need to decant?**
- **Should we decant? (Engage Environmental Unit)**
- **State Waters (State Regulatory Issues)**
  - In most states, such issue have been delegated to States by EPA relative to Clean Water Act etc.
- **Federal Waters (Less Regulatory Issues)**
  - Also generally deeper water situations with less environmental concerns, but not always.
- **RRT Approval Plans (RRT4 and RRT6)**
  - RRT4 has a plan.
  - RRT6 doesn't.
  - Always case by case... there is no automatic approval for decanting.
  - (Belt and Drum Skimmers)



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**Questions**

 **Federal On-Scene Coordinator Representative Training** 

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