Elements of an Emergency Response
-A Responder’s Perspective-

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NRC Environmental Services
Elements of the Response

• Pre-Emergency Response Planning
• The Response Plan
• The Spill Occurs
• Now What?
• Notifications
• Real Life Example: Detroit Lake
• Back to Basics
Planning

- Response Plan Executed In Time of Crisis
- Know Your Internal Resources
- Know Your Contractor
- Know Your Regulators
- Contact Information for All Parties
Prevention

Contractor Can Assist You:
• Review Your Operation
• Recommendations for Pre-Placed Resources
• Participate in Spill Drills and Training
Response

• Safety First
• Slow Moving Water Strategy
• Fast Moving Water Strategy
• Natural Disasters
Pre-Emergency Response Planning

Will You Need a Response Plan?

- Facilities
- Transporters
- Vessel Operators
- Spill Prevention
- Control & Countermeasure
- OPA 90 Plan

Real Life Example: Detroit Lake
Pre-Emergency Response Planning

• It is Good Business to Have a Plan
• Save Money with a Timely Response
• Protect the Reputation of your Organization
• Protect the Public, your Employees and our Environment
• The Yellow Pages are NOT a Response Plan (OK as a Resource)
The Response Plan

- Describes Who You Contact
- Lists 24 Hour Contact Information
  - Internal Personnel
  - External Resources (Contractors, Equipment)
- Regulatory Notification
- Pre-Placed Contract and Pricing
- Don’t Let Paperwork Slow The Response
- Know Your Contractor
- Let Contractor Know You
OIL SPILL RESPONSE --- EMERGENCY PROCEDURES

1. STOP THE PRODUCT FLOW
   -- Act quickly. Secure pumps, close valves, etc.

2. WARN PERSONNEL
   -- Enforce safety and security measures.

3. SHUT OFF ILLUMINATION SOURCES
   -- Motors, electrical circuits, open flames, etc.

4. CONTAIN / CONTROL SPILL
   -- Use berms, boom, water hose, etc. If gasoline in water — divert away.

5. NOTIFY COMPANY (Q.I.)
   -- Extent of damage (injuries?), assistance required, etc.

6. NOTIFY N.R.C. (USCG / EPA)
   -- 1-800-424-3802 or (202) 267-2675

7. NOTIFY, AS APPROPRIATE:

<table>
<thead>
<tr>
<th>State</th>
<th>Agency</th>
<th>Contact Numbers</th>
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<tbody>
<tr>
<td>ALASKA</td>
<td>DEC</td>
<td>1-800-478-9300 or (907) 428-7200</td>
</tr>
<tr>
<td>CALIFORNIA</td>
<td>OES / OSPR</td>
<td>1-800-852-7550 or (916) 262-1621</td>
</tr>
<tr>
<td>CANADA</td>
<td>CCW-NA</td>
<td>(604) 699-6011</td>
</tr>
<tr>
<td>HAWAII</td>
<td>HEER</td>
<td>(808) 586-4249 or (808) 247-2191</td>
</tr>
<tr>
<td>IDAHO</td>
<td>ECC / BOHM</td>
<td>1-800-632-8000 or (208) 334-4570</td>
</tr>
<tr>
<td>OREGON</td>
<td>OEM / DEQ</td>
<td>1-800-452-0311 or (503) 378-6372</td>
</tr>
<tr>
<td>WASHINGTON</td>
<td>EMD / DCE</td>
<td>1-800-225-5590 or (206) 912-4604</td>
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8. SUPPLEMENTAL:
   a. Foss Maritime (Qualified Individual) will mobilize an appropriate response, including salvage and recovery cleanup operations. This includes utilizing a third party contractor or oil spill clean-up cooperative, if necessary.
   b. Consult Foss Maritime Company's VESSEL RESPONSE (CONTINGENCY) PLAN for (USCG / state) for detailed information concerning the company's spill response management team, spill action plan (assessment, response options, containment, recovery, cleanup, decontamination, etc.), additional resources, response capabilities, communications, documentation, environmental sensitivity, disposal, training and safety.

Revised: 31 August 1999 <VESSELS>
INITIAL OIL SPILL REPORT (NOTIFICATION)

* NOTE: It is not necessary to wait for all information before making initial notification.

Reported by (name, title, telephone number, or monitored radio frequency):

Vessel name, size, type, country of registry, official number, and call sign (if applicable): *

Towing vessel (if applicable): *

Date / time of incident: * Date / time reported: * Date / time of next report: *

Location of incident: *

Course, speed, and intended track of vessel: *

Type and quantity of oil onboard: *

Estimate of oil discharged, or threat of discharge; details of pollution or potential: *

Nature of incident (e.g. grounding, collision, etc.), and extent of defects / damage: *

Weather and sea conditions on scene: *

Actions taken or planned by persons on scene: *

Current condition of the vessel: *

Injuries or fatalities: *

ASSISTANCE REQUIRED:

Other pertinent information (continues on reverse side, if necessary):

--- NOTIFICATION COMPLETED ----

Date / Time

To (name):

- Foss Q.I.
- USCG COTP
- Customer
- USCG NRC 1-800-424-8802
- State
- <other>

BY (name)
Where is Your Response Plan?

• Living Document
• Accessible
• Who Can Authorize The Response?
The Spill Occurs

- After Hours
- Middle of the Night
- Weekends
- Holidays
- NBA Playoffs
- Graveyard Shift
- Just Before Dawn
The Spill Occurs

- Bad Weather
- Distracted, Tired Employees
- People Not Following Procedures
- Human Error - The Most Common Cause
- Mechanical Failure Rarely Happens
- Force Majeure (Hurricanes, Earthquakes, Tsunami, Fire, Riot)
To Notify or Not to Notify

• Over vs Under Estimating Quantity
• Nature of the Emergency
  • What spilled? Where?
  • Affecting people, waters, soils, air?
• Thresholds for External Notifications
• 42 Gallons Reportable Quantity
• Know Your Reportable Quantities
• Any Oil to Water is Reportable
When in Doubt—Make Notifications

- Failure to Notify Can Result In: Fines, Penalties, Criminal Investigation
- The State or the Feds Can Take Over Treble Damages? ($$$)
- A Well Prepared Response Plan: Avoids any Confusion Regarding Reporting
Notifications

- **Internal Personnel:** Employee Responders, Next Level of Management, Environmental, H&S, Legal, Public Relations
- **External Resources:** Response Contractors, Neighbors
- **Regulatory:** State (DEQ, OERS or WDOE), Federal (National Response Center), County ER Manager, Fire, Police
After the Notifications

• Internal Response Capability?
  HAZWOPER Trained and Equipped
• Response Contractors?
  Not a Firehouse (Response Time)
Personnel On-Call
Participating Agencies

State:
ODEQ, WDOE, F&W, DOT, SHPO, OSHA

Federal:
EPA, USCG, BLM, USFS, USACOE, F&W, NOAA, OSHA

Police:
Local, State, Federal including EPA Criminal Investigators

Fire:
State HAZMAT Team, Local & Volunteer
More Participants

- County: Emergency Management, Road Department, Municipal Water
- Tribal: Law Enforcement, F&W, Natural Resources, Archaeologists
- Insurance Adjusters
- Media
- Concerned Citizens
Response Contractor’s Approach

Incident Command System (ICS)
- Manages the Interaction of All Parties
- Common Organizational Structure
- Common Terminology
- ICS Required by State/Federal Agencies
- Examples:
  - 9/11
  - Katrina
  - Detroit Lake
Real Life Example: Detroit Lake

- Gasoline Tank Truck & Trailer
  Wreck and Fire Hazard
  11,300 Gallons of Gasoline
  Highway 22 is Closed
- Extreme Circumstances
  Bad Weather
  Cold and Dark
- Contract Executed On The Side of the Road
Real Life Example: Detroit Lake

- Establish ICS Unified Command
- Safety First!
- Benzene Vapors and Respirators
- Flammable Materials
- Traffic and Site Control
- Heavy Equipment
- Geologic Fault Line
- Extreme Terrain
Real Life Example: Detroit Lake

- Response Actions
  - Implement Safety Plan
  - Establish Air Monitoring
  - Investigate Tank Contents, Preferential Pathways and Lake Impacts
  - Deploy Boom
  - Obtain Emergency Utility Locates
  - Implement Traffic Control
  - Establish Command Post
More Response Actions

- Staff the ICS
- Make Waste Determination and Profile
- Excavate, Stockpile, Transport & Dispose
- Implement Sampling Plan
- Drill MW’s and Vapor Extraction Wells
- Operate Extraction System
- Investigate Down Slope
Even More Response Actions

- Launch Vessels
- Barge Equipment on the Lake
- Install Air Sparging System
- Re-Open Highway
- Long Term Monitoring
- Report
- Billings and Collection
- Major Two Week Effort
- Lesser For Three Months
PPE and Air Monitoring.
Heavy Equipment Operations.
Weather Conditions...
Well Drilling Operations.
Barge Operation.
Barge Movement on the Lake.
Drill Rig and Excavator.
Drill Rig Loading.
Excavator Off Load.
Excavator Off Load.
Excavator in the Woods.
Detroit Lake Scene.
Containment and Sorbent Boom.
Daily Sampling and SCAT.
Drilling Plan & Slope Stability.
Drilling.
Down-Gradient Wells & Pits.
Decide Response Technologies.
Recovery from SVEU 1,000 Gallons.
Aeration System at Work.
Dispersion or Trajectory Modeling.
Highway Excavation.
Response Logistics

- Food
- Lodging
- Medical Care
- Laundry
- Transportation
- Communication & IT: Phone, Fax, Copier
- Spills Are A Boon to Local Economy
Back to Basics

- ICS Works Well
- RP
- ODOT
- ODEQ
- USEPA
- USACOE
Back to Basics

• ICS De-Brief
• 30-40 People on Lessons Learned
• Have a Response Plan
• Know Your Available Resources
• Thanks and Questions