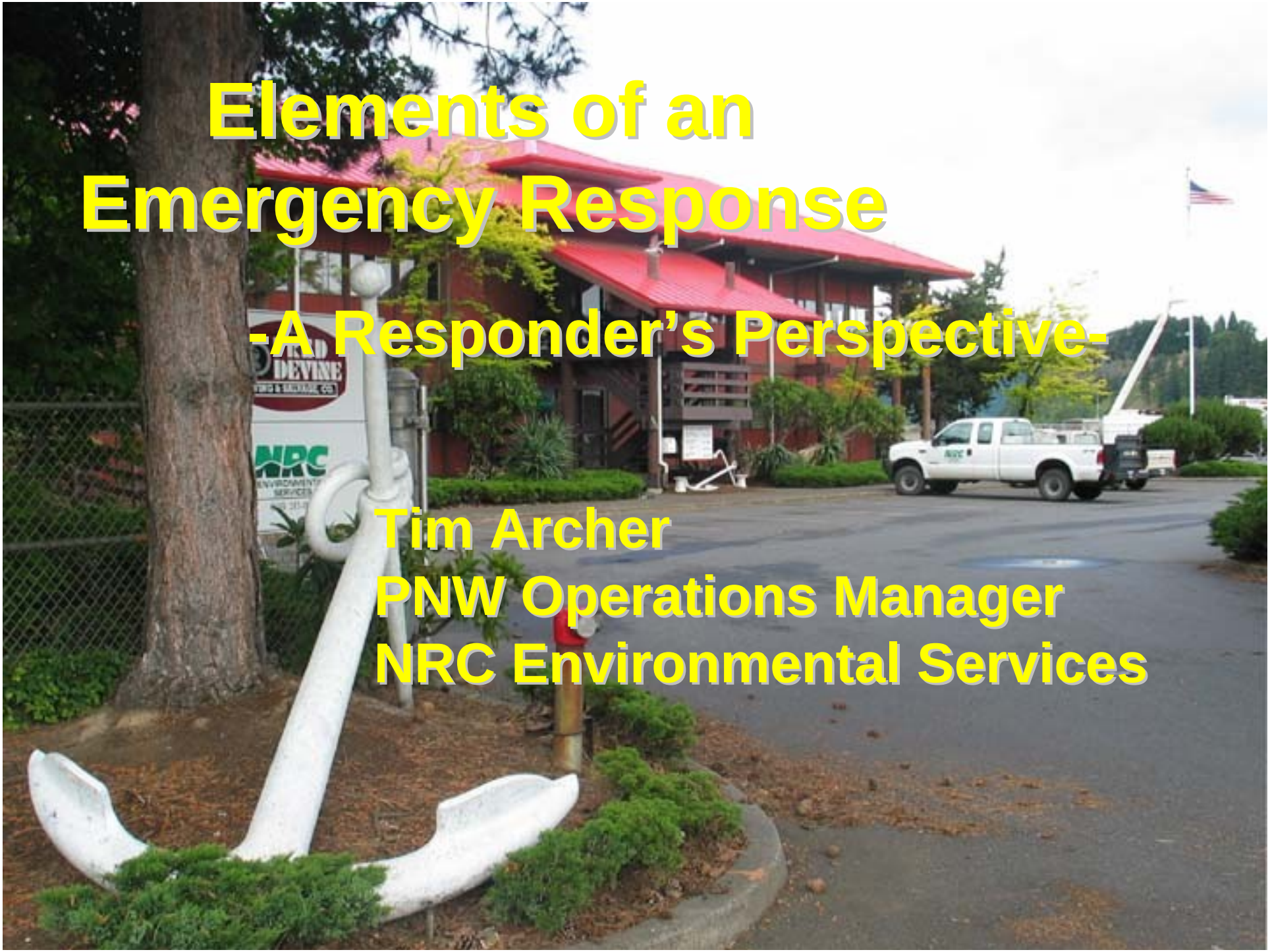


Elements of an Emergency Response

-A Responder's Perspective-

Tim Archer
PNW Operations Manager
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

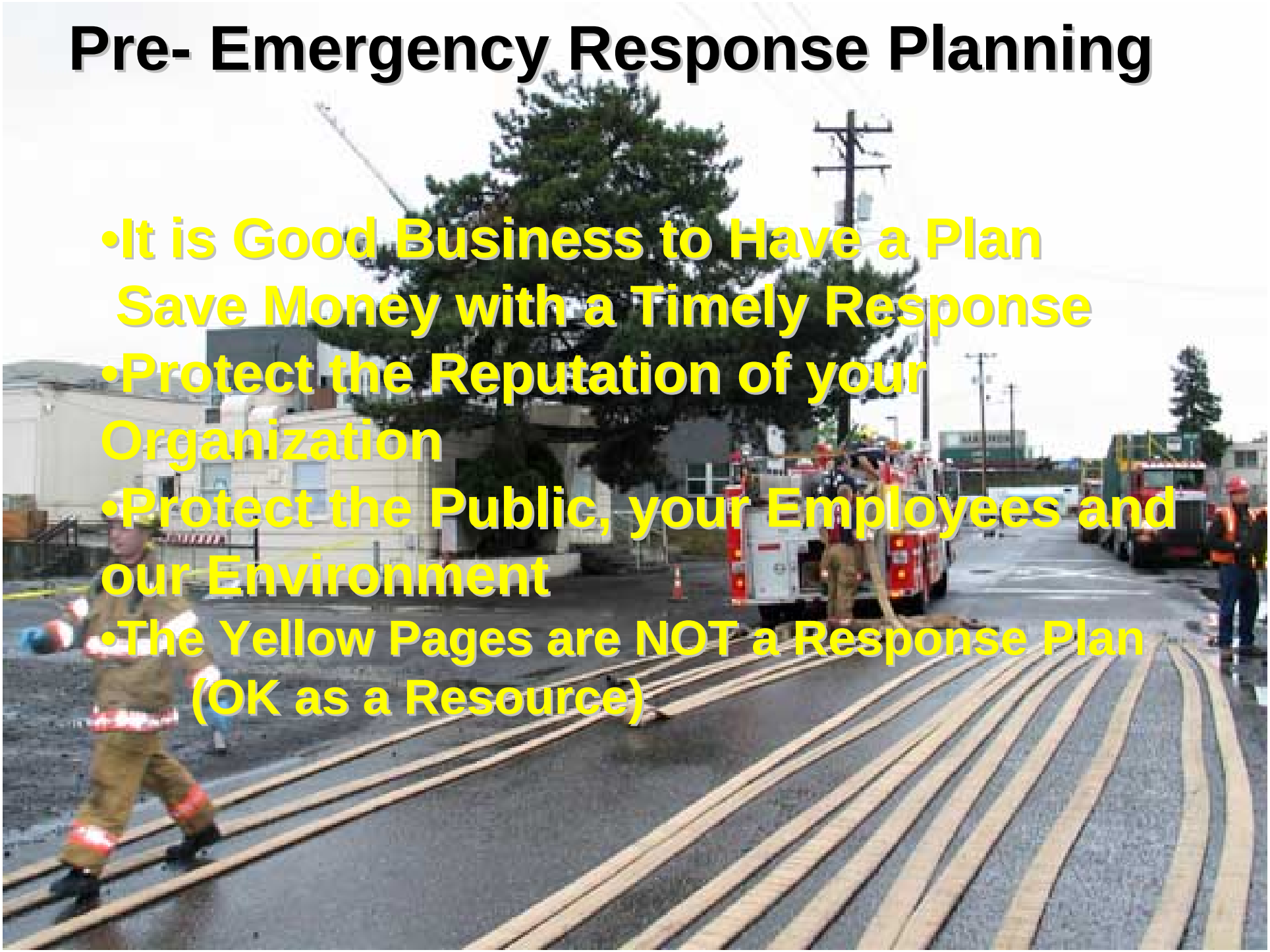
Will You Need a Response Plan?

- **Facilities**
- **Transporters**
- **Vessel Operators**

Regulations May Require a Plan

- **Spill Prevention Control & Countermeasure**
- **OPA 90 Plan**

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

FOSS MARITIME
Always Ready

CUSTOMER SERVICE CENTERS	(DISPATCH / 24 HOURS)
• Seattle, Washington	(206) 281-3810
• Portland, Oregon	(503) 286-0631
• San Francisco (Richmond), CA	(510) 307-7820
• LA / Long Beach, California	(562) 435-0171
• San Diego, California	(619) 234-8228

FOSS ENVIRONMENTAL SERVICES	
ALL Spill Responses (any location)	1-800-FE-SPILL
• Seattle, Washington	(206) 546-7150
• Portland, Oregon	(503) 283-1150
• San Francisco (Alameda), CA	(510) 749-1390
• LA / Long Beach, California	(562) 432-1304
• San Diego, California	(619) 235-3320

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 IGNITION 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)** -- 1-800-424-8802 -or- (202) 267-2675
7. **NOTIFY, AS APPROPRIATE:**

ALASKA	DEC	1-800-478-9300	-or-	(907) 428-7200
CALIFORNIA	OES / OSPR	1-800-852-7550	-or-	(916) 262-1621
CANADA	CCG-WR			(604) 666-6011
HAWAII	HEER	(808) 586-4249	-or-	(808) 247-2191
IDAHO	ECC / BOHM	1-800-632-8000	-or-	(208) 334-4570
OREGON	OEM / DEQ	1-800-452-0311	-or-	(503) 378-6377
WASHINGTON	EMD / DOE	1-800-258-5990	-or-	(253) 912-4904

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>

660 West Ewing Street • Seattle, WA 98119 • Phone (206) 281-3800 • FAX (206) 281-4702 • www.foss.com

Revised: 1-19-99 <VESSELS> * per 33 CFR 155.1040(b) [OPA-90 / VRP], and 33 CFR 151.26(b)(3) [SOPEP]

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 (continue on reverse side, if necessary):

.....NOTIFICATION COMPLETED.....

Date / Time

BY (name):

	To: (name):
❶ Foss Q.I.	
❷ USCG COTP	
❸ Customer	
❹ USCG NRC 1-800-424-8802	
❺ State	
❻ <others>	

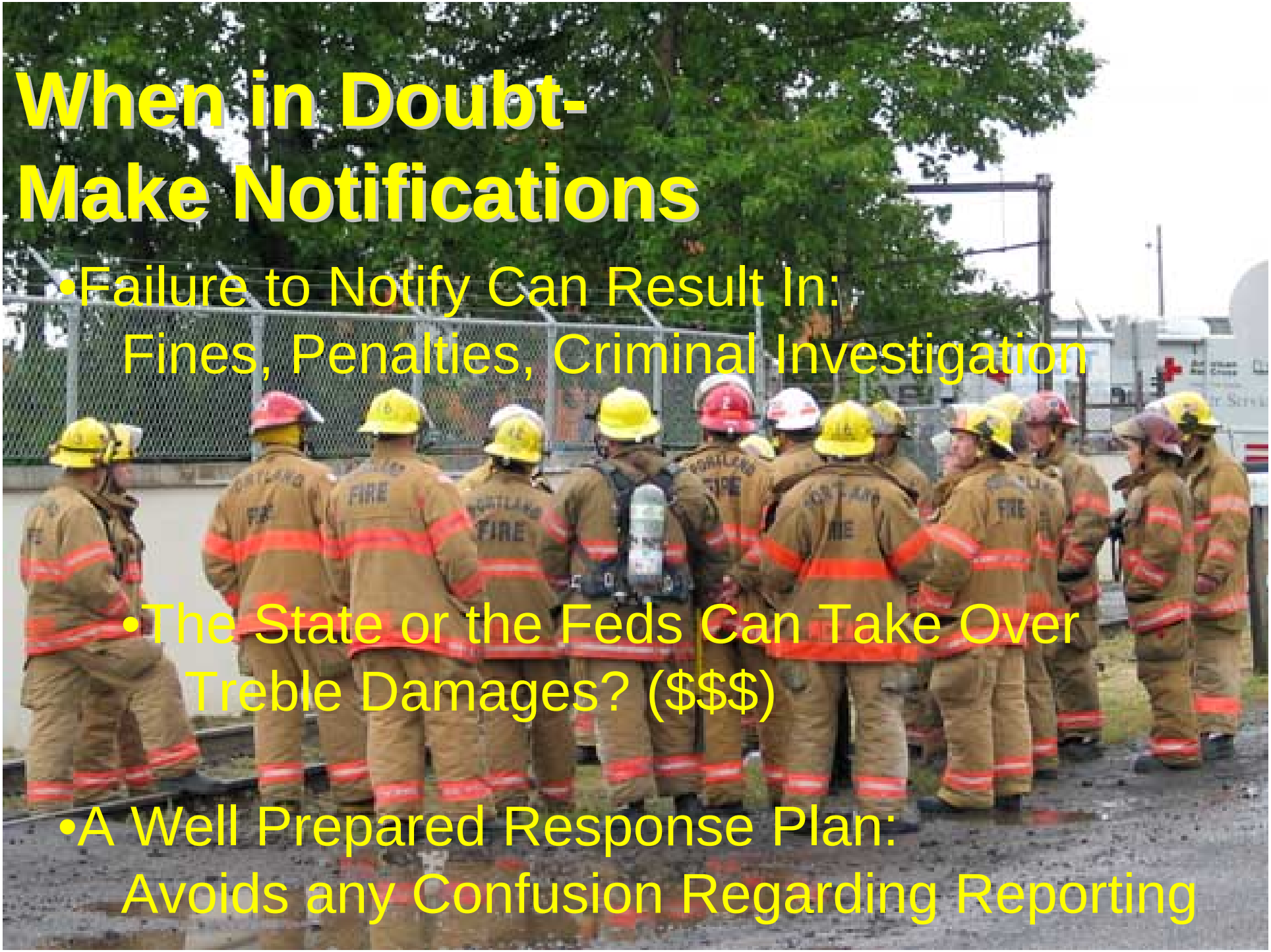
The Spill Occurs

- 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)

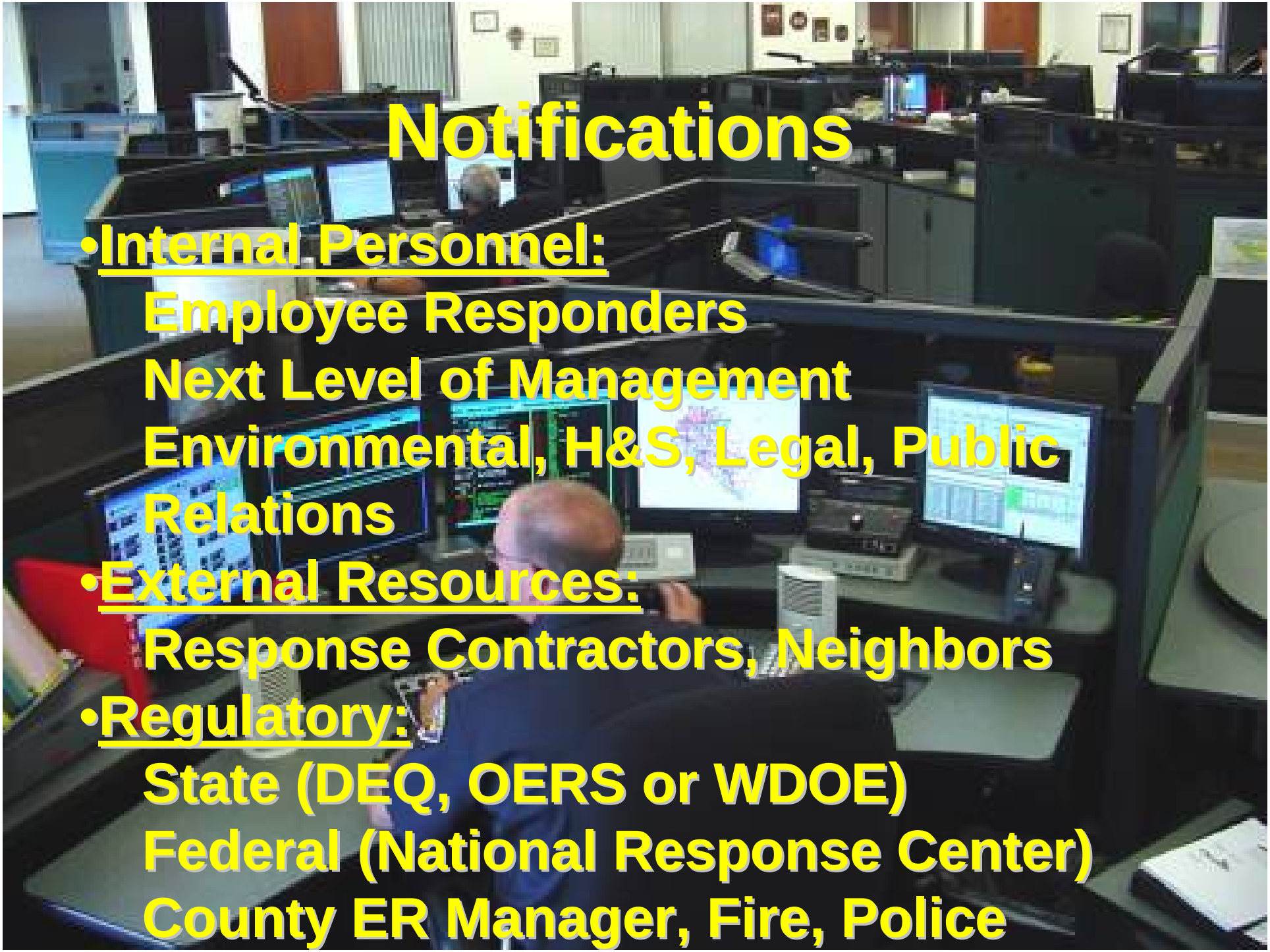
To Notify or Not to Notify

- 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



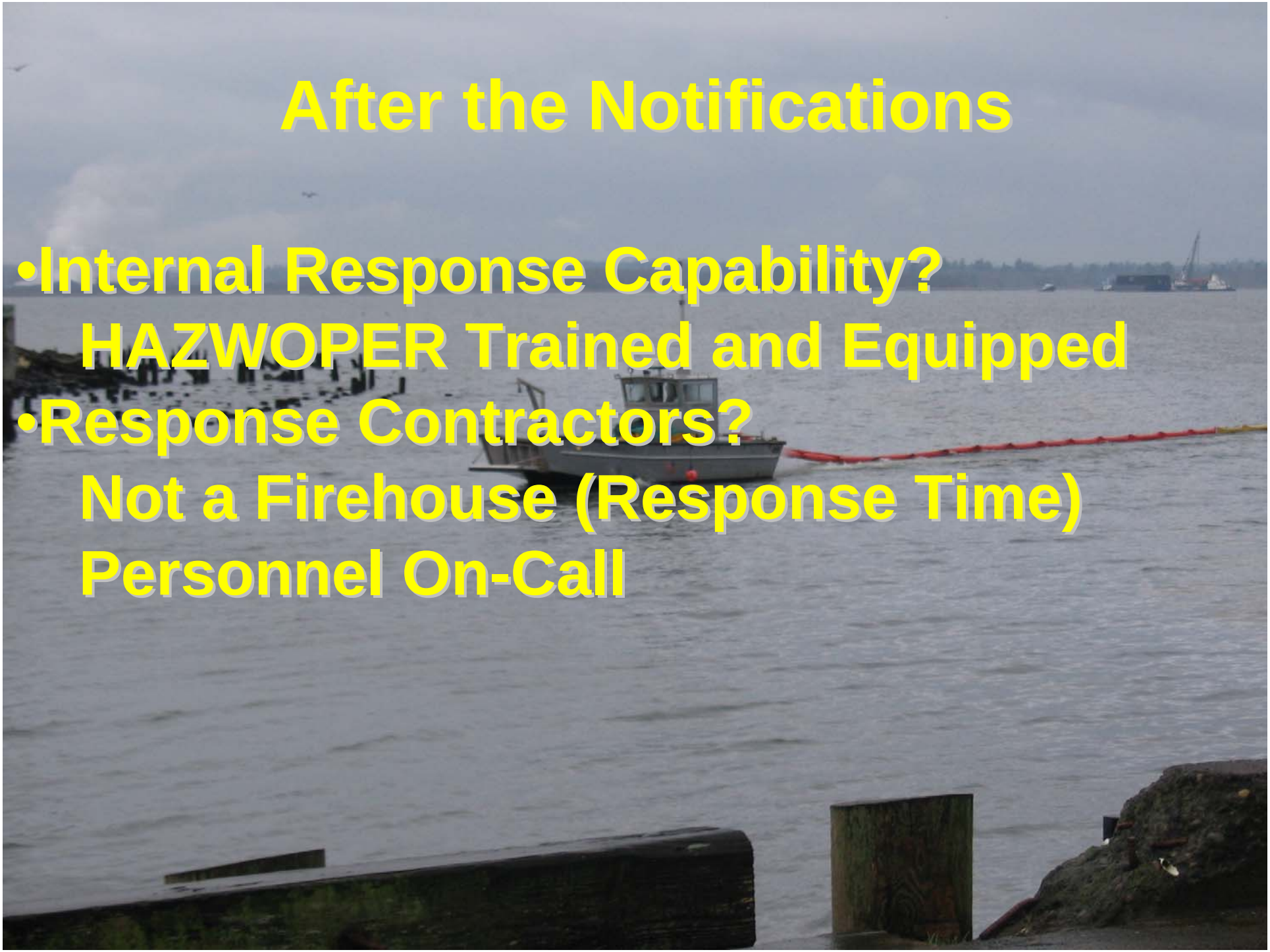
- Failure to Notify Can Result In:
  Fines, Penalties, Criminal Investigation
- The State or the Feds Can Take Over
  Treble Damages? ($$$)
- A Well Prepared Response Plan:
  Avoids any Confusion Regarding Reporting



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

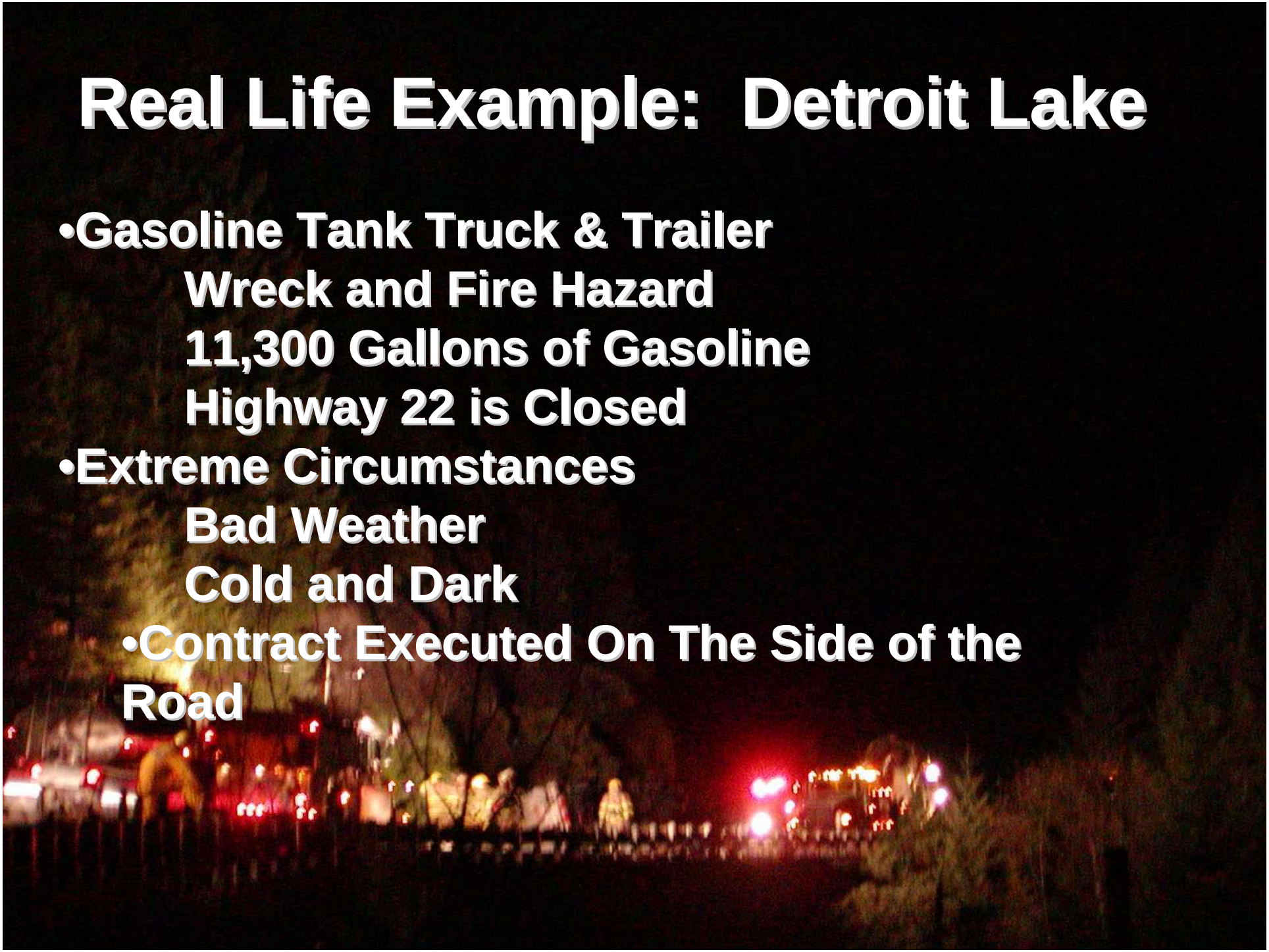
Response Contractor's Approach

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

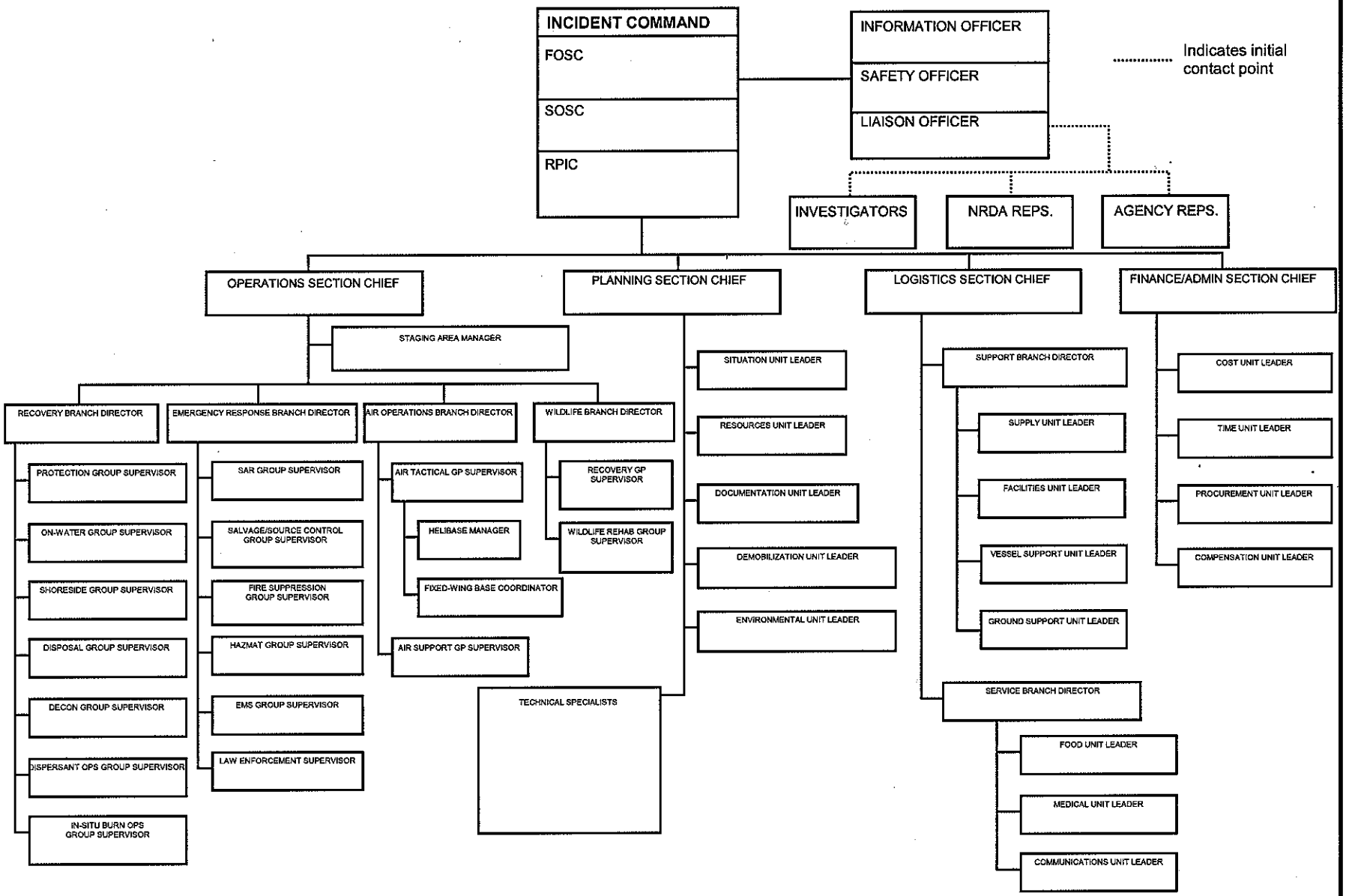
- Gasoline Tank Truck & Trailer
  - Wreck and Fire Hazard
  - 11,300 Gallons of Gasoline
  - Highway 22 is Closed
- Extreme Circumstances
  - Bad Weather
  - Cold and Dark
  - Contract Executed On The Side of the Road

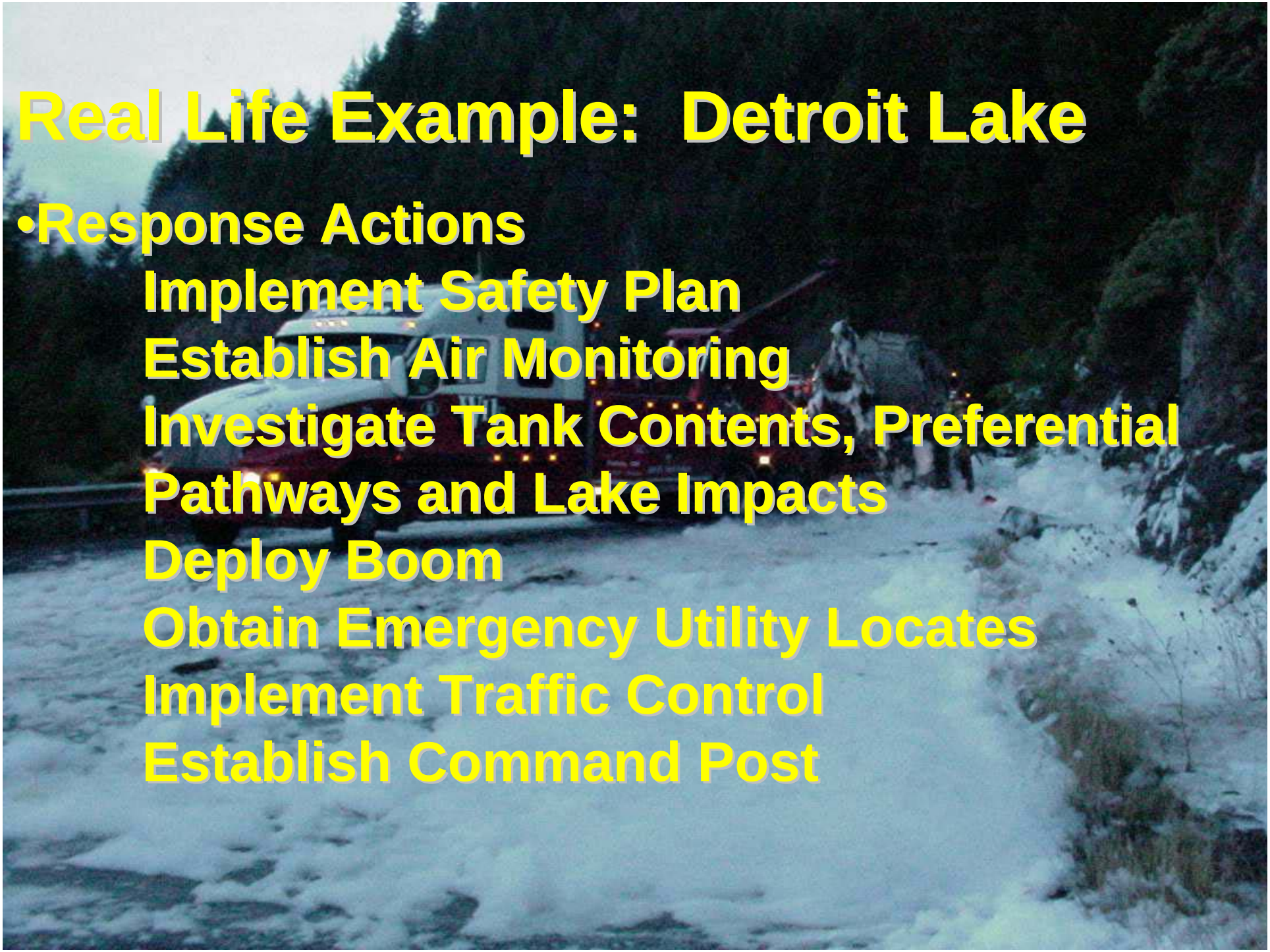


Real Life Example: Detroit Lake

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

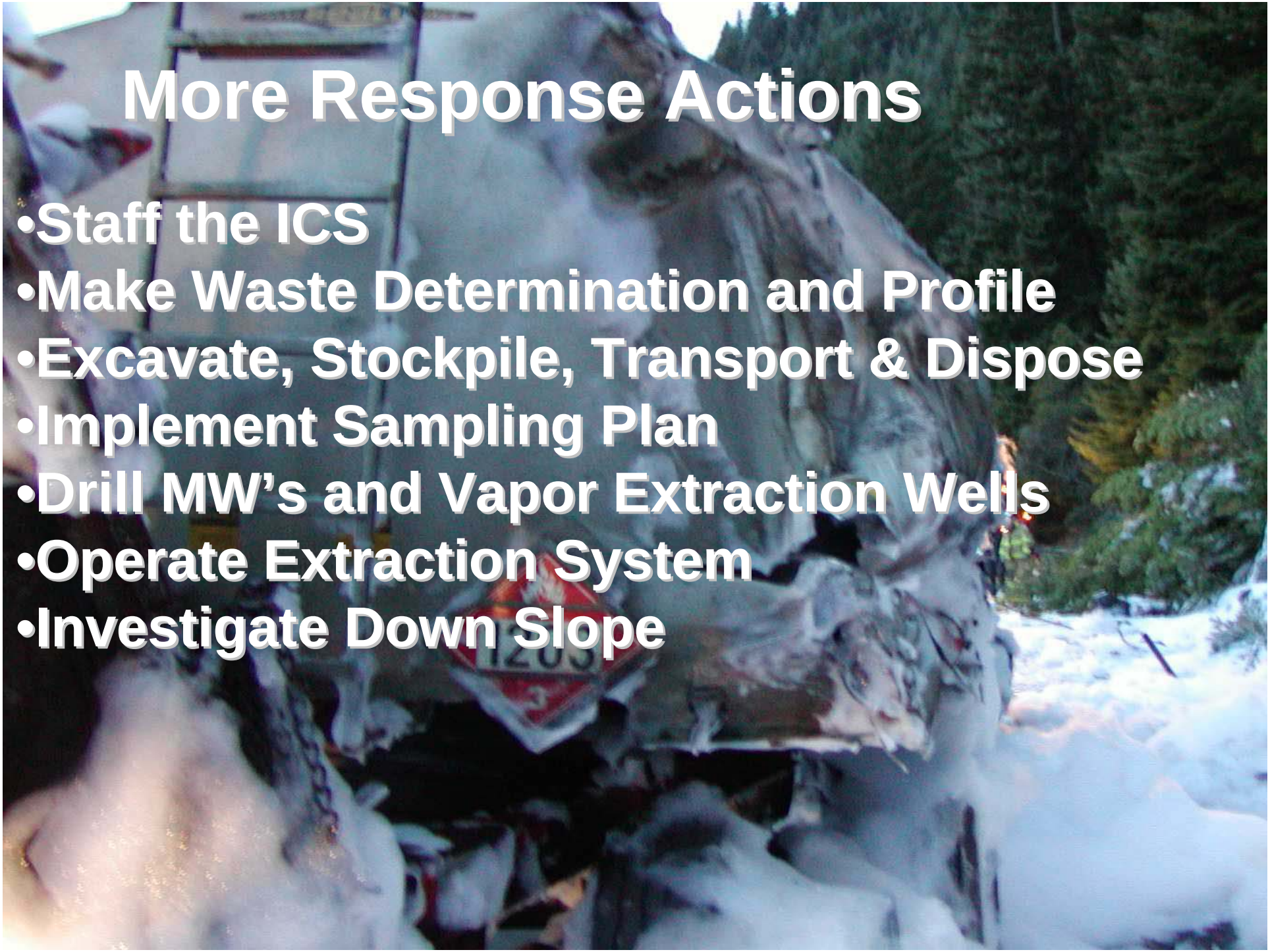
1. Incident Name	2. Operational Period (Date / Time) From:	INCIDENT ORGANIZATION CHART ICS 207-OS





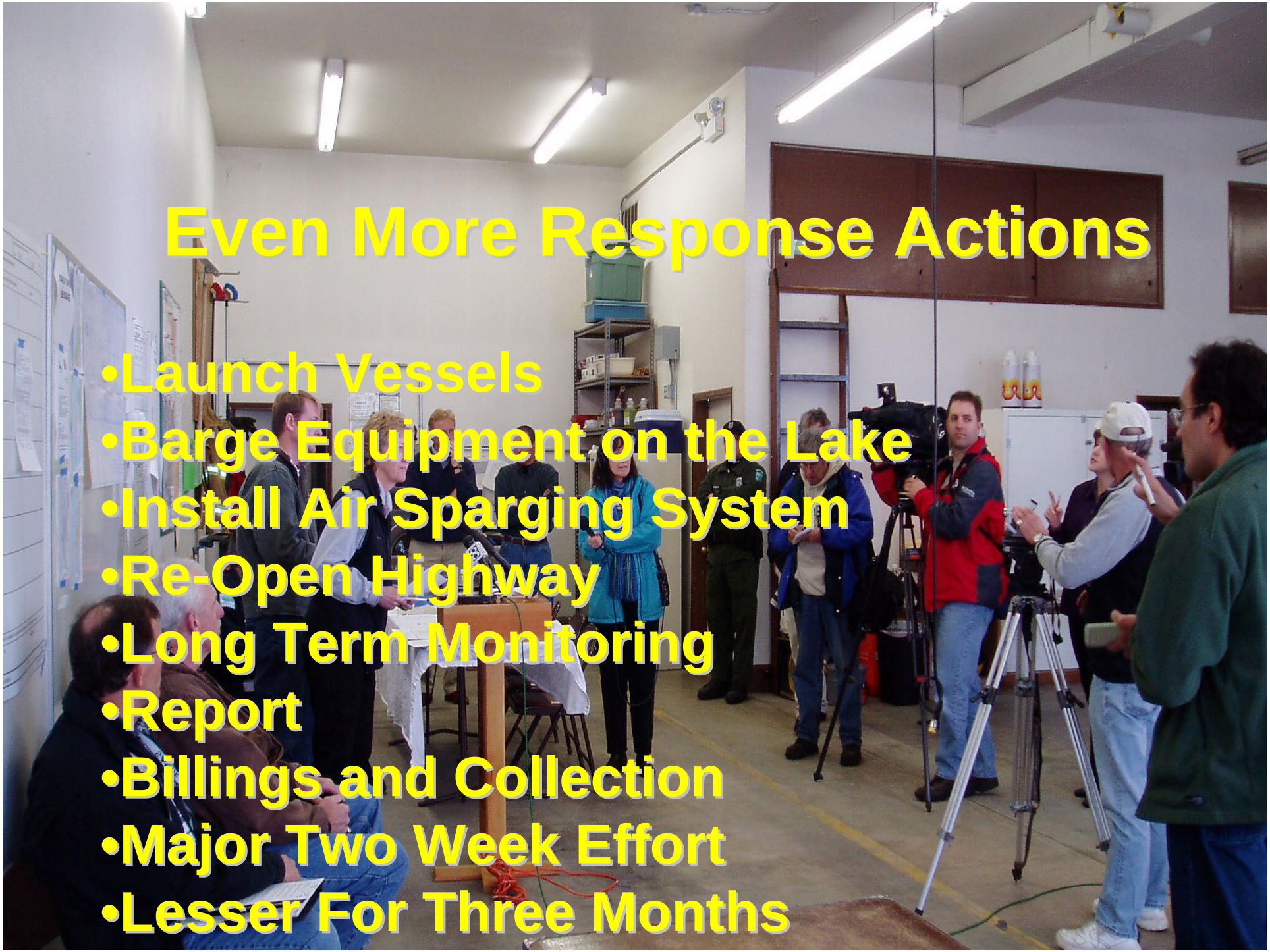
Real Life Example: Detroit Lake

- 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

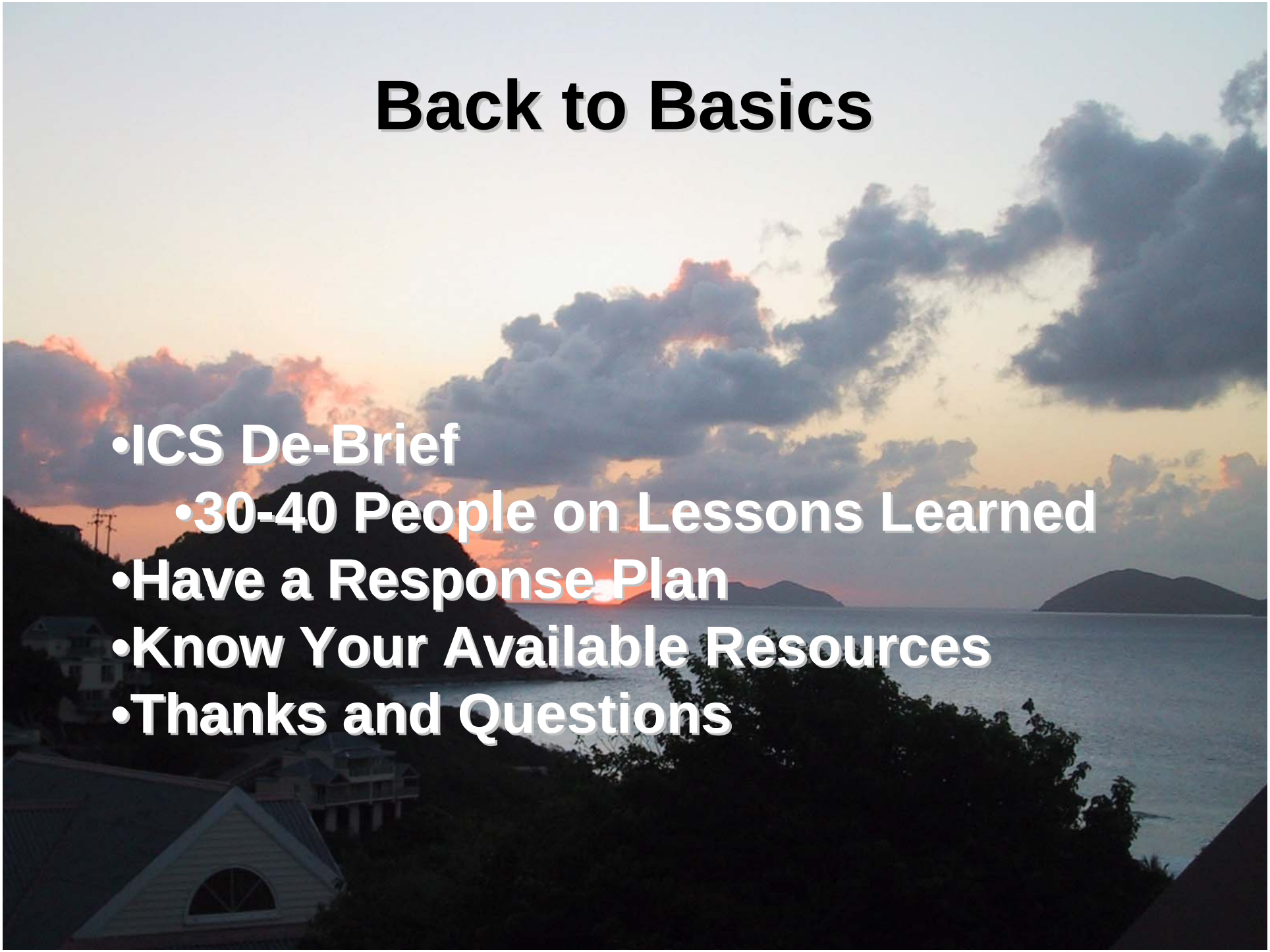
Oregon Department of Transportation

DEQ

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

US Army Corps of Engineers ®

Back to Basics



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