





## CRRT Meeting January 29, 2020

Roger Fernandez



## THE ON RESPONSE LANDSCAPE

>15,800 OIL SPILLS IN FY 2018\* >2,000 OFFSHORE FACILITIES OUTER CONTINENTAL SHELF

18% TOTAL U.S. CRUDE PRODUCTION

CRUDE OIL IMPORTS
> 10 M B/D

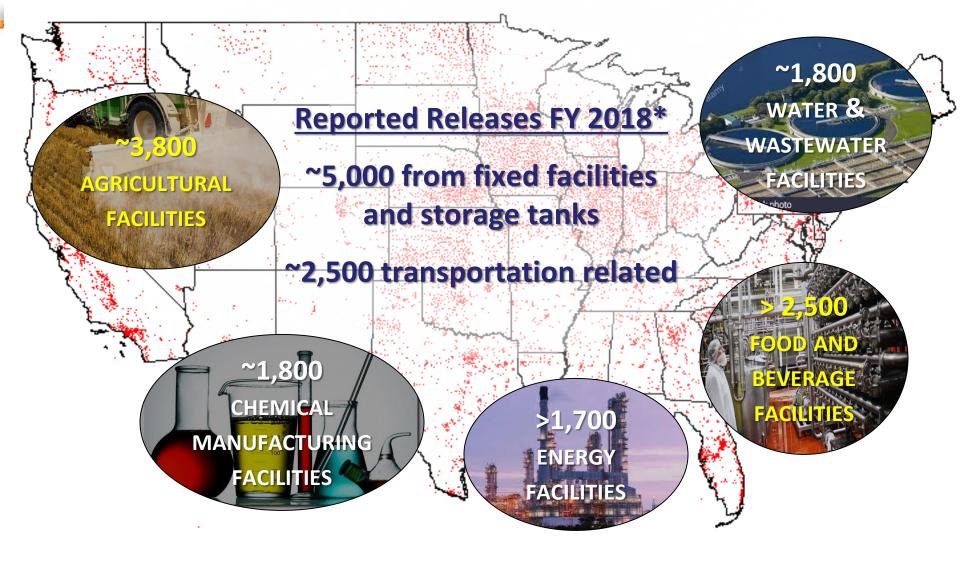
CRUDE OIL EXPORTS
>6 M B/D

>140,000
MILES OF RAIL

9476 TH B/D
TRANSPORTED

<sup>\*</sup>Reports to the National Response Center (NRC) in Fiscal Year (FY) 2018

# THE HAZARDOUS SUBSTANCES RESPONSE LANDSCAPE



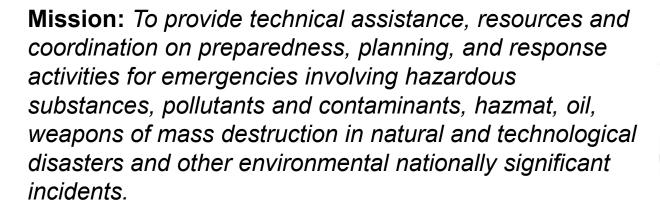




## NATIONAL RESPONSE TEAM (NRT)







Comprised of 15 federal agencies/departments

National-level planning, policy, and coordinating

Provides policy advice and national-level assistance













body



EPA – Chair; USCG – Vice Chair



to the OSC and RRT(s) during a response













## NRS SPECIAL TEAMS

EPA USCG NOAA OSHA BSEE DOE USN-SUPSALV





# EPA ENVIRONMENTAL RESPONSE TEAM (ERT)

### Focus: "Classic Environmental" Emergencies

- Air Monitoring
- Risk Assessment
- Responder Health & Safety (H&S)
- Lab & Analytical Support
- Cleanup Technologies
- Information & Data Management
- Training & Education



≈28 experienced responders + trained contractors

Key Assets include Trace Atmospheric Gas Analyzers (TAGAs), mobile labs, Dive Team, specialized rad gear, information management platforms





## **EPA**

### RADIOLOGICAL EMERGENCY RESPONSE TEAM (RERT)

≈27 person forward team (All Feds/No Contractor Support)

Focus: Radiation Monitoring and Evaluation

- Sampling/Monitoring
- Hazard Evaluation
- Planning Decontamination
- Risk Assessment
- Lab Analysis
- Characterization
- Cleanup
- Waste Disposal

Key Assets include RadNet System, Mobile Environmental Response Laboratory (MERL), Scanner Vans, deployables





## **EPA**

### National Criminal Enforcement Response Team (NCERT)

*Mission*: Provides evidence collection support for environmental crime investigations and law enforcement support/liaison to EPA's OSCs/responders



**Focus**: Environmental criminal investigations

- All-hazards response (Levels A–D)
- Contaminated crime scene management, processing, and evidence collection/decontamination
- Reach-back to EPA 's National Enforcement Investigations
   Center in Denver
- Law enforcement support/liaison













## **EPA**

### CBRN Consequence Management Advisory Team (CMAT)

Mission: Provides scientific and technical expertise for all phases of chemical, biological, radiological, and nuclear (CBRN) environmental consequence management

**Focus:** Operational preparedness for CBRN agents. Maintain ASPECT aircraft and PHILIS labs



**Support:** All phases of CBRN environmental response, including characterization, decontamination, clearance and waste management

Buildings, infrastructure, indoor and outdoor environments, transportation sectors



# USCG NATIONAL STRIKE FORCE (NSF)

Mission: Provide rapidly deployable technical experts, specialized equipment, and incident management capabilities for Lead Agency Incident Commanders and Federal OSCs for their response and preparedness missions

#### **National Strike Force Coordination Center:**

Provides support and standardization guidance for the Atlantic, Gulf, and Pacific Strike Teams and oversees the maintenance of the Response Resources Inventory (RRI), Oil Spill removal organizations (OSRO) Classification Program, and National Maintenance Contract (NMC)



Atlantic Strike Team, Pacific Strike Team, and Gulf Strike Team:
Specialized cadre of Coast Guard professionals who rapidly deploy any time to any place or Hazard





## **USCG**

### INCIDENT MANAGEMENT ASSISTANCE TEAM (IMAT)

**Mission:** Provide Deployable Specialized Forces to assist Operational Commanders to prepare for, respond to, recover from, and mitigate the effects of all risks and all hazards incidents and events

Capabilities: Deployable National Incident
Management System (NIMS) Type 1 and 2
IMATs; Incident Command System (ICS) training
for USCG components; and Exercise Support and
evaluation at the national and regional level







# USCG PUBLIC INFORMATION ASSIST TEAM (PIAT)

**Mission:** Provide rapidly deployable highly-trained crisis communications professionals to help Incident Commanders and Federal OSCs meet their objectives of truth and transparency of operations for the public

Capabilities: Deployable personnel and equipment to meet public affairs needs during the initial response (e.g., staff Public Information Officer (PIO), establish and manage a Joint Information Center (JIC), coordinate media relations, produce public information products, and provide Public Affairs (PA) guidance for all response personnel); Training and Exercise support in risk communications and ICS-based joint information center operations for all NRS components; Area Contingency Plan review for adequacy of public information management sections and customized communication plans





## NOAA & EPA

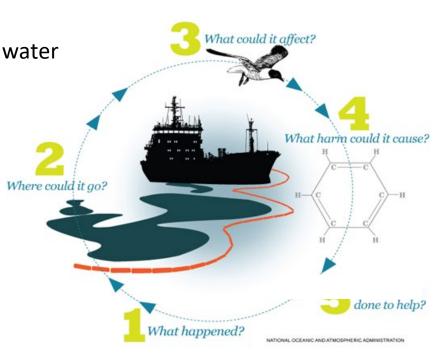
## SCIENTIFIC SUPPORT COORDINATORS (SSCs)

- SSCs are designated as a "Special Team" to advise the OSC on scientific and technical issues.
- Typically, National Oceanic and Atmospheric Administration (NOAA) SSCs support the USCG in the coastal zone; and EPA SSCs support the EPA in the inland zone.

#### Expertise includes:

Pollutant Transport Modeling in air and water

- Oil & Hazmat Fate and Effects
- Natural Resources at Risk
- Environmental Chemistry and Toxicity
- Environmental Trade-off of Countermeasures and Cleanup
- Environmental sampling
- Data & Information Management
- Contingency Planning
- Liaison to Scientific Community





## DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

- NOAA works to understand and predict changes in climate, weather, oceans, and coasts, and to conserve and manage coastal and marine ecosystems and resources
- Under the NRS, NOAA provides a wide variety of scientific support, such as:
  - Dedicated Scientific Support Coordinators to the OSC,
  - Natural Resource Trustees,
  - Meteorological and oceanographic data and forecasts,
  - Hydrographic surveys & nautical charts , and
  - Satellite & Aircraft remote sensing & photogrammetry





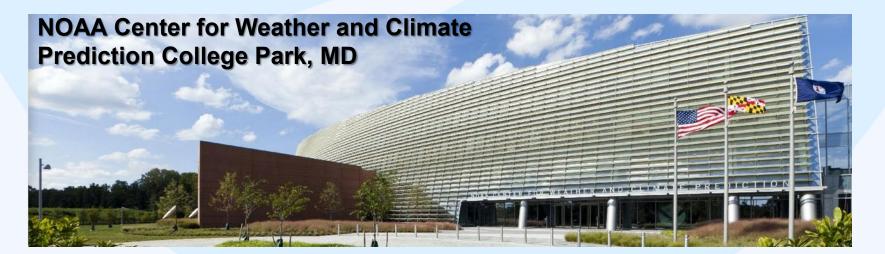




### BACKGROUND - SATELLITE ANALYSIS BRANCH (SAB)



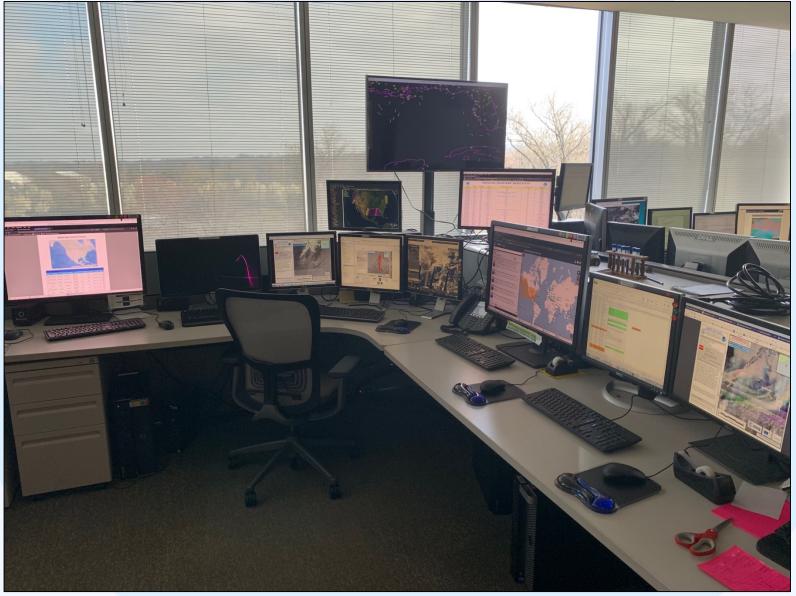
- Part of the NOAA | National Environmental Satellite Data and Information Service (NESDIS)
- In 2009 a formal request was made by the NOAA/NOS Office of Response and Restoration for <u>satellite</u> support of oil spill emergencies, and for assistance in monitoring intentional and accidental oil discharges in U.S. waters
- Oil Desk Mission: To analyze satellite imagery for accidental and intentional oil discharges, create the Marine Pollution Surveillance Report (MPSR), notify Federal and State Agencies
- Oil spill monitoring desk became fully operational in 2011.
- Customers/users of the reports include the U.S. Coast Guard, NOAA/ National Ocean Service, the Bureau of Safety and Environmental Enforcement, the Environmental Protection Agency, and State Agencies (e.g. Florida Fish and Wildlife, Texas General Land Office, Louisiana Oil Spill Coordinator's Office)
- As of 1 March 2018 MPSRs are published to the web and publicly available
  - https://www.ospo.noaa.gov/Products/ocean/marinepollution/





## THE OIL SPILL MONITORING OPERATIONS DESK







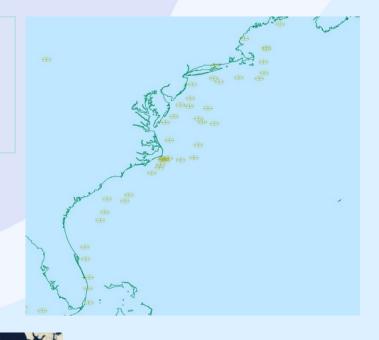
# WHAT TO MONITOR FOR AND WHERE



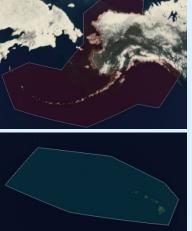
#### Manmade crude oil slicks occur for two reasons:

- 1. Accidental discharges. Examples Exxon Valdez, Deepwater Horizon, platform equipment failure, pinhole leaks in pipelines, damage to platforms/rigs from natural disasters, sunken vessels.
- 2. Intentional discharges. Example Pumping bilge waste at sea







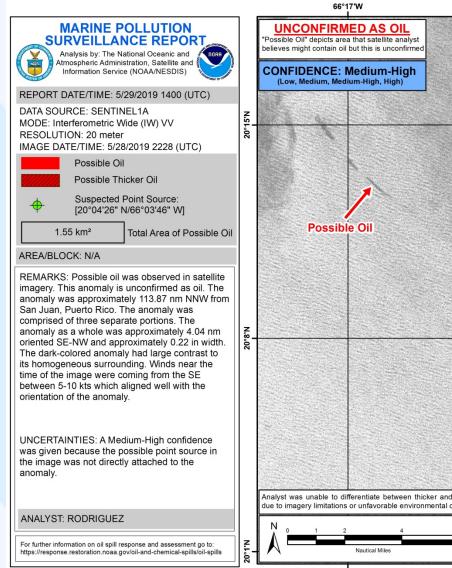


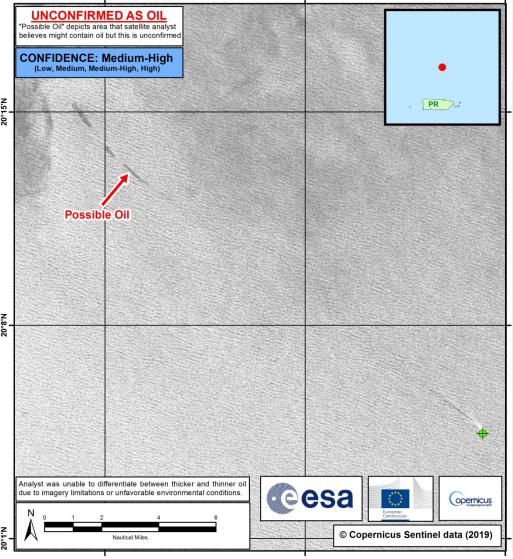
U.S. waters within the Exclusive Economic Zone (EEZ) and their approaches, and internationally when requested.



### MARINE POLLUTION SURVEILLANCE REPORT





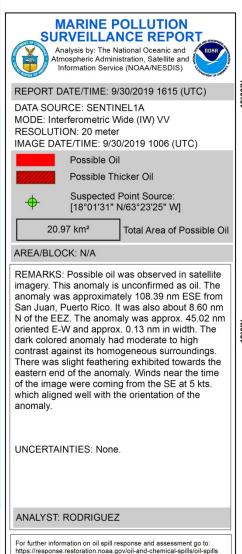


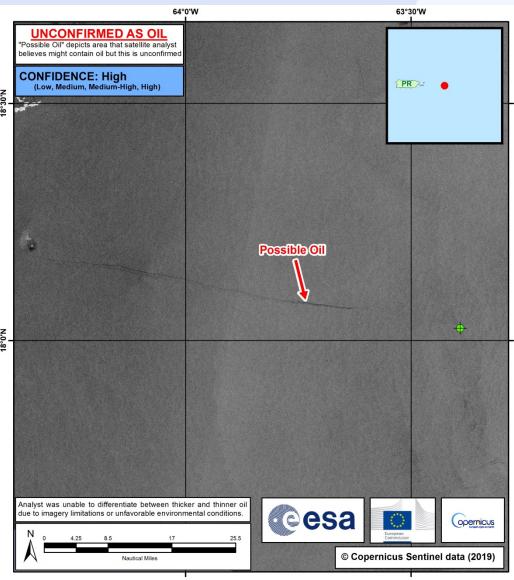
66°10'W



#### MARINE POLLUTION SURVEILLANCE REPORT



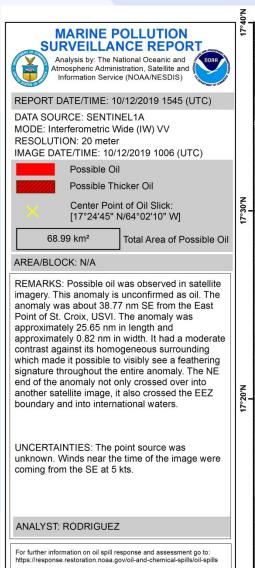


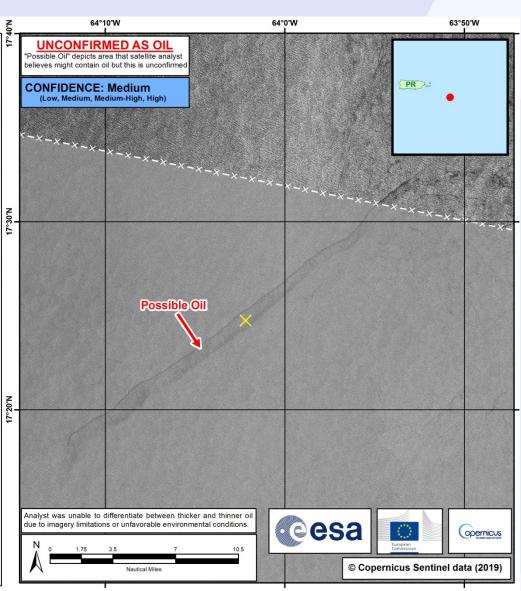




### MARINE POLLUTION SURVEILLANCE REPORT









# OSHA Specialized Response Team



- Chemical
- Biological
- Radiological
- Structural Collapse
- Members include:
  - Certified Industrial Hygienists
  - Professional Engineers
  - Occupational Physicians
  - Specialized Safety Experts
- Support the OSC in the area of worker health and safety
- Can also support through
   National Response Framework
   (NRF) Worker Safety and Health
   Support Annex





## DoD

### NAVY SUPERVISOR OF SALVAGE & DIVING (SUPSALV)

- Waterborne Pollution Response and Recovery
- Salvage, Wreck Removal, Diving, Deep Ocean Recovery
- Technical Support in Salvage, Ocean Engineering, and Spill Response





## **BSEE**

## SOURCE CONTROL SUPPORT COORDINATOR (SCSC)

The Bureau of Safety and Environmental Enforcement (BSEE) SCSC is the principal advisor to the OSC for source control operations

#### The SCSC can:

- Provide expertise and inspection resources for analysis and monitoring of proposed well intervention or pipeline source control operations;
- Quantify flow rate information from the source and provide forecasting for flow rate modeling; and
- Facilitate consultations, knowledge integration, and consensus from government agencies, academic and research institutions, and industry for source control







## DEPARTMENT OF DEFENSE

 DoD responds to releases where either the release is on any facility or from any vessel under DoD jurisdiction, custody, or control

DoD may support other federal agencies consistent with operational

requirements

• DoD responders include:

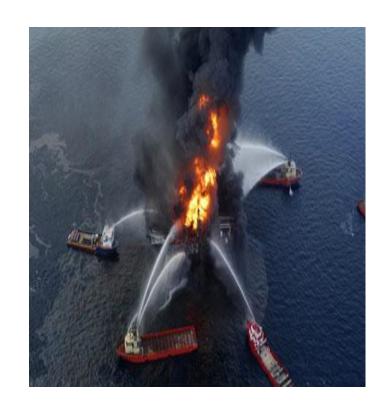
- U.S. Northern Command
- Army Corps of Engineers
- Navy's Supervisor of Salvage and Diving
- Army's 20th CBRNE Command (Chemical, Biological, Radiological, Nuclear, Explosives)





## DEPARTMENT OF JUSTICE

- Provides expert advice on legal questions arising during an incident
- Represents the federal government in litigation relating to hazardous substance, oil, chemical, or biological releases
- The Federal Bureau of Investigation (FBI) is the lead federal agency for the coordination of law enforcement and investigative activities in response to threats or acts of terrorism







# DEPARTMENT OF HEALTH AND HUMAN SERVICES



#### ASPR/OEM

 Principal entity coordinating overall HHS response

#### CDC/ATSDR:

- On-call and on-site specialists to answer human health questions
- Facilitate OSC interactions with state/local public health
- Facilitate access to other HHS assets

#### NIEHS:

 worker training program and onsite just-in-time training.













## DEPARTMENT OF AGRICULTURE

The **Department of Agriculture** (USDA) can provide a variety of assets to the Incident Command System teams: wildlife services, communications, laboratory analysis, geospatial and soil analysis, mapping and other technical expertise

• **Forest Service** has personnel, laboratory, and field capability to measure, evaluate, monitor, and respond on lands under its jurisdiction, custody, or control.



USDA

- Agriculture Research Service has a network of laboratories that are permitted to manipulate/analyze samples of select agents regulated by the United States/Department of Health and Human Services/USDA.
- Animal and Plant Health Inspection Service can regulate movement of diseased/infected organisms and assist in animal carcass disposal.
- Natural Resources Conservation Service has personnel in nearly every county in the nation who are knowledgeable in soil, agronomy, engineering, and biology and can predict the effects of pollutants on soil and its movements over and through soils.



## DEPARTMENT OF THE INTERIOR

- Through its various bureaus and offices, provides scientific expertise to On-Scene Coordinators (OSCs) to help protect sensitive natural, recreational, and cultural resources and areas
- Provides experts on remote sensing; mapping surface and ground water contamination; contaminant transport; oil, gas, and mineral development; source control of off-shore wells
- Facilitates environmental recovery efforts
- Facilitate wildlife response activities







## GENERAL SERVICES ADMINISTRATION

- GSA may facilitate response and recovery efforts by providing commodity support, telecommunications support, transportation services or other support through use of GSA's Federal Supplies Schedules
- GSA may also provide leasing support for needed federal facilities or space as requested utilizing staff from among its national cadre of realty specialists







## DEPARTMENT OF TRANSPORTATION

 The Pipeline and Hazardous Materials Safety Administration (PHMSA) manages national transportation safety programs for hazardous materials and oil by all modes of transportation and pipelines.

 PHMSA provides technical assistance to the planning and response communities, including publication of the DOT Emergency Response Guidebook







## FEDERAL EMERGENCY MANAGEMENT AGENCY



- Lead agency for administering financial and technical assistance during a Presidentially declared disaster or emergency under the Robert T.
   Stafford Disaster Relief Act (Stafford Act)
- Responsible for providing hazardous materials response guidance and training for emergency first responders





## DEPARTMENT OF ENERGY

DOE provides the designated On-Scene
Coordinator (OSC)/Remedial Project Manager
(RPM) for non-oil releases from or on any
facility or vessel under its jurisdiction

 DOE may also provide advice and assistance to other OSCs/ RPMs on emergency actions necessary to control immediate radiological hazards





### U.S. Nuclear Regulatory Commission

- Regulates civilian nuclear facilities and nuclear materials
- Lead federal agency during radiological events involving its licensees
- Provides expertise during other radiological incidents







## More information on the NRS can be found at: NRT.org



#### WORKING TOGETHER TO PROTECT AGAINST THREATS TO OUR LAND, AIR AND WATER

The U.S. National Response Team (NRT) provides technical assistance, resources and coordination on preparedness, planning, response and recovery activities for emergencies involving hazardous substances, pollutants and contaminants, oil, and weapons of mass destruction in natural and technological disasters and other environmental incidents of national significance.

To Report Oil and Chemical Spills, and Hazardous Material Releases Call the National Response Center: 1-800-424-8802 or 202-267-2675

RECENT UPDATES

More info >>

#### REGIONAL RESPONSE TEAMS (RRTS)

There are 13 Regional Response Teams (RRTs), one for each of ten federal regions, plus one for Alaska, one for the Caribbean, and one for the Pacific Basin. Each RRT maintains a Regional Contingency Plan (RCP) and has state, as well as federal government, representation.

More Info» >>

PRESENT OF THE CALL STREET, SALES OF THE SALES

Name	City	State	Updated
National Environmental Compliance Subcommittee	Washington	DC	8/29/2016
NRT WMD S&T Subcommittee (Chemical Workgroup)	Edison	NJ	8/26/2016
NRT WMD S&T Subcommittee (Biological Workgroup)	Washington	DC	8/26/2016
2016 NRT Worker Safety and Health Technical Conference	Washington	DC	8/26/2016
NRT Current Responses	Washington	DC	8/26/2016

#### RESOURCES

Laws, Regulations & Directives 
Guidance, Technical Assistance & Planning 
Training, Exercises & Lessons Learned 
International Coordination 
Current Events

More Updates»



## QUESTIONS?

