



Responding to Emergencies Involving Sea Disposed Military Munitions

Coast Guard Sector Delaware Bay Concept Plan Overview

RRT 1/2 Meeting
Burlington, VT

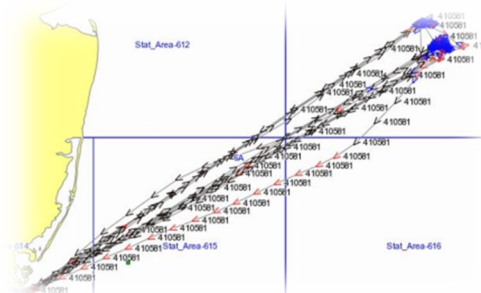
LT Terry Plank
Sector Delaware Bay



Recovered chemical munition



Chemical munition recovered from clambed





Why?



F/V WILLIAM LEE



ESS ENDEAVOR



PERSISTENT THREAT

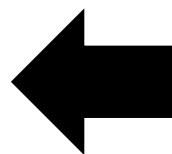




Dredge Operations



+/- 50 dredging type
F/Vs operating in AOR



13 Tractor Trailers



*Photo/video courtesy:
Tom Dameron*



Contents of the Plan

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Admin and Logistics:

Enclosures:

DoD 3R Guide

Command Center QRC

NRT QRG for Sulfur Mustard

EC

Enclosure 3: 3R Guide

Enclosure 4: Command Center Quick Response Checklist

Enclosure 5: National Response Team Quick Response Guide for Sulfur Mustard

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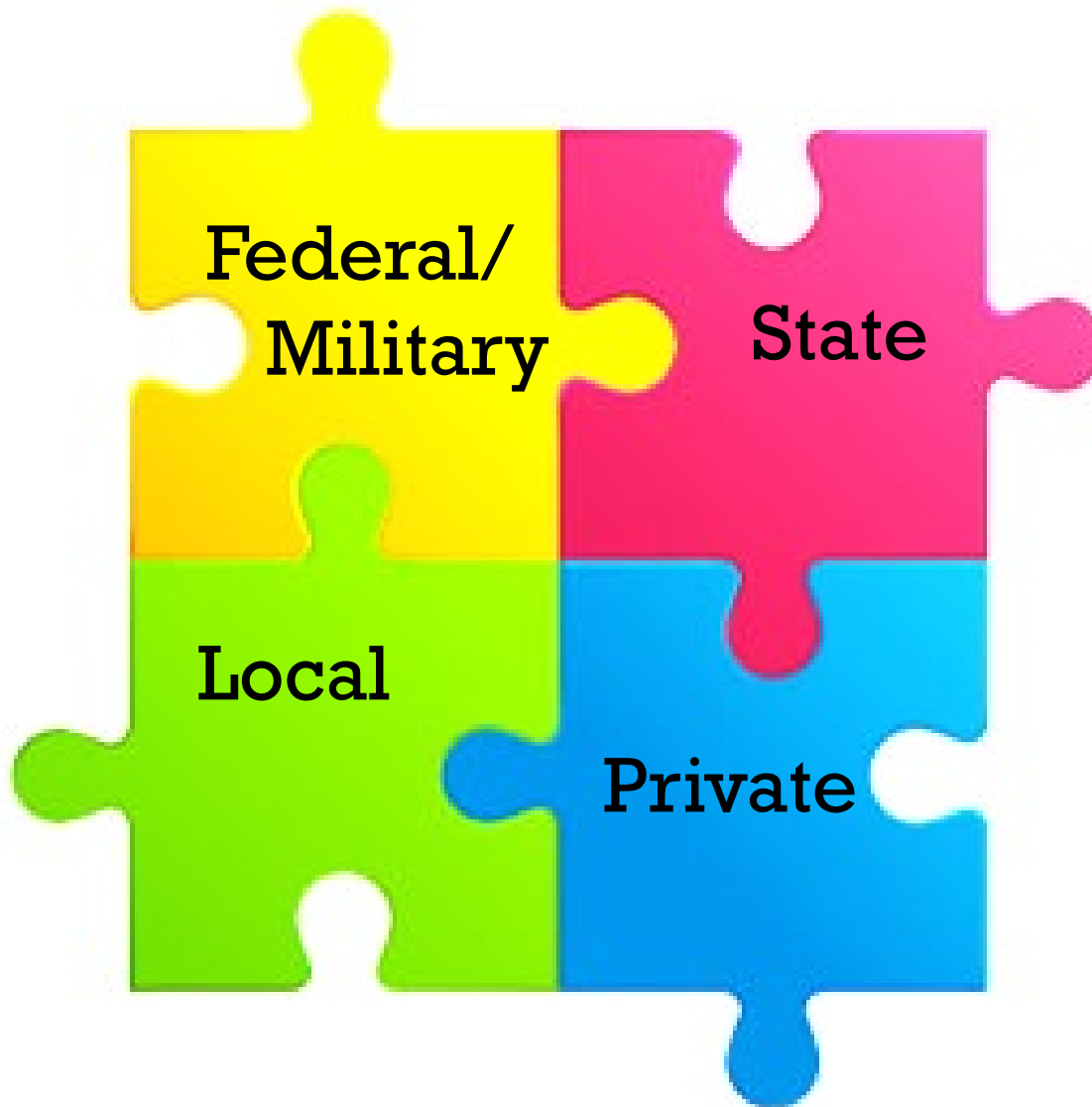
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Degree of Difficulty





Initial Response

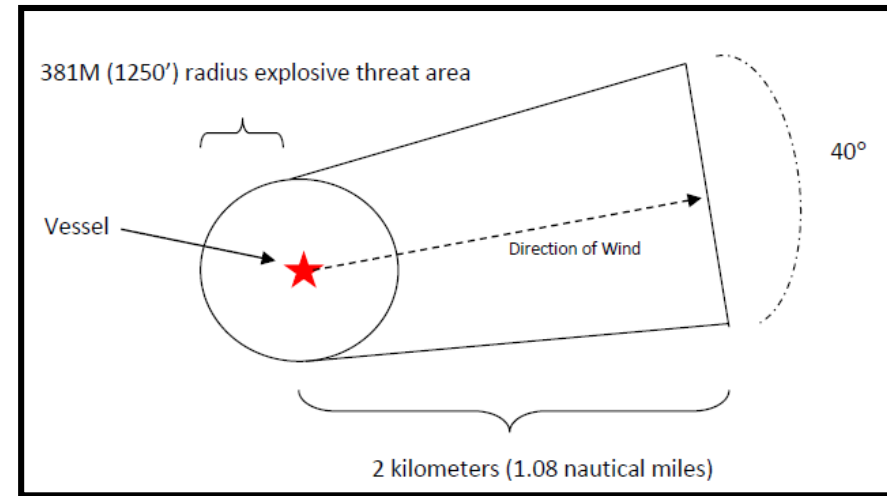
- Likely a NCP Response w/ USCG as FOSC
DoD OSC if known to involve military weapon
- Provide safety/first aid guidance to F/V
- Evaluate as best as possible the actual threat
Navy EOD → DTRA → 20th CBRNE
- Timely inter-agency communication
- Vessel control actions... There will be tradeoffs



Assessment & Mitigation



Worst Case Exclusion Area for Explosive/Significant Public Health Threat



- EOD Team will require vessel and entry support for offshore response (NWS Earle: 1 29' boat)
WPB, FRC, NSF assist
Only equipped for hasty decon for self preservation.



Decontamination



- **Offshore environment: HAZMAT response options diminished; risks to responders significant**
- **Vessel should be brought to an adequate pier if no explosive/significant vapor threat for appropriate response (trade offs)**
- **Worst case HAZMAT response 15+ personnel, Level B**



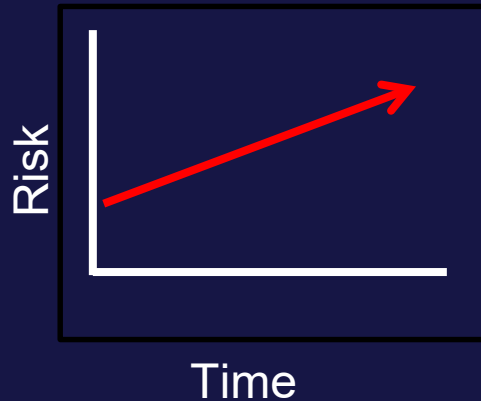
Ongoing Challenges



Fleet

- Reporting
- Safety
- Equipment
- Training
- Delayed symptoms

Risk



Training & Exercises

- EOD/NSF experience & TTP w/ munitions in maritime environment
- Exercise the plan
- Role Clarity




Further Reading

- DoD 3R Guide for the Maritime Industry
- NRT Quick Reference Guide for Sulfur Mustard
- DoD Munitions Response Terminology
- DoD Research Related to Effect of Ocean Disposal of Munitions in U.S. Coastal Waters – Report to Congress – November 2016
- OSPAR Framework for Developing National Guidelines for Fishermen on How to Deal with Encounters with Conventional and Chemical Munitions (North Atlantic)
- Helsinki Commission Report on Dumped Chemical Munition

OSPAR COMMISSION

Implementation of OSPAR Recommendation 2003/2

Database on Encounters with Dumped Conventional and Chemical Munitions



2003

3Rs Explosives Safety Guide

Maritime Industry



Recognize
Retreat
Report

UNITED STATES COAST GUARD
U.S. Department of Homeland Security

MARINE SAFETY ALERT
Inspections and Compliance Directorate

August 22, 2016
Washington, DC

Safety Alert 11-16

**Dangerous Bycatch from Bygone Days
Discarded Munitions Remain a Present-Day Hazard!**

This safety alert addresses the extreme hazards that exist today caused by discarded munitions that were dumped at sea long ago. They remain a significant risk to commercial fishermen, those operating dredges, and others who trawl and work the ocean floor. In a recent event, a deckhand on a clamming vessel was severely burned when a canister was dredged up and brought onboard along with rocks, clams, and debris. The canister likely contained mustard gas or some other type of blistering agent.

The canister itself did not appear to be leaking as there were no visible odors, evidence of discharge, or sounds of escaping contents. After the rocks and the munitions canister were sorted out from the catch and discarded a crewmember discovered he had been exposed to some sort of hazardous substance. Several hours later he developed severe blisters and burns over multiple parts of his body. The vessel then returned to port where he was admitted and treated at a local hospital.

Mustard gas is a chemical weapon developed during World War I. Millions of pounds of this product and many other chemical weapons, bombs, torpedoes, artillery shells, and munitions were routinely disposed of at sea in U.S. coastal waters. Many of these munitions dump areas are well charted with warnings posted on navigation charts. Nevertheless, there are numerous other areas where such munitions may be found that are unmarked. There is also evidence to suggest that munitions were frequently "short dumped," meaning dumped outside of the designated areas by contractors hired to take them to the intended locations.



Munition found on sea floor. (CDC image)



Approximate 12 lb. Mustard Gas Shell (CDC image)



THANK YOU