



Hawaii UXO Forum

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Discussions



- **Munitions Response Dialogue**
- **3Rs (Recognize, Retreat, Report) Program**
- **Explosives and Munitions Emergencies**
- **Interim Risk Management (IRM)**
- **Sea Disposal Studies**



Munitions Response Dialogue



- **Involves OSD, EPA, Association of State and Territorial Solid Waste Management Officials (ASTSWMO), the States, Federal Land Manager and the DoD Components**
- **State Participants include: Alabama, Arizona, California, Colorado, Massachusetts, Michigan, New Jersey, Texas, and Virginia**
- **MRD is a follow-on of Munitions Response Committee (MRC) and State-led Munitions Response Forum (SMRF)**



Recognize
Retreat
Report

3Rs Program Background



- **Established in 2000, after a May 2000, fatal incident involving unexploded ordnance (UXO) occurred at Camp Shelby, Mississippi. Ignoring warnings, a group of teenagers entered Camp Shelby's operational range and removed some anti-tank projectiles. While taking a projectile from their truck, one detonated, killing one teenager and critically injuring another. The detonation also damaged several homes and vehicles.**
- **Educates individuals and communities about the potential hazards associated with military munitions and the actions to take should they encounter a military munition to avoid injury.**
- **Focuses on key demographics, such as children, and behaviors, such as moving, touching or disturbing munitions, that may lead to death or serious injury.**
- **Contains educational materials, including explosives safety guides, posters, signs and publications that may be used in outreach and explosives safety educational programs.**



3Rs Program



- **Army has sought to continuously improve the 3Rs Program since its initial development. Key improvements included:**
 - **Development of Explosives Safety Guide for Mariners (2005)**
 - **Development of focused Explosives Safety Guides for Hawaii beginning in 2005 – products developed include:**
 - **Kids Explosives Safety Guide for Hawaii (2007)**
 - **Explosives Safety Guide for Hawaii (2006)**
 - **Ilio coloring Book (2007)**
 - **Ilio posters (propellant) (2007)**
- **CIRCA 2012, EPA whether the 3Rs Program was an effective Risk Management tool.**
- **In 2013, the Office of the Deputy Assistant Secretary of the Army, Environmental Safety and Occupational Health (ODASA(ESOH)) funded an independent programmatic study to assess the effectiveness of the U.S. Army Corps of Engineers' (USACE) implementation of the Army's 3Rs Program in changing behaviors for communities within or near Formerly Used Defense Sites where UXO and other munitions are known or suspected to be present.**
 - **Assessment identified a number of opportunities for improvement**
 - **Determined the 3Rs Program to be an effective risk management tool for influencing people's behavior to avoid actions that upon encountering a munition may lead to death or serious injury.**
- **In 2014, ODASA(ESOH) update website to address recommended changes.**

The Army is currently implementing a 3Rs Project designed to assist active and National Guard installations in implementing a comprehensive installation-specific 3Rs Program

- Initiated in 2015, as a follow-up to the 2013 assessment, DASA(ESOH) initiated the first phase of a project to help active Army and National Guard installations implement installation-specific 3Rs Programs. The below installations, which had experienced a munitions-related incident, occurred were the initial installations visited.
 - Forts Bliss, Bragg and Riley
 - Camp Shelby
 - White Sands Missile Range
- Army is now planning its second iteration to begin in 2017.
- As part of this project, the 3Rs Program website was updated and improved the 3Rs website (3Rs.mil) to reinforce the 3Rs message and its branding in a centralized fashion. One of the measures the completed was to improve the reach of the 3Rs Program is to make the website mobile-device accessible and more interactive. The improved website was launched at the end of 2015.



Explosives or Munitions Emergencies



- **After decades of munitions-related activities required to maintain our military's readiness, munitions may be present at both active and former military installations**
- **For a variety of reasons (e.g., munitions taken as souvenirs), munitions may also be encountered in other areas**
- **Munitions encountered in the public domain should be considered extremely dangerous and should not be disturbed or moved until technically qualified personnel assess and determine the hazards**
- **When munitions are encountered in the public sector, authorized officials may request DoD Explosive Ordnance Disposal (EOD) support - EOD units do not respond to requests for support directly from private citizens or organizations**
- **The National Oil and Hazardous Substance Contingency Plan (NCP) provides that DoD will be the removal response authority with respect to incidents involving military munitions**



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Explosives or Munitions Emergencies (cont)



- DoD has adopted the Military Munitions Rule's (MR) (40 CFR) definitions for an explosives or munitions emergency response and an explosives or munitions emergency response specialist
- Although the MR defines explosives or munitions emergency response specialists broadly, within DoD only EOD will respond to a request for support of an explosives or munitions emergency
- DoD further characterizes explosives or munitions emergencies as either Level 1 or Level 2 emergency responses. DoD assumes that requests from authorized officials to respond to a discovery of military munitions outside the DoD munitions logistics management system require an immediate response
- EOD personnel only conduct Level 1 emergencies, but may support Level II emergencies
- The lead on-site EOD specialist will, with regard to explosive hazard presented determines whether a Level 1 Emergency exists, and when to terminate a Level 1 or reclassify it to a Level 2 response.



Interim Risk Management (IRM)



Background

- **FUDS Definition:** Real property that was under the jurisdiction of the Secretary and owned by, leased by, or otherwise possessed by the U.S. and those real properties where accountability rested with DoD but the activities at the properties were conducted by contractors that were transferred from DoD control prior to October 17, 1986.
- **Scope of FUDS Program**
 - More than 5,100 eligible projects
 - Cost to complete of \$13.3 billion
 - Annual President's budget ~\$200 million
- DoD is committed to addressing environmental contamination and munitions in a safe, timely and responsive manner as described under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).



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Interim Risk Management (IRM)



- **DoDI 4715.07, Defense Environmental Remediation Program (DERP) establishes procedures for IRM**
- **HQDA (ODASA(ESOH)) oversees USACES' implementation and provides notifications to Congressional Delegations**
- **USACE centrally manages IRM activities for FUDS**
 - **FUDS IRM activities include:**
 - **Landowner notification (letters, factsheets, 3Rs information) mailed to landowners**
 - **Public education including an Information Center and 3Rs explosives safety information**
 - **Congressional Delegations (local offices), regulators, public officials, first responders and military installations are notified prior to mailing**



Interim Risk Management (IRM)



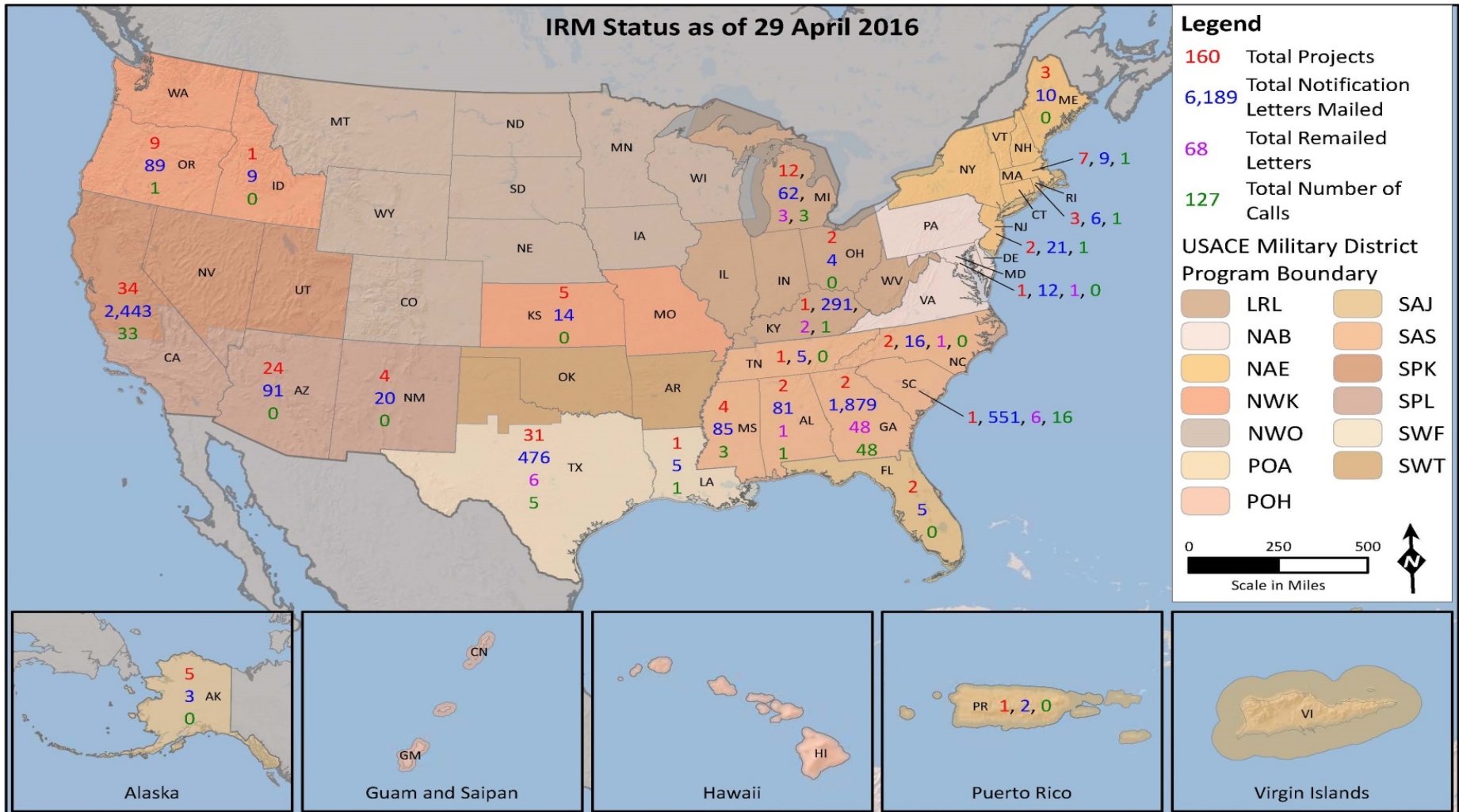
- **IRM activities may vary based on site-specific conditions and available information**
- **USACE plans to conduct IRM activities at least once every 5 years until it completes required response actions at each Munitions Response Site (MRS)**
- **Implementation Schedule**
 - **Initial Rollout (completed July 15)**
 - **Group 1 Sep 15 – Apr 16**
 - **Group 2 May 16 – Jan 17**
 - **Group 3 Feb 17 – Oct 17**
 - **Group 4 Nov 17 – Jul 19**
 - **Group 5 Aug 18 – May 19**



Interim Risk Management (IRM)



Progress to Date





Sea Disposal Report



Objective - Understand and then manage the risks associated with military munitions in the underwater environment by using:

- **Historical data to determine method and scale of usage**
- **Scientific data necessary to understand risk**
- **Scientific basis for making sound risk management decisions that fully consider the operational, safety and environmental factors of the alternatives**
- **Science to develop policy to manage risk**



History of Ocean Disposal of Military Munitions

Sea Disposal Report (cont)



- Disposal options, particularly for chemical warfare materials (CWM), were limited
 - Large quantities of munitions became excess
 - Deteriorating condition presented hazards
 - Disposal at depths, beyond human reach, considered safe
- Disposals included:
 - Munitions,
 - Bulk materials – chemical agents, explosives
 - Components
 - Captured enemy CWM (WWII)
- Between 1919 and 1970, the Armed Services disposed of excess, obsolete or unserviceable conventional and chemical munitions in U.S. coastal waters
- Congress banned the practice with the Marine Protection, Research and Sanctuaries Act of 1972
- In 1975, the U.S. signed the “London Treaty” prohibiting ocean disposal of chemical weapons





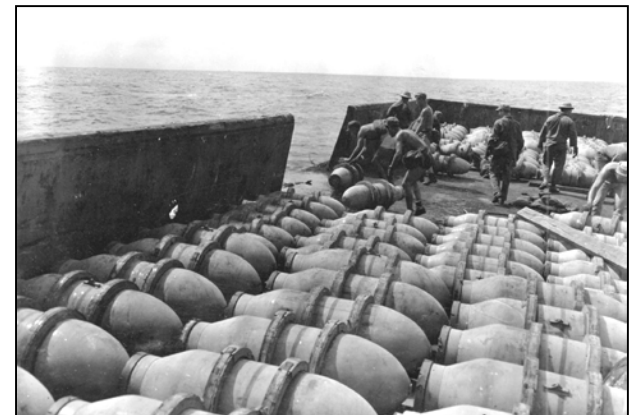
History of Ocean Disposal of Military Munitions (Cont)



- **Locations:**
 - Ranged from 5 to over 250 miles from shore
 - Depths ranged from 50 to 16,000 feet
- **DoD disposal methods**
 - Loose or “over the side”
 - Consolidated in ship hulks, with scuttling
- **DoD used for:**
 - CWM
 - Conventional munitions
- **Designated sites**
 - Were generally 100 square miles
 - May also have been used by others for disposal of industrial and municipal wastes



Operation CHASE



Loose or “Over the Side” Disposal



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Sea Disposal Report (cont)



- **Department of Defense Research Related to Effect of Ocean Disposal of Munitions in U.S. Coastal Waters Report to Congress – June 2016**
- **The report discusses:**
 - **DoD’s research to date regarding the effects of sea-disposed munitions on the ocean environment;**
 - **The feasibility of removing or otherwise remediating sea-disposal sites; and**
 - **Recommendations for additional research and the remediation or cleanup of sea-disposal munitions sites.**
- **DoD’s research concludes that:**
 - **Sea-disposed munitions, which have become part of the ocean environment and provide critical habitat to marine life, do not pose significant harm when left in place; and**
 - **Removing or cleaning up sea-disposal munitions sites would have more serious impacts on marine life and the ocean environment than would leaving them in place.**



Sea Disposal Report (cont)



- From an explosives safety perspective, DoD believes that it is best to leave sea-disposed munitions in place. DoD also found that the recovery of these munitions would likely result in a rapid release of munitions constituents that could cause more harm than would otherwise occur as the munitions continue to deteriorate over time.
- DoD found that a munitions deteriorated state and its encrustation by sea life make it virtually impossible to positively identify a munition or determine whether it is armed.
- The risk to human health and the environment associated with the recovery of sea-disposed munitions is far greater than the risk of leaving the munitions in place and implementing an explosives safety education program, like the Army's 3Rs (Recognize, Retreat, Report) Explosives Safety Education Program.
- DoD proactively uses the Army's 3Rs Program to advise people of the actions to take or avoid if they encounter or inadvertently recover a munition from the ocean.



Questions



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Contact Information



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Explosives or Munitions Emergencies (cont)



- **When an issue is raised to higher levels for resolution:**
 - **Protective measures must be maintained to ensure safety**
 - **Site security should be maintained until the situation is resolved**
- **EOD personnel are not allowed to take an action that is inconsistent with approved EOD procedures or that would place them at added risk**
- **Regulators and safety officials should immediately elevate the concern to higher levels of DoD authority to achieve a mutually agreeable solution.**
- **Once attained, the appropriate DoD authority will coordinate EOD's support to resolve the emergency in a manner protective of human health and the environment, and that is consistent with EOD procedures an emergency response is the responsibility of others (e.g., an installation)**
- **EOD addresses the explosive hazard – testing or cleanup environmental contamination resulting from EOD's actions are the responsibility of the requester (e.g., installation)**



Explosives or Munitions Emergencies (cont)



- **Environmental regulators and safety officials may have an independent authority and responsibility for and/or the technical expertise to evaluate the public safety and environmental aspects of an explosives or munitions emergency**
- **Typically, EOD and environmental regulators and safety officials work closely to manage the potential adverse impacts on the scene**
- **If, however, a situation occurs that requires regulators or safety officials to raise concerns about the potential impact of EOD's intended action to higher levels of DoD authority – this should be the exception, not the rule:**
- **Where a delay will not compromise safety or increase risks, DoD will ensure protective measures are implemented until a mutually agreeable solution is reached.**