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## U. S. Coast Guard Sector Hampton Roads

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# Military Munitions Response Annex to the Virginia Area Contingency Plan



**2019**  
*Version: I*

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# References

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- (a) National Response Framework
- (b) National Contingency Plan, 40 CFR Part 300
- (c) U.S. Coast Guard Marine Environmental Response and Preparedness Manual, COMDTINST M16000.14 (series)
- (d) Contingency Preparedness Planning Manual, Volume 4: Incident Management and Crisis Response, COMDTINST M3010.24
- (e) Policy for Countering Weapons of Mass Destruction, COMDTINST 3400.5
- (f) Weapons of Mass Destruction and Catastrophic Hazardous Material Releases, COMDTINST 3400.3 (series)
- (g) Critical Incident Communications, COMDTINST M16600.3
- (h) Coast Guard Incident Management Handbook
- (i) DoD Directive 6055.9M, Ammunition and Explosives Safety Standards
- (j) DoD Directive 3025.18, Defense Support of Civil Authorities (DSCA)
- (k) Department of the Army Memorandum of 21 April 2009: Munitions Response Terminology

# Situation

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This Military Munition Response Annex to the Virginia Area Contingency Plan provides guidance to Coast Guard Sector Hampton Roads for coordinating a response to an incident involving sea-disposed conventional or chemical Discarded Military Munitions (DMM), as a result of the incidental recovery of such material during maritime activities. This includes the potential encountering of, and exposure to, chemical agents (CA), and the potential or known presence of chemical warfare material (CWM), described as chemical munitions or CA in containers. In response to a DMM incident, Sector Hampton Roads will use all available resources, and conduct operations in concert with partner response agencies using risk informed decision making, to save or assist lives, mitigate and/or prevent further contamination of public/private property or the environment, contain the threat posed to public safety, stabilize the incident(s), and protect the environment and food supply. A special thanks to the members listed below who authored this Military Munition Response Annex.

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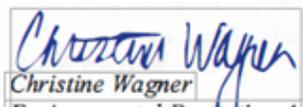
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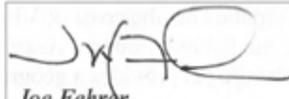
  
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## **General**

### ***Brief History of Sea Disposal of Military Munitions***

- (1) The Department of Defense (DoD) disposed of excess, obsolete, unserviceable, and captured enemy munitions in deep water off the shores of the United States until 1970. Congress prohibited the practice with the passage of the Marine Protection, Research, and Sanctuaries Act of 1972. Prior to the 1970s, munitions disposal was generally limited to burning, burial on-land, or disposal at sea. At the time, sea disposal was considered one of the safest alternatives available to dispose of munitions.
- (2) The U.S. Armed Forces established policies for munitions disposal beginning in 1917. These policies, which defined depths and locations of disposal sites, became more stringent over time in an effort to reduce the possibility of recovery and accidental contact by the public. In 1944, the War Department required the disposal of CWM to occur in water at least 300 feet deep and 10 miles from shore and established specific criteria for conventional munitions disposal. By December 1945, the Department increased the disposal depth requirement to 6,000 feet for CWM and 3,000 feet for explosives and ammunition. The Department also published disposal locations in a notice to mariners and on nautical charts.
- (3) Although most sea disposal operations were to occur in deep water, research shows that at least one vessel (the USS Elinor) was known to have disposed of DoD military munition off the mid-Atlantic coast after World War I. The USS Elinor, which returned to the United States from Europe in 1919, subsequently transited from the mouth of the Chesapeake Bay to New York Harbor between 11 and 14 February 1919, disposing her cargo of CWM approximately 40 nautical miles beyond the mouth of the Chesapeake Bay in 102 feet of water along the way. The USS Elinor, which disposed of 75-mm munitions (mustard rounds), may be the source of recently recovered munitions in the both Sector Hampton Roads AOR and Sector Delaware Bay AOR, however, this is not known for certain.

### ***Area of Concern***

**Area of Operation.** In response to an incident involving DMM covered by this plan, primary areas of operation will include onboard the vessel, waters and port areas immediately surrounding the vessel, and vessel crewmembers. In some cases, the catch that was onboard a fishing vessel at the time the DMM was encountered may have been transferred off the vessel prior to initiation of response operations. In these cases, the area of operation will extend to a holding area onshore, the processing facility, and vehicles used to transport the catch from the vessel to the facility.

**Area of Interest.** Vessels that are particularly susceptible to recovering DMM from the sea floor include dredging type vessels engaged in clam and ocean quahog fisheries. Accordingly, areas of interest include clam and quahog fishing grounds off the coast of Virginia, Maryland, and North Carolina, transit routes between the coastline and the fishing grounds, vessel homeports and/or offloading facilities, and processing facilities. Enclosure (2) provides a geographical reference for areas of interest noted in this annex.

- (1) As of the date of this plan, there were roughly 290 dredging type commercial fishing vessels on the regional Coast Guard Commercial Fishing Vessel Examiner's roster. Primary homeports for these vessels in Sector Hampton Roads' AOR include Norfolk, Newport News, Hampton, Virginia Beach, Portsmouth, Chincoteague, Cape Charles, and

numerous other communities, however, fishing vessels homeported elsewhere in the mid-Atlantic or Northeast regularly fish in the Sector Hampton Roads zone.

- (2) Common companies involved in shellfish *landing* in VA:
  - a. The Shellfish Company: 3323 Shore Dr. Virginia Beach, VA 23451
  - b. Wanchese Fish Company: 48 Water St Hampton, VA 23663
  - c. Lynnhaven Oyster Company: 1444 Southern Blvd, Unit C-20 Virginia Beach, VA 23454
  - d. Goodwin Island Oyster Company: 118 Sandbox Lane, Yorktown, VA 23692
  - e. Ruby Salts Oyster Company: 234 Cherrystone Road, Cape Charles, VA 23310
  - f. Ship Point Oyster Company: 1115 Poquoson Avenue, Poquoson, VA 23662
  
- (3) Primary shellfish *processing* companies/plants in VA:
  - a. Virginia Natural Fish Company: 200A Milnwood Rd, Farmville, VA 23901
  - b. Wanchese Fish Company: 48 Water St. Hampton, VA 23662
  - c. The Shellfish Company: 3323 Shore Dr. Virginia Beach, VA 23451
  - d. Sam Rust Seafood: 620 Regional Dr. Hampton, VA 23661
  - e. Ballard Fish & Oyster Company: P.O Box 347, 1588 Townfield Drive, Cheriton, VA 23361

***Area of Responsibility.*** Coast Guard Sector Hampton Roads' Area of Responsibility (AOR) is described in 33 CFR 3.25-10. The Sector Hampton Roads Marine Inspection and Captain of the Port (COTP) Zone includes an area of responsibility that encompasses nearly the entirety of the state of Virginia, excluding the northeastern counties of Loudoun, Fairfax, Arlington, Prince William, and northern third of Stafford, as well as the independent cities that fall within these counties. The COTP Zone extends seaward in an easterly direction from the Virginia coast to the 200 nautical mile exclusive economic zone boundary. Sector Hampton Roads includes the major ports of Norfolk, Portsmouth, Newport News, and Richmond and major river systems such as the James, York, Rappahannock, and Elizabeth Rivers. The AOR also includes several locks and dams, active shipyards, major deep draft cargo ports, and the waters of multiple lakes, rivers and coastal waterways.

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### ***Incident Impact***

An incident involving DMM and CWM may result in unique and potentially significant impacts in a number of ways, to include:

- (1) Injury to vessel crewmember(s).
- (2) Contamination of vessel.
- (3) Negative impact to vessel's schedule, operations, catch, and/or livelihood.
- (4) Contamination of catch/threat to food supply.
- (5) Disruptions to a vessel's operation, waterway, marina and/or pier/facility. These disruptions may stem from operational controls, such as safety zones or Captain of the Port Orders, necessary to provide for public safety and/or to facilitate an emergency response.
- (6) Public safety/health concerns (real or perceived).
- (7) Risk to responders.
- (8) The response may exceed or overwhelm the capabilities or resources of local fire departments/HAZMAT teams and/or require a joint federal, state and/or local response. Additionally, depending on the time of year, Level A or B personal protective equipment

(PPE) may pose health and safety risks for responders that may need to be mitigated.

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### ***Pre-Incident Conditions***

- (1) On 22 August 2016, the Coast Guard Inspections and Compliance Directorate issued Marine Safety Alert 11-16 (**see enclosure 2**) titled “Dangerous Bycatch from Bygone Days, Discarded Munitions Remain a Present-Day Hazard!” The alert addressed the extreme hazards that potentially exist today caused by discarded munitions, particularly for commercial fishermen engaged in dredging and trawling. The alert also recommended the fishing fleet review and follow the Army’s 3R Explosive Safety Guide for Maritime Industry, and report discoveries to the National Response Center at 1-800-424-8802.
  - (2) The Army’s 3R Explosive Safety Guide for Maritime Industry is guidance produced by the Army in July 2013 (**see enclosure 3**). This guide provides mariners with information on the actions to take should they recover or suspect they have recovered a munition during maritime operations.
  - (3) Sector Hampton Roads created a Quick Response Card (QRC) for the Sector Command Center and Sector Response personnel to help guide information collection and initial response actions for an incident involving munitions (**see enclosure 4**).
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### ***Support from Other Agencies***

Federal, state, and local agencies will play a key role in DMM and/or CWM response operations. The Coast Guard may receive support from, or provide support to, one or more of the following:

#### **Federal**

#### **Department of Defense (DOD) Contacts (in Order of Priority During a Response)**

- (1) Naval Weapons Station Yorktown, VA and Naval Amphibious Base Little Creek, VA: The Explosive Ordnance Disposal (EOD) Mobile detachment at Naval Weapons Station Yorktown and Explosive Ordnance Disposal Mobile Unit Two (EODMU2) at Naval Amphibious Base Little Creek are a six-person team equipped, trained and responsible for identifying (confirming/denying presence of) DoD military munitions, determining the threat, limiting the spread of contamination, and rendering it safe. The EOD has a 9-meter (29’ 6”) rigid hull boat, and normally launches on maritime missions from Naval Weapons Station Yorktown or Naval Amphibious Base Little Creek, although the boat is trailer-able and can launch from an alternate boat ramp. The EOD has a 1-4 hour ramp-up time (may be longer on weekends/holidays), and has a two-person team available on 24/7 duty. The EOD is dispatched through the Regional Operations Center 757-322-2609, but may also be reached directly at 757-462-8452 (day)/ 757-444-2324 (night). The team is not equipped or responsible for decontamination actions onboard the vessel or catch. If the recovered munition is determined to contain an unknown liquid fill, EOD will assist in coordinating further disposition. If the vessel is at sea, EOD can, if the risk is acceptable and if authorized by

higher DoD authority, dispose of the munition at sea.

- (2) DoD's 20<sup>th</sup> Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Operations Center: 410-436-6200. Responsible for determining and executing safe disposition, removal, and transport of munition, once rendered safe by an Explosive Ordnance Disposal team.
- (3) The Navy On Scene Coordinator (NOSC) that covers Sector Hampton Roads zone is Commander Navy Region Mid-Atlantic, 1510 Gilbert Street, Norfolk, VA 23511. Contact may be made through the Regional Operations Center at 757-322-2609.
- (4) The Office of the Assistant Secretary of the Army for Safety, Environment, and Occupational Health's Director for Munitions and Chemical Matters, can be reached at 703-697-5564.
- (5) Additional U.S. Army Contacts (Consult Navy EOD, 20<sup>th</sup> CBRN Operations Center, and Atlantic Strike Team to determine additional notifications based on incident):
  - Army Operations Center: 703-697-0218 or 703-695-4695.
  - Army National Guard 21<sup>st</sup> Civil Support Team (CST).
  - Chemical Material Activity's Director, Recovered Chemical Material Directorate, 410-436-1083.
  - Edgewood Chemical Biological Center's Director for Operations for Program Integration, 410-436-9570.
  - U.S. Forces Command's Director, CBRNE Analytical Remediation Activity, 410-436-9570

## **Department of Homeland Security (DHS)**

- (1) National Response Center (NRC). The NRC is a part of the federally established National Response System and staffed 24 hours a day by the U.S. Coast Guard. It is the designated federal point of contact for reporting all oil, chemical, radiological, biological and etiological discharges into the environment, anywhere in the United States and its territories. The NRC also takes maritime reports of suspicious activity and security breaches within the waters of the United States and its territories. Reports to the NRC activate the National Contingency Plan (NCP) and the federal government's response capabilities. It is the responsibility of the NRC staff to notify the pre-designated On Scene Coordinator assigned to the area of the incident and to collect available information on the size and nature of the release, the facility or vessel involved, and the party(ies) responsible for the release. The NRC maintains reports of all releases and spills in a national database. The NRC can be contacted at 1-800-424-8802.
- (2) National Strike Force (NSF): The National Strike Force (NSF) provides highly trained, experienced personnel and specialized equipment to Coast Guard and other federal agencies to facilitate preparedness for and response to oil and hazardous substance pollution incidents in order to protect public health and the environment. The NSF's area of responsibility covers all Coast Guard Districts and Federal Response Regions. Units that fall under the NSF can be requested or dispatched via communications with District 5 Command Center, and/or via the NSF Coordination Center (NSFCC) at 252-331-6000.
  - a. National Strike Force Coordination Center (NSFCC): THE NSFCC provides support and standardization guidance to the Atlantic Strike Team (AST), Gulf Strike Team (GST) and Pacific Strike Team (PST). The NSFCC also oversees the maintenance of the OPA-90 mandated Response Resources Inventory (RRI), Oil Spill Removal Organization (OSRO) Classification Program, and National Maintenance Contract

(NMC).

- b. Strike Team's (ST): Three specialized teams make up the National Strike Force (NSF); The Atlantic Strike Team (AST), Gulf Strike Team (GST) and Pacific Strike Team (PST). All three Strike Teams are vital national assets comprised of a unique, highly trained cadre of Coast Guard professionals who maintain and rapidly deploy with specialized equipment and incident management skills, including maritime environmental response, weapons of mass destruction (WMD), and Chemical, Biological, Radiological, and Nuclear (CBRN) response.
- c. Public Affairs Information Assist Team (PIAT): The Public Information Assist Team brings experienced members with expertise in interagency crisis communication to assist Incident Commanders (IC) and Federal On Scene Coordinators (FOSC) meet their objectives of truth and transparency of operations for the public.
- d. Coast Guard Incident Management Assist Team (IMAT): The IMAT is also a part of the NSF. It is designed to provide tactical incident support during a response. This team represents the highest level of ICS experience and qualifications in the Coast Guard and its members are available upon request to assist operational or incident commanders during significant contingencies.

### **Department of Justice (DOJ)**

- (1) Federal Bureau of Investigation (FBI). The FBI is the lead Federal agency for criminal investigations of terrorist acts or terrorist threats, as well as intelligence collection activities within the United States. FBI field office Norfolk, VA area of responsibility spans the counties of Accomack, Chesapeake, the Eastern Shore, Norfolk, Northampton, Portsmouth, Suffolk, and Virginia Beach. For a CWM/DMM incident, the FBI's investigative priorities include: possession of WMD (location, and who has access to it), and whether or not there are indicators that those involved intended to locate and retrieve the DMM. The FBI field office Norfolk has a WMD Operations Unit, WMD Countermeasures Unit, Domestic Emergency Support Team, Hazardous Materials Response Unit, and a Materials and Device Unit. The Norfolk office receives NRC reports, but may also be reached directly at 757-455-0100.

### **Department of Health and Human Services (HHS)**

- (1) Food and Drug Administration (FDA): The FDA is responsible for protecting the public health by ensuring the safety, efficacy, and security of the nation's food supply. The FDA manages the National Shellfish Sanitation Program (NSSP), which is the federal/state cooperative program for the sanitary control of shellfish produced and sold for human consumption. The purpose of the NSSP is to promote and improve the sanitation of shellfish (oysters, clams, mussels, and scallops), moving in inter-state commerce. The cognizant FDA office for the state of Virginia are located at Accomack field office (757-787-5864 x221), Norfolk field office (757-683-8461) and White Stone field office (804-435-1095). For CWM/DMM response, the FDA coordinates with designated state shellfish regulatory officials, as well as the owner/operator of the vessel and offloading/processing facilities, to coordinate the identification, status, isolation/embargo, and disposition of the shellfish catch.

- (2) Office of the Assistant Secretary for Preparedness and Response (ASPR): Regional Emergency Coordinators (RECs) serve as ASPR's primary representatives throughout the country at the regional level. The main role of the RECs is relationship building, planning for effective federal emergency responses, and facilitation of preparedness and response activities for public health and medical emergencies. ASPR and the REC are an additional resource that the state health department will engage for situational awareness and resource support (if needed). Region III covers Virginia and can be reached at 215-861-4413.
- (3) Centers for Disease Control and Prevention (CDC): The CDC provides independent oversight to the U.S. Army's chemical weapons elimination program and serves as an important element in ensuring the safe destruction of chemical warfare material for protection of public health. The CDC also recommends exposure limits for chemical warfare agents. During a response, the CDC may be able to provide additional resources and expertise for environmental or responder monitoring, medical guidelines and recommendations, and disposal. Contact and additional information at: [www.cdc.gov/nceh/demil](http://www.cdc.gov/nceh/demil); 800-232-4636.

### **Environmental Protection Agency (EPA)**

- (1) Consequence Management Advisory Division (CMAD): The CMAD is EPA's national special team providing expertise and response capabilities for CBRN. CMAD's Portable High-throughput Integrated Laboratory Identification System (PHILIS) is a mobile laboratory for on-site analysis of environmental samples contaminated with chemical warfare agents and toxic industrial compounds. There is one PHILIS in Edison, NJ, and another in Castle Rock, CO. Throughput for each PHILIS unit is approximately 60 samples/day. CMAD provides tactical capabilities for **screening, sampling, monitoring, decontamination, clearance, and waste management**. CMAD also includes a 16 member team located in six geographical regions (Washington DC; Erlanger, KY; Raleigh, NC; Edison, NJ; Boston, MA; and Kansas City, KS). Expertise includes biology, toxicology, health physics, chemistry, engineering, industrial hygiene, HVAC engineering, and contracts/grants management. CMAD also has contractual arrangements with laboratories in various locations in the US. Team members are available to respond and/or provide technical expertise 24/7/365. Requests for CMAD support can be made through EPA's Emergency Operations Center at 202-564-3850.
- (2) EPA's Environmental Response Team (ERT): Capable of conducting on-site health and safety assessments (including chemical, biological and physical treatment and monitoring) to determine if immediate threats to personnel safety exist. Coast Guard commanders who have reason to suspect threats to physical safety exist should contact the ERT via the National Response Center (NRC) at 1-800-424-8802 or EPA's Emergency Operations Center at 202-564-3850.

### **National Oceanic and Atmospheric Administration (NOAA)**

- (1) National Weather Service (NWS): The NWS provides weather, water, climate data, forecasts and warnings for the protection of life and property. The NWS office that services the Hampton Roads' AOR is NWS Wakefield, which can be reached at <https://www.weather.gov/akq/>, 757-899-4200, and [AKQ.webmaster@noaa.gov](mailto:AKQ.webmaster@noaa.gov).
- (2) NOAA Scientific Support Coordinator (SSC): The NOAA SSCs are part of NOAA's Office of Response and Restoration. NOAA SSCs are interdisciplinary scientific teams that support the Federal On Scene Coordinator, and respond to oil and chemical spills in U.S. waters.

NOAA SSCs help the On-Scene Coordinator make timely operational decisions. The team is headquartered at NOAA's campus in Seattle; however, members are located around the country to represent the team at spills, drawing on the team's spill trajectory estimates, chemical hazards analyses, and assessments of the sensitivity of biological and human-use resources. OR&R staff members also represent NOAA on the National Response Team and Regional Response Teams. NOAA SSC locations are mostly associate with Coast Guard Districts. The Region Three SSC covers Sectors New York, Delaware Bay, Maryland-National Capital Region, Hampton Roads, and North Carolina. The assigned SSC for Sector Hampton Roads is Mr. Frank Csulak. He can be reached at 732-371-1005.

## State

**Virginia Department of Environmental Quality (VADEQ):** VADEQ administers the state's environmental protection, conservation, and emergency response efforts. VADEQ may be reached at 804-698-4000, or through the Tidewater Regional Office at 757-518-2000.

**Virginia Department of Health (VDH):** The VDH is responsible for ensuring the health and well-being of communities and populations by protecting and promoting the physical, mental, and environmental health of its citizens, and by preventing disease, injury, and disability. The VDH Office of Emergency Management has responsibility to coordinate the emergency activities of the Department and its components. VDH OEM would lead Department efforts and activities for these situations, including alerting/notifying other Department units that have specific responsibilities, such as liaising with hospitals and EMS agencies, epidemiology and disease monitoring, and public information. One unit of note is the VDH Consumer, Environmental and Occupational Health Service (CEOHS), which serves the communities and workers through activities aimed at improving the health and well-being of the public. At the core of its mission are preventive initiatives to decrease disease and injury by reducing exposure to chemical, physical and biological hazards. CEOHS activities are organized into three programs: Environmental and Occupational Health Surveillance, Food Safety and Public Protection, and Environmental and Occupational Health Assessment. The VDH OHS is the State Shellfish Regulatory Official listed on the FDA's Interstate Certified Shellfish Shippers List. VDH Shellfish Sanitation Manager Mr. Keith Skiles can be contacted at 804-864-7480 or via email at [Keith.Skiles@vdh.virginia.gov](mailto:Keith.Skiles@vdh.virginia.gov).

**Virginia Emergency Operations Center:** The Virginia Emergency Operations Center (VEOC), when activated, performs direction and control, prioritization, assessment, coordination, and resource management. The emergency operations center operates with a hybrid organizational structure that incorporates elements of the incident command system and emergency support functions to structure its assessment, coordination, and resource activities. The Deputy Operations Director (DOD) is responsible for three of the major functions: assessment, coordination and resource management. The assessment function is performed by an Information and Planning Branch, the coordination function by Operations and Communications, and the resource management function by three branches: Emergency Services, Human Services, and Infrastructure & Resource that coordinate specific ESF functions that fall under those branches. VA EOC can be contacted at 804-897-6502 or 804-897- 6506.

**Virginia Office of Public Safety and Homeland Security (VPSHS):** Leads and coordinates Virginia's counterterrorism, cybersecurity, and emergency preparedness efforts, and can be contacted at 804-786-5351.

**Virginia Department of Emergency Management (VDEM):** The VDEM is a state agency that works closely with local government emergency managers, other state agencies, volunteer organizations and federal agencies such as FEMA to ensure a comprehensive, efficient and effective response to emergencies and disasters throughout Virginia. Headquartered in Richmond, VDEM is organized around five divisions with a staff of approximately 75 employees. Reporting directly to the Secretary of Public Safety and the Governor of Virginia, VDEM works under the broad authority of the Commonwealth of Virginia. State resources can be coordinated through VA EOC at 804- 897-6502 or 804-897- 6506.

### **Local**

**Fire Departments:** Some municipal fire departments have specialized HAZMAT units, many of which are trained in WMD response. State/municipal HAZMAT capabilities should be coordinated through the cognizant state office of emergency management or regional operations/dispatch center.

**Emergency Medical Services (EMS):** Local EMS organizations are responsible for responding to requests for medical assistance, depending upon the severity of the incident in terms of number of casualties and extent of exposure. EMS personnel may be restricted from responding to a site by the Lead Federal Agency (LFA) until protective capabilities for responders are available.

**Harbormaster:** Local harbormasters are usually employed by the town in which the harbor is located. They may be part of the local law enforcement agency or may have powers delegated to them directly by the town or city council. Harbormasters may be able to readily facilitate movement of vessels within the harbor and clear dock space as needed for the response.

**Hampton Roads Metropolitan Medical Response System (MMRS):** The purpose of the Hampton Roads MMRS is to develop and sustain a comprehensive medical response capability for the Hampton Roads communities to the health and medical consequences of WMD, terrorist acts, or any natural or technological disaster. MMRS coordinates local law enforcement, fire, HAZMAT, EMS, hospital, and emergency management to more effectively respond in the first 48 hours of a public health crisis. Through the Emergency Communication Center (ECC) located in Norfolk (or in the case of a catastrophic event, Yorktown) the strike teams can be activated by the Emergency Manager, Incident Commander, or other Public Safety Officers. MMRS can be contacted at 757- 441-5608.

**Maritime Incident Response Team (MIRT):** The mission of the Maritime Incident Response Team (MIRT) is to provide immediate on-scene maritime advice and agency liaison to the United States Coast Guard and Incident Commanders responding to fires, hazardous materials, search and rescue, and other emergencies in the marine environment. The MIRT will promote maritime response capabilities in The Port of Virginia through an ongoing program of training, drills, resources, and continued support and coordination through port partnerships. The MIRT can be requested via email at [bburket@portofvirginia.com](mailto:bburket@portofvirginia.com) or by phone at 757-683-2199.

**Hampton Roads Incident Management Team (HRIMT):** The mission of the Hampton Roads Incident Management Team (HRIMT) is to provide a professional, All-Hazard Type 3 IMT to support major incidents and events that occur in the Hampton Roads region, the Commonwealth of Virginia, and outside

State as requested. HRIMT was formed to provide specialized assistance to all member communities, and to provide specialized assistance to other communities and Agencies as available. The member community for the HRIMT consists of the sixteen localities identified by the Hampton Roads Planning District Commission. These consist of the Cities of Chesapeake, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg, and the Counties of Gloucester, Isle of Wight, James City, Southampton, Surry, and York. The MRIMT can be requested via email at [mgurley@cityofchesapeake.net](mailto:mgurley@cityofchesapeake.net)

### **Private**

**Vessels:** The Master of a vessel has a vested interest in the safety of their vessel, crew, and cargo. In the event suspected CWM encountered during normal fishing activity, hazards a crewmember or vessel, the Master may contact local authorities via 911 and/or Sector Hampton Roads Command Center via phone, VHF channel 16, or other means. The Master may also provide advice to the Incident Commander on the use of personnel and equipment. The Master and crew can also provide crucial information regarding the vessel's construction, cargo, firefighting systems, fishing configurations/cargo hold filtration systems, etc. It should be noted that a vessel's owner may be a different person than the master. In these cases, the owner may be an additional stakeholder to consider/engage.

**Shellfish Processing Facilities:** Shellfish Processing Facilities regularly used for processing shellfish in this AOR are addressed in the Situation paragraph above. The processing plants have protocols in place to deal with DoD military munitions encountered during processing at the plant. An encounter with DoD military munitions should be reported to local law enforcement. Law enforcement will request EOD support of an explosives or munitions emergency. The responding EOD team will follow applicable EOD procedures when addressing the munitions encountered.

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### ***Assumptions***

- (1) Timely notification(s) will enable a swift, effective, and comprehensive multi-agency response.
  - (2) Fishing vessels will be inclined to return to their intended next port of call/homeport. If the vessel has been engaged in fishing, the vessel Master will want to go to the dock where they offload catch.
  - (3) An incident(s) will be significant enough to require the commitment of Federal, state and local forces.
  - (4) An incident(s) involving CWM will require an atypical response that may create unease for decision makers and political officials.
  - (5) The source of contamination (i.e. the military munition) will be reasonably ascertained through information collection efforts, photo evidence, and/or on scene evaluation by a trained EOD team.
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## *Legal Considerations*

- (1) 14 USC 2: Provides the Coast Guard authority to engage in planning for HAZMAT and CBRNE incidents. One of the Coast Guard's primary duties is enforcing or assisting to enforce all applicable federal laws upon the high seas and waters subject to United States jurisdiction.
- (2) 14 USC 88 (b). Provides the Coast Guard authority to render aid and save life and property in the event of a marine-related emergency, within the capability of available Coast Guard resources.
- (3) 14 USC 89: Authorizes the Coast Guard to make inquiries, examinations, inspections, searches, seizures, and arrests upon the high seas and waters over which the United States has jurisdiction, for the prevention, detection, and suppression of violations of U.S. laws.
- (4) 14 USC 141: Authorizes the Coast Guard to utilize its personnel and facilities to assist, upon request, other Federal, state, and local agencies.
- (5) Ports and Waterways Act (33 USC 1223-1225). Delegates authority to the Captain of the Port (COTP) to direct the anchoring, mooring, or movement of a vessel; to specify times of vessel entry, movement, or departure to, from, or through ports, harbors, or other waters; to restrict vessels operation in hazardous conditions to vessels which have particular operating characteristics or capabilities; or to direct the handling, loading, discharge, storage and movement including, emergency removal, control and disposition of explosives or other dangerous cargo or substances, on any bridge or other structure on or in the navigable waters of the United States or any land structure immediately adjacent to those waters.
- (6) Clean Water Act: Pre-designates the Coast Guard COTP, as the Federal On Scene Coordinator (FOSC) for pollution discharge response and removal. Under this authority, the FOSC may coordinate and direct all public and private efforts directed at removal or elimination of imminent and substantial threats to the environment. Among the actions that may be taken, are the immediate removal and disposal of vessels, structures, and/or floating debris.
- (7) Intervention on the High Seas Act (33 USC 1471): Extends the Coast Guard's authority to take similar preemptive or corrective FOSC action onto the high seas (i.e., beyond the 12-mile territorial sea).
- (8) The Magnuson Act, 50 USC 191: Provides Coast Guard District Commanders and Captains of the Port (COTP) with broad authority in situations which may affect the safety and security of vessels, harbors, ports, and waterways.
- (9) The Ports and Waterways Safety Act, 33 USC 1221 through 1236: Gives the Coast Guard jurisdiction to control vessel or waterfront facility operations to prevent physical or environmental damage to any U.S. port.
- (10) 40 CFR 300.120: On-Scene Coordinators and Remedial Project Managers, general responsibilities. Includes a provision that states "DoD will be the removal response authority with respect to incidents involving DoD military weapons and munitions or weapons and munitions under the jurisdiction, custody, or control of DoD"

# Execution

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For incidents occurring offshore or in the coastal zone involving real or potential hazardous material, it is anticipated that the Coast Guard will assume the Federal On Scene Coordinator role under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300. Incidents known to involve DoD military weapons and munitions should also involve a DoD On Scene Coordinator to serve as the removal response authority, in accordance with 40 CFR 300.120. Due to the complexity, number of assisted/assisting agencies, and potential response duration, a NIMS ICS Unified Command structure should be considered early in the response. Normally, Sector Hampton Roads will initially dispatch a response team, comprised of at least two persons, at least one of whom will be a qualified Pollution Responder, to coordinate initial on scene Coast Guard response efforts on behalf of the COTP/FOSC. Additionally, Coast Guard deployable specialized forces, such as those operating under the National Strike Force, may be consulted and/or requested through established Coast Guard request for forces channels, and will operate in accordance with established policies and procedures. To better assist agencies in their initial response to an incident, an Incident Briefing Form ICS 201-CG Military Munition Discovery and Response form has been provided. (see **enclosure 7**)

The response operation(s) may involve *time-phasing*. These phases are discussed in further detail below.

- [1] Phase I: Discovery/Notification.
- [2] Phase II: Evaluation and Stabilization.
- [3] Phase III: Rescue Operations (if applicable).
- [4] Phase IV: On Scene Assessment, Mitigation, and Decontamination.
- [5] Phase V: Reconstitution.

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## ***Phase I: Discovery/Notification***

Phase I involves the discovery of a real or potential threat in the maritime environment, and the initial report made to the Coast Guard of the incident. Discovery may occur while the vessel is underway and engaged in fishing operations, while returning to port, or after returning to port when a crewmember(s) begins to exhibit signs of chemical blister agent exposure.

Initial Coast Guard notification may be received directly from the vessel's master (either while still at sea, or after returning to port), from a NRC report, and/or from another entity such as federal, state or local response agency, hospital, etc. Regardless of timing or method of Coast Guard notification, a report should be made to the Coast Guard Sector Hampton Roads Command Center in Portsmouth, and to the NRC, as soon as possible. Upon notification, the Sector Hampton Roads Command Center will collect key information about the incident and vessel(s) involved, make internal notifications, and initiate the Coast Guard's response actions in accordance with the QRC (see **enclosure 4**).

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## ***Phase II: Initial Evaluation and Initiating the Response***

Phase II involves evaluating the incident, characterizing the threat, and stabilizing a potentially fluid situation enough so that tactical response strategies may be formed and coordinated with other response partners.

**Communications with the vessel and initial safety/first aid guidance:** Depending on the situation, the vessel Captain and crew will need initial safety guidance.

- Follow the guidance in the 3Rs Explosive Safety Guide for Maritime Industry (see enclosure 3).
- For incidents involving exposure to a suspected chemical agent (i.e. sulfur mustard), the most important factors are removing the agent from the body and preventing spread. Decontamination of anybody who came into contact with the munition must start immediately, even if no adverse effects are felt at the start.
- Mustard agent penetrates the skin within two minutes. Therefore, decontamination of a person for mustard agents must occur in the first 1-2 minutes of exposure in order to prevent or decrease any tissue damage (skin, eyes, and/or airways).

### Emergency First Aid and Gross Decontamination Onboard a Vessel

Note: Gross decontamination efforts done at sea by a vessel's crew may include extensive flushing/wash down with salt water and/or fresh water (performed from an upwind position), wash down of the vessel with bleach solution, and/or steps consistent with those addressed in enclosure (5). Additional to the guidance provided in enclosure (5), a 0.5% bleach solution may be safely applied to skin if soap/water is not available or enough. Gross decontamination of a person or vessel should be done for as long as necessary until the substance is no longer visible. The affected area of the body (including any blistering) should also be dressed with a clean, dry dressing. Don't puncture blisters.

- Remove contaminated clothing and double seal in a plastic bag. Close nearby doors and hatches, and secure ventilation systems.
- Clean eyes only if stinging. Flush with water for 10-15 minutes.
- Additional first aid guidance for exposures to chemical munitions can be found in enclosure (5).

**Evaluate the incident and threat:** If the munition remains onboard or personnel have been exposed to a chemical agent, the level of concern, and complexity of response, are significantly elevated. In these cases, it may be prudent to direct the vessel to remain offshore, or proceed to a suitable anchorage area, until the cognizant Navy EOD team can evaluate the presence and severity of a potential explosive or chemical agent hazard – and respond accordingly. The presence or potential of crew injuries must also be factored into this evaluation. Evaluation of the threats and hazards by trained experts, such as the Navy EOD team, followed by close collaboration/consultation between decision makers, will be critical to properly identifying **risk-based** initial response actions. A Navy EOD team will normally take 4-8 hours to deploy a vessel along the Virginia shore (after notification). The location of the incident, weather, and status of the team at time of notification may extend the response time. Therefore, initial evaluation will be done remotely to the extent possible, while the team is being mobilized, based upon all available information.

### The Munition May Offer Important Clues About Hazards

**Note:** According to the Naval EOD, a missing cone and/or scoring on the base of a suspected chemical munition canister are indicators that the munition is **not** fused (i.e. does not present an explosive threat). If it is feasible and safe to do so, the vessel crew should be directed to provide photos of the DMM to the Coast Guard or UC. Photos taken from onboard the vessel could provide valuable initial clues to subject matter experts as to the type of munition and potential threat posed. However, sea growth and deterioration may make initial visual confirmation difficult or impossible.



A new 5-inch  
38 caliber  
projectile

**Consider Initial Control Actions:** For scenarios involving a DMM/CWM onboard a vessel that is still underway, **one of the first critical decision points will be where to direct the vessel.** Consider Coast Guard operational controls on the vessel, crew, and/or waterway in order to protect life and/or property, or to facilitate a response (to include COTP Order and/or Safety Zones). If a crew member or the vessel has become contaminated by CA, the contaminated crew member needs to be controlled and decontaminated prior to leaving the vessel (see page 19 and enclosure 5).

### **Control Actions on Vessel – Trade Offs**

**Note:** The decision to keep a vessel offshore and away from port will be based upon a number of complex factors, and may need to be thoroughly evaluated by decision makers in a short amount of time. The potential threat to public safety, based upon the totality/confidence of the information available at the time, should be evaluated, and weighed against the fact that **suitable response options are reduced, and risks to responders are exponentially elevated, in an offshore environment.** Additional factors that may influence the ability to direct or keep a vessel offshore include: current/forecasted weather/sea state, vessel Master’s level of concern/apprehension, health issues/injuries onboard, status of fuel/provisions onboard, and ability of vessel to anchor or station-keep. See page 22 for further discussion. It is necessary to determine, as best as possible initially based on all known facts, the true nature and extent of current and potential danger posed by the threat. This will include consensus among experts and decision makers as to the known or suspected substance, method of transfer/contamination, explosive/vapor threats, calculated danger/hot zones, etc. **Understanding and articulating “most probable” and “worst case” threats will become critical during stakeholder consultation and risk-based decision making, particularly for MEDEVAC and/or where to place vessel.**

#### **Initiate the Response:**

- **Limit or prevent injury to those on scene as a top priority.** Determine early, through command center communications with the vessel, if exposure to personnel has occurred or may occur, and provide information to reduce potential effects of exposure onboard the vessel. Information for the neutralization of a suspected chemical agent, and decontamination, must be immediately available to the vessel Captain if needed. See page 19 and Enclosure (5).
- **Remove or neutralize the threat.** Sulfur Mustard, for example, has a **freezing point of 58.1°F.** Suspected sulfur mustard can be rendered inert, and therefore risks associated with a damaged or leaking canister significantly reduced, at these (or lower) temperatures. If safe to do so, the vessel crew may consider securing a canister in an enclosed container with sea water or ice, or freezing the canister or discharged liquid fill with CO2 from an upwind position. CO2 is available on many commercial fishing vessels in the form of a portable fire extinguisher.
- **Give the vessel further instructions.** As a default position, the vessel should be directed to start proceeding towards port, at the master’s discretion, and if safe to do so. The vessel should remain at least 1 nautical mile (NM) offshore until a full picture of the situation can be established. The nature of the situation may require a Captain of the Port order.
- **Contact/dispatch a Coast Guard response team.** This team will normally be comprised of at least two persons, at least one of whom will be a qualified Pollution Responder, and additional unit representatives, as necessary.
- **Contact/coordinate with DoD response teams and subject matter experts** (whether or not munition is onboard the vessel), if source of contamination is believed to have been from a DoD munition source. Contact the following, in order of priority (see page 7 for contact info).
  - [1] Naval Weapons Station Yorktown EOD Team or EODMU2.
  - [2] 20<sup>th</sup> CBRNE Operations Center.
  - [3] Navy OSC.
- **Complete internal notifications.**
- **Continue/complete external notifications.** At a minimum, during this phase, timely notifications should be made to the following (see pages 7-11 for contact info):

- FDA.
- State environmental response agency(ies).
- State departments of public health.
- State shellfish regulatory/response agencies.
- FBI.
- NOAA SSC.
- EPA Emergency Operations Center for further notification to CMAD.

*Note: Many of these agencies will receive the National Response Center report; however, follow-on coordination at the local level will be expected. Supporting agencies may expand depending on the nature of the event.*

- **Consider initiating Critical Incident Communications** with the Coast Guard chain of command.
- **Assemble initial unified response structure**, even if done remotely at first.
- **Consider activation of Sector Incident Management Team.**
- **Assess resource requirements/shortfalls.**
- **Engage Coast Guard Public Affairs.**
- **Recommend to D5 an Incident Specific Regional Response Team (RRT) call** (include Defense Support Coordinating Element).

### DoD Standard Operating Procedure

**Note:** When military munitions are discovered outside DoD's munitions logistics management system, authorized officials (e.g., federal, tribal, state, and local law enforcement officers) may request DoD support for an explosives or munitions emergency response. The DoD Military Service that first becomes aware of an incident involving DoD military munitions will, if necessary, take immediate action to prevent or limit damage or injury.

If a recovered munition contains a liquid fill and the vessel is in port or the munitions is on land, the responding DOD EOD unit, regardless of Service, is required to contact the 20th CBRNE. The 20<sup>th</sup> CBRNE will dispatch the Chemical Analytical Remediation Activity (CARA) to assess non-intrusively, the munition, package it in a specialized container, and transport it to the nearest military installation within the state capable of safe storage of Category II munitions.

When a known chemical munition or munition with an unknown liquid fill is involved, the need for support from, and close coordination with, other DoD agencies on the response action is **mandatory**. Such agencies include the 20th CBRNE, the Chemical Material Activity's Director, Recovered Chemical Material Directorate (RCMD), and the Office of the Deputy Assistant Secretary of the Army for Environment, Safety and Occupational Health (ODASA (ESOH)).

### Phase III: Rescue Operations

Phase III, if applicable, involves the rescue operation (i.e. MEDEVAC or MEDICO) for a vessel's crewmember(s) at sea. The trigger for a rescue operation would normally be a request from the vessel Master to provide medical advice (i.e. or MEDICO) remotely, or a request to perform a medical evacuation of a crewmember from the vessel using a Coast Guard helicopter or boat.

According to a U.S. Public Health Service (USPHS) officer (CG Flight Surgeon involved in MEDEVAC discussions), an at-sea emergency MEDEVAC *may* be recommended for a crewmember exhibiting signs of moderate to severe exposure, described as extensive coverage (i.e. a limb or multiple portions of body), or symptoms of eye/respiratory issues. Patients with moderate to severe exposure will need to be treated by a hospital with a burn center as soon as possible to increase chances of survival. For minor cases (i.e. skin redness or irritation), a MEDEVAC may not be recommended, since the medical gain of expedited removal and transport to a medical facility is likely not enough to outweigh the risk of the operation (as compared to the transit time of the vessel to return to port on its own). Minor exposures require treatment

at a hospital with an Intensive Care Unit (ICU). In any event, there will be substantial risk vs. gain, and operational risk management discussions that will take place between the Sector, District 5, Flight Surgeon, and resource provider (i.e. Air Station), to fully evaluate the circumstances of a potential MEDEVAC mission. This evaluation will involve gross decontamination measures reported to have been completed by the vessel's crew, confidence in those measures, and risks to responders vs. potential gain of the mission. Typically, MEDEVAC consultations among decision makers involves considering and weighing the following:

- Type/nature of medical emergency.
- Type of medical care a patient needs.
- The location that medical care can be received
- How urgent/quickly that medical care is needed.
- Whether or not that window can be met by a Coast Guard asset.

Key elements that will factor into the MEDEVAC recommendation, and risk vs. gain discussions, include:

- Time of exposure.
- Extent/degree of exposure (including approximate coverage of body).
- Extent/nature of blistering/burns.
- Decontamination/first aid actions taken onboard the vessel, and on the exposed crewmember(s).
- Eye or respiratory symptoms.
- Status of the source of contamination (i.e. canister).

Additional questions to ask the vessel Master to help establish facts for risk-based decision making include:

- When was the source of contamination first handled?
- What was done onboard the vessel after the munitions were handled?
- What was done with the munition(s)?
- When did the crewmember(s) first start developing symptoms?
- What was done with the crewmember(s) after they developed symptoms?
- Where were they on the vessel from time of exposure to the time of symptoms?
- Were these places washed down/sanitized? If so, how and when?
- What is the status of the person's clothing, gloves, etc that were being worn at the time of exposure?

### MEDEVAC

**Note:** If the source of the contamination is contained/removed, and gross decontamination of the vessel and exposed crewmembers has occurred on scene by the vessel crew, a MEDEVAC *may* be considered (after standard MEDEVAC consultations and concurrence from the supporting unit). Rescue personnel should use universal precautions. Universal precautions are to treat any bodily fluid as if it may be contaminated. Suitable PPE includes medical gloves (i.e. Nitrile gloves), eye protection, and a surgical mask. Treatment rendered by Coast Guard responders would be supportive in nature (oxygen, pain meds, and monitoring vitals) as there are no specific antidotes for mustard agents.

Most USPHS Flight Surgeons have completed the Army's Medical Management of Chemical and Biological Casualties course. This level of training equips Flight Surgeons with the ability to discuss and make recommendations on first aid and treating casualties, recognizing the severity and level of urgency, risks of further contamination transfer, and mitigating those risks for first responders. Flight surgeons will provide a recommendation as to the medical need and urgency of a MEDEVAC, based on all available information about the patient's status and stability. Additional policies on MEDEVAC can be

found in section 4.7 of the Coast Guard Search and Rescue Addendum. The final decision to conduct a MEDEVAC rests with the aircraft commander, cutter commanding officer, or coxswain on scene. For a scenario such as this, the commanding officer/officer in charge (or their representative) of the recommended MEDEVAC asset's unit will be involved in the MEDEVAC decision making, along with the Search and Rescue Mission Coordinator, Flight Surgeon, and District 5 Command Center/Chief of Incident Management. If desired, additional expertise/consultation may be received from a DoD Medical Officer, or the 20<sup>th</sup> CBRNE Operations Center (see page 7 for contact info).

It is expected that a MEDEVAC would only be considered (and necessary) for cases involving severe symptoms, and when there is high confidence among all stakeholders that the mission will not put responders at risk of contamination. If there is reason to believe the environment is still contaminated, the only option will be to extract the crewmember(s) pier-side via an established decontamination station/process.

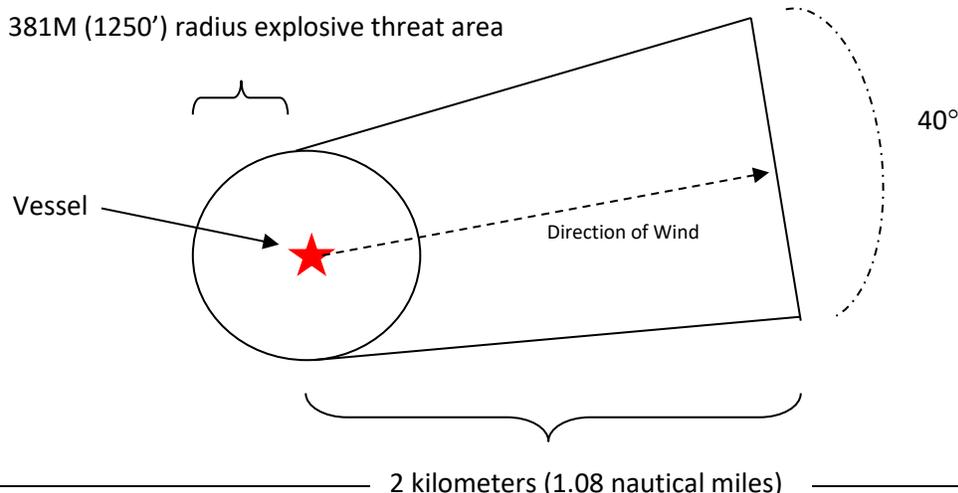
### ***Phase IV: On Scene Assessment and Mitigation***

To facilitate a timely and effective response by a trained HAZMAT team, access for emergency medical services, and appropriate catch offloading capabilities, the **vessel subject to the response should be brought to a shoreside facility appropriate for the size and type of vessel as soon as safely practicable.** Remaining offshore, or at an anchorage, significantly reduces options for a suitable HAZMAT response, and increases risk for the vessel's crew and emergency responders.

If the source of contamination (i.e. military munition shell/casing) is still onboard, or there is a compelling public safety concern due to the possibility of an explosive threat, un-identified munition, and/or chemical vapor threat, remaining offshore or proceeding to an anchorage (if the vessel is capable of anchoring) may be the safest interim option until the threat can be determined and mitigated by trained response personnel (EOD Team). Once determined, the EOD team will be able to secure or package the munition, in conjunction with the 20<sup>th</sup> CBRNE.

#### **Worst Case Exclusion Zone and Threat Analysis**

**Note:** Early consultation with the Navy EOD will be needed to evaluate and determine prudent/required exclusion areas around a vessel or threat (i.e. standoff distance), based on what they may be able to deduce from the munition's characteristics. Pending a more thorough evaluation of the threat, the **default worst case exclusion zone for an unknown munition threat, or unanalyzed (but possible) explosive threat,** can be used as a rule of thumb. (Source: Initial Exclusion Area for an Unknown Chemical Source, as per EOD AEDOPS.



Exclusion Zones, and subsequent decontamination hot/warm/cold zones will be further refined/determined (and likely vastly reduced from the default explosive and downwind exclusion area depicted in the graphic). The zone refinement will be accomplished by the EOD, in conjunction with the Defense Threat Reduction Agency (DTRA). Upon further evaluation of the scene, munition(s), and/or HAZMAT involved, the EOD can obtain sophisticated modeling and analysis on the explosive and vapor threat from DTRA. Inputs to this analysis will include type/number of munitions, assumed/known chemical liquid fill (if applicable), actual vs. potential volume of released chemical liquid fill, and current/projected environmental conditions.

The Atlantic Strike Team is trained and equipped for chemical agent confirmation sampling. This means the ability to confirm the presence of a chemical agent (i.e. an indicator turning a particular color based on detection of a particular chemical agent group), but not identification of exact type of agent. The AST's primary tool used for confirmation testing is M8/M9 detection paper for field level rudimentary sampling. Definitive analysis to pinpoint the actual chemical agent requires lab testing. A primary resource for field lab testing will be the EPA CMAD. Additional capabilities exist via the 20<sup>th</sup> CBRNE and/or an equipped Civil Support Team. See pages 7-9.

**Note: In addition to confirmation sampling and decontamination efforts during this phase, coordination early in the response among the EPA CMAD, city/state public health and emergency management officials, FDA/USDA, and potentially additional incident specific members of the RRT is critical. This coordination will identify and manage expectations and requirements for environmental monitoring during the response, clearance sampling, and waste management.**

### *Offshore EOD Team Response*

The Navy EOD team is capable of responding to an offshore/coastal incident. Their primary surface resource is a trailer-able 9-meter (29-foot) rigid hull response boat, with operational limitations of 10-15kt winds and 3-foot seas. A response to a possible chemical munition will require a minimum of five personnel, but ideally will include the full six-person EOD team.

**For incidents involving a potential explosive or dangerous vapor threat onboard a vessel, it is anticipated that the Coast Guard will order the vessel to remain at least one nautical mile offshore (based on the criteria for initial exclusion area for unknown chemical source).** Actual position for a given incident will be driven largely by the current and future prevailing wind and sea conditions. It may become necessary to weigh the risks of keeping the vessel offshore in bad weather, where there may be increased hazards to the crew and responders, versus the risks of bringing the vessel to a more protected harbor/back bay location.

For an offshore EOD response, the EOD team will need, and request, at a minimum, the following assistance from the Coast Guard:

- Coast Guard escort/support vessel (Buoy Tender (preferred) or Medium Endurance Cutter). **If the situation will not require a decontamination element**, a Patrol Boat or Fast Response Cutter may be adequate to support the EOD team's vessel and crew. This asset will be needed to provide a stable support tie-off platform for the smaller EOD boat, assist with logistics/messing needs, and stage equipment. It is also anticipated that this vessel will be needed to embark a National Strike Force contingent to provide additional support, expertise, and equipment back-up for the EOD team. This Coast Guard vessel may also be part of an offshore safety zone presence. Additional boat(s) may be required for safety zone enforcement.
- Ability to perform decontamination of up to five EOD personnel from the support vessel.
- Potential need for air supply bottle swap (Strike Team support).

- Advice/recommendations for a boat ramp/launch site, staging of equipment, and/or parking/logistics support at the nearest Coast Guard station.

### Limitations of the Navy EOD Team's Capabilities

**Note:** The EOD is only capable of and equipped for “hasty decontamination” for themselves following entry to analyze or render a munition safe. Hasty decontamination is typically reserved for limited use for lifesaving extraction of a casualty or injury. A trained and equipped HAZMAT/Decontamination team will be needed to operate in tandem with the EOD, particularly for prolonged responses.

### *Limitations of an Offshore HAZMAT Response*

A HAZMAT response in an offshore/maritime environment would be extremely complex, dangerous, lengthy, resource-heavy, and expensive. Barring a very unique/compelling circumstance, the physical hazards of an offshore HAZMAT operation to both responders and vessel crew will outweigh the public health/safety threat posed by a chemical agent, such as Sulfur Mustard, onboard a vessel.

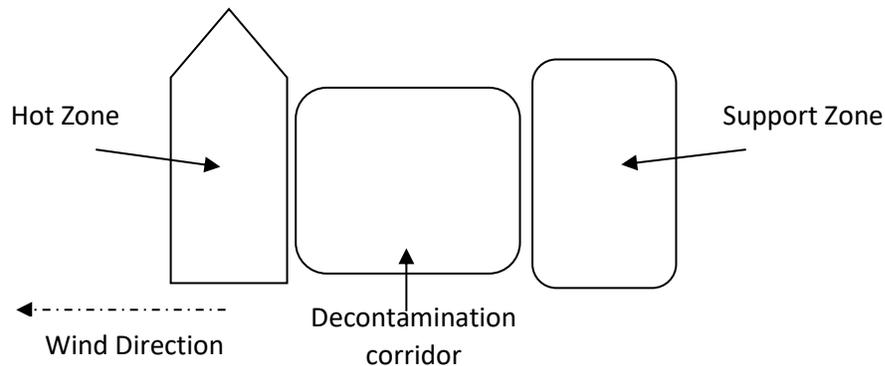
The following is a list of limitations and constraints that should be considered for an offshore HAZMAT response:

- The use of sodium hypochlorite (bleach) is a prominent decontamination agent. However, when used on metal deck surfaces and mixed with large quantities of salt water, it creates a “black ice” effect on chemical protective boots. This increases the safety concerns for HAZMAT responders transferring between vessels, traversing decks/fish holds, etc.
- Sea spray and wet/running machinery surfaces could cause run off of hydraulic fluid, solvents, and fuel oils. These could lead to false positives with chemical detection paper to a greater degree than if the vessel were moored with the machinery disengaged and dry.
- Logistics of decontamination water and support materials will be a factor. Decontamination water will either need to be dumped overboard, or retained onboard. Retaining onboard may require the capacity to retain hundreds of gallons of water onboard.
- The minimum personnel footprint for a full HAZMAT response will require an empty buoy tender deck or large deck barge. Personnel required for an NFPA/OSHA compliant operation beyond a basic EOD entry support is anticipated to include:
  - HAZMAT Team Lead
  - HAZMAT Safety Officer
  - (2) Entry Personnel
  - (2) Decon Personnel
  - (2) Rescue personnel
  - (1) Support zone/medic
  - (2-4) back up personnel for the next entry team
  - Medical team of at least two Emergency Medical Technicians (EMTs).
  - Until initial detection rules out the potential of air-borne contaminants, the HAZMAT team would default to level B entry, which requires at least one air bottle per person per entry.
- Generally speaking, a HAZMAT entry and decontamination operations will require the establishment of a **Hot Zone, Decontamination Corridor, and Support Zone**. The size, orientation, etc, of these zones is dynamic and will be case-specific. However, the establishment of these zones in the maritime environment will be particularly challenging, and currently void of

formalized or tested tactics, techniques, and procedures within the Coast Guard, DHS, or DoD.

- a. Hot Zone: Contaminated vessel (and potentially the area immediately surrounding the vessel).
- b. Decontamination Corridor: Area that contains the decontamination equipment (including water source(s)), upwind of the hot zone, and easily accessible to/from the hot zone and support zone.
- c. Support Zone (Cold Zone): Safe area for the staging and support of responders and equipment, prior to/following entry and/or decontamination.

### **Basic Schematic for Full HAZMAT DECON Operation in a Stable Environment**



The ability to establish these zones in a dynamic maritime environment that is susceptible to changing weather and sea conditions is a significant limitation. This may need to be mitigated by bringing the vessel to a dock, or if absolutely necessary, to a protected (i.e. back bay) location, along with a barge/support vessel(s) that may be anchored to the sea floor by spud or alternative method.

### ***Bringing a Vessel to Port***

**Unless early analysis and consultations with DoD subject matter experts indicate an explosive and/or compelling public health hazard, the vessel should ultimately be brought to a pier (preferably a pier that normally accommodates that vessel type) so that an adequate response may be carried out.**

Vessel homeports and shellfish offloading docks typically have sufficient space to support a response, and provide easy “brow” access and normal logistics support equipment for vessels. Homeports and offloading docks provide facilities to offload, segregate, and secure a catch that may be contaminated by CA until determination of its disposition. However, bringing a potentially hazardous vessel to port should only be done once safety controls are considered and put in place, to adequately control/isolate the vessel, vessel crew, and catch. Alternatively, military facilities *may* be considered. However, potential impacts to that unit’s readiness as a result of placing a vessel at their facility, including the potential for a prolonged response, must be considered and weighed against other options.

#### ***Military Facilities:***

- (1) Naval Weapons Station Yorktown, VA, located on the York River, has a large ammunition pier. This pier is located within the secure footprint of Naval Weapons Station Yorktown, has ample space, and is co-located with the Naval Weapons Station EOD. This pier *could* support a complex, multi-agency DMM response onboard a vessel; however, will require substantial collaboration with, and approval from, the DoD via the Navy OSC.

## *Food Safety Actions*

States have the authority to place a vessel's catch under embargo (i.e. seizure), either at the dock or at a processing facility. Once under embargo, and if product is still at the processing facility, products are marked and isolated from other product in refrigerated storage until a decision is made for disposition. If already processed (i.e. canned) and shipped out from the facility, embargoed product may be subject to recall under the authority and coordination of FDA and state health officials. The Coast Guard is **not** the agency responsible for determining the fate of the catch. This decision is made through collaboration among the FDA, State Health officials, and processing facility (if applicable). As part of the decision making process, the Coast Guard may be asked to provide information pertaining to the vessel, nature of reported encounter with the hazardous substance, and response/remediation efforts.

### *Phase V: Reconstitution*

The Reconstitution (or recovery) Phase follows response operations and is associated with returning to normal operations, and fulfilling post-response requirements.

One of the key aspects of Reconstitution will involve clearance sampling, and waste management/disposal. Clearance sampling (confirmation and/or lab based) is performed to provide confirmation of no contamination. What requires clearance sampling and when will be a case by case determination among cognizant decision makers, including the EPA, city/state public health and emergency management officials, and FDA/USDA. Examples of items that may require clearance sampling, depending on the nature and severity of the case, may include areas of the vessel, personal affects/property or public areas contacted by an exposed fisherman, fishing gear (i.e. clam cages), transport vehicles/containers, and processing facilities. **Mobilization of the EPA CMAD specialists and capabilities early in the response will improve coordination of clearance and waste management requirements with city/county/state officials and other federal partners.**

Additional activities anticipated during the Reconstitution Phase include:

- Cancellation of control actions on vessel, crew, facility, and/or waterway.
- Medical screening/de-briefs for responders.
- Demobilization support, including refueling and re-provisioning Coast Guard resources, decon station break-down and replenishment, and transportation of gear to home unit.
- De-briefings, hotwash, and after action reports. After-action reports, including lessons learned that may help improve this plan over time, should be forwarded to the Sector's Planning Staff office within 30 days of case conclusion.
- Case documentation, including accounting of expenditures.
- Repayment of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) fund by Responsible Party, if applicable.

# Administration and Logistics

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## *Funding*

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) fund, operated by EPA, provides broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA funding is authorized for removal actions, and remedial actions. The CERCLA fund may be opened in order to initiate response actions, if the source of the chemical contamination is not known, or not confirmed to be from DMM/CWM. However, if the source is a confirmed DoD munition, the DoD will be consulted for continued funding and/or reimbursement of the CERCLA fund through the National Pollution Funds Center (NPFC). In all cases, the cognizant NOSC should be contacted early on in the response for further response and funding coordination.

The Navy OSC should be consulted to determine the role and method of contact for the cognizant DoD Claims division or servicing legal division for follow on tort claims.

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## *Public Affairs*

District 5 is responsible for coordinating all Coast Guard public affairs activities, which will at first be accomplished through close coordination with “at the ready” Coast Guard public affairs support within the Sector and the Sector’s collateral duty Public Affairs Officer.

- (1) Coast Guard Public Affairs staff will:
  - Support the lead agency's public affairs strategy regarding the release of information pertaining to response plans, operations, or response force makeup.
  - Notify District 5 External Affairs and begin a draft press release for distribution for partner agency and Sector Hampton Roads command staff review. Ideally, an initial press release will be issued within the first day of the response. Timing and content of press releases will depend largely on the circumstances of the incident. It is customary for the Coast Guard to issue an initial (brief) press release, followed up by a subsequent release that contains more details. Press releases early in the response are intended to address the facts known about the incident, vessel involved, crew composition, location, public health information (if applicable), and the Coast Guard’s role/actions. Names of additional agencies involved, their responsibilities, and agency POCs for the media (names and contact info), should be provided (normally in the subsequent press release). Due to the length of time required for joint release reviews and approvals, it is recommended that public affairs stakeholders (i.e. response agencies addressed by the press release and/or needing to be part of the review/approval process) be identified, along with agency POCs, as early as possible.
  - Draft public affairs guidance, and provide support for interviews and/or press conferences.
  - The Navy OSC will identify the DoD public affairs office/contact for general military munitions matters/questions.
- (2) During the two prior incidents involving DMM in others zones, the public affairs posture remained “response to query.” Due to some OGA sensitivities and considerations for these cases, joint approval is required, and therefore the overall public affairs posture may not be as

pro-active as the normal Coast Guard posture. In both prior cases, the uncertainty surrounding the source of contamination, and final determination of the catch's fate, were among the key factors influencing public affairs posture and strategy for some partner agencies.

- (3) Other Public Affairs offices likely to be involved:
- State Department(s) of Environmental Quality
  - State Health Department(s)
  - Food and Drug Administration
  - Local fire department or first responders
  - National Strike Force
  - NOAA
  - EPA

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## *Medical Services*

Acute care hospitals are capable of providing treatment to patients with injuries stemming from blister agent exposure. However, depending on the extent and seriousness of the injury, a trauma center or a burn center (for serious cases) may be necessary to deliver required care. For additional medical facilities information (see **enclosure 6**).

### **Hospitals in Virginia:**

- Sentara Norfolk General (**Level I Trauma Center; Burn Center; helo pad**): 600 Gresham Dr. Norfolk, VA 23507 (757) 388-5597
- Sentara Virginia Beach General Hospital (**Level II Trauma Center; helo pad**) 1060 First Colonial Road, Virginia Beach, VA 23454 (757) 395-8000
- VA Commonwealth University Medical Center (**Level I Trauma Center**) 1250 E. Marshall St. Richmond, VA 23219 (804) 828-9111
- Riverside Regional Medical Center (Newport News) (**Level II; helo pad**) 500 J Clyde Morris Blvd, Newport News, VA 23601 (757) 594-2000
- INOVA Fairfax Regional Hospital( **Level I Trauma; helo pad, Air Care**) 3300 Gallows Rd, Falls Church, VA 22041 (703) 776-3154

### **Hospitals in Maryland:**

- Peninsula Regional Medical Center (Salisbury, MD) (**Level III Trauma Center; helo pad**): 100 E Carroll St, Salisbury, MD 21801 (410) 546-6408
- The John Hopkins Hospital (Baltimore, MD) (**Level I Trauma Center; Burn Center; helo pad**) 1800 Orleans St. Baltimore, MD 21287 (410) 955-5000

### **Hospitals in North Carolina:**

- Duke University Hospital (Durham, NC) (**Level I Trauma Center; helo pad**): 2301 Erwin Road, Durham, NC 27710 (919) 684-8111
- Pitt County Memorial Hospital (Greenville, NC) (**Level I Trauma; helo pad**) 2100 Stantonsburg Rd, Greenville, NC 27834 (252) 847-4100

### **Burn Centers:**

- Sentara Norfolk General (**Level I Trauma Center; Burn Center; helo pad**): 600 Gresham Dr. Norfolk, VA 23507 (757) 388-5597
  - The John Hopkins Hospital (Baltimore, MD) (**Level I Trauma Center; Burn Center; helo pad**) 1800 Orleans St. Baltimore, MD 21287 (410) 955-5000
  - Temple University Hospital (**Level I Trauma Center; Burn Center; helo pad**): 3401 N Broad St, Philadelphia, PA, (215) 707-2000.
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### ***Situation Reports***

Standard Coast Guard Command Center information management procedures (i.e. internal briefing matrix, and use of internal databases) will be used until such time as formal Situation Reports (SITREPs) are deemed to be required and/or the case becomes managed under ICS with an Incident Action Plan. The format and timeline for reports will be determined in consultation with District 5 Command Center or IMT (if established). For a prolonged case, it is anticipated that the first formal SITREP will be required within 6-10 hours of case initiation. The anticipated format is an ICS 209, which may be modified to meet the nature of the case. District 5 will provide SITREP transmission instructions, however, it is anticipated that SITREPs will be transmitted to the District via email to the District Command Center, or uploaded to the District 5 IMT CG Portal site. Additional guidance, resources, and templates, can be found on the District 5 IMT Portal site: <http://cglink.uscg.mil/d9867a69>. Depending on the seriousness of the case, media attention, etc, it is also recommended that the Sector Commander provide informal verbal briefings to the District 5 Commander and/or Chief of Staff, as appropriate.

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## List of Acronyms

3R	Recognize, Retreat, Report	NIMS	National Incident Management System
AOR	Area of Responsibility	VADEP	VA Dept of Environmental Protection
ASPR	Assistant Secretary for Preparedness and Response	VDH	VA Dept of Health
CA	Chemical Agents	VAOEM	VA Office of Emergency Management
CARA	Chemical Analytical Remediation Activity	VAOHSP	VA Office of Homeland Security and Preparedness
CBRN	Chemical, Biological, Radiological, and Nuclear	NM	Nautical Mile
CBRNE	Chemical, Biological, Radiological, and Nuclear, and Explosives	NOAA	National Oceanic and Atmospheric Agency
CDC	Centers for Disease Control	NOAA SSC	NOAA Scientific Support Coordinator
CEOHS	Consumer, Environmental and Occupational Health Service (VA)	NOSC	Navy On Scene Coordinator
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	NPFC	National Pollution Funds Center
CFV	Commercial Fishing Vessel	NRC	National Response Center
CMAD	Consequence Management Advisory Division	NRF	National Response Framework
COA	Course of Action		
CONPLAN	Concept Plan	NSF	National Strike Force
COTP	Captain of the Port	NSFCC	National Strike Force Coordination Center
CST	Civil Support Team	NSSP	National Shellfish Sanitation Program
CWM	Chemical Warfare Material	NWS	National Weather Service
DECON	Decontamination	ODASA ESOH	Office of the Deputy Asst Secretary of the Army for Environment, Safety and Occupational Health
VAEMA	Delaware Emergency Management Agency	OGA	Other Government Agency
DHS	Department of Homeland Security	OSHA	Occupational Safety and Health Administration
DMM	Discarded Military Munitions	PHILS	Portable High-throughput Integrated Laboratory Identification System
EMT	Emergency Medical Technician	PIAT	Public Information Assist Team
EOD	Explosives Ordnance Disposal	POC	Point of Contact
EPA	Environmental Protection Agency	PPE	Personal Protective Equipment
FBI	Federal Bureau of Investigation	QRC	Quick Response Card
FDA	Food and Drug Administration	RCMD	Recovered Chemical Material Directorate
FOSC	Federal On Scene Coordinator	REC	Regional Emergency Coordinator
HAZMAT	Hazardous Materials	ROIC	Regional Operations and Intelligence Center
HMRU	Hazardous Materials Response Unit	SITREP	Situation Report
ICS	Incident Command System	TTP	Tactics, Techniques, and Procedures
ICU	Intensive Care Unit	UC	Unified Command
IMAT	Incident Management Assist Team	USPHS	US Public Health Service
IMT	Incident Management Team	WMD	Weapon of Mass Destruction
LFA	Lead Federal Agency		
MEDEVAC	Medical Evacuation		
MEDICO	Medical Communication		
NCP	National Contingency Plan		
NFPA	National Fire Protection Association		



**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 fisherman, 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.



**Munitions found on sea floor. (CDC image)**



**Approximate 12 lb. Mustard Gas Shell  
(CDC image)**

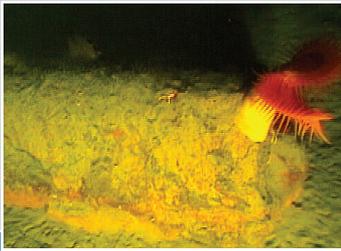
The Coast Guard previously issued a safety alert ([06-10, June 2010 link](#)) on this same topic and continues to **strongly recommend**:

- Persons involved in commercial fishing industries review their navigational charts to ensure that the areas in which they are trawling are not near labeled “Explosives Dumping Areas.” Such areas must be given wide berth and fishermen should recognize that bottom surfaces change and objects can move from original disposal areas;
- Review the [Maritime Industry 3R Explosive Safety Guide](#); follow and understand its recommendations; and
- Report any discovery immediately to the **National Response Center** at **1-800-424-8802** for proper response. (Alternatively, the USCG may be notified via channel 16.)

This safety alert is provided for informational purpose only and does not relieve any domestic or international safety, operational, or material requirements. Developed by the Coast Guard Fishing Vessel Safety Division and Office of Investigations and Casualty Analysis. Questions or comments may be sent to [HQS-PF-fldr-CG-INV@uscg.mil](mailto:HQS-PF-fldr-CG-INV@uscg.mil).

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# Maritime Industry



**During maritime operations (e.g., fishing, clamming or dredging), nets, bottom tending gear, and dredges may catch or dredge munitions from the ocean. Munitions pose a potential, but real danger to vessels and crews as well as to commercial and recreational divers.**

Vessel crews often tell tales about catching suspicious items in a net or dredging gear. Lucky crews live to spin their own tales, while others become the subject of a tragic tale.

In July 1965, such a tragedy took place aboard the fishing vessel (*FV Snoopy*). The *FV Snoopy* was trawling for scallops off the coast of North Carolina when it caught a large cylinder in her net. A witness said he could clearly see a long round object swaying in the net amidstips, over the deck.

What happened next is unclear, but an explosion caused the loss of the *FV Snoopy* and eight of her crew.

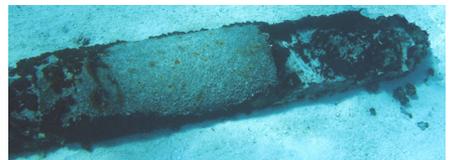
What went wrong? Was it preventable? Could something have been done to save the *FV Snoopy* and her crew?

While all these questions were asked, no one but the *FV Snoopy*'s crew actually knows what happened. However, this tale is meaningful if others learn from it.

If you encounter or suspect you have encountered a munition at sea, follow the 3Rs of explosives safety (Recognize, Retreat, Report).



*Unexploded ordnance recovered during dredging*



*A new torpedo (top) and a heavily corroded torpedo on the sea floor (bottom).*



# Recognize

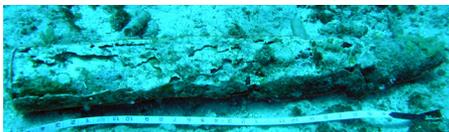
The military has conducted live-fire training and combat operations at sea for centuries. Prior to 1970, the U.S. military and the militaries of other nations sea-disposed excess, obsolete and unserviceable munitions either en route to port or as part of a planned disposal. In 1970, militaries of the United States and other countries stopped the practice, now allowing it only during an emergency. Mariners should be prepared for an encounter with munitions during commercial operations, such as fishing, clamming or dredging. By following the 3Rs and using common sense, mariners will know what to do if they inadvertently recover a munition.

Munitions may be encountered anywhere, not just in charted hazard areas. Munitions that may be encountered include mines, torpedoes, depth charges, artillery shells, bombs and missiles. Munitions may contain explosives or chemical agents, both potentially posing serious dangers to a vessel and her crew.

- All munitions, including those that have been in the sea or fresh water for many years, should be considered extremely dangerous.
- In some cases, munitions that have been in water for a long time have become more sensitive.
- Whether encountered at sea or on land, munitions might explode when moved, disturbed, or handled.
- Munitions submerged in sea or fresh water for any length of time may:
  - Look new and be easy to identify;
  - Be heavily rusted or encrusted with sea growth and be difficult to identify.



*Various recovered projectiles*



*Projectile and cartridge case on sea floor*

## **MUNITIONS ARE DESIGNED TO BE DANGEROUS**

In support of its mission, the Department of Defense (DoD) designs military munitions to kill or seriously injure people, or destroy equipment (e.g., vessels). To protect yourself from the potential hazards associated with munitions, avoid

known disposal areas by heeding warnings on nautical charts and following the 3Rs of explosives safety (Recognize, Retreat, Report). (Note: This guide includes drawings and photos of some munitions to help crews recognize suspect munitions.)

## CHEMICAL MUNITIONS AND CHEMICAL AGENTS

In the early 1900s, the Department of War, now DoD, developed chemical munitions to kill, seriously injure, or incapacitate an enemy. In the past, the United States and other countries sea-disposed chemical munitions and chemical agents in bulk containers, such as 55-gallon drums. As a result, some munitions or containers recovered from the sea may contain chemical agents.

Vessel crews should be alert for following signs that a chemical munition or chemical agents are present:

- Unusual odor from equipment or fish;
- Stinging sensations in the eyes;
- Burning or irritated skin;
- Presence of an oily liquid;
- Corroded containers or suspicious clay-like lumps.



*Recovered chemical munition*



*Chemical munition recovered from clambed*

## IF YOU SUSPECT A CHEMICAL MUNITION OR AGENT IS PRESENT, ACT IMMEDIATELY TO PROTECT THE CREW AND VESSEL.

- Move all crew members upwind;
- Steam into the wind to carry any contaminants away from the crew;
- Close all doors and hatches;
- Shut down all ventilation systems;
- Flush the area thoroughly with water to wash suspect chemical agent overboard;
- Contact the U.S. Coast Guard (USCG) for immediate assistance;
- Do not steam into port, unless the USCG advises you to do so.



*An aerial bomb prepared for shipping (above). An aerial bomb on the sea floor (below).*



## IF YOU SUSPECT CONTAMINATION BY CHEMICAL AGENTS

If you suspect a crew member has come in contact with a chemical agent, immediately:

- Remove any contaminated or potentially contaminated clothing and place it in a plastic bag (double bag, if possible) and seal it or just throw the clothing overboard. (Similar actions should be taken with contaminated or potentially contaminated tools.)
- Rinse the crew and the immediate area with large amounts of water. (If possible, use warm soapy water.)



*Munitions on the sea floor*

Every effort should be made to prevent the spread of chemical contamination. Chemical agent-contaminated clothing and tools may expose other crew members to chemical agent and spread the contamination to other areas on the vessel. Crew members should not work in areas known or suspected to be contaminated by chemical agent. Vessels that may have come in contact with chemical agents should not bring their catch ashore until the state's department of environmental health has determined it is safe to do so.

recognize

Retreat

Because munitions present a potential explosive or chemical agent hazard, they should not be moved, disturbed or handled. However at sea, and depending on the circumstances, specific action may be required to protect the vessel and her crew.

- Avoid bringing munitions (or suspect munitions) onboard, whenever possible.
- If a munition is ensnared or fouled in gear, retreat by carefully returning the munition to the water or by cutting away the gear.
- If the munition cannot be carefully returned to the water, secure it onboard, and move the crew upwind and as far away from the munition as possible.
- Limit the number of crew members securing the munition, and avoid bumping or dropping the munition. Remember that each action carries some risk!

report



A new 5-inch 38 caliber projectile (above). Recovered 5-inch 38 caliber projectiles (below).



## Munitions Recovered, but Not Yet Onboard

- Immediately stop all operations;
- Do not bring the munition or gear containing it onboard, if possible;
- Do not allow the munition to come or remain alongside the vessel where wave action could cause the munition to contact the hull;
- If a munition is caught in the gear, but has not been brought onboard, try to lower it safely back into the water, note the position and report it to the USCG. In:
  - Shallow water (less than 130 feet), lower the munition to the bottom, buoy off the net or dredge recovery lines and remain in the area while awaiting assistance.
  - Deep water, stream the munition as far aft as possible, maintain steerageway, as necessary and remain in the immediate area while awaiting assistance.

## Munitions Recovered and Brought Onboard

If gear is brought over the deck with a munition or suspected munition, but it remains suspended and it can be safely secured in place or nearby, immediately:

- Secure the munition with guy lines to prevent movement;
- Keep the crew upwind and away from the area.

If a suspect munition is brought onboard:

- Keep crew members upwind and as far away as possible.
- Minimize handling, and decide whether it is safest to:
  - Carefully return it to the water, or
  - Retain it onboard.

If returned to the water, note and report position to USCG.

If retained onboard:

- Keep the crew upwind and away from the munition.
- Minimize handling, and avoid disturbing (hitting, dropping or bending) any part of the munition;
- Secure the munition on deck with lines and/or by chocking it to prevent movement, but do this as far away as possible from heat sources, vibrations and the crew;
- Cover the munition with a tarp or wet cloth to reduce the potential for:
  - Deterioration of metal parts and release of its fill;
  - Explosives to dry out and become sensitive to shock.
- Request assistance (Channel 16 - 156.800 MHz).



A new rifle grenade (above). A recovered grenade (below). Item is about four inches long.



**NEVER BRING A MUNITION INTO PORT, UNLESS DIRECTED TO DO SO**

Careful observation and accurate reporting of the situation is necessary, so that proper instructions and assistance can be provided. However, never attempt to clean or open a munition to get a better description or tamper with a munition in any way. Information you provide may be combined with other reports to produce a Notice to Mariners and/or update nautical charts.

When a munition or suspect munition is encountered, the vessel's captain should notify the USCG (Channel 16 - 156.800 MHz) and provide the below information, as soon as possible. (Note: If a munition is encountered while in port, call 911.) Report:



Floating mine washed ashore

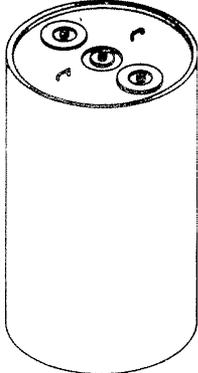
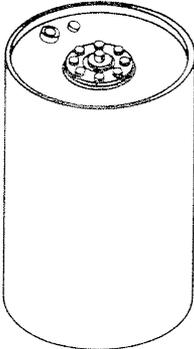
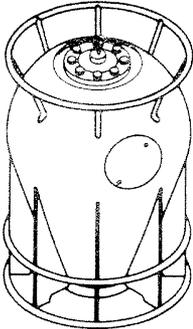
- The vessel's position (use World Geodetic System 1984 [WGS-84] for reporting). If the exact position is unknown, give approximate coordinates, or a range and bearing from a charted feature.
- The activity (e.g., fishing, clamming, dredging) being conducted when the munition was encountered.
- A general description of the munition's key features (i.e., size, shape, fins, markings) and overall condition, if observed or known.
- Any unusual odors.
- The action taken (e.g., secured munition on deck, munition carefully returned to water, washed off deck where munition was placed) to protect the crew.
- If the munition was returned to the water, provide:
  - The position where it was returned to the water: the water depth, buoys or markings used, if any; and whether the location is near or within a charted disposal area;
  - A description, if appropriate, of any entanglement (e.g., net, dredge);
  - A description of surface or sub-surface structures within 1,000 yards.

**THE US COAST GUARD WILL NOTIFY AN EXPLOSIVE ORDNANCE DISPOSAL UNIT TO ARRANGE FOR SUPPORT.**

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# DEPTH CHARGES

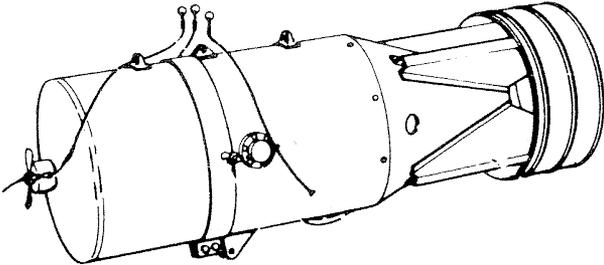
Length 28" / Diameter 18" to 25"



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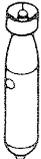
# DEPTH BOMB

Length 50" to 59" / Diameter 15" to 18"



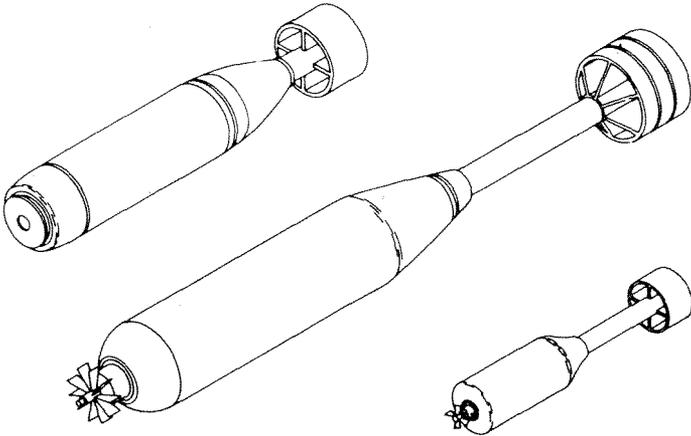
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# PRACTICE DEPTH CHARGES



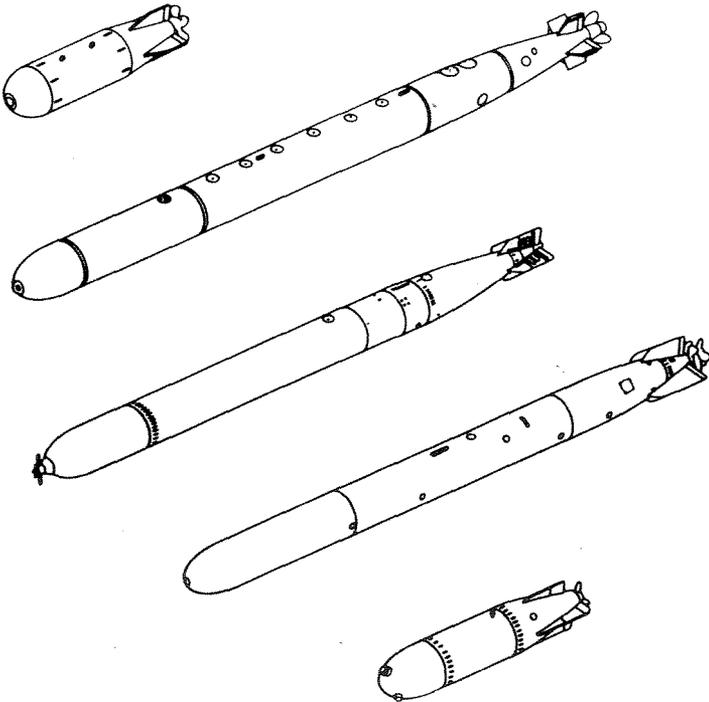
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**PROJECTED ANTI-SUBMARINE-WARFARE WEAPONS**



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Projected anti-submarine-warfare weapons  
**REPRESENTATIVE TORPEDOES**

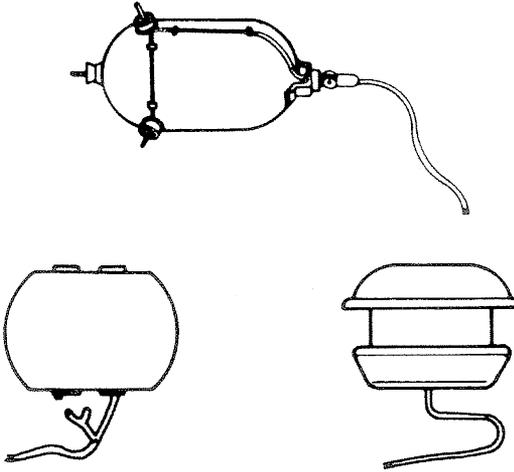


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## MISCELLANEOUS MINE FLOATS

Length 10" to 24"

Diameter 12" to 18"

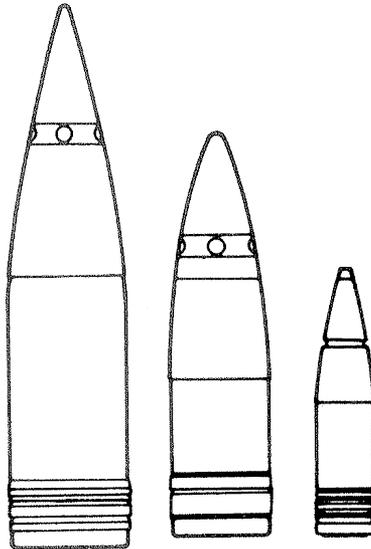


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## PROJECTILES

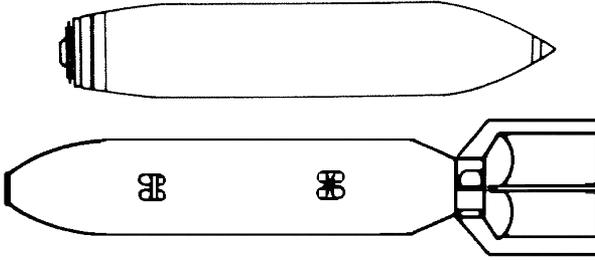
Lengths 20 mm to 16"

3" to 5" in Diameter (Typically)



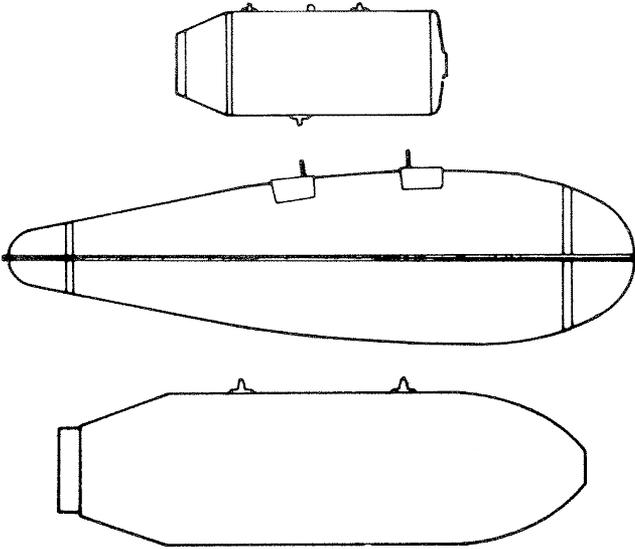
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## AERIAL BOMBS



Bomb Body Lengths 39" to 97"

Diameter 7" to 19"

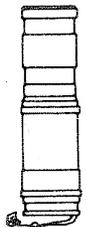
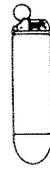
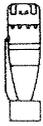


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## MARKERS AND SIGNALS

Lengths 10" to 18" (Approximately)

Diameter 2" to 5" (Approximately)



# Don't Forget

- Munitions are dangerous and may not be easily recognizable!
- Avoid operational and former military ranges, and disposal areas!
- Do not bring munitions on-board!
- Never bring a munition into port, unless directed to do so by USCG!

## Follow the 3Rs

### Recognize

When you may have encountered a munition and that munitions are dangerous.

### Retreat

If you know or suspect you have encountered a munition, carefully return it to the water or secure it and keep the crew away from the immediate area.

### Report

Immediately notify the USCG of the vessel's or munition's location and provide a description of the munition.

#### Emergency contacts:

- In port: Call 911
- At sea: Use Channel 16 (156.800 MHz)



(Insert contact information here)

For additional information call  
U.S. Army Technical Center for Explosives Safety  
at (918) 420-8919

or see

the US Army's UXO Safety Education website  
[www.denix.osd.mil/uxo](http://www.denix.osd.mil/uxo)

<b>MS – 10: EXPLOSIVE ORDINANCE INCIDENT REPORT</b>			Date/Time
Short Title:			MISLE
Watchstander:			CIC
<b>INITIAL INFORMATION COLLECTION – AWARENESS:</b>			
Incident type:		Location:	
<b>REPORTING SOURCE INFORMATION:</b>			
Name:	Phone:	Vessel name:	Doc #:
Cargo/Catch:	Type of fuel:	Amount of fuel:	Max capacity:
Address if calling from shore:			
Nature of incident:			
Has 911 been called:		Has NRC been notified:	
<b>DESCRIPTION OF ORDINANCE</b>			
Type:			
Color:	Shape:	Size:	Markings:
Hazard to navigation:		Exposure or injuries from content of ordnance:	
Cause of the incident:			
Amount of catch aboard vessel:			
Any facilities/vessels/people in the area:			
<b>ON SCENE WEATHER</b>			

VISIBILITY	WIND	SEA CONDITION		TEMPERATURE	
	<u>Direction/ Speed</u>	<u>Height</u>	<u>Direction</u>	<u>Air</u>	<u>Water</u>
SUNRISE/ SUNSET	TIDAL CURRENT	NEXT TIDE		MISCELLANEOUS	
	<u>Direction/ Speed</u>	<u>High/ Low</u>	<u>Time/ height</u>		

**INITIAL ACTIONS:**

- \_\_\_\_\_ Open MISLE Case
- \_\_\_\_\_ Complete Initial SAR Check sheet/related QRC(s) (if applicable).
- \_\_\_\_\_ Do not allow the ordnance to remain alongside the hull where wind/wave action may cause contact with the hull.  
Comments: \_\_\_\_\_
- \_\_\_\_\_ If the item is onboard and suspended above the deck in the net, and can continue to be safely suspended, stabilize the net with guy lines to prevent movement and keep the crew clear of the area.  
Comments: \_\_\_\_\_
- \_\_\_\_\_ Depending on the circumstances, consider removing the crew from the vessel until the ordnance has been safely disposed of comments \_\_\_\_\_
- \_\_\_\_\_ Direct the vessel to remain at sea or proceed to a safe anchorage where other persons/property will not be threatened. Comments : \_\_\_\_\_
- \_\_\_\_\_ Contact National Response Center
- \_\_\_\_\_ Establish safety zone/security zone
- \_\_\_\_\_ Issue SMIB or UMIB as necessary
- \_\_\_\_\_ Establish COMMS Schedule     15 Minutes     30 Minutes     1 Hour
- \_\_\_\_\_ Contact **NAVY ROC 757-322-2609** and have them Dispatch Explosive Ordnance Disposal (EOD) Team. Military units are usually the experts; however, consider the use of local police bomb squad or fire department as necessary.
- \_\_\_\_\_ EOD Mobile Unit Two (EODMU-2) – 757-462-8452 (days)/444-2324 (after) (if applicable)
- \_\_\_\_\_ Are evacuations necessary or ongoing? What area?
- \_\_\_\_\_ Notify Pilots if necessary
- \_\_\_\_\_ Complete initial notification(s) IAW briefing matrix

<b>PLANNING</b>				
<p>_____ Receive or develop tactical plan</p> <p>_____ If ordnance is a threat to public safety or there is significant media interest:                  Notify D5 (Acc) (757)398-6231                  EPA Region III (VA) – (215)597-9898</p> <p>_____ Notify the appropriate State Agency:                  _____ VA Dept of Emergency Services (800)468-8892</p> <p>_____ Conduct ORM</p>				
<b>PEACE MODEL – IDENTIFY HAZARDS</b>				
<input type="checkbox"/> Planning	<input type="checkbox"/> Event Complexity	<input type="checkbox"/> Asset Selection	<input type="checkbox"/> Communications	<input type="checkbox"/> Environment
<b>STAAR MODEL – IDENTIFY OPTIONS</b>				
<input type="checkbox"/> Spread out	<input type="checkbox"/> Transfer	<input type="checkbox"/> Avoid	<input type="checkbox"/> Accept	<input type="checkbox"/> Reduce
<b>OPERATIONAL EXECUTION</b>				
<p>_____ Dispatch appropriate unit</p> <p>_____ GAR score from responding unit(s). _____ <input type="checkbox"/> Green(0-23)   <input type="checkbox"/> Amber(24-44)   <input type="checkbox"/> Red(45-60)</p> <p>Concerns _____</p>				
<b>CC GAR</b>				
Assets GAR Scores:	Supervision:	Planning:	Crew Selection	Total GAR Score: _____
	Crew Fitness:	Environment	Complexity:	<input type="checkbox"/> Green (0-23) <input type="checkbox"/> Amber (24-44) <input type="checkbox"/> Red (45-60)
<p>_____ Make notifications IAW briefing matrix</p> <p>_____ Monitor case</p>				
<b>CONCLUSION</b>				

\_\_\_\_\_ Make notifications IAW briefing matrix

\_\_\_\_\_ Submit MISLE Case for review

#### **POLICY/PROGRAM INFORMATION**

**DISCUSSION:** Occasionally, commercial fishing vessels drag up unexploded ordnance in their nets. The primary concern is for personnel safety. Minimize personnel exposure to those necessary for safe disposal of the ordnance.

33 C.F.R. § 6.14 authorizes the Captain of the Port to supervise and/or control the movement of any vessel under his jurisdiction, whenever it appears necessary to secure the vessel from damage or injury, or to prevent damage or injury to any vessel or waterfront facility of the United States. The COTP may direct the vessel to remain at sea, moor, or take other action deemed necessary.

The COTP may also direct the master to keep the ordnance onboard until assistance arrives. The ordnance is of great interest to the United States. The U. S. Navy may want to inspect it, identify it and/or dispose of it properly. The above authority provides the means to secure these "rights and obligations" of the United States.

If the COTP issues an order and "federalizes" the case, the Coast Guard assumes some measure of responsibility to ensure the evolution is completed safely. If the case does not go smoothly, a claim is likely. Therefore, documentation for these cases must be thorough and detailed.

Agent Characteristics	<p><b>Agent Classification:</b> Schedule 1 Chemical Warfare Blister (Vesicant) Agent; CAS: 505-60-2; <b>Formula:</b> C<sub>4</sub>H<sub>8</sub>Cl<sub>2</sub>S; <b>Molecular Weight:</b> 159.08 g/mol.</p> <p><b>Description:</b> Sulfur mustard is sometimes called "mustard gas" but is actually a yellow to brown oily liquid with a garlic, onion, horseradish or mustard-like odor. It is a blister (vesicant) agent that will have delayed health effects on the order of hours, and is reported to be a known human carcinogen. It can be manufactured at different concentrations; with impurities, additives, or thickening materials that will all affect physical properties, appearance, persistence and analytical detection limits. Distilled mustard (HD) is considered the most potent form and is the basis of this QRG. Environmental breakdown products of HD, including thiodiglycol (TDG) and hydrochloric acid, are relatively non-toxic, but some decontamination by-products can be toxic (e.g., sulfones).</p> <p><b>Persistence:</b> HD is considered a "semi-persistent" chemical warfare agent with liquid deposition on surfaces lasting for hours to days. Persistence will depend upon amount and purity of the agent, method of release, environmental conditions, and the types of surfaces and materials impacted. Under certain environmental conditions, HD liquid may go through a partial hydrolysis that results in an outer protective coating around "globules" that are resistant to further hydrolysis and can persist for decades if not physically disturbed. Porous, permeable, organic or polymeric materials such as carpets and vinyl tiles can act as "sinks" for absorbing HD vapors and liquids, prolonging persistence.</p> <p><b>Physical properties are listed at/near STP unless otherwise indicated. Conversion Factors:</b> ppm = mg/m<sup>3</sup> x 0.1538; mg/m<sup>3</sup> = ppm x 6.503</p>																															
	<table border="1"> <thead> <tr> <th>Vapor Density</th> <th>Vapor Pressure</th> <th>Volatility</th> <th>Boiling Point</th> <th>Freezing Point</th> <th>Flash Point</th> <th>Liquid Density</th> <th>Aqueous Solubility</th> <th>Non-aqueous Solubility</th> </tr> </thead> <tbody> <tr> <td>5.4 (air = 1)</td> <td>0.072 mm Hg (68°F/20°C)</td> <td>610 mg/m<sup>3</sup> (68°F/20°C)</td> <td>-422°F/217°C</td> <td>58.1°F/14.5°C</td> <td>223°F/106°C</td> <td>1.27 g/mL (77°F/25°C)</td> <td>0.92 g/L (72°F/22°C)</td> <td>Common solvents, alcohols, gasoline, oils, fats</td> </tr> </tbody> </table>								Vapor Density	Vapor Pressure	Volatility	Boiling Point	Freezing Point	Flash Point	Liquid Density	Aqueous Solubility	Non-aqueous Solubility	5.4 (air = 1)	0.072 mm Hg (68°F/20°C)	610 mg/m <sup>3</sup> (68°F/20°C)	-422°F/217°C	58.1°F/14.5°C	223°F/106°C	1.27 g/mL (77°F/25°C)	0.92 g/L (72°F/22°C)	Common solvents, alcohols, gasoline, oils, fats						
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<p><b>AIR RELEASE SCENARIOS ARE ASSUMED MOST PROBABLE; HOWEVER, OTHER RELEASE SCENARIOS AND EXPOSURE ROUTES SHOULD BE CONSIDERED.</b></p> <p><b>Open Areas:</b> HD is difficult to disperse in air due to low volatility; however, it may be possible to disperse HD as a vapor/aerosol plume if an appropriate heat/explosive device is employed. The low volatility of HD would limit the size and extent of plume dissipation, posing localized hazards. <b>HD has a freezing point at 15°C (58°F), so the re-aerosolization of liquids and solids, as ambient temperatures rise, may present a real hazard.</b> HD vapors are heavier than air, so vapors can accumulate in lower terrains.</p> <p><b>Water/Water Systems:</b> HD released into water may dissolve and hydrolyze with a half-life of about 8.5 minutes at 25°C, but in sufficient amounts (relative to water volume) HD may also form globules surrounded by a protective outer layer resistant to hydrolysis. These globules may settle out or be entrapped, persisting for years and posing a contact hazard to anyone disturbing them. Areas in which the globules may persist include stagnant volumes of water as small as puddles formed by precipitation events. Water systems, plumbing, surfaces and equipment that have contacted HD globules, must be evaluated for decontamination.</p> <p><b>Indoor Facility:</b> HD is a semi-persistent agent with low to moderate volatility, and would be difficult to distribute effectively throughout a building or facility from a point source. Liquid HD will result in localized areas of surface contamination. HVAC system intakes near to liquid HD should be investigated for contamination from HD vapors and aerosols. HD vapors are heavier than air so vapors can accumulate in lower levels or utility corridors inside the buildings.</p>																																
Release Scenarios	<p>Onset</p> <p>Onset and severity of effects depend on dose, duration and route of exposure (not all signs/symptoms may develop). The effects caused by HD are not typically fatal immediately, but can require substantial supportive medical care as there is no antidote, and secondary infections from blisters/tissue damage may also be fatal. HD produces effects by causing DNA damage/cell death in seconds (this is not like an acid burn). Despite the immediate DNA damage actual signs/symptoms are delayed 1-48 hours after exposure, so those exposed may not be aware.</p>																															
	<p>Signs/Symptoms</p> <p>Symptoms will vary depending on exposure route; however, the following is a general list of all possible symptoms. The severity of effects depends upon the dosage.</p> <p><b>Mild:</b> Effects delayed 1-48 hours (severity depends on dose): Eye irritation (tearing, grittiness), runny nose, sneezing, nosebleed, hoarseness, hacking cough.</p> <p><b>Moderate:</b> Effects delayed 1-24 hours: Mild effects plus reddening and swelling of eyelids, severe cough, shortness of breath, reddening of skin.</p> <p><b>Severe:</b> Effects delayed 1-24 hours: Upper respiratory/lung damage may occur at high concentrations and longer exposure durations.</p>																															
	<p>Exposure Routes</p> <p><b>Inhalation:</b> Injury develops slowly, intensifies over several days. Vapor exposure is absorbed in mucous membranes (mouth, throat and lungs).</p> <p><b>Skin:</b> Direct contact with HD liquid can cause redness or blisters in 2-24 hours. Warm and sweaty skin areas (underarms, groin) are most susceptible to exposure.</p> <p><b>Eyes:</b> Eyes are the most sensitive to HD injury; effects noted after 1-12 hours include irritation, burning, gritty feeling, itching, weeping, reddening, lid swelling, light sensitivity, pain and corneal injury. High concentration effects are extremely painful and generally require extended medical treatment.</p> <p><b>Ingestion:</b> Consumption of contaminated food or drink could cause burning, nausea and vomiting.</p>																															
Health Effects	<p><b>Air: Acute Exposure Guideline Levels (AEGs)</b> for general population one-time exposure emergency scenarios for HD (complete definitions are available in Key References Cited/Used in NRT Quick Reference Guides for Chemical Warfare Agents):</p> <table border="1"> <thead> <tr> <th>AEG Level in mg/m<sup>3</sup>, at various exposure durations</th> <th>10 min.</th> <th>30 min.</th> <th>1 hr.</th> <th>4 hr.</th> <th>8 hr.</th> </tr> </thead> <tbody> <tr> <td>AEG 1: Threshold mild effects</td> <td>0.40</td> <td>0.13</td> <td>0.067</td> <td>0.017</td> <td>0.0083</td> </tr> <tr> <td>AEG 2: Potentially irreversible effects or impaired ability to escape</td> <td>0.60</td> <td>0.20</td> <td>0.10</td> <td>0.025</td> <td>0.013</td> </tr> <tr> <td>AEG 3: Threshold for severe effects/medical needs/increasing potential for lethality</td> <td>3.9</td> <td>2.7</td> <td>2.1</td> <td>0.53</td> <td>0.27</td> </tr> </tbody> </table> <p><b>Exposure Guidelines:</b> IDLH = 0.7 mg/m<sup>3</sup>; STEL = 3.0 x 10<sup>-3</sup> mg/m<sup>3</sup>; <b>Worker Population Limit (WPL)</b> [an 8-hr time-weighted average occupational value] = 4.0 x 10<sup>-4</sup> mg/m<sup>3</sup>; <b>General Population Limit (GPL)</b> [a 24-hr time-weighted average] = 2.0 x 10<sup>-5</sup> mg/m<sup>3</sup>. <b>Soil: Industrial Exposure Scenario</b> = 0.3 mg/kg (10<sup>-4</sup> cancer risk); <b>Residential Exposure Scenario</b> = 0.01 mg/kg (10<sup>-5</sup> cancer risk). <b>Drinking Water:</b> Provisional Advisory Levels (PAL-1) for HD are not available due to the rapid hydrolysis of dissolved HD to TDG. In the absence of PALs, the U.S. Army's Military Exposure Guidelines (MEGs) may be used; the MEG at 5 L/day, for 7 days = 140 µg/L.</p>								AEG Level in mg/m <sup>3</sup> , at various exposure durations	10 min.	30 min.	1 hr.	4 hr.	8 hr.	AEG 1: Threshold mild effects	0.40	0.13	0.067	0.017	0.0083	AEG 2: Potentially irreversible effects or impaired ability to escape	0.60	0.20	0.10	0.025	0.013	AEG 3: Threshold for severe effects/medical needs/increasing potential for lethality	3.9	2.7	2.1	0.53	0.27
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<p>Note</p> <p>Personal Protective Equipment (PPE) selection (levels A-D), medical surveillance requirements, First Aid options and personnel decontamination may vary depending upon the amount and purity of agent, site conditions and the release scenario. Additional information on personnel safety and PPE selection criteria can be found at: <a href="http://www.cdc.gov/niosh/ershdb">www.cdc.gov/niosh/ershdb</a>. We also recommend that responders check their own internal procedures (i.e., SOPs) if they have them.</p>																																
<p>Medical</p> <p><b>Pre-incident:</b> Annual physical and respiratory function exams. <b>During Incident:</b> Conduct periodic on-site medical monitoring, observe for any signs and symptoms as per Health Effects section above and treat accordingly as per First Aid section below.</p>																																
<p>First Aid</p> <p>Immediately remove person from affected area and remove contaminated clothing and articles. Wash bare skin immediately with water, or warm, soapy water if available, at normal household pressures (~50-60 psi) for three minutes, ensure thorough soaking. Rinse eyes exposed to liquid agent with potable water for 15 minutes. <b>Antidote: NO ANTIDOTE AVAILABLE.</b> Send person for follow-up medical attention and evaluation; <b>be aware effects are delayed 1-48 hours.</b> If cleared to resume work, continue to monitor for signs/symptoms and treat accordingly.</p>																																
<p>PPE</p> <p><b>GENERAL INFORMATION:</b> NIOSH-certified Chemical, Biological, Radiological, Nuclear (CBRN) Self Contained Breathing Apparatus (SCBA), Air Purifying Respirators (APR) or Powered Air Purifying Respirators (PAPR), full-face masks, &amp; protective clothing should be used. Pre-incident training &amp; exercises on the proper use of PPE are recommended. Per NIOSH guidance - <b>LEVEL A:</b> Recommended for the initial response to an HD incident. Level A provides the greatest level of skin (fully encapsulating suit), respiratory (SCBA), &amp; eye protection when the contaminant identity or concentration is unknown. Select Level A when the HD concentration is unknown or above the IDLH or AEG-2, &amp; when there is a potential of ocular or dermal exposure. <b>LEVEL B:</b> Provides the highest level of respiratory protection (SCBA) when a lesser level of skin protection is required. Select Level B when the HD concentration is unknown or above the IDLH or AEG-2 &amp; dermal exposure is less of a risk. Level B differs from Level A in that it incorporates a non-encapsulating, splash-protective, chemical-resistant outer suit that provides protection against most liquids but is not airtight. <b>LEVEL C:</b> Select Level C when the contaminant identity &amp; concentration are known &amp; the respiratory protection criteria factors for the use of APR or PAPR (i.e., &lt; IDLH, warning properties) are met. Level C may be appropriate when decontaminating personnel or equipment. <b>LEVEL D:</b> Select Level D when the contaminant is known &amp; the concentration is below the appropriate occupational exposure limit or less than AEG-1 for the stated duration times. <b>Downgrading PPE levels can be considered only when the identity and concentration of the contaminant and the risks of dermal exposure are known, and must be accompanied by on-site monitoring.</b></p>																																
Personnel Safety	<p>Real-time field screening tools (results not confirmatory or quantitative): Caution should be given to equipment that has not been properly evaluated. False positive and false negatives may occur in the presence of interferents common in the environment. The following is a summary of minimum screening concentration ranges for equipment procured by many EPA and HAZMAT response teams. Other screening tools may be used by these teams &amp; other agencies &amp; responders, some with similar capabilities &amp; limitations.</p>																															
	<p><b>NOTE: Detection equipment does not measure contaminant levels. Rather, they detect the presence of HD at levels as listed below.</b></p> <table border="1"> <thead> <tr> <th>Minimum Screening Ranges</th> <th>CAM/ICAM</th> <th>AP2C/AP4C</th> <th>APD-2000</th> <th>Dräger (CDS Kit)</th> <th>M256/M256A1</th> <th>M272 (water)</th> </tr> </thead> <tbody> <tr> <td>ppm</td> <td>0.3</td> <td>0.03-0.142</td> <td>0.3</td> <td>0.15</td> <td>0.31-0.46</td> <td>2.0 mg/L</td> </tr> <tr> <td>mg/m<sup>3</sup></td> <td>0.1-2</td> <td>0.2-1</td> <td>0.22-2</td> <td>1</td> <td>2-3</td> <td>NA</td> </tr> </tbody> </table>								Minimum Screening Ranges	CAM/ICAM	AP2C/AP4C	APD-2000	Dräger (CDS Kit)	M256/M256A1	M272 (water)	ppm	0.3	0.03-0.142	0.3	0.15	0.31-0.46	2.0 mg/L	mg/m <sup>3</sup>	0.1-2	0.2-1	0.22-2	1	2-3	NA			
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Sampling	<p><i>Note: This section on sampling contains general guidelines and does not replace the need for a site-specific sampling plan (See Key References Cited/Used)</i></p> <p><b>Sampling Concerns:</b> Detection, sampling equipment and procedures, and analytical techniques will be site-specific and depend on: 1) physical state of the agent; 2) type of surfaces contaminated (e.g., porous vs. non-porous); 3) the purpose of sampling (e.g., characterization, decontamination efficacy and clearance); and 4) specific laboratory requirements. Few laboratories currently have capability to determine HD, particularly for large numbers of samples and in all types of media. The U.S. Environmental Protection Agency (EPA) has set up mobile and fixed labs and analytical assets for chemical agent analysis of environmental samples under their Environmental Response Laboratory Network (ERLN), see ANALYSIS section below (<a href="http://www2.epa.gov/emergency-response/environmental-response-laboratory-network">www2.epa.gov/emergency-response/environmental-response-laboratory-network</a>). For sampling questions, call the EPA/HQ-EOC at 202-564-3850.</p>
	<p><b>Sample Locations and Planning:</b> Initially consider air monitoring to ensure worker safety and to determine if there is a vapor plume that could impact other areas. Characterization sampling is initiated by targeted or judgmental sampling to identify "hot spots," potential agent flow paths, and media or objects potentially acting as sinks. Additional biased or random sampling can be used to determine the extent of potential contamination or to verify the efficacy of decontamination. More thorough probabilistic sampling (e.g., grid, statistical approach) may be required for the clearance phase or if there are large uncertainties about the area impacted or the amount released. Because HD is a semi-persistent liquid, sample priorities should include surfaces that are potentially contaminated with aerosol/liquid (e.g., release site, low lying areas) and that humans are likely to contact or where vegetation is used as food.</p>
	<p><b>Note:</b> HD breaks down in most environmental conditions to numerous breakdown products, especially TDG, which may be used as a marker to determine the extent of contamination of the parent HD. See ANALYSIS section below to ensure sampling procedures are compatible with all analytes.</p> <p><b>Types of Samples:</b></p> <p><b>Air (Vapors are heavier than air):</b> Samples are collected using appropriate solid phase absorbent (tubes) or air sampler (e.g., SUMMA canister) at breathing zone level (~5 ft.) to assess inhalation exposure and at ground levels (~6 in.) to assess off gassing at surfaces.</p> <p><b>Water:</b> Water should be collected in appropriate containers with addition of appropriate de-chlorinating agents and preservatives.</p> <p><b>Soil:</b> For localized hot spot areas where soil deposition may occur (i.e., aerosol or liquid droplets), surface soil samples should be taken from a non-vegetated area to a depth of less than one inch. Sub-surface soil samples are typically not necessary unless a large amount of liquid was poured on the ground, or if an underlying aquifer is endangered.</p> <p><b>Surface Wipes:</b> Wipe samples are often desired to indicate absence of HD on non-porous surfaces. Concurrent air monitoring is recommended.</p> <p><b>Bulk:</b> For hot spot areas where liquid HD deposition may occur on porous surfaces (e.g., concrete, asphalt), actual pieces or cores of contaminated surface may be obtained using appropriate tools (scabbling, coring or drills) for subsequent laboratory extraction analysis. Bulk samples of suspected sink materials may be recommended to rule out secondary vapor phase desorption or absorption of HD into these materials.</p> <p><b>Other Sample Matrices:</b> Contact EPA/HQ-EOC at 202-564-3850 for sampling instructions.</p>
	<p><b>Sample Packaging and Shipping:</b> The packaging and shipping of samples are subject to strict regulations established by DOT, CDC, USPS, OSHA and IATA. Contact the sample-receiving laboratory to determine if they have additional packaging, shipping or labeling requirements.</p>
Analysis	<p><b>CAUTION: Many labs may not be able to perform analysis on all matrices (e.g., wipes and soil).</b> The ERLN will use uniform, compatible sample prep and analytical methods. (See <a href="http://www2.epa.gov/emergency-response/environmental-response-laboratory-network">www2.epa.gov/emergency-response/environmental-response-laboratory-network</a>). For access to the nearest ERLN laboratory specially trained and equipped for HD analysis, contact the EPA/HQ-EOC at 202-564-3850.</p>
Decontamination/Cleanup	<p><b>Decontamination/Cleanup Planning:</b> Once site controls are in place, develop a site-specific decontamination/cleanup plan. Decontamination may require a "tiered approach" using a variety of techniques and products. Call the EPA/HQ-EOC at 202-564-3850 for more information.</p> <p><b>General Considerations:</b> A cost vs. benefit evaluation should be undertaken for each decontamination strategy and approach that considers: public safety, total cost, impact on the facility, wastes generated, as well as the time the facility or item will be out of service and any socio-economic, psychological, and/or security impacts that may result. Large volumes of decontamination wastes may be generated that will need to be collected, treated and disposed of properly. Waste handling and disposal must be addressed as early in the decontamination and cleanup process as possible (see Waste Management section below).</p> <p><b>Disposal Option:</b> The urgency to restore a facility as quickly as possible may result in the outright and timely removal and disposal of contaminated materials. Certain materials may be resistant to decontamination formulations, or may be cheaper to discard and replace than to decontaminate and restore.</p> <p><b>Monitored Natural Attenuation:</b> HD degrades via natural processes. Environmental monitoring must be maintained during decontamination and recovery phases. Monitored natural attenuation may require institutional controls (e.g., access restriction and contaminant containment measures). The time to achieve clearance must be considered in the overall cost/benefit evaluation. This option is more passive than other options but is non-destructive to materials.</p> <p><b>Fix-in-Place Option:</b> The contaminated area may be resistant to decontamination products or may be unable or impractical to be treated. Physical barriers can be used to separate and immobilize the agent contamination from coming into contact with the environment or the public. This can be a temporary or permanent solution.</p> <p><b>Decontamination Strategy:</b> A decontamination strategy can be developed by designating contaminated areas into three broad categories: 1) surfaces or hot spots, 2) large volumetric spaces, and 3) sensitive equipment or items. Areas in each category may be treated using one or more unique decontamination processes in a tiered approach to the overall site-specific decontamination strategy.</p> <p><b>Surfaces/Hot Spots:</b> This category is for areas smaller in size but with higher levels of agent contamination. They may require more rigorous decontamination products and methods. In contrast to the rapid hydrolysis when HD is dissolved in water, <b>the hydrolysis of HD on surfaces is slow.</b> 1) Hypochlorite solutions are effective but can be very corrosive to certain surfaces and materials and should be rinsed thoroughly afterwards. Household bleach solutions (≥5% sodium hypochlorite) are very effective for HD with efficacy achieved with contact time of 15-60 minutes depending on surface material. Calcium hypochlorite, present in commercial products, such as HTH (10% hypochlorite solution), is better for surfaces with high concentrations of liquids in localized areas. 2) Proprietary decontamination foams and gels such as DF-200®, CASCAD®, Decon Green®, or L-Gel® have been reported to be effective against HD on the order of minutes to hours, but not all have been thoroughly tested. Availability, cost and the need for specialized equipment may limit their use early in the response.</p> <p><b>Large Volumetric Spaces:</b> This category is for areas larger in size but with lower levels of agent contamination. They may require less aggressive but more broadly applied decontamination products and methods. 1) Monitored Natural Attenuation is more passive than other decontamination options and is non-destructive to materials. This option may be preferable given the scope and severity of contamination. 2) Forced or Hot Air ventilation methods are recommended for vapor plume contamination or low concentration of HD in large volumetric spaces or open areas; efficacy typically can be achieved in hours to days with less waste and adverse impacts to materials. 3) Fumigation with modified vaporous hydrogen peroxide (VHP®) has been reported to be effective against HD. HVAC systems in large indoor spaces may require a separate decontamination strategy that could include the use of Hot Air ventilation or fumigation.</p> <p><b>Sensitive Equipment and Items:</b> 1) Forced or Hot Air ventilation may be used for HD and can be used either in-situ or ex-situ to decontaminate these items. 2) modified VHP® fumigation can be used on these items with less corrosion to electronics than dilute hypochlorite solutions.</p> <p><b>CAUTION:</b> Decontamination products may have unique safety/PPE requirements due to their own toxicity or that of breakdown products during use (e.g., bleach results in chlorine vapors). Strong oxidizers, such as hypochlorite, may react violently with organics. Under oxidizing conditions (i.e., bleach), <b>HD can break down into several toxic by-products, such as mustard and vinyl sulfones.</b> Hydrolysis of HD releases Cl ions that can affect the pH of solutions. Formulations should be chosen that do not allow the formation of these toxic breakdown products. Dirt, grime and other coatings can reduce the efficacy of decontamination; pre-cleaning surfaces with soap and water may be needed before the application of decontamination formulations <b>but resulting pre-cleaning rinsates may contain and spread agent.</b></p> <p><b>Verification of Decontamination:</b> Site and situation specific. Please contact EPA/HQ-EOC at 202-564-3850 for further assistance.</p>
Waste Management	<p><b>CAUTION:</b> Federal requirements for transporting hazardous materials and procedures for exemptions are specified in <a href="http://www.fmcsa.dot.gov/safety-security/hazmat/complyhmrregs.htm#hmp">www.fmcsa.dot.gov/safety-security/hazmat/complyhmrregs.htm#hmp</a>. These regulations differ from state-to-state. Detailed state regulations can be found at <a href="http://www.envcap.org">www.envcap.org</a>. Current resources on packaging, labeling and shipping are available at: <a href="http://www.phmsa.dot.gov/hazmat">www.phmsa.dot.gov/hazmat</a>.</p> <p><b>Waste Management:</b> Under the Resource Conservation and Recovery Act (RCRA), waste generally is classified as hazardous waste (subtitle C) or solid waste (subtitle D). Under RCRA's statutory authority, a waste is considered hazardous if it: (A) causes or significantly contributes to an increase in mortality or an increase in serious, irreversible or incapacitating reversible illness or (B) poses a substantial, present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of or otherwise managed. The RCRA regulations generally define a waste as hazardous if it is: (1) a listed waste (40 CFR§261.21, §261.32), (2) exhibits specific characteristics (§261.21-261.24) or (3) is a spilled or discarded commercial chemical product (§261.33). The States (except for Alaska and Iowa) have the primary responsibility to implement the hazardous waste regulations and can impose more stringent requirements than the Federal program, so it is critical to open a dialogue with regulators as early as possible. Several states (CO, IN, KY, MD, OR, UT) have their own waste designations for CWA, which may be applicable for the cleanup of contaminated residues. HD is not a hazardous waste under the Federal regulations, but state codes may apply for HD-contaminated residues, soils and debris. Management of toxic decomposition products, associated residual decontamination solutions, local waste acceptance criteria, and transportation and handling requirements should be considered. The EPA has developed I-WASTE, a web-based tool that contains links to waste transportation guidance, treatment and disposal facilities, state regulatory offices, packaging guidance, and guidance to minimize the potential for contaminating the treatment or disposal facility. Access to this decision support tool requires pre-registration (<a href="http://www2.ergweb.com/bdrtool/login.asp">www2.ergweb.com/bdrtool/login.asp</a>).</p>

### Medical Facilities

DAN (Diving Alert Network) Emergency	(919) 684-9111 (24 hrs)	(919) 684-4326 (Voice Prompt)			7-Jan-19
DAN Information	(800) 446-2671	(919) 684-2948			7-Jan-19
<b>VA Major Trauma Hospitals</b>	<b>Contact (ER)</b>	<b>Trauma Center Level</b>	<b>Lat/Long</b>	<b>Helo Pad</b>	<b>Verified</b>
Sentara Norfolk General Hospital	(757) 388-5597 / (757) 388-3551 / (757) 388-3296 / (757)-730-5050	Level I Trauma Center / Burn Center / Hyperbaric Chamber	36-51.6N 076-18.21W	Yes-on site	7-Jan-19
Pitt County Memorial Hospital (Greenville, NC)	(252) 847-0279/1985-ER (252) 847-4100-Main	Level I Trauma Center / Hyperbaric Chamber	35-27N 077-22W	Yes-on site	7-Jan-19
VA Commonwealth University Medical Center	(804) 828-9111	Level I Trauma Center	N/A	No	7-Jan-19
INOVA Fairfax Regional Hospital	(703) 776-3154-ER (703) 776-2925-COMMS (703) 776-2930-Air Care (24hr #s)	Level I Trauma Center	38-51.42N 077-13.5W	Yes-on site	7-Jan-19
Virginia Beach General Sentara Hospital	(757) 395-8079-ER (757) 395-8890-Main	Level II Trauma Center,	36-51.9N 076-01.54W	Yes-on site	7-Jan-19
Riverside Regional Medical Center (Newport News)	(757) 594-2050-ER (757) 594-2000-Main	Level II Trauma Center	37-03.9N 076-29.48W	Yes-on site	7-Jan-19
Southside Regional Medical Center (Petersburg, VA)	(804) 765-5681-ER (804) 765-5000-Main	Level III Trauma Center / Hyperbaric Chamber	N/a	No	7-Jan-19
<b>VA Hospitals with Hyperbaric Chamber and other Specialty</b>	<b>Contact (ER)</b>	<b>Trauma Center Level</b>	<b>Lat/Long</b>	<b>Helo Pad</b>	<b>Verified</b>
Bon Secours Depaul Medical Center (Norfolk, VA)	(757) 889-5111-ER (757) 889-5000-Main	Hyperbaric Chamber	No	No	7-Jan-19

**Enclosure 6**

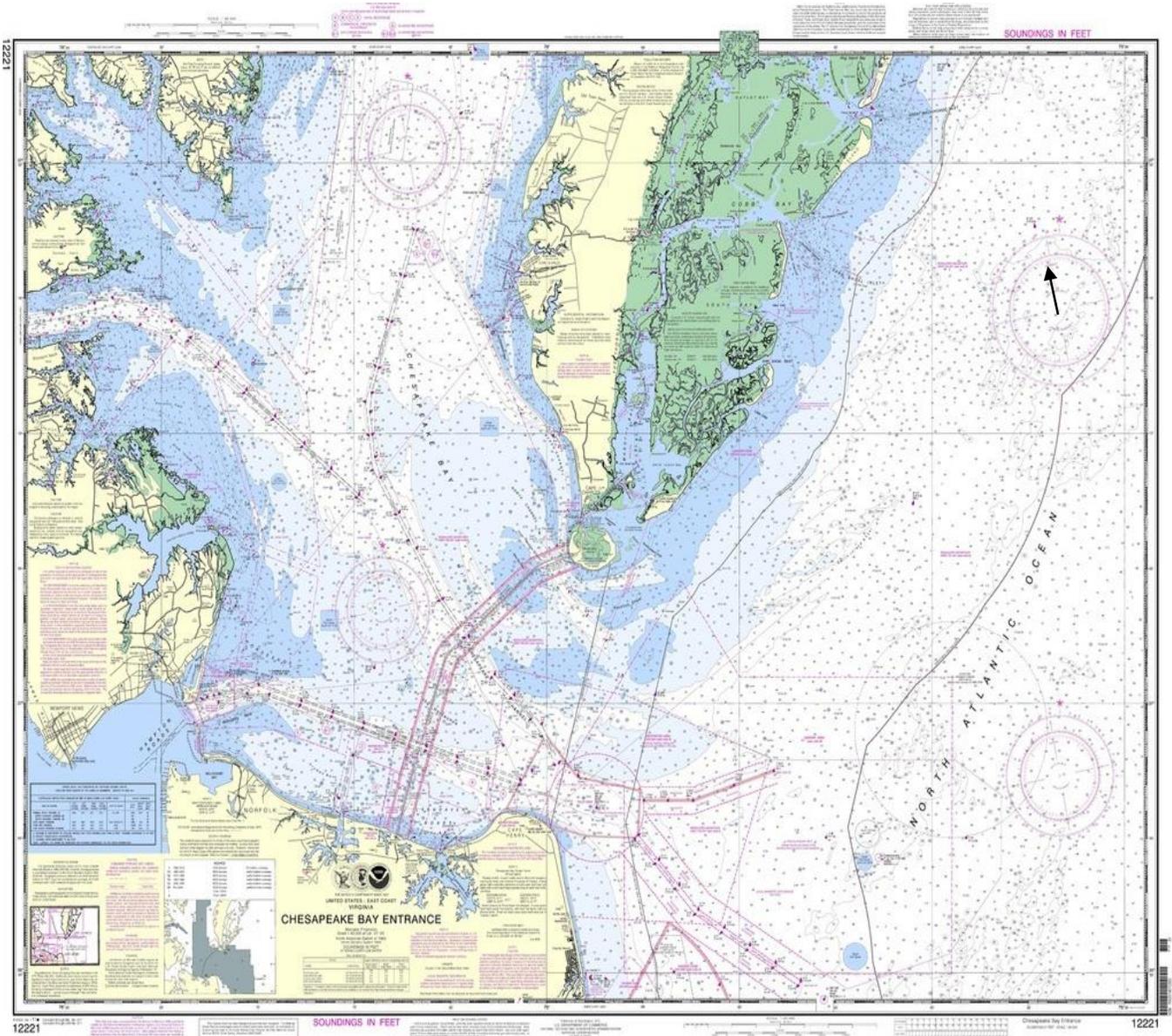
Chesapeake General	<b>(757) 312-6200-ER (757) 312-6128-Main</b>	<b>Primary Stroke Center, Hyperbaric Chamber</b>	36-44.5N 076-14.64W	Yes-on site	7-Jan-19
Columbia Retreat Hospital (Richmond, VA)	<b>(804) 254-5433-ER (804) 254-5100-Main (804) 254-5372-HBO</b>	Dep of Hyperbaric Medicines	N/A	No	7-Jan-19
MT Vernon Hospital (Alexandrai, VA)	<b>(703) 664-7112-ER (703) 664-7000-Main</b>	<b>Hyperbaric Chamber</b>	38-44.42N 077-04.63W	Yes-on site	7-Jan-19
Norton Community Hospital	<b>(276) 679-9645-ER (276) 679-9600-Main</b>	<b>Hyperbaric Chamber</b>	36-23.61N 082-38.69W	Yes-on site	7-Jan-19
Riverside Shore Memorial	<b>(757) 302-2350-ER (757) 302-2100- Main</b>	Hospital with ER to stablize patients	37-41.765N 075-43.39W	Yes-on site	7-Jan-19
Sentara Leigh Hospital (Norfolk, VA)	<b>(757) 261-6804-ER (757) 261-6000-Main</b>	<b>Hyperbaric Chamber</b>	36-51.73N 07618.25W	Yes-on site	7-Jan-19
Sentara Williamsburg Regional Medical Center	<b>(757) 984-7155-ER (757) 984-6000-Main</b>	<b>Trauma Center</b>	37-20.26N 076-44.26W	Yes-on site	7-Jan-19
<b>Other Units with Dive Experience and Hyperbaric Chamber</b>	<b>Contact (24 hrs)</b>	<b>Equipment/Services</b>	<b>Lat/Long</b>	<b>Helo Pad</b>	
Fort Eustis Diving Company (24hrs)	<b>(757) 878-3500</b>	Hyperbaric Chamber	N/A	N/A	7-Jan-19
NAB LC Mobile Unit (24 hrs)	<b>(757) 434-4108</b>	Diving and Salvage Unit (x2)	N/A	N/A	7-Jan-19
Norfolk Mobile	<b>(757) 462-8801</b>	Diving and Salvage Unit	N/A	N/A	7-Jan-19
Crofton Diving	<b>(757) 397-1131</b>	Commercial Diving and Salvage Unit	N/A	N/A	7-Jan-19
<b>NC/MD/DE Major Trauma Hospitals</b>	<b>Contact (ER)</b>	<b>Trauma Center Level</b>	<b>Lat/Long</b>	<b>Helo Pad</b>	
<b>Maryland</b>					

### Medical Facilities

Atlantic General Hospital (Berlin)	<b>(410) 641-9630-ER</b> <b>(410) 641-1100-Main</b>	<b>Stroke Center / Wound Care Center</b>	38-20.2N 075-12.1W	Yes-on site	7-Jan-19
Peninsula Regional Medical Center (Salisbury, MD)	(410) 546-6408	<b>Level III Trauma Center / Hyperbaric Chamber</b>	38-21.0N 075-34.9W	Yes-on site	7-Jan-19
The Johns Hopkins Hospital (Baltimore)	<b>(410) 955-5000-Main</b> <b>(410) 955-2280-ER</b>	<b>Level I Trauma Center</b>	39-17.83N 076-35.59W	Yes-on site	7-Jan-19
The Johns Hopkins Bayview Medical Center (Baltimore)	<b>(410) 550-0350- ER</b> <b>(410) 550-0100- Main</b>	<b>Level II Trauma Center/ Burn Center</b>	39-17.3N 076-32W	Yes-on site	7-Jan-19
University Maryland Medical Center (Baltimore)	<b>(410) 328-9595-ER</b> <b>(410) 328-8667-Main</b>	<b>Baltimore Shock / Par Trauma Center/ Hyperbaric Chamber</b>	39-17.3N 076-37.55W	Yes-on site	7-Jan-19
<b>North Carolina</b>					
Duke Medical Center (Durham, NC)	<b>800-362-5433</b> <b>(919)966-8111</b>	<b>Level I Trauma / Hyperbaric Chamber</b>	36-00.39N 078-56.31W	Yes	7-Jan-19
Pitt County Memorial Hospital (Greenville, NC)	<b>(252) 847-0279/1985-ER</b> <b>(252) 847-4100-Main</b>	<b>Level I Trauma Center / Hyperbaric Chamber</b>	35-27N 077-22W	Yes-on site	7-Jan-19
Albemarle Hospital (Elizabeth City)	<b>(252) 384-4610</b>	N/A	N/A	No	7-Jan-19
Outer Banks Medical Hospital	<b>(252) 449-5600</b>		35-56.24N 075-37.03W	Yes	5-Jan-12

<b>1. Incident Name</b> <b>Military Munitions Discovery/Response</b>	<b>2. Prepared by:</b> (name) Date: _____ Time: _____	<b>INCIDENT BRIEFING</b> <b>ICS 201-CG</b>
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**3. Map/Sketch** (include sketch, showing the total area of operations, the incident site/area, overflight results, trajectories, impacted shorelines, or other graphics depicting situational and response status)



**4. Current Situation:** Vessel name, location, nature of incident, type of ordnance, hazard to navigation, exposure or injuries, cause of incident, any facilities/vessels/people in the area, and cargo/catch aboard.

**Notification:** List the agency and stakeholder notifications completed. The USCG Sector Hampton Roads Command Center (757)-638-6641 can assist with making notifications listed within the Explosive Ordinance Incident Response QRC.

**Media Interest:** Describe media interest (low, medium, high, or local/national) and current media activity. All media or press releases should be coordinated through the JIC and approved by the UC.

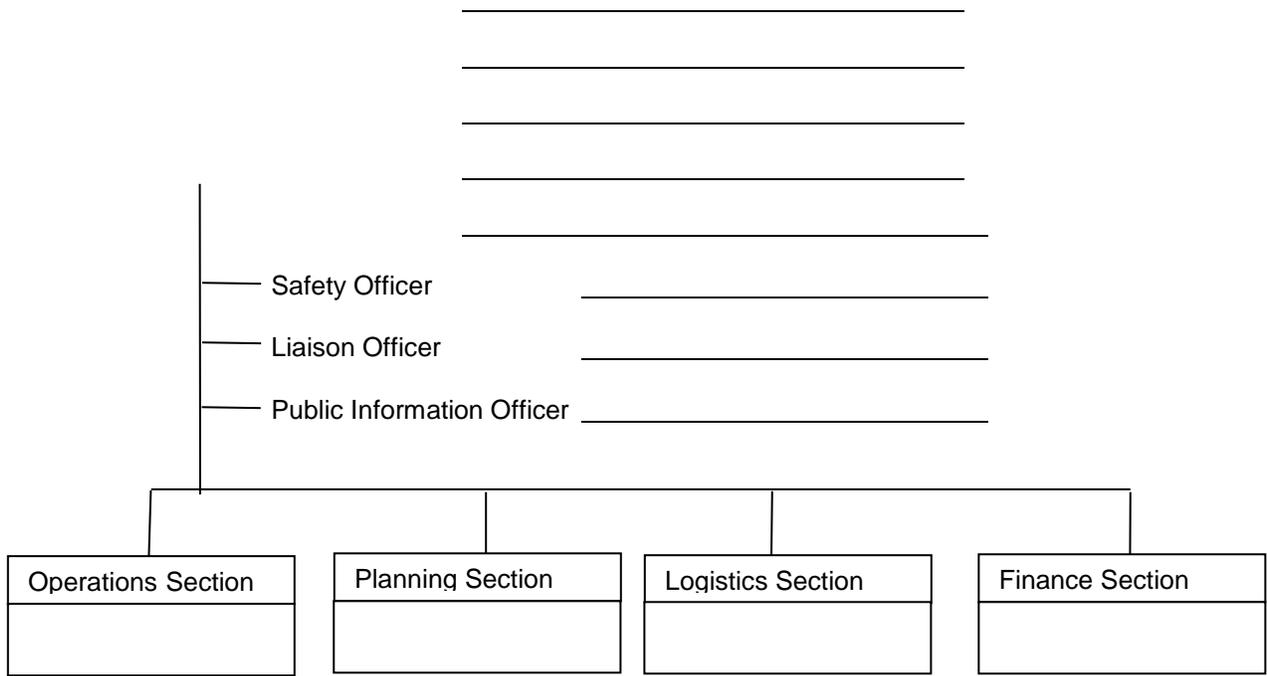
**Incident Facilities:** An ICP has been established at **XX**. A Staging Area has been established at **XX**. All agencies with a role in the response are requested to send a representative to the ICP to serve as a liaison or to fill an ICS position. The Vessel is currently located at **XX**. A JIC has been established at **XX**. The Closest hospital with a level **X** Trauma Center and hospital with a Burn Center is located at **XX**.

<b>1. Incident Name</b> Military Munitions Discovery/Response	<b>2. Prepared by:</b> (name) Date: _____ Time: _____	<b>INCIDENT BRIEFING</b> <b>ICS 201-CG</b>
<b>Weather Conditions:</b> On-Scene wx (temp, precipitation, visibility, thunderstorms activity) Marine forecast (wind, sea state, tides, small-craft advisories) Contact NOAA NWS Forecast Office, Wakefield, VA for assistance obtaining weather report and forecast at 757-899-4200.		
<b>5. Initial Response Objectives, Current Actions, Planned Actions</b>		
<u><b>Limitation and Constraints</b></u>		
<ul style="list-style-type: none"> <li>• Weather, including sea state, visibility, wind, and temperature.</li> </ul>		
<ul style="list-style-type: none"> <li>• Immediate availability of specialized resources (i.e HAXMAT response)</li> </ul>		
<ul style="list-style-type: none"> <li>• Lack of tactics, techniques, and procedures (TTP)/training/organic capability for offshore hazmat/decon response.</li> </ul>		
<ul style="list-style-type: none"> <li>• Multi-jurisdiction.</li> </ul>		
<ul style="list-style-type: none"> <li>• Night operations.</li> </ul>		
<ul style="list-style-type: none"> <li>• PPE requirements.</li> </ul>		
<ul style="list-style-type: none"> <li>• Responders fatigue given PPE, weather, and/or Operational Tempo (OPTEMPO)</li> </ul>		
<ul style="list-style-type: none"> <li>• Public perception</li> </ul>		
<p><b>Priorities:</b> Safety of human life ( including crew, public, and emergency responders), HAZMAT Response (including disposition of DMM munition (if still onboard), testing for chemical agent and decontamination), Food safety, Stakeholder outreach, Media relations, Information management, and investigation.</p>		
<u><b>Objectives:</b></u>		
<ul style="list-style-type: none"> <li>• Provide for the safety, security, protection, and health/welfare of responders, involved parties and public.</li> </ul>		
<ul style="list-style-type: none"> <li>• Control, isolate, and secure/remove the source of contamination.</li> </ul>		
<ul style="list-style-type: none"> <li>• Prepare for and execute decontamination measures.</li> </ul>		
<ul style="list-style-type: none"> <li>• Mitigate impacts to the food supply.</li> </ul>		
<ul style="list-style-type: none"> <li>• Identify and mitigate impacts to the marine transportation system.</li> </ul>		
<ul style="list-style-type: none"> <li>• Establish an incident management team that can manage a coordinated response effort.</li> </ul>		
<ul style="list-style-type: none"> <li>• Initiate/manage effective outreach strategy to keep the public, stakeholders, and media informed.</li> </ul>		
<u><b>Critical Information Requirements:</b></u> (Information to be collected, trackers & reported)		
<ul style="list-style-type: none"> <li>• Death or injury of responders or vessel crewmember</li> </ul>		
<ul style="list-style-type: none"> <li>• Location of any contaminated, or potentially contaminated catch or food product.</li> </ul>		
<ul style="list-style-type: none"> <li>• Media interest/coverage prior to first official release of information from Coast Guard or UC.</li> </ul>		
<ul style="list-style-type: none"> <li>• Ordnance remain onboard a vessel</li> </ul>		
<ul style="list-style-type: none"> <li>• Request for MEDEVAC for crewmember symptomatic of blister agent exposure.</li> </ul>		
<ul style="list-style-type: none"> <li>• Media on scene at location of vessel/decon efforts.</li> </ul>		
<ul style="list-style-type: none"> <li>• Real or potential impact to marine transportation system, navigable channel, anchorage, and/or marina area due to waterway control actions, hazard onboard vessel, or response operations.</li> </ul>		
<u><b>Planned Actions:</b></u>		
<ul style="list-style-type: none"> <li>• Identify all organization that should comprise a Unified Command (UC).</li> </ul>		
<ul style="list-style-type: none"> <li>• Review "Unified Command Initial Action Consideration.</li> </ul>		
<ul style="list-style-type: none"> <li>• Make agency notifications.</li> </ul>		
<ul style="list-style-type: none"> <li>• Id/de-conflict inter-agency HAZMAT/CBRN specialized</li> </ul>		
<ul style="list-style-type: none"> <li>• Identify whether source of contamination is still present onboard, status, and hazards (for example: is there a possibility the DMM could be fused or present an explosive hazard).</li> </ul>		
<u><b>Future Actions:</b></u>		
<ul style="list-style-type: none"> <li>• Identify risk(s) to the vessel, crew, and public.</li> </ul>		
<ul style="list-style-type: none"> <li>• Coordinate appropriate control actions for vessel or crew.</li> </ul>		
<ul style="list-style-type: none"> <li>• Develop courses of action (COAs) and recommend action, in conjunction with Unified Command and assisting agencies,</li> </ul>		

<b>1. Incident Name</b> Military Munitions Discovery/Response	<b>2. Prepared by:</b> (name) Date: _____ Time: _____	INCIDENT BRIEFING ICS 201-CG
	for placement of vessel, if underway.	
	<ul style="list-style-type: none"> <li>Plan response strategies and tactics</li> </ul>	
	<ul style="list-style-type: none"> <li>Utilize a stakeholder outreach process and specifically discuss the limitation and constrains of response operations.</li> </ul>	

<b>1. Incident Name</b> Military Munitions Discovery/Response	<b>2. Prepared by:</b> (name) Date: _____ Time: _____	INCIDENT BRIEFING ICS 201-CG
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**6. Current Organization** (fill in additional appropriate organization)





## Contact Information

<u>Organization</u>	<u>Point of Contact</u>	<u>Number &amp; Email</u>
Army Operation Center (AOC)		703-697-0218 703-695-4695
Center for Disease Control and Prevention (CDC)		1-800-232-4636
Chemical Material Activity's Director, Recovery Material Directorate		410-436-1083
Consequence Management Advisory Division (CMAD) -EPA		202-564-3850
DOD's 20 <sup>th</sup> Chemical Biological Radiological Nuclear and Explosive (CBRNE) Operation Center		410-426-6200
Edgewood Chemical Biological Center Director for Operation for Program Integration		410-436-9570
EPA Emergency Operation Center (EOC)		202-564-3850
EPA's Environmental Response Team (ERT)		NRC (1-800-424-8802) EPA EOC (202-564-3850)
Federal Bureau of Investigation (FBI)		757-455-0100
Food and Drug Administration (FDA)		Accomack: 757-787-5864 x 221 Norfolk: 757-683-8461 White Stone: 804-435-1095
Hampton Roads Medical Response System (MMRS)		757-441-5608
Maritime Incident Response Team (MIRT)	Mr. Bill Burket	757-683-2199 / <a href="mailto:bburket@portofvirginia.com">bburket@portofvirginia.com</a>
National Response Center (NRC)		1-800-424-8802
National Strike Force Coordination Center (NSFCC)		252-331-6000
National Weather Service (NWS) Wakefield		757-899-4200 / <a href="mailto:AKQ.webmaster@noaa.gov">AKQ.webmaster@noaa.gov</a>
Navy Mobile Disposal Unit Two (EODMU2)	Navy Regional Operation Center (ROC)	ROC: 757-322-2609 EODMU2: 757-462-8472 x 2000
Navy On Scene Coordinator (NOSC)	Mr. Alan Kersnick	757-322-2609 / <a href="mailto:Alan.Kersnick@navy.mil">Alan.Kersnick@navy.mil</a>
Navy Regional Operation Center (ROC)		757-322-2609
Naval Weapons Station Yorktown EOD Detachment	Navy Regional Operation Center (ROC)	ROC: 757-322-2609 Munitions Command: 757-887-4834

NOAA Scientific Support Coordinator (SSC)	Mr. Frank Csulak	732-371-1005 / <a href="mailto:Frank.Csulak@noaa.gov">Frank.Csulak@noaa.gov</a>
Office of the Assistant Secretary of the Army for Safety, Environmental, and Occupational Health Director for Munition and Chemical Matters.		703-697-5564
Office of the Assistant Secretary for Preparedness and Response (ASPR)		215-861-4413
Public Affairs Information Assist Team (PIAT)	National Strike Force (NSF) Command Center	252-331-6000
USCG Sector Hampton Roads Command Center		757-638-6637
USCG Strike Team's (ST)	National Strike Force (NSF) Command Center	252-331-6000
U.S Forces Command Director, CBRNE Analytical Remediation Activity		410-436-9570
Virginia Department of Emergency Management (VDEM)	VA EOC	804-897-6502 804-897-6506
Virginia Department of Environmental Quality (VADEQ)		Richmond: 804-698-4000 Tidewater Regional Office: 757-518-2000
Virginia Department of Health (VDH)	Mr. Keith Skiles	804-864-7480 / <a href="mailto:Keith.Skiles@vdh.virginia.gov">Keith.Skiles@vdh.virginia.gov</a>
Virginia Emergency Operations Center (EOC)		804-897-6502 804-897-6506
Virginia Office of Public Safety and Homeland Security (VPSHS)		804-786-5351