



CONTROLLED MONITORING SITE WASTE MANAGEMENT

TECHNICAL INFORMATION PAPER No. 13-035-0119

PURPOSE.

This information paper provides guidance for collecting and managing waste generated at controlled monitoring sites (CMS). It is not intended to change any existing Department of Defense (DOD) directives, policies, or procedures provided by Combatant Commands, contingency plans, or operation orders.

REFERENCES.

See Appendix A for complete reference information.

APPLICABILITY.

This information is applicable to DOD-owned facilities. There is an expectation that personnel involved with waste management activities have been trained in the proper use of personnel protective equipment (PPE) respirator protection, hazardous materials management, and hazards associated with Ebola Virus Disease (EVD) waste management and disposal practices.

BACKGROUND.

The Army provides logistical, engineering, and training support to the overall U.S. Government Foreign Humanitarian Assistance/Disaster Relief efforts to contain the spread of EVD. Army personnel returning from operations in an area with an active Ebola virus outbreak will be monitored in a CMS for a period of 21 days as a precautionary measure. A CMS is an enclosed area with barracks, dining facilities, and physical fitness/recreation facilities where personnel are kept separate from other populations and monitored to ensure that no one is infected with EVD during the 21-day incubation period. Controlled monitoring sites are established at military installations with airfield capabilities where personnel returning from the EVD infected region are transported directly to the CMS without contact with other areas of the installation. Most CMSs are located in the continental United States (CONUS); however, CMS locations may be established at installations outside CONUS. CMS locations are subject to applicable Federal, State, local, and host nation Final Governing Standard requirements for waste management.

Personnel in the EVD contaminated region are expected to be monitored according to risk category, from “no risk” to “low risk.” High-risk exposures will be screened out prior to arriving at the installation and not located at the CMS. During the 21-day period, the health of personnel will be carefully monitored on a daily basis to ensure that any

potential infection is quickly identified, and the patient is evacuated to an appropriate medical treatment facility (MTF).

EVD TRANSMISSION.

Body fluids and tissue from individuals who develop EVD symptoms are highly infectious. EVD spreads through human-to-human transmission with infection resulting primarily from direct contact (through broken skin or mucous membranes) with blood, secretions, organs, or other bodily fluids of infected people and indirect contact with environments contaminated with body fluids. Proper use of PPE when in contact with EVD-infected persons and when handling blood or body fluids and remains of the deceased prevents EVD.

Persons in contact with suspected and/or confirmed EVD patients must consistently apply appropriate infection control procedures (standard, contact, and droplet precautions). These include basic hand hygiene, respiratory hygiene, and PPE to reduce the risk from splashes or other contact with infected materials, and patient isolation.

DEFINITIONS.

Household Waste. Any material, including garbage and sanitary sewer wastes in septic tanks, derived from single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas. In order to qualify as household waste, the waste must 1) be generated on the premises of a household (temporary or permanent) and 2) be composed primarily of materials found in the wastes generated by consumers in their homes.

Porous materials. These materials allow liquid and gas to pass through them. They vary in hardness, density, and porosity. As a result, liquids spilled or applied to porous materials absorb into the material making it difficult to decontaminate. Examples of porous materials include clothing, carpet, curtains, cushions and padding, mattresses, paper, pillows, upholstered furniture, and untreated wood.

Nonporous materials. These materials will limit or prevent liquid and gas from passing through them. Liquids spilled or applied to these materials will pool or run off the material. Examples of nonporous materials include plastic identification cards, eyeglasses, cell phones, sinks and toilets, metal furniture, silverware, and sealed/treated wood.

Nonsoiled Items. Temporary housing furnishings and personal effects in the CMS that do not come in contact with persons ill with EVD.

Soiled items. Temporary housing furnishings and personal effects in the CMS that come in contact with persons ill with EVD and may be contaminated with body fluids.

WASTE GENERATION AND DISPOSAL.

Soldiers and civilians will live and work in the CMS and will generate regular trash throughout the course of their stay.

The CMS is considered living quarters similar to barracks. Wastes generated from the barracks on an installation are considered household wastes and are not subject to solid waste regulations applicable to other mission related waste generation areas on the installation. Title 40 Code of Federal Regulations Part 261.4(b)(1) excludes household wastes from hazardous waste regulations, allowing such wastes to be disposed of as ordinary solid wastes. This household waste exclusion extends to some mission related wastes that are generated by individuals in a manner that meets the household waste definition, such as wastes generated by individual occupants while residing in a CMS. Therefore, wastes generated in the CMS should be managed as general solid waste (like the barracks), including dining facility wastes, paper and refuse from latrines, printer paper, magazines, newspapers, and packaging.

The supporting installation will place solid waste collection containers inside the CMS fence line. These containers will provide ample capacity to facilitate daily waste generation, collection, and storage in the CMS. The containers will have covers (permanently fixed or temporary measures) to prevent saturation by rain/weather and access by scavenging wildlife.

Two main medical missions will be conducted at the CMS: routine medical care, including sick call, and twice-daily temperature screening of all personnel. Waste generated during routine medical care (non-EVD related care) does not pose an EVD risk to handlers/transporters and will be collected and managed as solid waste.

If at any time an individual presents with symptoms of EVD, the individual will be moved to the MTF isolation unit immediately with infection control precautions implemented. Waste generated from the initial evaluation at the CMS will be placed in regulated medical waste (RMW) containers or bags and transported with the patient to the MTF isolation unit. The MTF EVD waste management procedures address reclassification of the EVD waste at the MTF if a negative diagnosis of the patient is determined. The U.S. Army Public Health Center (APHC) published Standing Operating Procedure TA-446-1218, *Ebola Waste Management in the Medical Treatment Facility*, which provides information on collection of suspected EVD waste in initial diagnostic care areas (CMS screening room/treatment area), patient transport with EVD waste to the MTF, and management of spills and uncontrolled releases. See the APHC EVD website for this reference at:

<https://phc.amedd.army.mil/topics/discond/diseases/Pages/Ebola-Virus-Disease.aspx>

PERSONAL BELONGINGS OF PATIENTS AWAITING EVD DIAGNOSIS.

When an occupant of the CMS is transported to the MTF for EVD confirmation and treatment, his/her personal belongings must be secured and evaluated for EVD waste disposal requirements.

CMS personnel must conduct and document personal property inventories and adhere to all personal property and accountability regulations. Personnel who complete the inventories must be trained and wear appropriate PPE to handle items potentially contaminated with EVD.

Seal the room and secure items in place if possible while waiting for the EVD diagnosis at the supporting MTF. Collect any personal patient belongings that become soiled during the patient's assessment at sick call in RMW bags and transport them with the patient to the MTF. Double bag all collected items for transport in RMW red bags.

MANAGEMENT OF PERSONAL BELONGINGS AND ROOM FURNISHINGS.

If the patient is diagnosed with EVD, soiled personal property and CMS room furnishings must be either disinfected and returned to use or disposed of properly. The CMS Chain of Command, Garrison Staff, and supporting MTF Infection Control Team will coordinate to decide what items to disinfect and return to service and what items to dispose, taking note to adhere to personal property and accountability regulations. Some personal property items such as money, passports, identifications, wedding rings, and eyeglasses warrant disinfection. Disinfection is also warranted for room furnishings such as sinks, toilets, countertops, glassware, and nonporous furniture. Mattresses that are covered with plastic or other impermeable material may also be disinfected.

The APHC published the following technical information papers (TIP) that provide disinfection and cleaning information:

- *Decontamination of Equipment Used in the Area of Operations (AO) Impacted by Ebola Virus Disease (EVD)* (TIP No. 13-031-1014), which addresses disinfection of equipment;
- *Disinfection and Disposal of Household Goods Belonging to Patients Infected with Ebola Virus Disease* (TIP No. 37-032-0918); and
- *Terminal Cleaning for Ebola Virus Disease (EVD) Contaminated Patient-Care Areas* (TIP No. 13-033-0119), which addresses disinfection of the patient care area and equipment used.

See the APHC EVD website for these references at:

<https://phc.amedd.army.mil/topics/discond/diseases/Pages/Ebola-Virus-Disease.aspx>

Soiled porous items such as bed linens, mattresses (not covered with plastic/impermeable material), and couches in direct contact with body fluids from

positive EVD patients are Infectious Category A EVD waste. Manage this waste wearing all required PPE for EVD. Transportation restrictions exist for Infectious Category A EVD Waste. Only a U.S. Department of Transportation approved Special Permit holder is authorized to transport Infectious Category A EVD Waste. The best disposal option is to disinfect the items onsite using either a 10:1 bleach solution or an EPA-approved disinfectant suitable for Ebola virus decontamination. The EPA has identified disinfectants that meet the CDC criteria for use against EVD¹ to enable reclassification of the disinfected waste as RMW. Once properly disinfected, the items may be disposed as RMW via a certified RMW transporter. Current disinfection methods may not reach interior contamination or may prevent reuse due to saturation in items such as furniture; therefore, reclassification to RMW instead of solid waste prevents potential exposure of waste treatment personnel through contact with potentially untreated internal components of the items.

Once disinfected and downgraded to RMW, utilize a licensed RMW company to transport the items off the installation for RMW treatment and disposal. Ensure the company is a state licensed and approved RMW transporter.

Soiled, nonporous items that are properly disinfected do not require disposal and can be returned to use.

POINT OF CONTACT. The point of contact for this information is the APHC Environmental Health Sciences Division, Waste Management Branch, 410-436-3651 or DSN 584-3651.

¹<https://www.epa.gov/pesticide-registration/list-l-disinfectants-use-against-ebola-virus>

APPENDIX A

REFERENCES

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