



Debris Management Overview



US Army Corps of Engineers®

Questions, comments, and suggested improvements related to this overview are encouraged. For more information, please contact U.S. Army Corps of Engineers, Office of Homeland Security, Civil Emergency Management, 441 G Street NW, Washington, DC 20314-1000

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Mission Definition

Debris management refers to the collective operations of demolition, clearance, removal, transport, temporary storage, segregation, reduction and, ultimately, disposal of debris, whether generated by natural disaster or terrorist event. Debris may be largely woody in nature resulting from hurricanes, tornadoes or coastal storms, construction and demolition (C&D) material resulting from earthquakes or acts of terrorism, and household contents resulting from flooding or any of the other aforementioned threats. Reduction operations are typically accomplished by grinding, chipping, or incineration, and the preferred method of disposal is deposit in locally provided landfills. Recycling, particularly as related to C&D material, is desirable as a means of preserving landfill capacity.

USACE Concept of Operations

A successful debris management mission incorporates the combined USACE functions of Contracting, Real Estate, Environmental, Resource Management, Project Management, and Emergency Management. Close coordination and partnership with FEMA, State and Local governments, and other Federal agencies is essential. USACE assets are employed when the mission is assigned and funded by FEMA. A lead division and district are responsible for mission execution but are assisted initially by a Debris Planning and Response Team (PRT) and one or more Subject Matter Experts (SME). At an appropriate time, mission execution and closeout is transitioned to the lead division/district office. Contractor support from the private sector, USACE assets only, or some combination of the two may be employed to execute, depending on the nature of the mission assigned by FEMA. A summary of key debris mission execution elements is provided in the following discussion.



A. FEMA Mission Assignment

FEMA and USACE have reached agreement on pre-scripted mission assignments for both pre- and post-declaration conditions. Pre-declaration mission assignment for debris is classified as Federal Operations Support and generally provides for activation and pre-positioning of the PRT Management Cell and, as required, a contractor representative to do advance planning for mission execution. Post-declaration mission assignment may include debris oversight, or direct Federal assistance for debris removal, reduction, and disposal. Debris oversight may include the provision of technical assistance in the form of staffing of a debris hotline to provide assistance to State and Local governments, estimation of debris quantities, assistance in instituting a quality assurance program to monitor contractor performance, or other services as required by FEMA. When direct Federal assistance is assigned to USACE, a Debris PRT is engaged, and as is often the situation – a pre-awarded debris contract referred to as ACI, Advance Contract Initiative (See subparagraph c., following) is employed.

B. Debris Planning and Response Team

There are currently seven Debris PRTs located in the following district offices: Baltimore, Ft. Worth, Louisville, Mobile, New Orleans, Portland, and Sacramento. Each team is comprised of a Management Element and Support Element with the Management Element deploying first as an advance party, and the Support Element following as the mission matures. The initial responsibility of the Management Element is to effect coordination with FEMA and Local and State governments, scope the mission requirements, and prepare a mission Management Plan and Execution Plan. The Management Plan delineates agency or governmental entity responsibilities for each aspect of the debris/demolition process, and the Execution Plan provides details on how USACE will execute its piece of the mission as defined by the Management Plan to include definition of End State. Debris SMEs are listed in the USACE All Hazards Contingency Plan published monthly by CECW-OE.



C. Advance Contract Initiative

ACI debris contracts have been awarded for six different regions with the added provision that Region 2 is divided into four separate sub-regions, and Region 6 is divided into two separate sub-regions for a total of 10 separate contracts. Contracts are awarded for a base year beginning December 2002 with options for annual renewal up to four additional years. The contracts consist of a Requirements portion (\$100K) and a ID/IQ portion (\$29.9M). A contract awarded for a particular region may be utilized anywhere within that region, even if not awarded for a particular state within that region, but may not be employed outside or across awarded regions. ACI contract documents have been provided in CD format to all Debris PRTs and a standard solicitation for utilization where no ACI is awarded has been provided to all appropriate CT offices.

D. Contract Types

There are three contract types generally employed in debris operations. They are Equipment Rental, Unit Price – either ton or cubic yard, and Lump Sum. FEMA does not favor Equipment Rental contracts as they are generally costly, and require intensive QA. These contracts, however, provide a quick method of initiating debris clearance or removal operations when the mission scope is not well defined. Unit Price contracts are more common, while Lump Sum contracts are effectively utilized when requirements are well-defined.



Eligibility

According to FEMA Publication 325, Public Assistance, Debris Management Guide, dated April 1999:

Debris that may be eligible for clearance, removal and disposal includes trees, sand and gravel, building wreckage, vehicles and personal property. The debris must be a direct result of the declared event, must occur within the designated disaster area and must be the responsibility of the applicant at the time of the disaster. Debris removal may be eligible when it:

- a. Eliminates immediate threats to lives, public health and safety.*
- b. Eliminates immediate threats of significant damage to improved public or private property.*
- c. Ensures economic recovery of the affected areas to the benefit of the community at large.*

FEMA Pub. 325 describes in considerable detail debris eligibility in regard to several factors including private property, roads and highways, natural streams, and others.

Special Considerations

A. Environmental issues are significant for debris management operations. Issues associated with air curtain incineration for debris reduction, household hazardous wastes (HHW), and hazardous and toxic wastes (HTW) must be addressed. Coordination with State and Local governments and ESF #10, EPA, is essential for success.



B. Weapons of Mass Destruction (WMD) employment brings a host of new issues into consideration for debris management. Planning for debris management in a WMD environment is a work-in-progress. Issues to be addressed include but are not limited to the following:

- Preservation of crime evidence and maintenance of a chain of custody
- Safety of response/recovery personnel
- Site security
- Dealing with human remains and family issues
- Specialized equipment needs, e.g. hand tools, flat bed trailers, sifters, shakers, etc.

Other Federal Agency Authority

The Natural Resources Conservation Service (NRCS) has debris removal authority for certain conditions, including debris in stream channels, under the authority of the Emergency Watershed Protection Program (EWP). Coordination with NRCS should be a part of any Debris Management Plan.

Lead Division

The Mississippi Valley Division is the lead division for debris management.

