DEPARTMENT OF THE ARMY
HUNTSVILLE CENTER, CORPS OF ENGINEERS
P.O. BOX 1600
HUNTSVILLE, ALABAMA 35807-4301

REPLY TO
ATTENTION OF:

08 JAN 2003

CEHNC-OE-CX

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Procedures for Assessing Munitions with Unknown Fillers, Ordnance and Explosives Center of Expertise (OE-CX) Interim Guidance Document 02-03

1. Purpose: To specify how specific munition items that are found during munitions responses and whose fillers are unknown will be processed on United States Army Corps of Engineers (USACE) project sites.

2. Applicability: This guidance is applicable to (USACE) Commands having responsibility for performing munition response activities.

3. References:

a. Engineer Pamphlet 75-1-2, Unexploded Ordnance (UXO) Support During Hazardous, Toxic, and Radioactive Waste (HTRW) and Construction Activities, 20 November 2000.

b. Engineer Pamphlet 75-1-3, Recovered Chemical Warfare Materiel (RCWM) Response, 4 January 2002.

c. Engineer Pamphlet 385-1-95a, Basic Safety Concepts and Considerations for Ordnance and Explosives Operations, 29 June 2001.

d. Engineer Pamphlet 1110-1-18, Ordnance and Explosives Response, 24 April 2000.

4. Background:

a. For explosives and chemical safety reasons, the complete identification of recovered munitions is required before destruction or disposal. This is particularly true with regard to munitions that can be filled with chemical warfare material (CWM) and could present a downwind chemical vapor hazard.

b. Many munitions have sufficient physical properties (e.g., design characteristics, marking) that allow USACE OE Safety Specialists and UXO personnel to positively identify the munition and the filler. However, the design or physical condition of some munitions may not allow their complete identification by visual inspection.

c. Munitions whose external design does not always allow positive identification of their filler include: 4.2-inch mortars (M1, M2, and the M2A1 models) and Livens projectiles (MK II (M1) and MKIIAI).

(1) Because the 4-inch Stokes mortar's physical dimensions (see enclosure) clearly indicate whether or not it contains a suspect chemical filler, it is not included in this list.

(2) Because this list is not all-inclusive, the OE-CX should be contacted about other munitions when questions arise.

d. The identification of the filler of some munitions is very difficult, if not impossible through visual inspection, when the munition has been used or otherwise impacted (e.g., disposed of after ineffective treatment) or exposed to the environment (e.g., buried as a means of disposal) for years.

e. Only Explosive Ordnance Disposal (EOD) or Technical Escort Unit (TEU) can determine the most likely filler of these munitions.

5. Procedures: When performing munitions responses on USACE project sites and the filler of a munition listed above cannot be determined, the following procedures will be followed:

a. The munition will be assessed following the procedures below:

(1) On conventional OE project sites, contact the POC identified in the approved Work Plan for performing the assessment or response (i.e., military EOD or TEU). Typically,

the Work Plan will address how to "safe the hole/item" to mitigate possible downwind hazards pending arrival of the appropriate response personnel.

(2) On RCWM project sites, TEU will normally be present on the site and will perform the assessment as part of their daily routine and per their procedures.

(3) If the assessment has ruled out RCWM as a filler, the item will be returned to the USACE for disposal operations as specified in the approved Work Plan on conventional OE project sites.

(4) If the assessment indicates RCWM as a filler:

(a) On a RCWM project site, the item will be packaged and secured per the approved Chemical Safety Submission (CSS), usually on site.

(b) On a conventional OE project site, TEU will assume control of the item. (Note: TEU may require some logistical support during the assessment process.)

b. The use of these procedures is a precautionary measure to confirm that the munition can be safely destroyed; to help ensure that an uncontrolled, unintentional release of CWM does not occur; and to validate site-specific information.

6. It is important that terminology used not cause unnecessary public or regulatory concern. Generally, these munitions should be referred to as munitions with unknown fillers, rather than suspect chemical munitions. Pending revision of existing policies and procedures identified in paragraph 3, the terminology "munitions with unknown fillers" is synonymous with "suspect chemical" as it relates to response actions.

7. Effective dates: This interim guidance is effective immediately.

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8. The Ordnance and Explosives Center of Expertise's point of contact is Mr. Hank Hubbard at 256-895-1589.

FOR THE DIRECTOR OF ORDNANCE
AND EXPLOSIVES DIRECTORATE:

Carol A. Youkey

CAROL A. YOUKEY, P.E.
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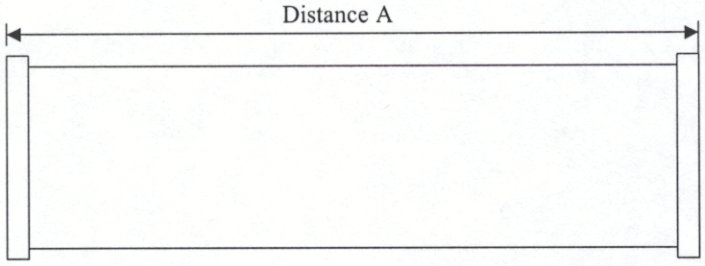
Encl
4 Stokes Mortar
Measurements

4 inch Stokes Mortars
Measurements

Distance A is measured from outside of the windage ring to outside of the windage ring without regard to fuze mounting location or tail boom.



Distance A measurements for the following type of mortar fillers are:

Chemical Gas – MK I = 16 inches, MK III = 16 ¾ inches
Smoke filled – MK I = 15 inches
Incendiary filled – MK I = 14 inches

Enclosure 1