



US Army Corps
of Engineers®

ENGINEERING AND CONSTRUCTION BULLETIN

No. 2012-12

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Subject: Safety Considerations for Munitions and Explosives of Concern Encountered During Construction

Applicability: Directive

1. The purpose of this Engineering and Construction Bulletin (ECB) is to provide background, references, information on actions to be taken, location of additional technical resources, and notification requirements for USACE personnel encountering Munitions and Explosives of Concern (MEC) or other Material Potentially Presenting an Explosive Hazard (MPPEH) during construction and other activities.

2. References:

a. EM 385-1-1, CESO-ZA, 15 September 2008, subject: Safety and Health Requirements Manual, [Section 33](#).

b. EM 385-1-97, CESO-ZA, 15 September 2008, subject: Explosives Safety and Health Requirements Manual, [Chapter III](#).

3. Background. During the past few years, USACE has experienced several encounters of explosive safety hazards on our active construction sites. These hazards can be MEC or other MPPEH and can be encountered at anytime during work on DoD installations or other sites not under DoD control, even if previous site surveys or characterization efforts did not identify the presence of these hazards, or after munitions response activities have been completed. Current technology does not always detect all hazardous items.

4. Actions. If MEC or MPPEH is encountered, USACE and contractor personnel must follow the **3Rs**: Recognize, Retreat, and Report.

a. **Recognize.** Recognize the hazard and do not touch, disturb, or move the item as it could detonate with movement or ground vibrations.

b. **Retreat.** Stop work, mark the general location, and have everyone retreat from the area.

c. **Report.** Report the situation immediately to the appropriate local emergency response authority (i.e., call 911 or the equivalent on DoD installations), providing as much information as possible about the items encountered. USACE personnel should also notify their project chain of command, District Safety Office, and installation staff as appropriate.

Once the immediate hazard has been addressed, an assessment must be performed to determine the probability of encountering additional MEC or MPPEH at the site. Based on the results of this assessment, it may become necessary to provide additional explosives and/or chemical agent safety support until work is completed.

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5. USACE personnel encountering MEC or MPPEH during construction or other activities are required to comply with the instructions provided in this ECB, including compliance with the 3Rs and contact the Huntsville Engineering and Support Center's Environmental and Munitions Center of Expertise (EM CX) point of contact listed in paragraph 7 below. This notification is required in addition to notifications made in accordance with the 3Rs. The EM CX can assist with determining if an explosives safety probability assessment is required and refer the project delivery team to a Military Munitions Design Centers (MMDCs) or Military Munitions Remedial Action Districts (MM RADs) for an Ordnance and Explosives Safety Specialist (OESS) and additional support, as necessary.

6. Additional information on the 3Rs is available on the U.S. Army UXO Safety Education website entitled "[Construction Industry – 3R's Explosive Safety Guide](#)" which can be used as part of safety tailgate meetings. [Posters](#) are also available to provide notification to site workers at sites where MEC and MPPEH could be encountered. All new construction projects with a potential of encountering MEC or MPPEH need to include initial training on the 3Rs to all on-site contractor and government personnel prior to start of site work.

7. HQUSACE point of contact for this ECB is Blanca Roberts, CESO, 202-761-8668, email: blanca.o.roberts@usace.army.mil. Technical issues are to be directed to Walt Zange or David Becker, EM CX, 256-895-1586/1513, email: walter.e.zange@usace.army.mil and david.becker@usace.army.mil.

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