

N00174.AR.000802
NSWC INDIAN HEAD
5090.3a

LETTER OF TRANSMITTAL AND FINAL SAFETY APPROVAL FOR INVESTIGATION AND
REMOVAL OF SURFACE MUNITIONS AND EXPLOSIVES OF CONCERN AND
ENVIRONMENTAL RESTORATION AT SITE 17 NSWC INDIAN HEAD MD
06/06/2011
NAVAL ORDNANCE SAFETY AND SECURITY ACTIVITY



DEPARTMENT OF THE NAVY
NAVAL ORDNANCE SAFETY AND SECURITY ACTIVITY
FARRAGUT HALL
3817 STRAUSS AVENUE, SUITE 108
INDIAN HEAD, MD 20640-5151

8020
Ser N54-PA/3320
06 Jun 11

From: Commanding Officer, Naval Ordnance Safety and Security Activity
To: Commanding Officer, Naval Support Activity, South Potomac (PRSI4/NC)
Subj: EXPLOSIVES SAFETY SUBMISSION, FINAL DATED MARCH 2011, FOR SITE 17, CONSTRUCTION SUPPORT AND INTERIM REMOVAL ACTION, AT NAVAL SUPPORT FACILITY, INDIAN HEAD, MARYLAND [N00174/ESS/CC-045F]
Ref: (a) *Explosives Safety Submission Site 17, Construction Support and Interim Removal Action, Final* dtd Mar 11
(b) NOSSA ltr 8020 Ser N54-PA/3225 of 30 Mar 11 [CC-045]
Encl: (1) DDESB memo DDESB-PE of 12 May 11 [CC-045]

1. Enclosure (1), which provides final safety approval for the investigation and removal of surface munitions and explosives of concern (MEC) and to conduct environmental restoration at Site 17, at Naval Support Facility, Indian Head (NAVSUPPEAC Indian Head), Indian Head, Maryland, is forwarded for continuing action. Final safety approval is based upon adherence to the conditions provided in references (a) and (b) and enclosure (1).

2. Please note that reference (b) of enclosure (1) includes the changes made to reference (a), paragraphs 6.1.2 and 6.1.5, as submitted by reference (b).

3. If changes occur during or after completion of this effort, which could increase explosive hazards to site workers or the public, an amendment to this Explosives Safety Submission (ESS) must be submitted through the Naval Ordnance Safety and Security Activity (NOSSA), to the Department of Defense Explosives Safety Board (DDESB), for review and approval.

4. The NOSSA point-of-contact for questions related to the explosives safety aspects of this project is Mr. Pat Altman, N548, at DSN: 354-1907; Commercial: (301) 744-1907; or E-mail: daniel.altman@navy.mil. The NOSSA point-of-contact for questions related to the environmental aspects of this project is Ms.

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SITE 17, CONSTRUCTION SUPPORT AND INTERIM REMOVAL ACTION,
AT NAVAL SUPPORT FACILITY, INDIAN HEAD, MARYLAND
[N00174/ESS/CC-045F]

Sherry McCahill, N535, at DSN: 354-5628; Commercial: (301)
744-5628; or E-mail: sherry.mccahill@navy.mil.


RICHARD T. ADAMS
By direction

Copy to (w/encl):
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**DEPARTMENT OF DEFENSE EXPLOSIVES SAFETY BOARD
2461 EISENHOWER AVENUE
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MAY 12 2011

DDESB-PE

**MEMORANDUM FOR COMMANDING OFFICER, NAVAL ORDNANCE SAFETY AND
SECURITY ACTIVITY (ATTENTION: CODE N54)**

**SUBJECT: DDESB Approval of Explosives Safety Submission for Sites 11 and 17 Construction
Support and Interim Removal Action, Naval Support Activity, Indian Head, MD
[N00174/ESS/CC-045]**

- References:
- (a) NOSSA ltr 8020 Ser N54-PA/3225 of 30 March 2011, First Endorsement on NAVSUPACT South Potomac ltr 5090 Ser PRSI42NC/13 of 21 March 2011, Subject: Explosives Safety Submission, Final Dated March 2011, for Site 17, Construction Support and Interim Removal Action, at Naval Support Activity, Indian Head, Maryland [N00174/ESS/CC-045]
 - (b) Email from Ms. Sherry McCahill (NOSSA), to Mr. Tony Dunay (DDESB), dated 6 May 2011, Subject: FW: Indian Head Site 17 ESS
 - (c) DoDM 6055.09-M, DoD Ammunition and Explosives Safety Standards, 29 February 2008, Administratively Reissued 4 August 2010
 - (d) DDESB TP-16, Methodologies for Calculating Primary Fragment Characteristics, Revision 3, 1 April 2009

The Department of Defense Explosives Safety Board (DDESB) Staff has reviewed the subject explosives safety submission (ESS) forwarded by reference (a), as clarified by reference (b), against the requirements of reference (c). Based on the information provided, approval is granted for removal and treatment of material potentially presenting an explosive hazard (MPPEH) and munitions and explosives of concern (MEC) at Naval Support Activity, Indian Head, MD. This approval is based on the following:

- a. The efforts addressed in this ESS involve manual unintentional detonation operations (to include mechanized unintentional detonation operations employing anomaly avoidance) and intentional detonations supporting munitions response actions at Sites 11 and 17.
- b. The property will remain under Navy control.
- c. The primary munition with the greatest fragmentation distance (MGFD) is the M8 JATO Rocket Motor; the minimum separation distance (MSD) for teams for manual unintentional detonation operations is 165 feet (ft) based on K40 of the MGFD; the MSD for nonessential personnel from manual unintentional detonation operations is 472 ft based on the hazardous fragment distance (HFD) of the MGFD; and the MSD for all personnel from

ENCL(1)

intentional detonations is 2,123 ft based on the maximum fragment distance (MFD) of the MGFDF.

d. The contingency MGFDF is a 300 pound non-robust munition; the MSD for teams for manual unintentional detonation operations is 268 ft based on K40 of the contingency MGFDF; the MSD for nonessential personnel from manual unintentional detonation operations is 800 ft based on the HFD of the contingency MGFDF; and the MSD for all personnel from intentional detonations is 2,678 ft based on the MFD of the contingency MGFDF.

e. The use of earth tamping is authorized as an engineering control for intentional detonations involving the MEC identified in reference (a) provided the Navy ensures usage per reference (d). The M64A1 500 pound Bomb serves as a conservative analogy to determine earth tamping for the contingency MGFDF.

f. Explosives, per reference (a), will be removed from Building 1574 prior to the intentional detonation of the contingency MGFDF.

g. Three storage containers for MPPEH holding/inspection area are each approved for a maximum credible event (MCE) of 1 pound net explosive weight of hazard division 1.1. The MSD for nonessential personnel is 291 ft based on the HFD of the MCE. A K11 intermagazine distance of 11 ft will be provided between the containers.

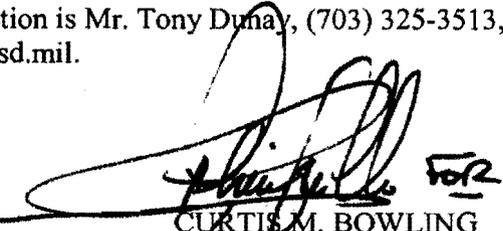
h. Demolition materials, per reference (a), will be delivered as needed.

i. Prior to initiation and through completion of on-site explosives operations, all nonessential personnel will be evacuated and prevented from entering any area/facility encumbered by the MSD required for the operation being conducted, or explosives operations will be suspended if nonessential personnel enter the MSD.

j. MPPEH will be inspected and classified as material documented as safe prior to release to the public.

If changes occur during or after completion of this effort that could increase explosive hazards to site workers or the public due to the presence of military munitions at the site, an amendment to this ESS must be submitted to DDESB for review and approval.

The point of contact for this action is Mr. Tony Dunay, (703) 325-3513, DSN 221-3513, E-mail address: tony.dunay@ddesb.osd.mil.



CURTIS M. BOWLING
Chairman
DDESB