DEPARTMENT OF THE NAVY
ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
1510 GILBERT ST
NORFOLK, VA 23511-2699

1/27/03-02290
TELEPHONE NO

(757) 322-4815
IN REPLY REFER TO

5090
EV23CP:EVS
27 JAN 2003

From: Commander, Atlantic Division, Naval Facilities Engineering Command
To: Commanding Officer, Naval Ordnance Safety and Security Activity

Subj: NOSSA SUPPORT FOR PROPOSED ORDNANCE/EXPLOSIVES INVESTIGATION AT SWMU 4 FORMER NASD, NAVAL STATION ROOSEVELT ROADS, PUERTO RICO

Re: (a) CH2M Hill Report "Final Ordnance and Explosives Site Specific Work Plan SWMU 4 Former U.S. Naval Support Detachment Vieques Island, Puerto Rico" October 2001
(b) Mtg btwn NAVORDSAFSECACT (N59) Mr. Rick Urbanski, LANTNAVFACENGCOM (EV23CP) Mr. Chris Penny, and NAVFACENGCOM (FAC 40) of 16 Oct 02

Encl: (1) Addendum to the Ordnance/Explosives Site Specific Work Plan for SWMU 04, Former NASD, Vieques Island, Puerto Rico

1. This letter serves as an official request for Naval Ordnance Safety and Security Activity (NOSSA) assistance. This office requests the expertise knowledge of your staff to review the revised Addendum to the SWMU 4 Work Plan, enclosure (1), and provide comments and/or final concurrence to this office prior to the commencement of field activities beginning on February 3rd, 2003. Mr. Rick Urbanski of your office and the LANTDIV Project Manager, Mr. Christopher Penny, have been working collectively on addressing NOSSA comments made previously to this submission. Please be advised that the proposed work in this Addendum is an extension of work previously performed by LANTDIV and concurred with by NOSSA in reference (a).

2. The results of the previous phases of the ordnance/explosives investigation at SWMU 04 and the scope proposed in enclosure (1) were discussed during reference (b).

3. The Phase III OE Investigation at SWMU 4 at the former NASD property will be initiated on or about 3 February 2003 as indicated in enclosure (1).

Subj: NOSSA SUPPORT 'S
INVESTIGATION TATION
ROOSEVELT ROAC

Chris,
Address
PLEASE

4. Please direct an: ter to the
Vieques Remedial Pro. Penny at (757)
322-4815.

3

copy to:
DDESB-KO
ASN (I&E)
CNO (N411)
CINCLANTFLT (N41)
COMNAVSEASYSCOM (SEA 00, 05, 53)
COMNAVAIRLANT (N8, N85)
COMNAVSO
COMNAVREG SE (N46E)
NAVSTA Roosevelt Roads (NOO, N02C-A53)
NAVORDSAFSECACT ESSOLANT (N712A)
COMNAVFACENGCOM (00, 60, 9241, EN, ENC, BRAC)

Addendum to the Ordnance/Explosives Site Specific Work Plan for SWMU 04, Former NASD, Vieques Island, Puerto Rico

Addendum to Section 2.4 Intrusive Investigation

2.4.2.2 Recovered Ordnance Related Scrap (ORS), Inert Certification, Demilitarization, Transport and Processing into the DRMO at NSRR

The process for recycling ORS consists of the following basic steps:

:

- Collection of ORS through the use of a systematic approach that is designed to ensure that materials undergo a continual evaluation/inspection process from the time discovered until finally removed from the site.
- Segregation of ORS as either Group 1a, Group 1b, or Group 2 ORS residue.
- Assignment of Demilitarization Codes for determination of the type of demilitarization processing required.
- Visual examination and certification by qualified personnel that the item has no visible evidence of explosives or dangerous materials and can be demilitarized by use of appropriate procedures.
- Demilitarization to remove the military capability of the item and designation of the ORS as either 3X or 5X.
- Certification that demilitarization has been accomplished in accordance with DoD 4160.21-M-1.
- Transfer of ownership to a Defense Reutilization and Marketing Office (DRMO) for sale.
- Secure storage of the items throughout the process once they have been demilitarized and/or certified as having no visible hazard.

2.4.2.2.1. Collection Procedures. Collection procedures begin at the time the metal item is discovered by the UXO Technician. At this point the UXO Technician makes a preliminary determination as to the classification of the item. If the item is identified as non-ordnance related scrap it is placed in a temporary non-OE scrap pile located within the operating area. If the item is identified as ordnance related scrap it is placed in a temporary ordnance related scrap accumulation point within the operating area.

Upon completion of operations within a grid, the UXO Supervisor for the team that cleared the grid will inspect each of the scrap piles and direct movement of the scrap into the appropriate site collection container. To preclude migration of the material from one pile to the other during movement to the scrap containers, each pile will be moved as **a** distinct and separate vehicle load.

2.4.2.2.2 Segregation of Scrap. The UXO Team will collect the scrap deposited at accumulation points and perform an inspection to confirm that segregation of the OE related scrap had been done correctly and that no live UXO has been placed in the OE related scrap accumulation points. The OE related scrap will be inspected and divided into two groups: 1) OE related scrap requiring further demilitarization; and **2)** OE related scrap that does not require further demilitarization. Figure 1 is a Logic Diagram for the Collection and Disposition of OE Related Scrap.

2.4.2.2.3 Assignment of Demilitarization Codes. The proper procedure requires that OE scrap be assigned a demilitarization code and that code determines the type of processing required. For almost all OE scrap the assigned code should be CG. Assignment of this code is the responsibility of the generating activity (for range maintenance contracts such as Fort Irwin it is the National Training Command; for BRAC removal actions it is the BRAC office; and for FUDS it is the Corp of Engineers). CH2M HILL as the contractor and expert in OE should assist the generating activity in determining the demilitarization code to be assigned and the method and degree of demilitarization required.

Definition of Demilitarization Code G:

"G" MLI -- Demilitarization required - AEDA, Demilitarization, and if required, declassification and/or removal of sensitive markings or information, will be accomplished prior to physical transfer to a DRMO. This code will be used for all ADEA items, including those which also require declassification and/or removal of sensitive marking or information. [When in doubt assign Demilitarization Code "G" for all recovered OE related scrap.]

2.4.2.2.4 Visual examination and inert certification. Ordnance related scrap generated from ordnance characterization site SWMU 04 at NASD, Vieques Island, Puerto Rico will be visually inspected and certified inert prior to demilitarization and transfer for recycling. The inspection and certification will be accomplished by a minimum of two technically qualified personnel. These qualified personnel include one Senior Unexploded Ordnance (UXO) Supervisor or UXO Safety Officer and one active duty Explosive Ordnance Disposal (EOD) technician from the NAVSTA Roosevelt Roads EOD Detachment to ensure no energetic materials remain on or in the scrap metallic debris material. The names of those individuals authorized to perform inspections and certifications of ordnance related scrap will be submitted to the DRMO that will be receiving the material. The Officer-In-Charge (OIC) NAVSTA Roosevelt Roads EOD Detachment will sign the letters for active duty military and the senior OE Manager, of CH2MHILL, will sign for contractor personnel.

Recovered ORS will be certified free of energetic material by the two qualified UXO/EOD personnel with the following certification statement on the 1348-1A, Issue Release Document and on the container used for storage of the material.

"This certifies and verifies that the AEDA residue, Range Residue and/or Explosive Contaminated property listed has been 100 percent properly inspected and to the best of our knowledge and belief, are inert and/or free of explosives or related materials."

The certification and verification signatures must be directly above the typed or clearly stamped or legibly printed full name, rank/rate, complete organization name and address, and phone number (commercial and DSN) of the personnel that certified and verified the inspection.

ORS that cannot be certified free of energetic material will be subjected to approved demilitarization procedures, with the preferred method being detonation to remove any remaining explosives residue. Upon completion of the demilitarization procedure the ORS will be re-evaluated by the appropriate qualified personnel.

Once the ORS has been certified free of energetic material it will be containerized in 55-gallon drums or wooden boxes. Each container will be labeled as to the contents and with the inert certification statement. The containers will be secured with traceable seals.

2.2.2. Demilitarization of ORS Items

Ordnance related scrap (ORS) recovered from SWMU 04, NASD, Vieques Island, Puerto Rico will be visually inspected and certified safe for demilitarization. Demilitarization requirements shall be in accordance with DoD 4160.21-M-1. The demilitarization process includes a series of tasks designed to destroy the military capacity of the item and to ensure that no energetic materials or hazardous materials remain. Demilitarization and decontamination of OE scrap is based on a system that assigns decontamination levels commensurate with the post treatment use. For metal that is being free released to the public as recyclable, 5X is the acceptable degree of decontamination.

OE scrap certified as safe for turn-in to DRMO for recycling based on visual inspection and certification by UXO/EOD technicians achieves a 3X level of decontamination. This is not sufficient for resale to the public unless the recycler has been evaluated by DRMO and meets the requirements of a qualified recycling program (QRP) for handling 3X ORS. Three X's indicate the equipment or facilities (in this case OE scrap) have been examined and decontaminated by approved procedures and no contamination can be detected by appropriate instrumentation, test solutions, or by visual inspections on easily accessible surfaces or in concealed housings, etc. and are considered safe for the intended use. Items decontaminated to this degree can not be furnished to qualified DOD or Industry users or subjected directly to open flame cutting, welding, high temperature heating devices), or operations which generate extreme heat, such as drilling and machining.

The only acceptable way to get to 5X decontamination is by partial or complete removal, neutralization, or destruction of explosives/explosive residue by flashing, steaming, neutralization, or other approved desensitizing methods such as shredding.

"Explosive demilitarization is the preferred method of demilitarization."

The tasks include the following:

- Evaluation of each item by qualified UXO personnel (SUXOS and UXO Safety Officer) to determine demilitarization procedure.
- Demilitarization of all hard cased munitions items through the use of planned demolition charges to vent, cut and disfigure, to meet demilitarization requirements.
- Cutting ORS with wet metal-cutting power saws will only be conducted on empty aluminum, brass and thin cased metal items that are visibly clear, such as expended cartridge cases and flare tubes. Dry cutting will not be used.
- A risk assessment shall be prepared for each demilitarization operation that is not done by explosives means.

No ORS will be demilitarized by cutting with a torch.

All suspect items that are in questionable condition will be demilitarized with explosives.

> **NOTE:** For inert loaded items (concrete, sand, plaster) a potential explosive safety hazard exists when the internal filler is not exposed or unconfined during burning, melting, or cutting. Heat generated from a demilitarization process can cause the filler, moisture and air to expand and burst sealed casings causing a mechanical explosion. For this reason, DRMOs will not accept inert loaded items unless the internal filler is exposed and unconfined. The internal filler may be exposed by removal of the fuze well from the cavity, removal of base plates, or by remote puncturing/drilling holes in the ordnance casing.

An iron works vendor in Vieques has been identified to support demilitarization efforts of inert certified ORS items at SWMU 04. This vendor has the requisite equipment to perform demilitarization tasks and has previously been used by the project team for this task at SWMU 04 during Phase II characterization efforts. A government or contractor representative will be present during demilitarization activities to eliminate the potential for working on items that may still contain energetic material. The vendor will receive training on the potential hazards associated with the demilitarization of ORS. Demilitarized items will be accumulated according to like items/metals. The containers used for storage of demilitarized items will be labeled as to the contents and with the inert certification statement.

A demilitarization statement will be prepared for each container/lot of demilitarized items. The statement shall be to the effect:

"I certify that (identify items) were demilitarized in accordance with (cite specific instructions (appendix and item number) that were complied with in the DoD 4160.21-M-1 and other applicable regulations)."On behalf of the Navy, CH2MHILL will witness the demilitarization operation and will inspect the demilitarized items.

2.4.2.2.3. Transfer of Inert Certified and Demilitarized ORS to DRMO. Planning efforts will be coordinated with the DRMO and the Environmental Programs office at NSRR prior to the demilitarization operations in an effort to minimize potential delays in the ORS processing after ORS certification and demilitarization is completed. ORS demilitarization guidance documents will be available on-site to assist the field teams in meeting the DRMO acceptance criteria for these type items. Demilitarization of ORS will not be complete until the SUXOS and UXOSO both agree that the ORS has been adequately modified to meet the DRMO criteria.

ORS that has been certified inert and demilitarized shall be transferred to the DRMO at NSRR for sale as recyclable metal. DD Form 1348-1A, Item Release Document, shall be used to affect the transfer. The document shall be annotated with the inert certification statement.

Addendum to Section 3, Explosives Management Plan

3.1 Acquisition

The site management team will make a slight modification in the explosives management plan during Phase III efforts to better reflect the day to day needs of commercial explosives at the site. The proposed change involves the shipment of explosives to Vieques and the need to minimize risks associated with the temporary storage of these items without 24-hour on-site security.

During Phase I & II efforts, OE demolition was planned and executed only when sufficient OE had been accumulated to warrant demolition operations. Commercial explosives were transported to Vieques under appropriate manifest prior to the start-up of both Phase I & II work and stored in the ATF Type 11 portable explosives magazine that is currently situated on the concrete apron to earth covered magazine (ECM) 239. Although this arrangement worked well for the two phases of investigation completed to date, project risks associated with storage of commercial explosives can be minimized by bringing in explosives only on the actual days of planned demolition. A total of 5 demolition days were executed during the approximately 16 weeks of field work to date at the site indicating that the storage of commercial explosives could have been reduced to these 5 days only.

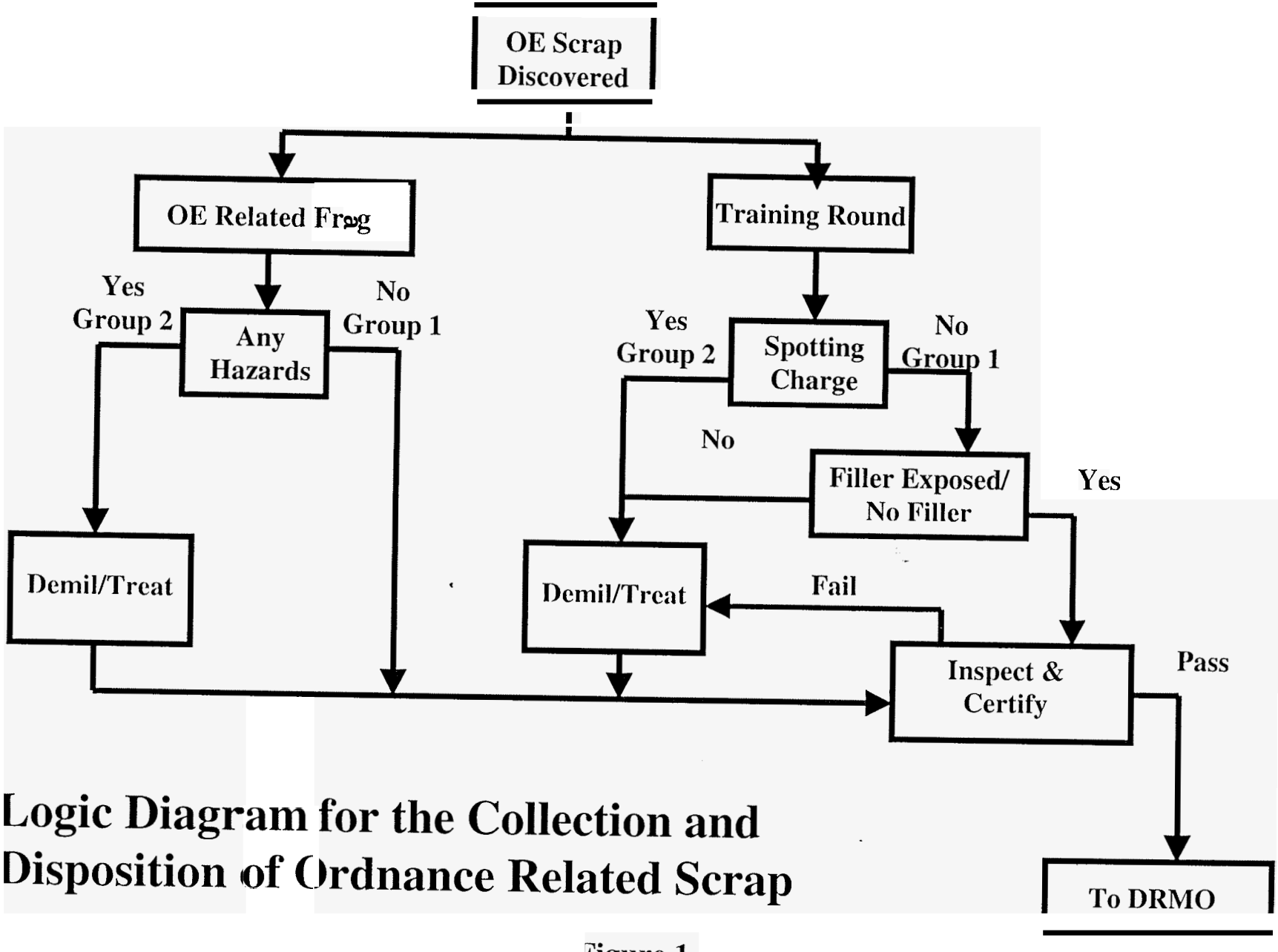
OE/MEC items removed during investigation operations will be stored with other like items in the portable explosives magazine until such time that a planned demolition of OE/MEC items is scheduled.

3.2 Storage

The portable magazine will again be used for the temporary storage of commercial explosives. Since the use of explosives for Phase III efforts has changed as described above due to the day to day needs of explosives on-site, storage of these items becomes less of a risk concern as explosives are expected to only be stored for a maximum of one day in the portable explosives magazine prior to use during demolition operations.

Security checks on the portable explosives magazine will be conducted on several occasions daily by both the site management team and the SUXOS. Inventories will be conducted as explosives are shipped in and after demolition operations to complete the reconciliation schedule.

Explosives shipped to the island for demolition operations, along with OE/MEC items recovered and accumulated from the investigation process, will be detonated prior to the field teams leaving the site for periods longer than the weekend. Since Phase III efforts are not scheduled to commence until February 3,2003, it is not expected that field teams will be away from the study area and ECM No. 239 for periods longer than the weekend.



Logic Diagram for the Collection and Disposition of Ordnance Related Scrap

Figure 1