

Action Memorandum for an Emergency Response Munitions Removal Action at the Atlantic Fleet Weapons Training Area, Munitions Response Site UXO 12, Vieques, Puerto Rico

FROM: NAVFAC Atlantic

TO: United States Environmental Protection Agency

COPIES: P.R. Environmental Quality Board

U.S. Fish & Wildlife Service

DATE: April 17, 2013

I. Purpose

This memorandum documents the decision to initiate emergency response removal actions described herein for Munitions Response Site UXO 12—part of the former Eastern Maneuver Area (EMA) at the former Vieques Naval Training Range (VNTR) located on the island of Vieques, Puerto Rico—pursuant to the Navy's authority under CERCLA Section 104. The former VNTR is part of the National Priorities List (NPL) site Atlantic Fleet Weapons Training Area–Vieques.

II. Site Information

A. Site Description

1. **Site Name:** Atlantic Fleet Weapons Training Area–Vieques, Munitions Response Site UXO 12 (Former EMA Interior)
2. **Superfund Site ID (SSID):** FFA CERCLA 02-2007-2001
3. **NRC Case Number:**
4. **CERCLIS Number:** PRN000204694
5. **Site Location:** Vieques, Puerto Rico
6. **Lat/Long:** 18.13°N, 65.40°W
7. **Potentially Responsible Party (PRP):** United States Navy
8. **NPL Status:** Final NPL
9. **Removal Start Date:** April 8, 2013

B. Site Background

1. Removal Site Evaluation

During the morning of March 26, 2013, when the munitions removal contractor approached the adjacent site UXO 13 to initiate munitions removal activities, a brush fire was identified within the UXO 12 site. Due to the potential explosive hazards associated with munitions potentially

present at UXO 12, the contractors evacuated the site with the fire continuing to burn.

2. Physical location and Site characteristics

UXO 12 is part of the former Vieques Navy Training Range (VNTR) transferred to the Department of Interior and now managed by the U.S. Fish & Wildlife Service as the Vieques Wildlife Refuge. UXO 12 is approximately 3½ miles east of the boundary between the former VNTR and the Municipality of Vieques (population of approximately 9,000 people).

3. Release or threatened release into the environment of a hazardous substance pollutant or contaminant.

UXO 12 is located within the former EMA which was established in 1947 to provide areas and ranges for the training of Marine amphibious units and battalion landing teams in exercises that included amphibious landings, small-arms fire, artillery and tank fire, shore fire control, and combat engineering tasks. Large-scale artillery exercises occurred within the site using live marine artillery fired from 33 gun positions located throughout UXO 12 toward targets located within the bombing ranges of the surface impact area (SIA) and live impact area (LIA). The results of a previous site inspection of UXO 12 identified more than 2,100 munitions-related items. The items identified were predominantly 81mm mortars, 105mm projectiles, 155mm projectiles, and 4.2 inch illumination projectiles. The identification of five 5-inch rockets and one 500-pound bomb indicate that the site may also have been used for, or otherwise received, air-to-ground bombing.

III. Threats to Public Health Welfare or the Environment

A. Nature of Actual or Threatened Release of Hazardous Substances, Pollutants or Contaminants.

Although UXO 12 is located within a restricted area where public access is prohibited, trespassers have been frequently observed throughout the site. Hikers have been seen on the trails, horseback riders have been observed along the dirt roads that extend throughout the site, and recreational boaters have been seen anchoring along the nearby beach areas. The munitions that have been identified throughout UXO 12 pose an explosive safety threat to the trespassers that enter the site. The elimination of the vegetation by the brush fire further increases the explosive safety threat by increasing accessibility to the site and the visibility of munitions at the surface.

B. Check applicable factors (from 40 CFR 300.415) which were considered in determining the appropriateness of a removal action:

- × Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants [300.4 I 5(b) (2) (i)].
Actual or potential contamination of drinking water supplies or sensitive ecosystems [300.4 I 5(b) (2) (ii)].
Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that pose a threat of release [300.4 15(b) (2) (iii)].
High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate [300.4 I 5(b) (2) (iv)].
Weather conditions that may cause hazardous substances or pollutants to migrate or to be released [300.415(b) (2) (v)].
- × Threat of fire or explosion [300.4 15(b) (2) (vi)].
- × The availability of other appropriate federal or state response mechanisms to respond to the release [300.4 15(b)(2)(vi i)]
- × Other situations or factors that may pose threats to the public health or welfare of the United States or the environment [300.415(b) (2) (viii)]. 62 Final Guidance, September 2009

IV. Selected Removal Action and Estimated Costs

A. Situation and Removal Activities to Date

1. Current Situation

The brush fire on March 26, 2013 occurred within an 800-acre footprint, and approximately 340 acres were burned such that the ground surface was exposed (**Figure 1**). This allows potential trespassers significantly enhanced accessibility to the site and any potential munitions-related items on the ground surface. However, the situation also allows the munitions removal contractors to readily see the munitions on the surface and safely remove them. The immediate removal of the munitions could also avoid up to \$4.4M in manual vegetation cutting costs. Surface clearance of munitions in the fire area was initiated on April 1, 2013.

2. Removal activities to date:

During a previous brush fire that occurred in UXO 12 in 2011 (**Figure 1**), a total of 229 acres of vegetation were burned which allowed munitions removal contractors the ability to evaluate the burned area and identify a 500-pound bomb and five 5-inch rockets. These munitions items were subsequently destroyed.

3. Enforcement

The approach for the ongoing removal action is consistent with previous and ongoing removal actions being conducted within the former VNTR under a time critical removal action (TCRA) and two non-time critical removal actions (NTCRAs) that have been approved by USEPA, PREQB, and USFWS. These interim actions have been, and are being, performed where munitions pose a high explosive safety risk to the public.

B. Planned Removal Actions

1. Removal Action description

The objective of the ongoing removal action is to remove the surface munitions identified on the ground surface of the 340-acre area of UXO 12 where the vegetation was burned by a brush fire. Weather conditions may facilitate rapid regrowth of the vegetation. Therefore, the surface clearance will continue until either the regrowth of the vegetation obscures visibility of the ground surface or limits access to the area by site workers and trespassers. The surface clearance will be verified by the QC and QA process approved for the TCRA and NTCRAs. Any munitions items identified will be appropriately managed—potentially including destruction by detonation in accordance with the Explosive Safety Submission that has been approved by DDESB and NOSSA.

2. Contribution to remedial performance

The surface removal action will allow munitions removal contractors to readily see the munitions on the surface to remove them in a safer manner than if the munitions were obscured in dense vegetation. In addition, immediate removal of the munitions are anticipated to reduce the removal time by 80 percent and save up to \$4.4M in munitions removal costs due to the elimination of the need to clear vegetation prior to munitions removal.

3. ARARs

The ongoing removal action is being conducted in accordance with the Explosive Safety Submission and includes establishing 5 foot wide search lanes that UXO technicians will traverse and using handheld magnetometers, to identify munitions items. This document lists the Federal and Commonwealth ARARs identified for the site and indicate that the NTCRA complies with the ARARs. Therefore, the emergency response will comply with the ARARs.

4. Project Schedule

The munitions removal action is anticipated to include the full surface clearance of the entire 340 acres and is estimated to take two months.

However, should rapid regrowth of the vegetation occur, the surface clearance of munitions will be discontinued prior to the end of the two-month period if the regrowth of the vegetation either obscures visibility of the ground surface or limits access to the area by site workers and trespassers.

C. Estimated Costs

Contractor Costs	\$1,650,000
Contractor Oversight Costs	\$210,000
Contingency costs (20% of subtotal)	\$372,000
Total Removal Costs	\$2,232,000*

* Note: The estimated costs include an estimated cost savings of \$4.4M due to the avoidance of manual vegetation clearance.

V. Expected Change in the Situation Should Action Be Delayed or Not Taken

A delay in action or no action at this site increases the potential explosive safety risk to the public by leaving munitions on the surface accessible to the public who have been observed to trespass in the area. In addition, allowing the vegetation to regrow would increase potential future removal costs by an estimated \$4.4M.

VI. Outstanding Policy Issues

None

VII. Approvals

This decision document represents the selected removal action for this site, developed in accordance with CERCLA as amended, and not inconsistent with the National Contingency Plan. This decision is based, in part, on the administrative record for the site. Conditions at the site meet the NCP section 300.4 I S (b) criteria for a removal action and, through this document, I am approving the proposed removal action. The total project cost of \$2,232,000 will be funded by the NAVFAC Atlantic Munitions Response Budget.



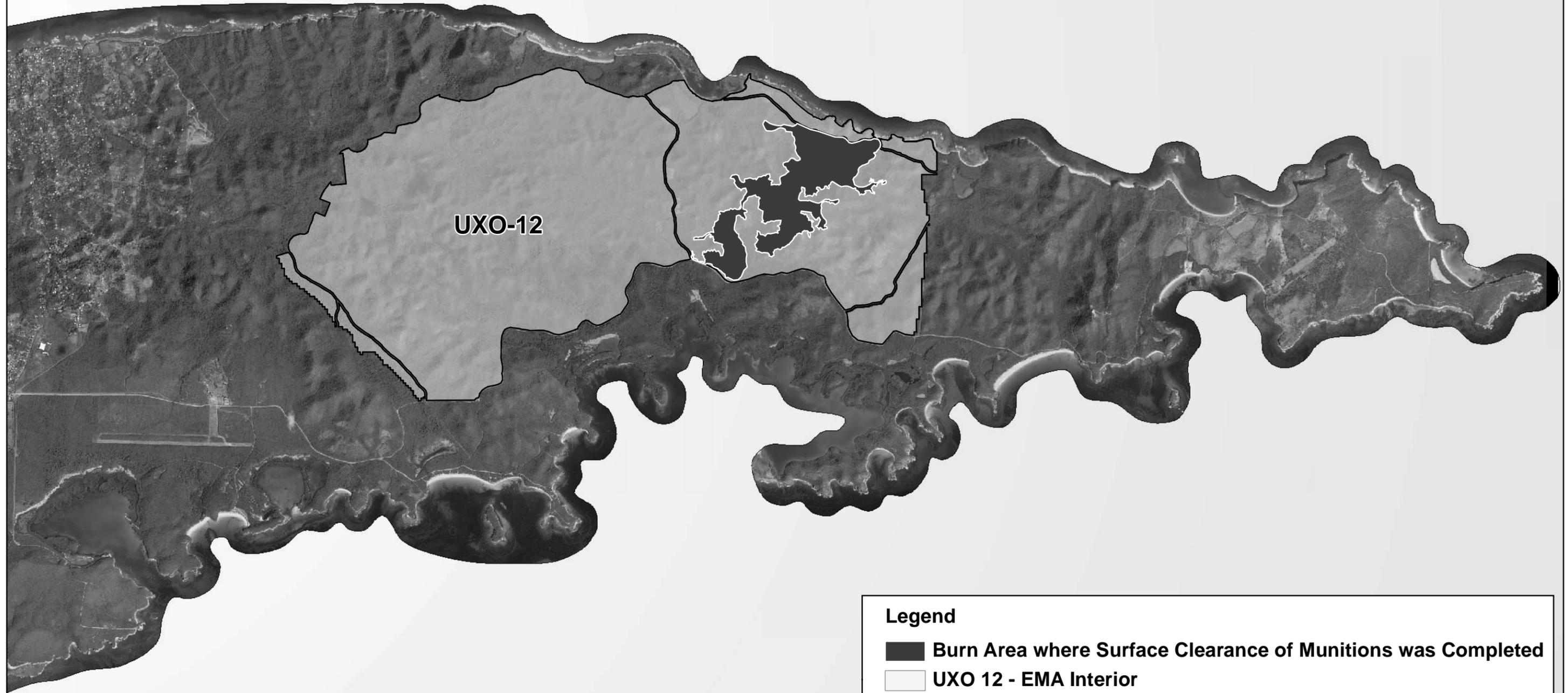
CHERRYL F. BARNETT

Environmental Business Line Manager

Naval Facilities Engineering Command, Atlantic



Date:



Legend

-  Burn Area where Surface Clearance of Munitions was Completed
-  UXO 12 - EMA Interior

