
Non-Time Critical Removal Action from the Beaches and Roads at the Former VNTR and Former NASD SWMU 4, Vieques, Puerto Rico

PREPARED FOR: Commander, Atlantic Division, Naval Facilities Engineering Command (NAVFAC)

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DATE: September 16, 2009

This Action Memorandum documents approval for the non-time critical removal action (NTCRA) described herein for removing munitions and explosives of concern (MEC) from the beaches and roadways at the former Vieques Naval Training Range (VNTR) and the former Naval Ammunition Support Detachment (NASD) in Vieques, Puerto Rico. The removal actions will be conducted at the VNTR Munitions Response Areas, consisting of the Eastern Maneuver Area, Surface Impact Area, Live Impact Area, and Eastern Conservation Area. At the former NASD, the removal action will be conducted at solid waste management unit (SWMU) 4.

The methods and procedures to be followed during execution of the NTCRA are detailed in the *Final Work Plan for Munitions and Explosives of Concern Subsurface Interim Removal Action, Beaches and Select Roadways, Former Vieques Naval Training Range (VNTR) and Former Naval Ammunition Support Detachment (NASD), Solid Waste Management Unit 4, Vieques, Puerto Rico*, (CH2M HILL, October 2008). This Action Memorandum substantiates the need for the selected remedial action and was developed in accordance with the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) as amended, and is consistent with the National Oil and Hazardous Substance Pollution Contingency Plan (NCP).

The site conditions within NASD SWMU 4 and the former VNTR pose a threat to human health and the environment and meet the NCP section 300.415(b)(2) criteria for conducting a removal action. As a result, NAVFAC recommends approval of the proposed removal action. The total estimated cost to complete the entire NTCRA is estimated to be \$19,311,906. Response actions to finalize the NTCRA should be expedited to minimize safety risks within the response areas.

Introduction

The *Final Engineering Evaluation/Cost Analysis for MEC Removal from the Beaches and Roadways of SWMU 4, Former NASD and Munitions Response Areas: Eastern Maneuver Area, Surface Impact Area, Live Impact Area, and Eastern Conservation Area, Former VNTR, Vieques, Puerto Rico* (CH2M HILL, February 2008), referred to as the EE/CA, and the final NTCRA Work Plan (CH2M HILL, October 2008) focus on reducing risks to human health associated with the MEC through minimizing the potential for human contact with the MEC. This Action Memorandum serves as the final approval for the Navy to implement the recommended alternative identified in the EE/CA. The alternatives evaluated in the EE/CA were:

- No Action.
- Removal of surface and geophysically detected subsurface MEC from select roadways and beaches to detection depth.
- Removal of surface and geophysically detected subsurface MEC from select roadways and beaches to anticipated depth of intrusive activity.

After the merits of each alternative and how they will meet the removal action objectives are described, the EE/CA identified the proposed removal action alternative as the removal of surface and subsurface MEC from select roadways and beaches to the anticipated depth of intrusive activity at the former VNTR and NASD SWMU 4.

The Navy will continue to be the lead agency, and the Navy's Installation Restoration Program will continue to be the exclusive source of funding for remedial actions for the former VNTR and NASD SWMU 4. As members of the CERCLA Technical Committee, representatives of the Department of Interior (U.S. Fish and Wildlife Service [USFWS]), the U.S. Environmental Protection Agency (USEPA; Region II) and the Commonwealth of Puerto Rico (Puerto Rico Environmental Quality Board [PREQB]) will continue to provide technical support and oversight until the objectives of the EE/CA have been met.

Following completion of this NTCRA, additional evaluations of the former VNTR and NASD SWMU 4 will be performed to determine if any additional responses are necessary.

Regulatory Background

This Action Memorandum was completed in accordance with the remedial program requirements defined by CERCLA as amended, the Superfund Amendments and Reauthorization Act of 1986 (SARA), the NCP, and *Superfund Removal Procedures Action Memorandum Guidance* (USEPA, 1990).

The Navy has broad authority under CERCLA Section 104 and Executive Order 12580 to carry out remedial actions when the release is on a Navy installation or the sole source of the release is from a Navy installation. The Navy's Installation Restoration (IR) Program was initiated to identify, assess, characterize, and clean up or control contamination from past hazardous waste disposal operations and hazardous material spills at Navy and Marine Corps activities. This Action Memorandum follows the guidelines published in the

Navy/Marine Corps IR Manual (Naval Facilities Engineering Services Center, 2001) and the *Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA* (USEPA, 1993). This Action Memorandum addresses a NTCRA for conducting surface and subsurface munitions removal actions to address explosive hazards of munitions that have been identified as potentially posing a high explosive safety risk at the former VNTR and NASD SWMU 4.

In addition, the NCP requires that removal actions comply with federal and state applicable or relevant and appropriate requirements (ARARs), with limited exceptions, to the extent practicable. Analysis of the removal action alternatives for the surface and subsurface anomalies in the former VNTR and NASD SWMU 4 with the applicable ARARs is presented in Appendix A of the EE/CA. The removal action set forth in this Action Memorandum will comply with these ARARs to the extent practicable.

Project Schedule

The Final EE/CA was made available to the public for comment for 30 days beginning on October 3, 2007 and concluding November 5, 2007. No comments were received during the public comment period. Therefore, no responsiveness summary is included in this memorandum.

The estimated project schedule for conducting the removal action and preparing the after-action report is as follows:

Task	Estimated Duration	Start Date	Completion Date
Removal Action	2 Years, 4 Months	3 June 2009	31 October 2011
After-Action Report Writing	2 Months	1 November 2011	31 December 2011

The contract to conduct this remedial action was awarded in fiscal year (FY) 2009, with the initiation of the project in FY2009 and completion in FY2012.

Estimated Costs

The NCP Part 300.415 dictates statutory limits of \$2 million and 12 months of USEPA-financed removal actions, with statutory exemption for emergencies and actions consistent with the removal action to be taken. This removal action will not be USEPA-financed. The Navy Environmental Restoration Program does not limit the cost or duration of the removal action (Navy, 2006).

The Navy will contract with the appropriate contractors to perform the required work associated with the NTRCA at the beaches and selected roads of the former VNTR and NASD SWMU 4. The total estimated cost of the removal action is \$19,311,906.

Recommendation

This Action Memorandum presents the selected remedial action for select beaches and roads throughout the former VNTR and NASD SWMU 4. The selected NTCRA was developed in

accordance with CERCLA as amended, and is consistent with the NCP. Conditions at the sites meet the NCP section 300.415(b)(2) criteria for remedial action. NAVFAC, Atlantic Division, recommends approval of the proposed NTCRA. The total project cost is estimated to be approximately \$19.3 million. The NTCRA should begin as soon as practical because of the potential threat to human health and the environment from the MEC present.

The NCP (Part 300.415) of the NCP requires that remedial actions comply with federal and state applicable laws and regulations. The NCP also requires that remedial actions be consistent with the NCP section 300.415(b)(2) criteria for remedial action. The NCP also requires that remedial actions be consistent with the NCP section 300.415(b)(2) criteria for remedial action. The NCP also requires that remedial actions be consistent with the NCP section 300.415(b)(2) criteria for remedial action.

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Task	Estimated Duration	Start Date	Completion Date
Remedial Action	1 Year 6 Months	1 June 2012	31 December 2013
Final Action Report Writing	3 Months	1 November 2013	31 December 2013

The contract to conduct the remedial action was awarded in fiscal year (FY) 2008, with the completion of the project in FY2009 and completion in FY2012.

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