

# Naval Facilities Engineering Command – Atlantic

## RAB Status Report: July-September 2007

### Former Navy Property, Vieques, Puerto Rico

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This report provides the Restoration Advisory Board (RAB) with a status of on-going work at the Solid Waste Management Units and Areas of Concern (SWMUs and AOCs) on the former Naval Ammunition Support Detachment (NASD) property in western Vieques and an overview of the Environmental Restoration and Munitions Response activities on eastern Vieques. The following is a summary of the activities completed through September 2007, and the activities planned for completion for the next few months.

**Note:** This summary is presented in English and Spanish for the convenience of the reader. Every effort has been made for the translations to be as accurate as reasonably possible. However, readers should be aware that the English version of the text is the official version.

**Nota:** Este resumen se presenta en inglés y en español para la conveniencia del lector. Se han hecho todos los esfuerzos para que la traducción sea precisa en lo más razonablemente posible. Sin embargo, los lectores deben estar al tanto que el texto en inglés es la versión oficial.

## PROGRESS through September 2007

### Environmental Restoration Program

- PREQB approved No Further Action (NFA) under CERCLA for nine west Vieques sites (solid waste management units [SWMUs] 5, 10, 14, 15; areas of concern [AOCs] B, C, F, K, and L) in February 2007.

### Munitions Response Program

- 497 acres in the LIA have been surface cleared
- All beaches (65 acres) have previously been surface cleared
- Over 5,300 live munitions removed
- Approximately 3000 tons of munitions debris (MD) and range related debris (RRD) has been recovered and is being processed for eventual shipment to a recycler.
- Over 1,700 tons of MD and RRD have been shipped off island to be recycled.

## CURRENT AND COMPLETED ACTIVITIES

### ENVIRONMENTAL RESTORATION PROGRAM

#### WEST VIEQUES

- **AOC E (Former Waste Oil Tank)**

The Supplemental Remedial Investigation (RI) field work, comprising soil and groundwater sampling, began in November 2005 and was completed in December 2005. Updated human health and ecological risk assessment protocols were developed (via an interactive process with the stakeholder agencies) and are contained in the Master Environmental QAPP, which was finalized in May 2007. An interim human health risk assessment deliverable detailing the AOC E risk assessment assumptions and input was submitted to the regulatory agencies in April 2007. Once the interim deliverable is approved by the regulatory agencies, the human health risk assessment and the ecological risk assessment for AOC E will be conducted and the RI Report prepared.

- **AOC H (Abandoned Power Plant)**

Regulatory comments on the draft RI report submitted for review in April 2004 were received in October 2005. Comment responses were prepared and submitted to the agencies for consideration in January 2006. A meeting was held among the agencies in May and September 2006 to discuss the comment responses and reach concurrence on an acceptable set of responses and associated report revisions. The final set of comment responses were concurred upon in December 2006. The Draft Final RI Report, which incorporates the mutually agreed upon comment responses, was submitted to the RAB in May 2007. No comments were submitted by the RAB. The final RI Report was submitted July 2007. Based on the RI Report findings, a Proposed Plan was prepared and submitted for regulatory agency review in August 2007. Regulatory agency comments were received in September 2007. Pending resolution of agency comments and any comments submitted by the Municipality of Vieques, the Proposed Plan will be available for a 30-day public comment period and a public meeting will be held to discuss the Proposed Plan.

- **AOC I (Former Asphalt Mixing Plant)**

The Supplemental RI field work, comprising monitoring well installation and sampling, began in late November 2005 and completed in January 2006. The human health risk assessment and the ecological risk assessment and RI Report for AOC I will be conducted concurrently with those for AOC E.

- **AOC J (Former Operations/Staging Area Disposal Site)**

The Draft Final EE/CA for AOC J, AOC R, SWMU 6, and SWMU 7 was submitted in December 2005. The public comment period on the EE/CA was scheduled from about mid-December 2005 to mid-January 2006, but a request from a RAB member extended the public comment period for an additional 2 weeks. No public comments on the EE/CA were received. A draft removal action work plan was submitted to the regulatory agencies in November 2005. Regulatory comments were submitted to the Navy in March 2006. Based on regulatory comments, a revised draft removal action work plan was submitted to the regulatory agencies for review in April 2007. Once

regulatory concurrence on the revised draft work plan is reached, the draft final removal action work plan will be prepared. The removal action is anticipated to take place in mid-2008, pending finalization of the removal action work plan.

Regulatory comments on the Draft RI report submitted for review in April 2004 were received in January 2006. Comment responses were prepared, taking into consideration the removal action to be conducted at the site, and were submitted to the regulatory agencies for consideration in May 2006. A meeting was held among the agencies in September and December 2006 to discuss the comment responses and concur upon a path forward for revising the report. Because a removal action is to be performed at the site, which will include new risk assessments, the RI Report will be finalized as is (with uncertainty language added to justify the removal action) because its purpose has been met. The final RI Report for AOC J was submitted in May 2007. Following the removal action, a removal action report will be prepared that documents the removal action activities and the new risk assessment performed using the removal confirmatory data.

- **AOC R (Former Staging and Operations Area)**

The RI field work, comprising monitoring well installation and surface water, sediment, soil, and groundwater sampling, began in December 2005 and was completed in March 2006. Preliminary evaluation of the analytical data suggests additional data are needed to adequately delineate the nature and extent of contamination and assess potential risks. This additional data collection will take place concurrently and/or subsequently to the planned removal action. See the discussion above under AOC J regarding the EE/CA and removal action work plan for this site. A human health and ecological risk assessment will be conducted and an RI Report prepared following the removal action and additional data collection.

- **SWMU 4 (Former OB/OD Unit)**

Regulatory comments on the draft RI work plan submitted for review in June 2004 were received in January 2006. Comment responses were prepared and submitted to the regulatory agencies for consideration in April 2006. A meeting was held among the agencies in May and September 2006 to discuss the comment responses and reach concurrence on an acceptable set of responses and associated work plan revisions. The Draft Final Work Plan was submitted to the RAB in November 2006 and discussed at the RAB meeting held in January 2007. The Final Work Plan was submitted and the RI fieldwork initiated in January 2007 and completed in March 2007. Preliminary evaluation of the RI data suggests additional sampling is warranted to sufficiently characterize the site. The rationale for additional sampling and the proposed locations will be submitted to the regulatory agencies in October 2007. It is anticipated that the additional samples will be collected in accordance with the Final Work Plan submitted in January 2007.

- **SWMU 6 (Mangrove Disposal Site at Kiani Lagoon)**

Regulatory comments on the draft RI report submitted for regulatory review in April 2004 were received in June 2006. Comment responses were prepared and submitted to the agencies for consideration in August 2006. See the discussion above under AOC J regarding the Final RI Report, EE/CA, and removal action work plan for this site. The final SWMU 6 RI Report was submitted in February 2007.

- **SWMU 7 (Quebrada Disposal Site)**

Responses to regulatory comments on the draft RI report submitted to the regulatory agencies in November 2004. See the discussion above under AOC J regarding the Final RI Report, EE/CA, and removal action work plan for this site. It is anticipated that the final RI Report for SWMU 7 will be submitted in late 2007.

## EASTERN VIEQUES

- **Original 12 SWMUs/AOCs Contained in the RCRA Consent Order**

A data summary report summarizing the data collected during the Phase I RFI was submitted to the regulatory agencies in May 2005. The draft Phase I RFI report is currently being revised (as a PA/SI report in accordance with CERCLA terminology due to Vieques' inclusion on the National Priorities List) to incorporate the soil inorganics background investigation report which was approved by EPA on September 28, 2007.

- **PI/PAOC sites**

The final PA/SI work plan for 8 PI/PAOC site was submitted in January 2006, based on regulatory agency approval. The field work began in January 2006 and was completed in April 2006. The draft PA/SI Report is currently being prepared and will incorporate the soil **inorganic background investigation report which was approved by EPA on September 28, 2007.**

- **Background Soil Inorganics**

The public comment period on the Work Plan ended on June 11, 2005. Based on the public comments, several revisions were made to the technical approach to the Background Investigation (i.e., several sampling locations relocated, explosives analysis added for each sample collected, etc.). The Final Work Plan, with these revisions incorporated, was submitted in May 2006. Agency responses to the public comments were finalized, and they were discussed with the RAB at the June 2006 RAB meeting. The field work commenced in June 2006 and was completed in early July 2006. The draft report was submitted to the regulatory agencies on January 29, 2007 for review. Regulatory comments were submitted to the Navy in April 2007 and preliminary responses to those comments were submitted to the regulatory agencies in May 2007. The regulatory comments were resolved and the draft final report was submitted to the RAB on August 9, 2007. At the RAB's request, EPA informally extended the RAB review period several weeks beyond the normal 30-day period. EPA approved the report as final on September 28, 2007.

## MISCELLANEOUS

- **Master Quality Assurance Project Plan**

A draft Master Quality Assurance Project Plan (QAPP) was submitted for regulatory review in May 2006. The Master QAPP provides standard procedures for data collection, analysis, and evaluation as part of the environmental restoration program. Although project-specific deviations from the Master QAPP may be warranted, the Master QAPP facilitates consistency and efficiency across the program. Regulatory comments were received in September 2006. Comment responses were prepared and submitted for regulatory consideration in November 2006. A meeting was held among the agencies in December 2006 to discuss the comment responses and reach concurrence

on an acceptable set of responses and associated work plan revisions. The concurred-upon comment responses were incorporated into the Master QAPP and the draft final document was submitted to the RAB in February 2007. No comments were received from the RAB. The final Master QAPP was submitted in May 2007.

- **Federal Facility Agreement (FFA)**

The FFA was signed on August 7, 2007, by the U.S. Environmental Protection Agency (EPA), the U.S. Department of the Navy, the Department of the Interior (DOI), the Puerto Rico Environmental Quality Board (EQB). The FFA is now available for a 45 days public comment period.

- **Site Management Plan**

A Site Management Plan was prepared in accordance with requirements defined in the FFA, which was signed on August 7, 2007.

## **MUNITIONS RESPONSE PROGRAM**

### **WEST VIEQUES**

- **SWMU 4 (Open Burn/Open Detonation (OB/OD) Area)**

The Draft Munitions/Explosives Remedial Investigation Report dated April 2004 is currently on hold and will be revised to include data collected during future interim removal action.

- A draft engineering evaluation/cost analysis (EE/CA) to remove munitions at selected areas in the vicinity of SWMU 4 and East Vieques was submitted to the regulatory agencies in May 2007. Regulator comments have been received and the Draft-Final version will be distributed for public review in October 2007.

### **EASTERN VIEQUES** - Munitions Response Actions

The Time Critical Removal Action in the LIA continues to reduce risk to human health for 1,100 acres in the LIA and ECA. Four hundred ninety seven acres have been surface cleared within the LIA, significantly reducing explosive risk in these areas. During these removal efforts over 5000 live munitions items have been removed, including extremely sensitive sub-munitions. Additionally, 65 acres of beaches have previously been surface cleared of munitions.

Air monitoring is being conducted along the LIA-SIA border to determine if there are metals or explosives releases above human health screening criteria from the BIP activities. To date no metals have exceeded the criteria and no explosives have been detected at these "near source" locations.

The Final Expanded Range Assessment/Phase II Site Inspection report was submitted December 2006 and further investigation efforts to determine the munitions extent across the east side have been initiated including the subsurface geophysical surveys for the beach areas. The Phase II Site Inspection will also address munitions response sites not yet investigated, by conducting surface evaluations to determine if munitions items are present.

The Digital Geophysical Mapping (DGM) has begun for beaches and selected roadways. The mapping will identify anomalies that may indicate the presence of munitions and explosives of concern (MEC) below the ground surface. Selected anomalies will require further investigation. The investigation of anomalies will begin when the Navy and regulators determine the best approach. To date over 65 acres of beach area have been mapped.

Biological survey of the Eastern Conservation Area was completed to support future removal action activities. An Archaeological survey of the beach areas has been conducted and additional surveys across the entire range will be conducted to support future removal action activities.

Draft EE/CA was submitted for removal action at beach areas and selected roadways, see EE/CA discussion above under West Vieques.

## **Public Involvement Activities**

- A RAB meeting took place on August 9, 2007. The next meeting has been scheduled for November 8, 2007
- A RAB site visit to observe a BIP operation is being planned for October 18, 2007.
- The Navy in collaboration with other agencies held the first of a series of UXO awareness programs near Camp Garcia on Aug. 11, 2007
- The Community Involvement Plan (CIP) for Vieques was distributed, the public comment period ended.

## VIEQUES DOCUMENT SUBMITTAL UPDATE

(as of September 2007)

Site	Document	Submitted By Navy To Regulators or RAB for Review	Regulator or RAB Comments Submitted To Navy
<b>West Vieques</b>			
AOC H	Draft RI Report	April 2004	October 2005
	Preliminary responses to regulatory comments	January 2006	Discussed in May, September, and December 2006
	Draft Final RI Report	Submitted to RAB in May 2007	No comments submitted
	Final RI Report submitted in July 2007	Not applicable	Not applicable
AOC R	Final RI Work Plan submitted in November 2005	Not Applicable	Not Applicable
	Draft EE/CA	August 2005	October 2005
	Final EE/CA	Submitted to RAB/Public in December 2005	Not Applicable
	Draft Removal Action Work Plan	November 2005	March 2006
	Revised Draft Removal Action Work Plan	April 2007	June 2007
	Response to comments and revised Work Plan	August 2007	
SWMU 4	Draft RI Work Plan	June 2004	January 2006
	Preliminary responses to regulatory comments	April 2006	Discussed in May and September 2006
	Draft Final Work Plan	Submitted to RAB in November 2006	Not Applicable
	Final Work Plan submitted in January 2007	Not Applicable	Not Applicable
SWMU 6	Draft RI Report	April 2004	June 2006
	Preliminary responses to regulatory comments	August 2006	Discussed in December 2006  Not Applicable

Site	Document	Submitted By Navy To Regulators or RAB for Review	Regulator or RAB Comments Submitted To Navy
	Final RI Report submitted in February 2007  Draft EE/CA  Final EE/CA  Draft Removal Action Work Plan  Revised Draft Removal Action Work Plan  Responses to comments and revised Work Plan	Not Applicable  August 2005  Submitted to RAB/Public in December 2005  November 2005  April 2007  August 2007	October 2005  Not Applicable  March 2006  June 2007
SWMU 7	Response to comments on Draft RI Report  Final RI Report anticipated to be submitted in mid 2007  Draft EE/CA  Final EE/CA  Draft Removal Action Work Plan  Revised Draft Removal Action Work Plan  Responses to comments and revised Work Plan	November 2004  Not Applicable  August 2005  Submitted to RAB/Public in December 2005  November 2005  April 2007  August 2007	Discussed in September 2006  Not Applicable  October 2005  Not Applicable  March 2006  June 2007
AOC J	Draft RI Report  Preliminary responses to regulatory comments  Final RI Report submitted in May 2007  Draft EE/CA  Final EE/CA  Draft Removal Action Work Plan	April 2004  May 2006  Not Applicable  August 2005  Submitted to RAB/Public in December 2005	January 2006  Discussed in December 2006  Not Applicable  October 2005  Not Applicable  March 2006 June 2007

Site	Document	Submitted By Navy To Regulators or RAB for Review	Regulator or RAB Comments Submitted To Navy
	Revised Draft Removal Action Work Plan	November 2005 April 2007	
	Responses to comments and revised Work Plan	August 2007	
NFA Sites	PREQB Response to Public Comments on No Further Action Report	Not Applicable	Not Applicable
	Final NFA Report submitted in October 2006	Not Applicable	PREQB issued a Resolution and Notification concurring with NFA in February 2007
<b>Eastern Vieques</b>			
LIA, SIA, EMA	Revised Draft ERA/Phase I Site Inspection Report	May 2007	
Former VNTR	Draft EE/CA for subsurface removal of MEC of roads and beaches	May 2007	
East Vieques Munitions Sites	Final MEC Master Work Plan	Final Submission – November 2006	
Various Munitions Response Sites and Beaches on East Vieques	Final Expanded Range Assessment/Phase II Site Inspection Work Plan	Final submission – December 2006. Editorial comments addressed and submitted – January 2007	
Background Soil	Revised Draft Final Background Soil Inorganics Investigation Work Plan	Public Comments Submitted to EPA in June 2005	November 2005
	Final Background Soil Inorganics Investigation Work Plan	Not Applicable	Not Applicable
	Draft Background Soil Inorganics Investigation Report	January 2007	April 2007
	Preliminary responses to comments	May 2007	Comments resolved July 2007
	Draft Final Background Soil Inorganics Report	Submitted to RAB August 2007	
Original 12 Consent Order Sites	Data Summary Report	May 2005	Not Applicable

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<b>Site</b>	<b>Document</b>	<b>Submitted By Navy To Regulators or RAB for Review</b>	<b>Regulator or RAB Comments Submitted To Navy</b>
8 PI/PAOC Sites	Final PA/SI Work Plan submitted in January 2006	Not Applicable	Not Applicable
Baseline Groundwater	Draft Final Groundwater Baseline Investigation	May 2005	