



**Vieques Island Investigation and Cleanup  
Naval Facilities Engineering Command (NAVFAC) Atlantic**

**ENVIRONMENTAL RESTORATION ADVISORY BOARD  
Meeting #29**

**6:00 p.m. - 9:00 p.m., April 26, 2011 – Vieques Lighthouse**

**MEETING MINUTES**

**Attendees:**

Mike Barandiaran/FWS	Lirio Márquez/ RAB Community Member
Jim Brantley/Navy	Stacie Notine/ RAB Community Member
Wanda Bermúdez/RAB Community Member	Luz Quiñones/Community Member/FWS
Kevin Cloe/Navy	Madeline Rivera/Navy
Michael Díaz/ RAB Community Member	Wilmarie Rivera/PR EQB
Jorge Fernández/ RAB Community Member	Danny Rodríguez/EPA
Tim Garretson/CH2M HILL	Pedro Ruiz/Navy
Mike Green/Navy	Lionel Sánchez/ RAB Community Member
Brett Doerr/CH2M HILL	Susana Struve/CH2M HILL
Rick Gorsira/CH2M HILL	John Tomik/CH2M HILL
Rich Herny/FWS	Claudio Vera/CH2M HILL
Daniel Hood/Navy	Julio Vázquez/EPA
Colleen MacNamara/ RAB Community Member	Dan Waddill/Navy

**1. Welcome and Introductions**

The meeting began at 6:15 PM. Kevin Cloe (RAB Co-Chair) welcomed all those present and presented the meeting agenda. Kevin took the opportunity to introduce Dan Waddill, Head of the Vieques Restoration Section for NAVFAC.

Susana Struve announced to the audience the availability of devices for simultaneous translation, as well as a form for people to write their names and telephone numbers if they are interested in participating in the RAB meetings.

**2. Streamlined Remedial Investigation / Feasibility Study (RI/FS) for Solid Waste Management Unit 1, Former Vieques Naval Training Range – Brett Doerr, CH2M HILL (see presentation for additional details).**

Brett presented a summary of the site history (Solid Waste Management Unit [SWMU 1]) and showed some figures that summarized the topography, geophysical investigations, and a site conceptual model. He also showed photos of the vegetation present at the site, as well as test pits for site characterization. He mentioned that soil and groundwater samples were taken to characterize the nature and extent of the contamination.

- A RAB member asked about the site conceptual model, which led to other questions about the size of the site and the frequency of monitoring the groundwater wells. Brett explained the conceptual model, and said that the site comprises 41 acres and that several rounds of groundwater samples were collected during the period of time the site was being characterized.

Brett proceeded with the presentation, explaining how the human health and ecological risk assessments were conducted and the results of each. He then explained the various remedial alternatives that were evaluated for the site and how the Feasibility Study concluded the alternative of enhancing the existing landfill cover with native soil and implementing institutional controls best satisfies the various criteria against which the alternatives were evaluated.

**Questions and Responses:**

- Why were “Dioxins” chosen for analysis from a list of 200 to 300 constituents?

When characterization of the site began, the site was still subject to Resource Conservation and Recovery Act (RCRA) regulation. Dioxins are part of the standard RCRA sample analysis list and were therefore included in some historical samples. However, processes that produce dioxins should not have occurred at SWMU 1.

- Why weren't pesticides sampled for?

Samples at SWMU 1 have been analyzed for pesticides in historical as well as recent samples.

**3. Expanded Site Inspection (ESI) UXO 15, Former Vieques Naval Training Range – Brett Doerr (see presentation for more details).**

Brett presented a summary of the history and physical environment of the site.

He stated that no unexploded ordnance had been found at UXO 15 and that only piles of debris, scrap metal, and empty casings had been encountered.

He explained that two areas, PI-9 and PI-13, had been identified at the UXO 15 site as where past Navy activities were known to have occurred and are the focus of the ESI. The first (PI-9) was likely used as a staging area to transport munitions to the Eastern Maneuver Area (EMA). PI-13 could possibly have been used to launch rockets toward the Live Impact Area (LIA) and the Surface Impact Area (SIA), but this may not have occurred given its proximity to Camp Garcia. Brett noted that regardless of whether the historical information regarding the sites' use is accurate or not, the investigation is designed to identify anything present as a result of past Navy activity. He then showed various photos of the debris found at the site, as well as a figure with the geophysical transects of where anomalies have been detected.

Brett then opened the discussion to questions and comments:

- A RAB member asked how long and wide the transects are?.

Daniel Hood (Navy): The past transects were very narrow; they were just wide enough to let a person walk through. He also added that a biological assessment will be performed before beginning any future clearing activities at the site; the biological assessment will be performed in collaboration with the Fish and Wildlife Service (FWS).

- A RAB member commented that he was worried that the same thing will happen that happened to the dwarf forest in the ECA, and that even though they will perform a biological assessment the dwarf forest should not be cut down. He then asked what are the tools and special considerations that will be taken into account to deal with this situation and to search for munitions in this area of the peninsula.

Daniel Hood stated that the experiences with vegetation clearance in the ECA will be leveraged to future sites, including UXO-15, in an attempt to avoid the situation from happening again. Prior to performing any broad vegetation clearing for the UXO-15 ESI, the results of the biological assessment and the proposed vegetation clearing areas will be discussed with the RAB.

- Another RAB member asked why they have discarded the idea, without any explanation, that this site was used for open detonation/burning of weapons. He added that he does not believe that this area was used for storage and preparation of weapons, since this area was not directly connected with the Base and because the coastal topography is not suitable for transporting weapons by boat.

Brett responded that no potential historical Navy activity has been disregarded. The UXO-15 ESI SAP simply points out, for informational purposes, that the historical information about the site uses may not be accurate. However, the investigation is designed to identify if there is any MEC present or if there have been contaminant releases at the site, regardless of the past Navy activity. This is one of the objectives of the work plan and the investigation will serve to verify the information.

- A RAB member asked why munitions were transported on pallets (containers).  
Daniel Hood clarified that they were not transported on “pallets” but in wooden boxes.  
Danny Rodriguez (EPA) added that the Navy will investigate all of the areas necessary to evaluate the risks to human health and wildlife. He added that necessary precautions will be taken to work in certain areas, and that the Navy will not discount any area until they know it does not present unacceptable risk.
- A RAB member requested that they discuss all of the alternatives before working in the dwarf forest since this type of forest is not found in any other location on the island. Another RAB member added that the priority is to know if there were munitions or not, and that the forest can be investigated without cutting it down.  
Mike Barandarian (FWS) stated that they visited these areas and that they have not arrived at a consensus about the areas that should not be cut, and that at the moment they do not have an answer. He explained that this is a sensitive topic and that the agencies are working on it together and will use information from the biological assessment to help make that determination.

**4. Demolition and Diving Operations in Cayo la Chiva (close to Blue Beach) – Mike Green (Navy) (see presentation for more details).**

Mike explained that five items, which turned out to be 5-inch projectiles, were identified and detonated on Cayo la Chiva.

He added that warning signs had been placed on Blue Beach and Cayo La Chiva and a 110-acre under water area between Blue Beach and Cayo La Chiva was investigated using transects, through which five items suspected to be munitions were found and that require additional investigation. He explained that there is a remnant underwater area of 100 acres around Cayo La Chiva that is planned for a Navy underwater diving investigation, in 2-week sessions, during the month of June.

In addition, he presented the proposed locations for the warning buoys around Cayo la Chiva

Last, he added that the preliminary investigations were solely visual and without the aid of instruments since an underwater magnetometer was not used.

- A RAB member asked what they should do if they find or see suspicious items underwater. Mike explained that Madeline Rivera and Pedro Ruiz are the people they should contact regarding these issues.

**5. Removal of munitions underneath the surface of Beaches and Roads. Future Use of FWS Land. Daniel Hood (Navy). (See presentation for more details).**

Daniel presented information updates on the cleanup of the beaches and roads, and spoke about the locations of the next subsurface soil cleanup efforts.

He presented a figure showing the different uses of the land and progress made in the cleanup. He explained what the work consists of removing munitions from beneath the surface on the beaches and trails selected in eastern Vieques. He mentioned that this work includes removing munitions to a depth of four feet at the beaches from the tidal line to the vegetation, including the turtle nesting areas. He also mentioned that they spent more than one year cleaning the Bahia Icacos beach and that munitions were found on these beaches. He said that the munitions removal will be long-term since storms also bring more munitions onto the beach. He then showed photos taken on the beaches where vegetation-cutting had taken place. He summarized the progress made in the cleanup and the removal actions to-date.

**6. Information about Monitoring and Control Activities by EPA and the Puerto Rico Environmental Quality Board (PR EQB). See presentation for further details.**

By way of introduction, Danny commented that there will be two project managers for this site. Julio Vázquez will be in charge of the western section and he (Danny) will be in charge of the eastern section of the island.

He then spoke to the status of the following reports of the Environmental Restoration Program and the Munitions Response Program:

- Draft Report of the Solid Waste Management Unit 4 (SWMU4) Investigation, August 2009 – Review of Risk Evaluations, May 28, Comments Presented June 2010, Resolution of Comments.
- Draft TCRA/Provisional Measure – Post Action, Surface MEC in the MRA LIA and ECA – Comments Presented June 2010
- Draft Expanded Site Inspection/SAP UXO 15 – October 2010, Review by the RAB on April 25, 2011
- Draft SI/ESI Report Addendum PI 7, PAOC Q and R – January 2011, Comments Presented March 2011, Preliminary Responses April 8, 2011
- Draft Decision Document for No Additional Action/ No Action PI 7, PAOC Q, and PAOC R – March 2011, In Review
- Draft Proposal Plan for AOCs J and R, and SWMU 7 – February 2011, Comments Presented on April 6, 2011
- Final RI/FS SWMU 1 Coordination Report – April 2011
- Draft Pilot Study and Supplemental ESI for SAP PI 4 – April 2011, In Review
- Draft Record of Decision for SWMU 1 – April 2011, In Review

- Draft EE/CA for Surface Removal of MEC at MRS UXO 13 – Comments Presented on April 20, 2011
- Draft NTCRA for Surface MEC at MRS UXO 13 – Preliminary Comments Presented on April 20, 2011

He also made reference to the “Vieques Sustainability Task Force,” which has as one of its objectives the sustainable development of the island and the creation of jobs. This group has been divided into work sub-groups. On April 6, 2006, the members of the “Task Force” visited the site in order to understand the complexity of the project.

As a side note, he mentioned that the EPA has awarded two grants to the Historic Conservation Trust of Vieques; one for environmental education and the other for the conservation of the bioluminescent bay.

He also made reference to two activities carried out by “Manta Sabado” in February and March. The first dealt with the impacts of stormwater on aquatic resources and the second with groundwater in Vieques framed within the perspective of the cleanup work. Wilmarie Rivera also made reference to the documents that Danny mentioned and to other monitoring and control activities by PR EQB, including site visits, reviews of sampling, and participation in technical meetings.

Wilmarie said that the next day, Wednesday April 29, would be a workshop on the analysis of human health risks, and encouraged the meeting participants to attend. Wilmarie mentioned that there would be a training workshop held for public enforcement agencies (police, firefighters, etc.), to train them to handle discovery of munitions in public areas. The training is planned for the end of 2011.

She also briefly mentioned two activities that were conducted in March: a meeting held between regulatory agency project managers and the Navy on March 15, and an Environmental Technical Sub-Committee meeting to discuss the presentation of the Health Risk Analysis workshop on March 16, 2011.

One member of the RAB commented that he was worried that the people of the Task Force were saying that they needed to speed up the cleanup activities. He emphasized that the cleanup has taken longer because they are doing things correctly. He is worried that if the process is sped up they will begin to omit munitions areas and thereby diminish the quality of the work.

Danny and Wilmarie responded by emphasizing the fact that the group that is dedicating itself to the cleanup of Vieques is only one part of the Task Force, and that this work group covers several other areas, which should allay any concerns.

## **7. Updates by FWS, (Rich Henry/ FWS). See presentation for more details.**

Rich Henry mentioned that Mike Barandarian is the new Manager of the Wildlife Refuge on Vieques and presented his credentials.

Mike Barandarian supported what Daniel Hood expressed about the dwarf forest. He also mentioned that the incorporation of the land use after the cleanup would not be an easy process and that it would require all parties involved to express their needs and come to consensus. He said that the island of Vieques is one particular case and that they are finding specific solutions for each site. He mentioned that in the future in the public areas in the western part of the east side of the island there will be facilities for public use, differing from the restricted areas to the east of the OP.

He then mentioned that TICATOVE, a turtle conservation Non for Profit Organization on Vieques presented two posters at the World Congress of Turtles in California. The posters were very well received by the general public since the information presented indicated that the situation of the turtles on the island is favorable when compared with other parts of the world.

## **8. Closure**

The Navy will communicate with the members of the RAB to plan an internal meeting with them to discuss upcoming technical documents.

The next RAB meeting will be planned for mid-July.

Susana Struve, CH2M HILL thanked the participants for attending and ended the meeting at 9:15 PM.