



Vieques Investigation and Cleanup
Navy Facilities Engineering Command (NAVFAC)
Atlantic
RESTORATION ADVISORY BOARD
Meeting Number 26

6:00 p.m. - 9:00 p.m., August 25, 2010
Lighthouse, Vieques

MEETING MINUTES

Attendees:

Mike Barandiaran/FWS	Stacie Notine/RAB member
Mitsuka Bermudez/TICATOVE	Barbara Orsillo/PIKA
James Brantley/Navy	John Orsillo/PIKA
Kevin Cloe/Navy	Chris Penny/Navy
Michael Díaz/ RAB member	Brenda Reyes/EPA
Mike Green/Navy	Madeline Rivera/Navy
Rich Henry/FWS	Wilmarie Rivera/EQB
Dawn Hayes/Navy	Daniel Rodríguez/EPA
Brett Doerr/CH2M HILL	Katarina Rutkosky/TRC
Daniel Hood/Navy	Pedro Ruiz/Navy
Douglas McHoul/Community Member	Susan Silander/FWS
Colleen MacNamara/ RAB member	Susana Struve/ CH2M HILL
Lirio Márquez/ RAB member	Diane Wehner/NOAA
John Martin/CH2M HILL	Dave Whitall/NOAA

1. Welcome and Introductions

The Meeting began at 6:15 PM. Kevin Cloe (Navy Co-chair) welcomed everyone.

2. Ecological Characterization of the Marine Resources of Vieques. Diane Wehner and Dave Whithall – NOAA. (See attached presentation for details):

Discussion Points:

- When did the sampling occur? Started in May 2007, with one additional sampling in event in Oct 2007
- Did you do collect data on the weather conditions? Yes. All this information is included in NOAA's report.
- The 162 constituents you mentioned, how do they compare with Navy list of Chemicals of Concern? Suspect that there is overlap, but would need to compare the chemical lists to confirm.
- How do sediment quality guidelines compare to regulatory guidelines? This varies by constituent; we focused on guidelines for ecological effects. NOAA values use some of the same values included in the Ecological Risk Assessment Protocol for the CERCLA program; NOAA ecological screening values have a high degree of confidence.
- Where does the radioactive background data come from? NOAA considered regulatory guidelines, and selected background values found in the literature for the region; they are not specific to Vieques.
- Have you looked at coral contamination elsewhere in the Caribbean? Yes – NOAA has published results for some of the other nearby locations; overall concentrations are similar between Vieques and these locations.

3. Site Inspection/Expanded Site Inspection Report, 7 Consent Order Sites and 16 PI/PAOC Sites. Brett Doer/CH2M HILL. (See attached presentation and handouts for details on each site):

Brett presented a summary of the general CERCLA process to put in perspective the steps followed to address these sites, and explained the Preliminary Assessment/Site Inspection decision process, describing each of the 26 East Vieques Consent Order and PI/PAOC Sites investigated. This report was submitted to the RAB for their review and has since been issued as final.

Discussion Points:

- Stacie Notine: It seems to me that there are discrepancies between the RCRA and CERCLA guidelines. Originally some of these sites were being investigated under RCRA, how can you validate the information?
Brett Doerr – there were 12 sites originally under RCRA on the east side. Both regulations follow a parallel track that is very similar. The analytical data from the original RCRA Consent Order for the Remedial Facility Investigation (RI) was validated before the sites were evaluated under CERCLA. Good chronologies for the sites are presented in the PA/SI and SI/ESI reports. All data used in making decisions for the sites have been thoroughly evaluated to ensure they are appropriate for this use.
- Stacie Notine: The Environmental Baseline Study (EBS) did not undergo regulatory review, why?
Brett Doerr - the land transfer required an EBS. This is not a regulatory document, but applicable data from the EBS were used in the RCRA and CERCLA studies and were therefore provided to the regulatory agencies for review.

- When you describe Step 7 – Determine if information and data available for site are sufficient to support decision - , I assume the identification of the actual location boundaries is imperative?
Brett Doerr – What is important is that the studies determine the boundaries of contamination associated with each site. Step 7 of the decision process ensures that sufficient data have been collected before the decision for a particular site is made. For example, in the expanded site investigation, we determined more data was needed for 4 sites, so additional data are being collected in order ensure confidence in the ultimate decisions made for these 4 sites.

4. Fish and Wildlife Service Update - Rich Henry

Mike Barandiaran and Rich Henry summarized some of the current information related to the Vieques Wildlife Refuge:

- There is a position available for a person to work with FWS and the Navy supporting cleanup activities. We have the available funding.
- Susan Silander/FWS stated that the refuge manager position has been announced to the public. Many applications were received and are currently under review. We should be able to announce the list of final candidates soon and expect to be able to fill the position by the end of year.
- Map of areas of concern - Mike Barandiaran/FWS: following a petition from some RAB members FWS agreed to develop map where areas of special concern (having ecological and cultural significance), based on community input, can be identified so they are included and given special considerations when conducting investigation and cleanup activities (if they can be independently confirmed). One goal is to avoid problems like that encountered with the vegetation clearing in the Eastern Conservation Area. Mike showed a draft map of sites of ecological significance, and an overlay map of the cultural resources. He explained that this is a conceptual map which will allow the public to add key and specific information on ecological and cultural resources they believe exist on Vieques. The idea is for members of the public to provide this information to FWS so it can be added to the map, assuming the information qualifies as a “special ecological/cultural resource” and can be independently verified. Such was the case of the “pond with flowers” – a year-round water spring which was not included in any previous maps. Information about this site was provided by a member of the community. FWS investigated the site with support from the Navy and confirmed its existence. The site may need some restoration since there are many invasive species, but it is now included on the map.

Discussion Points:

- What is an important area? Taking into consideration the history of Vieques from 1851 when the island had nearly all natural vegetation, the changes began with the sugarcane production across all but the steep hilltops. The primary forests around the hilltops were replaced by secondary forests. Timber was a short term industry but it too caused the habitats to change, and rivers went dry. Vieques at one point had 20,000 head of cattle. This, plus the introduction of non-native plant species and the Navy training exercises, resulted in the ecosystem we have now. There are some pockets of secondary forest we call eco-tone areas with at least 60 years of growth; these are what we consider important habitats. Some examples include dry forests, lagoons, and mangroves. There’s a lot of local knowledge in the community.

- What is the plan to distribute the map and request community input? – Mike explained that the maps thus far have been only presented to the RAB. We expect members of the RAB to discuss this with their neighbors, asking them to give us information; this will be a word of mouth process. The Navy will add information about the process for community input on the map to their monthly flyer.
- Other suggestions included community members working with the schools so the children can ask their parents and grandparents about potential important areas, and contacting nursing homes where older members of the public may have some information about a particular place. You may consider contacting folks in St Croix, where there is a number of extended families from Vieques.
- Mike stated that FWS does not have the resources to work on this full time, which is why we are relying on the RAB to help the agencies gather the information. This mapping process will be a short life-span (weeks to couple months) because the cleanup is moving fast and we want to identify these potential important locations and habitats soon so we can consider them in the cleanup process.
- Funding for plant restoration on the eastern end of Vieques: Rich explained that FWS has been able to procure funds to support this activity starting on October 1st. Mike is gathering expertise for the plant restoration project right now and requests input from the RAB before a plan is developed and later evaluated by the Navy.

Discussion Points:

- Is there a timeline for the restoration plan? – Mike – I spoke to different professors (Breckon and others), but the recent strike at the University of Puerto Rico (UPR) is slowing down the progress, but as soon as the funding procurement process is completed, we expect to start with this project before the end of year.
- Rich added that these funds are from the Department of Interior and they are very flexible, they won't go away, and they can be used for a variety of projects. FWS will coordinate with other parties so efforts won't be counterproductive. Every year additional funding can be requested. Susan Silander made it possible to have a greenhouse in Vieques so we can start planting seeds and developing seedlings; the greenhouse should be constructed in the next couple of months. UPR experts will be involved in supplying and growing these plants.

5. Summary of Expanded Range Assessment/Site Inspection (ERA/SI) Report - Daniel Hood/Navy. (See presentation for details).

Daniel presented a summary of the ERA/SI Report stating that the investigation was completed at 17 munitions response sites: 11 sites were recommended for Interim removal actions to reduce immediate risk; 4 sites containing munitions of explosive concern (MEC) were recommended for Remedial Investigations / Feasibility Studies; 3 sites were recommended for additional investigations to determine if MEC is present; and part of one site (UXO-17) was recommended for No Further Action since MEC is unlikely to be present.

Discussion Points:

- Will the water be surveyed? Yes, we will start with a survey. The process requires underwater divers, and is a complicated process. Currently the scope of the water delineations is still in its conceptual phase.
- Do you keep specific records of what kind of items you find? Yes, all of this information can be found in the report appendices
- Stacie Notine: Other sites have databases for munitions. It seems to me your information is old and incomplete. Daniel Hood and Kevin Cloe responded that all items found are identified, processed, and registered in a database. This information is available in the reports. The munitions removal process uses different tools to gather all the data, including information from ground truthing, historic information, aerial magnetometer, and ground transects. We know the specifics of what has been found.

6. Regulatory Update

Environmental Quality Board.

- Wilmarie Rivera: Wilmarie introduced Katarina Rutkowski and Scott Heim who are EQB's consultants for human health and eco risk assessments, respectively. Wilmarie stated that her consultants are available for the RAB if there is a technical question/issue they would like to discuss.
- Wilmarie spoke about the site visit by the Governor of Puerto Rico and other local/state representatives, FWS personnel, and EPA regional administrator. The visit was to provide updates on the cleanup activities. It was important for these agencies to be aware of the clean up progress, the difficulties of working in the field due to the harsh conditions, and how the agencies are working together to remove dangerous munitions.

Environmental Protection Agency.

- Danny Rodriguez stated that he too attended the visit along with EPA Regional Administrator.
- The EPA Regional Administrator met with senior Navy representatives to discuss ways in which the cleanup might be accelerated. Based on meetings she had with some local community members, she would like to see if the information process to the public may be enhanced. There is a multiagency task force being formed to discuss these two issues.
- Since the underwater work will be upcoming, EPA is also willing to meet with community members to discuss this issue and answer questions and concerns.

7. Meeting closing

The meeting finished 9:06 PM. The next meeting will be held on October 27, 2010 at the Vieques Lighthouse from 6:00 to 9:00 PM.

Vieques Restoration Advisory Board Meeting

Action Items

	Date	Issue	Action	Status
1	May 18, 2010	AOC I area near the active Quarry operation has noted hydraulic fluids/oils on the ground; RAB member is concerned that this may have an impact on groundwater.	PREQB and MOV to investigate and take action as necessary. This site is not associated with any Navy site.	On-going: Verify status with EQB.
2	May 18, 2010	RAB member requested information on in-situ technology being used at AOC E and I.	Navy to forward web link to ORC website or other technical literature on this technology.	Completed – Refer to Attachment 1
3	May 18, 2010	RAB member is concerned with clothes of workers picking up contaminants and bringing them into the public community.	Refer to the analysis results from the sludge at the vehicle washing area; Navy to discuss this issue with the contractor's corporate Safety office.	On-going: data being evaluated by contractor's safety office.
4	May 18, 2010	RAB member requested a map of the ECA MEC locations.	CH2M HILL will provide copy of map showing this information	Completed – Information available on the ES/SI sent to the RAB
5	May 18, 2010	RAB member requested that the FWS Important Habitat Map include other historically significant species along with references to explain the historical significance of the plant species that are not T&E.	FWS to coordinate with the public to make necessary additions/revisions to their map. CH2M HILL should provide FWS copy of Navy "Species of Concern Map" to be able to accurately define down to the grid level where each of these important habitats are located.	Completed – Aug, 2010 Refer to this meeting minutes. Map is available for community input
6	May 18, 2010	RAB member requested more technical details of the information contained in the Final Master SOPs, Protocols, and Plans for Risk Assessments	Navy to coordinate with NOAA, EPA, EQB, FWS and contractors to prepare presentations on this topic.	Completed – Aug 24, 2010 Interagency Eco-Risk Assessment Workshop was held at the Vieques Conservation Trust

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8	May 18, 2010	Navy offered the RAB a meeting with Jim Pastorick (EQB consultant) to explain construction and contents of munitions found at Vieques.	Navy to coordinate with EQB to establish a date and time to meet with RAB.	On-going
9		The Vieques Charter needs to be updated to reflect changes in membership and other RAB administrative items	The Navy will send the RAB members a track change version of the charter. RAB member will get together internally to review the proposed changes.	In progress– Proposed revisions sent to the RAB on Sept 24, 2010. Expect revisions from the RAB on Oct 18, 2010.
10	Aug 25, 2010	Stacie Notine requested printed copies of the Response to Comments from the last set of documents sent to the RAB		Completed – a set of RTC was mailed to Stacie at the beginning of September, 2010
11	Aug 25, 2010	Lirio Marquez requested a printed copy of the Master SOPs, Protocols, and Plans for Risk Assessments		Completed - a copy of the document was mailed to Lirio at the beginning of September, 2010

Attachment 1. Information on in-situ technology being used at AOC E and I.

Here is a list of where it has been used, published by FMC (producer of sodium persulfate):

<http://www.envsolutions.fmc.com/Klozur/ResourceCenter.aspx>

Currently, some of the most easily accessed documents describing ISCO with sections specifically on persulfate are the 2005 ITRC ISCO Guidance doc, and the EPA ISCO doc. The ITRC guidance is at the following link:

<http://www.itrcweb.org/guidancedocument.asp?TID=13>

The EPA reference is attached and is an excellent resource.

There is also ESTCP-funded "research" that was led by Colorado School of Mines (Dr. Robert Siegrist) There is a Fact sheet about the project at:

<http://www.estcp.org/Technology/ER-0623-FS.cfm>