



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

RESTORATION ADVISORY BOARD (RAB)

Meeting Number 51

7:30 p.m. – 9:00 p.m., November 16, 2016, Punta Mulas Lighthouse, Vieques, PR

MEETING MINUTES

Attendees:

Dan Waddill -- Ex-Officio RAB Member, NAVFAC Atlantic	James Larkins – Community RAB Member
Kevin Cloe -- Ex-Officio RAB Member, NAVFAC Atlantic	Stacie Notine – Community RAB Member
Daniel Hood – Ex-Officio RAB member, NAVFAC Atlantic	Myrna Pagán – Community RAB Member
Madeline Rivera – NAVFAC Atlantic	Carlos Connelly – Community Member
Daniel Rodríguez – Ex-Officio RAB Member, EPA Region 2	Adele Ferrer – Community Member
Susan Silander – Ex-Officio RAB member, USFWS	Jose Gómez – Community Member
Mike Barandiarán – Ex-Officio RAB member, USFWS	June Landrum – Community Member
Juan Babá – Ex-Officio RAB member, EQB	Janet Larkins – Community Member
Donald Shaw – USAE	Doug McHoul– Community Member
Brett Doerr – CH2M	Mary Kay McHoul– Community Member
John Martin – CH2M	Luis A. Melendez – Community Member
Susana Struve – CH2M	Hector Olivieri – Vieques Emergency Management Office
Luther Landrum – Community RAB Member	Juliana Ramos – Community Member

These minutes represent a summary of the meeting presentations, comments, questions, and action items and are not a verbatim transcript of the meeting.

Topics Discussed:

Opening and Introductions	
Susana Struve (CH2M/Facilitator)	The meeting began at 7:30 p.m. Participants were welcomed to the Vieques Environmental Restoration Program 51 st RAB meeting. Earlier in the evening, the Navy held the Public Meeting for the SWMU 6 Proposed Plan.
Dan Waddill (Navy Program Manager)	Dan greeted the participants, discussed the agenda and the meeting protocol, indicating that there will be an update regarding the site visit to Cayo la Chiva; the Navy's recent activities and the regulatory agencies oversight.
Friends of Cayo La Chiva Update	
James Larkins (Community RAB Member)	<ul style="list-style-type: none">• Mr. Larkins provided information from a presentation that was originally developed following the August 2 public meeting, discussing an alternative land use plan for Cayo la Chiva. The plan was developed based on a site visit held on October 8, when over 20 people visited the area, including 3 members of the RAB, and members of the community group named "Amigos de Cayo la Chiva" (Friends of Cayo La Chiva).• Mr. Larkins introduced Carlos Connelly ("Chasty") who read a summary of the proposed land uses, aiming to protect the natural resources while using the area for recreation. He described the area as a dry forest that offers exceptional views. Friends of Cayo la Chiva propose the development of trails, access ramps, observation points (sunset and sunrise), small floating decks for kayaks, and a bigger deck for motor boats, camping areas, interactive information centers powered by solar panels focused on flora and fauna, archeology, etc. He stated that the plan calls for smart use of local materials.• Mr. Larkins highlighted the group's inclusive and dynamic decision-making, and expressed there are still opportunities to suggest ideas for proposed activities to be implemented on Cayo La Chiva (regardless of a visitor's physical condition). The deadline for submitting comments on the Proposed Remedial Action Plan for Cayo la Chiva to the Navy and the regulatory agencies is February 24, 2014.• Mr. Larkins thanked USFWS for allowing access for the visit, to the Navy for providing UXO tech support, and to DNER for providing general support during the visit.
Submunitions Area Removal Action Update	
Dan Waddill (Navy)	Dan provided an update on the removal action for the Submunitions Area on the East side of Vieques. The Submunitions Area is comprised of approximately 75 acres. The land surrounding this area has been cleared providing a good estimate of the type and the numbers of submunitions present. Submunitions present are cluster bombs, which are dangerous because they are small, easily hidden within the vegetation and are sensitive to touch. This is unlike any other area being cleaned on Vieques; it is an

	<p>extremely dangerous place for USFWS and DNER to manage natural resources, for the Navy workers cleaning the area, and for any tourists, local residents, or trespassers who may enter the area. In order for cleanup workers to clear the submunitions safely, the vegetation must be removed, and the Navy has determined that controlled burning is the only safe method for vegetation removal. In addition, air modeling and extensive air sampling over a period of 12 years indicate the burn events comply with air quality standards, and smoke does not reach any homes or businesses, which are 8 miles from the Submunitions Area. These are the reasons why the Navy is moving ahead clearing the vegetation and removing the submunitions from this area.</p>
Community Feedback	<ul style="list-style-type: none"> • Myrna Pagán (Community RAB member) asked if the Navy has procured all regulatory permits to conduct the vegetation and munitions clearing activities using open burning, and said that her understanding is that the open burning practice is controversial as it has an effect air quality and the civilian population. <ul style="list-style-type: none"> ○ Dan Waddill responded that all the activities at the Submunitions Area are being conducted under CERCLA. The Navy, as the CERCLA lead agency, has the authority and responsibility to proceed and address the Submunitions Area, which presents a severe threat of explosion and an imminent and substantial danger. The Navy continues to work with the regulatory agencies to follow the Submunitions Area work plan, which has been repeatedly reviewed and revised to address regulatory comments; however, final regulatory approval of the work plan is still pending. <p>Dan also responded that open burning is the safest method to protect the site workers while cleaning up this very dangerous area. The vegetation needs to be removed in order to clean the area safely. In the last couple of years the Navy has used remote equipment to cut the vegetation; when the equipment ran over the submunitions, some of them detonated, which demonstrates how dangerous this area is. Burning the vegetation using controlled burns exposes the ground surface and allows those dangerous submunitions to be seen and removed. In addition, many submunitions detonate or burn during the controlled burns and are no longer a threat. The Navy considered the air quality implications seriously, and air modeling and extensive air sampling has been performed over a period of 12 years. The results indicate the burn events comply with air quality standards, and smoke does not reach any homes or businesses, which are 8 miles from the Submunitions Area.</p> <p>Dan continued explaining that air emissions modeling was used to determine the direction and impact of the smoke from the controlled burns, showing that the air quality in the community would not be affected by the controlled burning of Submunitions Area. In addition, the Navy has collected over 1,600 air monitoring samples during open detonations and brush fires since 2005. Some of those fires on the east end have been considerably larger than 1-2 acres. The data gathered</p>

include particulate matter 10 microns or less (PM10), particulate matter 2.5 microns or less in size (PM2.5), carbon monoxide, explosives, and metals. Currently there are 3 air monitors installed, 1 in Camp Garcia, and 2 in two different locations within the municipality. The results indicate that the controlled burns are done in a manner that is protective of human health and the environment.

- Stacie Notine (Community RAB Member) asked if the density of munitions in the area warrants a prolonged cleanup process, which impacts the community.
 - Dan responded that the Navy estimates a period of 2-3 years to clear the munitions from the entire 75-acre Submunitions Area. The Navy expects to perform a burn event approximately monthly. He highlighted that the air modeling and air monitoring data has shown that even if the wind is blowing toward the populated areas, there will not be an adverse impact on the community. In terms of the density, Dan explained that the Navy has already cleared most of the Live Impact Area, the 75 acres remaining represent the area where the submunitions density is highest.
- Héctor Olivieri (Emergency Management Office) expressed the availability of the Vieques Emergency Management Office to discuss potential support they could offer to the Navy, and also asked about any impacts the new administration would have on budget allocations to the Vieques cleanup.
 - Dan responded that the Navy does not know what impacts the new administration will have on budget allocations to the Vieques cleanup, but significant impacts are not expected. Historically Vieques has received between \$17 and \$20 million USD per year. For the foreseeable future, the Navy expects to receive around \$17 million USD per year, which will fund an effective Vieques Restoration Program.
- Myrna Pagan asked if there were other agencies doing comparative (controlled) studies to support the data and the conclusions the Navy presents to the public.
 - Dan responded that the air sampling has been done in collaboration with the regulatory agencies to select the methods, constituents to be analyzed, and to review the applicable reports submitted per the CERCLA process.
 - Angela Carpenter from EPA added that the regulatory involvement process starts with a Work Plan issued by the Navy which is reviewed by the regulatory agencies. At the beginning of the air monitoring process, EPA inspected the equipment and the air monitoring stations. EPA may also conduct an inspection of the current stations. The agencies have the opportunity to be involved in the process in other ways, including being able to: review some of the air monitoring data in real time, review the laboratory methods, and ensuring the laboratories selected by the Navy are certified and accredited for each applicable analytical method, and reviewing the data gathered. Reviewing the Navy's data using "split samples" has not been proposed for this area. EPA has done split samples for other media, such as at SWMU 4.

- James Larkins stated that he would be interested in looking at the air monitoring raw data to review the conclusions, including the real time data during controlled burns.
 - Dan replied that the Navy could make the raw data available soon after the controlled event is completed and the analytical results are provided by the laboratory.
- James Larkins asked if the PM10 and PM2.5 analysis include explosive health standards.
 - Angela replied that the PM analysis only measures the physical particulate size.
 - Brett Doerr (CH2M) added that all the explosives sampled and the data analyzed were non-detects, therefore they have no impact on the PM data.
- James Larkins asked if the health standards take into account the specific potential harmful characteristics of each chemical that could be recorded in the PM analysis regardless if its particulate size complies with the controlled standards.
 - Dan replied that the process must comply with all the standards. Explosives have different standards than the PM size. In more than 1,600 samples, explosives have not been detected in the air.

Regulatory Agency Status Updates

US Environmental Protection Agency (USEPA)

- Daniel Rodriguez (USEPA) provided a brief summary of the USEPA local activities related to the cleanup:
 - 1) The Navy continues evaluating the underwater areas (UXO 16) through the Wide Area Assessment; however, technical problems with the boat are slowing this process.
 - 2) During the month of July, USEPA participated in the sampling activities at the aquatic area in Boca Quebrada, taking duplicate sediment samples. The data showed no detections of explosive compounds. Some metals were detected, but they are attributed to background concentrations. USEPA expects the Navy to submit the health risk assessment stemming from this data in late November.
 - 3) A Non-Time Critical Remedial Action (NTCRA) Plan for the northeast side of Puerto Ferro was submitted for review. This action would address the encrusted munitions located at this area. The RAB will have access to that plan towards the end of the week.
 - 4) USEPA received the Draft Engineering/Cost Analysis for the UXO 16 Nearshore Munitions NTCRA for review.

<p>US Fish and Wildlife Service (USFWS)</p>	<ul style="list-style-type: none"> • Mike Barandiarán (USFWS) provided some clarifications to the audience: <ol style="list-style-type: none"> 1) He indicated that the USFWS has not had an administrative assistant and apologized for having the main office closed to the public. They recently received some funding, and the office is now open partial hours (8:00 am to 12:00 pm). 2) USFWS now has a biologist working alongside certain Navy field teams. 3) Regarding the topic of oversight, USFWS cannot provide grants to replicate studies; in some cases, EPA has funding for these type of independent studies. Mike stated that USFWS may be able to support independent studies in other ways.
<p>Community Feedback</p>	<ul style="list-style-type: none"> • James Larkins asked about the “Cabañas de Pata Prieta,” which he heard about at a presentation at the Inter American University describing a proposed project for that area. <ul style="list-style-type: none"> ○ Mike and other members of the regulatory agencies responded that they are not aware of any plans to develop that area. USFWS continues opening trails and promoting local small business on Vieques that follow the mission of USFWS.
<p>Adjournment</p>	
<p>Susana Struve</p>	<p>Susana thanked all the participants for attending the meeting. The meeting was adjourned at approximately 9:10 p.m. The next meeting will be held in February 2017.</p>