

9/29/04-02820



United States Department of the Interior



FISH & WILDLIFE SERVICE

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September 29, 2004

Mr. Chris Penny
Remedial Project Manager
Environmental Division
Atlantic Division (LANTDIV) Code 1822
Naval Facilities Engineering Command
6506 Hampton Blvd.
Norfolk, VA 23508-1278

Re: Draft Phase I RCRA Facility Investigation
Report, Former Atlantic Fleet Weapons Training
Facility

Dear Mr. Penny:

This Draft Phase I Facility Investigation Report (RFI) was prepared to investigate 12 sites located at the former Atlantic Fleet Weapons Training Facility (AFWTF) and specifically identified in the Resource Conservation and Recovery Act (RCRA) Consent Order between the Environmental Protection Agency (EPA) and the Navy, signed in January of 2000. In addition, 23 photo-identified (PI) sites and 12 Potential Areas of Concern (PAOC) identified in the Environmental Baseline Survey were assessed for the potential for offsite migration of site related contaminants.

The objectives of the investigation were: (1) to determine whether or not releases had occurred from the 12 identified Solid Waste Management Units (SWMU)/Areas of Concern (AOC), the 12 PAOC sites and the 23 PI sites; and (2) to identify any of the PAOC and PI sites that have potential Munitions and Explosives of Concern (MEC).

One hundred and twenty eight surface soil samples, 41 subsurface soil samples and 10 groundwater samples were analyzed from the 12 SWMU/AOC. Assessment of the PAOC and PI sites was based on the review of the facility records, historical aerial photo analysis, site inspection and a limited sampling program.

General Comments

While the report notes that surface runoff from the 12 SWMU/AOC sites generally flows south to the sea, very little has been done to determine the transport of possible contamination off the defined boundaries of the sites. In SWMU 1, both topographic maps and aerial photography clearly show an ephemeral stream running through the eastern section of the site. This stream

discharges into a mangrove wetland about 2,000 feet south of the site. No efforts have been made to determine whether there has been transport of contamination into this ecologically sensitive area. The SWMU 2 was a fuel tank farm located on a headland. In spite of the fact that the topography drops off sharply all around the site, sampling was restricted to the immediate location of the former fuel tanks. No soil samples were taken down gradient of the tank locations. The same holds true for the PAOC/PI sites.

Thallium has been detected in numerous samples in this report. Thallium sulfate was used as a pesticide and rodenticide, however, its use was prohibited in 1975. Prior to 1975, it may have been used on Vieques for pest control and this should be investigated by the Navy. The use of thallium sulfate as a pest control product is not the only use of thallium. Thallium is also used in flares and rockets, because it gives off a bright green light.

Signs of “stressed vegetation” have been used extensively to identify contaminated sites during the field reconnaissance of sites, many of which are over 20 years old. Stressed vegetation is usually a sign of recent releases, especially when associated with organic compounds. Vegetation can grow in soils having high pesticide and metal levels without showing obvious signs of stress. The lack of stressed vegetation should not have been a factor in the decision making process of site evaluation.

The document selectively presents analytical data for each site. Rather than present a table with a list of all the compounds detected at a particular site, the document selectively presents only those compounds that exceeded some level of screening criteria. We recommend that all compounds detected at each site be listed with those that are over the screening criteria levels highlighted.

Specific Comments:

Section 1.2.3 Land Use: Conservation Zones were established at AFWTF in 1983. The use of these lands for military activity prior to the establishment of the Conservation Zones concerns the Service. For example, the Eastern Conservation Zone was previously associated with the Live Impact Area. The photographic analysis does not seem to include anything east of OP1, yet significant ground scarring can be seen in the 1970 aerial photographs, within the area later designated as the Eastern Conservation Zone.

Similar ground scarring can be seen in the 1970 aerial photographs at Jalova Point in the Ensenada Honda Conservation Zone. This type of ground scarring is not mentioned in the aerial photo interpretation of either the Environmental Baseline Survey or the Preliminary Range Assessment.

Section 1.2.9 Ecological Resources: This section discusses the ecological resources of the AFWTF. It mentions the establishment of Conservation Zones, but fails to mention that many of the sites being investigated were in military use prior to the establishment of these zones. The section provides a list of federally listed threatened and endangered species, but it does not mention other Department of the Interior (DOI) trust resources like migratory birds. Vieques is

part of the eastern flyway and migratory birds use the wetlands and woodlands of Vieques as a stopover or wintering ground. Possible habitat degradation caused by the presence of contaminants or by future remedial actions should be discussed in future site specific documentation.

Section 2.6 Surface Soil Sampling: Surface soils were collected in June 2000 from surface to 8 inches for some sites and 0-6 inches for others. Proper collection of surface soils for evaluation of both human and ecological risk is important. We recommend that a standard depth and sampling protocol be established.

Section 3.1 SWMU-1 Camp Garcia Landfill: Nowhere in this section is it mentioned that an ephemeral stream crosses the eastern boundaries of the site and terminates in a mangrove wetland farther south. The site boundary should include the streambed down to the mangroves. Samples should be taken along the stream channel and at the mangroves, to determine if there was any off site migration of contaminants into the wetlands.

Section 14 Assessment of PIs and PAOCs: This section is meant to address the comments by EPA and the Puerto Rico Environmental Quality Board (EQB) concerning the previously published Environmental Baseline Survey and Preliminary Range Assessment. The Department of the Interior also submitted substantial comments to the Navy regarding these two documents in a letter dated June 24, 2003. Interior's view was that the documents could have been substantially improved. Although we received a letter, dated August 22, 2003, acknowledging our comments we have never received a formal reply to our comments, nor have we received revised editions of either document.

In the course of field investigations and habitat monitoring, Service biologists have found two additional PAOCs. One is located in the saltflat area of Puerto Ferro where small arms munitions were apparently disposed of in the area (Photo 1). Also two pits or craters were found near the beach on the western shore of Puerto Ferro (see map).

Section 14.2 Data Assessment of PI and PAOC Sites: Throughout this section the phrase "no evidence was found of past releases to the environment" is used to describe many of the PI and PAOC sites. Evidence of past releases consisted of stained soils, stressed vegetation or Navy related activity within the study area. The visual site inspections were done in 2001, nearly 20 to 30 years after any activity was supposed to have taken place. In a tropical system, these criteria are inadequate because a site can be covered with vegetation a year after it has been cleared.

We recommend that all PI sites identified as having persistent ground scarred areas, discolored soils, trenches or fill areas should be investigated through a Phase I RFI or PA (Preliminary Assessment) and not quantified as having no past releases to the environment without soil sampling. Sampling plans would need to be tailored to the specific photo interpretation of the site. If the PI site was identified as having been filled or covered, surface soil samples may not reveal any contamination.

Site aerial photographs in the document are poor even though there are good quality aerial photographs available for all the time periods used by the Aerial Photographic Analysis of AFWTF.

The site boundaries for many of these sites are restricted to what was identified in the aerial photo analysis. No consideration has been given for proximity to sensitive area such as wetlands or bays. Sites PI-5, PI-11, PI-17, PI-20, and PI-21 are all close to mangrove wetlands.

PI-12: Results from the aerial photography for the period from the mid 1970s to 1994 defined this site as a light toned material in a cleared area. We understand this site was observed by a helicopter overflight because it was inaccessible. Please explain how you determined that there was no contamination.

PI-22: The drum labeled DARACEN 19 may have been confused with DARACEM 19, a concrete additive. This area where the drums were found is also very close to a small bay.

PI-23: The document states that access to this site was not possible because of dense vegetation. Aerial photography analysis identified this site as a large pit from 1959-1967. Observation of the site from a nearby observation tower and site inspection in 2001 showed no stressed vegetation and there was no evidence of a pit. This suggests that the pit was filled. Subsurface samples should be taken in the general area along with a geophysical examination with a hand held metal detector.

Section 14.2.2 PAOC Sites: Most of the PAOC sites are located adjacent to or within the existing Camp Garcia compound. Since this area will continue to be used by the Service to store and maintain equipment, stage equipment for road maintenance and provide housing and office space for clean up contractors, we do not object to the proposed No Further Action for the sites associated with Camp Garcia.

We are concerned with PAOCs AA-DD sites which were used as small arms ranges. In addition to being evaluated for munitions, the surface soils should be evaluated for metals and explosive compounds. Shooting ranges can have very high lead levels in the soils which can either be transported off-site or pose a risk to wildlife on-site.

PAOC EE was identified as a former munitions storage area. This area is a headland at the east end of Blue Beach. The terrain drops off sharply from this headland to a rocky shoreline and sand/cobble beaches. The near shore marine environment consists of areas colonized by soft corals and sponges. In addition to an MEC determination, soil samples should be analyzed for metals, explosive compounds and pesticides. Service personnel inspecting the site in June 2003 found large rolls of ground matting and earth berms still at the site. One expended shotgun was found in one of the earth berms.

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PAOC FF was identified as a former gun emplacement site. Service personnel inspecting the site in June 2003 discovered an earth berm and concrete step. In addition to an MEC determination, surface soils should be evaluated for metals and explosive compounds.

Section 14.3 Summary of Recommendations for the PI and PAOC Sites:

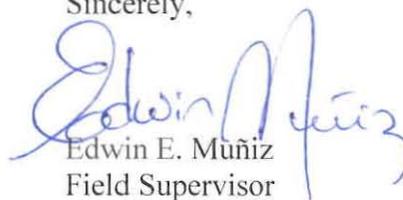
We do not agree with the criteria used to determine that no environmental releases have occurred. The use of visual observations of sites 10-30 years old or more is not adequate. Many of the PI sites suggest some type of filling or earth movement. This might not leave any readily visible evidence of contamination at the surface and may have provided a layer of clean soil. We believe that all the PI sites that suggested pits, burial and discolored earth should be investigated using metal detectors, surface and subsurface soil samples.

Sites to be transferred to the Munitions Response Program, or inspected for potential MEC should also include surface and subsurface soil sampling.

The former AFWTF is now a National Wildlife Refuge and, as such, it is the responsibility of the Service to assure that wildlife and habitats are not being impacted by past actions. The Service also has a responsibility to the user public, employees and researchers that their use, management and enjoyment of Refuge lands are not in any way exposing them to unnecessary risks. As always, the Service is available to work with EPA, the Commonwealth of Puerto Rico, the Navy and its contractors in determining site specific sampling criteria for the Vieques Island National Wildlife Refuge.

Thank you for the opportunity to comment on this project, if you have any questions please contact Felix Lopez of my staff at 787 851-7297 x 226.

Sincerely,



Edwin E. Muñiz
Field Supervisor

Enclosures

fhl

cc:

Vieques NWR, Vieques

Esteban Mujica, EQB, San Juan

Tim Gordon, RCRA Program, EPA, New York

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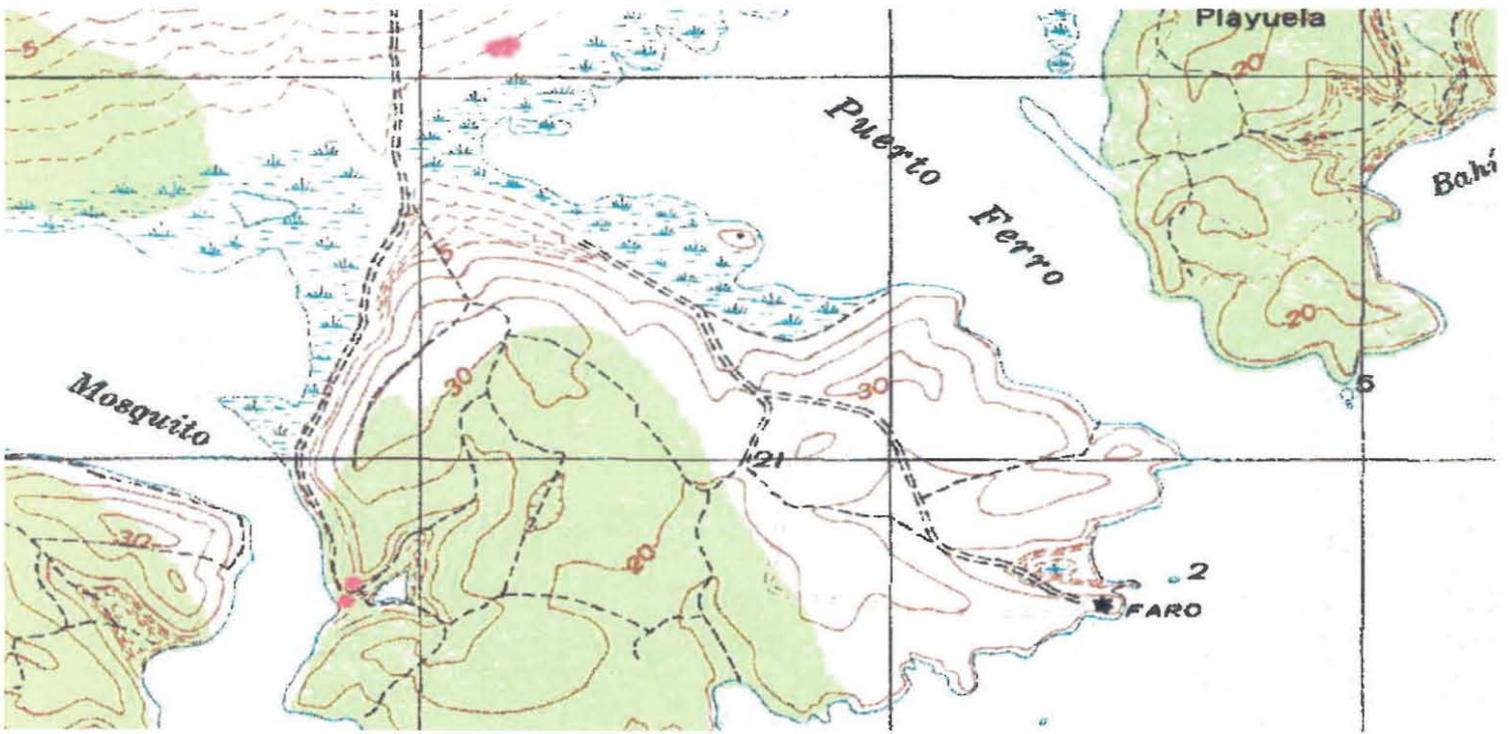
EPA, Vieques

EPA, San Juna

FWS, EC, R4, Atlanta



Photo 1 Small arms ammunition dumped in saltflat adjacent to Puerto Ferro mangroves



Map 1, location of small arms munitions near Puerto Ferro mangroves, and two depressions near the small salt pond adjacent to Mosquito Bay.