UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

AUG 29 2005

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Kevin Cloe
Navy Technical Representative
Installation Restoration Section (South)
Environmental Program Branch
Environmental Division,
Atlantic Division (LANTDIV), Code EV23KC
Naval Facilities Engineering Command
6506 Hampton Blvd.
Norfolk, VA 23508-1278

Re: Naval Activity Puerto Rico (NAPR), formerly Naval Station Roosevelt Roads,
EPA I.D. Number PRD2170027203,

EPA Comments on the SWMU 14 Draft RCRA Facility Investigation (RFI) Work Plan, dated July 19, 2005.

Dear Mr. Cloe:

The United States Environmental Protection Agency (EPA) Region 2 has completed its review of the SWMU 14 Draft RFI Work Plan submitted on the Navy's behalf by Baker Environmental Inc.'s letter of July 19, 2005. Based on our review, EPA has determined that the draft work plan is not fully acceptable. Our basis for this conclusion is discussed in the enclosed Technical Review, prepared for EPA by Booz Allen & Hamilton (BAH). In addition, several comments on the work plan have been submitted by the PREQB and are discussed in the enclosed letter dated August 17, 2005.

In regards PREQB's comment that the Health and Safety Plan (HASP) previously developed as part of the 1995 RFI Work Plan be included as part of this work plan, EPA considers it acceptable to cite the 1995 HASP, provided that the SWMU 14 RFI work plan is revised to include a discussion indicating that the 1995 HASP: a) addresses all potential exposures at SWMU 14; b) reflects current site conditions at the NAPR facility; and c) complies with all current applicable OSHA requirements. Please either include this information in the revised RFI work plan, or include an updated HASP to address those issues. If the 1995 HASP does not require updating, please supply a copy of that HASP to the PREQB.

Pursuant to Condition III.E.1(d)(ii) of the facility's existing RCRA permit, within 60 days of your receipt of this letter please submit a revised RFI work plan for SWMU 14 which

incorporates all necessary changes to address the comments in the enclosed Technical Review and the PREQB letter of August 17, 2005.

If you have any questions, please telephone me at (212) 637- 4167.

Sincerely yours,

Timothy R. Gordon,
Remedial Project Manager
Caribbean Section
RCRA Programs Branch

Enclosures (2)

cc: Ms. Yarissa Martinez, P.R. Environmental Quality Board, w. encl.
Mr. Julio I. Rodriguez Colon, P.R. Environmental Quality Board, w. encl.
Mr. Mark Kimes, Baker Environmental, w. encl.
Ms. Kathy Rogovin, Booz Allen & Hamilton, w/o. encl.

ENCL. 1

TECHNICAL REVIEW OF THE DRAFT RCRA FACILITY INVESTIGATION WORK PLAN SWMU 14 FIRE TRAINING PIT AREA

NAVAL ACTIVITY PUERTO RICO CEIBA, PUERTO RICO

REPA3-1203-059
August 18, 2005

I GENERAL COMMENTS

1. The proposed sampling locations are focused within and immediately surrounding the current training pit. While this layout may adequately assess this source of contamination, it is unclear whether the planned investigation will identify residual contamination associated with the former unlined pits and drainage from the pit into the ditch along the adjacent runway, as mentioned in Section 1.0 of the Solid Waste Management Unit (SWMU) 14 RCRA Facility Investigation (RFI) Work Plan (WP) for Naval Activity Puerto Rico (NAPR) dated July 19, 2005. To address this concern, figures in the WP should specifically show the former location of the two unlined pits, the area of visibly contaminated soils excavated during construction of the current training pit, and the path of the nearby drainage ditch. The text should also be amended to discuss the depth and areal extent of soil contamination identified and excavated in 1983, and any confirmation samples collected following excavation operations. In addition, the WP should justify the proposed sampling locations and omission of the abovementioned potential contamination sources and impact areas. Unless sufficient explanation is provided, the SWMU 14 investigation should be expanded to include sampling of native soils below and adjacent to former excavation areas, surface soil samples between the pits and the drainage ditch, and sediment samples in the drainage ditch at and downgradient of the likely point of surface water runoff from the fire training pits.

2. According to the RFI WP, soil and groundwater samples collected during the proposed investigation will be sent to the selected laboratory for analysis for Appendix IX volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), low-level polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), Appendix IX metals, and total petroleum hydrocarbons (TPH) – diesel range organics (DRO) and gasoline range organics (GRO). In addition to these constituents, environmental samples from fire training sites are typically analyzed for dioxins, furans, pesticides, explosives, and fluorotelomer sulfonates (found in fire-fighting foams). The WP should be amended to provide specific justification for omitting these potential contaminants from the proposed scope of investigation, or the scope should be expanded accordingly.

3. In general, the Detection Limits (DLs) presented in Table 3-2 appear to be sufficiently low. However, some of the DLs exceed applicable human health risk-based concentrations (RBC) and/or relevant ecological screening criteria (e.g., PCBs, SVOCs). The text should indicate that all quantitation limits will be reviewed to determine if they are sufficiently low; if not, an evaluation of those constituents that exceed RBCs should be conducted to assess whether they are actually present in the various media at levels of concern.

II SPECIFIC COMMENTS

Section 1.0 Introduction

1. To clarify the scope of this investigation and provide additional explanation for Figure 1-1, the introductory section of the WP should note that SWMU 12 (the Fire Training Area Oil/Water Separator) is located approximately 50 feet northeast of SWMU 14. Operational and investigational interaction between the two SWMUs should also be discussed.

Section 2.3 Previous Investigations

2. To more fully document the extent of contamination identified at SWMU 14 during the Phase I RFI, and thereby provide support for the currently proposed sample locations, a figure should be added to the RFI WP showing Phase I soil sampling locations, analytical results, and RBC exceedances.

Section 3.5.2 Investigation Derived Wastes (IDW)

3. According to this section of the WP, IDW such as soil cuttings, decontamination fluids, and purge water will be collected and stored pending laboratory analysis and determination of appropriate disposal methods. Although this section specifically mentions collection of a liquid IDW sample, no discussion is provided with regard to solid IDW (soil) sampling and analysis. Table 3-1, however, specifies analytical parameters for a solid IDW sample. The text of the WP should clarify whether a unique solid IDW sample will be collected (as suggested by Table 3-1), or if disposal methods will be determined based on results of the other surface and subsurface soil field samples (as suggested by Section 3.5.2).

Section 3.5.3 Decontamination

4. To ensure that no cross-contamination occurs between soil samples, this section of the WP should be modified to require decontamination of the drill rig and soil sampling equipment between *each sampling location*, rather than only between monitoring wells.

Section 4.0 Reporting

5. In addition to the items currently specified in this section, the following discussions and materials should be supplied with the field investigation report:

   - The Facility Investigation section should note any deviations from the approved scope of investigation or sampling locations, and should provide the basis for selection of samples sent to the analytical laboratory.

   - The section describing the nature and extent of contamination should summarize all available data (including the Phase I RFI data from 1996), and specifically indicate the RBC values against which these data were compared. Figures should also be provided to show current and historical sampling locations and areas of investigation.

   - In conjunction with the quality assurance and quality control (QA/QC) results, the Nature and Extent of Contamination section should present an overall assessment of data quality and usability for both new data and data obtained in 1996. Supporting documentation from the laboratory and third party validator should also be provided as an attachment to the report.

   - The field investigation report should included appendices containing any available documentation on previous excavation activities in this area, soil boring and monitoring well logs, field screening results, sample chain of custody documentation, any site photographs taken during the field investigation, and any manifests prepared to document the transport and disposal of impacted soil and/or IDW.

Section 5.2.2 Data Summary

6. The text indicates that the site may be partitioned into areas of concern (AOCs). Given the areal size of SWMU 14, it is not clear that dividing up this particular SWMU into AOCs is logical. Unless each AOC can be shown to describe discrete contaminated areas such that human receptors would be exposed to each one independently, it would be more appropriate to consider the entire area as one AOC.

7. The text indicates that naturally occurring inorganic data from the sites will be compared to NAPR background data prior to selecting chemicals of potential concern (COPCs), and that anlaytes detected below two times the background concentration will be eliminated from the human health risk assessment (HHRA). As outlined in EPA Superfund guidance, *Role of Background in CERCLA Cleanup Program* (OSWER 9285.6-07P, May 1, 2002), EPA has established a policy that constituents exceeding risk-based screening concentrations should be maintained in a risk assessment, regardless of whether those constituents are believed to be from background sources. This enables the risk manager

to have a more complete picture of the risks associated with hazardous contaminants present at the site.

At a minimum, NAPR should discuss elevated concentrations of COPCs that are believed to be background and their contribution to site risks. All COPCs that are believed to be naturally occurring or anthropogenic background should be included in the risk assessment if they exceed risk based concentrations. NAPR should discuss these naturally occurring contaminants and their contribution to site risks in the risk characterization and uncertainty sections of the report.

Since NAPR has presented base-wide background surface soil sampling locations and associated data in previous documents, NAPR should include the following elements to enable a background comparison: a clear description of the decision framework for using descriptive statistics, box plots, statistical comparisons of the means, how outliers and non-detects were evaluated, and all relevant statistical parameters used in the evaluation.

Section 5.2.3 Identifying Chemicals of Potential Concern

8. In the second full paragraph, first full sentence, the text infers that sediment samples will be obtained and screened against RBCs. However, sediment sampling has not been proposed in Section 3.0, Scope of Investigation. Thus, any reference to sediment sampling should be eliminated from this section of the document.

Section 7.0 Schedule

9. Figure 7-1 presents a Gantt chart showing the schedule for SWMU 14 RFI project planing, field work, and reporting tasks. Although Task 13 indicates the timing of field work within the scope of the overall SWMU 14 RFI project, the figure does not identify, or specify the order and schedule of, various subtasks that are projected to occur within this two-month period of time. To more fully guide the field and laboratory effort, this task should be broken down into specific project components including, but not limited to, mobilization, drilling, temporary monitoring well installation, sampling, laboratory analysis, data validation, and demobilization.

10. To expedite reporting on the SWMU 14 RFI effort, NAPR should consider initiating development of the Draft RFI Report (Task 14) concurrent with the latter half of Task 13 (described in Specific Comment 10). It does not seem necessary to wait until all validated data are received to begin preparing the basic report sections and appendices.

Section 8.1 Project Team Responsibilities

11. According to this section of the WP, the Baker Activity Manager/Project Manager (Mark Kimes) will be responsible for directing technical work; managing project staff, costs, and schedule; and ensuring that QA/QC procedures are followed during the course of the

project. However, this last responsibility is most appropriately performed by an independent party designated solely to monitor QA/QC without regard to project staff, costs, and schedule. On Figure 8-1, John Mentz is slated as senior technical advisor and QA/QC oversight, and may be a more appropriate choice to fill this role. The text should be clarified accordingly, or should further explain Mr. Mentz's intended role in this project.

Table 3-2 Method Performance Limits

12. The analytical methods listed in this table for use during the SWMU 14 RFI field effort should be updated to reflect the most current version of SW-846 methods (e.g., SW8260B, SW8270C). For assistance in identifying current methods, please refer to EPA's SW-846 online manual at www.epa.gov/epaoswer/hazwaste/test/main.htm. If an older method has been specifically selected for this investigation, the text should provide clear justification for that decision.

ENCL. 2

COMMONWEALTH OF PUERTO RICO/OFFICE OF THE GOVERNOR

Environmental Quality Board

August 17, 2005

Timothy Gordon
Caribbean Section RCRA Program Branch
Environmental Protection Agency
290 Broadway, 22nd Floor
New York, NY 10007-1866

Draft RCRA Facility Investigation
Work Plan SWMU 14
Naval Activity Puerto Rico
Ceiba, Puerto Rico
PR2170027203

Dear Mr. Gordon:

The above mentioned document was received on August 8, 2005. On the Fire Training Pit Area (SWMU 14), an estimated of 120,000 gallons of waste solvents, fuels and oils were burned during fire training exercises. Additional items burned in this area included wood, trash, plastic, fuel filter elements, oily rags and other debris. Training activities lasted from three to four hours and were conducted two to four times a month. The training consisted of Navy personnel simulating an aircraft crash by igniting pieces of aircraft with two to three 55 gallons containers of JP-5 fuel per training session.

There were previous assessments conducted at SWMU 14. As part of the 1996 RFI, a total of five surface soil samples were collected at the locations where the highest PID readings ranged from 21.1 parts per million (ppm) to 79.2 ppm. Fourteen SVOCs, twelve being Polynuclear Aromatic Hydrocarbons (PAHs), one congener of PCB (Aroclor-1260), and TPH diesel and gasoline range organics were detected in surface soil samples. From the Human Health Risk Assessment done, Chemicals of Potential Concern (COPC) were identified by comparing the chemicals in surface soil samples to Residential USEPA Region III Risk-Based Concentrations (RBCs)(current in 2000). The following chemicals exceeded the residential RBCc values, and therefore retained as COPCs for further analysis: benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, dibenzo(a,h)anthracene and indeno(1,2,3-c,d)pyrene.

In July 2000, both EPA Region II and the Navy agreed on an interim decision document that outlined that no additional site characterization would be performed until fire training activities ceased at this site since no human health risks were identified. On March 31, 2004, the fire training activities were suspended and therefore this RFI Work Plan is being developed to support a final investigation with the anticipated resolution of a decision of final site disposition.

The objective of this RFI is to determine if any contaminants are present from past operation of the fire training pit to the extent practical from the completion of the field activities. A human health and ecological risk assessment will be conducted utilizing the analytical results from this investigation to assess risks to human health and the environment.

From the evaluation done to this document, the Land Pollution Control Area has the following comments:

- **Comment #1-** In Section 3.1 (Soil Sampling and Analysis Program) it is established that the specific laboratory and third party validator will be determined at a later date. The facility must ensure to comply with Puerto Rico Law # 97 (June 4, 1983), Law for the Regulation of the Chemist profession in Puerto Rico. This law establishes that all data report must be certified by a license chemist authorized to practice the profession in Puerto Rico.
- **Comment #2-** In Section 3.5.5 (Health and Safety Procedures) the document establishes that the Health and Safety procedures that will be employed during the investigation can be found in the base RFI work plan (Baker, 1995). The Health and Safety procedures must be included as part of this work plan.
- **Comment #3-** The company in charge of performing the site investigation, must notify with at least one week of anticipation the starting date of the works to the Environmental Quality Board (EQB) representative. The EQB representative is Mr. Manuel Vargas. To contact Mr. Vargas you my use one of the following:
  - letter- Manuel Vargas
    Hazardous Waste Permit Division
    Environmental Quality Board
    Box 11488
    Santurce, Puerto Rico 00910
  - phone-787-767-8181 ext. 2806
  - e-mail- manuelvargas@jca.gobierno.pr

If you have any question, please contact Mr. Manuel Vargas at the above phone number.

Cordially,

Julio I. Rodríguez Colón
Manager
Land Pollution Control Area