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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY - REGION II

290 BROADWAY

NEW YORK, NEW YORK 10007-1866

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CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Stephen C. Wood, Captain, U.S. Navy
Commanding Officer
U.S. Naval Station Roosevelt Roads
TSC 1008 Box 3001
Code NO
FPO AA 34051-3001

Re: RCRA Facilities Investigation (RFI)- Comments on Draft RFI
Work Plan
U.S. Naval Station Roosevelt Roads
RCRA/HSWA Permit No. PR2170027203

Dear Captain Wood:

The United States Environmental Protection Agency (EPA) Region II has received the March 1995 Draft RFI work plan, submitted by Baker Environmental on behalf of the Navy. EPA cannot approve the Draft RFI Work Plans as submitted. Review of the RFI Work Plan revealed numerous deficiencies that will result in the incomplete site characterization of the SWMUs/AOCs required to be investigated pursuant to the terms of the 1994 Final RCRA/HSWA Permit for your facility. Among the most significant and recurring deficiencies are the following:

- proposed laboratory analyses do not cover all Appendix IX constituents;
- analyses for asbestos and explosives were not included for SWMUs 1, 2, and 3;
- the proposed Work Plan does not fully list the specific constituents that will be analyzed;
- the proposed method for analyzing total petroleum hydrocarbons typically underestimates concentrations of aviation gasoline, may not detect Bunker C fuel oil, and is prone to producing false positive in the presence of decaying vegetation;
- subsurface soil characterization is inadequate;
- the background sampling strategy will not characterize "regional" background conditions;

- proposed data validation procedures are not provided for analytical methods which lack NASA validation procedures;
- the Work Plan contains numerous inconsistencies in the proposed number of samples; and
- EPA comments, transmitted with my letter of December 19, 1994 and discussed during the January 13, 1995 meeting with Navy representatives, on the Draft Final Pre-Investigation Corrective Measures Screening Report (PICMSR) are not incorporated into the RFI Work Plan.

For many SWMUs/AOCs, the RFI Work Plan will not provide site characterization adequate to fulfill the requirements of the 1994 Final RCRA/HSWA Permit. In many cases, the proposed analytical program comprise a fraction of the "full Appendix IX constituents" which the text of your Draft RFI Work Plan states will be analyzed. As submitted, only 8 of the 19 Appendix IX metals will be analyzed for, and herbicides and organophosphorus pesticides will not be analyzed at many SWMUs/AOCs where their presence may be reasonably hypothesized. Also, since the proposed analytical program uses the generic term volatiles and semivolatiles, numerous other volatile and semivolatile organic compounds in the Appendix IX list may not be analyzed for.

Related to the issue of incomplete chemical characterization, the Navy has not proposed to analyze explosives or asbestos at SWMUs with landfilling histories. This issue was discussed with Navy representatives during the January 13, 1995 meeting with EPA staff in Region II's New York offices. Such analyses are particularly necessary at SWMUs 1, 2, and 3.

At many SWMUs where full characterization is required by the RCRA Corrective Action Permit, proposed subsurface sampling points will characterize only one soil sample per soil boring. Such limited sampling will not be sufficient to provide vertical profiling of potential contamination. This inherently limits any calculations for estimating the volume of potential contamination. Additional soil sampling will be necessary to provide the necessary characterization.

The proposed locations for background soil and ground water samples will not define regional background concentrations of various chemicals because the locations are, in some instances, downgradient or otherwise near potential source areas. The proposed locations appear to be placed in a manner to define background concentrations at different SWMUs rather than for the facility as a whole. This strategy may be useful in determining whether contamination at one SWMU may be influencing another, but it is not acceptable for characterizing regional background concentrations which can be used as potential action levels.

The text states that all laboratory analytical results will be validated by a third party in accordance with NASA Guidelines. However, NASA does not provide guidance for most of the SW-846 methods. Therefore, it is inappropriate to cite these guidelines for most of the SW-846 methods. The NASA Level C data validation guidelines (NASA document 20.2-047B) require the contractor to provide validation procedures for methods not specifically listed in the guidance. Because such validation procedures were not provided in the RFI Work Plan, it is impossible to verify that proposed sampling will produce data of acceptable quality for the RFI requirements. RFI data validation should follow either EPA's "Contract Laboratory National Functional Guidelines for Data Review", or the Region II "CERCLA Quality Assurance Manual", a copy of which was previously provided to Mr. James Szykman of LANTDIV. Alternative validation procedures for RFI data must be approved in advance by EPA.

The RFI Work Plan, particularly the Data Collection Quality Assurance Plan (DCQAP), contains numerous inconsistencies in the number of samples proposed for collection. The numbers proposed in the text do not coincide with the numbers presented in Table 4-2 or depicted in the various figures of the DCQAP.

Section 3.0 of the RFI Work Plan (Description of Current Conditions) and the DCQAP discuss/summarize the Navy's interpretation of the adequacy of existing media characterization and the extent of additional investigation needed for each SWMU/AOC. However, for most SWMUs/AOCs, the present extent of media characterization remains replete with data gaps/deficiencies, as discussed with Navy representatives during the January 13, 1995 meeting with EPA and in the Technical Review of Draft Final Pre-Investigation Corrective Measures Screening Report transmitted with my letter of December 19, 1994. The RFI Work Plan needs to be modified as to the conclusions regarding the adequacy of previous site characterization and risk conclusions based on that characterization. To avoid the redundancy of restating the concerns expressed in EPA's December 1994 Technical Review of the PICMSR, the following summarizes the two most relevant site characterization issues.

The first is that the adequacy of proposed soil sampling cannot be fully evaluated because insufficient data was provided during the Supplemental Investigation. Specifically, information is needed that describes the locations and depths of all soil samples collected during the Supplemental Investigation. Currently, the data are inadequate to determine if subsurface characterization occurred at several SWMUs. This data gap significantly limits the ability to determine if proposed soil sampling is adequate to supplement the existing database.

The second issue is that sample results from the Confirmation Study are not applicable for site characterization because the data quality associated with these samples is unknown. These issues were agreed upon by all parties in the January 13, 1995 meeting with EPA. As such, all references to Confirmation Study data must be eliminated from the text. This also applies to previous sampling locations illustrated on proposed sampling location maps. The uncertainties and potential impacts of the Confirmation Study sampling results are described in detail in the Technical Review of Draft Final Pre-Investigation Corrective Measures Screening Report transmitted by my letter of December 19, 1994.

Enclosed (Enclosure 1) is a Technical Review which contains our detailed comments regarding the proposed investigation plans for those SWMUs/AOCs for which a full RFI is required (SWMUs 1, 2, 3, 7, 8, 9, 11/45, and AOC B), and also comments regarding the following portions of the RFI work plans: Project Management Plan (PMP), Data Collection Quality Assurance Plan, and Data Management Plan (DMP).

Enclosure 2 contains our comments regarding the investigation work plans for those SWMUs/AOCs requiring a First Phase RFI investigation, and additional comments on the DCQAP and PMP.

EPA requests that within 45 days of your receipt of this letter, the Navy submit revised RFI work plans to fully address the comments contained in this letter and the two enclosures.

Please contact Mr. Tim Gordon, of my staff, at (212) 264-9538 if there are any questions.

Sincerely yours,

Andrew Bellina, P.E.
Chief, Hazardous Waste Facilities Branch

Enclosures

cc: Commander L.V. Marchette, NAVSTA Roosevelt Roads w/encls.
Mr. P.A. Rakowski, P.E., LANTDIV w/o encls.
Mr. Carl A. Soderberg, 2EPA-CFO w/encls.
Mr. Israel Torres, EQB w/encls.
Mr. Art Wells, LANTDIV w/encls.