UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, NEW YORK 10278-0012

SEP 2 9 1994

Mr. John Kolicius, Project Manager
Naval Facilities Engineering Command
10 Industrial Highway
Code 1821, Mail Stop 82
Lester, PA 19113-2090

Re: EPA Assessment of Data Needs to be Addressed During the Development of the *Remedial Investigation Workplan for 17 Sites*, Naval Weapons Station (NWS) Earle, Colts Neck, New Jersey

Dear John:

Several iterations of verbal and written comments/responses on the Navy's draft *Remedial Investigation Workplan for 17 Sites* (December, 1993) for Naval Weapons Station Earle, have gone back and forth between the Navy and the Environmental Protection Agency (EPA). The purpose of this letter is to provide the Navy our position (see attachment) on outstanding issues which do not appear to have been clearly resolved through EPA's March 18 and April 20, 1994 letters to the Navy and the Navy's responses of May 2, 1994 (by letter) and July 15, 1994 (by fax). These represent EPA's "bottom line" concerns and are presented here so to minimize future misunderstandings. It is our position that a final report on these 17 sites must contain the requested information in order for us to make informed remedial action decisions. It is our expectation that this portion of the project can move directly into the risk assessment/feasibility study/decision stage based on this information.

I assume that all other agreed upon changes acknowledged in the Navy's two above correspondences will be incorporated into the *Remedial Investigation Workplan for 17 Sites* to be submitted to EPA in November, 1994. We will consider this document to be "draft final," and subject to the applicable Parts of the Federal Facility Agreement (FFA) between the Navy and EPA for the NWS Earle site.

I look forward to meeting and discussing with you, at your earliest convenience, the issues addressed in the attachment to this letter. If you have any questions, please call me at (212) 264-6667.

Sincerely,

Jeffrey Gratz, Project Manager
Federal Facilities Section

Attachment

cc: B. Marcolina, NJDEP, w/attach.
G. Hermanni, NWS Earle, w/attach.
LCDR S. Smith, NWS Earle

EPA Assessment of Data Needs to be Addressed During the Development of the *Remedial Investigation Workplan for 17 Sites*

General Comments:

1. Two rounds of synoptic water level measurements on an area-wide (not just site by site) basis should be conducted in order to get a more accurate indication of groundwater flow direction locally and regionally. This is very important for sites where elevated levels of contaminants have been detected but the groundwater flow direction is uncertain and a source of contaminants has not yet been determined.

2. The Navy should provide a map in the draft final *RI Workplan* illustrating surface drainage pathways throughout the base along with sample locations that will be adequate in scope to afford an effective evaluation of potential environmental impacts on the base's watersheds. The results of the RI sediment/surface water sampling program should give us a good indication as to whether (1) specific sites have caused an impact to the local environment, and (2) there has been additive effect from many small sites on a regional level.

3. We have found that using a 100 ml/min. low flow pump for the collection of unfiltered metals samples has been highly effective in reducing the apparent metals concentration in groundwater samples. The turbidity of the sample is reduced dramatically, thereby reducing the concentrations of suspended solids (including metals) in the aqueous sample. If the turbidity of the sample cannot be sufficiently reduced, we recommend taking a filtered and unfiltered sample.

Site-Specific Comments:

Site	Comment
1	**a.** Prior to any sampling or installation of additional monitoring wells at Site 1, the site map should be redrawn to accurately reflect the dimensions of the Ordnance Demilitarization area as well as existing site features. Review of the applicable EPIC aerial photographs shows the current maps to be inaccurate. We understand that this work is being performed for this and all other sites and will be included in the draft final workplan.
	b. Elevated concentrations of volatile organic contaminants and explosives were detected in groundwater and soil at this site. The results suggest that well MW-01-001 is not an upgradient location. Soil sampling (for VOCs, metals, explosives and nitrite/nitrate) should be conducted to the north and west of the current sampling grid.
	c. A two-phased approach should be used to define the extent of groundwater contamination at the site: (1) screening should be conducted (cone penetrometer, hydropunch, soil-gas, etc...) to get a general sense of the magnitude of contamination, and (2) based on the results of the screening, monitoring wells should be installed at specific locations and screened at specific depths for the purposes of more accurately defining the contaminant plume and long-term monitoring. Groundwater sample parameters should include VOCs, metals, explosives, nitrite/nitrate, BOD, TOC, and COD.

6 **a.** Confirm dimensions of the landfill area and previous sample locations for the revised site map.

b. At least 3 sediment and surface water samples should be taken in the wetland area adjacent to the site. In addition to sample parameters listed in the *RI Workplan* (December, 1993), surface water should be tested for hardness.

c. Groundwater samples should also be analyzed for pesticides and dissolved oxygen and screened for explosives.

9 The SI states that "no drainage swales or streams are located on the site." However, the RI Workplan makes mention of a "small tributary drainage to Wagner Creek." Document the existence of this drainage. If it exists, 2 sediment/surface water samples should be taken downstream from the landfill area. An upstream sample should be taken as well.

12 Confirm the location of Site 12. The SI Report states that the site is a "paved area located to the east of Building R-10." However, the Initial Assessment Study (IAS) states the area of concern is "behind Building R-14." The IAS does not imply that the spill area is necessarily at the Building R-10 loading dock. Specific sample locations should be shown in the revised Workplan.

13 **a.** The DPDO yard is a large area for which historical information is lacking. Uncharacterized fill material is present throughout the site. For these reasons, and because this is a heavily used area adjacent to streams and wetlands, a significant investigation of this area is necessary. The investigation should include a magnetometer survey coupled with confirmation test pitting to determine whether there are contaminant sources at the site.

b. We concur with the State's comments #13 and #14 of February 24, 1994, regarding test pitting and monitoring well installation. In order for wells to give us useful information, the influence of regional groundwater flow direction on the local flow regime must be considered. It is doubtful that the currently proposed wells will allow us to make definitive decisions regarding the need for remedial action at Site 13.

c. Additional surface water/sediment samples should be collected in the marsh area adjacent to the site.

d. Surface water and groundwater samples should also be analyzed for landfill parameters. Groundwater should also be analyzed for explosives. Soil and sediment should also be analyzed for explosives and TPH.

15 Was bilge water dumped on both sides of the railroad track? If so, or if unknown, soil borings should be drilled on both sides of the track.

16/F **a.** Based on discussions with NWS Earle staff, a leachfield/drainage area has been confirmed through review of photographs and/or design plans for the site. This area should be added to the investigation.

b. We strongly suggest that a soil gas survey be conducted at the site. The petroleum spilled at the site probably has a high BTEX component that would make this survey useful. Because of the size of the site and potential multiple source areas, the survey would be very useful in making more informed decisions regarding monitoring well locations and numbers. With quick data retrieval, these decisions can be made during the RI field program with EPA and NJDEP input.

c. We concur with the State's comment #16 regarding PCB analyses.

17 **a.** Sampling in the marsh area (surface water/sediment) adjacent to the site should be considered as part of a comprehensive program to monitor environmental impacts due to multiple possible sources.

b. The landfill slope should be stabilized.

23 **a.** We suggest an additional well upgradient of the area of concern (to the east of building D-5).

b. Groundwater from all wells should be analyzed for explosives.

c. Surface water/sediment samples should be taken in the drainage entrance to the marsh area adjacent to the site. Samples should be analyzed for TAL metals, VOCs, SVOCs, and explosives.

d. Historical records should be reevaluated to determine if any other contaminant source area exists at this site.

24/25 No additional comments.

27 The text should state that sampling parameters will include pesticides, PCBs, VOCs, SVOCs and metals.

29 **a.** The exact location of the PCB spill should be confirmed. Although the concentration is not "high", the 3.5 ppm PCB concentration found between 6 and 10 feet at MW-5 (supposedly not at the PCB spill location) invites more questions than it answers.

b. Assuming the PCB spill location is correct, subsurface samples are more important than surface samples since, presumably, the excavated spill area was filled with clean material. Our concern is whether residual PCB contamination remains at depth.

c. We believe that the construction of the proposed hazardous waste storage facility near Site 29 can proceed without having an effect on this investigation, or any future remediation that may be necessary.

L No additional comments.

Q We concur with the State's comment #20 regarding Site Q.