



DEPARTMENT OF THE NAVY

NORTHERN DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
BUILDING 77L, U.S. NAVAL BASE  
PHILADELPHIA, PENNSYLVANIA 19112-5094

*N. L. ...*  
N60478.AR.000108  
NWS EARLE  
5090.3a

IN REPLY REFER TO

5090  
Ser 1274/1421/GFH  
JUN 20 1991

U. S. Environmental Protection Agency  
Attn: Paul Ingrisano  
J. Javits Federal Building  
New York, NY 10278

Re: INSTALLATION RESTORATION PROJECT, NAVAL WEAPONS STATION  
(NWS) EARLE, COLTS NECK, NJ

Dear Mr. Ingrisano:

This letter forwards responses to the U. S. Environmental Protection Agency's (EPA) review comments dated April 1, 1991 on the Site Investigation (SI) Work Plan of November 1989.

We are currently developing a revised sampling matrix for the SI sites. In order to expedite matters, this sampling matrix will be faxed to you and the New Jersey Department of Environmental Protection (NJDEP) by June 24, 1991 for review. Please be prepared to discuss your comments on the the sampling matrix and the enclosed responses by July 24, 1991. At that time, I will propose a conference call between the EPA, NJDEP, the Navy, and our contractor to clarify any outstanding issues regarding the SI Work Plan.

The SI Work Plan will be finalized within 30 days, upon agreement on a sampling approach, and forwarded to the appropriate parties.

If you have any questions please contact me at (215) 897-6432.

Sincerely,

Gerald F. Hoover  
Remedial Project Manager  
By direction of the Commanding Officer

Encl:

(1) NORTHNAVFACENGCOM Responses to Comments

Copy to:

NJDEP, Joseph Freudenberg  
NWS Earle, Greg Goepfert

Internal Copy to:  
Jerry Hoover  
Nick Stencel



**RESPONSES TO EPA COMMENTS  
DATE APRIL 1, 1991  
ON THE SI WORK PLAN FOR  
NWS EARLE (NOVEMBER 1989).**

**ATTACHMENT 1**

Responses to General Comments on the SI Workplan are as follows:

1. Acronyms and abbreviations are "spelled out" in the body of the SI document. A table of acronyms and abbreviation will be included in the SI report.
2. Tables 4-1 and 4-2, and Figure 4-1 were deleted from the document; the list of tables and figures will be corrected. Plate I will be included in the final submittal. Contaminants of concern are discussed in subsequent sections on a site by site basis.
3. North arrows on all figures will be checked and corrected if necessary.
4. The recently completed review of air photos has enabled Weston to improve several of the site map figures.
5. A summary table of the sampling program has been prepared.
6. Slug tests will be performed on several groundwater monitoring wells consistent with the RI/FS Workplan. This will be included in the revised SI Workplan.
7. Test pits are planned for the wood disposal areas at sites 8 and 9. The landfill boundaries at site 6 are fairly well defined in the field and from air photos. Therefore we do not propose test pits (for boundary delineation) at site 6.
8. The QUAPP and HSP will be modified for the SI as requested with dated reference.
9. The three "deficiencies" noted in comment #9 are addressed on a site by site basis as follows:
  - a. The methods for selecting soil sampling locations include, visual evaluation (site visits with the Agencies) in addition to several

other technical considerations. These other considerations include suspected source area locations identified in IAS, surface water flow direction and site topography, ground water flow direction, mobility of suspected contaminants, potential exposure pathways, and general outlay of the site with respect to surrounding features.

- b. Site specific sample analytes are selected based upon the potential contaminants associated with the respective site. For example, during the RI the suite of analytes for site 19 was expanded to include several additional lead and cadmium samples. These were the contaminant associated with that site.
  - c. As stated in response to comment #4 several revised site maps will be included in the SI Workplan.
10. The objective of this site investigation is to confirm the absence or presences of contaminants at the sites identified for this study. NOAA recommended sampling will be considered after a determination of site contaminants is completed. The Navy may be able to provide sampling results from other investigations that will meet NOAAs requirement



## ATTACHMENT 2

Responses to the specific comments on the SI Workplan are as follows:

1. **Section 5.3 - Site 1: Ordnance Demilitarization Site** The Ordnance Demilitarization, was the site used for explosives disposal by burning and is similar to the Remedial Investigation Site 11. Therefore it is recommended that the investigative approach be similar. This will be reflected in the final Work Plan.
  - a. Air monitoring will be conducted as required in the HSP; Soil samples will also be screened as part of routine protocol, however since the contaminants of concern at site 1 are not volatile this is not a critical screening tool.
  - b. The site's history as an explosives disposal area is well known and consistent with the present site appearance as well as historical aerial photographs. Shallow, near surface borings will be analyzed for explosive compounds and TPH. We feel that site history is sufficiently known to limit the range of analytes as was done for site 11.
  - c. Again, to be consistent with the approach taken at site 11 and other sites where ground water monitoring is being conducted, three monitor wells will be installed and sampled for full TCLNTAL.
  - d. Base neutrals will be added to the soil analysis.
  
2. **Section 5.4 - Site 6: Landfill West of Normandy Road**
  - a. During a recent site inspection by the TRC it was generally agreed that although site 6 and 17 are adjacent they can be investigated separately with respect to drainage and groundwater flow. However, it will probably still be practical to address them together in any future remedial plan.
  - b. We will present sites 6, 17 and 12 (battery storage area) on a single location map.
  - c. Ground water samples will be analyzed for the full TCL/TAL to be consistent with the base wide groundwater monitoring program.

- d. The borings are intended to identify waste boundaries as part of the SI. The need for further waste characterization by borings or test pits will be considered if the site continues into the RI phase.
- e. Since the landfill area is presently covered with buildings, paving or soil, we do not think that surficial sampling in this area will tell us anything about the landfill.
- f. Surface drainage ways at the toe of the landfill have been inspected. Since no leachate flow has been observed at the landfill, water sampling is not proposed. However sampling locations will be identified and sediment samples will be obtained for TCL/TAL.
- g. The NJDEP air monitoring results are questionable. However, because this is an active area, the Navy may want to consider some type of air monitoring.
- h. Historical air photos show what may have been a sewage treatment plant at this locations. The proposed configuration of monitoring wells will cover this area.
- i. There is no record of any landfill material being removed from the site during construction. Based on the nature of the land (fill over marsh) some sort of deep foundations were probably used such as drilled or driven piles. These methods do not require large scale removal of surficial materials.

3. Section 5.5 - Site 17: Disposal Area Behind Training Barge, Waterfront Area

- a. See responses to comments (2.a through 2.g).

4. Section 5.6 - Site 8:

- a. Site 8 has been addressed separately by the NAVY on a fast track basis because the Navy needs the area for parking in the near future. A test pit sampling program has been proposed to the EPA.

5. **Section 5.7 - Site 9 : Landfill Southeast of "P" Barricades**
  - a. Since site 9 is historically the same as Site 8 we propose that a similar test pit, soil sampling program be conducted. Air monitoring with an HNU or OVA will be done during the excavation.
  
6. **Section 5.8 - Site 12: Battery Acid Spill Site, Waterfront Area**
  - a. There is no documentation of any battery acid spill at this site; it was a battery storage area and the occurrence of spills is strictly speculation. The loading dock and asphalt paved access area has not changed.
  - b&c. During the TRC site visit in February, 1991, a collection drain and drainage ditch (adjacent to the site) was identified as the most logical sampling area. Sediment samples will be obtained from the collection drain for TAL analysis.
  - d. During the TRC site visit the general consensus was that soil borings at the site were not justified at this time.
  
7. **Section 5.9 - Site 13: Defense Property Disposal Yard**
  - a. We are attempting to identify the area from air photos. Once identified surface soils should be sampled for PCB's and Semi-volatile organics. We see no rationale for conducting a full TCL/TAL scan since the site use is known.
  
8. **Section 5.10 - Site 14: Defense Property Disposal Office, Warehouse**
  - a. Site 14 is a 16,000 - square foot warehouse where reportedly "one to several ounces" of mercury was spilled and clean up. The incident reportedly occurred over twenty years ago inside the building. Considering the large size of the building, the quantity of mercury spilled and the fact that the spill was cleaned up, we believe that visual inspection for pathways and evidence of release and the recommendation to analyze samples for full TCL compound is unreasonable.
  - b. There is no record of disposal of the mercury.

9. **Section 5.11 - Site 15: Sludge Disposal Site Near Waterfront South Gate**

- a. Site 15 is not a sludge disposal area; although this term has been used to refer to site 15, it is actually a railroad siding where oily bilge water was reported to have been discharged. Soil gas is not recommended since any volatile fraction remotely present in the bilge water would have since dissipated considering the time frame. Available historical air photos of the area show the railroad siding where the activities took place but no specific evidence is visible of the activity itself.
- b. Surface sediment samples will be taken for BNA analysis which relates to the hydrocarbons involved. Samples will be located in the drainage way parallel to the siding and other depressions where the water would tend to collect.
- c. The need for deeper sampling and/or monitor wells will be determined based on the results of the surface sampling.

10. **Section 5.12 - Site 16: Fuel Line Connecting Buildings C-19 and C-50**

- a. The exact location of the fuel leak is not known, although the approximate location of the line is easy to identify. We can limit the area of concern to less than 100 linear feet from personnel recollections. Because of the age of the spill and type of fuel we do not think that soil gas will show anything.
- b. After locating the pipe with geophysics, soil borings will be completed at 10-15 foot intervals along the pipe line and sample of water or soil collected at the shallow water table. Continuous spoon samples will be taken from the pipe depth to the water table. There is no reason to take surface samples; the spill was several feet deep and the original soils were removed in the excavation.
- c. Since the issue is potential impact on the ground water, one sample per boring at the shallow water table is sufficient.

11. **Section 5.13 - Site 23: Paint Chip Disposal Area Adjacent to Building D-5**

- a. Soil vapor screening is not currently proposed at this site.



- b. A select number of samples will be subjected for full TCL and TAL analysis.

12. **Section 5.14 - Site 24 Closed Pistol Range**

- a. Locations and depths of hand auger soil samples will be determined from visual characterization of the ranges, considering the concentration and depth of slugs in the berm area.
- b. Regionally, the natural sediments have abundant concentrations of iron. Therefore iron is not included as an analyte. Zinc will be added to the list analytes for this site.

13. **Section 5.15 - Site 25 Closed Pistol Range**

- a. See comment 13 (d).
- b&c. There are rail ties all over the base; many of them are attached to rails. It is likely that the ties at the firing ranges are structurally used to delimit the firing areas.
- d. The plan of action at site 25 will be the same as that being conducted at site 24.

14. **Section 5.16 - Site 27 Projectile refurbishing area**

- a. The criteria for selecting the soil sample locations at this site is clearly stated. "Two soil samples will be obtained from the disposal area. One soil sample will be obtained from the swale adjacent to the disposal area." These areas have the highest potential to reflect potential contaminants associated with refurbishing activities.

A visual inspection and soil vapor screening will be conducted at the site.

15. **Section 5.17 - Site 28: Waste Oil Tank**

Closure status of the Oil Tank is being addressed under a separate investigation. This information will be included in the SI Report.

16. **Section 5.18 - Site 29: PCB Spill Site**

- a. A soil removal and sampling effort was undertaken in the spill area to remove all stained soils. It was reported that approximately 27



cu. ft., or 2 to 3 (55) gallon drums of materials (soils) was removed. Post excavation confirmation sampling results showed level of PCBs at less than 35 ppb.

17. Site GG Water Treatment Plant

- a. The waste water treatment plant is a regulated facility and does not belong in the SI program.