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NWS EARLE
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, NEW YORK 10278

AUG 12 1991

Mr. Gerald F. Hoover
Project Engineer, Code 142
Environmental Restoration Branch
U.S. Navy, Northern Division
Naval Facilities Engineering Command
U.S. Naval Base, Bldg. 77 Low
Philadelphia, PA 19112-5094

Re: NWS Earle Site Investigation (SI) Workplan

Dear Mr. Hoover:

The U.S. Environmental Protection Agency (EPA) has reviewed the U.S. Navy's (Navy) responses (June 20, 1991) to EPA's comments (April 1, 1991) on the SI Workplan and more justification is needed before EPA can agree to the Navy's responses.

General comments are included in Attachment 1, while specific comments are included in Attachment 2. I recommend that a meeting and site visit be held during the week of August 18, 1991 to address EPA's comments. In accordance with the Interagency Agreement, the Navy should submit a Final SI Workplan to EPA thirty (30) days after this meeting.

If you have any questions concerning this matter, please contact me at 212-264-6609.

Sincerely yours,

A handwritten signature in cursive script that reads "Paul G. Ingrisano".

Paul G. Ingrisano
Project Manager
Federal Facilities Section

Enclosures

cc: Captain W.M. Migrala, Jr., NWS Earle
G. Goepfert, NWS Earle
J. Freudenberg, NJDEP
R. Johnson, Weston

ATTACHMENT 1

General Comments on the Draft SI Workplan are as follows:

4. The Final SI Workplan should include individual site maps that clearly delineate the site locations and site boundaries.
5. The Tables summarizing the Analytical Requirements for Soil and Sediment Samples and Groundwater Samples should follow the format of the Remedial Investigation/Feasibility Study (RI/FS) Workplan and should be included in the Final SI Workplan.
6. The Final SI Workplan should state where the slug tests are to be performed (i.e., which sites and which wells).
7. The map for Site 6 on page 5-12 does not clearly show the site boundary. If through the aerial photographs available, the site boundary can not be clearly defined, then test pits must be taken at Site 6.
9. For several of the sites, three general deficiencies were noted in the SI Workplan:
 - a. The methods for selecting sampling locations were not adequately described or may not be sufficient. The Final SI Workplan should include this information. If soil vapor screening is applicable (e.g., if organic contaminants are suspected), it should be used in conjunction with visual evaluation to select sampling locations.
 - b. Adequate justification was not provided for the selection of target analytical compounds in the sample media. The samples from each site should be analyzed for all potential contaminants associated with that site and should be included in the Final SI Workplan.
 - c. See the response to comment #4 above.
10. Recommendations for Sampling and Biological Assessment by the National Oceanic and Atmospheric Administration (NOAA).
 - a. Additional sampling to evaluate impacts on NOAA resources is recommended in the drainages of Ware Creek and Pine Brook, including Hockhockson Brook. There are 15 specific locations that should be sampled:

Ware Creek Drainage

- one station in the eastern tributary of Ware Creek between New Jersey Route 36 and the confluence with the western tributary (surface water and sediment)

- two stations in the main stem downstream of the confluence between the eastern and western tributaries (surface water and sediments)
- three stations in the marsh at the outflow of the storm drain (sediments)

Hockhockson Brook Drainage

- one station in the western tributary near Site 28 (surface water and sediment)
- one station in the western tributary, midstream (surface water and sediment)
- one station in the western tributary near the confluence with the eastern tributary (surface water and sediment)
- one station in the eastern tributary near Site 13 (surface water and sediment)
- one station in the eastern tributary, midstream (surface water and sediment)
- one station in the eastern tributary near the confluence with the western tributary (surface water and sediment)

Pine Brook Drainage

- one station in the main stem, upstream (near Site 5) (surface water and sediment)
- one station in the main stem, just below the confluence of the two unnamed tributaries and above Squankum Road (surface water and sediment)
- one station in the main stem, just upstream of the confluence with Hockhockson Brook (surface water and sediment)

b. Sediment samples should be analyzed for substances on the Target Compound List (TCL) and the Target Analyte List (TAL), including cyanide, sediment grain size, and total organic carbon. The surface water samples should be analyzed for volatile organic compounds (VOCs) and TAL substances, including cyanide, pH, hardness, and total suspended solids. It would be best to conduct surface water sampling during periods of both high and low flows, but if only one round of sampling is possible, low flow would be preferred.

c. Sampling on the unnamed tributary to Comptons Creek downstream of Site 7 and on the unnamed tributary to Mingamahone Brook downstream of Site 19, as proposed in the RI/FS Workplan, should also be conducted for both surface water and sediment, and

samples should be analyzed as described above.

d. Sufficient sampling of groundwater in the Ware Creek drainage is proposed in the SI Workplan, but the samples should be analyzed for VOCs and TAL substances, including cyanide. (Note: the SI Workplan proposes to analyze samples for TCL substances, which includes VOCs, but TAL substances, including cyanide, need to be added.) These analyses will provide the most comprehensive, yet cost-effective, information about effects of the sites for the protection of NOAA resources.

e. There are at least three reasons why this additional investigation should be undertaken: (1) contaminants may have migrated long distances over time; (2) the objectives of the RI programs so far have not included a broad understanding of the site for its effects on natural resources; and (3) at least for the sites identified for the SI program, the sites may not receive further study. This additional investigation will allow NOAA to discharge its responsibility for protection of trust resources.

11. NOAA's comments on the Navy's responses (June 20, 1991)

a. This work under the SI portion of the Installation Restoration Program may be the last study that these 16 sites receive. It is important that NOAA's concerns about these sites are addressed in this part of the project.

b. NOAA's position on sampling at this facility was expressed in an earlier site review (December 11, 1989 letter from Paul Ingrisano to Adreinne Townsel, Attachment I, page 8, paragraph 2)

"In general, investigations at NWS Earle should take the philosophy that waste disposal has occurred over wide areas, on several watersheds, and over a long time period, [and may have been greater in the past], and therefore, contamination may be present in environmental media over a wider area than might [otherwise] be expected. The additional sampling recommended [by NOAA] takes into account such circumstances. This level of effort is warranted even though previous limited investigations did not observe extensive contamination."

c. In contrast to NOAA's position, it seems clear that the Navy's approach to the SI is strict, limited, and minimal. The Navy commits to considering additional sampling only "after a determination of site contaminants is completed."

d. The Navy suggests that it may be able to supply information from other work that will meet NOAA's needs. While it is important to explore and evaluate all alternatives, this circumstance seems unlikely given the sophisticated nature of the information requirements, the general experience that for a field program to be successful it must have well-defined objectives,

and the low level of probability that such a program would have had NOAA's objectives in mind at the start.

e. Overall, in this response to comments and in other communications, the Navy has shown a willingness to consider NOAA's concerns about trust resources, but not a real commitment to gather the information necessary to assess threats to those resources.

12. EPA's comments on the Navy's responses (June 20, 1991) with respect to the Quality Assurance Project Plan (QAPjP).

a. The QAPjP from the RI will also be used here, with an addendum prepared with modifications for these sites.

b. The analytical methods to be employed for this SI should be included in the addendum to the QAPjP to be prepared.

c. Sample analysis for volatile organics are recommended if specific petroleum hydrocarbon compounds are desired at those sites where total petroleum hydrocarbon (TPHC) is of interest. The volatile organic analysis would yield information regarding the presence of benzene, toluene, xylene, and ethylbenzene, in addition to the other TCL volatile compounds.

ATTACHMENT 2

Specific comments on the Draft SI Workplan are as follows:

1. Section 5.3 - Site 1: Ordnance Demilitarization Site, Secured
 - a. In addition to visual characterization, soil vapor screening should be used as a criteria in the selection of soil samples for analysis. If potential contamination is detected by these means, it may be necessary to have more than one sample from each boring analyzed.
 - b. Soil samples should be analyzed for full TCL +30 compounds due to the insufficient nature of the site background information and to the waste burning activities undertaken at the site.
2. Section 5.4 - Site 6: Landfill West of Normandy Road
 - a. The Final SI Workplan should include a separate Plan of Action for Sites 6 and 17.
 - d. Split-spoon soil samples obtained from site borings should be subjected to visual inspection and soil vapor screening in order to determine if contamination exists in this area. Samples should be submitted for full TCL and TAL analysis due to the limited information available on waste types and quantities.
 - e. It is recommended that surficial soil samples be obtained in areas exhibiting visual signs of contamination.
 - f. A visual and soil gas inspection of the adjacent marsh is recommended. If evidence of contamination is found, samples of sediment, and possibly surface water, should be obtained for TCL compound analysis.
 - g. Air monitoring should be completed in and around the recreation building in order to identify any potential risk from VOC's to people using this area.
 - i. Please provide construction drawings for the building built on the landfill.
3. Section 5.5 - Site 17: Disposal Area Behind Training Barge, Waterfront Area
 - a. See comments for Section 5.4, Site 6 (2.a, d, e, f and g).

5. Section 5.7 - Site 9: Landfill Southeast of "P" Barricades

- ✓a. There should be six test pits at this site. Each test pit should be sampled for TCL, TAL, and TPHC, since no surface water, groundwater or sediment samples have been proposed. Also, if groundwater is encountered in any of the test pits, groundwater samples should also be analyzed for the same parameters.

6. Section 5.8 - Site 12: Battery Acid Spill Site, Waterfront Area

- ✓a. Describe the size of this site, if known, and include it in the Final SI Workplan.

7. Section 5.9 - Site 13: Defense Property Disposal Yard

- a. The PA reported this as a storage area for scrap metal batteries and PCB transformers. It is unknown whether leakage from the transformers occurred at this location. EPA recommends, soil sampling be undertaken to assess the degree if any, of contamination by PCBs. Samples should be obtained for full TCL and TAL analysis. Also, a soil gas study would be helpful in determining the presence or absence of contaminants at the site.

8. Section 5.10 - Site 14: Defense Property Disposal Office Warehouse

- a. A visual inspection of this site is recommended. Special attention should be paid to possible drainage pathways, and when they extend outside of the building, any stained soils along the pathway that may indicate a past release. If evidence of a release is noted, samples should be obtained for full TCL and TAL analysis.

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

- a. Attempts to identify the location of this site should include a thorough visual inspection and a soil vapor survey of the suspected area.
- b. When the site is identified, surface and subsurface soil samples should be obtained. These should be analyzed for TCL compounds. The installation of monitoring wells may also be required.
- c. The PA recommends soil borings to be taken in order to assess the extent of contamination.

10. Section 5.12 - Site 16: Fuel Line Connecting Building C-19 and C-50
 - b. This section should include a reference to the planned soil vapor screening (Figure 5-1) and indicate how data obtained during the screening will be used.
 - c. The sampling scheme for the soil borings is unclear. It appears that composites of one foot of soil will be taken at each two-foot interval within the boreholes. This sampling scheme should be clarified.
11. Section 5.13 - Site 23: Paint Chip Disposal Area Adjacent to Building D-5
 - a. If soil vapor screening is not proposed at this site, then Figure 5-1 should be revised.
12. Section 5.14 - Site 24: Closed Pistol Range
 - b. Since iron has been listed as a contaminant at Site 25, it should be sampled for at both Sites 24 and 25.
13. Section 5.15 - Site 25: Closed Pistol Range - Treated Rail Ties
 - b. Table 2-1 suggests that treated rail ties are also present at Site 25, but these ties are not addressed in Section 5.15.
 - c. Soil samples should be taken for TAL, TCL, and TPHC to determine any contamination due to the treated rail ties.
14. Section 5.16 - Site 27: Projectiles Refurbishing Area
 - a. The criteria for selecting the soil sample locations at this site are not stated. Both visual inspection and soil vapor screening should be used to select the location and number of soil samples.
 - b. It is recommended that soil samples be obtained from more than one depth in order to vertically characterize possible contamination.
 - c. The PA recommends that monitoring wells will be installed to determine the extent of contamination and direction of groundwater flow. Additional soil borings should be taken to assess the degree of contamination.

16. Section 5.18 - Site 29: PCB Spill Site, Building C-16

- a. During the proposed review of cleanup records, data from past cleanup sampling should be obtained and reviewed. If this information is not available, or samples were not obtained, sampling should be considered at this site during the SI.
- b. A vandalized transformer, resulting in PCB's spillage, onto and into the surrounding soil, was reported in the PA for the site. Though 120 cubic feet of contaminated soil was removed from the area, EPA feels that further soil sampling in this area is necessary to determine if the soil is still contaminated.

17. Site GG Wastewater Treatment Plant

- a. I am going to send the two comments I had listed in my April 1, 1991 letter to the appropriate person at the New Jersey Department of Environmental Protection. If they have no plans in addressing my comments, then the Navy will have to address them under this SI Workplan.