



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

JACOB K. JAVITS FEDERAL BUILDING

NEW YORK, NEW YORK 10278

11.0 JUL 1992

Gerald F. Hoover
Naval Facilities Engineering Command
10 Industrial Highway
Code 1821, Mail Stop 82
Lester, PA 19113-2090

Re: Site A - Child Development Center

Dear Mr. Hoover:

The U.S. Environmental Protection Agency (EPA) has reviewed the following letter reports from the U.S. Navy dated February 25, May 7 & 27, 1992, and offer the following general comments, while specific comments are included in Attachment 1.

It is rather difficult to make a decision on the risks that may be apparent to the population of children who in the future would be using this portion of the site under a recreational scenario. EPA is extremely hampered by the very suspect nature of the data. For example, the extensive contamination of the blank samples associated with this site brings into question the validity of any conclusions regarding the extent and level of contamination. Many of the compounds were listed as undetected based on the current EPA Region II data validation guidelines of raising the reported detection limit by applying a multiplier to the quantity of contamination found in the blank. The extensive contamination of this site's blanks, particularly with compounds that are not typically considered common laboratory solvents, makes appropriate consideration of the human health and ecological risks difficult. Procedurally, EPA should only be making a recommendation where the data has met EPA's QA/QC standard. With the four carcinogens detected, EPA can not take chances with data that is accompanied by an extensive 'legend' of data qualifiers covering items such as, blank contamination, poor recovery, bad duplicates, etc.

Aside from the **major** drawback surrounding data useability, is the issue of the sequence of events regarding sampling. The Navy originally proposed to take composite samples. In the New Jersey Department of Environmental Protection & Energy's (NJDEPE) March 18, 1992 letter to the U.S. Navy, it required that discrete as opposed to composite samples be taken. In the May 7, 1992 letter report the U.S. Navy claimed that, **in response to the NJDEPE comment**, discrete samples were taken. The samples were actually

taken on March 10, 1992. EPA does not understand that the sampling done on March 10, 1992 could have been done in response to NJDEPE's comments of March 18, 1992 and question that discrete, as opposed to composite, samples were taken as claimed by the Navy, please explain. Compositing samples can mask problems by diluting isolated concentrations of some hazardous compounds below detection limits. Basically, this procedure provides an average concentration over a number of locations and sensitivity is generally sacrificed and consequently, the data will suffer.

EPA is in full agreement with NJDEPE's comments in its letter of March 18, 1992, and would add to the points made there. Specifically, regarding point #5, the ultimate comparison to make is not of the concentrations of the site's soil contaminants with NJDEPE proposed standards, but rather should be one of computed cancer and non-cancer risk estimates, according to the Risk Assessment Guidance for Superfund (RAGS), to EPA's acceptable limits/ranges. In short, determinations and recommendations on risk must follow EPA's methodology as a matter of protocol.

Regarding the four inches of topsoil that is slated to be removed, EPA has concerns here as well. It is possible that this action would expose more contaminants, for the soil sampling effort performed does not make any distinctions as to the vertical pattern of the contaminants. The samples seem to be of the top six inches. If there is a distinct vertical profile of the contaminants, it could be that higher concentrations abound at the lower reaches of the 0 - 6" layer. Another consideration concerns the exposure of workers or trespassers to soil-borne contaminants during the time that the four inch layer of soil is being removed. Perhaps this should be an exposure scenario to be considered (see below).

In summary, EPA recommends that an EPA/NJDEPE approved re-sampling effort is needed. Then, assuming the data adequately passes QA/QC, a scaled down risk assessment (limited to just one or two exposure scenarios) following RAGS, would provide the basis for a determination of acceptable or not acceptable risk. Keep in mind that Site A is part of the larger NWS Earle facility, and there may be opportunities for exposure to children from other portions of the site proper.

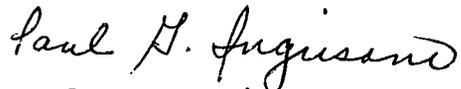
Also, it is important to note that compliance with Section 7 of the Endangered Species Act is an ARAR. If it has not yet been initiated, an informal Section 7 Consultation will need to be requested from the U.S. Fish and Wildlife Service to identify threatened or endangered species which may be associated with this site. This can be accomplished by contacting the EPA.

Wetlands on Site A or potentially impacted by the site must be addressed, as previously referenced. Also, any wetlands impacted through construction activities unrelated to contamination may require permits from the U.S. Army Corps of Engineers and the NJDEPE.

It may be beneficial to conduct a visit to Site A after the Technical Review Meeting on July 14, 1992.

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

Sincerely yours,



Paul G. Ingrisano
Project Manager
Federal Facility Section

Enclosure

cc: CPT W. M. Migrala, Jr., NWS Earle
LCDR J. P. Dell, NWS Earle
J. Freudenberg, NJDEPE

Attachment 1

February 25, 1992

3. Soil Sampling Results

Appendix B was not included.

Figure 2

Why is there a chain-link fence around suggested areas for wetlands delineation, A2?

May 7, 1992

The March 27, 1992 letter from Halliburton NUS, page 3 of 5, are the units ug/kg or mg/kg?

The May 1, 1992 letter from Halliburton NUS, for inorganic data validation is missing Appendices B, C & D; for organic data validation is missing Appendices B, C, D & E.