State of New Jersey
Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
CN 028
Trenton, NJ 08625-0028

Scott A. Weiner
Commissioner

Karl J. Delaney
Director

Mr. Jerry Hoover, Project Manager
Northern Division
Naval Facilities Engineering Command
10 Industrial Highway
Code 1821 Mail Stop 82
Lester, PA 19113-2090

2 JUL 1992

Dear Mr. Hoover:

Re: Naval Weapons Station Earle
Colts Neck Twp., Monmouth County
Remedial Investigation Report - Sections 6,7, and 8

The Department has reviewed the above referenced sections of the draft Remedial Investigation Report. The Departments comments are as follow.

Section 6 - Risk Assessment

1. Toxicity Assessment

The toxicity information for benzo(a)pyrene has been changed (see attached memo, 2/6/92). The oral slope factor is 5.8 per (mg/kg)/day, not 11.5. The inhalation slope factor 6.1 per (mg/kg)/day has been withdrawn. Since PAHs substantially contribute to the risk at some sites, the revised risk assessment should reflect and discuss these changes.

NJDEPE does not recommend that contractors develop their own toxicity values for use in risk assessment. To promote consistency throughout the Superfund program, the contractor should work in conjunction with EPA's Environmental Criteria and Assessment Office (ECAO) to develop an RfD or a slope factor. Weston has developed an RfD for aluminum based on a 1966 multi generational study in mice and one for iron based on maximum RDA. EPA's RfD Work group, representing approximately 30 interagency scientists, has reviewed all available data related to aluminum and iron toxicity and has determined that the data are inadequate for quantitative risk assessment. Since iron and aluminum are major contributors of risk based on the derived toxicity values, the NJDEPE recommends that the contractor submit their methodology to ECAO for approval or retract aluminum and iron as chemicals of concern and discuss their potential toxicity in the uncertainty section.

2. Exposure Assessment

The inhalation rate for children of 16 m^3/day appears in the text on page 6-65 while 10 m^3/day appears in Table 6-22. The inhalation rate should be corrected in the table to 16 m^3/day.

The permeability constants available in Superfund Public Health Evaluation Manual (1986) are currently being reviewed due to numerous inaccuracies and should not be used. In the future, acceptable permeability values are presented in a new EPA document, Dermal Exposure Assessment-Principles and Application, EPA/600/8-91/011B, January 1992, available through the Center for Environmental Research Information (CERI), 26 West Martin Luther King Drive, Cincinnati, OH 45268. If chemical specific PC values are not available in this report or the open literature, the permeability of water can be used to derive a default value.

On page 6-78 and Table 6-29, the reference should be EPA, 1986b for all permeability constants found in the Superfund Public Health Evaluation Manual.

3. Risk Characterization and Uncertainty

The risk characterization text and percentiles must be modified if aluminum and iron are deleted as chemicals of concern.

Section 7 - ARARs

1. Reference is made to the NJDEPE cleanup goals for soils and ground water and Tables 7-10 and 7-11 are cited as listing the appropriate TBCs. The standards presented in Tables 7-10 and 7-11 are incorrect. The correct TBC is the proposed soil and ground water cleanup standards cited in Tables 7-13 and 7-14. It should be noted that Table 7-13 is incomplete (i.e. missing parameters) and must be corrected.

If you have any questions please call me at (609) 633-1455.

Sincerely,

Joseph Freudenberg, Case Manager
Bureau of Federal Case Management

enclosure

c. Paul Ingrisano, USEPA
Ken Petrone, BEERA/DPFSR
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