



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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NWS EARLE
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SEP 17 1998

Mr. John Kolicius
Remedial Project Manager
Naval Facilities Engineering Command
Northern Division
10 Industrial Highway, Mailstop #82
Lester, PA 19113-2090

Re: EPA Comments on the Draft *Feasibility Studies for Site 13 (OU-5) and Sites 3 & 10 (OU-6)*, December, 1997, for NWS Earle, Colts Neck, New Jersey

Dear Mr. Kolicius:

In accordance with Chapter XV of the Federal Facilities Agreement (FFA) between the Environmental Protection Agency (EPA) and the Navy, EPA has reviewed the draft *Feasibility Studies for Site 13 (OU-5) and Sites 3 & 10 (OU-6)* for Naval Weapons Station (NWS) Earle which was received by EPA the week of December 15, 1997. Enclosed are EPA's set of comments. I apologize for the delay.

Please call me at (212) 637-3921 if you have any questions.

Sincerely yours,

A handwritten signature in cursive script that reads "Jessica Mollin".

Jessica Mollin
Project Manager
Federal Facilities Section

Attachment

cc: B. Marcolina, NJDEP (w/attach.)
G. Goepfert, NWS-Earle

EPA Comments on NWS Earle's Draft Feasibility Study for Site 13

Executive Summary. It would be helpful to provide a brief summary of the site risks to provide the reader with a framework to interpret the proposed remediation efforts.

The discussion of the possible use of natural attenuation as a remediation alternative (page ES-4) requires further clarification. What site-specific characteristics are present that will support this as a remediation alternative? No documentation is presented.

Table 2-1. It is unclear why the Agency's draft guidance on assessing potential risks to adults from lead exposure was not also considered, especially considering the potential use of this area as an industrial facility.

Page 2-19. No reference is provided for the proposed procedure of selecting a maximum background concentration over a risk-based concentration. The use of a maximum background concentration may significantly exceed the risk base concentration as was found with iron.

The discussion of Risk Based Concentrations needs clarification as to the basis for the development of these values. The only reference provided is a footnote to Table 2-8.

Table 2-8. The suggested use of the maximum background concentration would result in a Hazard Quotient of 1.7, exceeding the non-cancer risk range of 1.0. Before applying this approach the authors should consider other potential sources of iron in the diet, the toxicity of iron, and determine that this value is protective of public health.

The type of chromium considered should be identified i.e., +3, +6, or total.

Table 4-1. It is unclear how the magnitude of residual risks were quantified to support the conclusions presented under Alternatives 2 and 3. To make this statement, further clarification of the calculations would be needed.

ECTran Model. The assumptions used in the model, and the Monte Carlo simulation approach, should be evaluated to assure they are not underestimating the potential concentrations.

Draft Feasibility Study for Sites 3 & 10:

Executive Summary. It would be helpful to provide a brief summary of the site risks in the Executive Summary to provide the reader with a framework to interpret the proposed remediation efforts.

The discussion of possible use of natural attenuation as a remediation alternative (ES-5) requires further clarification. What site-specific characteristics are present that will support this as a remediation alternative? No documentation is presented.

Tabl 2-1. It is unclear why the Agency's draft guidance on assessing potential risks to adults from lead exposure was not also considered especially considering the potential use of this area as an industrial facility.

Page 2-19. No reference is provided for the proposed procedure of selecting a maximum background concentration over a risk-based concentration. The use of a maximum background concentration may significantly exceed the risk based concentration as was found with aluminum, arsenic, cadmium and iron. It is unclear why the cancer risks from exposure to arsenic in groundwater were not considered.

The discussion of Risk Based Concentrations needs clarification as to the basis for the development of these values. The only reference provided is a footnote to Table 2-8.

Table 2-9. The suggested use of the maximum background concentration for aluminum would result in an exceedence of the PRG based on an HI = 0.1. Similarly, the maximum background concentration for iron would exceed the PRG based on an HI of 1 by a factor of 2. Before applying this approach the authors should consider other potential sources of iron and aluminum in the diet, the toxicity of the chemicals, and determine that these values are protective of public health.

Table 2-15. It is unclear why arsenic was not included in the contaminants of concern as the maximum value exceeds the NJ GWQS standard by a factor of 2.

Table 4-1. It is unclear how the magnitude of residual risks were quantified to support the conclusions presented under Alternatives 2 and 3. To make this statement, further clarification of the calculations would be needed.

General Comments Pertinent to Both Documents:

ARARs

The documents identify a number of potential federal location-specific ARARs (i.e., related to wetlands, floodplains, endangered species, fish and wildlife coordination, and the historic and cultural resources) as being potentially applicable to actions at these sites, but do not provide sufficient information to determine how their requirements were incorporated into the alternatives analysis.

The revised FS should specifically address how these requirements were considered, factored in, or ruled out. In particular, statements in these FSs that the NHPA could be a potential ARAR only "if artifacts are discovered during active site remediation" are improper in light of the fact that cultural resources studies have already been prepared, but apparently not been consulted or followed up on.

In fact, on 2/28/94, we reviewed the Navy's base-wide Cultural Resources Assessment for Naval Weapons Station Earle (Ecology and Environment, Inc., December 1990) and recommended additional steps to ensure that remedial actions would comply with the requirements of the National Historic Preservation Act (NHPA) and related laws.

At that time, we indicated that:

1. The report can be considered a Stage IA cultural resources survey of the facility which has been augmented with additional field inspection. The additional field inspection confirms the patterns of sensitivity which are suggested by the documentary studies. As a result of both documentary and field studies, the report noted the general overall sensitivity of the facility for the discovery of both historic and prehistoric resources. In particular, a number of structures associated with significant activities at the facility still retained sufficient integrity to be potentially eligible for nomination to the National Register of Historic Places. In addition, the field inspection identified specific locations of prehistoric sites, suggesting the potential for discovering many more such sites if a systemic survey were to be carried out.
2. The remedial investigation/feasibility study process indicates the existence of a wide variety of potentially contaminated sites which could be subject to remedial action. To ensure that the Navy's remedial actions are carried out in compliance with the requirements of the National Historic Preservation Act, we recommended that each site be evaluated with respect to the areas of cultural resources sensitivity which are outlined in the cultural resources assessment, and that appropriate field testing at the Stage IB cultural resources survey level be carried out; and,
3. Identification of any significant resources is preferable at the early stages of the remedial action planning process, and cultural resource survey work is most effective when carried out concurrently with ongoing RI/FS investigations and studies because plans can often easily allow for planned avoidance and/or subsequent mitigation through the remedial action itself. Therefore, we recommended that the Stage IB cultural resources surveys be incorporated into the ongoing RI/FS process wherever they are needed.

Thus, the final FSs should utilize the results of the already completed cultural resources analyses to determine whether the NHPA is actually a potential ARAR at these sites. If so, appropriate additional stage 1B studies still need to be completed to ensure compliance with the NHPA.