



DEPARTMENT OF THE NAVY

NORTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
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LESTER, PA 19113-2090

N60478.AR.000525
NWS EARLE
5090.3a

IN REPLY REFER TO

27 MAY 1999

Ms. Alida Karas – Project Manager, Federal Facilities Section
U. S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Karas:

Subject: NAVY RESPONSE TO EPA COMMENTS ON THE DRAFT *RECORD OF DECISION*,
OPERABLE UNIT 4 (OU-4) SITES 14, 20, 22, 23, 24, 25, 27, AND 29, DECEMBER, 1998,
FOR NWS EARLE, COLTS NECK, NEW JERSEY

Dear Ms. Karas:

Annotated responses to each comment from EPA's January 21, 1999 letter and the subsequent February 16, 1999 memo regarding the subject document are enclosed. Draft final text and revised tables for the Record of Decision (ROD) are also enclosed for your review. Text changes in response to EPA comments are highlighted in red. Text referring to potential transfer of property was also slightly revised upon the advice of Navy counsel. The figures for the ROD are not included in this submission since they are unchanged from the draft. Please let me know if the proposed changes are acceptable or if any further clarification is needed.

Upon acknowledgement that the proposed changes are acceptable, a final Record of Decision will be forwarded via NWS Earle for signature by Captain Honey and your Regional Administrator. Please call me at (610) 595-0567 ext. 157 if you have any questions or comments.

Sincerely,

JOHN P. KOLICIUS
Remedial Project Manager
By direction of the
Commanding Officer

Copy to:

Ms. Jessica Mollin – USEPA Region 2 (w/o enclosure)
Mr. Robert Marcolina - New Jersey DEP (w/enclosure - 3 copies)
Mr. Greg Goepfert - NWS Earle, Code 043 (w/enclosure – 2 copies)
Mr. Russ Turner – Tetra Tech NUS (w/o enclosure)

**ANNOTATED REPLY TO COMMENTS
NWS EARLE, COLTS NECK NEW JERSEY
DRAFT ROD FOR OU-4**

Annotated responses to preliminary comments on the draft OU-4 ROD, letter from Jessica Mollin on 01/21/99.

**EPA Comments on the Navy's draft ROD for Sites 14, 20, 22, 23, 24, 25, 27 and 29
(OU-4)**

Bob Wing, Section Chief, Federal Facilities Section

- 1) Page 1-1, Statement of Basis and Purpose, Paragraph 2, Line 1. Since institutional controls are being used at some of the sites, this sentence should state that No Further Action **and Institutional Controls** were selected for OU-4. This should be consistent throughout the ROD.

Reply: Concur. With the addition of the statement "a notation will be placed in the facility Master Plan ... indicating further measures would be required ..." the document no longer is a no further action ROD. The entire report has been revised to reflect the new status (institutional controls) for Sites 20, 22, 23 and 27. Section III of Part I has been completely rewritten to discuss how the low-level threats are being addressed. A new section IV has been added to address Statutory Determinations of CERCLA 121, and discuss applicability of 5 year reviews.

- 2) Page 1-2, Description of the Selected Remedy. This section should include the following:

- a) Which sites have no further action.

Reply: Sites 14, 24, 25, and 29. Text has been revised throughout to reflect this change.

- b) Which sites have institutional controls.

Reply: Sites 20, 22, 23 and 27. Text has been revised throughout to reflect this change.

- c) Which sites have groundwater action/restrictions/monitoring.

Reply: None.

- 3) Page 1-2, Declaration Statement.

- a) As stated above, institutional controls need to be mentioned, including which sites will have institutional controls.

- b) Since residential standards were not met at three of the sites, the Navy needs to expand on what specific measures would be taken before these three sites could be used for residential use. For example, the Navy should include that the sites will be subject to five year reviews and that if the site ownership

were transferred, deed restrictions would be required unless the sites were cleaned up to residential standards.

Reply: Concur. Changes have been made as discussed in reply to comment 1.

- 4) Page II-8, Geology and Hydrology, second paragraph. Need detailed explanation of how groundwater was presumed not to be a problem if no wells were installed at the site. Include language from page II-9, IAS, which “concludes a minimal probable impact based on the presumption that metals in paint chips would not leach to the environment.”

Reply: Concur. Changes have been made as recommended (now on page II-9).

- 5) Page II-12, top paragraph. Again, need to further discuss how groundwater was presumed not to be a problem if no wells were installed at the site. Include language from page II-13, 1995 Remedial Investigation, second paragraph, third line, “No groundwater samples were obtained because the amount of waste disposed, based on observed residues on the soil, was considered to be minimal.”

Reply: Concur. Explanation has been added to text.

- 6) Page II-16, second paragraph from the top. How many wells were screened? Where were the wells located? Which site map are the wells located on?

Reply: Concur. Information has been added.

- 7) Page II-18, second and third paragraphs, page II-19, fourth paragraph. Page II-18, how was groundwater and surface water evaluated? Why was there no action? Page II-19, what was done with groundwater and surface water? Did risk assessment show acceptable risk?

Reply: Information has been provided in the last paragraph of page II-19.

Page II-20, second paragraph. Why were no wells installed at the site? Need explanation.

Reply: Explanation has been added.

- 8) Page II-22, Geology and Hydrology, second paragraph. Again, why were no wells installed at the site. Need discussion.

Reply: Explanation has been added (now on page II-23).

- 9) Page II-24, Summary of Remedial Actions, third paragraph. Perimeter does not define the area. Include length and width.

Reply: Concur. Additional data has been inserted in text (now on page II-24 – II-25).

10) Page II-27, Nature and Extent of Contamination. In this section, summarize remedial actions (i.e., spill cleaned up).

Reply: Summary of spill has been added (now on page II-28).

11) Page II-34, first paragraph, first line. What were the levels of lead detected at the site? Give concentrations.

Reply: Requested data has been added (now in 7th paragraph of II-34).

12) Page II-35, first paragraph. What actions, if any, were taken regarding groundwater? Need explanation.

Reply: Additional discussion has been inserted into text.

13) Page II-39, Human Health Risk Assessment, third paragraph. What remedial actions were taken for groundwater? Need explanation of remedial actions which were taken. If no actions were taken, provide justification.

Reply: Additional discussion has been inserted as requested (Pages II-40 and II-42).

14) Page II-41, Summary of Risks. What about the iron found in groundwater? Need explanation.

Reply: Additional discussion has been inserted as requested (now on page II-42).

John Frisco, Remedy Selection Manager, Superfund

- 1) Page 1-1, Statement of Basis and Purpose, second paragraph, third and fourth lines. Commas needed after (CERCLA) and (SARA).
- 2) Page II-4, Site 23: Paint Disposal Area, fourth line. Replace the word “to” with “on”.
- 3) Page II-14, first line. Insert a hyphen between site and related.
- 4) Page II-28, last paragraph. Insert a hyphen between non and carcinogenic. Make this change throughout the document.

Reply: Concur. Changes have been made.

Jessica Mollin, Project Manager, Federal Facilities Section

- 1) Page II-14, fifth paragraph, fourth line. This line states “Analytical results from the 8 confirmatory samples indicated that contaminant levels in all soil samples were below regulatory cleanup levels when compared with NJDEP..... soil cleanup criteria.” However, Table 19, shows that in one of the samples, benzo(b)fluoranthene, fluoranthene and pyrene all exceed the NJDEP soil cleanup criteria. This needs to be discussed.

Reply: Table 19 has been modified to show that there are no exceedances.

- 2) Page II-24, last sentence on the page. This line states “Table 46 shows the results of the second round of (2) confirmatory soil samples.” However, Table 46 has ten soil samples, so it needs to be clarified which are the second round of samples. Additionally, in Table 46, arsenic, beryllium, cadmium, copper, lead, antimony, selenium and thallium exceed NJDEP residential and non-residential cleanup criteria. These exceedances need to be discussed.

Reply: This section has been revised to respond to EPA Comments (page II-25).

- 3) Many of the tables say non-residential direct contact instead of non-residential direct contact.

Reply: Concur. Corrections have been made.

The shading of soil sample levels which exceed NJDEP cleanup criteria in tables is too dark and obscures the print.

Reply: Concur. Corrections have been made.

Handwritten table numbers (on top of page) are hard to read.

Reply: This has been corrected.

- 4) The Declaration section of the ROD does not include Statutory determinations.

Reply: Concur. This section has been added. See reply to Comment No. 1 (Bob Wing).

- 5) In the Decision Summary, the community participation section does not include the participation requirements of CERCLA 113(k)(2)(B)(i-v) and note that these requirements have been met.

Reply: Concur. This information has been added (page II-5).

- 6) In the Decision Summary, the Scope and Role of OU Section, does not include the removal actions that have already been taken.

Reply: Discussion of removal actions has been added or modified where applicable.

- 7) In the Decision Summary, there isn't a section on Statutory determinations. This section would describe how the selected remedy meets the requirements of CERCLA 121.

Reply: A new section IV of the Declaration has been added to address Statutory Determinations of CERCLA 121, and discuss applicability of 5 year reviews.

Annotated responses to additional comments presented in February 16, 1999 memo to Bob Wing from Marian Olsen, Program Support Branch

As requested, I have reviewed the Record of Decision for Operable Unit 4 (Sites 14, 20, 22, 23, 24, 25, 27 and 29) for the Naval Weapons Station EARLE in Colts Neck, New Jersey. Based on this review, I have the following general and specific comments on the document.

General Comments

The current document is difficult to follow. In general, it appears that there was an original baseline risk assessment, a remedial action, and an assessment of post excavation levels where the soil values were compared to NJDEP values to confirm the action reduced the risk to acceptable levels. It is suggested that the document needs to clarify each of these steps through clear delineations in the section headings. The current combining of the issues makes it difficult to follow the past events.

The summary of site risks section needs to clearly explain that a secondary risk assessment was not performed but rather, it appears, that the concentrations found in soil were compared to NJDEP criteria. It is recommended, that conclusions such as “no excess risk is present” need to be modified to indicate that the NJDEP soil clean-up criteria, including the assumptions of this criteria, were met. If a risk assessment was conducted then the risk values should be presented in a table and summarized in the text. It does not appear, however, that a risk assessment was conducted on the post excavation samples.

The risk tables presented do not summarize the exposure assumptions used nor the toxicity values that were included in the assessment. It is recommended that individual tables summarizing the toxicity values, their source (i.e., IRIS, HEAST, NCEA) and the date the values were obtained should be included in the document. This request is consistent with proposals for standardizing the ROD tables.

The document should also clarify what is meant by the “amended” risk assessment.

REPLY: These comments have been considered throughout the document as specific comments have been responded to.

Site 14

The reference to the EPA residential soil level should be provided (page II-28, last sentence in paragraph 1). The assumptions should also be included in the statement for comparison to the industrial exposures identified in the second paragraph.

REPLY: These changes have been made as suggested.

The comparison in the second paragraph (page II-28) is not clear. It is suggested that the statement that the floor sweepings represent no apparent health threat be further qualified to indicate this conclusion is based on lower frequency of exposure than that identified in the residential exposure scenario. Further, the second paragraph describing the non-residential exposure should be further clarified to describe the differences in the exposure assumptions between industrial and residential exposures i.e., 250 days vs. 350 days/year. This section should also more clearly explain the assumptions made for the residential exposure i.e., a combined child (ages 0 to 6 years old) and adult (24 years) exposures compared to the adult exposures assumed in the industrial scenario.

REPLY: Additional discussion/clarification has been added on page II-29.

Site 20

On page II-28, paragraph 1, reference is made to the exposure pathways, potential receptors and uncertainties in the risk assessment. However, the tables do not capture information uncertainties in the risk assessment. It is suggested that the main uncertainties in the assessment be highlighted in another table or in the conclusions section.

REPLY: Uncertainty discussion has been added (now on page II-30).

Site 22

On page II-28, paragraph 1, reference is made to the exposure pathways, potential receptors and uncertainties in the risk assessment. However, the tables does not capture information on uncertainties in the risk assessment. It is suggested that the main uncertainties in the assessment be highlighted in another table or in the conclusions section.

REPLY: Uncertainty discussion has been added on page II-32.

Table 14 includes a number of NJDEP values that can not be read. Table 14 indicates that the NJDEP values for benzo(b)fluoranthene, fluoranthene and pyrene exceed the NJDEP values while the text on page II-32 indicates NJDEP values are exceeded. These exceedences and their significance should be presented in the text.

REPLY: Table 19 has been corrected to show no exceedences. Note that concentrations of benzo(b)fluoranthene, fluoranthene and pyrene are reported in ug/kg.

Tables 71, 74 and 76 should include a total hazard similar to that shown in Table 72.

REPLY: Non-Concur. Summation of non-carcinogenic risk is not appropriate.

Site 23

The exceedences listed in Table 33 are not readable.

REPLY: Table has been revised to be readable.

On page II-33, the statement comparing the central tendency and RME exposures is not appropriate. The exposures represent different components of the population i.e., the average exposure and the reasonable maximum exposure and the use of the term over conservative is not appropriate. As indicated in the National Contingency Plan, the Agency is required to make its decisions based on the RME and the risks to the average individual provides additional information but is not a decision point.

REPLY: Concur. Changes have been made as suggested (now on page II-34).

The statement concerning the use of filtered metal water samples (see pages II-33 cancer and non-cancer and pages II-34) are not consistent with the Agency guidance requiring the evaluation of non-filtered samples in the human health risk assessment.

REPLY: Filtered metals results have been mentioned within a decision making process which includes results of human health risk assessment results and other pertinent information.

The statements concerning non-cancer risks are also inconsistent with the purpose of the calculation of the non-cancer hazards and use of non-filtered samples as described above.

REPLY: Clarifications have been made. Non-filtered metals results exclusively have been used in the estimation of human health risks (now stated on page II-34).

Table 85 show total hazard for all substances in table.

REPLY: Non-Concur. Summation of non-carcinogenic risk is not appropriate.

The summary of risks for Site 23 is confusing. The discussion mentions that "thallium was the only contaminant that exceeded any of the soil clean-up criteria. Review of the chemicals of concern indicates that thallium was not identified as a chemical of concern. It is recommended that the document should identify the concentrations of this chemical found in the soil, its source and the depth of sample where the thallium was found to support the conclusion that the risk level is within the acceptable risk range. See also differences between Tables 30 and 33.

REPLY: This section has been rewritten to respond to EPA comments (now on pages II-35 – II-36).

Site 24

Tables 111 and 113 should include total hazards.

REPLY: Non-Concur. Summation of non-carcinogenic risk is not appropriate.

Where are the confirmatory results mentioned in the summary of risks presented. A table summarizing the confirmatory values should be presented.

REPLY: The text has been altered to reflect the source of this information, Tables 40 and 41.

Site 25

To help avoid confusion it would be helpful to have the information for Site 24 separated from that for Site 25. Specifically, Table 109 should be moved behind Table 114.

REPLY: Table 109 (now Table 114) has been moved as suggested.

Total non-carcinogenic hazards should be presented for Tables 116 and 118.

REPLY: Non-Concur. Summation of non-carcinogenic risk is not appropriate.

The rounding for the estimated incremental cancer risks for subsurface soil exposure should be approximately 4×10^{-5} not 3×10^{-5} since the actual value listed in the table is 3.9×10^{-5} .

REPLY: Concur. Change made (now on page II-37).

Site 27

See previous comments concerning the application of the RME and Central Tendency (see comments on Site 23).

REPLY: Changes made (page II-38).

The confirmatory samples listed in Table 46 are not readable. Several of the values listed from the sampling are inked out and can not be read in the current copy.

REPLY: Concur. Corrections have been made to improve readability.

The discussion of the concentrations being within the Agency's risk range requires clarification since a risk assessment is not presented. It may be more appropriate to indicate that the values are being compared to risk based values i.e., New Jersey's soil

criteria and that these values are not being exceeded. Special consideration should be given to the exceedences shown in Table 46 and their potential impact on calculated risk needs to be evaluated especially since so many samples were above the NJDEP values.

REPLY: Concur. Clarifications and additional discussion has been added on page II-40.

Site 29

This site is identified as a PCB spill area while the chemicals of concern identified do not reflect an analysis for total PCBs or Aroclors. It would be important in the risk assessment section to indicate that PCBs were remediated in the past as indicated in a previous section of the document.

REPLY: Concur. The previous remediation action has been summarized and referenced on page II-40.

The Summary of Risks section indicates that removal actions were conducted and no excess risk remains. However, review of the document indicates that a summary table of confirmatory samples with appropriate comparisons to NJDEP values is not available in the document. It is recommended that this table should be presented for evaluation.

REPLY: A summary of historical removal and analytical results has been added to the text on page II-42.