

Responses to Comments: Interim Remedial Action Report (dated August 26, 2002) Operable Unit B – Poleline Road, Fort Richardson, Alaska

Responses to written comments received from Louis Howard, ADEC, (dated September 17, 2002; to Mark Prieksat:

Specific: Section 3.2.2.3 Soil Sample Results Page 15. The table for Array 3 shows 1,1,2,2-Tetrachloroethane's maximum detected values in soil at 34 mg/kg before treatment to a maximum detected value of 57 mg/kg after treatment. The Department requests the Army clarify in text why the maximum detected soil sample results were higher after treatment (e.g. sampling variability) for Array 3. Otherwise the reader may draw inferences to the soil sampling data which are incorrect.

Response: Wording was added at the end of the paragraph with reference to clarify that the sample results are due to sampling variability and site conditions.

Specific: Section 6.3 Institutional Controls Page 29. The text states that the institutional controls such as limitations on access, water use, and excavation as supplementing engineering controls for both short-term and long-term management to prevent and limit human and environmental exposure to hazardous substances. The Department requests some examples of engineering controls being implemented at OUB also be include in this section.

Response: Wording was added to section 6.3 indicating that locked gates limit access to the site and that the institutional controls document is reviewed and reissued approximately every two years with the change of command at U.S. Army – Alaska.

Specific: Section 6.4 Exit Strategy Page 29. The text states that the operation of the long-term-monitoring plan will be evaluated annually by project managers and will continue until the remedial action objectives (RAOs) are achieved. This is correct, however the August 8, 1997 ROD for OUB section 7.2 Agency Review of the Selected Remedy states: "...the long-term goal of the remedial action is to return all groundwater within and outside of the source area ("hot spot") to state and federal MCLs and risk-based criteria, active remediation will be considered complete when concentrations within the "hot spot" are below remediation goals for three continuous quarters after remedy shutdown and the plume is not expanding." The Department requests discussion on whether or not groundwater contamination levels have been shown to meet or is progressing towards these two goals within the "hot spot" or outside the "hot spot."

Response: Discussion of the results of the remedial action is currently within this document in sections 3 and 7. Specifically section 7.3 covers the Trend Analysis. Currently a statically valid trend analysis cannot be performed at this time. There have only been seven rounds of groundwater data collected since the SPSH system was completed in October 1999. Using the data prior to the SPSH system operation would substantially bias the trend due to the rapid reduction of contaminants experienced over a short duration of time. By the end of the next 5-year review, enough data should be

available to perform a trend analysis using regression statistics. No additional text has been added for this comment.

The ROD also states: "Groundwater monitoring...will continue in the downgradient portion of the plume until state and federal MCLs are achieved over three consecutive quarters and until subsequent borings show that RAOs are met after remedy shutdown and the plume is not expanding."

The text for the second paragraph states "...the project managers will further determine whether the plan is operating efficiently and cost-effectively." The Department requests the measurement criteria be described in further detail. Specifically, discussion on what details the Army anticipates as serving as the definition of "efficient" or "cost effective" in terms of monitored natural attenuation in groundwater and long-term monitoring of groundwater contamination at OUB.

For example, costs of monitoring groundwater currently would be compared to the estimates listed in the ROD which give an estimate of 29,070 dollars per year. Operation and maintenance costs were estimated to be 64,878 dollars per year. The estimates for total costs of the preferred remedy were based on 30 years of annual operation costs, but the estimate for the groundwater to meet cleanup goals was 150 years based on groundwater modeling. The Department requests clarification on whether or not the estimate for meeting cleanup goals will be refined with additional groundwater modeling at the future date or whether or not true costs for monitoring groundwater to 150 years will be discussed.

Response: The five-year review of the long-term monitoring process should assess whether the remedial action is continuing to be protective of human health and the environment and assess whether the remedial action is proceeding in accordance with the ROD. The review will also serve as an opportunity to look at the rate and frequency of the monitoring program and the costs associated with them. No text has been added for this comment.

Specific: Section 10.1 Contact Information Page 38. The Department requests the word "Remediation" be deleted from the line "Contaminated Sites Remediation Program" under contact information for the State of Alaska.

Response: The word "remediation" was deleted.

Responses to written comments received from Bill Adams, EPA, (dated November 27, 2002), to Mark Prieksat:

General COMMENTS:

Section 1.3, 5.1 and other sections the report should be clear that the "treatability studies", particularly the six phase heating, accomplished the goals of the ROD and were the remedial action. One would typically expect that a treatability study would

be followed by implementation of the selected remedy. It would be helpful to provide background on the scope of the treatability studies and reasons why additional action was not required. A clear statement at the front of the document indicating that the remedial action was completed through a series of successful treatability studies should be provided. This type of language currently exists in Section 9.1 and should be stated earlier in the document as well.

Response: Text was added to sections 1, 1.3, and 5.1. Section 1.3 was further broken up into sections (Site Investigation, Feasibility Study, Remedial Action, etc.).

SPECIFIC COMMENTS:

1. *Section 1.2.2 Page 2. This section should include some mention of the adjacent pond since it relates to surface water. Sediments are first mentioned in section 1.3 when describing the RI fieldwork without any reference to the location of the sediments. In addition Section 2.1.3.2 mentions that the Clean Water Act Section 404 is relevant and appropriate to the protection of wetlands adjacent to Poleline Road.*

Response: A paragraph was added addressing the wetlands.

2. *Section 1.3 last paragraph. This paragraph should begin with “The”. Also there should be further description of the groundwater monitoring program and which DVS it was developed under.*

Response: Text changed. Text added to the long term monitoring section 1.3.6.

3. *Section 1.4. This section should include additional information on when the public had an opportunity to review documents and provide comments. This information should include when notices were provided in newspapers announcing the availability of documents and RAB meetings and how many fact sheets were developed and when.*

Response: Information was added to section 1.4.

4. *Section 1.4 second paragraph first sentence. This sentence would be clearer if written as follows: “The public has been given the opportunity to participate and comment on ongoing remedial action.”*

Response: Sentence changed as requested.

5. *Section 2.11. The description of the ROD talks about the “hot spot”. It would be beneficial if here or earlier in this document the “hot spot” was briefly defined.*

Response: “Hot spot” is currently defined in 2.1.1. Additionally it was added to section 1.3.4 where the word “Hot spot” is first used in this document.

6. *Section 2.1.2 fifth item second sentence. Please revise this sentence as follows. The HVE system was expected to operate from seven to twelve years for soil and shallow groundwater in the “hot spot” and natural attenuation was expected to take at least 150 years before the remaining groundwater meets state and federal MCLs and risk based criteria.*

Response: Wording was not changed since this paragraph is describing the major components of the selected remedy as directly stated in the ROD.

7. *Section 2.1.2 ninth item. This paragraph talks about revision to the ROD. This type of change would typically be handled as an Explanation of Significant Difference (ESD) rather than a ROD amendment.*

Response: Wording was not changed since this paragraph is describing the major components of the selected remedy as directly stated in the ROD.

8. *Section 2.2 first paragraph first sentence. Change the word allowed to anticipated.*

Response: Word changed.

9. *Section 2.3 [3.2] seventh paragraph last sentence page 12. Modify this sentence as follows, “...the air stripper was reducing the concentration of contaminants to levels at or below existing MCLs.”*

Response: Text changed.

10. *Section 3.2.2.3 On page 14 array tables. Please indicate in the table that the values are concentration in soil.*

Response: Added text to each table.

11. *Section 5.1 last paragraph page 26. Change the words remedial actions to treatability studies in the first and second sentences.*

Response: Text changed and clarified.

12. *Section 7.5 page 34. Indicate that the five-year review will not be completed until February 2003.*

Response: Text changed.

13. *Revise the second sentence to indicate that five-year review [process] will continue until “no hazardous substances, pollutants, or contaminants remain on site above levels that allow for unlimited use and unrestricted exposure.*

Response: Text changed.

14. Section 10.1.1. Change mailcode from ECL-113 to ECL-112.

Response: Text changed.

*15. Appendix A signature page. Dave Croxton will sign the IRAR Report for EPA.
Dave is a Unit Manager in the Office of Environmental Cleanup.*

Response: Information added.