

## STATE OF ALASKA

TONY KNOWLES, GOVERNOR

**DEPT. OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SPILL PREVENTION & RESPONSE**

Contaminated Sites Program

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January 9, 1997

Suzanne Beauchamp  
Department of the Army  
U.S. Army Engineer District, Alaska  
P.O. Box 898  
Anchorage, Alaska 99506-0898

**RE: Draft Phase II Remedial Investigation / Feasibility Study, Northeast Cape, Alaska**

Dear Ms. Beauchamp:

The Alaska Department of Environmental Conservation has reviewed the remedial investigation portion of the Draft Phase II Remedial Investigation / Feasibility Study, Northeast Cape, Alaska. As I have discussed with you during recent phone conversations, in addition to the comments provided here, comments regarding the risk assessment portion that will be provided separately. ADEC expects to be able to provide you with those comments for Northeast Cape by the end of January, or early in February.

A major concern with the Phase II RI/FS is that it is difficult to determine from the information provided whether the sites have been adequately characterized. It would be extremely helpful if the document would summarize the findings of the Phase I RI as each respective site is discussed, so that a complete description is provided regarding what is known about that site. The RI/FS should be a stand-alone document, providing sufficient information about previous studies that the reader should not have to refer to multiple documents to get a reasonable understanding of the conditions present at each site. The Department requests that revisions to this RI include presentation of results from the Phase I RI in sufficient detail that the reader can obtain an accurate understanding of what is known about each site from the information provided. Some of the specific comments provided below reflect this same request for providing additional information within the Phase II RI/FS.

Another major concern is the tendency to draw broad qualitative conclusions, such as health of biota or health of streams, without having provided sufficient evidence to support those conclusions. This concern will be elaborated through specific comments below.

## Comments:

1. **Page 2-2, Section 2.1.2.** The RI should be a stand-alone document. The reader should not need to refer to other documents in order to understand what was actually performed at a site. Thus, sampling procedures should be described here. The work plan describes how the samples will be taken; the RI describes how they were actually taken, thus it is important also that any sampling procedures that were varied or modified in the field also be described, along with an explanation

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for why that modification occurred.

2. **General, Section 3.** As results are discussed, a summary of previous findings should be included to provide a complete picture of what is known about each site.
3. **Page 3-5, fourth and fifth paragraphs.** This paragraph implies that, based on visual evidence of vegetation, the impact of the diesel spill to the wetland area is minimal even though a sheen is present and diesel odors were apparent. This doesn't address potential faunal receptors. It also doesn't address the probable impact that the presence of petroleum may have on habitat of small micro- and macroorganisms that may be important parts of the food chain. It might be more accurate to phrase this statement to say that the vegetation doesn't appear distressed when compared to surrounding vegetation. It is also misleading to assume that there is "no evidence" that contamination reached the unnamed creek, based on visual evidence. To verify that contamination hasn't reached the creek would require sampling to confirm the extent of the diesel contamination, and may require sediment samples from the creek.
4. **Page 3-6, Section 3.1.8.** The third sentence in this section seems to be incomplete; it is missing a direct object.
5. **Page 3-7, first full paragraph, and elsewhere throughout Chapter 3.** The third sentence on page 3-7 states that, "generally, the biota appears healthy." A general statement of this sort is too broad and potentially misleading. If the vegetation does not appear distressed, this should be stated; however, "biota" includes fauna as well as flora. Unless there is sufficient evidence that there is no significant impact to, for instance, burrowing, grazing, nesting, etc. fauna, it is best to report visual observations in a limited and objective manner rather than broad and sweeping scope. In this section, and throughout the remainder of the chapter 3, please be objective in describing vegetation. In several locations, vegetation is described as sparse due to disturbed soil, or gravel pad, but also described as appearing healthy. Please provide the basis for the determination that it appears healthy. Is the color, plant height, etc., similar to the same plants in non-disturbed clean areas? Please be objective and avoid drawing conclusions without having adequate detailed information to support them.
6. **Page 3-10, Section 3.1.16.** Future investigation of the auto maintenance and storage facilities should include determination of what soil is impacted by the floor drains, and characterization of any soil contamination. Do these drains lead directly to soil underneath the buildings, or do they have outfalls some distance from the buildings?
7. **Page 3-14, Site 13 Headwaters.** The second to last sentence in this section should be corrected to read, "ice *damming* during the winter."
8. **Page 3-18, Section 3.1.24. Page 2-2, Section 2.1.2.** Why was such extensive radiological testing performed throughout the installation? Is there any reason to believe that there may have been radioactive material used at this site? A detailed description of the radiological survey should be

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provided. The data quality objectives should be discussed. The methodology, including calibration, and distance the meter is held above the ground surface should be clearly described. Were there pre-established grids? If so, these should be provided in the RI, with recorded readings shown. A copy of the field log should be provided in the appendix. The Department is concerned that the results may be misleading. A hand-held Geiger-Muller type of meter will only detect gamma radiation at the surface, and will not detect buried materials, will not identify the type of isotope present, nor detect materials that give off other forms of radiation. Thus, for instance, radium, which might be found on radium dials, and has formerly been used in military paints, would not be detected. Buried materials in a landfill also would not be detected. It is important not to mislead the community into assuming that the surveys provide substantive evidence that there are no radioactive materials on site. Given that the community has raised concerns about the possibility of radioactive materials being present on site, a clear and accurate discussion of historical uses of radioactive materials by the military that could potentially be found on the site would be appropriate, as well as a discussion about which of these could actually be detected with the type of survey performed.

9. **Page 3-19.** Streamflows 1 and 2 are described as "apparently healthy," and streamflow 4 is described as appearing "healthy" except when disturbed, whereupon a "visible hydrocarbon sheen contamination bubbles to the surface" and petroleum odors are present. Please describe what is meant by "healthy" in this context. By what criteria is stream health determined? The health of a stream, or any other water body, is very complex and difficult to judge by visual observation. Without a valid bioassessment of the stream, and determination of other physical and chemical characteristics (e.g., pH or dissolved oxygen) there is no way to accurately determine stream "health." Please be objective and describe only what was actually observed; do not draw broad inferences. These same comments apply to descriptions of streamflow on page 3-20 of the RI.
10. **Page 3-28, Section 3.2.3.1, first paragraph.** Please state the purpose of the additional sampling performed at the buried drum field. Was this for further site characterization, or was it for risk assessment purposes? For other sites where sampling was performed, please also explain the purpose of the sampling.
11. **Page 3-28, Section 3.2.3.1, second paragraph.** What is the basis for the statement that elevated levels of petroleum are probably due to moisture in the sample? Is there a reference that can be provided to support the supposition that moisture skews petroleum lab results high? Did the analytical laboratory flag this particular sample as having moisture problems that affected the results? More likely, the sample simply was taken from a location with a higher concentration of petroleum.
12. **Page 3-31, third paragraph.** This paragraph should reference the most recent USEPA guidances for PCBs. The Soil Screening Guidance: Technical Background Document, USEPA, May 1996, should be used to provide screening levels for PCBs, or the most recent USEPA Region III RBCs would also be acceptable. The actual levels of PCBs found should be reported.

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13. **Page 3-31, Section 3.2.4.** With respect to biological sampling, please provide a complete description of sample collection, including description of vegetation along the banks or in the stream (overhanging vegetation providing good cover, sparse vegetation, etc.), or any other observations about the quality of the habitat. Also please describe in detail the sampling methods and tools, the part of the stream sampled (riffle, snag, bank, submerged etc.), and sample handling and preservation.
14. **Page 3-32, first paragraph.** This paragraph states that one commonly used method for evaluating water quality is by use of indicator organisms. Is that the method that is used here? If so, please provide that basis used for selection of indicator organisms.
15. **Figures 3-4 through 3-10.** These map pages do not have maps, therefore it is difficult to evaluate the kind of information the maps will provide. It is hoped that maps will be provided that will clearly show all the sampling locations and results from both Phase I and Phase II RI's.

Thank you for giving ADEC the opportunity to comment on this document. If you have any questions, please contact Tamar Stephens at (907) 451-2131.

Sincerely,



Tamar J. Stephens  
Environmental Specialist

TS/rdb

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# FAX TRANSMISSION

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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**To:** Doug Quist **Date:** January 9, 1997  
**Fax #:** 248-8884 **Pages:** 5, including this cover sheet.  
**From:** Tamar Stephens  
**Subject:** Northeast Cape RI/FS Comments

## COMMENTS:

Doug,

Here are ADEC comments on the Northeast Cape RI/FS. I'm sorry that you are receiving them at the last minute like this. However, I was just assigned this site about three weeks ago, and given my other work load, the time it takes to get up to speed on a new site, and the fact that there were holidays in the middle of this time period, this was the earliest I could get them to you. I hope to also have comments on Gambell completed before the end of the day, and will fax those on to you also as soon as I can.