

<b>PROJECT:</b> Gambell Sites - FUDS <b>DOCUMENT:</b> Decision Document, November 2004				
<b>REVIEW COMMENTS</b>		<b>LOCATION:</b> Gambell, St. Lawrence Island, Alaska		
<b>DATE:</b> 12/21/2004		<b>REVIEWER:</b> Jeff Brownlee	<b>PHONE:</b> (907) 269-3053	
<b>Item No.</b>	<b>Location (page, par., sen.)</b>	<b>COMMENTS</b>	<b>Review</b> A – Comment Accepted W – Comment Withdrawn N – Noted	<b>Alaska District Response</b>

1.	Declaration Site Name and Location	<p>Please clarify whether the Decision Documents is specific for the individual projects or the entire property.</p> <p>Please note that there are multiple Reckkeys for Gambell in the ADEC database.</p>		<p>The Decision Document refers to the specific projects which are funding the response action. However, the entire property is included.</p> <p>Text modified. The Alaska Department of Environmental Conservation (ADEC) contaminated sites record key (reckey) number for the overall Gambell site is 198532X917919, individual areas of concern are also tracked with separate reckeyes (198532X917920-32 and 198532X117901-13). The Environmental Protection Agency (EPA) identification number is AKD981765894.</p>
2.	Declaration Description of Selected Remedy	<p>In the first sentence please change the “or” to “and” as in “arsenic and lead”. With the continued groundwater sampling at Site 5, please explain what will happen if the monitoring wells are clean and what would happen if monitoring well(s) were impacted; NFA or continued sampling rather than open ended.</p> <p>In the last bullet please make a note that the NFA sites have been inspected and/or cleaned up during previous investigations/removal actions. The list of NFA sites looks disturbingly long without some sort of explanation that they have been previously addressed.</p>		<p>Done. Text added:</p> <p>Additional groundwater monitoring will be conducted if the level of COCs exceeds ADEC cleanup levels. If the groundwater sampling results show no contamination above cleanup levels, no further action will be taken.</p> <ul style="list-style-type: none"> <li>▪ Sites 1A, 1B, 1C, 2, 3, 4A, 4B, 4C, 4D, 4E, 6, 8B, 8C, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25A, 25B, 26, 27, and 28 were investigated and previous response actions removed debris and/or contaminated soils. No further action is required at these sites.</li> </ul>

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3.	Statutory Determinations	The third sentence in this section seems out of place. The sentence seems to be referring to an alternatively considered remedy (in-situ). Please review.		Suggested wording as follows: “However, because treatment of the contaminants at the site was not found to be practicable, alternative treatment technologies were not selected.”
4.	Declaration Signature page – reopen clause	In the first sentence of the last paragraph please add “Formerly Used Defense” between Gambell and Site. In the Jennifer Roberts signature block please change the “DOD” to “Federal Facilities”.		Done.
5.	Section 1.2 Site History	In the fifth paragraph, please specify the institutional controls that were implemented and the vehicle used; education with public meetings. Is this ongoing? Is there any land management plan established in the community?		Text added. The institutional controls were implemented during the summer of 2004 and consisted of distributing informational pamphlets and posters about ordnance risks to local residents and businesses and holding a community meeting. An initial review to evaluate the continued effectiveness and reliability of the ordnance response action will be conducted in 3 years. After the initial review has been conducted, recurring reviews will be performed at 5 year intervals. The need for recurring reviews will be coordinated with regulators and stakeholders and justified in each recurring review report.  There is no land management plan established in the community. (Note: this statement is not intended to be inserted in the decision document)
6.	Section 1.2 Site History	In the sixth paragraph four new sites are mentioned. Please reference the source of discovery for these sites (SPIP, TEC Report, etc.). Finding new sites this late in the process could diminish a reader’s confidence in the earlier investigative work.		Text added. These sites were identified as potential areas of concern based on community concerns and a review of a historical photographic analysis completed by the USACE Topographic Engineering Center in September 2000.

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7.	Community Participation	You may want to mention under the RAB bullet or separately that there was (is) a village liaison available to help community members with accessing technical information and agency communication.		Text added. <ul style="list-style-type: none"><li>▪ <u>TAPP Advisor/Community Liaison</u>: The RAB is served by a technical advisor, under the Technical Assistance for Public Participation (TAPP) program, to provide technical guidance on workplans, reports, proposed remedies, and potential environmental and human health impacts. In addition, a local resident was employed as a community liaison during the remedial investigation phase, to help community members access technical information, distribute meeting notices, and assist with agency communication.</li></ul>
8.	Section 1.5.2	Please note that early maps of the village show a drinking water well in the middle of the old village. This well was abandoned either because of poor water quality (salt water intrusion) or poor water quantity. Either way it may be worth mentioning as supporting evidence for using the ingestion cleanup levels.		Text clarified. Groundwater from the central gravel spit is not suitable as a source of drinking water. Groundwater in the gravels is often saline, difficult to recover in useable quantities, and located in an active lens over permafrost. A drinking water well in the old Village area was abandoned in the past because of poor water quality (salt water intrusion) or quantity. Groundwater encountered at the site has been limited in quantity, and only intermittently detected.
				<i>Note: revised document re-numbers some sections. Section 1.6 is now incorporated as subsection 1.5.4, Section 1.5.3 <u>Ecological and Biological Resources</u> was added. Subsections Section 1.6.1 through 1.6.35 describe Site Conditions, and Section 1.7 summarizes risk, and Section 1.8 remedial objectives.</i>

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9.	Section 1.7.1	In the second sentence, please add “may” before “pose”.		Done.
10.	Section 1.7.2	The first paragraph mentions a tar-stained area. The third paragraph mentions a rust stained area I believe referring to the same location.. Please clarify.		Text modified: The site contained exposed surface debris, rust-stained gravel, and a separate patch of tar-stained gravel (degraded asphalt).

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11.	Table 5	Please clarify the Dioxin units. These are usually in parts per trillion. The cleanup level could be referenced as EPA Region 9 Preliminary Remediation Goals for Residential Soil = 39 ppt. Please clarify if there were any post-excavation samples taken in 2001.		<p>Units corrected to pg/g and note added to table picograms per gram (parts per trillion). According to the USEPA Region 9 PRG Table (October 2004), the value for dioxin in residential soil is listed as 3.9 E-06 mg/kg, which is equal to 3.9 pg/g or ppt (not 39 ppt).</p> <p>We suggest adding clarifying text to the 4<sup>th</sup> paragraph of Section 1.7.7 (to be re-numbered Section 1.6.7) as follows: The USEPA and ADEC have not established cleanup levels for dioxins. The USEPA Region 9 has established a screening level of 3.9 ppt for dioxins in residential soil. <u>The State of Alaska adjusts the EPA screening level by one order of magnitude to derive a Preliminary Remediation Goal for Residential Soil of 39 ppt dioxin.</u> The Agency for Toxic Substance and Disease Registry (ATSDR) uses a screening level of 50 ppt and an action level of 1,000 ppt for dioxins in soil.</p> <p>We have added footnote (<sup>d</sup>) with text similar to the above to Table 5, keeping the NA entry in the ADEC Cleanup Level column.</p> <p>The post-excavation samples collected in 2001 focused on the petroleum impacted soils and were not analyzed for dioxins.</p>
12.	Table 10	Please add the arsenic in soil samples that are a concern at Site 7 to this table.		Arsenic results from 1994 added to Table 10. New table with arsenic results from 2001 and 2003 added.

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13.	Section 1.7.15	In the second sentence, please add “of” after “Drums”.		Done.
14.	Section 1.7.32	Please clarify if 18 AAC 75, Table B is the screening level referred to at the end of the second paragraph.		Text modified. No analytes were detected at concentrations exceeding the Table B cleanup levels.
15.	General – Page Breaks	The document may be a bit more presentable to the reader with some negative space between sections, for example between the end of section 1.7.35 and 1.8.		Page breaks added between major sections.
16.	Section 1.8, Sites 7 and 12 and general	The last sentence of the second paragraph states that sites 7 and 12 are available for unrestricted use. These locations and other known debris sites should be documented on a map for use by the community to avoid situations like that which occurred when the high school foundation was excavated. The map could serve as an institutional control with soil management information at those sites where the migration to groundwater cleanup level is not used.		Debris (surface and subsurface) was previously removed from Sites 7 and 12. Geophysical surveys did not indicate additional areas of buried debris at these sites. A complete and accurate map of buried debris cannot be produced, based on the amount of previous geophysical surveys and the experience with the NALEMP project during the 2004 field season which indicated more extensive amounts of debris than anticipated. <u>Perhaps a map of known debris could be made, with areas of soil contamination exceeding the migration to groundwater levels indicated.</u>
17.	Table 14	Please add another note “c” = Table B – ingestion level and change the note on RRO from b to c.  In the short paragraph prior to Table 14, please add “and ingestion” after “groundwater” for “... groundwater and ingestion pathways soil cleanup levels		Done.
18.	Section 1.10.3 Community Acceptance	Please expand on this response. Was the public disagreement primarily from Gambell residents or nonprofit watchdog groups? Was the disagreement centered on the FUDS program not being able to address buried debris or are the alternative cleanup levels a		Text added to 1 <sup>st</sup> paragraph regarding state acceptance: The decision may be reviewed and modified in the future if new information becomes available that indicates the presence of previously undiscovered contamination or exposures that may cause

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		<p>difficulty? Alternative solutions toward community acceptance could be discussed such as the previously mentioned buried debris map, the use of NALEMP to address some of the debris problems and the possibility of BIA participation of asbestos problems if any at Site 22 - CAA Housing.</p>		<p>unacceptable risk to human health or the environment.</p> <p>The public comments centered on the issues already listed in the paragraph, and did not specifically address alternative cleanup levels. The only alternative cleanup level used is for arsenic, which is disputed by some commenters as not an appropriate background value.</p> <p>Text added regarding the community concerns about buried debris: Based on comments received from local residents, nonprofit environmental groups, and the RAB's technical advisor during the public comment period on the Proposed Plan, there appears to be support from the local community for the Preferred Alternative at Sites 7, 8A, 8D, and 12. However, the public generally disagrees with the selected alternative of no further action for all remaining sites, due to concerns that inadequate site characterization was conducted at the Gambell sites, inadequate site-specific background metal concentrations were defined, and a desire for additional assurances that sites won't pose a threat in the future due to changing climate conditions, melting of permafrost, undetected contaminants, and contaminant migration. The community desires additional groundwater monitoring events into the future (minimum yearly) at Site 5 and throughout the Gambell area, for a broader list of analytes. The community is also concerned that buried military</p>
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				<p>debris may become exposed in the future through erosion, frost heaving, or changing permafrost conditions and impact construction activities or the safety of residents. The FUDS program cannot address these concerns directly, since the buried debris has not been associated with soil contamination or migration. The debris impacts are documented in the Native American Environmental Tracking System (NAETS) database and will be addressed by the Native American Lands Environmental Mitigation Program (NALEMP), subject to eligibility and funding constraints.</p> <p><u>We do not want to single out who is in disagreement. As you know, ACAT hires many of the vocal community people; it gets cloudy.</u></p>
19.	Figures	Please put the Site Vicinity and Site Location Maps toward the front of the document and place the more specific figures at the most applicable sections. One or two higher resolution maps of the individual sites would aid a reader in visualizing the site locations and interactions.		Done. Figures added for Sites 7, 8, and 12.
20.	Responsiveness Summary – Scudato #43	Can the NALEMP program address monitoring well or drinking water well monitoring at Site 5?		Maybe. The concern would have to be added to the NAETS database.