MONTGOMERY WATSON

June 21, 1994

2198.0220/0230

Department of the Army
U.S. Army Engineer District Alaska
P.O. Box 898
Anchorage, Alaska 99508-0898

Attention: Mr. Douglas Blaisdell

Subject: St. Lawrence Island Investigations

Dear Mr. Blaisdell:

The purpose of this letter is to summarize our understanding of decisions and clarifications regarding the St. Lawrence Island Site Investigations discussed at the June 7, 1994 meeting held at the U.S. Army Corps of Engineers (USACE) Alaska District office. The meeting attendees were yourself, and five Montgomery Watson representatives (project manager Victor Harris, and field team members Lynn Fischer, Doug Quist, Chris Brown and John De George).

The enclosed list of issues, which served as our agenda for the meeting, has been modified to include the resolution of each issue. The resolution of each issue is based on our understanding of our meeting discussion and subsequent phone conversations. Please let me know if these resolutions differ from your understanding or if you have questions or comments.

Sincerely,

Victor E. Harris
Project Manager

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LIST OF ISSUES FOR CLARIFICATION
ST. LAWRENCE ISLAND SITES

Cat.	Site	Doc.	Page No.	Issue	Resolution
R	GAM	CDAP		Several references made to E&E's 1991/1992 reports - may we have these and the URS 1985 report to review?	*Blaisdell supplied these documents as well as listed in transmittal letter dated June 7.*
R	GAM	CDAP	P5-11	Site 5 - drilling in transformer burial area - not a good idea. Get data from geophysical survey.	*Geophysical work will define limits of burial area so as to avoid drilling through buried debris.*
R	GAM	CDAP	TBL 3-1 P3-5	Background - one rep. sample for each soil type and each parameter of interest (dioxins?, TCLP? TOX...)	*Not necessary to analyze background locations for the parameters not expected, such as dioxin, TCLP*
R	GAM	CDAP	P5-2	Why do TCLP (expensive) unless the 8 RCRA metals are above the appropriate action levels?	*Analyze for total sample, not TCLP*
R	GAM	CDAP	GBN	Mr. James of the FAA is quoted quite frequently, still out there, in town - FAA?	*Mr. Wynie James is a knowledgeable local resident(not associated with the FAA).*
R	GAM	CDAP	P5-29	Background boring. Only one boring and 2 samples scheduled; objective to cover each soil type.	*Make appropriate field decision, and document rationale in field notes*
R	GAM	CDAP	TBL 5-6	Recommend additional boring, convert to well/swap.	*Make appropriate field decision, and document rationale in field notes*
R	GAM	CDAP	P5-8	Site 4 - recommend subsurface investigation here (the area has been abandoned for 30 plus years.)/swap.	*Drinking water well just over hill, so probably not. But make appropriate field decision, and document rationale in field notes*
R	GAM	CDAP	P5-31	(Tbl 5-2, Fig 5-5) Disagree on number of borings/monitoring wells are constructed.	*The text, drawings, and tables are not consistent on number of borings in Sites 3 and 5. Make appropriate field decision, and document rationale in field notes*
R	GAM	CDAP	P5-17	Number of wells/borings at Site 16 seems excessive, also question boring in the middle of the landfill.	*Make appropriate field decision, and document rationale in field notes*
R	GAM	CDAP	P5-18	Where was former mess hall and where is Sivugag Inc. building? Where were 10 - 25,000 gal fuel tanks? Six flat fuel tanks. Probably a mistake not to sample here - suggest relocate wells/borings.	*Make appropriate field decision, and document rationale in field notes*
R	GAM	CDAP	TBL 5-3	Table 5-3 doesn't agree with text regarding metals analysis, recommend priority pollutants vs RCRA.	*Request analysis for priority pollutants vs. RCRA metals*
			P3-1	One groundwater drinking water well (where?); very sketchy description of water	*See additional data supplied by Blaisdell*
R	GAM	CDAP	P2-4	Source in hydrology section.	

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R	GAM	CDAP	P3-4	TSCA has PCB criteria which varies with access and land use - 10 is for residential areas.	*Comment only...no decision required*
R	GAM	CDAP	P5-2	Soil characteristic analysis - similar to Kodiak. Remediation parameters at Gambell.	*At both Gambell and NE Cape, we will sample for soil characteristics with same rationale as Kodiak. No remediation parameters (nutrients, microbial count) will be requested.*
R	GAM	CDAP	P5-14	Why no geophysical survey at Site 12, it is clearly a disposal site? Cost impact.	*No geophysical work at Site 12, as stated in CDAP.*
R	GAM	CDAP	GEN	Holding time issue - Nitrate-Nitrogen (48 hr); Coliforms (6 hr); BOD (48 hr); TDD/TSS (24 Hr) Northern Test Labs (Fairbanks) can do all these analyses cost as follows: T. collform (20), Fecal Collform (25), TDS (15), TSS (15), Nitrate (17.50), BOD (5-day,35; soluble, 45)	*Local contract labs to accommodate short holding times have been arranged.*
R	GAM	CDAP		Archeological sites are located near boring locations identified at Site 5. Has this been approved?	*Data on exact location of archeological sites is not available. Use caution to avoid sampling in these areas. Use URS maps to try to pinpoint location of sites.*
R	GAM/NEC	CDAP	GEN	Surface well completion methods...Bollards?	*Bollards will not be used at either site. Flush mounts will be used in high-traffic areas at Gambell. All other wells will have flags.*
R	GAM/NEC	CDAP	GEN	Consider permafrost impermeable boundary? May not to puncture - field decision (no well).	*Permafrost will be generally considered an impermeable boundary - do not drill through*
R	GAM/NEC	CDAP		Bioremediations parameter - Hydrocarbon ox. pot, nutrients bulk density - cost - impact	*Sampling for nutrients and microbial count will not be conducted*
GEN	NEC	LOA		#3 local liaison on site provide per diem, #9 pay wages for liaison?	*MW will not have to pay wages or for privilege to be on site, but should pay reasonable fees for services provided such as transportation.*
GEN	NEC	CDAP	5-41 B-3	"59 subsurface BH" ≠ 36 monitoring well in 5.4.5.1. Assume 39 borings/37 wells max (wells in boring)	*The reference to 59 borings is an error (typo)*

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M	NEC	CDAP	B-3	PVC (vs stainless steel) well materials.	*PVC well materials will be used at both Gambell and NE Cape*
M	NEC	CDAP	B-4, B-5	"a bedrock monitoring well installation may be necessary" We assume 10% footage maximum.	*Bedrock will be considered an impermeable boundary, in general, there should be no drilling in bedrock areas.*
M	NEC	CDAP	B-7	What are "frost protective control monuments with brass caps"? Assume Corps surveyor supplies.	*Corps (contracted) surveyor will provide these*
M	NEC	CDAP	B-8	Sand size unclear, recommend 10-20 or 20-40.	*20-40 or 10-20 will be used, depending on site conditions. Use 10-20 in coarser formational materials*
M	NEC	CDAP	GEN	Not clear - boring hole depth. What if no water found. OK Assume 25' Max.	*Maximum hole depth is 36' if no water is encountered*
M	NEC	CDAP	P5-52	Field screens - does not say how many or where.	*Field screening will be used at subsurface boring locations as a supplement to laboratory analyses.*
A	NEC	CDAP	P5-97	Confirm 14 days to extraction for H2O organics, 1L A/analysis - confirm?	*7-days is proper holding time. NPD informed.*
A	NEC	CDAP	P5-97 P5-88 P5-46 P5-45	Confirm no Acid present for fuel ID H2O 9020/9060 TOX, TOC 9260B, 9260D, 9510G, Persistent Pathogens 1613 Page 3-4 refers to clean-up levels for GRO/DRO; however, no GRO/DRO analyses due to be performed. Is 8015M to be substituted for 8100/AK--- H2O samples SW - no VOCs: BTEX/GRO, 418.1 DRO, Where 8015M Fuel IDs on wipes: BTEX? GRO (what solvent?) DRO; TRPH (what solvent?) Metals Solvent?	*CDC indicates pathogens (hepatitis B, salmonella) and there is no regulatory rationale. Omit these analyses. For petroleum contaminants use AK UST methods in lieu of CDAP specs. Wipes to be conducted as per CDAP.*
R	NEC	CDAP	P5-8 & TBL 5-6	Sample rationale (Lab/Screening) at NE Cape unclear (See Drawing) for recommended rationale	*Field screening will be used at subsurface boring locations as a supplement to laboratory analyses.*

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M	NEC	CDAP	P5-40	"Subsurface soil samples will be collected continuously for the initial 6 feet." (See broader discussion of sample rational)	*Surface samples will be collected if surface soils are stained. Drive samples will be taken from 2-4' and 4-6'. Subsurface sampling will conform as closely as possible to the CDAP (particularly page 5-40). Modifications and rationale will be noted.*
M	NEC	CDAP	P5-41	The number of wells may be reduced "depending upon whether the boreholes reach the water table, or if contamination is detected" - if we are not encountering groundwater, how deep do we drill through soil before terminating To bedrock? If contamination is or is not detected, is this grounds for terminating a boring? Or not placing a well? The statement is ambiguous.	*Maximum hole depth is 36' if no water is encountered*
M/A	NEC	CDAP	P5-50	ACM - need As-Builts of building.	*?*
L	NEC	CDAP	APP. F	DNR letter states XSL-042 located on enclosed maps. Maps are not included. Can we have a copy of the maps?	*?*
M	NEC	CDAP	P5-53	Lead Testing in Paint - No field test with (XRF) - Send to Lab.	*Lead testing to be performed by contract lab*
A	NEC	CDAP	P5-18	Can we obtain copy of well log of well #3 (Stratigraphic log Is Table 5-2.)	*MW will research if log is available*
R	NEC	CDAP	P5-31 P5-34	Backgrounds collected near subsurface, GW, SS & SE sample location - latitude to move (add)?	*Make appropriate field decision, and document rationale in field notes*

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