REVIEW COMMENT

PROJECT: Northeast Cape RI, Phase IV

DOCUMENT: draft Work Plan (S&W 2004)

LOCATION: St. Lawrence Island, AK

U.S. ARMY CORPS OF ENGINEERS CEPOA-EN-ES	DATE: 16 June, 2004 **REVIEWER:** Pamela Miller - RAB **PHONE:** (907) 222-7714	**Response By:** Randy Hessong, Shannon & Wilson Field Team Leader; 21 June 2004

Item No.	Drawing Sht. No., Spec. Para.	COMMENTS	Response / Recommended Responder	Correction to Document	Bac check by: (Initials
1.	General	….I advise that a focused hydrological study be conducted in order to elucidate the flow patterns, fate and transport of contaminants in the NE Cape area prior to closing the remedial investigation stage of the CERCLA process	A focused hydrological study is not within the scope of this delivery order. / USACE - The goal of this investigation is to fill in data gaps and proceed to cleanup of the site.		
2(a).	General	The Corps and contractor must acknowledge (…, for example on page 7) and take action to support the interest of the people of St. Lawrence Island in establishing a permanent community at NE Cape. The work plan and subsequent feasibility study and cleanup plan should be directed toward complete characterization and cleanup of contaminated soils, surface waters, sediments, and groundwater with the interest of protecting the health of year-round residents in a permanent community reliant on local water sources and traditional foods.	A statement that a permanent community is a possibility at the site could be added if approved by USACE. Remaining comment is beyond the scope of the Phase IV RI / USACE - The goal of the Phase IV investigation is to fill data gaps to achieve adequate characterization and proceed to cleanup of the site.	A statement will be added at the end of the first paragraph of Section 2.1 stating "The establishment of a permanent community at Northeast Cape is being discussed by the residents of St. Lawrence Island.	
2(b).	General	from Page 1 to Page 6? Am I missing several pages?	No. There was an error in the automatic document pagination. Comment accepted / S&W Author	Correct pagination.	

REVIEW COMMENT

PROJECT: Northeast Cape RI, Phase IV

DOCUMENT: draft Work Plan (S&W 2004)

LOCATION: St. Lawrence Island, AK

U.S. ARMY CORPS OF ENGINEERS CEPOA-EN-ES	DATE: 16 June, 2004 **REVIEWER:** Pamela Miller - RAB **PHONE:** (907) 222-7714	**Response By:** Randy Hessong, Shannon & Wilson Field Team Leader; 21 June 2004

Item No.	Drawing Sht. No., Spec. Para.	COMMENTS	Response / Recommended Responder	Correction to Document	Ba checl by: (Initial
3.	General	The Suqi River cannot be considered a drinking water source based on contamination transported in the aqueous phase (PCBs and PAHs), sediment contamination and other sources within the watershed that continue to load the system. Source removal and sediment cleanup is necessary to effectively restore the Suqi River.	Comment not directed toward Phase IV RI WP / USACE - The Feasibility Study will evaluate cleanup options for the Suqi River and upgradient areas.	None	
4.	General	…The lack of adequate ecological characterization….results in an inadequate understanding of chronic and long-term effects on fish and wildlife resources.	Comment not directed toward Phase IV RI WP / USACE - Ecological resources and potential risks were evaluated in the approved risk assessment.	None	
5.	General	The work plan must include provisions to analyze mercury and arsenic at all locations where heavy metal analyses are to be conducted, not just lead, chromium, and zinc. The NIEHS study shows mercury contamination of sediments—thus the sources of this contamination must be delineated and removed.	Based on Task Order 006, Modification 1, mercury analysis has been added to the suite of metals analysis at several sites.	Update WP, FSP, and QAPP the reflect addition of mercury analyses	
6.	General	Moving from the RI phase to Feasibility Study is premature without sufficient site	Comment not directed toward Phase IV RI WP /USACE - The Feasibility	None	

REVIEW COMMENT

PROJECT: Northeast Cape RI, Phase IV

DOCUMENT: draft Work Plan (S&W 2004)

LOCATION: St. Lawrence Island, AK

U.S. ARMY CORPS OF ENGINEERS CEPOA-EN-ES	DATE: 16 June, 2004 **REVIEWER:** Pamela Miller - RAB **PHONE:** (907) 222-7714	**Response By:** Randy Hessong, Shannon & Wilson Field Team Leader; 21 June 2004

Item No.	Drawing Sht. No., Spec. Para.	COMMENTS	Response / Recommended Responder	Correction to Document	Ba check by: (Initial
		characterization	Study phase will follow completion of the Phase IV RI.		
7.	General	Please correct use of "data" as plural throughout the document, not singular. For example, correct usage would be "data are needed," not "data is needed."	Accepted. (The noun "data" is the plural of datum, but "data" is in common usage as a substitute for "information." This usage is not generally accepted in technical writing) / S&W author	Search for "data" and use "information", "Datum", or a plural verb as appropriate.	
8.	Section 4.1, page 12	dioxins and furans should be tested for in samples associated with the former burn pit.	Concern for products of incomplete combustion is understood, but not in SOW. / USACE - There has been no evidence of burning activities or a pit in the vicinity of Site 1, the planned additional samples are to verify no impacts from the hypothesized area of concern.		
9(a).	Section	vertical extent of contamination is also not known. Need samples of groundwater at greater depth than 3-6 feet.	The contaminants of concern along the	None	

REVIEW COMMENT

PROJECT: Northeast Cape RI, Phase IV

DOCUMENT: draft Work Plan (S&W 2004)

LOCATION: St. Lawrence Island, AK

U.S. ARMY CORPS OF ENGINEERS CEPOA-EN-ES	DATE: 16 June, 2004 **REVIEWER:** Pamela Miller - RAB **PHONE:** (907) 222-7714	**Response By:** Randy Hessong, Shannon & Wilson Field Team Leader; 21 June 2004

Item No.	Drawing Sht. No., Spec. Para.	COMMENTS	Response / Recommended Responder	Correction to Document	Bac check by: (Initials
(split into 2 topics)	4.2, p 12		pipeline are fuels, which are lighter than water. The dissolved phase can distribute itself vertically in the groundwater, but is generally highest near the source (product). The intent is to sample the dissolved phase in the first aquifer encountered, and depths up to 15 feet are planned to facilitate this.		
9(b).	Section 4.2, p 12	When PAHs are analyzed, please identify/quantify those PAHs that are persistent, bioaccumulative toxics (PBTs) as defined by EPA.	Not in SOW / USACE - PAHs will be analyzed according to standard laboratory methods, and reported as such.		
10.	Section 4.3, p 13	What is the justification for limiting well points to maximum depth of 10 feet?	As stated in the plan, previous sampling shows a shallow aquifer. See Item 9(a). Drilled wells are more appropriate for greater depths. With any well, perforating a confining layer	None	

REVIEW COMMENT

PROJECT: Northeast Cape RI, Phase IV

DOCUMENT: draft Work Plan (S&W 2004)

LOCATION: St. Lawrence Island, AK

U.S. ARMY CORPS OF ENGINEERS CEPOA-EN-ES	DATE: 16 June, 2004 **REVIEWER:** Pamela Miller - RAB **PHONE:** (907) 222-7714	**Response By:** Randy Hessong, Shannon & Wilson Field Team Leader; 21 June 2004

Item No.	Drawing Sht. No., Spec. Para.	COMMENTS	Response / Recommended Responder	Correction to Document	Bac check by: (Initials
			can lead to cross-contamination if appropriate (and expensive) steps are not taken..		
11.	Section 4.4, p 14	Disagree that this site (Cargo Beach Rd. Landfill) is adequately characterized. Additional borings and monitoring wells are needed beneath the landfill to properly characterize the lateral and vertical extent of contamination of PCBs and other contaminants. The surface and subsurface soil samples may result only in sampling of fill or cover material and not contamination that may lie beneath the landfill	Not in SOW / USACE – The objective of the FUDS program is to determine migration of contaminants away from the landfill. The objective is not to characterize the buried waste materials. Advancing sampling equipment into waste materials is not advised.		
12.	Section 4.6, p 15	concern that depth of fuel contamination is unknown. Two soil borings will not be enough—recommend 4-5 as this is a fairly large site.	Not in SOW / USACE – The 2 soil borings are meant to refine the extent of contamination, based on previous sampling results. The specific purpose is to determine the overall depth of contamination for remedial design purposes. Historical sampling results may be added to the figure for		

REVIEW COMMENT

PROJECT: Northeast Cape RI, Phase IV

DOCUMENT: draft Work Plan (S&W 2004)

LOCATION: St. Lawrence Island, AK

U.S. ARMY CORPS OF ENGINEERS CEPOA-EN-ES	DATE: 16 June, 2004 **REVIEWER:** Pamela Miller - RAB **PHONE:** (907) 222-7714	**Response By:** Randy Hessong, Shannon & Wilson Field Team Leader; 21 June 2004

Item No.	Drawing Sht. No., Spec. Para.	COMMENTS	Response / Recommended Responder	Correction to Document	Bac check by: (Initials
			clarification.		
13.	Section 4.7, p 16	not clear what will be done if existing wells cannot be used—need to install and maintain additional wells to properly monitor contaminant flow from this substantial source.	The SOW does not include well replacement or repair. / USACE – If the existing monitoring wells are not viable for sampling (destroyed/damaged), the samples will be collected from nearby existing wells installed in 2002.		
14.	Section 4.9	the document acknowledges that fractured bedrock, localized permafrost, and other factors confound understanding of contaminant flow. More than three additional monitoring wells are needed to delineate the extent of contamination in and beyond the Main Operations complex. Analyses must include PCBs, arsenic and mercury.	Not in SOW / USACE – Mercury will be added to the planned analytical suite for the soil and groundwater samples collected at the Main Complex.		
15(a).	Section	the document must specify which pesticides will	See Table A2-1 of the QAPP for the	None	

REVIEW COMMENT **PROJECT:** Northeast Cape RI, Phase IV

DOCUMENT: draft Work Plan (S&W 2004) **LOCATION:** St. Lawrence Island, AK

U.S. ARMY CORPS OF ENGINEERS CEPOA-EN-ES	DATE: 16 June, 2004 **REVIEWER:** Pamela Miller - RAB **PHONE:** (907) 222-7714	**Response By:** Randy Hessong, Shannon & Wilson Field Team Leader; 21 June 2004

Item No.	Drawing Sht. No., Spec. Para.	COMMENTS	Response / Recommended Responder	Correction to Document	Bac check by: (Initials
	4.16, page 26	be analyzed.	pesticides list.		
15(b).	Section 4.16, page 26	The RI must identify the sources of the pesticides detected.	Not in SOW / USACE		