FAX

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Date: 6/21/94

To: Doug Blaisdell AK COE

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From: Victor Harris

Reference:

Subject:

No. of Pages: (including cover) 8

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MONTGOMERY WATSON

June 21, 1994

Alaska Department of Environmental Conservation
610 University Avenue
Fairbanks, Alaska 99709-3643

2198.0220/0230

Attention: Mr. Robert Couch
Environmental Engineering Assistant

Subject: Investigative Derived Waste (IDW) - St. Lawrence Island

Dear Mr. Couch:

As you are aware, Montgomery Watson is performing the remedial investigation for the U.S. Army Engineer District at Gambell and Northeast Cape, St. Lawrence Island, Alaska. The enclosed text represents modification to the work plans for these two projects in the area of IDW, based on discussions between you and Doug Blaisdell on May 25, 1994 in Fairbanks.

As I discussed with you in our June 17, 1994 phone conversation, we previously faxed this plan to you on June 15 for comment. In the absence of further comment from you, we will proceed with the plan for IDW as outlined in the enclosed text.

We appreciate your assistance with these projects. Please contact myself or Butch West at (907) 561-5829 if you have comments or questions on the enclosed plan.

Sincerely,

Victor E. Harris
Project Manager

/mg.01C.10

cc: Mr. Douglas Blaisdell - USAED

encl.

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5.9 INVESTIGATION-DERIVED WASTE

Investigation-derived wastes (IDW) are expected to consist of the following waste types:

- Cuttings from boreholes;
- Samples not submitted for laboratory analysis;
- Groundwater from well development and sampling activities;
- Decontamination fluids; and
- Disposable protective clothing and supplies.

5.9.1 Existing Data on Contaminants

This plan for IDW is based on existing information from previous investigations on the nature and extent of contamination. Previous investigations were limited to visual inspection of the site, interviews with knowledgeable personnel and limited sampling and analysis (Chemical Data Acquisition Plan, February 1993). Laboratory data is limited to date. Soil samples were previously collected and analyzed for PCBs. PCBs were detected in some samples, but were all at or below 3.7 ppm. Sediments were collected and analyzed for PCBs and fuel hydrocarbons. Both analytes were detected in a few samples (PCBs in only one sample). Surface water and groundwater were not analyzed. Existing background information from field observation, and the limited analytical data and interviews is documented in Table 5-11, which presents a summary of the suspected contamination for each site under investigation. To date, laboratory analysis has not confirmed the presence of these suspected contaminants, except as listed above. This field investigation is intended to sample additional areas and collect samples for a laboratory analysis to confirm or refute a wide range of potential (undocumented) contaminants, such as: total petroleum hydrocarbons, diesel range organics, gasoline range organics, volatile organic compounds, priority pollutant metals, dioxins, explosives, PCBs, base neutral extractables (BNA) and persistent pathogens. Many of the laboratory analyses are targeted at documenting the absence of potential, but unlikely contaminants. There is no report of listed hazardous waste in soil, sediment, surface water or groundwater.

5.9.2 Soils

All boreholes not completed as monitoring wells will be backfilled with bentonite grout. Cuttings from boreholes and monitoring wells will be segregated from native soils in sealed weatherproof woven polypropylene bulk bags with waterproof polyethylene liners. These soils will remain in the vicinity of the borehole, covered by a veneer of native soils as protection from the environment. If laboratory analyses indicate remediation of these soils is required, they will be addressed during the remediation phase.

Table 5-11
IDW Characterization
NE Cape

Site	Sub surface Soil Sampling	Groundwater Sampling	Potential Contaminants	Listed Waste Present?	Area
1			No investigation or sampling		
2	None	None	Transformers (with confirmed PCB oil), capacitors, ACM,	No	Undefined
3	None	None	Fuel line, POL stained soils, batteries (lead)	No	Undefined
4	None	None	Empty POL drums, household debris, POL stained soils, Dielectric fluid used to start fires(PCB and dioxins)	No	Undefined
5	None	None	Historic cans of dielectric fluid (PCB), 275 decaying drums (diesel, motor oil, dielectric fluid), debris, POL stained soils, paint can	No	Undefined
6	Sample	Sample	Approx. 1500 Empty POL drums disposed (about 30 partly full with POL), POL stained soils	No	Undefined
7	Sample	Sample	Landfill, Approx. 2300 drums (one labeled dry cleaning solvent (PCE, TCE)), debris, batteries (lead), Oil-stained backfill, trash burning (dioxins)	No	Undefined
8			No investigation or sampling		
9	Sample	Sample	Solid waste landfill, Drums, trash, debris, 2 quart amber jar of white powder,	No	Undefined
10	Sample	Sample	Est. 29,500 buried drums (90 weight waste oil), stained soils, PCB detected in soil and sediments	No	Undefined
11	Sample	Sample	Fuel storage tanks, reported spill of 180,000 gal. diesel, soil staining from spill in wetlands,	No	Undefined
12	None	None	Leaded gasoline tank, no stained soil evident	No	Undefined
13	Sample	None	Power bldg., 2 UST, Transformers with confirmed PCB oils, oil spill, ACM, soil with confirmed PCB,	No	Undefined
14	None	None	Power and communications bldg.., ACM, transformers with confirmed PCB oil, fuel AST, debris	No	Undefined
15	Sample	Sample	40, 000 gal. spilled diesel from underground line, stained soils,	No	Undefined
16	Sample	Sample	Flammable liquids storage, solvents, paints, POL, dielectric fluids, cleaners, TCE, some leaking containers in and outside building,	No	Undefined
17	None	None	Cleaning fluids, ACM, multiple drums and containers (leaked), bromochloromethane, NaOH, isopropanol, cappella oil,	No	Undefined
18	None	None	ACM, cleaning fluids in closets, susp. lead paint, trash burner,	No	Undefined
19	Sample	Sample	Auto maintenance, ACM, oil sheen on pit, smudge pots, antifreeze,	No	Undefined
20	None	None	ACM	No	Undefined
21	Sample	Sample	WWT, discharge to stream, sludge buried	No	Undefined
22	Sample	Sample	ACM cement, paint, UST, oiled sand floor,	No	Undefined
23	None	None	Power lines, transformers, stained soils, drums (used as supports), 175 utility poles (treated?)	No	Undefined
24	Sample	Sample	Receiver bldg.., burned out after electrical equip. removed, 450 POL drums, 1,000 buried drums,	No	Undefined
25	None	None	Burned building, 50 drums, debris, transformer	No	Undefined
26			No investigation or sampling		
27	Sample	Sample	Diesel fuel pump, underground lines, stained soils,	No	Undefined
Background			None		

Updated: 5/17/94

5.9.3 Water

Development, decontamination and purge water will be observed visually to determine the appropriate disposal method. The water will be visually observed for the presence of free product. If free product (floating oily residue) is observed, the waste will be containerized, a sample will be collected for fast turnaround laboratory analysis, and the waste will be characterized for disposal. The containerized waste will be characterized, labeled, stored, transported and disposed according to RCRA and TSCA and applicable federal, state, and local requirements. Other fluids will be disposed of on-site without treatment unless field screening noted above indicates the need for containerization and alternate disposal.

Decontamination solvents will be containerized and evaporated.

5.9.4 Disposable Protective Clothing and Supplies

Disposable protective clothing and supplies will be bagged, then characterized per the RCRA regulations. Any hazardous wastes will be shipped first to Anchorage and then out of state for disposal. Non-hazardous waste will be disposed per the local standard procedures or transported to Anchorage for disposal as solid waste.

5.9 INVESTIGATION-DERIVED WASTE

Investigation-derived wastes (IDW) are expected to consist of the following waste types:

- Cuttings from boreholes;
- Samples not submitted for laboratory analysis;
- Groundwater from well development and sampling activities;
- Decontamination fluids; and
- Disposable protective clothing and supplies.

5.9.1 Existing Data on Contaminants

This plan for IDW is based on existing information from previous investigations on the nature and extent of contamination. Previous investigations were limited to visual inspection of the site, interviews with knowledgeable personnel and limited laboratory analysis. Laboratory data is limited to date. Soil samples were previously collected and analyzed for PCBs. No PCBs were detected. Surface water and groundwater were analyzed for water quality objectives, PCBs, volatile organic compounds and metals. Reported analytical results do not indicate any significant contamination, except some oil and grease in most samples (Chemical Data Acquisition Plan, February 1993). Existing background information from field observation and the limited analytical data and interviews is documented in Table 5-11, which presents a summary of the suspected contamination for each site under investigation. To date, laboratory analysis has not confirmed the presence of these suspected contaminants. This field investigation is intended to sample additional areas, and collect samples for a laboratory analysis to confirm or refute a wide range of potential (undocumented) contaminants, such as: total petroleum hydrocarbons, diesel range organics, gasoline range organics, volatile organic compounds, TCLP metals, dioxins, explosives, PCBs, base neutral extractables (BNA) and coliform/fecal bacteria. Many of the laboratory analyses are targeted at documenting the absence of potential, but unlikely contaminants. There is no report of listed hazardous waste in soil, sediments, surface water or groundwater.

5.9.2 Soils

All boreholes not completed as monitoring wells will be backfilled with bentonite grout. Cuttings from boreholes and monitoring wells will be segregated from native soils in sealed weatherproof woven polypropylene bulk bags with waterproof polyethylene liners. These soils will remain in the vicinity of the borehole, covered by a veneer of native soils as protection from the environment. If laboratory analyses indicate remediation of these soils is required, they will be addressed during the remediation phase.

Table 5-11
IDW Characterization
Gambell

Site	Soil Sampling	Groundwater Sampling	Potential Contaminants	Listed Waste Present?	Area
1	Sample	Sample	Tars, asphalt	No	In impacted area and around perimeter
2	Sample	Sample	ACM, nitrates and metals from ordinance	No	In impacted area and around perimeter, excluding ordinance burial area
3	Sample	Sample	Buried transformers (PCB), Batteries (lead, acid), POL	No	In impacted area
4	Sample	None	ACM, transformers (PCB), former spill (PCB, metals), burned areas (BNA)	No	In stained areas and adjacent to transformers
5	Sample	Sample	Buried transformers (PCB),	No	In impacted area and downgradient
6	None	Sample	Lime-stabilized sewage	No	Perimeter
7	Sample	Sample	Buried transformer (PCB), gas/diesel pipeline, stained soils (POL)	No	In impacted area
8	Sample	Sample	Ordinance (nitrates, metals, explosive), No surface stains,	No	No sampling in ordinance burial area, Downgradient well, Soil samples in ar
9	No investigation or Sampling				
10	No investigation or Sampling				
11	No investigation or Sampling				
12	Sample	Sample	Drum disposal(household garbage, EG), batteries (lead), household garbage	No	Perimeter, vicinity of batteries
13	Sample	Sample	Buried transformers (PCB, POL), Stained soils (burned, rust)	No	In impacted area and around perimeter
14	No investigation or Sampling				
15	No investigation or Sampling				
16	Sample	Sample	Stained soils (??), Suspected buried material (??)	No	In impacted area and around perimeter
17	Sample	Sample	Landfill(garbage, sewage, fuel containers), burned (BNA)	No	In impacted area and around perimeter
18	No investigation or Sampling				

Notes:
ACM = Asbestos containing material (suspected)
EG = Ethylene glycol

If free product (floating oily residue) is observed, the waste will be containerized, a sample will be collected for fast turnaround laboratory analysis, and the waste will be characterized for disposal. The containerized waste will be characterized, labeled, stored, transported and disposed according to RCRA and TSCA and applicable federal, state, and local requirements. Other fluids will be disposed of on-site without treatment unless field screening noted above indicates the need for containerization and alternate disposal.

Decontamination solvents will be containerized and evaporated.

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