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2007 WORK PLAN

FORMER COMMUNICATIONS SITE PCB REMOVAL ACTION

FORT WAINWRIGHT, ALASKA

**FINAL – REVISION 1
OCTOBER 2007**

JACOBS ENGINEERING GROUP INC.



Alaska District

2007 WORK PLAN

FORMER COMMUNICATIONS SITE PCB REMOVAL ACTION

FORT WAINWRIGHT, ALASKA

FINAL – REVISION 1 OCTOBER 2007

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**Environmental Restoration Services
Contract No. W911KB-06-D-0006
Task Order No. 0006**

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ACRONYMS AND ABBREVIATIONS

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
COC	contaminant of concern
CQCSM	Contractor Quality Control Site Manager
DFW	definable feature of work
DOT	U.S. Department of Transportation
DQO	data quality objective
EPA	U.S. Environmental Protection Agency
FCS	Former Communications Site
FS	Feasibility Study
FSP	Field Sampling Plan
Jacobs	Jacobs Engineering Group Inc.
MEC	munitions and explosives of concern
mg/kg	milligram per kilogram
mg/L	milligram per liter
MI	multi-incremental
PCB	polychlorinated biphenyl
POC	point of contact
PPE	personal protective equipment
RA	removal action
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
SSHP	Site Safety and Health Plan
SVOC	semivolatile organic compound
SSB	South Sound Berm
TAT	turnaround time
TCLP	Toxicity Characterization Leaching Procedure
TSA	Transfer Service Area

ACRONYMS AND ABBREVIATIONS
(continued)

TSCA	Toxic Substances Control Act
TSDF	Treatment, Storage, and Disposal Facility
USACE	U.S. Army Corps of Engineers
USAED	U.S. Army Engineer District, Alaska
VOC	volatile organic compound

1.0 INTRODUCTION

This Work Plan outlines the 2007 Removal Action (RA) to be conducted at Area E of the Former Communications Site (FCS), also referred to as Taku Gardens, located at Fort Wainwright, Alaska. Jacobs Engineering Group Inc. (Jacobs) will perform this RA in support of an ongoing Remedial Investigation/Feasibility Study (RI/FS). Table 1 of the Communications Plan (U.S. Army Engineer District, Alaska [USAED] 2007e) presents key personnel for this project.

The U.S. Army Garrison, Alaska, the U.S. Environmental Protection Agency, and Alaska Department of Environmental Conservation (ADEC) have agreed to conduct the FCS RI/FS utilizing the Triad approach. A Management Plan addressing the methods of the overall site management, quality assurance plan and sampling techniques has been prepared and should be referred to for additional information. This document is one of many work plans that provide detailed information to the specific task of the RI/FS. This approach was determined to be the most effective, efficient and appropriate method for investigating this site for a time critical RA for soil contaminated with polychlorinated biphenyls (PCBs) at the FCS (aka Taku Gardens) within the Fort Wainwright Federal Facility National Priorities List site, located at Fort Wainwright, Alaska. These actions meet the criteria for initiating an RA under the National Oil and Hazardous Substances Pollution Contingency Plan, 40 Code of Federal Regulations (CFR) 300.415, as well as the requirements outlined in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Area A, located on the east side of the FCS, is considered a Munitions Response Site because military munitions and related items have previously been discovered. All munitions and explosives of concern (MEC) items discovered to date have been non-shock sensitive, inert, unarmed, or empty; suggesting that only training rounds, Munitions Debris and Material Potentially Presenting an Explosive Hazard, are present. To date, no MEC or Munitions Debris has been discovered within the west area (Areas B, C, D, and E) of the FCS. To address the specific concerns associated with MEC, a separate MEC Support Work Plan was developed and is provided under separate cover (USAED 2007c).

1.1 PROJECT OBJECTIVES

The project objective is to remove all PCB-contaminated soil from Area E that exceeds the residential cleanup level of one milligram per kilogram (mg/kg).

1.2 SCOPE OF WORK

The following definable features of work (DFW) under this task order are described in Section 3.3:

- Mobilization
- Site security
- PCB-contaminated soil removal
- Waste management
- Site restoration and backfilling
- Demobilization

1.3 SITE DESCRIPTION

Fort Wainwright occupies a 915,000-acre military reservation located west of Fairbanks, Alaska; see Figure 1-1 of the RI/FS Management Plan (USAED 2007a). This 54-acre construction site is located between Alder and Neely Roads, east of White Street and west of the Fort Wainwright Power Plant. To view the FCS site and the location of Area E, see Figure 2-2 of the RI/FS Management Plan (USAED 2007a).

1.4 PREVIOUS ENVIRONMENTAL ASSESSMENT WORK

In 2005, investigation of PCBs in soil was performed. Soil borings were advanced to groundwater and Ensys field test kits combined with analytical samples were used for characterization. Approximately 230 cubic yards of PCB-impacted soil was excavated from near Building 52 and was loaded into roll-off bins (connexes) and transferred to Emerald Services Inc., by William Snyder of the Fort Wainwright Department of Public Works (DPW) for disposal. Stockpiled soil removed from near building 54 was used to fill the Building 52 excavation.

In 2006, a PCB investigation was conducted at three potential source areas; the Exclusion Zone (adjacent to the former Building 52 location), the Transformer Service Area (TSA), and the South Sound Berm (SSB). A total of 467 samples were collected from the Exclusion Zone, 52 samples were collected from the TSA, and 20 samples were collected from the SSB and screened for PCB contamination using Hach Immunoassay field test kits.

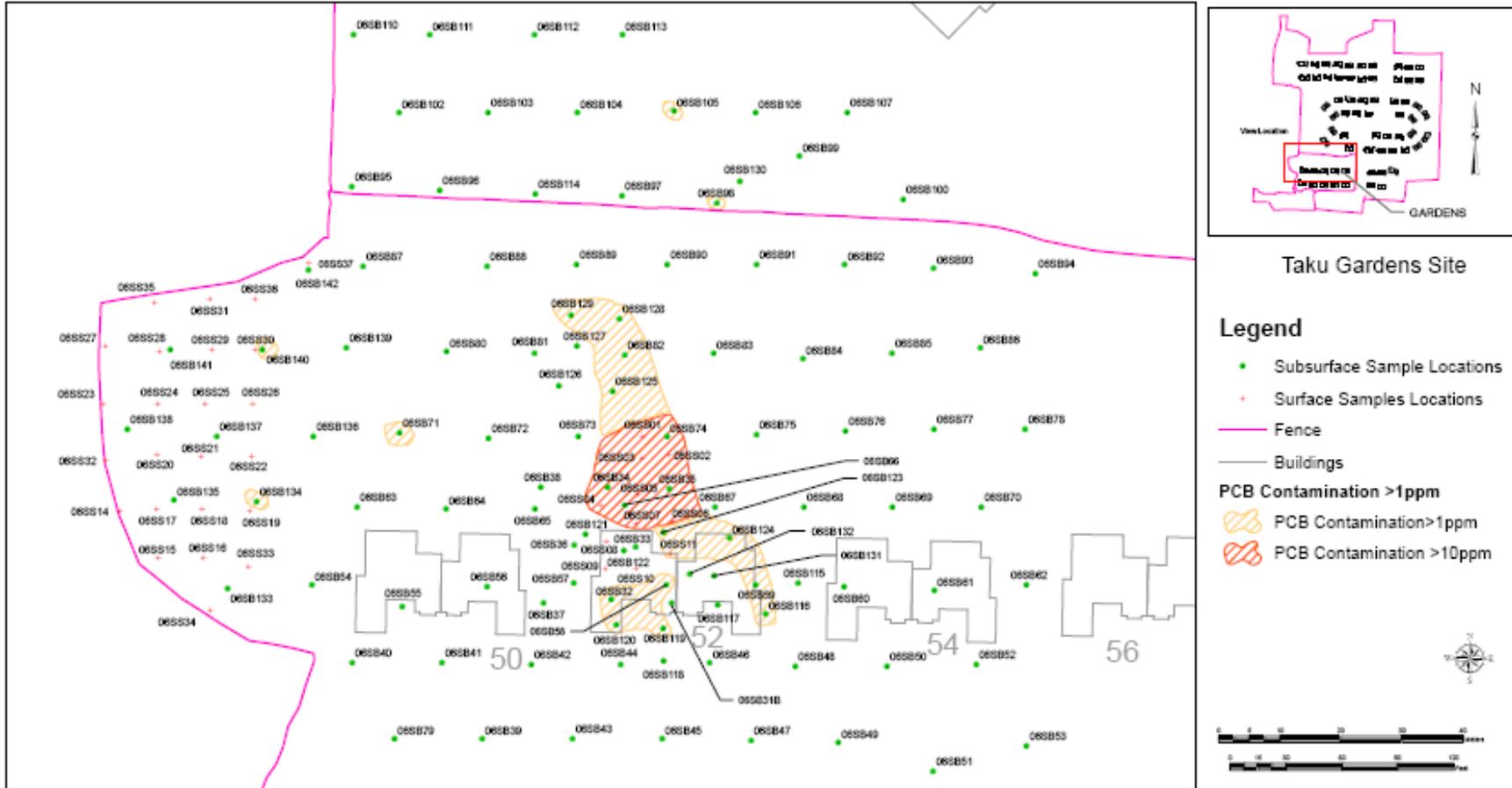
The result of this evaluation in the Exclusion Zone was the discovery of high levels of PCB contamination, with the highest concentration found north of the former Building 52 location at a concentration of 111,000 mg/kg (USAED 2006). The Exclusion Zone results indicated that one large area of contamination exists near the former Building 52 location as depicted in Figure 1-1. PCB contamination appears confined to the top 5 feet of the soil column in all positive samples results (USAED 2007b).

Smaller, isolated areas of contamination may exist at the TSA as shown in Figure 1-2. However, given the rate of false positive errors reported by the field test method, these isolated, non-contiguous areas would require additional sampling to verify the presence of PCB contamination.

Four positive field screening results were detected at the SSB, but fixed laboratory results confirmed that all four field screening detections were false positive errors indicating that PCBs are not present at these locations.

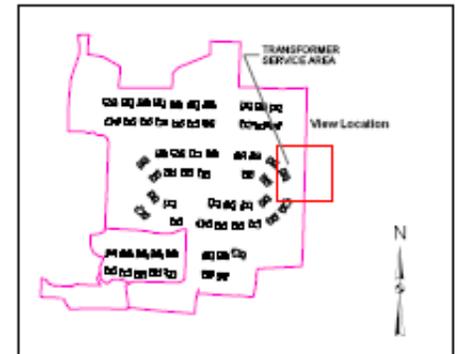
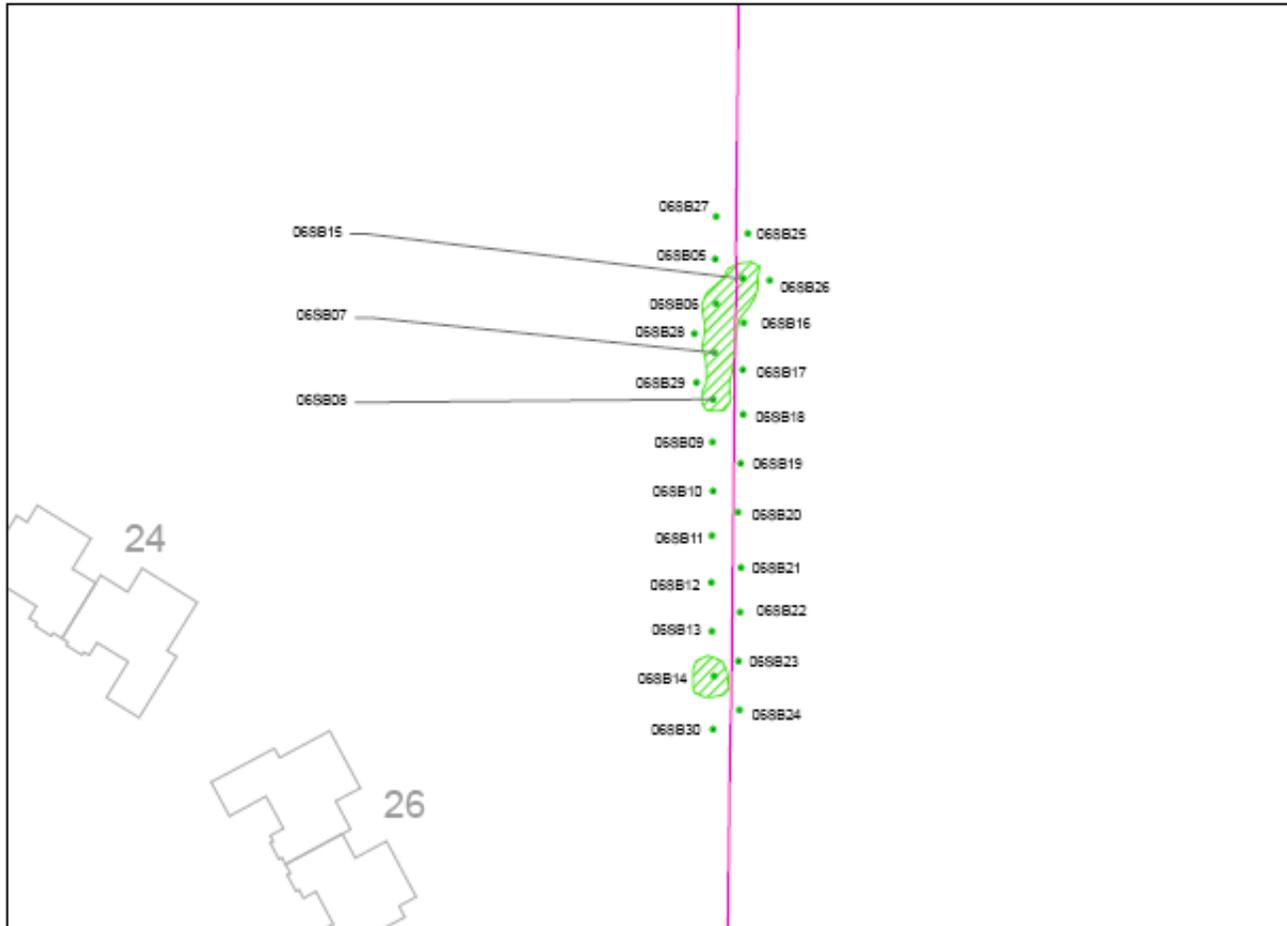
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Figure 1-1: Exclusion Zone PCB Contamination



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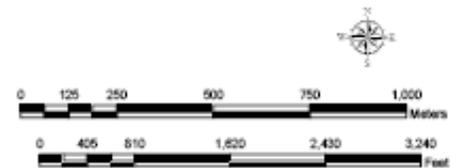
Figure 1-2: TSA PCB Contamination



Taku Gardens Site

Legend

- Sample Locations
- Fence
- Buildings
- ▨ PCB Contamination > 1ppm



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2.0 DATA QUALITY OBJECTIVES

Data quality objectives (DQOs) guide decisions and procedures for collecting, analyzing, and evaluating data so that overall project objectives are met. Project specific DQOs are presented in detail in Table 2-1.

**Table 2-1
Data Quality Objectives**

Objective	Data to Be Collected	Analytes of Concern	Data Use	Governing Regulation	Comments
Characterize TSCA soil for offsite TSDF disposal purposes	Collect soil samples from the first 10 waste containers filled during excavation activities	VOCs, SVOCs, pesticides, herbicides, and RCRA metals List will decrease to only include analytes detected in the first 10 samples	Determine appropriate waste profile information for manifesting, labeling, and disposal facility requirements	DOT guidance (49 CFR) EPA guidance (40 CFR)	<ul style="list-style-type: none"> • One sample will be collected per container • Results will be reviewed to determine if additional TCLP analysis is necessary • Estimated 3-day TAT for samples; actual TAT will be determined in the field
Characterize soil previously identified as having PCB concentrations greater than 1 mg/kg but less than 10 mg/kg	Collect soil samples from the soil stockpile per CH2M Hill's MI sampling procedure	PCBs, VOCs, SVOCs, pesticides, herbicides, and RCRA metals	Determine if soil can be disposed of in the Fort Wainwright Landfill	Fort Wainwright Landfill Permit DOT guidance (49 CFR) EPA guidance (40 CFR)	<ul style="list-style-type: none"> • Representative samples will be collected at a frequency of one sampler per 20 cubic yards or source area, whichever is lesser • Results will be reviewed to determine if soil will be disposed in the Fort Wainwright Landfill or an offsite TSDF • Estimated 3-day TAT for samples; actual TAT will be determined in the field

Note: For definitions, see the Acronyms and Abbreviations section.

2.1 CONTAMINANTS OF CONCERN

The primary contaminant of concern (COC) is PCBs. The waste generator, the U.S. Army Garrison, Alaska, has determined that the PCB-contaminated soil located within the Exclusion Zone and previously identified as having a PCB concentration greater than 10 mg/kg per

Figure 1-1 is Toxic Substances Control Act (TSCA) waste. Therefore, waste characterization samples collected from this soil will not be analyzed for PCBs. This soil, however, has not been adequately characterized for potential Resource Conservation and Recovery Act (RCRA) COCs, which is necessary to determine if the soil will be regulated under RCRA in addition to its TSCA classification. This determination is required in order to select the appropriate Treatment, Storage, and Disposal Facility (TSDF) to receive this soil. Therefore, the first 10 waste transportation containers will be sampled for the following contaminants: volatile organic compounds, semivolatile organic compounds, pesticides, herbicides, and RCRA metals.

Soil previously identified as having a PCB concentration greater than 1 mg/kg but less than 10 mg/kg, per Figures 1-1 and 1-2, will be sampled for PCBs and other COCs to determine if it can be disposed of in the Fort Wainwright Landfill. This soil requires PCB sampling to verify it is less than 10 mg/kg because it was primarily characterized using HATCH PCB test kits.

Specific RCRA analytical COCs are provided in Table 2-2 along with their corresponding “20 times” totals action level, above which a Toxicity Characterization Leaching Procedure (TCLP) analysis must be run to determine if the represented waste will be hazardous. The applicable RCRA TCLP hazardous waste concentration is also provided in Table 2-2.

**Table 2-2
RCRA COC Totals and TCLP Concentrations**

Sample Suite	Sample Method	Chemical Analyte	RCRA TCLP Concentration (mg/L)	20 Times TCLP Totals Action Level (mg/kg)
RCRA Metals	SW6020/7470A	Arsenic	3.0	60.0
		Barium	100.0	2,000.0
		Cadmium	1.0	20.0
		Chromium	5.0	100.0
		Lead	5.0	100.0
		Mercury	0.2	4.0
		Selenium	1.0	20.0
		Silver	5.0	100.0

Sample Suite	Sample Method	Chemical Analyte	RCRA TCLP Concentration (mg/L)	20 Times TCLP Totals Action Level (mg/kg)
VOCs	SW8260B	Benzene	0.5	10.0
		Carbon Tetrachloride	0.5	10.0
		Chlorobenzene	100.0	2,000.0
		Chloroform	6.0	120.0
		1,4-Dichlorobenzene	7.5	150.0
		1,2-Dichloroethane	0.5	10.0
		1,1-Dichloroethylene	0.7	14.0
		Hexachlorobutadiene	0.5	10.0
		Methyl Ethyl Ketone	200.0	4,000.0
		Pyridine	5.0 ¹	100.0
		Tetrachloroethylene	0.7	14.0
		Trichloroethylene	0.5	10.0
		Vinyl Chloride	0.2	4.0
SVOCs	SW8270C	Chlordane	0.03	0.60
		2,4-Dinitrotoluene	0.13 ¹	2.6
		Hexachlorobenzene	0.13 ¹	2.6
		Hexachloroethane	3.0	60.0
		Nitrobenzene	2.0	40.0
		Pentachlorophenol	100.0	2,000.0
		2,4,5-Trichlorophenol	400.0	8,000.0
		2,4,6-Trichlorophenol	2.0	40.0
Herbicides	SW8151	2,4-D	10.0	200.0
		2,4,5-TP Silvex	1.0	20.0
Pesticides	SW8081A	Endrin	0.02	0.4
		Lindane	0.4	8.0
		Methoxychlor	10.0	200.0
		Toxaphene	0.5	10.0

Notes:

¹ Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level. For definitions, see the Acronyms and Abbreviations section.

2.2 SAMPLING APPROACH

The intent of the sampling effort for this RA is to characterize and identify an appropriate TSDf to dispose of PCB-contaminated soil removed from the FCS. The first 10 waste characterization samples from each source area collected from random locations in order to acquire representative data. Only analytes detected in the first 10 samples will continue to be analyzed for waste container characterization purposes. If a RCRA chemical is detected at a total concentration 20 times greater than its corresponding RCRA TCLP concentration per Table 2-2, a composite sample will be collected from five locations within the waste bin and submitted for TCLP analysis. The Field Sampling Plan (FSP) Addendum (Attachment 1) contains additional detail regarding sample collection methodology.

Jacobs will collect all waste characterization samples. Collection of analytical soil confirmation samples will be conducted by CH2MHill in accordance with the RI/FS Management Plan (USAED 2007a).

3.0 PROJECT EXECUTION APPROACH

This section describes general requirements for completion of PCB-contaminated soil removal. It discusses conditions for performing the work and identifies fieldwork control requirements.

3.1 QUALIFICATIONS AND RESPONSIBILITIES

The Site Manager oversees all Jacobs and subcontractor employees working onsite. The Site Manager is responsible for overseeing all activities and verifying their conduct in accordance with this Work Plan and all applicable federal and state regulations.

The Jacobs Contractor Quality Control System Manager (CQCSM) ensures that all quality standards are met. The CQCSM is responsible for providing the USAED PM with daily Contractor Quality Control reports detailing each day's activities, quantities, etc.

The Site Safety and Health Officer oversees all field activities; ensures that each activity is performed in a safe manner following USAED, Occupational Safety and Health Administration, and Jacobs guidelines; and reports directly to the Jacobs Project Manager.

The Field Sampler is responsible for collecting samples, reviewing analytical results, completing appropriate documentation, and submitting samples to the laboratory. The Field Sampler is also responsible for implementation the FSP Addendum and coordination of the Quality Assurance Project Plan requirements that affect the laboratory and field programs. The Field Sampler will report to the Site Manager while working onsite and to the Project Chemist regarding the FSP. The Field Sampler will meet ADEC requirements for a Qualified Person as defined by Alaska Administrative Code (AAC), Title 18, Section 75.990(100). These requirements include a four-year college degree in chemistry, environmental science, engineering, geology, hydrology, or a related field, and at least one year of professional experience in a related field.

3.2 GENERAL WORKING CONDITIONS

The work schedule will generally be six days a week, 10 hours a day for onsite activities. Members of the crew performing management and reporting activities could work up to 12 hours a day.

3.3 DEFINABLE FEATURES OF WORK

The following sections describe the project DFWs and the order of occurrence that will be applied to the contaminated soil removal at Area E.

3.3.1 Mobilization

Mobilization of personnel to Fort Wainwright began on 20 August 2007. If field activities are not completed in 2007 due to the onset of winter, a second mobilization will be scheduled for spring 2008. Jacobs shall mobilize sufficient personnel, equipment, and materials to the site to conduct the remedial work described in this Work Plan. USAED has provided Jacobs with a landowner right-of-entry permit to work at the site. Prior to mobilization, the following personnel were notified:

- Bob Brock, USAED Project Manager, 907-753-5612
- Joe Malen, Fort Wainwright DPW Point of Contact (POC), 907-361-4512

Prior to any contractor activities at the site, each contractor personnel will coordinate and attend a site specific safety briefing hosted by Fort Wainwright DPW Environmental.

A staging area for the project site will be located in the former laydown yard south of Area E. This staging area will be used to store all heavy equipment and organize and manage packaged wastes that will be placed into bulk containers to be transported offsite after profiling and manifesting is completed. Exposure to uncontrolled releases is not anticipated; however, work zones (i.e., exclusion zone, contamination reduction zone, support zone) to prevent spreading contamination will be established.

3.3.2 Site Security

Contractor personnel desiring site entry will sign the TAKU Entry Control Roster in building 3023 – Name, Organization, & Time in, and will then be issued a gate key.

All contractor personnel will check in and out with the Fort Wainwright Fire Department Dispatcher daily prior to accessing and departing the FCS. Fort Wainwright dispatch can be reached telephonically 24 hours a day at 907-361-7470.

A chain-link security fence surrounds the FCS. Access to and from the site will be controlled by Jacobs. The fence gate will remain locked during non-working hours. While work is occurring, the gate will be manned and a sign-in / sign-out log will be maintained in the onsite job shack. A sign will be placed on the gate identifying who to call for access. The gate will be closed and locked behind personnel entering or exiting the site.

3.3.3 PCB-Contaminated Soil Removal

PCB-contaminated soil will be excavated from two general areas within the FCS, the Exclusion Zone and the TSA. The primary excavation area lies within the Exclusion Zone at the former Building 52 location. The areas at the TSA identified as contaminated in Figure 1-2 will also be excavated. Additionally, localized hot spots within the Exclusion Zone (locations 06SB134, 06SB140, and 06SB71) and just north of the Exclusion Zone (locations 06SB98 and 06SB105) will be removed. Soil will either be stockpiled inside the Exclusion Zone in accordance with the Long-Term Soil Stockpile Plan (USAED 2007f) for future loading into waste bins or direct loaded into waste bins, depending on bin availability.

Vertically, soil will be removed to a depth of 1 foot below the deepest sample location indicating the presence of contamination above 1 mg/kg. Horizontally, soil will be excavated to the estimated limits of contamination determined by the 2006 investigation; approximately 5 feet beyond the outward most contaminated sample location (refer to Figures 1-1 and 1-2). At the smaller localized hot spots, the horizontal extent of the initial excavation will include a 10-foot-by-10-foot grid centered on the contaminated sample location.

Once it is believed that clean limits have been achieved, field screening samples using Hach test kits (the same kits used in 2006) will be collected. Based on the results of the field screening sample, additional excavation will be performed or an analytical confirmation sample will be collected. Wall samples will be collected every 10 feet and one floor sample will be collected for each 10-foot-by-10-foot grid. Additional excavation will occur at each confirmation sample location if the sample result is above the 1 mg/kg screening level presented in the Quality Assurance Program Plan (USAED 2007d).

If a floor confirmation sample exceeds a screening level, the 10-foot by 10-foot grid represented by that floor sample will be excavated an additional 1 foot below ground surface, and re-sampled. If a wall confirmation sample exceeds a screening level, the wall length represented by that sample (i.e., 5 feet on either side of the sample location) will be excavated an additional 5 feet into the wall's face, and re-sampled. This process will continue until COCs are below their respective screening levels.

Soil piles located in the PCB exclusion zone (Soil Piles 17 through 39 and Soil Piles SPD and SPF) will be sampled and analyzed for PCBs by CH2M Hill in accordance with the RI/FS Management Plan (USAED 2007a). Soil piles with PCB concentrations greater than 10 mg/kg will be disposed of under this RA at an approved TSDF. Soil piles with PCB concentrations less than 10 mg/kg will be disposed of by Jacobs at the Fort Wainwright Landfill. The letter of approval for disposal of low-level PCBs at the Fort Wainwright Landfill is provided as Attachment 4.

3.3.4 Waste Management

Contaminated soil requiring offsite disposal will be containerized, transported to an approved TSDF, and disposed of by Jacobs. Contaminated soil will be containerized in leak proof intermodal bulk containers on chassis, or other suitable U.S. Department of Transportation (DOT)-approved bulk containers.

Responsibilities

Project specific waste management responsibilities are provided in Table 3-1.

**Table 3-1
Waste Management Responsibilities**

Organization	Waste Management Responsibility
USAED	Contract holder responsible for directing Jacobs and CH2M Hill.
DPW	Designated FCS waste generator and hazardous waste manifest signer.
Jacobs	Responsible for characterizing, profiling, labeling, manifesting, transporting, and disposing of waste streams. Also responsible for waste tracking and providing final disposition paperwork to DPW (e.g., certificates of disposal, landfill tipping fee receipts, etc.).
CH2M Hill	Responsible for confirmation sampling and timely delivery of sample results.

Anticipated Waste Streams

Waste types and anticipated quantities are listed in Table 3-2, which also identifies the anticipated disposal facility for each waste stream.

**Table 3-2
Anticipated Wastes and Estimated Quantities**

Waste Type	Item	Quantity	Container	Disposal Facility
PCB-contaminated soil	Regulated soil	< 110 containers	20-foot intermodal bulk containers	To be determined
PCB-contaminated soil	Non-regulated soil < 10 mg/kg	< 10 containers	20-foot intermodal bulk containers	Fort Wainwright Landfill
Solid waste, PPE, and sampling equipment	Non-regulated solid waste	< 250 pounds	Super Sacks	Fort Wainwright Landfill

The Fort Wainwright Landfill will be used in accordance with the *Fort Wainwright Landfill Prohibitions and Special Restrictions* (March 2000), which is provided as Attachment 2. A letter authorizing dumping of PCB-contaminated soil with concentrations less than 10 mg/kg as been requested by the USAED from DPW, but has not yet been received for inclusion in this Work Plan.

Waste Container Requirements

All regulated wastes will be placed in containers that comply with DOT shipping requirements established in 49 CFR 173. Wastes will be placed in containers that comply with DOT shipping requirements established in 49 CFR 173. Liquids will be shipped in UN/1A1/Y or UN/1A2/Y drums. Solids will be shipped in UN/1A2/Y steel drums or Super Sacks (5H packaging per 49 CFR 173) or approved bulk or intermediate bulk containers.

3.3.5 Site Restoration and Backfilling

Clean native soil from borrow pits near the project will be used to backfill the excavations. Jacobs will inspect the fill material to ensure that it is free of trash, debris, wood, ice, and other deleterious materials. The final grade shall match the pre-existing grade.

Backfilling will not commence until the excavation has been sampled by CH2M Hill, areas are confirmed clean by sampling results, and the USAED has given direction to backfill. In excavation areas where utilities are encountered, backfilling activities will be performed in accordance with *Replacement Housing Fort Wainwright Specification 02300, Earthwork*. For all other areas, unclassified fill material will be placed in 1- to 2-foot lifts in the excavation and compacted with several passes of the heavy equipment at the site. If necessary, backfilling may be performed in sampled and confirmed clean portions of the excavation while soil removal continues concurrently. After excavation and prior to backfilling and grading are complete, all equipment will undergo dry, gross decontamination, including the removal of potentially contaminated materials by use of a shovel or other hand tools and stiff bristle brushes. Trash and debris related to the RA will be packaged and removed from the site with the contaminated soil and debris.

3.3.6 Demobilization

Jacobs will notify USAED and the landowner 48 hours prior to final demobilization from the site, to offer the opportunity for final inspection. Work activities in 2007 are anticipated to continue until winter weather prohibits further work. Jacobs will winterize the site and demobilize personnel and equipment until activities commence again in spring 2008, if

necessary. Following the completion of project activities, all project equipment and supplies will be demobilized from the project site within 30 days of project completion. Prior to demobilization, Jacobs will develop a demobilization punch list, which will identify all remaining features of work and deficiencies to be corrected prior to demobilization. All demobilization punch-list items will be resolved prior to demobilization.

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4.0 ENVIRONMENTAL PROTECTION

This section summarizes the measures that will be used to protect vegetation, land, water, and resources within the project boundary during execution of the scope of work.

4.1 STORM WATER POLLUTION PREVENTION REQUIREMENTS

All work performed at the FCS will be conducted in accordance with the base-wide Storm Water Pollution Prevention Plan.

4.2 PROTECTION OF LAND AND WATER RESOURCES

Erosion and pollution control measures will be accomplished utilizing best management practices. The subcontractor will be responsible for the containment, cleanup, and disposal of all construction-related discharges of petroleum fuels, oil, and/or other substances hazardous to the land and water. The subcontractor will also be responsible for performing all fueling operations in a safe and environmentally responsible manner. Performance of this activity shall comply with the requirements of 18 AAC 75 and Title 46 of the Alaska Statutes.

The subcontractor will provide immediate permanent or temporary pollution control measures to prevent contamination of adjacent streams, lakes, ponds, or other areas of water impoundment, as directed by the Site Manager.

Silt fencing and other temporary erosion control measures will be erected as determined by the Site Manager. To accomplish removal, the fabric will be cut off at ground level, and the wire and posts will be removed. No silt will be discharged into any wetlands or water bodies when removing the silt fence. If a sediment height in excess of 4 inches (100 millimeters) above ground remains, the sediment will be disposed of at the Fort Wainwright Landfill.

At the end of the field activities, the contractor will remove all signs of temporary facilities such as work areas, staging areas, waste materials, and other vestiges of the field activities.

4.3 DUST CONTROL

The Contractor shall maintain excavations, embankments, stockpiles, haul roads, permanent and temporary access roads, and all other work areas within or outside the project boundaries free from dust that would cause a hazard or nuisance. Sprinkling or similar methods shall be employed to control dust. The contractor shall retain sufficient, suitable equipment at the site and repeat applications at intervals as to keep all parts of the disturbed area damp at all times 24 hours a day, 7 days a week. As a minimum, one 2000-gallon water distributor truck shall be onsite at all times except when freezing weather precludes sprinkling. Dust control shall be performed as the work proceeds and whenever a dust nuisance or hazard occurs. There shall be no visible dust coming off the work site at any time, or from any vehicle hauling for the contractor. All waste loads transported offsite will be covered. In addition, the contractor shall ensure that no material of any type will fall off any vehicle while in transit. Any dirt or mud, which is tracked onto paved or surfaced roadways, shall be cleaned away within the day it is deposited.

4.4 DECONTAMINATION

All equipment coming into contact with contaminated material shall be decontaminated at a decontamination pad that will be constructed onsite by the excavation/civil contractor. Decontamination shall include the use of high-pressure washers, brooms, shovels, adsorbent pads, and other appropriate material necessary to remove all contamination from equipment. The decontamination rinsate or liquid will be confined to the decontamination pad, containerized in 55-gallon drums, loaded in a connex and transported for offsite disposal at a TSDF permitted to accept this waste stream.

4.5 SPILL PREVENTION, RESPONSE, AND REPORTING

The following operating procedures will be utilized to prevent spills from occurring, respond to them if they do occur, and report them.

4.5.1 Spill Prevention

All field activities will be conducted and managed in a manner that will prevent the release of contaminants to the environment. The greatest risk of a reportable spill is during fueling of heavy equipment. To minimize the risk of a fuel spill, the following procedures will be required during any fueling activity:

- All equipment anticipated to be used onsite will be inspected by a competent person and the equipment condition documented prior to mobilization to the site.
- Check the vehicle or equipment. Ensure that it has been properly maintained and there are no petroleum, oil, and lubricant leaks prior to operation.
- Stage vehicles in a central location, away from water bodies or other sensitive areas.
- Position equipment so that valves, piping, tanks, or other fuel-containing parts are protected from damage by other vehicles or equipment.
- Verify that adequate secondary containment and absorbent pads are onsite.
- Before starting any fuel-transfer operation, inspect all hoses, connections, valves, etc. Ensure that these items have been properly maintained and all connections are properly tightened.
- Use secondary containment or absorbent pads under all appropriate connections, vents, or any other likely source of spillage. Use as many secondary containers as necessary.
- During fuel transfer, maintain line of sight with the equipment operator and/or all connections and other potential sources of spillage.
- Never leave a fuel transfer unattended.
- Maintain secondary containment while disconnecting filling hoses.

4.5.2 Spill Response

Spills response will be conducted in accordance with the RI/FS Management Plan (USAED 2007a), Jacobs Site Safety and Health Plan (SSHP) (USAED 2007f) and the FWA spill response policy provided as Attachment 3.

4.5.3 Spill Reporting

18 AAC 75.300-307 and CERCLA regulations require immediate notification of a hazardous material discharge or release. Consequently, field personnel will immediately record the

following information for a spill of any volume and contact the Site Manager, USAED Project Manager, and Fort Wainwright DPW POC for reporting:

- Date, time, and location of discharge
- Name, mailing address and telephone number of person(s) causing or responsible for the discharge
- Cause of discharge
- Environmental damage, including volume of soil or water affected, caused by the discharge, to the extent the damage can be identified
- Cleanup actions taken
- If the material has been disposed of, the date, location, and method of hazardous substance and cleanup materials
- Estimate of the volume of cleanup materials used
- Any actions taken to prevent recurrence of the discharge
- Other information the field team considers important to the discharge episode

In the event of a spill, the appropriate State of Alaska spill reporting forms will be prepared by Jacobs and submitted to the USAED Project Manager and Fort Wainwright DPW POC, who will determine whether reporting will be performed by USAED or Jacobs.

5.0 SAFETY

The Jacobs SSHP addresses site-specific work activities and complies with the *Safety and Health Requirements Manual* (U.S. Army Corps of Engineers 2003). A site-specific activity hazard analysis will be completed for each DFW, and the analysis will be reviewed at the preparatory-phase meeting. All crew members will use the buddy system.

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6.0 REMOVAL ACTION REPORT

An RA report will be submitted to USAED in draft and final versions. The content of this report will include a summary of fieldwork activities, waste removed, laboratory analytical results, and conclusions. The report will also include summaries of the analytical data and a summary describing data quality and usability. Copies of all waste manifests and receipts of final disposal will also be included, as well as site surveys and figures. The report shall include photographic depictions of all phases of work and document that work areas were left in an orderly fashion. Only data from samples collected by Jacobs will be presented in this report unless otherwise requested.

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7.0 REFERENCES

- ADEC (Alaska Department of Environmental Conservation). 2006 (December). *Oil and Other Hazardous Pollution Control Regulations – Discharge Reporting, Cleanup, and Disposal of Oil and Other Hazardous Substances*. 18 AAC 75.
- U.S. Army Corps of Engineers. 2003. *Safety and Health Requirements Manual*. EM 385-1-1.
- USAED (U.S. Army Engineers District, Alaska). 2006 (February). *Field Data Report, Former Communications Site, Fort Wainwright, Alaska, Draft*. Prepared by North Wind.
- USAED. 2007a. *Remedial Investigation/Feasibility Study Management Plan, Former Communications Site, Fort Wainwright, Alaska*. Prepared by CH2MHill.
- USAED. 2007b (May). *Preliminary Source Evaluation II Report, Taku Gardens, Fort Wainwright, Alaska*. Prepared by North Wind Inc.
- USAED. 2007c (August). *Munitions and Explosives of Concern Support Work Plan, Former Communications Site RI/FS, Fort Wainwright, Alaska, Draft-Final*. Prepared by Jacobs Engineering Group Inc.
- USAED. 2007d (August). *Quality Assurance Program Plan, Former Communications Site RI/RS, Fort Wainwright, Alaska, Final*. Prepared by CH2M Hill.
- USAED. 2007e (August). *Communications Plan, Former Communications Site RI/FS, Fort Wainwright, Alaska, Final*. Prepared by Jacobs Engineering Group Inc.
- USAED. 2007f (August). *Site Safety and Health Plan, Former Communications Site RI/FS, Fort Wainwright, Alaska, Final*. Prepared by Jacobs Engineering Group Inc.

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ATTACHMENT 1

Field Sampling Plan

**FIELD SAMPLING PLAN
ADDENDUM**

**FORMER COMMUNICATIONS
SITE PCB REMOVAL ACTION**

**FORT WAINWRIGHT,
ALASKA**

**FINAL
AUGUST 2007**

**Prepared for:
U.S. Army Corps of Engineers
P.O. Box 6898
Elmendorf AFB, Alaska 99506-0898**

**Prepared by:
Jacobs Engineering Group Inc.
4300 B Street, Suite 600
Anchorage, Alaska 99503**

**Environmental Remediation Services
Contract No. W911KB-06-D-0006
Task Order No. 06**

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EXHIBIT

Exhibit 1 Standard Field Forms

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ACRONYMS AND ABBREVIATIONS

ADEC	Alaska Department of Environmental Conservation
BFB	bromofluorobromide
CoC	chain-of-custody
DQO	data quality objective
DRO	diesel-range organics
FCS	Former Communications Site
FSP	Field Sampling Plan
GRO	gasoline-range organics
HCl	hydrochloric acid
Hg	mercury
HNO ₃	citric acid
ID	Identification
L	Liter
Jacobs	Jacobs Engineering Group Inc.
mL	Milliliter
MS	matrix spike
MSD	matrix spike duplicate
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyls
PID	photoionization detector
QA	quality assurance
QAPP	Quality Assurance Project Plan
QC	quality control
RCRA	Resource Conservation and Recovery Act
RRO	residual-range organics
SVOC	semivolatile organic compound
TAT	turnaround time
TCLP	Toxicity Characterization Leaching Procedure
TLC	Teflon®-lined cap
TLS	Teflon®-lined septum

ACRONYMS AND ABBREVIATIONS
(continued)

USACE	U.S. Army Corps of Engineers
USAED	U.S. Army Engineer District, Alaska
VOC	volatile organic compound
°C	degrees Celsius

1.0 INTRODUCTION

This addendum to the 2007 CH2M Hill Remedial Investigation, Fort Wainwright, Alaska (U.S. Army of Engineering District, Alaska [USAED] 2007a) Field Sampling Plan (FSP) addresses work to be conducted in support of the 2007 Former Communications Site (FCS) PCB Removal Action (RA) at Fort Wainwright, Alaska. This document presents sampling protocols and procedures that will be used to meet the project data quality objectives (DQO). Sample collection, preservation, packaging, and laboratory analytical methods are also presented. Laboratory data quality requirements are presented in the 2007 CH2M Hill Quality Assurance Project Plan (QAPP) (USAED 2007b).

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2.0 PURPOSE

The purpose of this FSP addendum is to provide a summary of field sampling and analytical testing methods required to meet the 2007 PCB RA objectives presented in Section 2.0 of the Work Plan.

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3.0 PROCEDURES AND METHODS

This section discusses the procedures that will be followed during field screening and sampling associated with the 2007 PCB RA at the FCS. It describes the number and type of samples, required chemical analyses, appropriate sample containers, preservation methods, quality assurance (QA)/QC requirements, and anticipated turnaround times (TAT). DQOs and data review procedures are presented in the QAPP (USAED 2007b). Standard field forms for the field activities described in this FSP are included in Attachment A-1.

3.1 SOIL SAMPLE COLLECTION FOR CHEMICAL LABORATORY ANALYSIS

In general, soil sampling for laboratory analysis will be performed in accordance with the following procedures:

- Prior to the collection of each sample, the sampler(s) will don new, clean nitrile gloves to avoid cross-contamination.
- Samples will be collected in order of the most volatile to least volatile analytes.
- All soil samples will be collected using clean stainless-steel spoons or other sampling equipment and placed in jars.
- Excess soil will be removed from the lip of the container, and a Teflon®-lined lid will be used to seal the container. The sample collection date, time, analyses requested, preservation, place of collection, project name, and sampler initials will be placed on the prepared label and CoC form.
- Each sample will be assigned an identification number, as described in Section 6.2 of this FSP.
- Soil samples will be placed in a prechilled cooler immediately after sample collection. Upon return to the field office, samples will be refrigerated at 4 ± 2 degrees Celsius ($^{\circ}\text{C}$) until packaged for shipping.
- Sample packaging and shipping procedures will be followed, as described in Section 7.0 of this FSP.
- Waste characterization samples do not require MSs or field duplicates because waste disposal facilities does not require them.
- The field sampler(s) will dispose of nitrile gloves after sample collection is completed at each sample location to minimize potential for cross-contamination.

Soil samples for volatile organic compound (VOC) analysis must be collected and containerized with the following additional requirements:

- Four-ounce jars with Teflon®-lined septa shall be supplied prepared by the laboratory.
- A label sticker must not be affixed to the jar; instead, write sample information on the preaffixed label, using a pen.
- Sharpie or similar brand markers contain VOCs and must not be used on the jar.
- Twenty-five grams of soil must first be weighed and then added to the jar.
- After the soil is added to the jar, pour a 25-milliliter (mL) vial of methanol preservative (surrogated methanol for AK101 analysis) into the jar, ensuring that the liquid completely covers the 25 grams of soil.
- If the 25 mL of methanol does not completely cover the soil, add another 25 mL of methanol. Methanol may only be added in 25 mL increments. Adding an additional 25-mL aliquot of methanol may raise the reporting limit and will be documented in the field logbook(s) and noted on the Chain of Custody (CoC).
- Upon completion of methanol addition, place a line on the jar label, in pen, that is flush with the methanol level.
- After wrapping the jar in bubble wrap, place in a self-sealing bag and place a sticker label on the outside of the bag.

Composite soil samples will be collected from each bulk container generated in the field. Random composite sample locations will be collected from each intermodal bulk container generated in the field. Random sample locations will be directed by the field sampler and collected from either the loaded intermodal bulk container or the excavator bucket that is loading the container.

**Table 1
Waste Characterization Samples**

Parameter	Analytical Method	Container	Preservation and Maximum Hold Times
Soil Samples			
PCBs	SW8082	One 8-ounce amber glass, TLC	Cool 4 ± 2 °C / 14 days to extraction, 40 days to analysis
SVOC	SW8270C	One 8-ounce amber glass, TLC	Cool 4 ± 2 °C / 14 days to extraction, 40 days to analysis
RCRA 8 Metals	SW6020/SW7471A	One 4-ounce amber	Cool 4 ± 2 °C / 180 days

Parameter	Analytical Method	Container	Preservation and Maximum Hold Times
		glass, TLC	to analysis, 28 days to analysis (Hg)
Pesticides	SW8081	One 8-ounce amber glass, TLC	Cool 4 ± 2 °C / 14 days to extraction, 40 days to analysis
Herbicides	SW8151A	One 8-ounce amber glass, TLC	Cool 4 ± 2 °C / 14 days to extraction, 40 days to analysis
VOCs (mid-level)	SW8260B	One 4-ounce amber glass, TLS	Methanol, Cool 4 ± 2 °C / 14 days to analysis
TCLP	SW8260B/8270C/8081/8151A/6020/7471A	Three 8-ounce amber glass, TLC	Cool 4 ± 2 °C / 14 days to leaching, 7 days to extraction, 14 days to analysis

Notes:

Whenever practical, multiple analyses will be performed from the same sample container to reduce the sample volume needed. Sample containers may be substituted by the laboratory as long as all method requirements are met. For definitions, see the Acronyms and Abbreviations section.

**Table 2
PCB Waste Sample Summary**

Parameter	TAT (days)	Primary Samples	Field Duplicates (QC)	MS/MSD	Total Samples
PCB Waste Bins (Soil) – Waste Characterization					
PCBs by SW8082	3	108	NA	NA	108
VOCs by SW8260B	3	108	NA	NA	108
Dioxins and Furans by SW8290	3	72	NA	NA	72
SVOCs by SW8270C	3	10	NA	NA	10
RCRA Metals by SW6020/7471A	3	10	NA	NA	10
Pesticides by SW8081B	3	10	NA	NA	10
Herbicides by SW8151A	3	10	NA	NA	10
Ignitability by SW1010	3	10	NA	NA	10
Reactivity	3	10	NA	NA	10
TCLP	3	22	NA	NA	22

Notes:

One trip blank shall accompany each group of methanol-preserved samples in the shipment cooler. There will also be a minimum of one unique trip blank per every 20 or fewer methanol preserved samples.

NA = Not Applicable. Field duplicates and MS/MSD are not a requirement for waste characterization samples.

TCLP includes methods 8260B/8270C/8081/8151A/6020/7471A

For definitions, see the Acronyms and Abbreviations section.

3.2 SAMPLE NUMBERING SYSTEM

Each CoC submitted to the laboratory will be assigned an identification number thirteen characters in length. The first four digits define the sampling year (e.g., 2007). The FCS project will be denoted on the CoC as “FCSPCB”. The final three characters are incremented sequentially per CoC (001, 002, etc.) An example of the CoC number is presented below:

CoC Number:

Year	Project Identifier	CoC Number
2007	FCSPCB	001

Each sample is assigned a unique identification number. This identifier is a unique character sequence specified by the project, which specifies a distinct location at the project site. The first two digits define the sampling year (e.g., 07). The next six characters (FCSPCB) defines the project as FCS drum and debris investigation. An example of a sample name is shown below:

Year	Site	Sample Matrix	Sample Number
07	FCSPCB	SO	001

Two characters follow the location identifier to indicate the matrix, “SO” for soil and “WW” for waste liquid. The final three characters denote the sample number.

Sample containers will be labeled identically to the CoC records. At the time of sampling, appropriate sample numbers will be recorded in the field logbook. Sample labels will include the following information:

- Field organization (e.g., Jacobs)
- Sample ID number
- Sampling date and time
- Analytical method(s)

- Preservative
- Initials of person(s) collecting the sample

3.3 CHAIN-OF-CUSTODY AND ANALYTICAL SUMMARY TABLE

Once a sample is collected, it will remain in the custody of the Field Sampler who collected the sample, or designee, until it is shipped to the analytical laboratory. When the sample is transferred, a CoC form will be signed by the sampler transferring custody of the sample containers. The CoC may only be signed by a qualified person as defined by ADEC. Samples will be placed in a numbered or named cooler or other appropriate shipping container, and the cooler number or name will be included on both the shipping label and the CoC form. The original, properly completed CoC form for the samples contained within the cooler will be placed in a resealable plastic bag, which will then be taped to the inside lid of the cooler before sealing the cooler for shipment. A separate CoC form will be completed for each cooler. Each cooler will be taped closed on the outside with strapping tape and sealed with custody seals marked with signature, date, and time and placed on opposite sides of the cooler starting from the lid, crossing over the opening, and attaching to the main body of the cooler. The date and time on the custody seals must match that of the CoC.

A copy of the CoC enclosed with the shipment will be maintained as a field record while a second copy will be faxed or emailed to the Jacobs Project Chemist (if practical). On a weekly basis (preferably daily following each shipment), a sample summary table will be generated or updated by the Field Sampler recording CoC number, sample collection dates and times, associated location identification, analysis and TAT requested, cooler identification, shipped date, and laboratory. This table will be updated to record changes to analyses requested and other CoC information after the samples are shipped to the laboratory. Table 2 specifies the number of samples and anticipated TATs. TAT requirements and expectations will be discussed with the laboratory prior to shipping samples. Occasionally TATs may need to be adjusted as dictated by needs in the field. The sample summary table will also record the date that preliminary results were received.

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4.0 CORRECTIVE ACTIONS

Corrective action will be initiated when potential or existing conditions are identified that may adversely impact data quantity or quality. It will be the responsibility of the individual who first recognizes an out-of-control event to initiate corrective action. Corrective action for either field or analytical operations includes notification to the Jacobs Project Chemist and Site Manager, response, reestablishment of control, and documentation. Corrective actions will be approved by the appropriate personnel (Site Manager and/or Project Chemist). The implementation of these corrective actions will be documented, and documentation will be maintained and provided with the deliverables. All variances to the Work Plan will be communicated to the Jacobs Site Manager and Project Chemist immediately upon identification.

Events that may require corrective action include the following (at a minimum):

- Violation of established field procedures including sample collection, handling, and documentation.
- Violation of established analytical methods, procedures, or controls.

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5.0 REFERENCES

- ADEC (Alaska Department of Environmental Conservation). 2000 (September). *Guidance for Cleanup of Petroleum Contaminated Sites*.
- U.S. Army Corps of Engineers, Alaska District (USAED). 2007a (May). *Field Sampling Plan, Former Communications Site Fort Wainwright, Alaska*. Prepared by CH2M Hill.
- USAED. 2007b (May). *Quality Assurance Program Plan, Former Communications Site Fort Wainwright, Alaska*. Prepared by CH2M Hill.
- U.S. Environmental Protection Agency. 1996 (April). *Test Methods for Evaluating Solid Waste*. EPA/540/S-95/504. SW846, Third Edition, On-Line, Resource Conservation and Recovery Act Test Methods:
<http://www.epa.gov/epaoswer/hazwaste/test/main.htm>

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EXHIBIT 1

Standard Field Forms

SAMPLING CHECKLIST

Project Name: _____ Project No: _____
Reviewer's Name: _____ Date: _____

Place initials next to activity after information has been verified.

SAMPLE LABELS COMPLETED AND CORRECT

_____ Field organization (e.g., Jacobs)
_____ Sample ID number
_____ Sampling data and time
_____ Analytical method(s)
_____ Initials of person(s) collecting the sample
_____ Preservative

CHAIN-OF-CUSTODY COMPLETED AND CORRECT FOR SAMPLES

_____ Project name and/or number
_____ CoC number and cooler ID
_____ NPDL WO# (admin number)
_____ Sample identification
_____ Date and time of collection
_____ Sampler(s) initials
_____ Number, type and volume of container(s)
_____ Preservative and matrix
_____ Analyses requested
_____ Turn-around time requested
_____ Airway bill number

COOLER PACKING COMPLETED AND CORRECT

_____ Cooler media in cooler(s)
_____ Sample(s) in bubble wrap and bag
_____ Temperature blank in cooler(s)
_____ Chain-of-custody inside cooler (relinquished)
_____ Cooler(s) sealed
_____ Shipping label on lid and custody seals in place

CoC VARIANCE REQUEST

Change Requestor: _____ Laboratory Project Manager: _____

Date/Time Requested: _____ Jacobs Project Chemist: _____

Jacobs Site Manager: _____ Jacobs Contracts Administrator: _____

Project Name/Number _____

Laboratory Sample Delivery Group Number _____

Action to be taken (add analyses, change turnaround time, delete analysis, etc.): _____

Specific Requirements

Jacobs Sample Number	Lab Sample Number	Action	Added Cost
		Total Additional Cost:	

Comments/Justification: _____

Authorization: To ensure proper action is authorized, transmit this form via facsimile to Jacobs Project Chemist for signature approval. Jacobs Project Chemist will sign and return this form via facsimile to the Laboratory Project Manager to initiate change implementation.

Client Approval: _____ Date: _____

This form will be used to track changes to the chain-of-custody record and will not be used to modify or increase the value of a delivery order.

Signed Copy Routing: Jacobs Project Chemist, Jacobs Site Manager, Jacobs Contracts Administrator

COOLER RECEIPT FORM

Fax this form and the CoC records to Jacobs Project Chemist within 24 hours of receiving sample.

CoC Number _____ **(One receipt form per cooler)**
Cooler Number/Name on CoC _____
Laboratory and Location _____
Lab SDG _____

- | | | | |
|-----|---|------------|-----------|
| 1. | Were custody seals on outside of cooler?
If yes, how many and where? _____
Were signatures and dates correct? _____ | YES | NO |
| 2. | Were custody papers taped to lid inside of cooler? | YES | NO |
| 3. | Were custody papers properly filled out (ink, signed, etc.)? | YES | NO |
| 4. | Did you sign custody papers in the appropriate place? | YES | NO |
| 5. | Did you attach shipper's packing slip to this form? | YES | NO |
| 6. | What kind of packing material was used? _____ | | |
| 7. | Was sufficient ice used (if appropriate)? | YES | NO |
| 8. | Were all bottles sealed in separate plastic bags? | YES | NO |
| 9. | Did all bottles arrive in good condition? | YES | NO |
| 10. | Were all bottle labels complete (number, date, signed, analysis, pres., etc.)? | YES | NO |
| 11. | Did all bottle labels and tags agree with custody papers? | YES | NO |
| 12. | Were correct bottles used for the tests? | YES | NO |
| 13. | Were VOA vials checked for absence of air bubbles and, if present, noted? | YES | NO |
| 14. | Was sufficient amount of sample sent in each bottle? | YES | NO |
| 15. | Chain-of-custody identification number: _____
Temperature blank reading _____
Cooler temperature. _____
Identification number of thermometer _____ | | |
| 16. | Is temperature within 4 ± 2 °C? | YES | NO |
| 17. | Were labels correctly associated with pretared containers? (not placed directly on jars)? | YES | NO |
| | CORRECTIVE ACTION FORM ATTACHED | YES | NO |

Jacobs Project Chemist contacted? Date/Time _____

Attach associated CoC record and Conversation Confirmer forms.

Explain any discrepancies: _____

Chain-of-Custody Report

Collection Organization: JEGA **Chain-of-Custody:** _____ **Cooler ID:** _____ **Admin #:** 06-083
Project Number: FCS Remedial Investigation / 05F50601 **Laboratory:** TBD **Bill To:** JEGA **Report To:** JEGA

COC Sample ID	Collection Date	Time	Sampler	Number	Containers Type	Volume	Preservative	Matrix	Analyses Requested Group	QC	TAT	Notes:

Special Instructions:

Relinquish By: _____
Signature/Printed Name Date/Time

Relinquish By: _____
Signature/Printed Name Date/Time

Received By: _____
Signature/Printed Name Date/Time

Received By: _____
Signature/Printed Name Date/Time

ATTACHMENT 2

Fort Wainwright Landfill Prohibitions and Special Restrictions

FORT WAINWRIGHT LANDFILL

PROHIBITIONS AND SPECIAL RESTRICTIONS

- A. Scavenging and Salvaging is prohibited.
- B. Disposal of hazardous wastes, as defined by 40 CFR part 261 is prohibited. Ensure waste meeting this definition is disposed of in accordance with 40 CFR Part 262, Standards Applicable to Generators of Hazardous Waste.
- C. Disposal of raw sewage, liquids, radioactive material, explosives, oil, solvents, strong acids, untreated sewage sludge, septage, untreated pathogenic, and other waste defined under 18AAC 60.910(28) is prohibited at this facility.
- D. Disposal of lead-acid vehicle batteries is prohibited.
- E. Disposal of polluted soil as defined by 18 AAC 60.025 & 330 is prohibited.
- F. Disposal of trash other than *construction debris* is prohibited.
- G. Drums must be empty and cleaned of fluids prior to crushing. All drums must be crushed and flattened prior to disposal.
- H. Ensure that if scrap vehicles are accepted at the landfill, they are drained of all oil and petroleum products and lead-acid batteries removed prior to disposal.
- I. Former is invalid FWA does not accept MSW.
- J. Disposal of asbestos waste is allowed in accordance with the following requirements; submit to the landfill operator a completed asbestos manifest form with each load of ACM. ACM will be properly contained in leak-tight containers and labeled. Labeling will include description of contents, ACM source location (building number or utilidor location), and the contractor's name and contract number for identification purposes.

Containers may be barrels, drums, or six-mil or thicker plastic bags. The ACM waste will be placed in approved locations only as directed by the landfill operator. All containers will have warning labels attached that state:

**CAUTION
CONTAINS ASBESTOS
AVOID OPENING OR BREAKING CONTAINER
BREATHING ASBESTOS IS HAZARDOUS TO YOUR HEALTH**

OR

**CAUTION
CONTAINS ASBESTOS
AVOID OPENING OR BREAKING CONTAINER
BREATHING ASBESTOS DUST
MAY CAUSE SERIOUS BODILY HARM**

- K. Questions concerning disposal of solid waste at the Ft Wainwright Landfill can be addressed to the Ft Wainwright Environmental Office at 361-6249.
- L. Authorization Cards need to be obtained from the Ft Wainwright Environmental Office, building 3023 phone 361-6249.

MEMORANDUM FOR: DPW Engineering Division

SUBJECT: Operational Changes at Fort Wainwright Landfill

The Fort Wainwright Landfill will no longer accept mixed municipal solid waste after Friday, March 31, 2000.

Contractors will be allowed limited access for disposal of items listed below subject to the conditions listed:

Construction Debris:

- Access must be coordinated at least one day in advance with DPW Grounds Maintenance Shop at 361-7192.
- Contents of the load must be construction materials only with no mixed garbage such as food containers or other household type refuse. Mixed loads will be refused.

Asbestos:

- Loads must be properly documented.
- Access must be coordinated at least one day in advance with DPW Grounds Maintenance Shop at 361-7192.
- Delivery time must be coordinated and must be early enough in the day to allow the operator to cover the material before the end of the day.

The landfill will be open by appointment only during the following hours (excluding federal holidays): Monday – Thursday 0800 to 1600 hours and Friday 0800 to 1500 hours.

A landfill card form DPW Environmental Division will be required for each contractor.

Load sheets will be required for each load at the landfill gate per current practice.

1.8.1 Landfill Cover Requirements

All construction and asbestos containing material (ACM) debris placed in the landfill by the Contractor's operations shall be covered daily. The Contractor shall provide all plant, labor, material, equipment and supervision necessary to cover all construction and ACM debris deposited in the landfill generated by this projects' construction operations. The Contractor shall be responsible for providing cover in accordance with the requirements listed below and in accordance with all local, state and federal regulations. This work is considered incidental to the project requirements and no separate payment will be made for this work.

1.8.1.1 Cover Layer Requirements

- a. The material used to cover the construction debris and ACM cells shall be obtained from an approved source(s). See additional requirements listed in paragraph 1.8.1.2 below.
- b. Material shall be spread in sufficient quantity and loose thickness to ensure that when compactive effort is applied that the cover material will consolidate easily and uniformly, and that all debris is covered. Loose cover material shall be spread in such a manner in a thickness so as to preclude damage to bagged ACM. Exposed debris or bagged ACM will not be allowed.
- c. The maximum compacted thickness shall be 300 mm.
- d. Compactive effort shall be applied uniformly across the entire surface employing equipment of a type specifically designed for use in this type of environment. Required compactive effort shall be equivalent to 3-passes of a D-6 dozer or heavier piece of equipment over the entire surface to be covered.

1.8.1.2 Cover Material Source

At the option of the Contractor, suitable cover material may be provided from a source outside of Ft. Wainwright or from the material pit located on Old Badger Road.

If the Contractor elects to provide cover material from an outside source, the Contracting Officer prior to the start of any construction or demolition operations shall approve that source.

Should the Contractor elect to use the Old Badger Road material pit, the Contractor is advised that at least one other Contractor will be obtaining material from this site. It shall be the responsibility of the Contractor to coordinate his operations with that of the other Contractor(s).

Under either circumstance, the Contractor shall provide all plant, labor, equipment and supervision necessary for the acquisition, transport and off-loading of the cover material at the landfill.

1.8.1.3 On-site Equipment Storage

Storage of equipment associated with this effort may be stored within the boundary of the landfill. It is the Contractors' responsibility to safeguards against unauthorized access to the equipment during non-duty hours.

1.8.1.4 Environmental Protection

The Contractor shall provide the necessary safeguards for the prevention of POL spills, containment and cleanup, and for dust suppression.

CONSTRUCTION & DEMOLITION (C&D) DEBRIS DEFINITION

C&D debris is defined as those materials resulting from the alteration, construction, destruction, rehabilitation or repair of any manmade physical structure or surrounding site. Materials that can be disposed at the Fort Wainwright landfill are:

- lumber to include light weight steel building studs
- drywall
- brick & concrete
- metals
- plaster
- windows
- roofing materials
- plumbing fixtures
- electrical wiring
- heating equipment
- asphalt
- insulation
- carpeting
- human waste (*bagged and returned from field exercises*)
- asbestos (*in it's own segregated cell - disposal is IAW State & Federal laws*)

The Fort Wainwright landfill **cannot** accept

- regular household waste
- hazardous waste/materials (except asbestos)
- tires
- light bulbs, tubes or PCB light ballasts
- *mattresses
- *excess/unserviceable TA-50, vehicle components, etc.
- *wall lockers/bed frames
- *desks
- * refrigerators and white metals

- * **Turned into the local DRMO for reuse or sale**

ATTACHMENT 3

Spill Response Procedure



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
INSTALLATION MANAGEMENT AGENCY
HEADQUARTERS, U.S. ARMY GARRISON, ALASKA
1060 GAFFNEY ROAD #3700
FORT WAINWRIGHT, ALASKA 99703-3700

IMPA-FWA-ZA

22 AUGUST 2005

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: FWA Garrison Policy #22 – Spill Reporting Requirements for All Units/Organizations and Activities on Fort Wainwright

1. References:

- a. Alaska State Spill Reporting Requirement: 18 AAC 75, Oil and Hazardous Substances Pollution Control.
- b. USARAK Pam 200-1, Hazardous Materials and Regulated Waste Management.
- c. AR 200-1, Environmental Protection and Enhancement.

2. All spills must be reported to DPW Environmental in accordance with the enclosed Spill Notification Procedure.

3. The following information will be required when reporting a spill. However, do not allow a lack of information to delay notification.

- a. Unit Point of Contact
- b. Phone number
- c. Substance spilled and estimated quantity
- d. Date and time of spill
- e. Location of spill
- f. Is there a hazard to life or property?

4. As defined by AR 190-40, a reportable serious incident includes spills that the commander determines to be of concern to HQDA based on the nature, gravity, potential for adverse publicity or potential consequences of the spill. When a spill meeting these criteria occurs, the unit also needs to submit a Serious Incident Report (SIR) following the procedures outlined in FWA Garrison Policy #6 – Serious Injury/Incident Reporting Procedures.

5. This memorandum supersedes Post Policy Letter #4, SAB, dated 21 August 2001.

6. POC for questions/concerns about spill response, is Mr. Herbert L. Griffin, DPW Environmental, at 353-6489.

Encl
as

RONALD M. JOHNSON
LTC, SF
FWA Garrison Commander

DISTRIBUTION:
A (FWA)

**ENCLOSURE TO
FWA GARRISON POLICY #22 -
SPILL NOTIFICATION PROCEDURE**

PURPOSE: This procedure outlines required spill notification and response actions. It is our responsibility to protect health, property and natural resources from damages caused by spills and to insure compliance with the requirements of the Alaska Department of Environmental Conservation (ADEC), the U.S. Environmental Protection Agency (EPA), and the U.S. Army.

SCOPE: This procedure covers the initial notification and response actions required as soon as a spill occurs or is discovered. USAG-AK also maintains Oil Discharge Prevention and Contingency Plans and Spill Prevention, Control and Countermeasure Plans for each Installation that provides greater detail on oil spill prevention and response. Details that can be found in these plans, but not in this procedure include: measures and activities undertaken to prevent oil discharges, operational overview and background information; tank inventories and spill sources; secondary containment and leak detection systems, best available technology; and inspections and testing.

SPILL DEFINED: A “spill” is an un-permitted release to the environment of a petroleum product, hazardous material, hazardous waste, toxic waste or material, or other regulated material; discovery of a past, unreported spill; or discovery of contamination, or possible contamination.

WHEN TO REPORT SPILLS/RELEASES:

All spills are to be reported immediately!

- All releases to water regardless of amount or type, directly or indirectly (e.g. via storm drain, floor drain, sanitary sewer) to a waterway or water body

All releases, regardless of amount or location or release, of materials other than petroleum products (e.g. hazardous materials, hazardous waste, toxic substances)

All releases of petroleum products

All discoveries of past, unreported spills, contamination or suspected contamination

INITIAL ACTIONS: Upon discovery of a spill or potential contamination all work in the area shall cease (except for immediate response actions), workers shall be removed, and access to the affected area shall be restricted until further notice. Concurrently, the notification process below shall be initiated.

Immediate response actions shall be taken only by persons adequately trained and may include:

- Eliminating routes to water (e.g., closing/blocking floor drains and storm drains)
- Stopping spill source (e.g., closing valves, up-righting container)
- Containment of spill (e.g., berms, absorbents)
- Eliminating possible ignition sources for flammable material spills (e.g., turn power off, no smoking)
- Recovery of spilled material or contaminated soil

NOTIFICATION PROCESS:

Reporting Information: To the extent possible the following information should be provided when reporting a spill, however, initial spill notification should not be delayed if all the information is not available:

1. Name and telephone number of person making notification.
2. Exact location, cause and time of spill or emergency.
3. Type and description of emergency.
4. Estimate of amount and type of material spilled,
5. Extent of actual or potential environmental damage.
6. Injuries or property damage, if any.
7. Possible hazards to off-post human health and environment.
8. Immediate response actions taken.

Notification Points of Contact for Installations and Off-Installation Spills:

Fort Wainwright: To the Fort Wainwright Fire Department at (907) 353-7470 (911 for on-base land lines). Units will also notify Range Control at (907) 353-1242 and their chain of command. DPW/ENVIRONMENTAL (Lee Griffin, 907 353-6489/Bill Snyder 907 353-9195) will make all required notifications to the Alaska Department of Environmental Conservation and/or the National Response Center.

Fort Richardson: To the Fort Richardson Fire Department at (907) 384-0774 (911 for on-base phones). Units will also notify Range Control at (907) 384-6233 and their chain of command. DPW/ENVIRONMENTAL (Clay Bates 907 384-2711/Paul Woodward 907 384-0276) will make all required notifications to the Alaska Department of Environmental Conservation and/or the National Response Center.

Off-Installation: Utilizing any means of communication available, tactical radios, non-tactical radios, closest public phone service, cell phones, or by whatever means; follow the spill notifications as outlined above for the closest installation from the incident. Call 911 if immediate assistance is required (i.e. injuries, spill to water, spill >55 gallons) and also follow the spill notifications as outlined above for the closest installation.

CLEANUP ACTIONS: Most spills are petroleum related products to land. The following describes clean-up actions:

Normal Weather: Contaminated soil or gravel shall be cleaned up as directed by DPW Environmental Compliance. If the determination is made to drum the contaminated media, the spill will be dug out until no further contamination is visible and placed in 55 gallon open head steel drums. The drum then must be marked per the guidelines identified in USARAK Pamphlet 200-1, figure 10-1, and then turned over to the DPW Environmental Services Contractor at Building 45-125, FRA or Building 3489, FWA for proper disposal.

Freezing Weather: Contaminated snow/ice and any stained soil must be scooped and or chipped up and placed in an appropriate container. The container shall be marked per the guidelines identified in USARAK Pamphlet 200-1, figure 10-1, and then turned over to the DPW Environmental Services Contractor at Building 45-125, FRA or Building 3489, FWA for proper disposal.

Other Spills: Clean up of other types of spills (to water or not petroleum, etc.) will be coordinated with DPW Environmental Compliance to ensure proper response is accomplished.

Environmental Concerns for Construction and Renovation Projects (20 Jan 06)

The U.S. Army Garrison Alaska (USAG-AK) is firmly committed to a policy of environmental stewardship for all lands and facilities under its control. USAG-AK has developed and implemented an Environmental Management System (EMS) based on the ISO 14001 international standard. In order for this EMS to be an effective management tool that enhances mission performance, the design and execution of contracts and projects must integrate environmental management processes into all phases of execution, from concept to final acceptance. Coordination with installation environmental program managers is therefore expected as outlined below.

The following issues are major concerns of the DPW Environmental Office, and need to be considered during the design and /or execution of projects on Fort Wainwright and the Donnelly Training Area. More specific guidance may be provided in the project Scope Of Work, project Specifications or through the DPW Environmental Office. The primary environmental point of contact for projects is Cliff Seibel, 353-6220. In addition, individuals responsible for specific programs or issues are listed in the narrative.

Part of each project is the preparation of an Environmental Protection Plan by the prime contractor, which will be adhered to by all sub-contractors. This plan needs to address how the contractor will comply with the issues listed below. Some items identify a specific requirement for a plan (ie: Storm Water Pollution Prevention Plan). These can be stand alone plans, or be incorporated into one overall plan. Confirmation of what issue(s) below that may or may not be relevant to a particular project can be coordinated with Cliff Seibel, 353-6220. A copy of this Plan(s) needs to be provided to DPW Environmental for review and comment.

General Compliance Programs:

1. Contaminated Soils: Any project that involves excavation or movement of soils must include field screening for petroleum (plus any other identified contaminants). Soils registering less than 20ppm are considered clean and may be reused on site or transported to the Post landfill for cover. Soils screening 20ppm or higher must be handled IAW Attachment A, Contaminated Soil. POC: Cliff Seibel, 353-6220
2. Storm Water: (POC: Brian Adams, 353-6623)
 - a. Design: The storm water system must comply with the Fort Wainwright Storm Water Pollution Prevention Plan and NPDES permit. In general, all storm water is handled by overland flow and drainage ditches. UIC's (underground injection) are not normally approved.
 - b. Construction: The contractor is responsible for preparing and following a Storm Water Pollution Plan (SWPP) for the site, as well as submitting the Notice

of Intent (NOI) and Notice of Termination (NOT) to the EPA and ADEC. An example checklist is included as Attachment G.

3. De-Watering: De-watering refers to removal of water, from a surface or subsurface source, for construction purposes, including but not limited to activities such as dust control or clearing excavations. If de-watering is anticipated, the contractor must prepare a de-watering plan, as a stand alone plan or as part of the SWPP and, if de-watering will exceed 5,000 gallons per day, submit for a permit to ADEC. The plan and permit must conform to ADEC General Wastewater Disposal Permit No 2004DB0101, or current general permit. POC: Brian Adams (FWA and DTA), 353-6623 and Ellen Clark (DTA), 873-1614.

4. Wastewater: Use of a facility must be evaluated for need of such items as Oil/Water separators and applicability of floor drains in the wastewater system. The sanitary system design must be approved by ADEC, and insure that no prohibited substances can enter the drains in violation of Fort Wainwright's wastewater permit. Also, per EPA, an Oil/Water separator cannot discharge to a septic system. An alternate means of containment needs to be provided for facilities without access to a wastewater system. A copy of the correspondence with ADEC needs to be provided to the DPW Environmental Office. POC: Cliff Seibel, 353-6220 or Brian Adams, 353-6623

5. Backflow Prevention: Design of the facility potable water system must include backflow prevention devices and components IAW the applicable plumbing codes, and approved by ADEC. A copy of the correspondence with ADEC needs to be provided to the DPW Environmental Office. Attachment B, Backflow Assembly Test/AG Inspection Report, must be filled out by a certified Backflow Assembly Tester and submitted to the DPW Environmental Office by the Designer/Installer upon completion of the project for all backflow prevention devices installed, moved or repaired. The contractor shall also provide an electronic photograph of the device after installation, along with a detailed one-line drawing of the installation of the device. POC: Joe Malen, 353-4512

6. Noise: Noise generation of the planned use of any given project must be considered in siting. The Installation Noise Management Plan, with maps showing the various noise contours and compatible use zones, is available in the DPW Environmental Office. POC: Cliff Seibel, 353-6220

7. Hazardous Waste/Material:

a. All hazardous materials (paints, fuels, etc) must be stored and used in such a manner as to prevent spills and releases. Any unused or partly used materials are the property of the contractor, and must be removed from Post and disposed of at the contractor's expense. On site refueling operations will conform to guidance in Attachment L. Storage areas are subject to inspection by DPW Environmental Office. POC: Cliff Seibel, 353-6220 or Bill Snyder, 353-9195

b. Hazardous waste generation that is the responsibility of the Post is generally associated with projects involving demolition. These hazards should be identified in advance, and proper abatement planned as part of the project. These hazards include, but are not necessarily limited to asbestos, lead (primarily in paint), PCBs and glycol. Abatement, containerization, handling and sampling (as appropriate) are the responsibility of the contractor. Containerized fluorescent light ballasts (suspect PCB) must also be accompanied by a contractor's statement that none were leaking when placed in the container. Guidance is provided in Attachment C, 200-1 Chapters 8 and 10. Additional guidance is provided in USAG-AK Pam 200-1, available through the DPW Environmental Office. Disposal will be accomplished through the DPW Environmental Office waste contract (asbestos will be disposed of at the FWA landfill). POC: asbestos/lead: Wayne Tolliver, 353-7724; PCB: Cliff Seibel, 353-6220; disposal: Bob Gray, 353-9949 or Bill Snyder, 353-9195. The Environmental Office does not handle radioactive waste/materials (ie: smoke detectors, exit signs, etc). Contact Post Safety for guidance in handling these items, 353-7412.

c. All hazardous material spills must be reported to the DPW Environmental Office as well as the COE or DPW project manager using the DPW Oil and Hazardous Substances Spill Notification form, Attachment D. Reporting to ADEC will be accomplished by the DPW Environmental Office. Clean up of the spill and associated clearance sampling is the responsibility of the contractor. With the exception of the spill notification form, procedures listed in Attachment A will apply. POC: Lee Griffin, 361-6489 or Bill Snyder, 361-9195

8. Solid Waste: The Fort Wainwright landfill is to be used for construction debris only. Municipal solid waste is to be collected separately and disposed of by the contractor. Recycling of debris (concrete, asphalt, metal, etc) should be addressed in the contract specifications or Scope Of Work, and required where practical. Guidance on use of the Fort Wainwright landfill is provided in Attachment E, Fort Wainwright Landfill Prohibitions and Special Restrictions. POC: Brian Adams, 353-6623

9. Air Issues:

a. Dust Control: Fugitive emissions, primarily dust, need to be controlled on each construction site, 24 hours a day, 7 days a week. This includes cleaning of soil tracked out onto Post roadways daily. Attachment F, Fort Wainwright Dust Control Specification, elaborates on this requirement. POC: Cliff Seibel, 353-6220 or Brian Adams, 353-6623

b. Head Bolt Outlets: The Post is subject to Borough air pollution ordinances. One such ordinance requires installation of head bolt outlets in any new or renovated parking lot in which patrons can be expected to park for at least two hours. This requirement applies to nearly every existing and proposed parking area on Post. POC: Cliff Seibel, 353-6220

c. Air Quality Construction Permit (AQCP): Each project must be evaluated to determine whether an AQCP is required prior to commencing construction. An AQCP is typically required for projects that involve the addition of new air emission sources (e.g., boilers, generators, fire pumps, painting & degreasing operations, fuel storage & loading) and for projects that involve the modification of existing air emission sources (e.g., landfill expansion and non-routine maintenance at the power plant). The evaluation includes determining if the project conforms to the requirements and emission caps established by Fort Wainwright's current Title V operating permit and assesses the need to obtain a permit modification. POC: Eric Dick, 353-3006

d. General Conformity: Each project on Main Post must be evaluated for impacts to the Fairbanks North Star Borough Carbon Monoxide Maintenance Area. This evaluation includes assessing both direct and indirect emissions. Direct emissions include emissions resulting from the installation of new air emission sources, including generators, incinerators, boilers, paint booths, fuel tanks and parts washers. Indirect emissions include emissions resulting from increased vehicle traffic, heat & power demand from the CHPP, cooling, water and wastewater loads. An inventory of these sources will come from the designer and/or end user, and must be provided to the DPW Environmental Office as early into the design process as possible to facilitate this review and the need for a more detailed general conformity determination. POC: Eric Dick, 353-3006

e. New Source Performance Standards (NSPS): Designers must insure any stationary diesel engines (generators, fire pumps, etc) comply with the new EPA NSPS standards for nitrogen oxides, particulate matter, sulfur dioxide, carbon monoxide, and hydrocarbons. The new standards will apply to any stationary diesel engine manufactured after April 2006. The latest standards can be accessed through the EPA website. POC: Eric Dick, 353-3006

10. Facility Fuel Storage Tanks:

a. Underground Storage Tanks (UST): All USTs installed on Army property will conform with 40CFR280, 18AAC78 and applicable Army guidance. While the EPA and ADEC generally exempt heating oil tanks, the Army requires all USTs to be installed to the same standard. USTs will be double wall steel with cathodic protection (anodic, not impressed), provided with spill and overflow protection, and interstitial leak detection. Fuel lines will be double wall Enviroflex, or equal. Other requirements will be identified based on specific use and installation requirements. POC: Cliff Seibel, 353-6220

b. Aboveground Storage Tanks (AST): All ASTs installed on Army property will conform with 40CFR112, as well as applicable ADEC and Army guidance (to include the most current version of the Fort Wainwright Spill Prevention, Control and Countermeasures Plan). In general, all ASTs will be either double wall or vaulted tanks, with containment on ALL four sides. Tanks with double

steel on one end will not be accepted. Single wall tanks with alternate secondary containment will generally not be approved, but will be considered on a case by case basis. All tanks will be tapped on the top only, and be provided with spill and overflow prevention and leak detection. Other requirements will be identified based on specific use and installation requirements. POC: Cliff Seibel, 353-6220

Restoration/Contaminated Sites: All projects on or near a current or past restoration site need to comply with Attachment H, Institutional Control Policy. In addition, some of these sites contain monitoring wells, recording sensors and remediation systems. If the site contains any of these items, the contractor shall coordinate all staging and construction activities through the DPW Environmental Office. Restoration personnel will determine which items can be removed or must be saved or must be moved and protected from damage. POC: Therese Deardorff, 384-2716 or Karen Dearborn, 384-2694

National Environmental Policy Act (NEPA): A NEPA document (REC, EA, EIS) must be prepared for each project prior to funds being spent on design or construction. Preparation of this document is to be funded by the project proponent, and be reviewed and approved by the DPW Environmental Office. Attachment I, NEPA Analysis Form, identifies the minimum information that must be included in the appropriate NEPA document. POC: Roger Sayre, 353-3001 or Carrie Barta, 353-9507

Natural Resources:

1. Wetlands: An initial survey of each site must be made by DPW Environmental personnel to determine the potential of wetlands. If wetlands are suspected, a determination must be requested of, and made by, COE Regulatory office, at which time they may require a permit application be filed. Prior to the start of the project, this permit must be approved. The designer must provide the DPW Environmental Office a drawing showing the project limits before COE Regulatory can be contacted. If a permit is required, additional information will be requested. POC: Cliff Seibel (FWA), 353-6220, and Ellen Clark (DTA), 873-1614.

2. Timber Policy: Once a project siting is established, the DPW Environmental Office forester will evaluate the site for salvageable timber. Based on the estimate, timber can be purchased by the contractor, with the funds being deposited in the DA Budget Clearing Account, or cut and stacked for individual firewood sales. This policy and guidance is provided in Attachment J, Policy on Use of Timber at Fort Wainwright. POC: Dan Rees (FWA), 353-9318 or Josh Buzby (FWA), 353-3016 and Ellen Clark (DTA), 873-1614.

3. Migratory Birds: The birds of concern on Post are the cliff swallows who build mud nests on facilities, mew gulls who build nests on vehicles and other assets and raptors who build nests on power poles. Once a nest has been established and eggs laid, it is

against Federal law to disturb the nest or annoy the birds in an attempt to get them to abandon the nest. The contractor should make every attempt to remove partially completed nests daily from 1 May to 15 July. It is also recommended that clearing of grass and scrub land, as well as forested areas occur before 1 May or after 15 July to minimize impacts on ground and tree nesting birds. POC: Cliff Seibel (FWA), 353-6220 and Ellen Clark (DTA), 873-1614.

Cultural Resources: Cultural resources include (but are not limited to) archaeological sites, historic buildings or structures, and properties of traditional religious and cultural importance. All projects require review for potential conflicts with cultural resources under Section 106 of the National Historic Preservation Act. This review must be coordinated in advance through the USAG-AK cultural resources program. The contractor must also have a policy in place for notifications and actions by workers in the event of inadvertent discovery of cultural resources (artifacts, etc.). Within the cantonment area, potential impacts to the Ladd Air Force Base Historic District and the Ladd Field National Historic Landmark in particular, must be considered. These areas are shown in Attachment K, Ft. Wainwright Historic Building Status. The POC for historic buildings and structures is: Kathy Price, 353-9197. The POC for archaeological sites and properties of traditional religious and cultural significance is: Julie Raymond-Yakoubian (FRA and FWA), 353-3002 and Aaron Robertson (DTA), 873-4717.

OIL & HAZARDOUS SUBSTANCES SPILL NOTIFICATION

SPILL #	FILE #	LC	
SPILL NAME, IF ANY	PERSON REPORTING:	PHONE NUMBER	
DATE/ TIME OF SPILL	DATE/TIME REPORTED:	REPORTED HOW? (Phone, fax, etc.)	
	DATE/TIME DISCOVERED:		
<u>LOCATION</u>		<u>SUBSTANCE SPILLED</u>	
<u>QUANTITY SPILLED</u>	QUANTITY CONTAINED	QUANTITY RECOVERED	QUANTITY DISPOSED
<u>POTENTIAL RESPONSIBLE PARTY</u>		OTHER POTENTIAL RESPONSIBLE PARTIES, IF ANY	
<u>SOURCE OF SPILL</u>			
<u>CAUSE OF SPILL</u>			
<u>CLEANUP ACTIONS</u>			
<u>DISPOSAL METHODS AND LOCATION</u>			
ENVIRONMENTAL DAMAGE (circle one) YES NO	SURFACE AREA AFFECTED (in square feet)	SURFACE TYPE (describe area affected)	
COMMENTS. Spill Report FWA 04-XXX			
TYPE OF DEC RESPONSE (phone, field visit, took report)	NAMES OF DEC STAFF RESPONDING	CASE STATUS (open, closed, trans. to cont. sites)	

ATTACHMENT 4

Approval for Low-Level PCB Disposal at Fort Wainwright Landfill

2 August 2007

Directorate of Public Works

SUBJECT: Disposing of Soils with Very Low Levels of Polychlorinated Biphenyl Oil in the Fort Wainwright Landfill per Solid Waste Permit # SW1A003-11.

Mr. James Spiers
State of Alaska
Department of Environmental Conservation
Division of Environmental Health
Solid Waste and Pesticides Program
610 University Avenue
Fairbanks, Alaska 99709-3643

The US Army Garrison, Alaska is providing notice that it plans to dispose of soils with very low levels of Polychlorinated Biphenyls (PCBs) in the Fort Wainwright Solid Waste Landfill as defined in the subject permit. Fort Wainwright has conducted extensive sampling events on the soils in question and has come to the conclusion that the soils are not polluted as defined in 18 AAC 60.990. According to 18 AAC 60.990, "Polluted Soil shall mean soil or residue that is not a Regulated Hazardous Waste and meets any of the following criteria; contains a hazardous substance in concentrations exceeding an "over 40 inch zone" migration to groundwater level...; or contains petroleum contaminated media or debris...exempted from 40 CFR 261.4(b)(10)...; or contains Polychlorinated Biphenyl's (PCBs) in concentrations greater than 10 Parts per Million".

The low levels of PCB contamination in the soils have been determined by a combination of field test kits and fixed laboratory results to be less than 10 Parts per Million. The results are on file with the Contaminated Sites Program, as appendices to the Preliminary Source Evaluation 1 and Preliminary Source Evaluation 2. The soils are being removed from the Taku Gardens Housing area to facilitate current and future remedial investigation efforts and future clean-up activities.

At the end of the removal action, a short report will be provided to the ADEC Solid Waste Program detailing the total number of cubic yards and the respective concentration of PCBs disposed.

Disposal of these soils will follow the procedures of other solid waste materials disposed of at the Ft. Wainwright landfill in accordance with the existing Solid Waste permit.

If you have additional questions or concerns regarding this action, please contact Ms. Cristal Fosbrook, Remedial Project Manager, US Army Garrison, Alaska at 907-384-2713 or Ms. Therese Deardorff at 907-384-2716.

Joseph S. Malen
DERA Program Manager
Fort Wainwright Alaska

FW Landfill PCBs Soil Approval.txt

From: Brock, Robert D POA [Robert.D.Brock@poa02.usace.army.mil]
Sent: Thursday, October 04, 2007 9:55 AM
To: Heikkila, Terry
Cc: Cory.Hinds@CH2M.com
Subject: FW: PCBs (UNCLASSIFIED)

Importance: High

-----Original Message-----

From: Malen, Joseph Mr MIL USA USARPAC [mailto:joseph.malen@us.army.mil]
Sent: Wednesday, October 03, 2007 4:26 PM
To: Fosbrook, Cristal MIL USA USARPAC; Deardorff, Therese M Ms MIL USA USARPAC;
Markey, Rielle M Ms MIL USA USARPAC; Brock, Robert D POA; Kendall, Scott POA;
sharon.richmond@alaska.gov; gusmano.jacques@epa.gov; Adams, Brian Mr CIV USA IMCOM
Cc: Seibel, Clifford Mr CIV USA IMCOM; Gardner, Kevin DPW (FTR) POA; Meeks, Michael
LTC MIL USA USARPAC; Magid, Jeffrey A Mr CIV USA USARPAC
Subject: FW: PCBs (UNCLASSIFIED)
Importance: High

Classification: UNCLASSIFIED
Caveats: NONE

All:

Reference the attached email from the Alaska Department of Environmental Conservation, Solid Waste Program Managers, Jacobs Engineering has authorization to haul the less-than-10-part-per-million PCB contaminated soil to the Fort Wainwright Landfill.

Joe Malen

-----Original Message-----

From: Spiers, James K (DEC) [mailto:james.spiers@alaska.gov]
Sent: Wednesday, October 03, 2007 2:54 PM
To: Malen, Joseph Mr MIL USA USARPAC
Cc: Buteyn, Douglas J (DEC)
Subject: PCBs

Joe,

I talked with Kin Stricklan, Solid waste and Pesticides Program Manager for DEC. We confirmed what Jeff Magid maintained in our earlier phone conversation - that LEXUS still had a subparagraph (c) in the definition of polluted soil, i.e. PCBs greater than 10 ppm. Therefore, there is an error in our solid waste regulation book.

Please take this e-mail as authorization to dispose of PCB contaminated soil of under 10 ppm PCBs in the Fort Wainwright Class I landfill.
Thank you for pointing out this error.

Ken

Classification: UNCLASSIFIED
Caveats: NONE