

Closure Report

**Site 5/TPA Site 5a – St. Paul Landfill Cell C (Tract 42)
St. Paul Island, Alaska**

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ACRONYMS AND ABBREVIATIONS

| | |
|--------------|---|
| 18 AAC | Title 18 Alaska Administrative Code |
| ADEC | Alaska Department of Environmental Conservation |
| bgs | Below ground surface |
| BSE | Bering Sea Eccotech |
| BTEX | Benzene, toluene, ethylbenzene, and total xylenes |
| CAP | Corrective action plan |
| CESI | Columbia Environmental Sciences, Inc. |
| cm | Centimeter |
| COC | Chain of custody |
| CSM | Conceptual site model |
| CY | Cubic yard |
| DRO | Diesel-range organic compounds |
| EPA | U.S. Environmental Protection Agency |
| ft | Foot |
| GIS | Geographic information system |
| GPS | Global positioning system |
| GRO | Gasoline-range organic compounds |
| KRI | Kelly Ryan, Inc. |
| MSL | Mean sea level |
| MSW | Municipal solid waste |
| NOAA | National Oceanic and Atmospheric Administration |
| NWS | National Weather Service |
| PAH | Polynuclear aromatic hydrocarbon |
| PCB | Polychlorinated biphenyl |
| PCS | Petroleum-contaminated soil |
| Polarconsult | Polarconsult Alaska, Inc. |
| QAP | Quality assurance plan |
| RRO | Residual-range organic compounds |
| Tetra Tech | Tetra Tech EM Inc. |
| TPA | Two-Party Agreement |
| TOPA | Transfer of Property Agreement |
| UST | Underground storage tank |

EXECUTIVE SUMMARY

The U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and its contractor, Tetra Tech EM Inc. (Tetra Tech), prepared this closure report. The report details closure activities conducted at Tract 42 Cell C (Site 5/Two-Party Agreement [TPA] Site 5a) of the St. Paul Landfill on St. Paul Island, Alaska. Activities associated with this site were conducted during the 2003 and 2004 field seasons.

The former St. Paul municipal solid waste (MSW) landfill lies in Tract 42 of Section 17, Township 35 South, Range 131 West of the Seward Meridian, Alaska as shown on the plat of rectangular survey officially filed May 14, 1986. The U.S. Government owns the surface and subsurface estate of Tract 42. Tract 42 is scheduled for transfer to the City of St. Paul under the Transfer of Property Agreement (TOPA; NOAA 1984). NOAA, its predecessor agencies, and the St. Paul municipality used the former landfill as the primary landfill for St. Paul Island from the 1940s until 2004. Although the former landfill never received an operating permit from the State of Alaska, disposal activities occurred on lands in and adjacent to Tract 42, and included the disposal of MSW, construction and demolition debris, and drums containing petroleum products. In 2002, the village native corporation, the Tanadgusix Corporation, deeded approximately nineteen acres of land adjacent to and contiguous with Tract 42 to the City of St. Paul for use as a community MSW facility. The regional native corporation, The Aleut Corporation, retained ownership of the subsurface estate. The City of St. Paul identifies this property as the *Ataqan* Subdivision.

Tract 42 is a 5.78-acre tract owned by the U.S. government and managed by NOAA. It is situated approximately 1.5 miles northeast of the City of St. Paul and 0.25 miles south of the St. Paul Airport (57°08'54.10" North Latitude, 170°13'57.76" West Longitude). For purposes associated with the environmental restoration project, NOAA arbitrarily distinguished three areas within the Tract 42 landfill and the *Ataqan* Subdivision: (1) Cell A (Site 6/TPA Site 5b); (2) Cell B (Site 7/TPA Site 5c [Drum Dump] and Site 8/TPA Site 5d [Solid Waste]); and (3) Cell C. Cell A, located north of Tract 42, contained construction debris and barrels, some with waste oil. Cell A was capped with sand and scoria during the 2000 and 2003 field seasons. Cell B, located north and west of Tract 42, was associated with historical disposal activities on St. Paul Island and contained primarily MSW and drums, some with waste oil. Cell B was closed during the 2003 field season when the MSW was relocated to within Cell C; the drums were removed and disposed off-island. Cell C, located within the boundaries of Tract 42, primarily contained MSW. All the MSW in Cell C that was near the property boundary was relocated to the central portion of Tract 42, inside a line set back 50 feet (ft) from the property boundary ("50 ft

setback line”). Prior to the closure of Cell C, NOAA operated a permitted, short-term stockpile of petroleum-contaminated soil (PCS) atop Cell C during 2003 and 2004. This closure report summarizes the closure activities conducted at Cell C during the 2003 and 2004 field seasons. A closure report submitted under separate cover summarized closure activities conducted at Cell A and Cell B (Tetra Tech 2004b).

NOAA selected Tetra Tech to implement the corrective action plan for the closure of Cell C consistent with the requirements of Title 18 of the Alaska Administrative Code (AAC) Chapter 75 respecting hazardous materials, with 18 AAC 70 respecting water quality standards, and as a Class III solid waste disposal facility in accordance with 18 AAC 60, even though Cell C is not a permitted landfill.

Closure activities conducted at Cell C included:

- removal and relocation of MSW from Cells A and B to tract 42, inside the 50 ft setback line;
- recontouring the MSW consolidated within Tract 42 to a mound with side slopes no steeper than 3 to 1 (horizontal to vertical);
- relocation of some of the short-term stockpiled PCS from Tract 42 to the National Weather Service (NWS) landspreading area; and
- placement and grading of 2 ft of final cover material over the MSW in Tract 42.

During the 2003 field season, NOAA relocated an estimated 14,736 cubic yards (CY) of MSW from Cell A, Cell B, and from portions of Cell C where MSW existed inside Tract 42 within 50-ft of the Tract 42 boundary. The MSW was incorporated within the southern and western portions of Tract 42, inside the 50 ft setback line, where it was leveled and compacted. In 2003, NOAA also received permission from the Alaska Department of Environmental Conservation (ADEC) for a short-term PCS stockpile atop of MSW in Tract 42. That year, NOAA placed on Tract 42 approximately 23,397 CY of PCS that had been excavated from St. Paul Island corrective action sites. During 2004, NOAA added to Tract 42 a net additional 1,870 CY of PCS, as well as, an estimated 395 CY of debris from corrective action sites.

NOAA estimated 25,267 CY as the final volume of PCS at the short-term stockpile after PCS relocation activities.

ADEC approved a NOAA request to utilize stockpiled PCS as final cover material for the MSW consolidated within Tract 42. Subsequently, PCS remaining at Tract 42 was contoured, leveled, and graded over the area ensuring a minimum 2 ft of cover material in areas containing MSW. In addition, the top of the cell was graded to a slope of no less than 100 to 1 (horizontal to vertical) to allow for drainage while the side slopes were graded to no steeper than 3 to 1 for both slope stability and erosion

control. Following completion of grading activities, large boulders were placed along the perimeter of the area to restrict vehicle access. Cap vegetation was initiated in June 2005 by planting native grass seeds, applying fertilizer, and installing erosion control matting along the side slopes of the cap.

Because closure of Cell C has been completed in accordance with regulatory requirements, NOAA requests acceptance of the Cell C closure by ADEC's Division of Environmental Health, Solid Waste Program and the initiation of post-closure monitoring consistent with 18 AAC 60. NOAA requests a conditional closure determination from ADEC's Division of Spill Prevention & Response, Contaminated Sites Program consistent with the 1996 Two-Party Agreement signed by NOAA and the State of Alaska.

NOAA proposes post-closure monitoring to include groundwater sampling in the vicinity of the St. Paul Landfill and periodic inspections of the landfill cap over a five-year period. NOAA also proposes recording a deed notice regarding the closed MSW landfill and the use of PCS for its cap.

1.0 INTRODUCTION

The U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) is responsible for characterization and restoration of specific sites on St. Paul Island, Alaska under Public Law (PL) 104-91 of 1996 and PL 106-562 of 2000. A Two-Party Agreement (TPA), signed in 1996 by NOAA and the State of Alaska, provides the framework for corrective action on St. Paul Island (NOAA 1996). The State of Alaska provides TPA oversight through the Alaska Department of Environmental Conservation (ADEC). Under the TPA, NOAA is required to comply with State of Alaska regulations that were in effect in 1991 (ADEC 1991); however, with ADEC agreement, NOAA has chosen to follow more current regulations whenever possible.

St. Paul Island is located north of the Aleutian Island chain in the Bering Sea, approximately 800 miles west-southwest of Anchorage, Alaska (Figure 1-1). The former St. Paul municipal solid waste (MSW) landfill (landfill) lies in Tract 42 of Section 17, Township 35 South, Range 131 West of the Seward Meridian, Alaska as shown on the plat of rectangular survey officially filed May 14, 1986. The U.S. Government owns the surface and subsurface estate of Tract 42 (Figure 1-2). Tract 42 is scheduled for transfer to the City of St. Paul under the Transfer of Property Agreement (TOPA; NOAA 1984).

Although the landfill never received an operating permit from the State of Alaska, solid waste disposal activities by NOAA, its predecessor agency (*i.e.* Department of the Interior, Bureau of Commercial Fisheries), and the City of St. Paul occurred on lands in and adjacent to Tract 42; solid waste included MSW, construction and demolition debris, and used oil drums. In accordance with PL 104-91, NOAA is required to cleanup and close the landfill. In 2002, the village native corporation, Tanadgusix Corporation, deeded approximately 19 acres of land adjacent to and contiguous with Tract 42 to the City of St. Paul for use as a community MSW facility. The regional native corporation, The Aleut Corporation, retained ownership of the subsurface estate. The City of St. Paul identifies this property as the *Ataqan* Subdivision (Figure 1-2).

NOAA selected Tetra Tech EM Inc. (Tetra Tech) to implement a corrective action plan (CAP) for closure of Cell C (NOAA 2003a). Tetra Tech subcontracted Kelly Ryan, Inc. (KRI) and Bering Sea Eccotech (BSE) to provide the personnel and equipment necessary to implement the requirements of the CAP. Tetra Tech provided oversight and completed closure activities in accordance with the TPA, the CAP, the landfill closure plan (Polarconsult Alaska, Inc. [Polarconsult] 2002, NOAA 2003a), State of Alaska regulations and guidance for solid waste under Title 18 of the Alaska Administrative Code (AAC) Chapter 60 (ADEC 2003a), State of Alaska regulations respecting water quality under 18 AAC Chapter 70 (ADEC 2003b), State of Alaska regulations respecting hazardous materials under 18 AAC Chapter 75

(ADEC 2003c), and State of Alaska regulations respecting underground storage tanks under 18 AAC Chapter 78 (ADEC 2003d). For the purposes of this closure report, Cell C is now defined as that portion of Tract 42 containing MSW. Closure activities included confining all MSW within an area set back 50 feet (ft) from the Tract 42 property boundary.

The objectives of Cell C closure activities, as outlined in the CAP (NOAA 2003a, 2004a), were as follows:

- Removal and relocation of MSW from between the Tract 42 boundary and the 50 ft setback line.
- Contouring the side slopes of Cell C to meet regulatory requirements for side slopes no steeper than 3 to 1 (horizontal to vertical).
- Construction of a cap over Cell C as shown in the landfill closure plan (Polarconsult 2002).
- Installation of a boulder barrier along the perimeter of Cell C.
- Incorporation of site features and sampling locations into a geographic information system (GIS) database.
- Reporting of closure activities and results to ADEC for acknowledgement of a no further remedial action planned status as well as completion of the closure and initiation of the post-closure monitoring period.

Except as noted in this closure report, field activities were carried out in accordance with the following documents:

- Landfill Closure Plan for the St. Paul Landfill (Polarconsult 2002)
- Draft CAP for the St. Paul Landfill Closure, including Appendix B - Addendum 1 to the Landfill Closure Plan (NOAA 2003a)
- Master Quality Assurance Plan (QAP) (NOAA 2003b)
- Master Health and Safety Plan (NOAA 2003c)
- Master Investigation-Derived Waste Plan (NOAA 2003d)
- Addendum 2 to the Landfill Closure Plan (NOAA 2004a)

2.0 SITE DESCRIPTION

The following subsections describe site background, site geology, site hydrogeology, and previous investigations for Cell C.

2.1 SITE BACKGROUND

Tract 42 is a 5.78-acre tract owned by the U.S. government and situated at 57°08'54.10" North Latitude, 170°13'57.76" West Longitude, approximately 1.5 miles northeast of the City of St. Paul and 0.25 miles south of the St. Paul Airport (Figures 1-1 and 1-2). For purposes related to the environmental restoration project, NOAA arbitrarily divided the Tract 42 MSW landfill and portions of the surrounding *Ataqan* Subdivision into three geographic areas identified as Cell A, Cell B, and Cell C (Figure 2-1). NOAA and its predecessor agency (Bureau of Commercial Fisheries), along with the City of St. Paul, managed landfill operations at and near Tract 42 from the 1940s to present (Columbia Environmental Sciences, Inc. [CESI] 2001a).

Cell A, located north of Tract 42, contained MSW, demolition and construction debris, and drums, many of which contained used motor oil. NOAA removed the drums and closed Cell A (NOAA 2003a; Tetra Tech 2004b). Prior to closure activities, Cell B contained primarily drums and fuel storage tanks with some drums containing waste oil. In addition, Cell B was used to burn wood debris, and to accept some MSW that was covered over (Mercurief 2005). NOAA removed petroleum-contaminated soil (PCS) and drums from Cell B in 2003, burned residual wood, and relocated the MSW to Cell C (Tetra Tech 2004b). NOAA is submitting separate conditional closure requests for Cells A and B, and they will not be further discussed here.

Tract 42 served as an intermittent MSW landfill possibly dating back to the 1940s. The area of usage was relatively small and MSW was kept covered over with soil. The exclusive use of Tract 42 for MSW didn't occur until the early/mid 1990s following an order to the City of St. Paul by the State of Alaska to cease and desist regarding the use of Cell A as the City's landfill for encroaching on the adjacent wetlands (Mercurief 2005). Cell C lies within the boundaries of Tract 42 and primarily contains MSW.

During 2003 and 2004, NOAA operated an ADEC-permitted, short-term PCS stockpile atop Tract 42. The City of St. Paul conducted daily waste management operations at Cell C until mid-2004. Waste management operations included the use of a "burn box" to incinerate MSW. The City disposed burn box ash into the active portion of Cell C. Prior to the implementation of burn box operations, MSW was either deposited in Cell C and covered with soil or openly burned atop Cell C. During June 2004, the

City of St. Paul moved its MSW incineration and disposal operations from Cell C to its own property on the *Ataqan* Subdivision, adjacent to Tract 42. NOAA continued to landfill inert debris in Cell C up until the completion of its closure in the fall of 2004.

2.2 SITE GEOLOGY

St. Paul Island was formed as a result of volcanic eruptions of basaltic lavas onto the southern edge of the Bering Sea Shelf. The island has never been glaciated, and many cinder cones with steep slopes and sharp crater rims are present on the island. The island soil is characterized as primarily volcanic deposits consisting of scoria of varying sizes (pebbles to cobbles) and colors (lenses of gray, red, and black) with fractured basalt occurring at depth (Barth 1956).

The landfill is situated amid a series of coastal sand dunes that begin at the south shore of the island along the Bering Sea and extend inland to the northern perimeter of the landfill (Figure 1-2). As such, topography in this area is variable with surface elevations that vary from 5 ft above mean sea level (MSL) in low-lying depressions to 40 ft above MSL atop the largest sand dunes. Surface soil in this area consists primarily of fine sand with gravels present in some locations, most likely imported to the site during past development or disposal activities. Beneath the sand lies a layer of sandy silt and clay that is classified as undifferentiated mud. Fractured basalt is present beneath this layer throughout the area (Polarconsult 2002, NOAA 2003a). A shallow lake and contiguous wetland are present in the northeast portion of the landfill and cover approximately 100,000 square ft (Figure 2-1). The elevation of the lake surface is approximately 5 ft above MSL (Polarconsult 2002).

2.3 SITE HYDROGEOLOGY

Groundwater beneath the landfill reportedly exists in two aquifers: the upper aquifer and the lower aquifer. A layer of sandy silt and clay, which is classified as undifferentiated mud, and appears to act as a semi-confining layer, separates these two units. An undetermined vertical gradient exists between the upper and lower aquifers (CESI 2001b).

The upper aquifer occurs in the fine sand layers, and is present at depths that vary from 1 ft below ground surface (bgs) in low-lying areas to 25 ft bgs in the area of larger sand dunes. Groundwater flow in the upper aquifer is defined by a groundwater divide that runs generally from east to west between Cell A and Cell C; to the north of this divide, groundwater flows to the north-northeast, while to the south of this divide, groundwater flows to the south-southwest. Based on available data, groundwater within the upper aquifer is not tidally influenced (CESI 2001b).

The lower aquifer occurs within the fractured basalt layer. Groundwater flow in this unit appears to be to the south toward the Bering Sea. Based on available data, groundwater within the lower aquifer is tidally influenced (Dames and Moore 1997; CESI 2001b).

2.4 PREVIOUS INVESTIGATIONS

Since Cell C has been active until recently, most previous investigations have focused on Cells A and B. However, in May 2000, CESI conducted a routine inspection of the landfill and identified a tar spill in the active portion of Cell C. Further investigation revealed that the spill originated from a drum located in the area. CESI subsequently uncovered, removed, and disposed off-island two buried drums, spilled tar, and a small quantity of visually stained or tar-coated soil (CESI 2001c). CESI collected one soil sample from the small excavation created after tar and soil removal. The sample was field screened for petroleum hydrocarbons using PetroFlag[®], a colorimetric test kit, with the result below the kit detection limit (CESI 2001a). No confirmation samples were analyzed for the excavation.

NOAA and its contractors installed 17 groundwater monitoring wells within and near Tract 42 from approximately 1995 to 2004, and decommissioned 9 of these wells during 2003 and 2004 landfill closure activities (Figure 2-1). Recent groundwater sampling results indicate no contaminants exceeded their ADEC Table C cleanup levels excepting lead, which was detected in MWSNPLF-1 above its Table C cleanup level of 15 micrograms per liter during the October 2003 quarterly sampling event (Tetra Tech 2004d).

3.0 CLOSURE STANDARDS

Closure activities at the landfill were conducted in accordance with State of Alaska regulations (ADEC 2003a, 2003b, 2003c, 2003d) and the TPA signed between NOAA and the State of Alaska (NOAA 1996).

In accordance with 18 AAC 60 (ADEC 2003a), NOAA was required to conduct the following closure activities:

- Remove and relocate MSW from between the Tract 42 boundary and the 50 ft setback line.
- Contour the side slopes of Cell C to meet regulatory requirements for side slopes no steeper than 3 to 1 (horizontal to vertical).
- Construct a cap over Cell C as shown in the landfill closure plan (Polarconsult 2002; NOAA 2003a, 2004a).

In 2004, NOAA and its contractor conducted a feasibility study-level screening of remedial alternatives for the treatment of PCS staged in the short-term stockpile at Cell C and scheduled for removal from NOAA's sites under the TPA. As a result of the screening, NOAA narrowed the plausible alternatives to industrial landfilling on island, landspreading on island, and landfarming on island (Mitretek Systems, Inc. 2004, NOAA 2004b). NOAA subsequently proposed, and ADEC approved, using PCS as Landfill Cell C cover material and landspreading PCS at the NOAA National Weather Service (NWS) property located on Tract 41 approximately 0.5-mile northeast of the landfill (ADEC 2004a, 2004b, 2004c, 2004d; NOAA 2004a, 2004b, 2004c).

4.0 FIELD ACTIVITIES

The following subsections summarize the equipment used and the activities performed during closure activities at Cell C. Appendix A provides photographic documentation of closure activities. Appendix B provides copies of the daily reports as well as logbook notes generated during closure activities.

4.1 CONTRACTORS AND EQUIPMENT

Tetra Tech provided overall site management and engineering oversight, including the direction of closure activities during implementation of the CAP, excepting cap vegetation activities that were performed by NOAA. Tetra Tech subcontracted KRI and BSE to provide the personnel and equipment, including excavators and dump trucks, necessary to implement the closure requirements. NOAA also furnished several pieces of government-owned equipment for use during the corrective action. Health and safety meetings were conducted before the commencement of each day's activities. NOAA representatives provided survey support using real-time kinematic global positioning system (GPS) techniques and equipment.

Equipment used on site during field activities included the following:

- Caterpillar D3 Bulldozer (NOAA)
- Caterpillar D4 Bulldozer (KRI)
- Caterpillar D8 Bulldozer (KRI)
- Hitachi EX300 Excavator (KRI)
- Hitachi EX350 Excavator (KRI)
- Komatsu PC200 Excavator (KRI)
- Caterpillar 320BL Excavator (NOAA)
- Caterpillar 988 Loader (KRI)
- Michigan L70 Loader (BSE)
- Ingersoll Rand SP56D Compactor (KRI)
- Bell 25B 20-CY Dump Trucks (3) (KRI)
- Caterpillar 773 40-CY Dump Trucks (3) (KRI)
- Kenworth T800 12-CY Dump Trucks (2) (NOAA)

- International 12-CY Dump Truck (BSE)
- Kenworth 10-CY Dump Truck (BSE)
- New Holland LB115.B Backhoe (City of St. Paul)
- Thompson Seeder (NOAA)
- Trimble Total Station® 5700 GPS (NOAA)
- Trimble Total Station® 5700 GPS (NOAA)
- Laser Leveling System (KRI)
- Survey Transit (KRI)

4.2 MSW AND INERT DEBRIS ACTIVITIES

4.2.1 2003 Field Season

Between August and November 2003, landfill closure activities included the incorporation of approximately 13,560 CY of MSW from Cell B to inside the 50 ft setback line in Tract 42 (Figure 4-1). [Note: A summary of closure activities conducted at Cell A and Cell B has been provided in a closure report submitted under separate cover (Tetra Tech 2004b).] In addition, approximately 1,176 CY of MSW were removed from the area between the Tract 42 boundary and the 50 ft setback at the southeast corner of Tract 42, and incorporated inside the 50 ft setback line.

Upon placement, MSW was shaped and compacted in approximately 18-inch lifts using a bulldozer and vibratory compactor. MSW was initially placed in the southeast corner of Tract 42, inside the 50 ft setback line, and placement continued along the southern boundary of this area to the southwest corner as lifts were completed (Figure 4-1). When large objects, including concrete and boulders were encountered and could not be incorporated with MSW, they were segregated and staged to avoid interference with the removal and placement of MSW.

4.2.2 2004 Field Season

NOAA excavated two debris pits within Cell C in 2004 to accommodate solid wastes acquired during island cleanup operations. Debris Pit 1 was excavated in June 2004 within a sand dune area in the southwest corner of Cell C, and inside the 50 ft setback line (Figure 4-1). The excavated soil was sand without MSW that was set aside for use as cover material. Debris Pit 1 was initially filled with discarded fish net, used PCS stockpile plastic liner material from Tract 42, and other solid waste. The pit's upper half and another pit (Debris Pit 2; Figure 4-2) were filled with an estimated 395 CY of debris excavated from the Lukanin Bay PCS site (TPA 12c; Tetra Tech 2005a). The City of St. Paul placed its Cell C burn box ash in the western portion of Tract 42, covering it with soil. This location is marked as "2004 MSW

Disposal Area” on Figure 4-1.

The debris placed in the pits was covered with fill material, thereby incorporating the debris with existing Cell C MSW (Figures 4-1 and 4-2).

4.3 PCS STOCKPILING

Between June and November 2003, NOAA conducted corrective action activities at 13 sites and NOAA’s previous short-term PCS stockpile at the Blubber Dump, which included the removal and relocation of approximately 23,397 CY of PCS. With ADEC approval, NOAA designated a portion of Cell C for the placement of a short-term, lined stockpile to contain PCS removed during these corrective actions (Figure 2-1). The designated area was graded, cleared of debris, and a liner was installed in July 2003. The liner footprint was approximately 60,000 square ft. Subsequently, NOAA transported PCS from each site to the Tract 42 stockpile. Figure 4-3 illustrates the topography of Tract 42 prior to and following MSW relocation and PCS stockpile activities. Figure 4-4 illustrates the topography of the Cell C after MSW removed from TPA sites in 2003 had been relocated into Tract 42 and the PCS stockpile had reached nearly its maximum size. Figure 4-5 illustrates the topography of Tract 42 in October 2004 after the remaining PCS had been used as the final cover material. These activities are discussed in greater detail below. A summary of stockpile activities conducted during the 2003 field season has been provided under separate cover (Tetra Tech 2004a).

Between June and October 2004, NOAA transported an additional 4,471 CY of PCS to Tract 42 for stockpiling following corrective actions at four sites, and additional cleanup at the Blubber Dump PCS stockpile.

In 2004, NOAA relocated an estimated total of 2,601 CY of PCS from the Tract 42 stockpile to NOAA’s National Weather Service (NWS) landspreading site (Figure 1-2). The change in PCS at Tract 42 during 2004 was a net increase of 1,870 CY (+4,471 CY – 2,601 CY = 1,870 CY). At the end of stockpile activities, there were an estimated 25,267 CY of PCS at Tract 42 (Appendix D).

4.4 LANDFILL CAPPING

During the 2004 field season NOAA used the Cell C short-term stockpile material to cap the Tract 42 Cell C landfill, as approved by ADEC (ADEC 2004b, 2004d). The capping soil was contoured, leveled, and graded over the landfill ensuring a minimum 2 ft cover over the MSW. In accordance with regulatory requirements, the side slopes were graded to no steeper than 3 to 1 (horizontal to vertical) and the top of Cell C was graded to a slope of no less than 100 to 1 to ensure proper drainage of potential surface water

runoff. Along the eastern edge of Cell C, final cover material abutted the existing sand dunes. Figure 4-5 illustrates the topography of Cell C following completion of closure activities. Appendix C provides examples of the slope measurements and calculations. Following final cover placement activities, Tetra Tech placed large boulders along the perimeter of Cell C to restrict vehicle access.

In June 2005 NOAA completed landfill closure activities. NOAA repaired several cap locations impacted by winter erosion and the lack of vegetative cover during the 2004/2005 winter. NOAA punctured the former short-term PCS stockpile liner in several locations to mitigate future erosion risk posed by surface water pooling and runoff. Finally, NOAA broadcast seed and fertilizer to initiate a vegetative cover throughout the closure area consistent with the landfill closure plan (Polarconsult 2002; NOAA 2003a, 2004a), and placed erosion control matting along the side slopes of the cap to aid with erosion protection until the vegetative cover matures. The seed consisted of beach wild rye at a rate of 12 pounds (lbs) per acre, and a mixture of boreal red fescue and Bering hair grass applied at a rate of 28 lbs per acre. Fertilizer was applied at the rate of 400 lbs per acre. After application of all seed and fertilizer, a 10-ft long by 8-ft wide piece of chain link fence attached to an 8-foot length of pipe was dragged over the surface to bury the seed.

4.5 INVESTIGATION-DERIVED WASTE MANAGEMENT

No investigation-derived waste was generated during the 2003 and 2004 closure activities at Cell C.

4.6 SITE SURVEYING

Elevations, benchmarks, excavation extents, boundaries, and side slopes were surveyed by NOAA representatives using a survey-grade Trimble Total Station® 5700 differential GPS. The Trimble Total Station® 5700 is a GPS and GIS data collection and mapping system that combines a high-performance, dual-channel GPS receiver and antenna with a local base station and real-time differential correction system to provide survey-grade accuracy in real time. Horizontal positions of locations and excavation boundaries were determined to within approximately plus or minus 1 centimeter (cm), and elevations were determined to within approximately plus or minus 2 cm. A repeater radio was placed atop Diamond Hill, approximately 1 mile west of the landfill, to provide radio transmission from the base station to the site location. Data were collected in latitude and longitude referenced to the World Geodetic System 84 Datum, Universal Transverse Mercator Zone 2 coordinate system in meters.

5.0 ANALYTICAL SAMPLING AND ANALYSIS

During the 2003 and 2004 field seasons, Tetra Tech collected representative analytical samples from the PCS stockpiled on Tract 42. The PCS came from excavations at NOAA corrective action sites in accordance with the CAPs for each site. Stockpile samples were collected according to 18 AAC 78 (ADEC 2003d), and the ADEC underground storage tank (UST) procedures manual (ADEC 2002a).

Details regarding the numbers of samples collected and their results are included in Appendix D of this closure report in the context of determining the average contaminant concentrations for PCS used for landfill closure cover material. Details regarding the sample collection and analytical methods, as well as, evaluations of data usability associated with each corrective action have been provided in the corrective action reports submitted under separate cover for each respective site (Tetra Tech 2004c, 2005a, 2005c, 2005d).

6.0 CONCEPTUAL SITE MODEL

A conceptual site model (CSM) is used to evaluate exposure pathways for human health and ecological receptors (ADEC 2000). The following subsections provide an evaluation for each of the elements of the CSM for Cell C, including historical contamination sources, release mechanisms, impacted media, migration pathways, exposure routes, potential receptors, and a cumulative risk assessment.

6.1 HISTORICAL SOURCES OF CONTAMINATION

The site served as an intermittent MSW landfill for approximately sixty years, with the City of St. Paul beginning exclusive use of Tract 42 for MSW disposal in the early/mid 1990s. The landfill cell operated without a State of Alaska permit, and neither the federal government nor the City of St. Paul kept records of disposal practices. The landfill potentially contains numerous items that could contribute to soil, air, and groundwater contamination. The only recorded removal of potential contaminant sources are for two drums containing petroleum products, as detailed in Section 2.4. By the end of the 2004 field season an estimated 25,267 CY of PCS was stockpiled at Tract 42 and subsequently used to construct the soil closure cap atop Cell C MSW. Groundwater monitoring results downgradient of Cell C indicated the presence of lead above its ADEC Table C cleanup level in one well during one monitoring round (Tetra Tech 2005b).

6.2 RELEASE MECHANISMS

Potential release mechanisms from the MSW and PCS cap include dissolution by precipitation percolating through the soils, volatilization, and dispersal of particulates by winds. Lead in a single groundwater sample from monitoring well MWSNPLF-1 suggests a potential release from the MSW through percolation of precipitation through the MSW and leachate entering site groundwater.

6.3 IMPACTED MEDIA

Cell C surface soil consists of an estimated 25,267 CY of PCS. No soil sampling took place below the MSW, but presumably the soils are impacted by MSW. The presence of lead above its ADEC Table C cleanup level in groundwater downgradient from Cell C during one sampling round suggests that groundwater at the site could potentially become an impacted medium (Tetra Tech 2005b).

6.4 MIGRATION PATHWAYS

Migration pathways include vertical migration of contamination through the soil vadose zone and lateral migration in groundwater. Climatic conditions on St. Paul Island including moderate rainfall and a high

infiltration to precipitation ratio could allow vertical migration of contaminants through the vadose zone to the upper aquifer. The presence of a layer of sandy silt and clay that is classified as undifferentiated mud may act as a confining layer limiting vertical migration of contaminants to the lower aquifer.

Overland transport is not a likely migration pathway because of the high permeability of soil and the low intensity of rainfall typical for St. Paul Island. Although PCS is present at Cell C, the permeable soil is more conducive to vertical migration than overland transport. However, any vertical migration would be expected to occur slowly because of the low solubility of contaminants of concern, primarily petroleum related compounds.

6.5 EXPOSURE ROUTES

Direct exposure routes include dermal contact with or ingestion of MSW or contaminated soils. Direct exposure to MSW is unlikely because it is covered by at least two feet of soil. Direct exposure to PCS is limited because Cell C is located on Tract 42, which is owned by the federal government and closed to the public. In addition, access to Cell C has been restricted by the placement of large boulders along the perimeter.

Indirect exposure routes include inhalation of contaminated soil particles or vapors and ingestion of potentially contaminated groundwater. Inhalation of contaminated soil particles or vapors is unlikely because Cell C is located on Tract 42, which is owned by the federal government and closed to the public. Volatilization of the petroleum will occur over time, which is an intended consequence of spreading the PCS out as cover material at Cell C, although the low volatility of contaminants present at Cell C limits inhalation of contaminant vapors. Through volatilization, the cover soil will become less contaminated over time. Ingestion of potentially contaminated groundwater is unlikely because no potable water wells are located in the vicinity of Cell C. In addition, groundwater beneath Cell C generally flows to the south-southeast toward the Bering Sea and away from the City of St. Paul's water supply wells.

6.6 POTENTIAL RECEPTORS

Because Cell C is located on Tract 42, which is owned by the federal government and closed to the public, humans are unlikely receptors. Potential ecological receptors include plants, shrews, foxes, and birds.

6.7 RISK ASSESSMENT

ADEC performed a risk assessment to determine whether placement of PCS in a landspreading operation would be protective of human health and the environment. ADEC concluded the PCS would not pose

unacceptable risk to human health or the environment (ADEC 2004a). Key assumptions made in the landspreading risk evaluation are shared with the use of PCS as cover material for Cell C. ADEC approved both landspreading of PCS at the NWS landspreading area and using PCS as Cell C cover material (ADEC 2004b, 2004c, 2004d).

7.0 CONCLUSIONS AND RECOMMENDATIONS

The following subsections present conclusions and recommendations for Cell C based on field activities performed and analytical findings obtained from corrective action activities conducted during the 2003, 2004, and 2005 field seasons.

7.1 CONCLUSIONS

Closure activities at Cell C during 2003 and 2004 included the removal and relocation of approximately 14,736 CY of MSW from Cell A, Cell B, and Tract 42 outside the 50 ft setback line to within the 50 ft setback line of Tract 42 (Figure 4-2). This MSW was leveled and compacted in the southern portion of Cell C. NOAA stockpiled an estimated 25,267 CY of PCS in an ADEC-permitted short-term stockpile within Tract 42, including Cell C during 2003 and 2004. Subsequently, ADEC approved NOAA's request to utilize the stockpiled PCS as final cover material for landfill closure. The landfill cap utilized an estimated 25,267 CY of PCS. Tetra Tech leveled and graded the PCS over the entire landfill to ensure a minimum thickness of 2 ft of cover. In accordance with regulatory requirements, the landfill top was graded to a slope of no less than 100 to 1 while the sides were graded to a slope of 3 to 1 or less. NOAA initiated a vegetative cover for the soil cap in 2005 using native grass seeds and fertilizer, with erosion-control matting along the side slopes.

7.2 RECOMMENDATIONS

Because closure of Cell C has been completed in accordance with regulatory requirements, NOAA requests acceptance of the Cell C closure by the ADEC's Division of Environmental Health, Solid Waste Program and the initiation of post-closure monitoring consistent with 18 AAC 60. NOAA also requests a conditional closure determination for no further remedial action planned from the ADEC's Division of Spill Prevention & Response, Contaminated Sites Program consistent with the TPA.

Consistent with Appendix E, NOAA proposes post-closure monitoring to include groundwater sampling in the vicinity of the St. Paul Landfill and periodic inspections of the Cell C cover over a five-year period. Monitoring wells remaining in the vicinity of the St. Paul Landfill include MWSNPLF-1, MWSNPLF-9, MWSNPLF-10, MWSNPLF-11, MWSNPLF-12, MWSNPLF-13, HC-4, and HC-5 (Figure 2-1). NOAA also proposes recording a deed notice regarding the closed MSW landfill and the use of PCS for its cap.

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FIGURES



Bering Sea

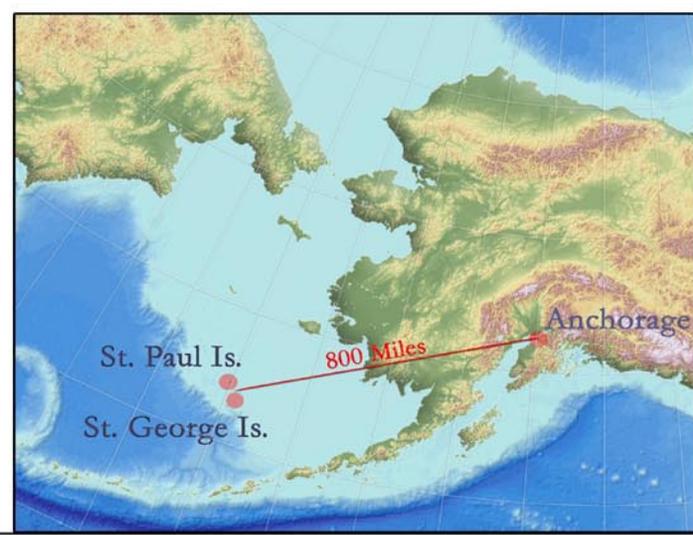
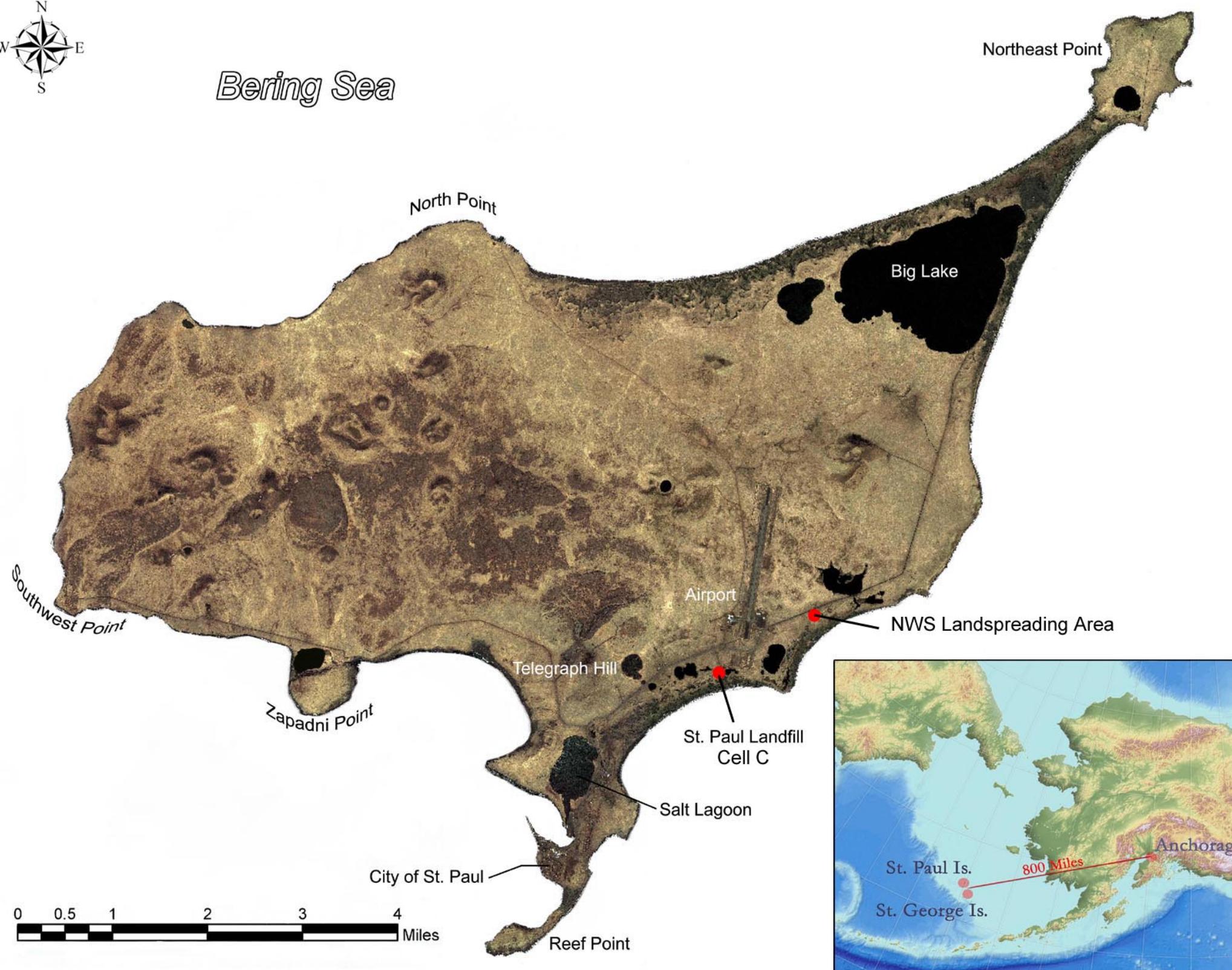
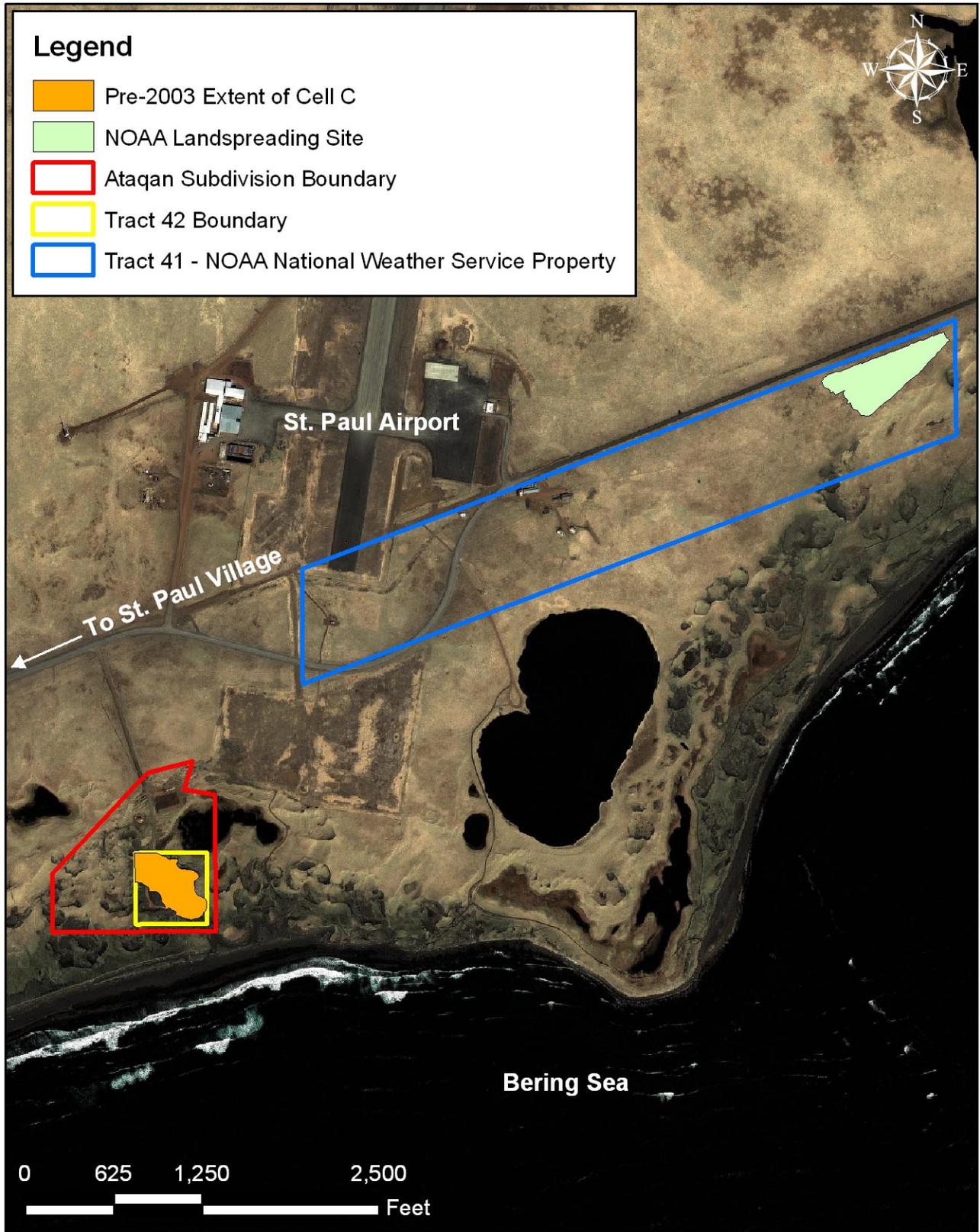


Figure
1-1

St. Paul Island Vicinity Map
St. Paul Landfill Cell C
Site 5/TPA Site 5a
St. Paul Island, Alaska

Source: Ikonos Satellite
Imagery, 2001





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|-----------------------|--|--|
| <p>Figure 1-2</p> | <p>Site Location Map St. Paul Landfill Cell C Site 5/TPA Site 5a St. Paul Island, Alaska</p> | <p>Sources: GIS Data (NOAA Pribilof Project Office 2004), Satellite Imagery (Ikonos 2001).</p> |
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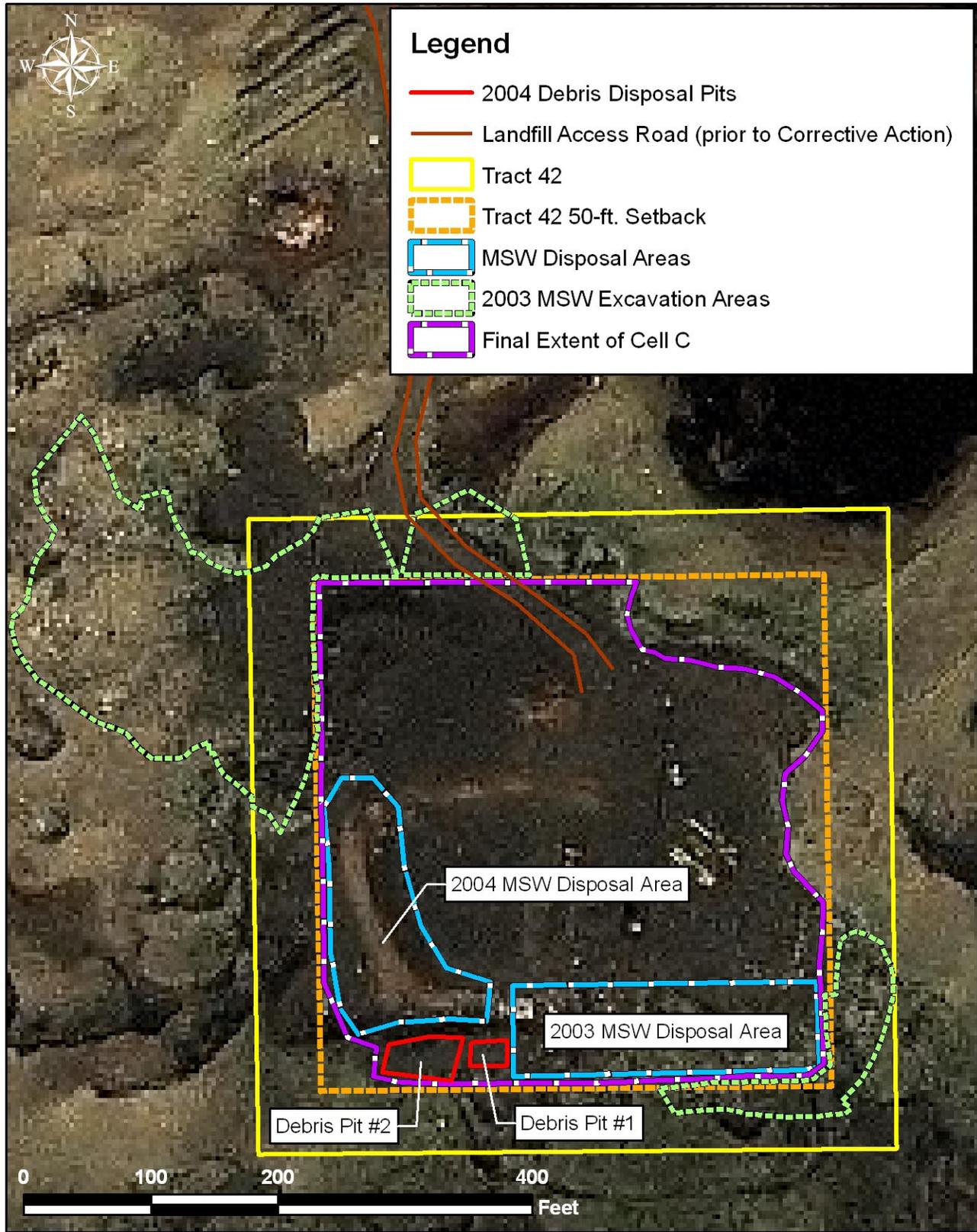


Figure
4-1

St. Paul Landfill Cell C Final Locations of Municipal Solid Waste (October 2004)
St. Paul Landfill Cell C Site 5/TPA Site 5a
St. Paul Island, Alaska

Sources: NOAA Pribilof Project GIS/GPS (2005), Satellite Imagery (Ikonos 2001).



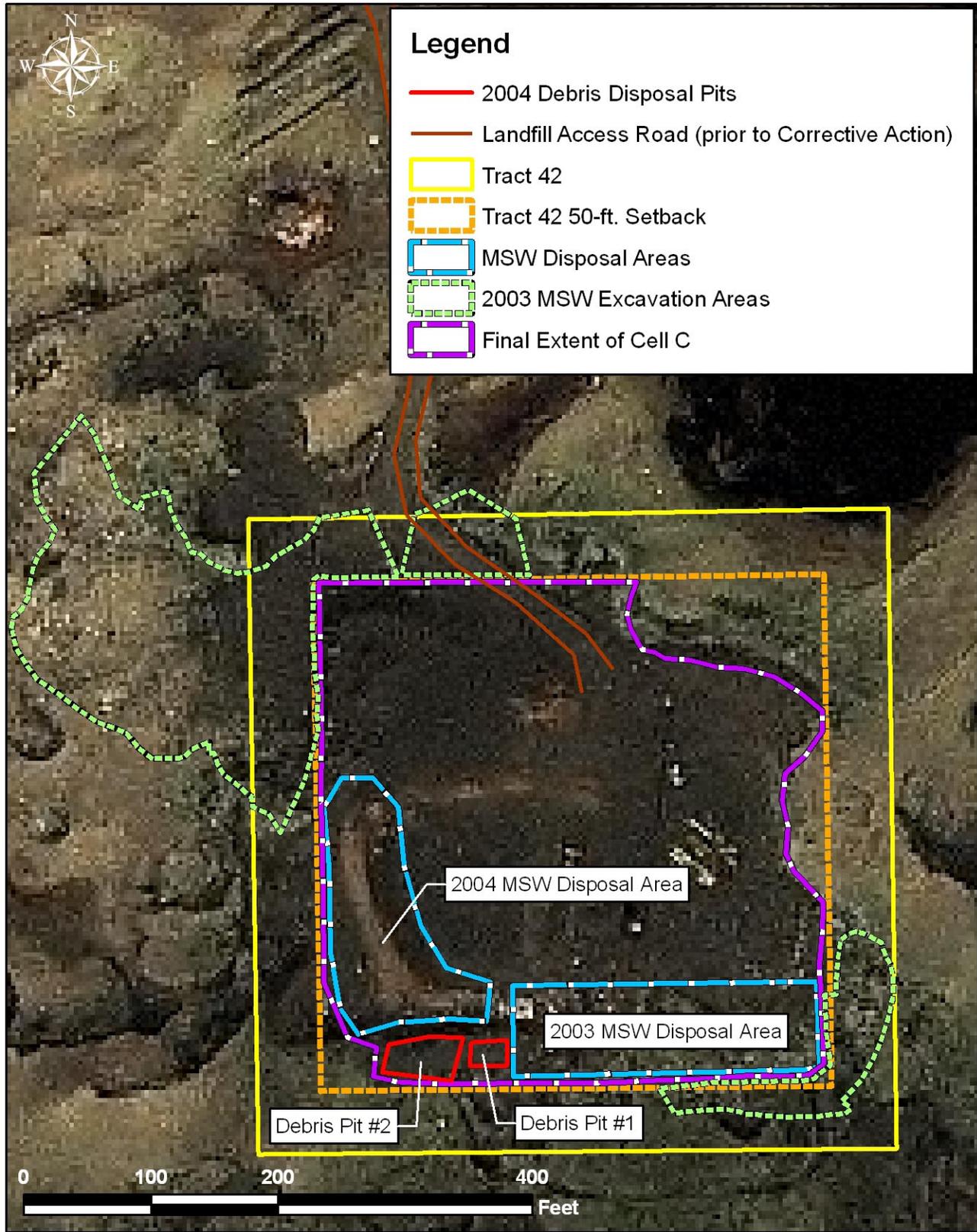


Figure
4-1

St. Paul Landfill Cell C Final Locations of Municipal Solid Waste (October 2004)
St. Paul Landfill Cell C Site 5/TPA Site 5a
St. Paul Island, Alaska

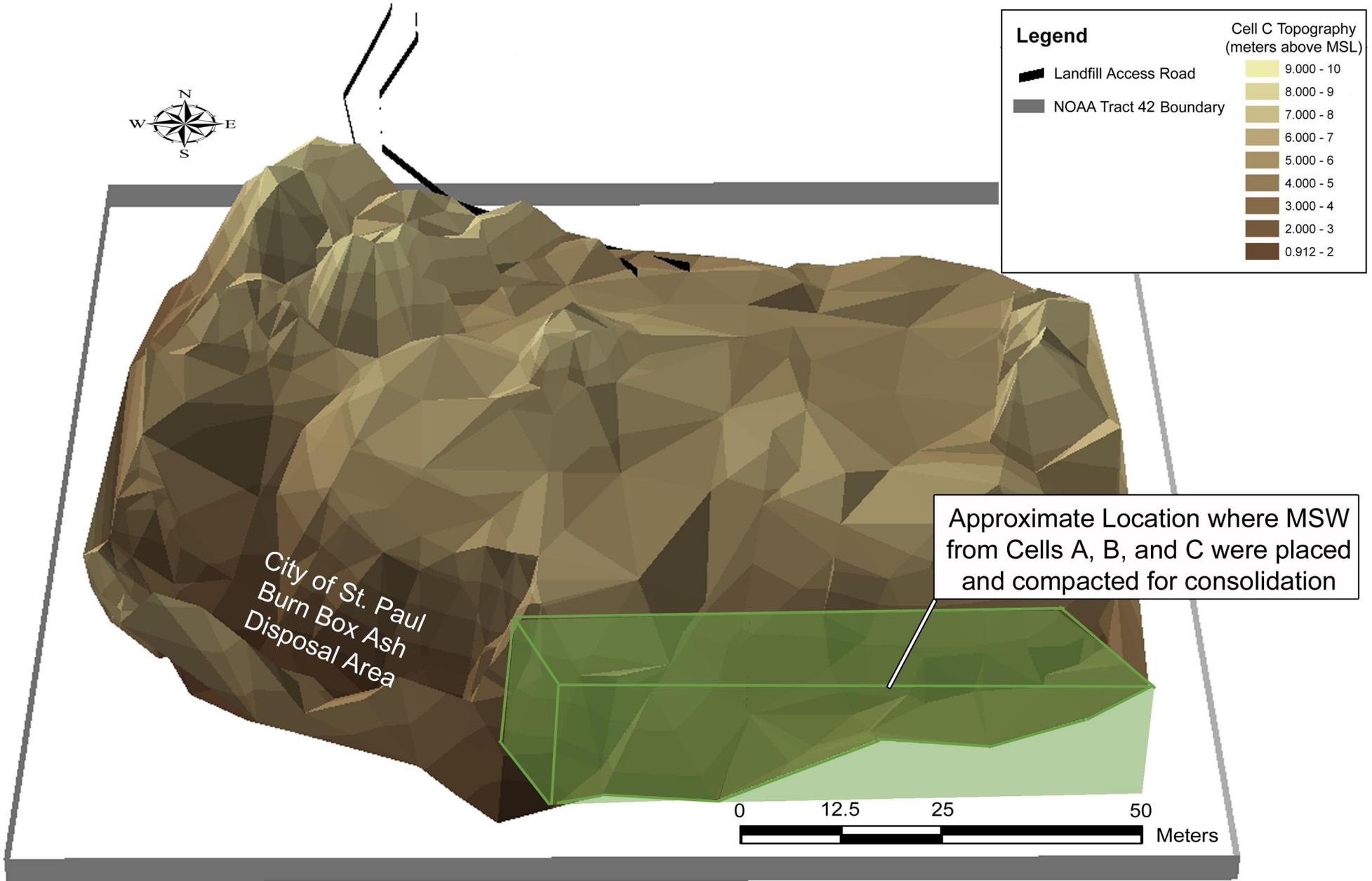
Sources: NOAA Pribilof Project GIS/GPS (2005), Satellite Imagery (Ikonos 2001).





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| <p>Figure</p> <p>4-2</p> | <p>St. Paul Landfill Cell C Final Closure (October 2004)</p> <p>St. Paul Landfill Cell C Site 5/TPA Site 5a</p> <p>St. Paul Island, Alaska</p> | <p>Sources: NOAA Pribilof Project GIS/GPS (2005), Satellite Imagery (Ikonos 2001).</p> |
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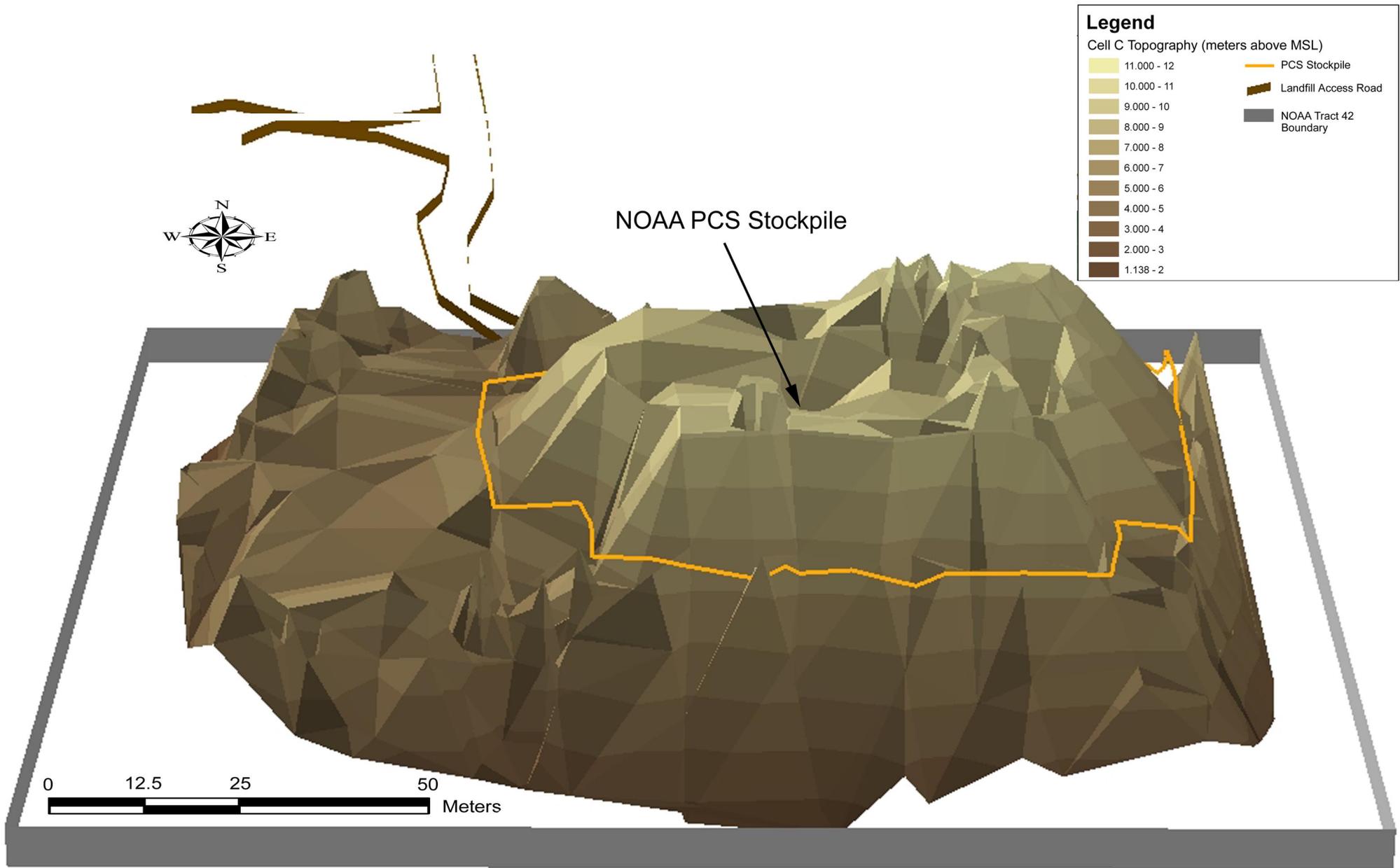
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4-3

St. Paul Landfill Cell C Pre-Closure Topography
(July 2003)
Site 5/TPA Site 5a
St. Paul Island, Alaska

Source: NOAA Pribilof Project
GPS.





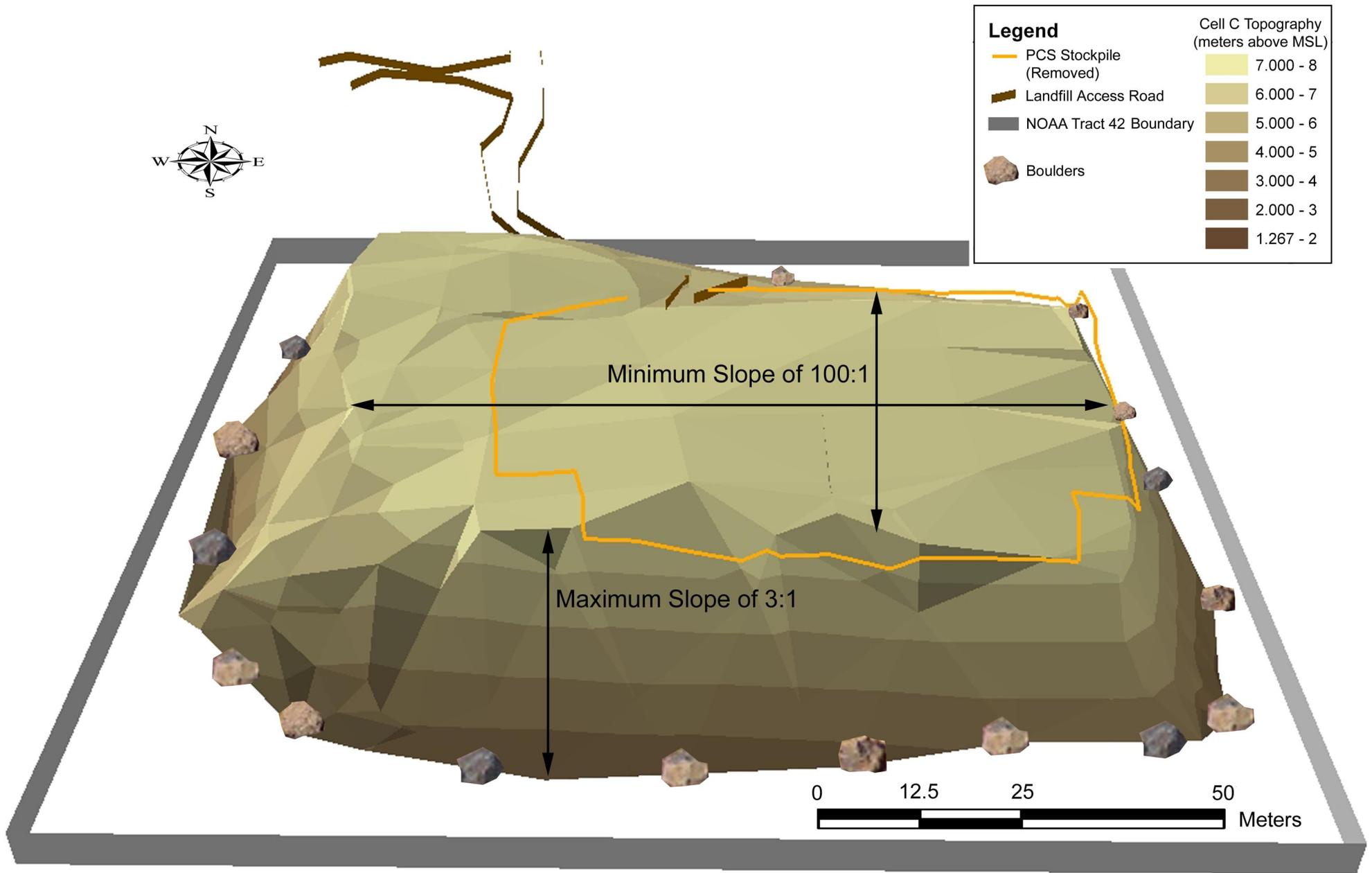
Figure

4-4

St. Paul Landfill Cell C Mid-Closure Topography
 (November 2003)
 Site 5/TPA Site 5a
 St. Paul Island, Alaska

Source: NOAA Pribilof Project
 GPS.





Figure

4-5

St. Paul Landfill Cell C Closure Final Topography
(October 2004)
Site 5/TPA Site 5a
St. Paul Island, Alaska

Source: NOAA Pribilof Project
GPS.



APPENDIX A

PHOTOGRAPHIC DOCUMENTATION



Photograph 1.

St. Paul Landfill

24 October 2003

View of the new pad constructed at Cell B. Facing northwest from Tract 42.



Photograph 2.

St. Paul Landfill

24 October 2003

View of the new pad constructed at Cell B. Facing west.



Photograph 3.

St. Paul Landfill

24 October 2003

View of Tract 42 showing the petroleum-contaminated soil stockpile and the active burn box operated by the City of St. Paul. Facing south.



Photograph 4. St. Paul Landfill 24 October 2003
View of the active burn box operated by the City of St. Paul at Tract 42. Facing west.



Photograph 5. St. Paul Landfill 24 October 2003
View of western portion of Tract 42 where municipal solid waste was placed and compacted behind the active burn box operated by the City of St. Paul. Facing south.



Photograph 6. St. Paul Landfill Cell C 24 October 2003
View of the PCS stockpile at Cell C/Tract 42 prior to the 2004 field season. Facing to the south.



Photograph 7. St. Paul Landfill Cell C 18 August 2004
View of excavation activities at the northeast corner of the PCS stockpile. Facing southwest.



Photograph 8. St. Paul Landfill Cell C 18 August 2004
View of the excavation at the northeast corner of the PCS stockpile. Facing west.



Photograph 9. St. Paul Landfill Cell C 20 August 2004
View of the pit excavated in the southwest portion of Tract 42 for the placement of debris. Facing west.



Photograph 10. St. Paul Landfill Cell C 20 August 2004
View of the lined staging area formerly used to contain suspected PAH-contaminated soils removed from Cells A and B during the 2003 field season. Facing northwest.



Photograph 11. St. Paul Landfill Cell C 20 August 2004
View of the lined staging area formerly used to contain suspected PAH-contaminated soils removed from Cells A and B during the 2003 field season. Facing east.



Photograph 12. St. Paul Landfill Cell C 21 August 2004
View of the excavator sorting rocks and debris from the PCS stockpile. Facing southwest.



Photograph 13. St. Paul Landfill Cell C 24 September 2004
View of the staging area for pieces of concrete and large boulders located near the northeast corner of the PCS stockpile. Facing southeast.



Photograph 14. St. Paul Landfill Cell C 24 September 2004
View of backfill activities at the pit near the northeast corner of the PCS stockpile along the north side of the Tract 42 access road. Facing northwest.



Photograph 15. St. Paul Landfill Cell C 25 September 2004
View of backfill activities at the pit near the northeast corner of the PCS stockpile along the north side of the Tract 42 access road. Facing east.



Photograph 16. St. Paul Landfill Cell C 25 September 2004
View of grading activities atop the PCS stockpile at Tract 42. Facing north.



Photograph 17. St. Paul Landfill Cell C 25 September 2004
View of leveling and grading activities atop the PCS stockpile at Tract 42. Facing south.



Photograph 18. St. Paul Landfill Cell C 25 September 2004
View of leveling and grading activities along the south side of the PCS stockpile. Facing east.



Photograph 19. St. Paul Landfill Cell C 25 September 2004
View of grading activities at the southeast corner of Tract 42. Facing southwest.



Photograph 20. St. Paul Landfill Cell C 29 September 2004
View of contouring, leveling, and grading activities for the PCS stockpile at Tract 42. Facing southeast.



Photograph 21. St. Paul Landfill Cell C 1 October 2004
View of the northeast corner and east side of Tract 42. Facing south.



Photograph 22. St. Paul Landfill Cell C 1 October 2004
View of the northeast corner of Tract 42. Facing southeast.



Photograph 23. St. Paul Landfill Cell C 1 October 2004
View of the north side of Tract 42. Facing east-southeast.



Photograph 24. St. Paul Landfill Cell C 1 October 2004
View of leveling and grading activities atop the PCS stockpile at Tract 42. Facing south.



Photograph 25. St. Paul Landfill Cell C 1 October 2004
View of the former pit excavated near the southwest corner of Tract 42 for the placement of debris (following backfill and placement of cover material). Facing southwest.



Photograph 26. St. Paul Landfill Cell C 12 October 2004
View of the northeast portion of Tract 42 following the placement of cover material and perimeter rock barrier. Facing south.



Photograph 27. St. Paul Landfill Cell C 12 October 2004
View of the north side of Tract 42 following the placement of cover material and perimeter rock barrier. Facing east.



Photograph 28. St. Paul Landfill Cell C 12 October 2004
View of the southeast portion of Tract 42 following the placement of cover material and perimeter rock barrier. Facing southeast.



Photograph 29. St. Paul Landfill Cell C 12 October 2004
View of the south side of Tract 42 following the placement of cover material and perimeter rock barrier. Facing east.



Photograph 30. St. Paul Landfill Cell C 12 October 2004
View of the southwest portion of Tract 42 following the placement of cover material and perimeter rock barrier. Facing south.



Photograph 31. St. Paul Landfill Cell C 12 October 2004
View of the southwest corner (top) of Tract 42 following the placement of cover material and perimeter rock barrier. Facing southwest.



Photograph 32. St. Paul Landfill Cell C 12 October 2004
View of the top of Tract 42 following the placement of cover material and perimeter rock barrier.
Facing west.



Photograph 33. St. Paul Landfill Cell C 12 October 2004
View of the top of Tract 42 following the placement of cover material and perimeter rock barrier.
Facing northwest.



Photograph 34. St. Paul Landfill Cell C 12 October 2004
View of the northeast portion (top) of Tract 42 following the placement of cover material and perimeter rock barrier. Facing north.



Photograph 35. St. Paul Landfill Cell C 12 October 2004
View of the northeast corner of Tract 42 following the placement of cover material and perimeter rock barrier. Facing north.



Photograph 36.

St. Paul Landfill

15 October 2004

View of the capped Cell C. Facing west from TDX property to the east of Tract 42.



Photograph 37.

St. Paul Landfill

15 October 2004

View of the capped Cell C. Facing northwest from TDX property to the southeast of Tract 42.



Photograph 38. St. Paul Landfill 20 June 2005
Punctured plastic liner for former Cell C short-term PCS stockpile. Looking into trench.



Photograph 39. St. Paul Landfill 22 June 2005
Excavating a trench to puncture plastic liner for former Cell C short-term PCS stockpile. Facing east.



Photograph 40. St. Paul Landfill 22 June 2005
ATV and chain link fence section used to turn seed and fertilizer into Cell C soil cap. Facing east.



Photograph 41. St. Paul Landfill 23 June 2005
Manually securing erosion mat with steel staples along Cell C soil cap sideslope. Facing southwest.



Photograph 42. St. Paul Landfill 23 June 2005
View of east sideslope of Cell C during matting. Facing northwest from TDX property to the east of Tract 42.



Photograph 43. St. Paul Landfill 25 June 2005
View of planted and matted Cell C. Facing northwest from TDX property to the southeast of Tract 42.



Photograph 44. St. Paul Landfill 26 June 2005
View of planted and matted western slope of capped Cell C. Facing south from northwest portion of Tract 42.



Photograph 45. St. Paul Landfill 26 June 2005
View of planted and matted northern slope of capped Cell C. Facing south from north portion of Tract 42.



Photograph 46. National Weather Service Landspreading Area 15 August 2004
View of the temporary road being constructed to provide access for dump trucks to the National Weather Service (NWS) landspreading area. Facing north.



Photograph 47. National Weather Service Landspreading Area 1 October 2004
View of dumping and leveling activities at the NWS landspreading area. Facing west.



Photograph 48. National Weather Service Landspreading Area 1 October 2004
View of the NWS landspreading area. Facing west.

APPENDIX B
DAILY REPORTS AND LOGBOOK NOTES



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Thursday August 21, 2003
Personnel On Site: Eric DeRuyter, Tetra Tech
Alicia Lomas and Jim Wright, NOAA

Daily Activities:

1. A preparatory meeting was held today between Eric DeRuyter and Jim Wright to discuss plans for initial work at the landfill site when Kelly-Ryan personnel arrive on-island.
2. Eric DeRuyter, Jim Wright, and Alicia Lomas staked 50-foot setback corners and midpoints within Tract 42 and reviewed the extent of municipal solid waste at Cell B. Eric DeRuyter and Jim Wright also talked with local landfill personnel to discuss working schedules.

Problems Encountered or Anticipated:

1. The burn box currently located within Tract 42 is still in operation. All work at the landfill area will require coordination with local landfill personnel.

Discussions With NOAA Personnel or Island Entity Personnel:

1. The first task is to relocate Cell B municipal solid waste (MSW) into Tract 42 (approximately 1,000 cubic yards at a maximum assumed depth of 2 feet below ground surface). The second task is to construct a 100-foot by 100-foot pad for the burn box on Cell B, which includes construction of a scoria access road.
2. All MSW must be placed within a 50-foot setback inside the Tract 42 property line. All waste must be placed 100 feet away from wetlands. Slopes must be greater than 1 percent and at a slope less than 5:1, according to current conceptual design.

Contractor/Subcontractor Personnel: None

Contractor-Provided Equipment (Kelly-Ryan): None

Government Furnished Heavy Equipment Used: None

Samples Collected: None



Tetra Tech EM Inc.

6100 219th Street SW, Suite 550, Mountlake Terrace, WA 98043 ♦ Telephone (425) 776-3761 ♦ Fax (425) 673-9119

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Saturday August 23, 2003

Personnel On Site: Eric DeRuyter, Tetra Tech
Terry Johnson, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A pre-construction meeting and site visit were conducted between Eric DeRuyter (Tetra Tech), Jim Wright (NOAA), and Terry Johnson (Kelly-Ryan) to discuss work at the landfill site.

Problems Encountered or Anticipated:

1. The burn box currently located within Tract 42 is still in operation. All work at the landfill area will require coordination with local landfill personnel.
2. Dump trucks hauling petroleum-contaminated soil (PCS) will be periodically entering the landfill site and will require caution and right-of-way protocol. Kelly-Ryan will give all other operations at the landfill the right-of-way.

Discussions With NOAA Personnel or Island Entity Personnel:

1. Work will start on Monday August 25, 2003. Workdays will be 10 hours per day, 6 days per week, starting at 8 a.m. and ending at 7 p.m. with a 1-hour lunch break from noon to 1 p.m.
2. Mr. Wright directed that the existing fence, except for the portion of the fence along the access road as it enters Tract 42, shall be removed and incorporated into the landfill, and that the sections of reinforced concrete pipe (RCP) culvert and concrete blocks be saved.
3. Mr. Wright will determine if the 50-foot setback shall be the toe of the eventual landfill cap or the lateral boundary of the trash (with sideslopes extending beyond the 50-foot setback).

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|----------------------------|-------|
| St. Paul Island Landfill | | | |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 2 |



Tetra Tech EM Inc.

6100 219th Street SW, Suite 550, Mountlake Terrace, WA 98043 ♦ Telephone (425) 776-3761 ♦ Fax (425) 673-9119

Contractor-Provided Equipment (Kelly-Ryan): None

Government Furnished Heavy Equipment Used: None

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Monday August 25, 2003

Personnel On Site: Eric DeRuyter, Tetra Tech
Ray Hill, Terry Johnson, Alexay Mercurief, and Robert Owens, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities.
2. Mobilized equipment (excavator, bulldozer, dump truck, and front end loader) to the landfill site. Also, mobilized the field trailer from the blubber dump to the landfill's Cell A area and anchored the trailer with two concrete blocks.
3. Marked all groundwater monitoring wells with spray paint, ribbon, and 2x4 boards to keep the wells protected during construction activities.
4. Moved reinforced concrete pipe (RCP) culvert to entrance of landfill and moved concrete blocks to north side of septic solids disposal area in accordance with NOAA direction.
5. Removed fence and stockpiled trash in the northwest area of Cell B.
6. Moved a mattress and other debris from outer limits of the project area into the landfill.
7. Potholed in southern area of landfill to determine depths of MSW.
8. Smoothed out and prepared the southeastern corner of the landfill for placement of Cell B material.

Problems Encountered or Anticipated:

1. The burn box currently located within Tract 42 is still in operation. All work at the landfill area will require coordination with local landfill personnel.



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- NOAA would like to use the treated soil stockpiled on top of the landfill for backfill material at the Municipal Garage/Machine Shop (Two-party Agreement [TPA] Site 9E and the Former Diesel Tank Farm (TPA Site 11). However, this may not be an option because it appears that MSW is intermingled with this material.

Discussions With NOAA Personnel or Island Entity Personnel:

- Kelly-Ryan will not attempt to create additional volume in the southeastern corner of the landfill by excavating and removing clean native material below the existing layer of trash. Instead, the southeastern area will be graded and prepared for Cell B material to be placed on top of existing MSW and then built up.
- Treated soil stockpiled on top of the landfill may be used for construction of a haul road between the northwestern portion of the Cell B area to the landfill.

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10 |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Alexay Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|-----------------------------------|---|-------|
| Chevrolet Blazer (rental) | Daily transportation | Day |
| Caterpillar 988B front-end loader | Move RCP culvert pipe and concrete blocks | 1 |
| Komatsu PC200 excavator | Remove fence and stockpile debris | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|-----------------------------|-------|
| Caterpillar D5M bulldozer | Grading SE area of landfill | 3 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Tuesday August 26, 2003

Personnel On Site: Eric DeRuyter, Tetra Tech
Ray Hill, Terry Johnson, Alexander Kushin, Alexay Mercurief, and Robert Owens, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air.
2. Constructed haul road for hauling Cell B trash material to Tract 42.
3. Excavated and hauled MSW from the northwest area of Cell B to the southeastern corner of the landfill. The Moxy truck hauled 39 loads, and the City truck hauled 32 loads, for a total of 71 loads (788 loose cubic yards [CY]) for the day.
4. Smoothed out piles of MSW deposited in the southeastern corner of the landfill and compacted lifts of MSW by track-walking the bulldozer.

Problems Encountered or Anticipated:

1. The City dump truck immediately became stuck upon trying to use the newly constructed haul road for hauling Cell B MSW to Tract 42. A new haul route for the City dump truck was constructed, but it meets the main access road to the landfill at a blind corner. With all the other traffic from dump trucks carrying soil from various other corrective action projects on-island, it was deemed necessary to hire a flagger (Alexander Kushin) for the busy, blind corner. NOAA agreed to this decision.
2. The Moxy dump truck had a hose break, which was repaired within an hour.
3. NOAA gave permission to use the treated soil stockpiled on top of the landfill for construction of haul roads within Cell B. However, upon further inspection of the treated soil, too many fines



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and not enough scoria are present to be suitable for use in a haul road. If trucks continue to get stuck, scoria from the Telegraph Hill borrow pit may be used.

Discussions With NOAA Personnel or Island Entity Personnel:

1. Tetra Tech does not need to take photographs of the current work at the landfill. NOAA will take all the necessary photographs to document the work conducted.
2. NOAA's interpretation of the 50-foot offset rule is that MSW can be placed up to, but not beyond the 50-foot offset. The toe of the cap can occur anywhere between the 50-foot offset line and the property line. Thus, the top edge of the final cap (occurring at the 50-foot offset) must meet the minimum thickness above the trash and extend down a side slope (made entirely of clean material) at a slope that allows the toe of the cap (and drainage swale, if necessary) to fall within the 50-foot buffer.
3. The existing access road north of Cell B contains several locations identified by NOAA to be contaminated with petroleum compounds. The locations are easily identified by stained soil and lack of vegetation. NOAA has given Kelly-Ryan permission to use the access road as long as these locations are removed and placed into the petroleum contaminated soil (PCS) stockpile in the landfill. NOAA will direct Kelly-Ryan during the removal and provide TLC screening samples for confirmation. Upon negative TLC sample results, NOAA will use personnel currently working at the Former Diesel Tank Farm (Two-party Agreement [TPA] Site 11) to collect confirmation samples that will be sent to an off-site laboratory for analytical confirmation. At least one 55-gallon drum containing a hardened tar substance and two nearby small tar spills will require a removal action. The drum and tar spills shall be placed in an overpack drum, if the actual quantity is small enough to be contained by an overpack drum. If not, the material shall be placed on a liner away from the access road, for NOAA to address at a later time.

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10.5 |
| Alexander Kushin | Kelly-Ryan | Flagger | 6 |
| Alexay Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|----------------------------------|-------------------------------|-------|
| Chevrolet Blazer (rental) | Daily transportation | Day |
| Kelly-Ryan Moxy 6200S dump truck | Haul trash | 9 |
| Komatsu PC200 excavator | Excavate trash | 10 |
| 12 cy dump truck (City rental) | Haul trash | 6 |
| Mechanic truck | Bring parts to fix Moxy truck | 0.5 |



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Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|-----------------------------|-------|
| Caterpillar D5M bulldozer | Grading SE area of landfill | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Wednesday August 27, 2003

Personnel On Site: Eric DeRuyter, Tetra Tech
Ray Hill, Terry Johnson, Alexander Kushin, Alexay Mercurief, Robert Owens,
and Guy Miller, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities and follow the flagger's signals at the blind intersection. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air.
2. Excavated and hauled MSW from the northwest part of Cell B to the southeastern corner of the landfill. The Moxy truck hauled 42 loads, and the City truck hauled 44 loads, for a total of 86 loads (944 loose cubic yards [CY]) for the day. To date, approximately 1,732 loose CY of MSW have been removed from Cell B and incorporated into the southeastern corner of the landfill.
3. Constructed two decks of deposited MSW in the southeastern corner of the landfill. The Moxy truck dumped on the lower deck and the City truck dumped on the upper deck. The bulldozer smoothed out deposited piles of MSW and compacted by track-walking the bulldozer.
4. Mobilized the compactor to the site and compacted MSW in the southeastern corner of the landfill.
5. Relocated a 6x6x6-foot concrete structure from outside the eastern edge of the landfill into the south portion of the landfill with the excavator.
6. Performed a cleanup action from releases of petroleum product from two deteriorated 55-gallon drums discovered during excavation activities in Cell B. Both drums were placed in overpack drums, and a small quantity of soil stained by the released product was shoveled into one of the overpack drums. Per direction from Jim Wright, soil and vegetation affected by the release were excavated into the City truck and dumped at the petroleum-contaminated soil (PCS) stockpile at the landfill. The excavator bucket and bed of the City truck were decontaminated using a scrub brush with Alconox® and water mixture and rinsed with water at the PCS stockpile area. All decontamination procedures were inspected and approved by Jim Wright. Tyvek® and gloves



used during the cleanup/decontamination activities were also placed in one of the overpack drums.

Problems Encountered or Anticipated:

1. Encountered a deteriorated 55-gallon drum that contained degraded petroleum product in a hillside dune of Cell B while excavating, resulting in a release of the petroleum product. During the cleanup action for the release, a second 55-gallon drum that contained petroleum product was discovered. Both drums were removed and containerized as discussed under Daily Activities.

Discussions With NOAA Personnel or Island Entity Personnel:

1. Jim Wright requested that excavation activities be halted in the hillside dune of Cell B where the deteriorated 55-gallon drums with petroleum product were discovered today. Several more drums are visible within the hillside. The area will be staked off and will be addressed by NOAA at a later date.
2. All twelve existing monitoring wells around the landfill site are to remain in place and not be removed during excavation activities, even if there is visible MSW at depth around them. A minimum of 6-foot radius distance shall be maintained from each monitoring well during excavation activities.

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 12 |
| Alexander Kushin | Kelly-Ryan | Flagger | 8 |
| Alexay Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 11.5 |
| Guy Miller | Kelly-Ryan | Mobilized compactor to site | 2 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 11.5 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|-------------------------------------|-------|
| Chevrolet Blazer (rental) | Daily transportation | Day |
| Komatsu PC200 excavator | Excavate MSW | 11.5 |
| Ingersoll-Rand SP56DD compactor | Mobilized to site and compacted MSW | 3 |
| Moxy 6200S dump truck | Haul MSW | 10 |
| 12 cy dump truck (City rental) | Haul MSW | 11.5 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|-----------------------------|-------|
| Caterpillar D5M Bulldozer | Grading SE area of landfill | 10 |

Samples Collected: None



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Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Thursday, August 28, 2003

Deleted: day

Personnel On Site: Eric DeRuyter, Tetra Tech
Ray Hill, Terry Johnson, Alexander Kushin, Alexay Mercurief, and Robert Owens, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities and follow the flagger's signals at the blind intersection. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking on site, and Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities.
2. Excavated and hauled MSW from the northwest area of Cell B to the southeastern corner of the landfill. The Moxy truck hauled 19 loads, and the City truck hauled 38 loads, for a total of 57 loads (608 loose cubic yards [CY]) for the day. To date, approximately 2,340 loose cubic yards of MSW have been removed from Cell B and incorporated into the southeastern corner of the landfill.
3. Marked off the perimeter of the dune that contains deteriorated 55-gallon drums. NOAA personnel surveyed the perimeter of this dune using GPS.
4. Potholed using the excavator at five locations in the northwest area of Cell B to determine the outlying extent of MSW.
5. Shaped piles of MSW and graded 18-inch loose lifts of MSW in the southeastern area of the landfill using a bulldozer.
6. Compacted the first 18-inch loose lift of MSW in the southeastern corner of the landfill. Top of the lift was compacted with the vibratory roller compactor, and side slopes were compacted by track-walking the dozer.

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- 7. Met with PolarConsult, City representatives, and Jim Wright on-site to discuss location and construction of the future burn box pad.

Problems Encountered or Anticipated:

- 1. The Moxy dump truck was down for 2.5 hours today due to a broken hose that was repaired.

Discussions With NOAA Personnel or Island Entity Personnel:

- 1. NOAA will survey pothole locations surrounding Cell B that do not contain any MSW.

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10.5 |
| Alexander Kushin | Kelly-Ryan | Flagger | 8 |
| Alexay Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 6 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|-------------------------------------|-------|
| Chevrolet Blazer (rental) | Daily transportation | Day |
| Komatsu PC200 excavator | Excavate MSW | 10 |
| Ingersoll-Rand SP56DD compactor | Mobilized to site and compacted MSW | 5.5 |
| Moxy 6200S dump truck | Haul MSW | 7.5 |
| 12 cy dump truck (City rental) | Haul MSW | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|-----------------------------|-------|
| Caterpillar D5M Bulldozer | Grading SE area of landfill | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Friday, August 29, 2003

Deleted: day

Personnel On Site: Eric DeRuyter, Tetra Tech
Ray Hill, Terry Johnson, Alexander Kushin, Alexay Mercurief, and Robert Owens, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities and follow the flagger's signals at the blind intersection. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking on site, and Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities. For emergencies, channel 16 on Alexay's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Excavated and hauled MSW from the northwest area of Cell B to the southeastern corner of the landfill. The Moxy truck hauled 18 loads, and the City truck hauled 45 loads, for a total of 63 loads (666 loose cubic yards [CY]) for the day. To date, approximately 3,006 loose CY of MSW have been removed from Cell B and incorporated into the southeastern corner of the landfill.
3. Potholed using the excavator at several locations in the northwest area of Cell B to determine the outlying extent of MSW.
4. Shaped piles of MSW and graded 18-inch loose lifts of MSW in the southeastern area of the landfill using a bulldozer.
5. Compacted the second 18-inch loose lift of MSW in the southeastern corner of the landfill. Top of the lift was compacted with the vibratory roller compactor and side slopes were compacted by track-walking the bulldozer.

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Problems Encountered or Anticipated:

1. None.

Discussions With NOAA Personnel or Island Entity Personnel:

1. Jim Wright requested that the remaining small pieces of MSW (cans, bottles, and various debris) in the bottom of the excavation at Cell B be removed. The bottom surface and sideslopes of the excavation shall also be smoothed out and “dressed up.”

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10.5 |
| Alexander Kushin | Kelly-Ryan | Flagger | 8 |
| Alexay Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|-------------------------------------|-------|
| Chevrolet Blazer (rental) | Daily transportation | Day |
| Komatsu PC200 excavator | Excavate MSW | 10 |
| Ingersoll-Rand SP56DD compactor | Mobilized to site and compacted MSW | 6 |
| Moxy 6200S dump truck | Haul MSW | 4 |
| 12 cy dump truck (City rental) | Haul MSW | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|-----------------------------|-------|
| Caterpillar D5M bulldozer | Grading SE area of landfill | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Saturday August 30, 2003
Personnel On Site: Eric DeRuyter, Tetra Tech
Ray Hill, Terry Johnson, and Robert Owens, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities and follow the flagger's signals at the blind intersection. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking on site, and Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities. The medical clinic is located in town next to the King Eider Hotel.
2. Excavated and hauled MSW from the northwest area of Cell B to the southeastern corner of the landfill. The City truck hauled 19 loads (190 loose cubic yards [CY]) for the day. To date, approximately 3,196 loose CY of MSW have been removed from Cell B and incorporated into the southeastern corner of the landfill.
3. Potholed using the excavator at multiple locations in the outlying edge of Cell B to determine the extent of MSW.
4. Shaped piles of MSW and graded 18-inch loose lifts of MSW in the southeastern area of the landfill using a bulldozer.
5. Compacted the third 18-inch loose lift of MSW in the southeastern corner of the landfill. Top of the lift was compacted with the vibratory roller compactor and side slopes were compacted by track-walking the bulldozer.
6. Smoothed out the bottom and side slopes of the current excavation in the Cell B area with the bulldozer and removed the remaining small pieces of MSW (cans, bottles, and various debris) from the area.

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- 7. Boulders stockpiled in Cell B were relocated to the east side of the access road north of the wetlands area and south of Cell A.

Problems Encountered or Anticipated:

- 1. The battery in the Moxy dump truck was hissing (arching and draining the battery). Supports for the battery compartment were removed and reshaped to stop the problem.

Discussions With NOAA Personnel or Island Entity Personnel:

- 1. Jim Wright directed Kelly-Ryan to relocate boulders stockpiled in Cell B to the east side of the access road north of the wetlands area and south of Cell A.
- 2. NOAA will survey (using global positioning system) the locations of excavated clean potholes surrounding Cell B.

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10.5 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|-------------------------------------|-------|
| Chevrolet Blazer (rental) | Daily transportation | Day |
| Komatsu PC200 excavator | Excavate MSW | 10 |
| Ingersoll-Rand SP56DD compactor | Mobilized to site and compacted MSW | 7 |
| 12 cy dump truck (City rental) | Haul MSW | 3 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|---|-------|
| Caterpillar D5M bulldozer | Grading SE area of landfill and smoothing bottom and side slopes of Cell B excavation | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Monday September 1, 2003

Personnel On Site: Eric DeRuyter, Tetra Tech
Ray Hill, Terry Johnson, Alexay Mercurief, and Robert Owens, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities and follow the flagger's signals at the blind intersection. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexay's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Excavated and hauled MSW from Cell B to the southeastern corner of the landfill. The Moxy truck hauled 21 loads, and the City truck hauled 17 loads, for a total of 38 loads (422 loose cubic yards [CY]) for the day. To date, approximately 3,618 loose CY of MSW have been removed from Cell B and incorporated into the southeast corner of the landfill.
3. Excavated and hauled PCS from several locations along the northern access road of Cell B to the PCS stockpile area of the landfill. The large removal area to the north of the access road was approximately 100 feet long, 25 feet wide, and 3 feet deep. Several small locations (hot spots) south of the northern access road were also removed. The Moxy truck hauled 16 loads, and the City truck hauled 7 loads, for a total of 23 loads (262 loose CY) for the day. To date, 262 loose CY of PCS have been removed from the Cell B area and incorporated into the PCS stockpile.
4. Decontaminated the beds of the two dump trucks and the excavator bucket at the PCS stockpile area after PCS excavation activities.



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5. Shaped piles of MSW and graded 18-inch loose lifts of MSW in the southeastern area of the landfill using a bulldozer.
6. Compacted lifts of MSW in the southeastern corner of the landfill. Top of each lift was compacted with the vibratory roller compactor and side slopes were compacted by track-walking the bulldozer.

Problems Encountered or Anticipated:

1. Work was delayed to obtain a key for the front-end loader, which was blocking the entrance to the PCS stockpile area. Since today was Labor Day, the PCS stockpile team was not working.

Discussions With NOAA Personnel or Island Entity Personnel:

1. Excavation limits for PCS will be directed by Jim Wright. Mr. Wright specified that the removal area to the north of the northern access road was to extend 3 feet below ground surface (bgs) along the northern access road from a hot spot location at the east to a pin flag he placed to the west approximately 25 feet away. For the hot spots located south of the northern access road, Mr. Wright directed the excavation work and decided when to stop excavating.
2. Jim Wright specified less compaction effort for MSW than was applied last week in the southeast corner of the landfill. For the duration of the field effort in 2003, only one pass with the vibratory compactor over a lift of MSW will be required to meet NOAA's goal for compaction of MSW at the landfill. MSW shall continue to be placed in nominal 18-inch loose lifts.
3. NOAA will address the deteriorated 55-gallon drum containing a tar-like substance and the depression south of the northern access road. Similar to the hillside dune of deteriorated drums, Tetra Tech and Kelly-Ryan will not perform any work in these areas.

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10.5 |
| Alexay Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|-------------------------------------|-------|
| Chevrolet Blazer (rental) | Daily transportation | Day |
| Komatsu PC200 excavator | Excavate MSW | 10 |
| Ingersoll-Rand SP56DD compactor | Mobilized to site and compacted MSW | 2 |
| Moxy 6200S dump truck | Haul MSW | 10 |
| 12 cy dump truck (City rental) | Haul MSW | 8 |



Tetra Tech EM Inc.

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Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|-----------------------------|-------|
| Caterpillar D5M bulldozer | Grading SE area of landfill | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Tuesday September 2, 2003

Personnel On Site: Eric DeRuyter, Tetra Tech
Ray Hill, Stephen Hopkins, Terry Johnson, Alexander Kushin, Alexay Mercurief, and Robert Owens, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities and follow the flagger's signals at the blind intersection. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexay's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Excavated and hauled MSW from Cell B to the southeastern corner of the landfill. The Moxy truck hauled 23 loads, and the City truck hauled 13 loads, for a total of 36 loads (406 loose cubic yards [CY]) for the day. To date, approximately 4,024 loose CY of MSW have been removed from Cell B and incorporated into the southeast corner of the landfill.
3. Excavated and hauled additional PCS (from the excavation opened yesterday) along the northern access road of Cell B to the PCS stockpile area of the landfill. The removal area excavated yesterday to the north of the access road was approximately 100 feet long, 25 feet wide, and 3 feet deep. Today, the same area was overexcavated down to as deep as 12 feet below ground surface (bgs). The Moxy truck hauled 27 loads, and the City truck hauled 27 loads, for a total of 54 loads (594 loose CY) for the day. To date, 856 loose CY of PCS have been removed from the Cell B area and incorporated into the PCS stockpile.
4. Decontaminated the beds of the two dump trucks and excavator bucket at the PCS stockpile area after PCS excavation activities.



5. Smoothed out the excavated area in the northwest portion of Cell B where MSW was removed using a bulldozer.
6. Shaped piles of MSW and graded 18-inch loose lifts of MSW in the southeastern area of the landfill using a bulldozer.
7. Compacted lifts of MSW in the southeastern corner of the landfill. Top of each lift was compacted with the vibratory roller compactor and side slopes were compacted by track-walking the bulldozer.
8. Pointed out locations of clean potholes to NOAA personnel for a GPS survey of the area. Per Tetra Tech's request, NOAA personnel also surveyed the current dimensions of the southeastern portion of the landfill.

Problems Encountered or Anticipated:

1. The City dump truck's hydraulic lift wasn't extending to its full height and the pin connection for its bed was loose. Also, a tooth on the excavator bucket broke off and a cable on the compactor needed repair. Kelly-Ryan's mechanic, Stephen Hopkins, repaired all equipment items.

Discussions With NOAA Personnel or Island Entity Personnel:

1. Excavation limits for PCS will be directed by Jim Wright. Today, Mr. Wright specified that the lateral limits of yesterday's PCS excavation removal area to the north of the northern access road be maintained (approximately 100 feet long by 25 feet wide = 2,500 square feet), but that the excavation should extend downward to the extent possible to remove additional PCS.
2. The deteriorated 55-gallon drums located in the hillside dune should be addressed by NOAA in a timely manner so that once all Cell B material is moved into Tract 42, work can transfer smoothly into construction of the new burn box pad currently planned to be located adjacent to this area.



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Stephen Hopkins | Kelly-Ryan | Mechanic | 1.5 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10.5 |
| Alexander Kushin | Kelly-Ryan | Flagger | 8 |
| Alexay Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|-------------------------------------|-------|
| Chevrolet Blazer (rental) | Daily transportation | Day |
| Ingersoll-Rand SP56DD compactor | Mobilized to site and compacted MSW | 3 |
| Komatsu PC200 excavator | Excavate MSW and PCS | 10 |
| Moxy 6200S dump truck | Haul MSW and PCS | 10 |
| 12 CY dump truck (City rental) | Haul MSW and PCS | 9 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|-----------------------------|-------|
| Caterpillar D5M bulldozer | Grading SE area of landfill | 8 |

Samples Collected: see Table 1

- Eleven stockpile samples, including one duplicate sample, were collected from PCS bound for the PCS stockpile area.

Prepared by:

Tetra Tech EM Inc.

Date



**TABLE 1
SAMPLES COLLECTED**

| Sample No. | Sample Type | GRO | DRO | RRO | BTEX | PAH |
|-------------------|---|------------|------------|------------|-------------|------------|
| SP04-SS-001-000 | Grab soil | X | X | X | X | |
| SP04-SS-002-000 | Grab soil | X | X | X | X | |
| SP04-SS-003-000 | Grab soil | X | X | X | X | |
| SP04-SS-004-000 | Grab soil | X | X | X | X | |
| SP04-SS-005-000 | Grab soil | X | X | X | X | |
| SP04-SS-006-000 | Grab soil | X | X | X | X | X |
| SP04-SS-007-000 | Grab soil | X | X | X | X | |
| SP04-SS-008-000 | Grab soil | X | X | X | X | |
| SP04-SS-009-000 | Grab soil | X | X | X | X | |
| SP04-SS-010-000 | Grab soil | X | X | X | X | |
| SP04-SS-011-000 | Grab soil duplicate of SP04-SS-010-000 | X | X | X | X | |



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Wednesday September 3, 2003

Personnel On Site: Eric DeRuyter, Tetra Tech
Ray Hill, Terry Johnson, Alexander Kushin, Alexay Merculief, and Robert Owens, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities and follow the flagger's signals at the blind intersection. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexay's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Excavated and hauled MSW from Cell B to the southeastern corner of the landfill. The Moxy truck hauled 48 loads, and the City truck hauled 13 loads, for a total of 61 loads (706 loose cubic yards [CY]) for the day. To date, approximately 4,730 loose CY of MSW have been removed from Cell B and incorporated into the southeast corner of the landfill.
3. Smoothed out the excavated area in the northwest portion of Cell B using a bulldozer.
4. Shaped piles of MSW and graded 18-inch loose lifts of MSW in the southeastern area of the landfill using a bulldozer.
5. Compacted lifts of MSW in the southeastern corner of the landfill. Top of each lift was compacted with the vibratory roller compactor and side slopes were compacted by track-walking the bulldozer.



6. Pointed out the locations of the deteriorated 55-gallon drums in the hillside dune and adjacent depression area containing tar-like substance spills/drum to BSE personnel, Julie Shane. BSE will address these areas under separate contract with NOAA.
7. NOAA personnel GPS-surveyed the sample locations today.

Problems Encountered or Anticipated:

1. The City dump truck's left front tire had a flat and took two hours to repair.
2. The City dump truck often gets stuck in the loose soil on the haul road at the center of Cell B. Scoria may need to be obtained and placed on the haul road for better traction. Note: the haul road is located over MSW, and the scoria, if needed, will eventually be incorporated into the landfill along with the underlying MSW.

Discussions With NOAA Personnel or Island Entity Personnel:

1. The PCS excavation area to the north of the northern access road shall be left open indefinitely.
2. The groundwater monitoring well located within the area designated for the new burn box pad shall be decommissioned. Tetra Tech is awaiting direction from NOAA on the specified procedures for the abandonment of the well.
3. Excavation limits for PCS will be determined by Jim Wright. Today, Mr. Wright specified that the lateral limits of yesterday's excavation removal area to the north of the northern access road be maintained (approximately 100 feet long and 25 feet wide), but that the excavation should extend downward to the extent possible to remove additional PCS.
4. The deteriorated 55-gallon drums located in the hillside dune should be addressed by NOAA in a timely manner so that once all Cell B material is moved into Tract 42, work can transfer smoothly into construction of the new burn box pad currently planned to be located adjacent to this area.



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10.5 |
| Alexander Kushin | Kelly-Ryan | Flagger | 8 |
| Alexay Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|-------------------------------------|-------|
| Chevrolet Blazer (rental) | Daily transportation | Day |
| Ingersoll-Rand SP56DD compactor | Mobilized to site and compacted MSW | 4 |
| Komatsu PC200 excavator | Excavate MSW | 10 |
| Moxy 6200S dump truck | Haul MSW | 10 |
| 12 cy dump truck (City rental) | Haul MSW | 4 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|-----------------------------|-------|
| Caterpillar D5M bulldozer | Grading SE area of landfill | 10 |

Samples Collected: see Table 1

1. Fourteen confirmation samples, including one duplicate sample, were collected within the PCS excavation area (100 feet long, 25 feet wide, and 6 to 12 feet bgs) north of the northern access road of Cell B. The samples included five bottom samples and eight sidewall samples.

Prepared by:

Tetra Tech EM Inc.

Date



**TABLE 1
SAMPLES COLLECTED**

| Sample No. | Sample Type | GRO | DRO | RRO | BTEX | PAH |
|-------------------|---|------------|------------|------------|-------------|------------|
| SP04-CS-001-110 | Grab soil | X | X | X | X | |
| SP04-CS-002-100 | Grab soil | X | X | X | X | |
| SP04-CS-003-090 | Grab soil | X | X | X | X | |
| SP04-CS-004-070 | Grab soil | X | X | X | X | |
| SP04-CS-005-060 | Grab soil | X | X | X | X | |
| SP04-CS-006-050 | Grab soil | X | X | X | X | |
| SP04-CS-007-050 | Grab soil | X | X | X | X | X |
| SP04-CS-008-040 | Grab soil | X | X | X | X | |
| SP04-CS-009-040 | Grab soil | X | X | X | X | X |
| SP04-CS-010-070 | Grab soil | X | X | X | X | |
| SP04-CS-011-030 | Grab soil | X | X | X | X | |
| SP04-CS-012-050 | Grab soil | X | X | X | X | |
| SP04-CS-013-030 | Grab soil | X | X | X | X | |
| SP04-CS-014-030 | Grab soil duplicate of SP04-CS-013-030 | X | X | X | X | |



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Thursday September 4, 2003

Personnel On Site: Eric DeRuyter, Tetra Tech
Ray Hill, Stephen Hopkins, Terry Johnson, Alexander Kushin, Alexay Mercurief, and Robert Owens, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities and follow the flagger's signals at the blind intersection. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexay's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Enhanced traction and compaction on the central Cell B haul road by hauling 8 loads (96 loose cubic yards [CY]) of treated soil that was stockpiled at the landfill. Used the bulldozer to grade and the vibratory compactor to compact the material.
3. Excavated and hauled MSW from Cell B to the southeastern corner of the landfill. Also, excavated and hauled MSW from an area outside the 50-foot offset (buffer) line in the southeast corner of Tract 42 and incorporated it into the south-central portion of the landfill. The Moxy truck hauled 24 loads, the City truck hauled 10 loads, and the DJB dump truck hauled 4 loads for a total of 38 loads (500 loose CY) for the day. To date, approximately 5,230 loose CY of MSW have been removed from outside of the 50-foot offset (buffer) line (including Cell B) and incorporated into the landfill.
4. Potholed using the excavator in the southeastern corner of Tract 42 to find MSW that extended outside the 50-foot offset (buffer) boundary line.



- Top of each lift was compacted with the vibratory roller compactor and side slopes were compacted by track-walking the bulldozer.

Problems Encountered or Anticipated:

- The Moxy truck had a broken hose that required the Kelly Ryan mechanic, Stephen Hopkins, 0.5 hour to repair.
- The Moxy truck’s all-wheel drive is failing. Only two of its six wheels are engaging and, thus, it is having trouble climbing hills and traveling on loose soil.
- MSW was found located outside the 50-foot offset (buffer) line in the southeast corner of Tract 42 and needed to be relocated into the landfill. Because restricted space to move in this area and a short haul distance, only one truck could be used to relocate the MSW in the southeastern corner of Tract 42. Due to the failing Moxy and impracticability of the City truck (small payload and traction problems), the City truck was swapped for the off-road DJB 35 dump truck that could carry a bigger payload (28 cubic yards) and maneuver the terrain.
- A portion of MSW that extends below-grade and beyond the 50-foot offset (buffer) boundary line in the southeaster corner of Tract 42 was not excavated and purposely left in-place to maintain the steep sideslope that currently supports the southeastern corner of the PCS stockpile area. Removing the MSW from this area would jeopardize the entire sidewall, especially since part of the sidewall also contains MSW and extends beyond the 50-foot offset (buffer) and, therefore, would require removal. MSW was also left in place surrounding MWSNPLF-2 located in the southeast corner of Tract 42 for a radius of approximately 6 feet and a depth of approximately 8 feet bgs; NOAA is awaiting confirmation from ADEC regarding proper well decommissioning procedures. The well and MSW are located within the 50-foot buffer zone.

Discussions With NOAA Personnel or Island Entity Personnel:

- The location of the current burn box operation will be moved to its new location by October 30, 2003 once the new burn box pad and disposal cell have been constructed. Therefore, the current location of the burn box disposal area can be used for additional volume of relocated MSW within the landfill.
- Monitoring well MWSNPLF-2, located in the southeast corner of Tract 42, shall remain in-place during excavation of MSW extending outside of the 50-foot offset (buffer) line.

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Stephen Hopkins | Kelly-Ryan | Mechanic for hose on Moxy | 0.5 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10.5 |
| Alexander Kushin | Kelly-Ryan | Flagger | 8 |
| Alexay Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |



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Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|-------------------------------------|-------|
| Chevrolet Blazer (rental) | Daily transportation | Day |
| DJB 35 dump truck | Haul MSW | 2 |
| Ingersoll-Rand SP56DD compactor | Mobilized to site and compacted MSW | 8 |
| Komatsu PC200 excavator | Excavate MSW | 10 |
| Moxy 6200S dump truck | Haul MSW | 5 |
| 12 cy dump truck (City rental) | Haul MSW | 2.5 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|-----------------------------|-------|
| Caterpillar D5M bulldozer | Grading SE area of landfill | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Friday September 5, 2003

Personnel On Site: Eric DeRuyter, Tetra Tech
Ray Hill, Stephen Hopkins, Terry Johnson, Alexay Mercurief, and Robert Owens, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexay's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Excavated and hauled MSW from the area outside the 50-foot offset (buffer) line in the southeast corner of Tract 42 and incorporated it into the southwest portion of the landfill (current burn box disposal area). The DJB dump truck hauled 42 loads (1,176 loose cubic yards [CY]) for the day. To date, approximately 6,406 loose CY of MSW have been removed from outside of the 50-foot offset (buffer) line (including Cell B) and incorporated into the landfill.
3. Shaped piles of MSW and graded 18-inch loose lifts of MSW in the southwest portion of the landfill.
4. Top of each lift was compacted with the vibratory roller compactor and side slopes were compacted by track-walking the bulldozer.
5. Began backfilling the excavated area outside of the 50-foot offset (buffer) line in the southeast corner of Tract 42 with treated soil stockpiled at the landfill. Treated soil was backfilled in 18-inch loose lifts and compacted with the vibratory roller compactor. The Moxy truck hauled 2



loads and the DJB truck hauled 2 loads for a total of 4 loads (80 loose CY) for the day. To date, 80 loose CY of treated soil have been used for backfill in the southeastern corner excavation.

6. Assisted NOAA personnel surveying and staking corners for the new burn box pad and disposal pit.

Problems Encountered or Anticipated:

1. The Komatsu PC 200 excavator was slow in production filling the large payload of the DJB dump truck and had to reach extra high to dump into the DJB's bed. To increase production and maneuverability, the Komatsu PC 200 excavator was swapped out for the larger Hitachi EX 350 H-5.
2. The DJB 35 had a broken gear shifter and was down for 0.5 hour.

Discussions With NOAA Personnel or Island Entity Personnel:

1. BSE personnel will work on investigating and removing deteriorated 55-gallon drums from the hillside dune area and the depression south of the northern access road known to contain deteriorated drums and several visible spills of a tar-like substance. A lined and bermed pad shall be constructed north of the burn box for large quantities of contaminated soil removed during this removal action.
2. Groundwater monitoring well MWSNPLF-2, located in the southeast corner of Tract 42, shall be decommissioned and the MSW surrounding it outside of the 50-foot offset (buffer) line shall be excavated and incorporated into the landfill. However, decommissioning of the well must wait until Jim Wright has received written approval from the state for the method of decommissioning. Therefore, the excavation in the southeastern corner shall be backfilled to pre-existing grade. Once written approval is received, the well will be decommissioned appropriately and the area surrounding the well will be re-excavated to remove MSW surrounding the well and then backfilled/compacted with clean fill material.
3. Groundwater monitoring wells designated by NOAA shall be decommissioned in the following manner: (1) fill the casing with bentonite chips up to ground surface; (2) wait 24 hours; (3) cut the casing just below ground surface; (4) excavate MSW from around the well; and (5) backfill and compact the area with clean fill material.
4. Treated soil currently stockpiled at the landfill contains trace amounts of MSW but is approved as clean fill material for use in the southeastern excavation area that extends beyond the 50-foot offset (buffer) line.



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10.5 |
| Alexay Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|---|-------|
| Chevrolet Blazer (rental) | Daily transportation | Day |
| DJB 35 dump truck | Haul MSW and backfill | 9.5 |
| Hitachi EX 350 H-5 | Mobilize, excavate MSW, and load backfill | 7.5 |
| Ingersoll-Rand SP56DD compactor | Compact MSW and backfill | 8.5 |
| Komatsu PC200 excavator | Excavate MSW | 4 |
| Moxy 6200S dump truck | Haul backfill | 1.5 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|-----------------------------|-------|
| Caterpillar D5M bulldozer | Grading SE area of landfill | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Saturday September 6, 2003

Personnel On Site: Eric DeRuyter, Tetra Tech
Ray Hill, Stephen Hopkins, Merwyn Johnson, Terry Johnson, Alexay Mercurief, and Robert Owens, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexay's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Kelly-Ryan completed backfilling the excavated area outside the 50-foot offset (buffer) line in the southeast corner of Tract 42 with treated soil (formerly PCS) stockpiled at the landfill. Treated soil was backfilled in 18-inch loose lifts and compacted with the vibratory roller compactor. The DJB truck hauled 41 loads (1,148 loose CY) for the day. At completion, a total of 1,228 loose CY of treated soil was used for backfill in the southeast corner excavation.
3. Excavated and hauled MSW from Cell B to the southwest portion of the landfill. The Moxy truck hauled 8 loads and the DJB truck hauled 10 loads for a total of 18 loads (376 loose CY) for the day. To date, approximately 6,782 loose CY of MSW has been removed from outside the 50-foot offset (buffer) line (including Cell B) and incorporated into the landfill.
4. Shaped piles of MSW and graded 18-inch loose lifts of MSW in the southwest portion of the landfill.
5. Top of each lift was compacted with the vibratory roller compactor and side slopes were compacted by track-walking the bulldozer.



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Problems Encountered or Anticipated:

1. The burn box is full and should have been burning trash all day but the landfill superintendent, Louis, opted to wait to start the burn box fire until after 7 p.m. today so that the air would be clear and fresh for the workers to breathe today. Much appreciated by all.

Discussions With NOAA Personnel or Island Entity Personnel:

1. Groundwater monitoring wells designated by NOAA shall be decommissioned by these steps: (1) fill the casing with bentonite chips up to ground surface (no hydration time required), (2) cut the casing just below ground surface, (3) excavate MSW from around the well, (4) backfill and compact with clean fill material.

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10.5 |
| Alexay Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|---|-------|
| Chevrolet Blazer (rental) | Daily transportation | Day |
| DJB 35 dump truck | Haul MSW and backfill | 10 |
| Hitachi EX 350 H-5 | Mobilize, excavate MSW, and load backfill | 10 |
| Ingersoll-Rand SP56DD compactor | Compact MSW and backfill | 8.5 |
| Moxy 6200S dump truck | Haul backfill | 1.5 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|-----------------------------|-------|
| Caterpillar D5M bulldozer | Grading SE area of landfill | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Monday September 8, 2003

Personnel On Site: Eric DeRuyter, Tetra Tech

Roman Fratiss, Ray Hill, Stephen Hopkins, Merwyn Johnson, Terry Johnson,
Alexay Merculief, and Robert Owens, Kelly-Ryan

Jim Wright and Craig Russel, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities and follow the flagger's signals along the main access road. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexay's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Compacted last lift on top of the southeastern corner of the landfill with the vibratory roller. Sideslopes were track-walked with the bulldozer.
3. Excavation area in the southeastern corner of the landfill and adjacent dunes were smoothed out using the bulldozer.
4. Excavated and hauled MSW from Cell B to the southwestern portion of the landfill. The Moxy truck hauled 10 loads and the DJB truck hauled 52 loads for a total of 62 loads (1,556 loose cubic yards [CY]) for the day. To date, approximately 8,338 loose CY of MSW has been removed from outside of the 50-foot offset (buffer) line (including Cell B) and incorporated into the landfill.
5. Shaped piles of MSW and graded 18-inch loose lifts of MSW in the southwestern area of the landfill.



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6. Top of each lift was compacted with the vibratory roller compactor.
7. Tetra Tech collected samples in support of the excavation work being conducted by BSE at the tar pit (depression area south of the northern access road).
8. Tetra Tech assisted NOAA personnel (Craig Russel) in surveying the western and southern 50-foot offset (buffer) lines as well as the limits of the southeastern excavation.

Problems Encountered or Anticipated:

1. The compactor was down for one hour while a broken hydraulic line was repaired.
2. Relocation of the MSW from outside the 50-foot offset (buffer) line by Kelly-Ryan is almost complete. Removal of the drums located in the hillside dune by BSE may delay construction of the new burn box pad by Kelly-Ryan currently planned for the area of the hillside dune.

Discussions With NOAA Personnel or Island Entity Personnel:

1. Borrow material for construction of the new burn box shall be obtained from the adjacent proposed burn box disposal pit and the surrounding City property.
2. Scoria can be used for traction on haul roads, as necessary.

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Roman Fratiss | Kelly-Ryan | Flagger | 7.5 |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Stephen Hopkins | Kelly-Ryan | Mechanic for compactor | 1 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10 |
| Alexay Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|----------------------|-------|
| Chevrolet Blazer (rental) | Daily transportation | Day |
| DJB 35 dump truck | Haul MSW | 10 |
| Hitachi EX 350 H-5 | Excavate MSW | 10 |
| Ingersoll-Rand SP56DD compactor | Compact MSW | 8 |
| Moxy 6200S dump truck | Haul MSW | 2 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|-----------------------------|-------|
| Caterpillar D5M bulldozer | Grading SE area of landfill | 10 |



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Samples Collected: see Table 1

1. One characterization sample was collected from the PCS bound for the new lined and bermed stockpile pad located north of the current burn box pad. One confirmation sample was also collected from the bottom of the tar pit.

Prepared by:

Tetra Tech EM Inc.

Date



**TABLE 1
SAMPLES COLLECTED**

| Sample No. | Sample Type | GRO | DRO | RRO | BTEX | PAH |
|-------------------|--------------------|------------|------------|------------|-------------|------------|
| SP04-SS-012-000 | Grab soil | X | X | X | X | X |
| SP04-CS-015-110 | Grab soil | X | X | X | X | |



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Tuesday September 9, 2003

Personnel On Site: Eric DeRuyter, Tetra Tech

Roman Fratiss, Ray Hill, Merwyn Johnson, Terry Johnson, Alexay Mercurief,
and Robert Owens, Kelly-Ryan

Greg Gervais, Craig Russel, and Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities and follow the flagger's signals along the main access road. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexay's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Constructed access road (using the bulldozer) to allow BSE to reach the hillside dune area to excavate and remove drums.
3. Excavated and hauled MSW from Cell B to the southwest portion of the landfill. The DJB truck hauled 23 loads (624 loose cubic yards [CY]) for the day. To date, approximately 8,962 loose CY of MSW has been removed from outside the 50-foot offset (buffer) line (including Cell B) and incorporated into the landfill.
4. Shaped piles of MSW and graded 18-inch loose lifts of MSW in the southwest portion of the landfill.
5. Top of each lift was compacted with the vibratory roller compactor.



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6. Conducted potholing along the northern side of the landfill and 50-foot offset (buffer) line. Only a small amount of MSW was found outside the 50-foot offset (buffer) line, and will be relocated within Tract 42.
7. Removed fence along the main access road to the landfill. Fencing material and posts were incorporated into the landfill per NOAA direction.
8. Assisted NOAA personnel (Jim Wright) by pouring bentonite chips and clean water down groundwater monitoring wells designated for decommissioning.
9. Assisted NOAA personnel (Craig Russel) in surveying potholes made along the north side of the landfill.

Problems Encountered or Anticipated:

1. Relocation of the MSW from outside the 50-foot offset (buffer) line (by Kelly-Ryan) is almost complete. Removal of the 55-gallon drums located in the hillside dune (by BSE) may delay construction of the new burn box pad (by Kelly-Ryan) currently planned to be located in the area of the hillside dune. NOAA has directed Tetra Tech /Kelly-Ryan to perform earthwork along the sideslopes of Cell A if BSE does not complete drum removal prior to Kelly-Ryan completing relocation of MSW into the landfill footprint.

Discussions With NOAA Personnel or Island Entity Personnel:

1. Borrow material for construction of the new burn box shall be obtained from the adjacent proposed burn box disposal pit and the surrounding City property.
2. Scoria can be used for traction on haul roads, as necessary.

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Roman Fratiss | Kelly-Ryan | Flagger | 8 |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10 |
| Alexay Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|----------------------|-------|
| Chevrolet Blazer (rental) | Daily transportation | Day |
| DJB 35 dump truck | Haul MSW | 10 |
| Hitachi EX 350 H-5 | Excavate MSW | 10 |
| Ingersoll-Rand SP56DD compactor | Compact MSW | 9 |



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Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|-----------------------------|-------|
| Caterpillar D5M bulldozer | Grading SE area of landfill | 10 |

Samples Collected: see Table 1

1. One characterization sample was collected from the PCS stockpile on the lined and bermed stockpile pad located north of the current burn box pad.

Prepared by:

Tetra Tech EM Inc.

Date



**TABLE 1
SAMPLES COLLECTED**

| Sample No. | Sample Type | GRO | DRO | RRO | BTEX | PAH |
|-------------------|--------------------|------------|------------|------------|-------------|------------|
| SP04-SS-013-000 | Grab soil | X | X | X | X | |



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Wednesday September 10, 2003

Personnel On Site: Eric DeRuyter, Tetra Tech
Roman Fratiss, Ray Hill, Merwyn Johnson, Terry Johnson, Alexay Mercurief,
and Robert Owens, Kelly-Ryan
Greg Gervais, Craig Russel, and Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities and follow the flagger's signals along the main access road. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexay's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Decommissioned the groundwater monitoring well located in the southeast corner of Tract 42 and the groundwater monitoring well located near the hillside drum area in Cell B. MSW surrounding each of the decommissioned wells was excavated and incorporated into the southwest portion of the landfill footprint. The resulting excavation from removal of the MSW/well in the southeast corner of Tract 42 was backfilled/compacted with treated soil from the stockpile at the landfill. The DJB hauled 4 loads (112 cubic yards [CY]) of treated soil for backfill in the excavation.
3. Excavated and hauled MSW from the area outside of the 50-foot offset (buffer) line to the north of Tract 42 (and the MSW surrounding the decommissioned wells) and incorporated it into the southwest portion of the landfill footprint. The Moxy truck hauled 3 loads and the DJB truck hauled 33 loads for a total of 36 loads (924 loose CY) for the day. To date, approximately 9,886 loose CY of MSW have been removed from outside the 50-foot offset (buffer) line (including Cell B) and incorporated into the landfill.



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4. Shaped piles of MSW and graded 18-inch loose lifts of MSW in the southwest portion of the landfill footprint.
5. Top of each lift was compacted with the vibratory roller compactor.
6. Toured Cell A with NOAA personnel (Jim Wright and Greg Gervais) to discuss earthwork that is required on the sideslopes at Cell A.

Problems Encountered or Anticipated:

1. Relocation of the MSW from outside the 50-foot offset (buffer) line (by Kelly-Ryan) is almost complete. Removal of the 55-gallon drums located in the hillside dune (by BSE) may delay construction of the new burn box pad (by Kelly-Ryan) currently planned to be located in the area of the hillside dune. NOAA has directed Tetra Tech /Kelly-Ryan to perform earthwork along the sideslopes of Cell A if BSE does not complete drum removal prior to Kelly-Ryan completing relocation of MSW into the landfill footprint.

Discussions With NOAA Personnel or Island Entity Personnel:

1. No cover is required on the exposed MSW when work is completed at the landfill this fall.
2. BSE personnel working on the PCS stockpile area will pull back the southeastern corner of the PCS stockpile to allow Kelly-Ryan to remove the MSW-filled slope supporting the southeastern corner of the PCS stockpile. Only the portion of slope existing beyond the 50-foot offset (buffer) line and containing MSW shall be removed. Treated soil shall be used for backfill in this area to be consistent with the rest of the backfill in the southeastern corner of Tract 42.

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Roman Fratiss | Kelly-Ryan | Flagger | 8.5 |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10 |
| Alexay Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|--|-------|
| Chevrolet Blazer (rental) | Daily transportation | Day |
| DJB 35 dump truck | Haul MSW and treated soil backfill | 10 |
| Hitachi EX 350 H-5 | Excavate MSW and load/compact treated soil for backfill in southeastern excavation of decommissioned groundwater monitoring well | 10 |
| Ingersoll-Rand SP56DD compactor | Compact MSW | 9 |
| Moxy 6200S dump truck | Haul MSW | 1 |



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Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|-----------------------------|-------|
| Caterpillar D5M bulldozer | Grading SE area of landfill | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Thursday September 11, 2003

Personnel On Site: Eric DeRuyter, Tetra Tech

Roman Fratiss, Ray Hill, Merwyn Johnson, Terry Johnson, Alexay Mercurief,
and Robert Owens, Kelly-Ryan

Greg Gervais and Craig Russel, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities and follow the flagger's signals along the main access road. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexay's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Excavated and hauled MSW from the area outside of the 50-foot offset (buffer) line to the north of Tract 42 and incorporated it into the southwest portion of the landfill footprint. The DJB truck hauled 43 loads (1,204 loose cubic yards [CY]) for the day. To date, approximately 11,090 loose CY of MSW have been removed from outside of the 50-foot offset (buffer) line (including Cell B) and incorporated into the landfill footprint.
3. Shaped piles of MSW and graded 18-inch loose lifts of MSW in the southwest portion of the landfill footprint.
4. Top of each lift was compacted with the vibratory roller compactor.
5. Smoothed surface and debris in the northwest corner of Tract 42 with a bulldozer.



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6. Assisted NOAA personnel (Craig Russel) surveying cross-section elevations for the new burn box pad, centerline of the existing access road, and excavation limits north of Cell B and north of the 50-foot offset (buffer) line.

Problems Encountered or Anticipated:

1. Excavation on the north side of the main access road and 50-foot offset (buffer) line was halted due to traffic; operations were moved to the south side of the main access road (and outside the 50-foot offset) until after 5:30 p.m. when trucks hauling PCS were no longer operating.
2. The Komatsu PC 200 excavator, owned by Kelly-Ryan and operated by BSE to investigate the hillside area for drums, broke its water pump bearings and seals.

Discussions With NOAA Personnel or Island Entity Personnel:

1. No cover is required on the exposed MSW when work is completed at the landfill this fall.
2. BSE personnel working on the PCS stockpile area will pull back the southeast corner of the PCS stockpile to allow Kelly-Ryan to remove the MSW-filled slope supporting the southeast corner of the stockpile. Only the portion of slope existing beyond the 50-foot offset (buffer) line and containing MSW will be removed. Treated soil will be used for backfill in this area to be consistent with the rest of the backfill in the southeast corner of Tract 42.
3. Backfill along exposed MSW on the north and west sides of the 50-foot offset (buffer) will consist of sand from the City property surrounding Tract 42.
4. The top foot of soil will be removed from the excavation in the northwest area of Cell B to remove visible PCS contamination hot spots.

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Roman Fratiss | Kelly-Ryan | Flagger | 8.5 |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10 |
| Alexay Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|----------------------|-------|
| Chevrolet Blazer (rental) | Daily transportation | Day |
| DJB 35 dump truck | Haul MSW | 10 |
| Hitachi EX 350 H-5 | Excavate MSW | 10 |
| Ingersoll-Rand SP56DD compactor | Compact MSW | 10 |



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Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|--|-------|
| Caterpillar D5M bulldozer | Smoothing northwest corner of Tract 42 and grading SW area of landfill footprint | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Friday September 12, 2003

Personnel On Site: Eric DeRuyter, Tetra Tech
Ray Hill, Merwyn Johnson, Terry Johnson, and Robert Owens, Kelly-Ryan
Greg Gervais, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexay's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Pulled back the sideslopes of Cell A to a 3:1 slope using the excavator.
3. Graded and filled low depression areas on the cover of Cell A using a bulldozer.
4. Excavated and hauled large boulders from the sideslopes and surface of Cell A and stockpiled in one location at Cell A. The DJB hauled 6 loads of boulders (approximately 168 cubic yards [CY]) to the stockpile location.
5. Excavated and hauled MSW from Cell A to the southwest portion of the landfill footprint. The DJB truck hauled 3 loads (84 loose CY) for the day. To date, a total of 84 loose CY of MSW have been removed from Cell A and incorporated into the Tract 42 landfill footprint.
6. No MSW was removed from Tract 42 or Cell B today. To date, approximately 11,090 loose CY of MSW have been removed from outside the 50-foot offset (buffer) line (including Cell B) and incorporated into the landfill footprint.



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7. Shaped piles of MSW and graded 18-inch loose lifts of MSW in the southwest portion of the landfill footprint.
8. Top of each lift was compacted with the vibratory roller compactor.

Problems Encountered or Anticipated:

1. Pulling the sideslopes back at a 3:1 slope at Cell A was halted upon finding 2 deteriorated 55-gallon drums containing a tar-like substance. NOAA will address these drums and search for additional drums in the area at a later date.

Discussions With NOAA Personnel or Island Entity Personnel: None

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|-----------------------------|-------|
| Chevrolet Blazer (rental) | Daily transportation | Day |
| DJB 35 dump truck | Haul MSW and large boulders | 10 |
| Hitachi EX 350 H-5 | Excavate MSW | 10 |
| Ingersoll-Rand SP56DD compactor | Compact MSW | 2 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|--|-------|
| Caterpillar D5M bulldozer | Grading Cell A and SW area of landfill footprint | 8 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Saturday September 13, 2003

Personnel On Site: Eric DeRuyter and Brian Croft, Tetra Tech
Ray Hill, Merwyn Johnson, Terry Johnson, Alexay Mercurief, Joshua Rukovishnokoff, and Robert Owens, Kelly-Ryan
Greg Gervais and Laura Murray, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexay's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Excavated and hauled MSW from the area of the landfill access road (Tract 42) outside the 50-foot offset (buffer) line to the southwest portion of the landfill footprint. The DJB truck hauled 19 loads and the Bell 25 B truck hauled 18 loads for a total of 37 loads (856 loose cubic yards [CY]) for the day. To date, a total of 11,946 loose CY of MSW have been removed from outside the 50-foot offset (buffer) line (including Cell B) and incorporated into the Tract 42 landfill footprint.
3. Hauled clean sand to reconstruct the landfill access road and cover exposed MSW along the north side of the landfill. Material was graded to a 3:1 slope. The DJB truck hauled 29 loads and the Bell 25B truck hauled 27 loads for a total of 56 loads (1,298 loose CY). To date, a total of 1,298 loose CY of clean sand have been hauled.
4. Shaped piles of MSW and graded 18-inch loose lifts of MSW in the southwest portion of the landfill footprint.
5. Top of each lift was compacted with the vibratory roller compactor.



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Problems Encountered or Anticipated:

- 1. None

Discussions With NOAA Personnel or Island Entity Personnel:

- 1. None

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Joshua Rukovishnokoff | Kelly-Ryan | Dump truck driver/equipment operator | 9 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|-----------------------|-------|
| Bell B25B dump truck | Haul MSW and sand | 10 |
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |
| Hitachi EX 350 H-5 excavator | Excavate MSW and sand | 10 |
| Ingersoll-Rand SP56DD compactor | Compact MSW and sand | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|--|-------|
| Caterpillar D5M bulldozer | Grading Cell A and SW area of landfill footprint | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Monday September 15, 2003

Personnel On Site: Brian Croft, Tetra Tech
Ray Hill, Merwyn Johnson, Terry Johnson, Alexay Mercurief, Joshua Rukovishnokoff, and Robert Owens, Kelly-Ryan
Greg Gervais and Laura Murray, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexei's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. The Caterpillar 773B hauled 3 loads (114 cubic yards [CY]) of scoria from Telegraph Hill for the surface of the landfill access road. To date, a total of 114 CY of scoria have been hauled. Scoria was shaped and graded prior to being compacted using the vibratory roller compacter.
3. Excavated and relocated MSW from outside the 50-foot offset (buffer) line at the southeast corner of the petroleum-contaminated soil (PCS) stockpile (Tract 42) and from Cell B (near future burn box pad) and incorporated into to the southwest portion of the landfill. The Bell 25B trucks (2) hauled a total of 47 loads (846 loose cubic yards [CY]). To date, approximately 12,792 loose CY of MSW have been removed from outside the 50-foot offset (buffer) line (including Cell B) and incorporated into the landfill footprint.
4. Hauled clean sand to cover exposed MSW along the north and west sides of the landfill and at the southeast corner of the PCS stockpile. Material was graded to a 3:1 slope. The Bell 25B trucks hauled a total 58 loads (1,044 loose CY). To date, approximately 2,342 CY of loose sand have been hauled.



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5. No MSW was removed from Cell A today. To date, a total of 84 loose CY of MSW have been removed from Cell A and incorporated into the Tract 42 landfill footprint.
6. Shaped piles of MSW and graded 18-inch loose lifts of MSW in the southwest portion of the landfill footprint.
7. Top of each lift was compacted with the vibratory roller compactor.

Problems Encountered or Anticipated:

1. The DJB dump truck had a hydraulic leak; the truck was switched for a second Bell B25B dump truck.

Discussions With NOAA Personnel or Island Entity Personnel:

1. None

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10 |
| Alexie Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 9.5 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Josh Rokovishnokoff | Kelly-Ryan | Dump truck driver/equipment operator | 9 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|------------------------------------|-------|
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |
| Caterpillar 992B | Loading scoria at Telegraph Hill | 2 |
| Caterpillar 773B | Hauling scoria from Telegraph Hill | 3 |
| Bell 25B dump truck | Haul MSW and sand | 9 |
| Bell 25B dump truck | Haul MSW and sand | 10 |
| Hitachi EX 350 H-5 | Excavate MSW | 10 |
| Ingersoll-Rand SP56DD compactor | Compact MSW | 9 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|--|-------|
| Caterpillar D5M bulldozer | Grading Cell A and SW area of landfill footprint | 10 |



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Samples Collected: See Table 1

1. Two confirmation samples were collected from the tar pit excavation in Cell B.

Prepared by:

Tetra Tech EM Inc.

Date



**TABLE 1
SAMPLES COLLECTED**

| Sample No. | Sample Type | GRO | DRO | RRO | BTEX | PAH |
|-------------------|--------------------|------------|------------|------------|-------------|------------|
| SP08-CS-014-070 | Grab soil | X | X | X | X | |
| SP08-CS-015-080 | Grab soil | X | X | X | X | |



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Tuesday September 16, 2003

Personnel On Site: Brian Croft, Tetra Tech
Ray Hill, Merwyn Johnson, Terry Johnson, Alexie Mercurief, Joshua Rukovichnokoff, and Robert Owens, Kelly-Ryan
Greg Gervais and Laura Murray, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexei's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Excavated and relocated MSW from outside the 50-foot offset (buffer) line from Cell B (near future burn box pad) and incorporated into to the southwest portion of the landfill. The Bell 25B hauled 22 loads and the DJB hauled 14 loads for a total of 36 loads (788 loose cubic yards [CY]). To date, approximately 13,580 loose CY of MSW have been removed from outside the 50-foot offset (buffer) line (including Cell B) and incorporated into the landfill footprint.
3. Began clearing high spots and leveling the area in Cell B in preparation for new pad construction. Also began clearing an access road to a sand dune located west of Tract 42 to provide fill material for pad construction.
4. Excavated and relocated petroleum-contaminated soil (PCS) from the small access road between the tar pit and open excavation in the north portion of Cell B to the PCS stockpile. The road area was excavated to a depth of approximately 3 feet bgs. The Bell B25B hauled 11 loads (198 loose CY). To date, approximately 1,054 loose CY of PCS have been excavated and relocated to the PCS stockpile.



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5. Hauled clean sand to backfill the tar pit. The Bell 25B hauled 1 load (18 loose CY). To date, approximately 2,360 loose CY of sand have been hauled.
6. No MSW was removed from Cell A today. To date, a total of 84 loose CY of MSW have been removed from Cell A and incorporated into the Tract 42 landfill footprint.
7. Shaped piles of MSW and graded 18-inch loose lifts of MSW in the southwest portion of the landfill footprint.
8. Top of each lift was compacted with the vibratory roller compactor.

Problems Encountered or Anticipated:

1. The Moxy dump truck could no longer meet the demands of site operations and was switched out for the DJB dump truck when repairs had been completed.
2. The Hitachi EX350 excavator was not operating most of the afternoon due to repairs to the “thumb”; the Komatsu PC200 excavator was used as a replacement during this time.

Discussions With NOAA Personnel or Island Entity Personnel:

1. None

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10 |
| Alexie Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 7 |
| Josh Rukovishnokoff | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|-------------------------|-------|
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |
| Bell 25B dump truck | Haul MSW, PCS, and sand | 10 |
| DJB dump truck | Haul MSW and sand | 10 |
| Hitachi EX 350 H-5 | Excavate MSW | 6 |
| Ingersoll-Rand SP56DD compactor | Compact MSW | 8 |
| Komatsu PC200 excavator | Excavate MSW | 4 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|--|-------|
| Caterpillar D5M bulldozer | Grading Cell B and SW area of landfill | 10 |



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Samples Collected: See Table 1

1. Six confirmation samples were collected from the small access road excavation in Cell B.
2. One confirmation sample was collected from an area of stained soil on the dune to the southwest of the tar pit.

Prepared by:

Tetra Tech EM Inc.

Date



**TABLE 1
SAMPLES COLLECTED**

| Sample No. | Sample Type | GRO | DRO | RRO | BTEX | PAH |
|-------------------|--------------------|------------|------------|------------|-------------|------------|
| SP08-CS-016-030 | Grab soil | X | X | X | X | |
| SP08-CS-017-030 | Grab soil | X | X | X | X | |
| SP08-CS-018-030 | Grab soil | X | X | X | X | |
| SP08-CS-019-030 | Grab soil | X | X | X | X | |
| SP08-CS-020-030 | Grab soil | X | X | X | X | |
| SP08-CS-021-030 | Grab soil | X | X | X | X | |
| SP08-CS-022-005 | Grab soil | X | X | X | X | |



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Wednesday September 17, 2003

Personnel On Site: Brian Croft, Tetra Tech
Ray Hill, Merwyn Johnson, Terry Johnson, Alexie Mercurief, and Robert Owens, Kelly-Ryan
Greg Gervais and Laura Murray, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexei's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Hauled clean sand to backfill the tar pit and begin construction of the new burn box pad. The Bell 25B hauled 37 loads and the DJB hauled 38 loads for a total of 75 loads (1,730 loose cubic yards [CY]). To date, approximately 4,090 loose CY of sand have been hauled. Piles were shaped using the bulldozer.

Problems Encountered or Anticipated:

1. The compactor was required for another project by Kelly-Ryan; it was taken off site and will be brought back as soon as possible.

Discussions With NOAA Personnel or Island Entity Personnel:

1. Meeting held on site between NOAA, Tetra Tech, the St. Paul City Manager (John R. Mercurief), and the St. Paul City Engineering consultant (Mike Dahl, PolarConsult). Discussed final pad elevations, access road configuration, Cell A activities, borrow sources, and possible pad area expansion by the city.



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------|-------------------------|-------|
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |
| Bell 25B dump truck | Haul MSW, PCS, and sand | 8.5 |
| DJB dump truck | Haul MSW and sand | 8.5 |
| Hitachi EX 350 H-5 | Excavate MSW | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|--|-------|
| Caterpillar D5M bulldozer | Grading Cell B and SW area of landfill | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Thursday September 18, 2003

Personnel On Site: Brian Croft, Tetra Tech
Ray Hill, Merwyn Johnson, Terry Johnson, Alexie Merculief, Bob Halter, and Simeon Swetzof, Kelly-Ryan
Greg Gervais and Laura Murray, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexei's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Hauled clean sand to continue construction of the new burn box pad. The Bell 25B trucks (2) hauled a total of 116 loads (2,088 loose cubic yards [CY]). To date, approximately 6,178 loose CY of sand have been hauled. Piles were shaped using the bulldozer.

Problems Encountered or Anticipated:

1. None

Discussions With NOAA Personnel or Island Entity Personnel:

1. Meeting held onsite between NOAA, Tetra Tech, St. Paul City Manager (John R. Merculief), and the St. Paul City Engineering consultant (Mike Dahl, PolarConsult). The city is planning to proceed with expansion of the pad area. Mr. Merculief requested that Tetra Tech procure scoria for the final surface of their pad expansion area. He will speak with Kelly-Ryan representatives regarding the labor and equipment necessary.



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Terry Johnson | Kelly-Ryan | Foreman/equipment operator | 10 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Bob Halter | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 3 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------|----------------------|-------|
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |
| Bell 25B dump truck (1) | Haul sand | 10 |
| Bell 25B dump truck (2) | Haul sand | 8 |
| Hitachi EX 350 H-5 | Excavate sand | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|------------------------------------|-------|
| Caterpillar D5M bulldozer | Shaping and leveling piles of sand | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Friday September 19, 2003

Personnel On Site: Brian Croft, Tetra Tech
Ray Hill, Merwyn Johnson, Alexie Merculief, Bob Halter, and Simeon Swetzof, Kelly-Ryan
Greg Gervais, Nir Barnea, and Laura Murray, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexei's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Hauled clean sand to continue construction of the new burn box pad. The Bell 25B trucks (2) hauled a total of 70 loads and the DJB hauled 23 loads for a total of 93 loads (1,904 loose cubic yards [CY]). To date, approximately 8,082 loose CY of sand have been hauled. Piles were shaped using the bulldozer.

Problems Encountered or Anticipated:

1. None

Discussions With NOAA Personnel or Island Entity Personnel:

1. NOAA and Tetra Tech representatives identified sand dunes to be mined for future fill material based on volume estimates prepared by NOAA.



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Bob Halter | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------|----------------------|-------|
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |
| Bell 25B dump truck (1) | Haul sand | 5 |
| Bell 25B dump truck (2) | Haul sand | 10 |
| DJB dump truck | Haul sand | 5 |
| Hitachi EX 350 H-5 | Excavate sand | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|------------------------------------|-------|
| Caterpillar D5M bulldozer | Shaping and leveling piles of sand | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Saturday September 20, 2003

Personnel On Site: Brian Croft, Tetra Tech
Ray Hill, Merwyn Johnson, Alexie Mercurief, Bob Halter, and Simeon Swetzof, Kelly-Ryan
Greg Gervais, Nir Barnea, and Laura Murray, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. For emergencies, channel 16 on Alexei's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Hauled clean sand to continue construction of the new burn box pad. Two Bell 25B trucks hauled a total of 122 loads (2,196 loose cubic yards [CY]). To date, approximately 10,278 loose CY of sand have been hauled. Piles were shaped using the bulldozer.

Problems Encountered or Anticipated:

1. None

Discussions With NOAA Personnel or Island Entity Personnel:

1. None



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Bob Halter | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------|----------------------|-------|
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |
| Bell 25B dump truck (1) | Haul sand | 10 |
| Bell 25B dump truck (2) | Haul sand | 10 |
| Hitachi EX 350 H-5 | Excavate sand | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|------------------------------------|-------|
| Caterpillar D5M bulldozer | Shaping and leveling piles of sand | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Monday September 22, 2003

Personnel On Site: Brian Croft, Tetra Tech
Ray Hill, Merwyn Johnson, Alexie Merculief, Bob Halter, Simeon Swetsof,
and Dimitri Zacharof, Kelly-Ryan
John Lindsay, Nir Barnea, and Laura Murray, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. For emergencies, channel 16 on Alexei's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Hauled clean sand to: continue construction of the new burn box pad; backfill the open excavation near the tar pit in the northwest portion of Cell B; and initiate construction of the road to the burn box pad. Two Bell 25B trucks hauled a total of 102 loads (1,836 loose cubic yards [CY]). To date, approximately 12,114 loose CY of sand have been hauled. Piles were shaped using the bulldozer.

Problems Encountered or Anticipated:

1. None

Discussions With NOAA Personnel or Island Entity Personnel:

1. Tetra Tech spoke with Julie Shane (Tanadgusix Corporation/Bering Sea Eccotech, Inc.) regarding future scoria needs. Ms. Shane initiated the necessary paperwork to procure the estimated 3,000 CY necessary for the burn box pad (including the proposed city extension), access roads, and Cell A activities.



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2. Tetra Tech toured the landfill area with NOAA representatives John Lindsay and Nir Barnea. Discussed additional activities to be conducted at various areas including further removal of material along Cell A boundaries.

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Alexie Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Bob Halter | Kelly-Ryan | Dump truck driver/equipment operator | 8 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 10 |
| Dimitri Zacharof | Kelly-Ryan | Dump truck driver/equipment operator | 2 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------|----------------------|-------|
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |
| Bell 25B dump truck (1) | Haul sand | 10 |
| Bell 25B dump truck (2) | Haul sand | 10 |
| Hitachi EX 350 H-5 | Excavate sand | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|------------------------------------|-------|
| Caterpillar D5M bulldozer | Shaping and leveling piles of sand | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Tuesday September 23, 2003

Personnel On Site: Brian Croft, Tetra Tech
Ray Hill, Merwyn Johnson, Alexie Mercurief, Robert Owens, Simeon Swetzof, and Joshua Rukovishnokof, Kelly-Ryan
John Lindsay, Nir Barnea, and Laura Murray, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. For emergencies, channel 16 on Alexei's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Hauled clean sand to continue construction of the road to the burn box pad. Two Bell 25B trucks hauled a total of 82 loads (1,476 loose cubic yards [CY]). To date, approximately 13,590 loose CY of sand have been hauled. Piles were shaped using the bulldozer.

Problems Encountered or Anticipated:

1. None

Discussions With NOAA Personnel or Island Entity Personnel:

1. Based on signed paperwork, Julie Shane (BSE) granted permission for Kelly-Ryan representatives to mine scoria from their Lake Hill pit for use at the landfill.
2. NOAA and Tetra Tech spoke with Phyllis Swetzof, City Clerk, regarding vehicle traffic at the landfill. Ms. Swetzof agreed to switch the city's residential garbage pickup from Friday to Thursday in order to accommodate road construction activities at the landfill intended to minimize the effects of closing the access road.



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3. Based on thin-layer chromatography (TLC) screening sample results, NOAA has directed Tetra Tech to re-excavate backfilled areas in the northwest portion of Cell B to remove additional subsurface contamination.
4. NOAA directed Tetra Tech to re-slope materials along the boundaries of Cell A to avoid encroaching on the adjacent wetland.

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Josh Rukovishnokof | Kelly-Ryan | Dump truck driver/equipment operator | 9 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|----------------------|-------|
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |
| Bell 25B dump truck (1) | Haul sand | 10 |
| Bell 25B dump truck (2) | Haul sand | 10 |
| Hitachi EX 350 H-5 | Excavate sand | 10 |
| Ingersoll Rand SP56DD compactor | Compact sand | 8 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|------------------------------------|-------|
| Caterpillar D5M bulldozer | Shaping and leveling piles of sand | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Wednesday September 24, 2003

Personnel On Site: Brian Croft, Tetra Tech
Ray Hill, Merwyn Johnson, Alexie Mercurief, Guy Miller, Robert Owens,
Simeon Swetzof, and Josh Rukovishnokof, Kelly-Ryan
John Lindsay, Nir Barnea, and Laura Murray, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. For emergencies, channel 16 on Alexei's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Hauled clean sand to continue construction of the road to the burn box pad. Two Bell 25B trucks hauled a total of 32 loads (576 loose cubic yards [CY]). To date, approximately 14,166 loose CY of sand have been hauled. Piles were shaped using the bulldozer.
3. Hauled and stockpiled scoria for landfill access road. Two Caterpillar 773 trucks (2) hauled a total of 10 loads (380 loose CY). To date, approximately 380 loose CY of scoria have been hauled from the Lake Hill scoria pit. The material was stockpiled onsite for future use.
4. Began excavating material from the sideslopes of Cell A to bring the grade to a 3:1 slope. Material was incorporated into Cell A.

Problems Encountered or Anticipated:

1. None



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Discussions With NOAA Personnel or Island Entity Personnel:

1. Based on discussions with NOAA, petroleum-contaminated soil (PCS) located near the northwest corner of Cell B (tar pit area) and identified by thin-layer chromatography (TLC) screening results will be excavated and placed on the PCS stockpile.

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|---|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Alexie Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 8 |
| Guy Miller | Kelly-Ryan | Equipment operator (Lake Hill scoria pit) | 6.5 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 8 |
| Josh Rukovishnokof | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|------------------------------------|-------|
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |
| Bell 25B dump truck (1) | Haul sand | 4.5 |
| Bell 25B dump truck (2) | Haul sand | 10 |
| Caterpillar 773 dump truck (1) | Haul scoria (Lake Hill scoria pit) | 4 |
| Caterpillar 773 dump truck (2) | Haul scoria (Lake Hill scoria pit) | 4 |
| Caterpillar 988B loader | Load scoria (Lake Hill scoria pit) | 6.5 |
| Hitachi EX 350 excavator | Excavate sand | 10 |
| Ingersoll Rand SP56DD compactor | Compact sand | 3.5 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|------------------------------------|-------|
| Caterpillar D5M bulldozer | Shaping and leveling piles of sand | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Thursday September 25, 2003

Personnel On Site: Brian Croft, Tetra Tech
Ray Hill, Merwyn Johnson, Alexie Merculief, Simeon Swetzof, and Josh Rukovishnokof, Kelly-Ryan
Nir Barnea and Laura Murray, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. For emergencies, channel 16 on Alexei's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Completed excavating material from the sideslopes of Cell A to bring the grade to a 3:1 slope. Material was incorporated into Cell A. Two drums containing a tar-like material were discovered and placed aside for future overpacking.
3. Excavated petroleum-contaminated soil (PCS) from the three locations identified by thin-layer chromatography (TLC) near the northwest portion of Cell B (tar pit area). The Bell 25B truck hauled a total of 3 loads (54 loose CY). To date, approximately 1,108 loose CY of PCS have been excavated and relocated to the PCS stockpile.

Problems Encountered or Anticipated:

1. None



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Discussions With NOAA Personnel or Island Entity Personnel:

1. John R. Mercurief (City Manager) and Joe Reller (City Department of Public Works) visited the site to inspect areas being mined for sand and fill material. Mr. Mercurief complained that the city was not being updated regarding the situation. Tetra Tech referred him to NOAA representatives.

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 6 |
| Josh Rukovishnokof | Kelly-Ryan | Dump truck driver/equipment operator | 3.5 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------|-----------------------|-------|
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |
| Bell 25B dump truck (1) | Haul PCS and fill | 9.5 |
| Hitachi EX 350 excavator | Excavate PCS and fill | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|------------------------------------|-------|
| Caterpillar D5M bulldozer | Shaping and leveling piles of fill | 10 |

Samples Collected: see Table 1

1. Three confirmation samples were collected from the excavations at removal locations.

Prepared by:

Tetra Tech EM Inc.

Date



**TABLE 1
SAMPLES COLLECTED**

| Sample No. | Sample Type | GRO | DRO | RRO | BTEX | PAH |
|-------------------|--------------------|------------|------------|------------|-------------|------------|
| SP08-CS-016-065 | Grab soil | X | X | X | X | |
| SP08-CS-019-070 | Grab soil | X | X | X | X | |
| SP08-CS-022-030 | Grab soil | X | X | X | X | |



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Friday September 26, 2003

Personnel On Site: Brian Croft, Tetra Tech
Ray Hill, Merwyn Johnson, Alexie Mercurief, Robert Owens, Simeon Swetzof, and Josh Rukovishnokof, Kelly-Ryan
Nir Barnea and Laura Murray, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. For emergencies, channel 16 on Alexei's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Hauled clean sand for construction of the pad access road and to backfill the hot spot excavations. Two Bell 25B trucks hauled a total of 104 loads (1,872 loose cubic yards [CY]). To date, approximately 16,038 loose CY of sand have been hauled.
3. Tetra Tech and drilling contractor arrived onsite this date to decommission various wells located at the landfill.

Problems Encountered or Anticipated:

1. None

Discussions With NOAA Personnel or Island Entity Personnel:

1. Meeting held on site with NOAA, Tetra Tech, John R. Mercurief (City Manager), and Joe Reller (City Department of Public Works) to discuss quantities of sand needed for current and future activities at the landfill.



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 9 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Josh Rukovishnokof | Kelly-Ryan | Dump truck driver/equipment operator | 8 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|----------------------|-------|
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |
| Bell 25B dump truck (1) | Haul sand | 10 |
| Bell 25B dump truck (2) | Haul sand | 10 |
| Hitachi EX 350 excavator | Excavate sand | 10 |
| Ingersoll Rand SP56DD compactor | Compact sand | 5 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|------------------------------------|-------|
| Caterpillar D5M bulldozer | Shaping and leveling piles of fill | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Saturday September 27, 2003

Personnel On Site: Brian Croft, Tetra Tech
Ray Hill, Merwyn Johnson, Alexie Mercurief, Robert Owens, Simeon Swetzof, and Josh Rukovishnokof, Kelly-Ryan
Nir Barnea and Laura Murray, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. For emergencies, channel 16 on Alexei's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Two Bell 25B trucks hauled previously stockpiled scoria for placement and compaction along the landfill access road.

Problems Encountered or Anticipated:

1. None

Discussions With NOAA Personnel or Island Entity Personnel:

1. None



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Josh Rukovishnokof | Kelly-Ryan | Dump truck driver/equipment operator | 5 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|----------------------|-------|
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |
| Bell 25B dump truck (1) | Haul sand | 10 |
| Bell 25B dump truck (2) | Haul sand | 6 |
| Hitachi EX 350 excavator | Excavate sand | 10 |
| Ingersoll Rand SP56DD compactor | Compact sand | 9 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|------------------------------------|-------|
| Caterpillar D5M bulldozer | Shaping and leveling piles of fill | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Monday September 29, 2003

Personnel On Site: Brian Croft, Tetra Tech
Ray Hill, Merwyn Johnson, Alexie Mercurief, Robert Owens, Simeon Swetzof, and Josh Rukovishnokof, Kelly-Ryan
Nir Barnea, John Lindsay, and Laura Murray, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. For emergencies, channel 16 on Alexei's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Hauled scoria from the Lake Hill scoria pit. Two Bell 25B trucks hauled a total of 42 loads (756 loose CY). To date, approximately 1,136 loose CY of scoria have been hauled from the Lake Hill scoria pit.

Problems Encountered or Anticipated:

1. None

Discussions With NOAA Personnel or Island Entity Personnel:

1. None



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Josh Rukovishnokof | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------------|----------------------|-------|
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |
| Bell 25B dump truck (1) | Haul scoria | 10 |
| Bell 25B dump truck (2) | Haul scoria | 10 |
| Caterpillar 988B loader | Load scoria | 10 |
| Ingersoll Rand SP56DD compactor | Compact scoria | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|--------------------------------------|-------|
| Caterpillar D5M bulldozer | Shaping and leveling piles of scoria | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Tuesday September 30, 2003

Personnel On Site: Brian Croft and Mike Sturdevant, Tetra Tech
Ray Hill, Merwyn Johnson, Robert Owens, Simeon Swetzof, Josh Rukovishnokof,, and Steve Hopkins, Kelly-Ryan
Nir Barnea, John Lindsay, and Laura Murray, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. For emergencies, channel 16 on Alexei's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. Hauled sand for construction of the city's pad extension area. Two Bell 25B trucks hauled a total of 105 loads (1,890 loose CY). To date, approximately 1,890 loose CY of sand have been hauled for city activities.

Note: Kelly-Ryan labor and equipment charges for this activity will be paid directly by the City of St. Paul.

Problems Encountered or Anticipated:

1. The government-owned Caterpillar D-5 bulldozer required an oil change. Kelly Ryan's mechanic, Steve Hopkins, performed the necessary maintenance during the lunch hour.

Discussions With NOAA Personnel or Island Entity Personnel:

1. None



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------------------|-------------|--------------------------------------|-------|
| St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Steve Hopkins | Kelly-Ryan | Mechanic | 1 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Josh Rukovishnokof | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------|----------------------|-------|
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |
| Bell 25B dump truck (1) | Haul sand | 10 |
| Bell 25B dump truck (2) | Haul sand | 10 |
| Hitachi EX-350 excavator | Load sand | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---------------------------|------------------------------------|-------|
| Caterpillar D5M bulldozer | Shaping and leveling piles of sand | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Wednesday October 1, 2003

Personnel On Site: Brian Croft and Mike Sturdevant, Tetra Tech
Ray Hill, Merwyn Johnson, Robert Owens, Simeon Swetzof, Alexie Mercurief, and Steve Hopkins Kelly-Ryan
Nir Barnea and John Lindsay, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexei's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. No sand was hauled for NOAA activities this date. To date, approximately 16,038 loose cubic yards (CY) of sand have been hauled for NOAA activities.
3. Hauled sand for construction of the city's pad extension area. Two Bell 25B trucks (2) hauled a total of 85 loads (1,530 loose CY). To date, approximately 3,420 loose CY of sand have been hauled for city activities.

Note: Kelly-Ryan labor and equipment charges for this activity will be paid directly by the City of St. Paul.

Problems Encountered or Anticipated:

1. Kelly Ryan's mechanic, Steve Hopkins, performed maintenance to fix backup lights and backup alarms on both Bell Trucks. While maintenance was performed the Bell Truck was replaced with the DJB truck.



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Discussions with NOAA Personnel or Island Entity Personnel:

- 1. None

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---|-------------|--------------------------------------|-------|
| City of St. Paul – Pad Extension | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Steve Hopkins | Kelly-Ryan | Mechanic | 4.5 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Alexie Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---|----------------------|-------|
| City of St. Paul – Pad Extension | | |
| Hitachi EX350 excavator | Load sand | 10 |
| Bell 25B dump truck (1) | Haul sand | 10 |
| Bell 25B dump truck (2) | Haul sand | 10 |
| Chevy 1-ton crew cab | Daily transportation | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---|------------------------------------|-------|
| City of St. Paul – Pad Extension | | |
| Caterpillar D5M bulldozer | Shaping and leveling piles of sand | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Thursday October 2, 2003

Personnel On Site: Mike Sturdevant, Tetra Tech
Ray Hill, Merwyn Johnson, Alexie Mercurief, Robert Owens, and Simeon Swetzof, Kelly-Ryan
Nir Barnea, NOAA
Steve Melovidov and John Mercurief, City of St. Paul
Joel Groves, Polarconsult

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexei's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. No sand was hauled for NOAA activities this date. To date, approximately 16,038 loose cubic yards (CY) of sand have been hauled for NOAA activities.
3. Continued to haul sand for construction of the city's pad extension area. Two Bell 25B trucks hauled a total of 83 loads (1,494 loose CY). To date, approximately 4,914 loose CY of sand have been hauled for city activities.

Note: Kelly-Ryan labor and equipment charges for this activity will be paid directly by the City of St. Paul.

Problems Encountered or Anticipated:

1. None.



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Discussions with NOAA Personnel or Island Entity Personnel:

- 1. None

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---|-------------|--------------------------------------|-------|
| City of St. Paul – Pad Extension | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Steve Hopkins | Kelly-Ryan | Mechanic | 0 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Alexie Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---|----------------------|-------|
| City of St. Paul – Pad Extension | | |
| Hitachi EX350 excavator | Load sand | 10 |
| Bell 25B dump truck (1) | Haul sand | 10 |
| Bell 25B dump truck (2) | Haul sand | 10 |
| Chevy 1-ton crew cab | Daily transportation | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---|------------------------------------|-------|
| City of St. Paul – Pad Extension | | |
| Caterpillar D5M bulldozer | Shaping and leveling piles of sand | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Friday October 3, 2003

Personnel On Site: Mike Sturdevant, Tetra Tech
Ray Hill, Merwyn Johnson, Alexie Mercurief, Josh Rukovishnokof, and
Simeon Swetzof, Kelly-Ryan
Nir Barnea, Laura Murray, and Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. For emergencies, channel 16 on Alexei's CB can be used for ambulance service. The medical clinic is located in town next to the King Eider Hotel.
2. No sand was hauled for NOAA activities this date. To date, approximately 16,038 loose cubic yards (CY) of sand have been hauled for NOAA activities.
3. Completed hauling sand for construction of the city's pad extension area. Two Bell 25B trucks hauled a total of 39 loads (702 loose CY). To date, a total of approximately 5,616 loose CY of sand were hauled for city activities.

Note: Kelly-Ryan labor and equipment charges for this activity will be paid directly by the City of St. Paul.

4. Began cutting back side slopes on Cell A. In order to accommodate a 2-foot cover, the side slopes need to be brought back a minimum of 6.5 feet from the original toe. Also, the side slopes must be cut to a maximum of 3:1. MSW removed from the side slopes are to be placed on the southwest corner of Cell A. Two Bell 25B trucks hauled a total of 60 loads (1,080 loose CY).



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Problems Encountered or Anticipated:

- 1. None

Discussions with NOAA Personnel or Island Entity Personnel:

- 1. None

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---|-------------|--------------------------------------|-------|
| NOAA – St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 6 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 6 |
| Josh Rukouvshnikoff | Kelly-Ryan | Dump truck driver/equipment operator | 5.5 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 6 |
| City of St. Paul – Pad Extension | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 4 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 4 |
| Josh Rukouvshnikoff | Kelly-Ryan | Dump truck driver/equipment operator | 4 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 4 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---|----------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Hitachi EX 350 excavator | Load sand | 6 |
| Bell 25B dump truck (1) | Haul MSW | 5.5 |
| Bell 25B dump truck (2) | Haul sand | 6 |
| Blue Chevy 1-ton crew cab | Daily transportation | 6 |
| City of St. Paul – Pad Extension | | |
| Hitachi EX 350 excavator | Load sand | 4 |
| Bell 25B dump truck (1) | Haul sand | 4 |
| Bell 25B dump truck (2) | Haul sand | 4 |
| Blue Chevy 1-ton crew cab | Daily transportation | 4 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---|------------------------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Caterpillar D5M bulldozer | Shaping and leveling piles of sand | 4 |
| City of St. Paul – Pad Extension | | |
| Caterpillar D5M bulldozer | Shaping and leveling MSW | 6 |



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Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Saturday October 4, 2003

Personnel On Site: Mike Sturdevant and Jim Jordan, Tetra Tech
Ray Hill, Merwyn Johnson, Alexie Mercurief, Robert Owens, and Simeon Swetzof, Kelly-Ryan
Nir Barnea and Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. The medical clinic is located in town next to the King Eider Hotel.
2. No sand was hauled for NOAA activities this date. To date, approximately 16,038 loose cubic yards (CY) of sand have been hauled for NOAA activities.
3. Continued cutting back side slopes on Cell A. MSW removed from the side slopes are placed on the southwest corner of Cell A. Two Bell 25B trucks hauled a total of 49 loads (882 loose CY). To date, a total of 1,962 loose CY of MSW have been cut from the side slopes.

Problems Encountered or Anticipated:

1. During excavation of the northeast side slope at Cell A, numerous drums were encountered. Several were discovered to be empty or contained solid sludge material (these drums were placed on liners). During excavation, one drum containing liquid waste was encountered and excavation was stopped in that area. BSE will perform drum removal work under a separate contract. After moving approximately 20 feet further to the north, soil mixed with solid sludge material was encountered. This mixture of MSW/solid sludge material was hauled to Tract 42 and placed on the liner containing PCS generated as part of corrective action activities on the island. The excavator bucket and truck bed were decontaminated prior to continuing excavation activities.



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The discovery of drums during excavation significantly slowed the progress of excavating the side slopes.

Discussions with NOAA Personnel or Island Entity Personnel:

- 1. None

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|--|-------------|--------------------------------------|-------|
| NOAA – St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|--|----------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Hitachi EX 350 excavator | Load MSW | 10 |
| Bell 25B dump truck (1) | Haul MSW | 10 |
| Bell 25B dump truck (2) | Haul MSW | 10 |
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|--|------------------------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Caterpillar D5M bulldozer | Shaping and leveling piles of sand | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Monday October 6, 2003

Personnel On Site: Mike Sturdevant, Tetra Tech
Ray Hill, Merwyn Johnson, Robert Owens, Simeon Swetzof, Alexie Mercurief, Kelly-Ryan
Travis Mercurief and Walter Shane, BSE
Nir Barnea and Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. The medical clinic is located in town next to the King Eider Hotel.
2. Two Bell 25B trucks hauled 58 loads (1,044 loose CY) of sand for cap placement on Cell A. To date, approximately 17,082 loose cubic yards (CY) of sand have been hauled for NOAA activities.
3. Continued cutting back side slopes on Cell A. MSW removed from the side slopes was placed on the southwest corner of Cell A. The Bell 25B trucks (2) hauled a total of 19 loads (342 loose CY) of MSW.
4. Bering Sea Eccotech, Inc. (BSE) removed four oily drums from the side slope, placing them in overpack drums. BSE also removed drums of sludge and soil staged on a ground tarp, and hauled the material to the small PCS stockpile.



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Problems Encountered or Anticipated:

1. During excavation of the northeast side slope at Cell A, more drums were encountered after BSE completed cleanup of previously identified drums. Drums containing solid sludge were placed on the ground tarp.

Discussions with NOAA Personnel or Island Entity Personnel:

1. None

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|--|-------------|--------------------------------------|-------|
| NOAA – St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|--|----------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Hitachi EX 350 excavator | Load MSW | 10 |
| Bell 25B dump truck (1) | Haul MSW | 10 |
| Bell 25B dump truck (2) | Haul MSW | 10 |
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|--|------------------------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Caterpillar D5M bulldozer | Shaping and leveling piles of sand | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Tuesday October 7, 2003

Personnel On Site: Mike Sturdevant, Tetra Tech
Ray Hill, Merwyn Johnson, Robert Owens, Simeon Swetsof, Alexie Mercurief, Kelly-Ryan
Nir Barnea and Jim Wright, NOAA
Steve Melovidov and John Mercurief, City of St. Paul
Joel Groves, PolarConsult

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. The medical clinic is located in town next to the King Eider Hotel.
2. Two Bell 25B trucks hauled 50 loads (900 loose CY) of sand for cap placement on Cell A. To date, approximately 17,982 loose cubic yards (CY) of sand have been hauled for NOAA activities.
3. Continued cutting back side slopes in the northeast corner of Cell A. MSW removed from the side slopes were hauled and placed on the southwest corner of Tract 42. Two Bell 25B trucks hauled a total of 28 loads (504 loose CY) of MSW.

Problems Encountered or Anticipated:

1. During excavation of the northeast side slope at Cell A, more drums were encountered after BSE completed cleanup of previously identified drums. Drums containing solid sludge were placed on the ground tarp and drums containing liquid are left in place. BSE will be tasked with completing the excavation in the northeast corner of Cell A and removing any drums encountered.



Discussions with NOAA Personnel or Island Entity Personnel:

1. NOAA and City of St. Paul personnel met to discuss the need for additional sand. The City stated that the new landfill cell was too low and that more sand was needed to fill the bottom. Therefore, the city is unsure if any more sand is available. Later in the day, City consultant Polarconsult Alaska Inc. returned to the site to show where additional sand could be excavated.

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|--|-------------|--------------------------------------|-------|
| NOAA – St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|--|----------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Hitachi EX 350 excavator | Load MSW | 10 |
| Bell 25B dump truck (1) | Haul MSW | 10 |
| Bell 25B dump truck (2) | Haul MSW | 10 |
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|--|------------------------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Caterpillar D5M bulldozer | Shaping and leveling piles of sand | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Wednesday October 8, 2003

Personnel On Site: Mike Sturdevant, Tetra Tech
Ray Hill, Merwyn Johnson, Robert Owens, Simeon Swetzof, Alexie Mercurief, Kelly-Ryan
Nir Barnea and Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. A hard hat, steel-toed boots, orange vests, and safety glasses are required on-site. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Keep out of the swing radius of the excavator arm and always keep eye contact with operators. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. If working downwind of the burn box, take breaks as needed to get out of the burn box smoke and breathe fresh air. Also, discussed protocol for cleanup actions involving released petroleum product. Tyvek® suits, gloves, oil sorbent, overpack drums, an eyewash station, and decontamination equipment are stored in the field trailer. No eating, drinking, or smoking. Tyvek® and gloves must be worn by personnel during cleanup and decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities. The medical clinic is located in town next to the King Eider Hotel.
2. No sand was hauled for NOAA activities. To date, approximately 17,982 loose cubic yards (CY) of sand have been hauled for NOAA activities.
3. Continued cutting back side slopes in the northeast corner of Cell A. MSW removed from the side slopes were hauled and placed on the southwest corner of Tract 42. Two Bell 25B trucks hauled a total of 8 loads (144 loose CY) of MSW.
4. Hauled and placed scoria on NOAA and City pad. Two Bell 25B trucks hauled a total of 29 loads (522 loose CY) of scoria.
5. BSE was tasked with disposal of drums and sludge staged on tarps from the previous day of excavation. They also were directed to complete the final excavation of the side slope in the northeast corner of Cell A. Numerous drums were removed during the excavation and hauled to the small PCS pile on Tract 42.



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Problems Encountered or Anticipated:

1. During excavation of the northeast side slope at Cell A, a drum containing an unidentified liquid was encountered. BSE removed the drum from Kelly-Ryan's excavator bucket and placed it in an overpack. BSE then cleaned and decontaminated the bucket. Kelly-Ryan was then directed to begin hauling scoria so that standby time caused by encountering drums could be minimized.

Discussions with NOAA Personnel or Island Entity Personnel:

1. None

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|--|-------------|--------------------------------------|-------|
| NOAA – St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 5 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 5 |
| Alexie Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 5 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 5 |
| NOAA (50%) and City of St. Paul (50%) – Pad extension | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 5 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 5 |
| Alexie Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 5 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 5 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|--|----------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Hitachi EX 350 excavator | Load MSW | 5 |
| Bell 25B dump truck (1) | Haul MSW | 5 |
| Bell 25B dump truck (2) | Haul MSW | 5 |
| Blue Chevy 1-ton crew cab | Daily transportation | 5 |
| NOAA (50%) and City of St. Paul (50%) – Pad extension | | |
| Caterpillar 988B wheel loader | Load scoria | 5 |
| Bell 25B dump truck (1) | Haul scoria | 5 |
| Bell 25B dump truck (2) | Haul scoria | 5 |
| Blue Chevy 1-ton crew cab | Daily transportation | 5 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|--|-------------------------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Caterpillar D5M bulldozer | Shaping and leveling MSW and Scoria | 5 |
| NOAA (50%) and City of St. Paul (50%) – Pad extension | | |
| Caterpillar D5M bulldozer | Shaping and leveling MSW and Scoria | 5 |



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Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Thursday October 9, 2003

Personnel On Site: Mike Sturdevant and Kevin Heym, Tetra Tech
Ray Hill, Merwyn Johnson, Robert Owens, Simeon Swetzof, Alexie Mercurief, Kelly-Ryan
Nir Barnea and Jim Wright, NOAA
Dave Bates, North Wind
Joel Groves, Polarconsult

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground under tall vegetation. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. Also, discussed protocol for decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities.
2. No sand was hauled for NOAA activities. To date, approximately 17,982 loose cubic yards (CY) of sand have been hauled for NOAA activities.
3. Two Bell 25B trucks hauled a total of 19 loads (228 loose CY) of PCS from the Blubber Dump to the Tract 42 PCS stockpile.
4. Hauled and placed scoria on NOAA and City pad. Two Bell 25B trucks hauled a total of 32 loads (576 loose CY) of scoria and placed it at the NOAA and City of St. Paul pad. A total of 1,098 loose CY of scoria of scoria have been placed on the pad.
5. BSE crew finished excavation of the northeast corner of Cell A, where numerous drums have been encountered. BSE hauled PCS to the small PCS liner pad near the burn box on Tract 42.

Problems Encountered or Anticipated:

1. During startup of the NOAA excavator, a hydraulic line broke. The BSE crew was on standby for 3 hours as a result. Tetra Tech secured the rental of a Kelly-Ryan Komatsu excavator so that BSE could finish its task.



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Discussions with NOAA Personnel or Island Entity Personnel:

- 1. None

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|--|-------------|--------------------------------------|-------|
| NOAA – St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 4 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 1 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 5 |
| NOAA – Blubber Dump PCS Removal | | | |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 5 |
| Alexie Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 5 |
| NOAA (50%) and City of St. Paul (50%) – Pad Extension | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 6 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 1 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 5 |
| Alexie Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 5 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 5 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---|---------------------------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Hitachi EX 350 excavator | Excavate side slope/flatten MSW piles | 5 |
| Komatsu PC 200 excavator | BSE used for excavation at Cell A | 3.5 |
| Chevy 1-ton crew cab | Daily transportation | 5 |
| NOAA – Blubber Dump PCS Removal | | |
| Hitachi EX 350 excavator | Load Blubber Dump PCS | 5 |
| Bell 25B dump truck (1) | Haul Blubber Dump PCS | 5 |
| Bell 25B dump truck (2) | Haul Blubber Dump PCS | 5 |
| NOAA (50%) and City of St. Paul (50%) – St. Paul Island Landfill | | |
| Caterpillar 988B wheel loader | Load scoria | 5 |
| Bell 25B dump truck (1) | Haul scoria | 5 |
| Bell 25B dump truck (2) | Haul scoria | 5 |
| Chevy 1-ton crew cab | Daily transportation | 5 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|---|-------------------------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Caterpillar D5M bulldozer | Shaping and leveling MSW and scoria | 5 |
| NOAA (50%) and City of St. Paul (50%) – St. Paul Island Landfill | | |
| Caterpillar D5M bulldozer | Shaping and leveling MSW and scoria | 5 |



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Samples Collected: Collected two confirmation samples (SP05-CS-01-000 and SP05-CS-02-000) from the side slope on the northeast corner of Cell A, in areas where several drums were removed. The samples will be analyzed for GRO/BTEX, DRO/RRO, and select PAHs.

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Friday October 10, 2003

Personnel On Site: Mike Sturdevant, and Kevin Heym, Tetra Tech
Ray Hill, Merwyn Johnson, Robert Owens, Simeon Swetzof, Alexie Mercurief, Kelly-Ryan
Jim Wright, NOAA
Joel Groves, Polarconsult

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. Also, discussed protocol for decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities.
2. Two Bell 25B trucks hauled a total of 66 loads (1,188 loose CY) of sand to Cell A. When one Bell truck broke down, the DJB truck hauled 3 loads (84 loose CY) of sand to Cell A. To date, approximately 19,254 loose cubic yards (CY) of sand have been hauled for NOAA activities. The Caterpillar D-5 bulldozer spread the sand over the side slopes on the east side of Cell A.
3. The Hitachi EX 350 excavator picked up the soil and tarps where PCS drums and material were stored. The Bell 25B (No. 2) truck hauled 1 load of PCS from the northeast corner of Cell A to the small PCS pile next to the burn box on Tract 42. The bucket of the EX 350 and bed of the Bell 25B truck were then decontaminated at the PCS pile.

Problems Encountered or Anticipated:

1. None

Discussions with NOAA Personnel or Island Entity Personnel:

1. Received approval from Jim Wright, NOAA, to use the Bell25B trucks to haul PCS from the Blubber Dump for the next morning activities while the dozer and excavator build a road into another sand borrow area.



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|--|-------------|--------------------------------------|-------|
| NOAA – St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Steve Hopkins | Kelly-Ryan | Mechanic | 1.5 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Alexie Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 9 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 10 |
| NOAA (50%) and City of St. Paul (50%) – Pad Extension | | | |
| Alexie Merculief | Kelly-Ryan | Dump truck driver/compactor operator | 1 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|--|------------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Compactor | Compact sand | 1 |
| Hitachi EX 350 excavator | Excavate and load sand | 10 |
| Bell 25B dump truck (1) | Haul sand and PCS | 8.5 |
| Bell 25B dump truck (2) | Haul sand | 10 |
| DJB 35 dump truck | Haul sand | 1.5 |
| Blue Chevy 1-ton crew cab | Daily transportation | 10 |
| NOAA (50%) and City of St. Paul (50%) – Pad Extension | | |
| Compactor | Compact Scoria | 1 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|--|---------------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Caterpillar D5M bulldozer | Shaping and leveling sand | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Saturday October 11, 2003

Personnel On Site: Mike Sturdevant, Tetra Tech
Ray Hill, Merwyn Johnson, Terry Johnson, Robert Owens, Don Hooper,
Alexie Merculief, Steve Hopkins Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. Also, discussed protocol for decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities.
2. The Caterpillar D-5 bulldozer and Hitachi EX 350 excavator built a road to a new sand borrow area. Two Bell 25B trucks hauled a total of 41 loads (738 loose cubic yards [CY]) of sand to Cell A. To date, approximately 19,992 loose CY of sand have been hauled for NOAA activities. The D-5 spread a 1.5-foot sand layer over the side slopes on the east and south sides of Cell A.
3. Two Bell 25B trucks hauled a total of 24 loads of PCS from the Blubber Dump to the landfill PCS pile. Both Bell trucks broke down and were replaced by the DJB truck and the Caterpillar 773 truck. The DJB hauled 1 load and the Caterpillar 773 hauled 5 loads of PCS. The EX 350 was used to load PCS at the Blubber Dump. The Caterpillar 988 wheel loader and EX 350 were used to level and slope the dumped PCS at the landfill.

Problems Encountered or Anticipated:

1. None

Discussions with NOAA Personnel or Island Entity Personnel:

1. None



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|--|-------------|--------------------------------------|-------|
| NOAA – St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Steve Hopkins | Kelly-Ryan | Mechanic | 1.5 |
| Terry Johnson | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| NOAA – Blubber Dump PCS Removal | | | |
| Don Hooper | Kelly-Ryan | Equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|--|--------------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Hitachi EX 350 excavator | Excavate and load sand | 9 |
| Caterpillar 988B wheel loader | Level PCS | 1 |
| Bell 25B dump truck (1) | Haul sand | 8.5 |
| Bell 25B dump truck (2) | Haul Sand & PCS | 6.5 |
| Chevy 1-ton crew cab | Daily transportation | 10 |
| NOAA – Blubber Dump PCS Removal | | |
| Hitachi EX 350 excavator | Load PCS at Blubber Dump | 6.5 |
| Bell 25B dump truck (1) | Haul PCS | 3.5 |
| Bell 25B dump truck (2) | Haul Sand & PCS | 2 |
| DJB 35 dump truck | Haul PCS | 1.5 |
| Caterpillar 773 haul truck | Haul PCS | 3.5 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|--|---------------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Caterpillar D5M bulldozer | Shaping and leveling sand | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Monday October 13, 2003

Personnel On Site: Mike Sturdevant, Tetra Tech

Ray Hill, Merwyn Johnson, Terry Johnson, Robert Owens, Simeon Swetsof,
Alexie Merculief, Don Hooper, Kelly-Ryan

Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. Also, discussed protocol for decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities.
2. Two Bell 25B trucks hauled a total of 40 loads (720 loose CY) of scoria to place on flat surfaces of Cell A. The Caterpillar 988B wheel loader was used to load the trucks at the Lake Hill scoria pit. The Caterpillar D-5 bulldozer graded a 6-inch layer of scoria over the flat sand surfaces of Cell A, excluding the area that is within the U.S. Department of Transportation (DOT) easement.
3. The Caterpillar 773 haul truck hauled 5 loads of PCS from the Blubber Dump to the landfill PCS stockpile. One of the Hitachi EX 350 excavators was used to load PCS at the Blubber Dump.
4. The EX 350 excavator cut back the steep north slope of the landfill PCS stockpile to a slope of 3:1. The DJB truck hauled the excavated PCS material from the north side to the south side of the PCS stockpile.

Problems Encountered or Anticipated:

1. Based on a cost and productivity analysis of using the Caterpillar 773, it was determined that the schedule for hauling the Blubber Dump PCS did not warrant the additional cost of using this piece of equipment. Therefore, the contractor was directed not to use this equipment any further.

Discussions with NOAA Personnel or Island Entity Personnel:

1. Received approval from John Merculief, St. Paul City Manager (through the City Clerk) to haul 1,500 CY of scoria from the Lake Hill scoria pit and place it on the southwest corner of Cell A (at no cost to NOAA).



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|--|-------------|--------------------------------------|-------|
| NOAA – St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 8.5 |
| Terry Johnson | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Alexie Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 8.5 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 8.5 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 8.5 |
| NOAA – Blubber Dump PCS Removal | | | |
| Don Hooper | Kelly-Ryan | Equipment operator | 8.5 |
| City of St. Paul – Scoria Stockpile | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 1.5 |
| Alexie Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 1.5 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 1.5 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 1.5 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|--|---------------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Hitachi EX 350 excavator | Excavate and load PCS | 10 |
| Caterpillar 988B wheel loader | Load scoria | 8.5 |
| Bell 25B dump truck (1) | Haul scoria | 8.5 |
| Bell 25B dump truck (2) | Haul scoria | 8.5 |
| Chevy 1-ton crew cab | Daily transportation | 8.5 |
| NOAA – Blubber Dump PCS Removal | | |
| Hitachi EX 350 excavator | Load Blubber Dump PCS | 0.5 |
| Caterpillar 773 haul truck | Haul Blubber Dump PCS | 2 |
| DJB 35 dump truck | Haul PCS at landfill | 6 |
| City of St. Paul – Scoria Stockpile | | |
| Caterpillar 988B wheel loader | Load Scoria | 1.5 |
| Bell 25B dump truck (1) | Haul Sand & 1 load of PCS | 1.5 |
| Bell 25B dump truck (2) | Haul Sand | 1.5 |
| Chevy 1-ton crew cab | Daily transportation | 1.5 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|--|-----------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Caterpillar D5M bulldozer | leveling scoria | 8.5 |
| City of St. Paul – Scoria Stockpile | | |
| Caterpillar D5M bulldozer | leveling scoria | 1.5 |



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Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Tuesday October 14, 2003

Personnel On Site: Mike Sturdevant, Tetra Tech
Ray Hill, Merwyn Johnson, Terry Johnson, Robert Owens, Simeon Swetzof,
Alexie Merculief, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. Also, discussed protocol for decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities.
2. Two Bell 25B trucks hauled a total of 46 loads (828 loose CY) of scoria to stockpile for the City of St. Paul on the southwest corner of Cell A. The Caterpillar 988B wheel loader was used to load the trucks at the Lake Hill scoria pit. The Caterpillar D-5 bulldozer pushed the loads into a pile.
3. The Hitachi EX 350 excavator completed cutting back the south and north side slopes of the landfill PCS pile to a slope of 3:1. The EX 350 collected surface debris on the northern edge of Cell A, and this debris was hauled to the MSW cell on Tract 42. The EX-350 then mobilized to the Lake Hill scoria pit to assist in benching the quarry walls.

Problems Encountered or Anticipated:

1. None

Discussions with NOAA Personnel or Island Entity Personnel:

1. Provided Jim Wright (NOAA) with a volume estimate to place 4 inches of scoria on the side slopes of Cell A. NOAA will check with ADEC to determine if scoria is an acceptable interim cover over the sand for the winter.



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|--|-------------|--------------------------------------|-------|
| NOAA – St. Paul Island Landfill | | | |
| Terry Johnson | Kelly-Ryan | Equipment operator | 6.5 |
| City of St. Paul – Scoria Stockpile | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Alexia Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 9.5 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|--|-----------------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Hitachi EX 350 excavator | Cut side slopes of PCS pile | 10 |
| City of St. Paul – Scoria Stockpile | | |
| Caterpillar 988B wheel loader | Load scoria | 10 |
| Bell 25B dump truck (1) | Haul scoria | 10 |
| Bell 25B dump truck (2) | Haul scoria | 9.5 |
| Chevy 1-ton crew cab | Daily transportation | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|--|-------------|-------|
| City of St. Paul – Scoria Stockpile | | |
| Caterpillar D5M bulldozer | Pile scoria | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Wednesday October 15, 2003

Personnel On Site: Mike Sturdevant, Tetra Tech
Ray Hill, Merwyn Johnson, Terry Johnson, Robert Owens, Simeon Swetzo, Alexie Merculief, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. Also, discussed protocol for decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities.
2. Completed hauling a total of 1,500 loose cubic yards (CY) of scoria for the City of St. Paul. Two Bell 25B trucks hauled a total of 29 loads (522 loose CY) of scoria to the stockpile on the southwest corner of Cell A. The Caterpillar 988B wheel loader was used to load the trucks at the Lake Hill scoria pit. The Caterpillar D-5 bulldozer pushed the loads into a pile.

A Tanadgusix Corporation (TDX) requirement is to provide benches in the scoria pit. The Hitachi EX 350 excavator was mobilized to the quarry and used to cut a series of benches in the sidewalls. The labor and equipment costs for this activity will be split between NOAA and the City of St. Paul based on the volume of scoria mined. To date, 4,454 CY of scoria has been mined from the pit. In addition, 600 CY of scoria has been stockpiled in the quarry in anticipation of placement on the side slopes of Cell A. The total anticipated amount of scoria used is 5,054 CY. The amount of scoria used for NOAA activities is 3,005 CY, which includes 549 CY for the NOAA pad, 758 CY for landfill access, 378 for pad access, 720 CY over the top of Cell A, and 600 CY for the Cell A side slopes. The amount of scoria used for the City of St. Paul is 2,049 CY, which includes 549 CY for the city pad and 1,500 for the scoria stockpile. Therefore, the cost proration for benching the quarry include approximately 59 percent to NOAA and 41 percent to the City of St. Paul.

3. Two Bell 25B trucks hauled a total of 15 loads (270 loose CY) of PCS from the Blubber Dump to the landfill PCS stockpile. The Hitachi EX 350 excavator was used to load the trucks at the Blubber Dump. To date, Kelly-Ryan has hauled 1,369 CY of PCS from the Blubber Dump.
4. The Caterpillar D-5 bulldozer graded the sand slopes of the NOAA/City Pad.



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Problems Encountered or Anticipated:

1. The BSE loader cannot maintain a 3:1 slope as material is dumped from the trucks. An excavator or dozer will be required to dress up side slopes after PCS material is spread and compacted with the loader.

Discussions with NOAA Personnel or Island Entity Personnel:

1. Talked to Jim Wright about the excavation of the Blubber Dump PCS pile. He will determine if rocks and liner material need to be separated from the soil being hauled to the landfill PCS pile. Also, need to determine if a small 20' x 20' area on the northwest corner of the Blubber Dump pile should be handled separately from the rest of the PCS material.

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|--|-------------|--------------------------------------|-------|
| NOAA (50%) and City of St. Paul (50%) – Pad Extension | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 3.5 |
| NOAA – Blubber Dump PCS Removal | | | |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 3.5 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 3.5 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 3.5 |
| NOAA (59%) and City of St. Paul (41%) – Lake Hill Scoria Pit Benching | | | |
| Terry Johnson | Kelly-Ryan | Equipment operator | 6.5 |
| Simian Swetzof | Kelly-Ryan | Equipment operator | 3.5 |
| City of St. Paul – Scoria Stockpile | | | |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Ray Hill | Kelly-Ryan | Equipment operator | 6.5 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 6.5 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 6.5 |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 6.5 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|--|----------------------|-------|
| NOAA – Blubber Dump PCS Removal | | |
| Bell 25B dump truck (1) | Haul PCS | 3.5 |
| Bell 25B dump truck (2) | Haul PCS | 3.5 |
| Hitachi EX 350 excavator | Load PCS | 3.5 |
| NOAA (59%) and City of St. Paul (41%) – Lake Hill Scoria Pit Benching | | |
| Hitachi EX 350 excavator | Bench scoria pit | 10 |
| Chevy 1-ton crew cab | Daily transportation | 2 |
| City of St. Paul – Scoria Stockpile | | |
| Caterpillar 988B wheel loader | Load scoria | 6.5 |
| Bell 25B dump truck (1) | Haul scoria | 6.5 |
| Bell 25B dump truck (2) | Haul scoria | 6.5 |
| Chevy 1-ton crew cab | Daily transportation | 8 |



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Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|--|--------------|-------|
| City of St. Paul – Scoria Stockpile | | |
| Caterpillar D5M bulldozer | Pile scoria | 6.5 |
| NOAA (50%) and City of St. Paul (50%) – Pad Extension | | |
| Caterpillar D5M bulldozer | Grade slopes | 3.5 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Thursday October 16, 2003

Personnel On Site: Mike Sturdevant, Tetra Tech

Ray Hill, Merwyn Johnson, Terry Johnson, Robert Owens, Simeon Swetsof,
Alexie Merculief, Josh Rukovishnokof Kelly-Ryan

Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. Also, discussed protocol for decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities.
2. The Hitachi EX 350 excavator completed benching the Lake Hill scoria pit and moved back to the landfill. The costs for this activity will be shared between NOAA and the City of St. Paul, as discussed in the daily report for October 15, 2003.
3. Two Bell 25B trucks (2) hauled a total of 45 loads (810 loose CY) of PCS from the Blubber Dump to the landfill PCS stockpile. The DJB truck hauled 2 loads (50 loose CY), when it broke down. The EX 350 was used to load the trucks at the Blubber Dump. To date, Kelly-Ryan has hauled 2,229 CY of PCS from the Blubber Dump.
4. The Caterpillar D-5 bulldozer finished grading the side slopes of the NOAA/City pad. In addition, the D-5 spread topsoil over the sand borrow areas.

Problems Encountered or Anticipated:

1. None

Discussions with NOAA Personnel or Island Entity Personnel:

1. Discussed the possibility of renting a City dump truck to haul PCS from the Blubber Dump. Jim Wright (NOAA) will find out if a truck is available.



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|--|-------------|--------------------------------------|-------|
| NOAA (59%) and City of St. Paul (41%) – Lake Hill Scoria Pit Benching | | | |
| Simeon Swetzof | Kelly-Ryan | Equipment operator | 10 |
| NOAA – Blubber Dump PCS Removal | | | |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Terry Johnson | Kelly-Ryan | Equipment operator | 10 |
| Alexia Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 9.5 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Josh Rukovishnokof | Kelly-Ryan | Dump truck driver/equipment operator | 3 |
| Big Hands Inc. | Kelly-Ryan | Mechanic | 2 |
| NOAA – St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 8 |
| NOAA (50%) and City of St. Paul (50%) – Pad Extension | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 2 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|--|----------------------|-------|
| NOAA (59%) and City of St. Paul (41%) – Lake Hill Scoria Pit Benching | | |
| Hitachi EX 350 excavator | Bench scoria quarry | 10 |
| NOAA – Blubber Dump PCS Removal | | |
| Hitachi EX 350 excavator | Load PCS | 10 |
| Bell 25B dump truck (1) | Haul PCS | 10 |
| Bell 25B dump truck (2) | Haul PCS | 10 |
| DJB 35 dump truck | Haul PCS | 3 |
| Chevy 1-ton crew cab | Daily transportation | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|--|----------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Caterpillar D5M bulldozer | Spread Topsoil | 8 |
| NOAA (50%) and City of St. Paul (50%) – Pad Extension | | |
| Caterpillar D5M bulldozer | Grade slopes | 2 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Friday October 17, 2003

Personnel On Site: Mike Sturdevant, Tetra Tech
Ray Hill, Merwyn Johnson, Terry Johnson, Robert Owens, Alexie Mercurief,
Josh Rukovishnokof Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. Also, discussed protocol for decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities.
2. Compacted scoria on the NOAA and city pad to smooth it out after the Caterpillar D-5 bulldozer finished side slope work.
3. Two Bell 25B trucks hauled a total of 46 loads (828 loose cubic yards [CY]) of PCS from the Blubber Dump to the landfill PCS stockpile. The rented City truck hauled 15 loads (225 loose CY) from the Blubber Dump. The Hitachi EX 350 excavator was used to load the trucks at the Blubber Dump. To date, Kelly-Ryan has hauled 3,282 CY of PCS from the Blubber Dump.
4. The D-5 finished spreading topsoil over the sand borrow areas. The D-5 spread piles on the landfill PCS stockpile. In addition, the D-5 cut an access ramp to the top of the PCS pile to speed turnaround time of trucks.

Problems Encountered or Anticipated:

1. The mechanic serviced the Bell 25B truck (No. 2) this date.

Discussions with NOAA Personnel or Island Entity Personnel:

1. None



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|--|-------------|--------------------------------------|-------|
| NOAA – Blubber Dump PCS Removal | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 1.5 |
| Steve Hopkins | Kelly-Ryan | Mechanic | 1.5 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Terry Johnson | Kelly-Ryan | Equipment operator | 10 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Josh Rukovishnokof | Kelly-Ryan | Dump truck driver/equipment operator | 6 |
| NOAA – St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 6.5 |
| NOAA (50%) and City of St. Paul (50%) – Pad Extension | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 1 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|--|----------------------|-------|
| NOAA – Blubber Dump PCS Removal | | |
| Caterpillar D5M bulldozer | Spread PCS | 1.5 |
| Hitachi EX 350 excavator | Load PCS | 10 |
| Bell 25B dump truck (1) | Haul PCS | 10 |
| Bell 25B dump truck (2) | Haul PCS | 10 |
| Rented City dump truck | Haul PCS | 6 |
| Chevy 1-ton crew cab | Daily transportation | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|--|----------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Caterpillar D5M bulldozer | Spread topsoil | 6.5 |
| NOAA (50%) and City of St. Paul (50%) – Pad Extension | | |
| Compactor | Compact scoria | 2 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Saturday October 18, 2003

Personnel On Site: Mike Sturdevant, Tetra Tech
Ray Hill, Merwyn Johnson, Terry Johnson, Robert Owens, Alexie Mercurief,
Josh Rukovishnokof, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. Also, discussed protocol for decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities.
2. Two Bell 25B trucks hauled a total of 51 loads (918 loose cubic yards [CY]) of PCS from the Blubber Dump to the landfill PCS stockpile. The rented City truck hauled 28 loads (420 loose CY) from the Blubber Dump. The Hitachi EX 350 excavator was used to load the trucks at the Blubber Dump. To date, Kelly-Ryan has hauled 4,620 CY of PCS from the Blubber Dump. The Caterpillar D-5 bulldozer spread PCS at the landfill PCS stockpile.

Problems Encountered or Anticipated:

1. Before the landfill PCS stockpile is ready to accept a cover, the following activities must be performed: (1) an excavator must cut back the side slope to 3:1 on the southwest corner and on the west side; (2) the excavator should smooth out the side slope on the east side and remove large boulders; and (3) a minimum of 3 feet of fill should be placed on top of the PCS stockpile near the center and graded to the edges to have a minimum 2 percent slope to promote runoff.
2. The mechanic serviced Bell 25B truck (No. 1).

Discussions With NOAA Personnel or Island Entity Personnel:

1. As directed by Jim Wright (NOAA), Tetra Tech will pick up MSW near the field trailer and then spread approximately 4 loads of sand between the trailer and existing barrier dune north of Cell A. An additional 4 loads of sand will be stockpiled between boulder piles on the northeast side of Cell A. If ADEC approves of placing scoria on the side slopes of Cell A, an additional 2 loads of scoria will be placed over the sand mentioned above.



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|--|-------------|--------------------------------------|-------|
| NOAA – Blubber Dump PCS Removal | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Steve Hopkins | Kelly-Ryan | Mechanic | 1.5 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Terry Johnson | Kelly-Ryan | Equipment operator | 10 |
| Alexie Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Josh Rukovishnokof | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|--|----------------------|-------|
| NOAA – Blubber Dump PCS Removal | | |
| Caterpillar D5M bulldozer | Spread PCS | 10 |
| Hitachi EX 350 excavator | Load PCS | 10 |
| Bell 25B dump truck (1) | Haul PCS | 10 |
| Bell 25B dump truck (2) | Haul PCS | 10 |
| Rented City Dump Truck | Haul PCS | 10 |
| Chevy 1-ton crew cab | Daily transportation | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Monday October 20, 2003

Personnel On Site: Mike Sturdevant, Tetra Tech
Merwyn Johnson, Terry Johnson, Robert Owens, Alexie Mercurief, Josh Rukovishnokof, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. Also, discussed protocol for decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities.
2. Two Bell 25B trucks hauled a total of 51 loads (918 loose cubic yards [CY]) of PCS from the Blubber Dump to the landfill PCS stockpile. The rented City truck hauled 26 loads (390 loose CY) from the Blubber Dump. The Hitachi EX 350 excavator was used to load the trucks at the Blubber Dump. To date, Kelly-Ryan has hauled 5,928 CY of PCS from the Blubber Dump.

Problems Encountered or Anticipated:

1. None

Discussions with NOAA Personnel or Island Entity Personnel:

1. None

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|--|-------------|--------------------------------------|-------|
| NOAA – Blubber Dump PCS Removal | | | |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Alexia Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Josh Rukovishnokof | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Terry Johnson | Kelly-Ryan | Equipment operator | 10 |



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Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|--|----------------------|-------|
| NOAA – Blubber Dump PCS Removal | | |
| Hitachi EX 350 excavator | Load PCS | 10 |
| Bell 25B dump truck (1) | Haul PCS | 10 |
| Bell 25B dump truck (2) | Haul PCS | 10 |
| Chevy 1-ton crew cab | Daily transportation | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|--|------------|-------|
| NOAA – Blubber Dump PCS Removal | | |
| Caterpillar D5M bulldozer | Spread PCS | 0 |
| Rented City dump truck | Haul PCS | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Tuesday October 21, 2003

Personnel On Site: Mike Sturdevant, Tetra Tech
Big Hands, Inc., Ray Hill, Merwyn Johnson, Terry Johnson, Alexie Mercurief,
Guy Miller, Robert Owens, Josh Rukovichnokof, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. Also, discussed protocol for decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities.
2. Two Bell 25B trucks hauled a total of 43 loads (774 loose cubic yards [CY]), and the rented City truck hauled 25 loads (375 loose CY) of PCS from the Blubber Dump to the landfill PCS stockpile. To date, Kelly-Ryan has hauled 7,077 CY of PCS from the Blubber Dump.
3. Excavated test holes at the Blubber Dump to investigate potentially contaminated soil. Utilized Caterpillar D8 bulldozer to scrape 6 inches from surface of Blubber Dump to remove visibly stained soils. Material was stockpiled near the northwest corner of the Blubber Dump for future transport to the landfill PCS stockpile. Kelly-Ryan used the Caterpillar 988 loader to mobilize two conex boxes to the Blubber Dump for disposal of liner and debris staged on south side of the dump; after the boxes were loaded, the Caterpillar 992 loader was used to move them into town for staging and future disposal.
4. Bering Sea Eccotech, Inc. (BSE) personnel utilized the Caterpillar D5M bulldozer to level piles of contaminated soil atop the landfill PCS stockpile.

Problems Encountered or Anticipated:

1. Kelly-Ryan mechanic conducted maintenance on the Caterpillar D5M bulldozer (heater installation) and the Ingersoll Rand SPDD56 compactor (vibratory control cable).

Discussions with NOAA Personnel or Island Entity Personnel:

1. None



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|---------------------|-------------|--------------------------------------|-------|
| Blubber Dump | | | |
| Big Hands Inc. | Kelly-Ryan | Mechanic | 3 |
| Ray Hill | Kelly-Ryan | Equipment operator | 6 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Terry Johnson | Kelly-Ryan | Equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Alexie Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 8 |
| Guy Miller | Kelly-Ryan | Equipment operator | 3.5 |
| Josh Rukovishnokof | Kelly-Ryan | Dump truck driver/equipment operator | 10 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|---------------------------|------------------------|-------|
| Blubber Dump | | |
| Caterpillar D-8 bulldozer | Stockpile PCS | 4 |
| Hitachi EX 350 excavator | Load PCS | 10 |
| Caterpillar 988 loader | Mobilize conex boxes | 1.5 |
| Caterpillar 992 loader | Demobilize conex boxes | 2 |
| Bell 25B dump truck (1) | Haul PCS | 10 |
| Bell 25B dump truck (2) | Haul PCS | 10 |
| Chevy 1-ton crew cab | Daily transportation | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|------------------------|----------|-------|
| Blubber Dump | | |
| Rented City dump truck | Haul PCS | 10 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Wednesday October 22, 2003

Personnel On Site: Brian Croft and Mike Sturdevant, Tetra Tech
Big Hands, Inc., Ray Hill, Merwyn Johnson, Terry Johnson, Alexie Mercurief,
Guy Miller, Robert Owens, Josh Rukovichnokof, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. Also, discussed protocol for decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities.
2. Two Bell 25B trucks hauled a total of 8 loads (144 loose cubic yards [CY]), and the rented City truck hauled 2 loads (30 loose CY) of PCS from the Blubber Dump to the landfill PCS stockpile. To date, Kelly-Ryan has hauled 7,251 CY of PCS from the Blubber Dump. Equipment was decontaminated prior to resuming landfill closure operations.
3. Two Bell 25B trucks hauled a total of 35 loads (630 loose cubic yards [CY]), and the rented City truck hauled 5 loads (75 loose CY) of scoria from the Lake Hill scoria pit for Cell A closure operations. To date, Kelly-Ryan has hauled 3,710 CY of scoria from the Lake Hill quarry for NOAA activities.

Problems Encountered or Anticipated:

1. The rented City truck was down for approximately 4.5 hours due to a flat tire; it was returned to the public works department for repair.

Discussions with NOAA Personnel or Island Entity Personnel:

1. None



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Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|--|-------------|--------------------------------------|-------|
| NOAA – Blubber Dump | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 2.5 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 1 |
| Terry Johnson | Kelly-Ryan | Equipment operator | 2.5 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 2.5 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 2.5 |
| Josh Rukovishnokof | Kelly-Ryan | Dump truck driver/equipment operator | 2.5 |
| NOAA – St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 7.5 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 1 |
| Terry Johnson | Kelly-Ryan | Equipment operator | 7.5 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 7.5 |
| Alexie Mercurief | Kelly-Ryan | Dump truck driver/equipment operator | 7.5 |
| Josh Rukovishnokof | Kelly-Ryan | Dump truck driver/equipment operator | 3 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|--|----------------------|-------|
| NOAA – Blubber Dump | | |
| Hitachi EX-350 excavator | Load PCS | 2.5 |
| Bell 25B dump truck (1) | Haul PCS | 2.5 |
| Bell 25B dump truck (2) | Haul PCS | 2.5 |
| Chevy 1-ton crew cab | Daily transportation | 2.5 |
| NOAA – St. Paul Island Landfill | | |
| Caterpillar 988 loader | Load scoria | 7.5 |
| Bell 25B dump truck (1) | Haul scoria | 7.5 |
| Bell 25B dump truck (2) | Haul scoria | 7.5 |
| Chevy 1-ton crew cab | Daily transportation | 7.5 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|--|---------------------|-------|
| NOAA – Blubber Dump | | |
| Caterpillar D-5 bulldozer | Level scoria | 2.5 |
| Rented City dump truck | Haul PCS and scoria | 2.5 |
| NOAA – St. Paul Island Landfill | | |
| Caterpillar D-5 bulldozer | Level scoria | 7.5 |
| Rented City dump truck | Haul PCS and scoria | 3 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Thursday October 23, 2003

Personnel On Site: Brian Croft, Tetra Tech
Ray Hill, Merwyn Johnson, Terry Johnson, Alexie Mercurief, Robert Owens,
Josh Rukovishnokof, Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. Also, discussed protocol for decontamination activities for field equipment (dump truck beds and excavator bucket). For petroleum-contaminated soil (PCS) removal actions, Tyvek® and rubber gloves are not required until decontamination activities.
2. One Bell 25B truck hauled a total of 1 load (18 loose cubic yards [CY]) of MSW from the northwest corner of Cell A to the southwest corner of Tract 42. To date, Kelly-Ryan has relocated a total 750 loose CY of MSW from Cell A to the southwest corner of Tract 42.
3. One Bell 25B truck hauled a total of 11 loads (198 loose CY) of sand for closure operations in the northwest corner of Cell A. To date, Kelly-Ryan has hauled a total of 20,290 CY of sand for NOAA activities.
4. Two Bell 25B trucks hauled a total of 26 loads (468 loose CY), and the rented City truck hauled 14 loads (210 loose CY) of scoria from the Lake Hill quarry for Cell A closure operations. To date, Kelly-Ryan has hauled 4,388 CY of scoria from the Lake Hill quarry for NOAA activities.
5. One Bell 25B truck hauled a total of 2 loads (36 CY) of boulders for placement along the perimeter of Cell A. To date, Kelly-Ryan has hauled 36 CY of boulders from separate on-island projects on which Kelly-Ryan is conducting work, and as such, these boulders were obtained at no fee. Future loads will be obtained from the quarry at a rate of \$7 per cubic yard. The Komatsu PC200 excavator was used to load the boulders, which were loaded by the truck driver.

Problems Encountered or Anticipated:

1. None



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Discussions with NOAA Personnel or Island Entity Personnel:

- 1. None

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|--|-------------|--------------------------------------|-------|
| NOAA – St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Terry Johnson | Kelly-Ryan | Equipment operator | 10 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 6 |
| Alexie Merculief | Kelly-Ryan | Dump truck driver/equipment operator | 10 |
| Josh Rukovishnokof | Kelly-Ryan | Dump truck driver/equipment operator | 6 |

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|--|--------------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Ingersoll Rand SPDD56 compactor | Compact scoria | 1 |
| Hitachi EX-350 excavator | Load MSW and sand | 2.5 |
| Komatsu PC200 excavator | Load boulders | 1.5 |
| Caterpillar 988 loader | Load scoria | 7 |
| Bell 25B dump truck (1) | Haul MSW, sand, scoria | 9 |
| Bell 25B dump truck (2) | Haul scoria and boulders | 6 |
| Chevy 1-ton crew cab | Daily transportation | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|--|--------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Caterpillar D-5 bulldozer | Grade scoria | 10 |
| Rented City dump truck | Haul scoria | 6 |

Samples Collected: None.

Prepared by:

Tetra Tech EM Inc.

Date



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Friday October 24, 2003

Personnel On Site: Brian Croft, Tetra Tech
Ray Hill, Merwyn Johnson, Terry Johnson, Guy Miller, and Robert Owens,
Kelly-Ryan
Jim Wright, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. Slips, trips, and falls are a hazard due to wires and other municipal solid waste (MSW) sticking out of the ground. Be wary of traffic due to other landfill operations/activities. Give the right-of-way to these other activities. Also, discussed protocol for decontamination activities for field equipment (dump truck beds and excavator bucket).
2. One Bell 25B truck hauled a total of 2 loads (36 cubic yards [CY]), and the Caterpillar 773 truck hauled a total of 3 loads (114 CY) of boulders from the quarry for placement along the perimeter of Cell A. To date, Kelly-Ryan has hauled a total of 150 CY of boulders from the quarry.

Problems Encountered or Anticipated:

1. None

Discussions with NOAA Personnel or Island Entity Personnel:

1. None

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|--|--------------------|--------------------------------------|--------------|
| NOAA – St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 10 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Terry Johnson | Kelly-Ryan | Equipment operator | 10 |
| Guy Miller | Kelly-Ryan | Dump truck driver/equipment operator | 3 |
| Robert Owens | Kelly-Ryan | Dump truck driver/equipment operator | 2 |



Tetra Tech EM Inc.

6100 219th Street SW, Suite 550, Mountlake Terrace, WA 98043 ♦ Telephone (425) 776-3761 ♦ Fax (425) 673-9119

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|--|----------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Hitachi EX-350 excavator | Place boulders | 10 |
| Caterpillar 988 loader | Place boulders | 9 |
| Bell 25B dump truck (2) | Haul boulders | 2 |
| Caterpillar 773 dump truck | Haul boulders | 3 |
| Chevy 1-ton crew cab | Daily transportation | 10 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|--|--------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Caterpillar D-5 bulldozer | Grade scoria | 1 |

Samples Collected: (See Table 1)

1. One confirmation sample was collected from the tar product discovered during landfill drum operations. Per NOAA request, this sample will be analyzed for all contaminants of concern in order to determine disposal options (PCS stockpile versus off island disposal).

Prepared by:

Tetra Tech EM Inc.

Date



**TABLE 1
SAMPLES COLLECTED**

| Sample No. | Sample Type | GRO | DRO | RRO | BTEX | PAH |
|-------------------|----------------------------|------------|------------|------------|-------------|------------|
| SP07-CS-030-000 | Confirmation – tar product | X | X | X | X | X |



**CONTRACTOR DAILY LOG
ST. PAUL ISLAND LANDFILL CLOSURE
ST. PAUL, ALASKA**

CONTRACT NO. GS-10F-0076K

Date: Saturday October 25, 2003
Personnel On Site: Brian Croft, Tetra Tech
Ray Hill, Merwyn Johnson, Terry Johnson, Kelly-Ryan
Greg Gervais, NOAA

Daily Activities:

1. A morning health and safety tailgate meeting was held with Tetra Tech, Kelly-Ryan, and NOAA personnel to discuss the project and related health and safety issues. Watch heavy equipment moving around.
2. Finished placement of boulders along the northern edge of Cell A. Conducted final grading and compacting of scoria in areas disturbed by heavy equipment during boulder placement.
3. Kelly-Ryan demobilized the Caterpillar 988 loader.
4. Landfill closure activities are complete at this time.

Problems Encountered or Anticipated:

1. None

Discussions with NOAA Personnel or Island Entity Personnel:

1. None

Contractor/Subcontractor Personnel:

| Name | Affiliation | Role | Hours |
|--|--------------------|------------------------|--------------|
| NOAA – St. Paul Island Landfill | | | |
| Ray Hill | Kelly-Ryan | Equipment operator | 6 |
| Merywn Johnson | Kelly-Ryan | Project superintendent | 2 |
| Terry Johnson | Kelly-Ryan | Equipment operator | 4 |



Tetra Tech EM Inc.

6100 219th Street SW, Suite 550, Mountlake Terrace, WA 98043 ♦ Telephone (425) 776-3761 ♦ Fax (425) 673-9119

Contractor-Provided Equipment (Kelly-Ryan):

| Type | Task | Hours |
|--|----------------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Ingersoll Rand SPDD56 compactor | Compact scoria | 2 |
| Hitachi EX-350 excavator | Place boulders | 4 |
| Caterpillar 988 loader | Place boulders | 1 |
| Chevy 1-ton crew cab | Daily transportation | 6 |

Government Furnished Heavy Equipment Used:

| Type | Task | Hours |
|--|--------------|-------|
| NOAA – St. Paul Island Landfill | | |
| Caterpillar D-5 bulldozer | Grade scoria | 4 |

Samples Collected: None

Prepared by:

Tetra Tech EM Inc.

Date

Daily Construction Quality Control Report (DCQCR)
 Corrective Action Plan Implementation
 St. Paul, Alaska

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 16-Aug-04 **DCQCR Version:** 1

Management on Site:

| | |
|--------------------|---|
| <i>Contractor:</i> | Eric DeRuyter (lead) Christine O'Donovan Brian Croft (left on Penair) |
| <i>NOAA:</i> | David Winandy (lead) Greg Weigel (EPA) Robert Aguirre |

Daily Activities (Include in this section a detailed description):

| Summary: | Soil | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$3,898.00 | \$10,991.03 | \$14,889.03 |
| | PCS Volume (CY) | 5,220 | 586 | 5,806 |
| | Backfill Volume (CY) | 943 | 150 | 1,093 |
| | Personnel | | | |
| | Personnel Cost | \$118,803.23 | \$6,463.73 | \$125,266.95 |
| | Personnel Hours | 1353.5 | 55 | 1408.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$83,706.49 | \$7,660.17 | \$91,366.65 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 875.75 | 58.5 | 934.25 |
| | Contractor Equipment Standby Hours | 0 | 0 | 0 |
| | Government Equipment Hours | 83 | 15 | 98 |
| | Other Costs | | | |
| | Sample Cost | \$28,416.87 | \$0.00 | \$28,416.87 |
| | Total Cost | \$234,824.59 | \$25,114.92 | \$259,939.51 |

NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting at 0700 (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

Per NOAA's direction, KRI hauled NOAA filter fabric from the machine shop to the landspread area and installed one roll (20' x 300') as the base for an access road to the landspread area.

KRI hauled 6 truck loads (773B) of 6"-minus rock from Kamanista Quarry to the landspread area for use as road base for the access road to the landspread area. KRI leveled the 6"-minus rock at the landspread area with the D8N dozer to construct the access road.

Tetra Tech conducted paint filter tests on dewatered soil in the dewatering area.

Tetra Tech operated the skimmer system within the dewatering area and pumped water through the oil/water separator and GAC drums prior to release to the open excavation.

KRI hauled 22 truck loads (773B) of PCS from the dewatering area to the landspread area.

KRI continued excavation of PCS from the southeast corner of Area 3B. KRI hauled 3 truck loads (B25B) of PCS from Area 3B to the dewatering area.

KRI utilized their Gradall forklift to assist NOAA personnel in moving sandbag operation equipment and pallets of sandbags.

KRI leveled an area for NOAA's sandbag operation adjacent to KRI's dewatering area and placed sandbags in a maximum 8.5' trench.

Date: 16-Aug-04

Problems Encountered or Anticipated:

The EX350 LCH excavator was worked on for 0.5 hour to fix the thumb manipulator.

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA directed that filter fabric be installed as a base for the 6"-minus rock for the access road to the landspread area.

NOAA stated that lead analysis is required for any backfill for the Lukanin Bay Site, but not the Diesel Seep Site. Since the sand from the Salt Lagoon Channel has already been sampled for all necessary constituents and deemed "clean" there is no need to conduct additional sampling of this material for backfill at the Diesel Seep Site.

NOAA's surveyor confirms that the northern and eastern sides of the excavation for Area 3B were overexcavated last week without any corner marker stakes available.

NOAA states that sandbags are being filled with GAC to be installed in the planned treatment trenches in lieu of the original plan of lining the trench with filter fabric and pouring the free-flowing GAC into it. Tetra Tech stated that the sandbags would be difficult to place and preferential pathways will likely occur between the sandbags. NOAA stated that trench boxes were being considered but dewatering the trenches is not an option currently being considered.

Samples Collected:

Seven samples of dewatered PCS were collected and tested using the paint test analysis. 6 passed and 1 failed.

Prepared by:

Tetra Tech EM Inc.

16-Aug-04
Date

Kelly-Ryan, Inc.

16-Aug-04
Date

Received by:

National Oceanic and Atmospheric Administration

16-Aug-04
Date

Date: 16-Aug-04

Daily Log Review Comments:

1. KRI uses an Hitachi EX350 LCH tracked excavator. Equipment selection option should be corrected.
2. In NOAA & TTEMI discussions, NOAA verified that TTEMI was to sample and analyze for RRO at the Diesel Seep site. NOAA verified that clean fill for Lukanin Bay was to be sampled and analyzed for lead, but that dewatered Salt Lagoon sediments were to be used for clean fill at Lukanin Bay and Ice House Lake excavations before the lead characterization results were received.
3. Gabe Rukovisnikoff, Gradall Extendable Boom Forklift, moved an estimated 12 pallets of sandbags from outside the GARCO Building to the Diesel Seep site, and removed 6 FIBCs of GAC from the shipping container. Also assisted in relocation of entire sandbagging operation to the Diesel Seep. His hours as an equipment operator need to be recorded vice as a truck driver. Nick Kozloff used D4 bulldozer to level new sandbagging site prior to relocation.
4. Column width needs expansion for cost data display.
5. Total TTEMI personnel hours are correct, but please verify time spent on NWS Landsread Site covered under Option 21F.
6. TTEMI to provide cost estimate for trench box / shoring box / coffin box fabrication, Re: GAC installation in trench at Diesel Seep.
7. TTEMI to verify 2 stockpiles at Lukanin Bay Site meet ADEC cleanup levels before use as backfill.

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

1. Equipment selection is correct; no change.
2. Noted.
3. Concur. Equipment and labor hours for Option 19X have been corrected.
4. Noted.
5. Noted and resolved.
6. Noted; costs will be addressed in next contract modification.
7. Noted.

Tetra Tech EM Inc.

Date

Daily Construction Quality Control Report (DCQCR)
 Corrective Action Plan Implementation
 St. Paul, Alaska

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 18-Aug-04 **DCQCR Version:** 1

Management on Site:

| | | | |
|--------------------|---|------------------------------|--|
| <i>Contractor:</i> | Eric DeRuyter (lead) Christine O'Donovan | | |
| <i>NOAA:</i> | David Winandy (lead) | Greg Gervais (arrived today) | |
| | Greg Weigel (EPA) Robert Aguirre | | |

Daily Activities (Include in this section a detailed description):

| Summary: | Soil | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 6,085 | 567 | 6,652 |
| | Backfill Volume (CY) | 1,093 | 0 | 1,093 |
| | Personnel | | | |
| | Personnel Cost | \$130,552.24 | \$5,612.17 | \$136,164.41 |
| | Personnel Hours | 1466 | 62.5 | 1528.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$97,496.68 | \$8,233.51 | \$105,730.19 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 1004.75 | 66.5 | 1071.25 |
| | Contractor Equipment Standby Hours | 0 | 0 | 0 |
| | Government Equipment Hours | 98 | 0 | 98 |
| | Other Costs | | | |
| | Sample Cost | \$28,700.41 | \$0.00 | \$28,700.41 |
| | Total Cost | \$271,638.36 | \$13,845.68 | \$285,484.04 |

NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting at 0700 (at Tract 42 - landfill), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI attached "Caution" tape to the tops of the grade stakes NOAA placed at the landspread area so they would be visible to truck and dozer operators.

KRI hauled PCS from the landfill to the landspread area (15 truck loads using the 773B and 16 truck loads using the B25B).

KRI leveled piles of PCS into a 1.5 foot lift at the landspread area.

Tetra Tech operated the skimmer system within the dewatering area and pumped water through the oil/water separator and GAC drums prior to release to the open excavation of Area 3B.

Tetra Tech assisted NOAA personnel surveying Areas 1, 2, and 3B.

Date: 18-Aug-04

Problems Encountered or Anticipated:

Production rate for loading PCS onto trucks at the landfill was decreased because the excavator operator required additional time to pick out pieces of rock and debris greater than 12 inches in size prior to loading. Only material less than 12 inches in size is allowed at the landsread area.

The EX350 H5 excavator was worked on for 0.5 hour to fix the thumb manipulator.

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA stated that if there is not any visible sheen present on the water in the dewatering area, the water may be pumped directly back into the current open excavation at the Diesel Seep Site (bypassing treatment).

NOAA personnel directed Tetra Tech to notify KRI personnel to not haul wet loads from their dredging operation (Salt Lagoon Channel - USACE) with obvious loose liquid onto public roads nor dump these loads at NOAA's clean fill stockpile area (east of the Diesel Seep Site). Loads of dredged material containing loose liquid shall be hauled and dumped at KRI's dewatering area (USACE).

NOAA stated that even though the CAP states that the maximum excavation depth specified is -1.0 mean lower low water (MLLW), if there is visible sheen emanating from the soil in the excavator bucket as a confirmation is about to be collected, the sample may be collected and analyzed using TLC, but NOAA will direct Tetra Tech to excavate deeper until the sheen is no longer present. Visible sheen is the driving factor for the Diesel Seep removal action. Thus, if a confirmation sample contains elevated concentrations of petroleum contaminants, as long as the person that collected the soil sample did not see sheening during his/her sampling, the removal action has been sufficient.

Samples Collected:

None.

Prepared by:

Tetra Tech EM Inc.

18-Aug-04

Date

Kelly-Ryan, Inc.

18-Aug-04

Date

Received by:

National Oceanic and Atmospheric Administration

18-Aug-04

Date

Date: 18-Aug-04

Daily Log Review Comments:

1. KRI uses an Hitachi EX350 LCH tracked excavator. Equipment selection option should be corrected.
2. Column width needs expansion for cost data display on-screen.
3. PCS Transported From Tract 42 Landfill PCS Stockpile to NWS Landsread Site (Option 21F). Eric DeReuter had at least 1 Hr on this option. All of KRI CAT 773 and Bell B25B truckloads and operator hours were under Option 21F. Please verify and correct.
4. With 4.5 Hours charged, Merwyn Johnson was working as equipment operator, due to lack of personnel. Verify rate at which he charges when operating equipment and cost codes against which charges are incurred, then verify hours.
5. TTEMI to provide cost estimate for trench box / shoring box / coffin box fabrication, Re: GAC installation in trench at Diesel Seep.
6. TTEMI to verify 2 stockpiles at Lukanin Bay Site meet ADEC cleanup levels before use as backfill.
7. NOAA is still allowing naturally dewatered sediment to be directly transported to excavations undergoing backfill, and to the NOAA clean sediment stockpile at the Diesel Seep. Only saturated and supersaturated soils are excluded.
8. PCS at NWS Landsread site leveled by KRI D8N Bulldozer over an approximate 1 acre area.
9. Fluorescent spray paint alone insufficient as a marker for equipment operators at NWS Landsread site. Need to attach tape flags to increase visual recognition.

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

1. Equipment selection is correct; no change.
2. Noted.
3. Noted and resolved.
4. Hours corrected to reflect equipment operation, under Superintendent labor category.
5. Noted; costs will be addressed in next contract modification.
6. Noted; TLC results for two samples less than 100 ppm.
7. Noted.
8. Noted.
9. Noted.

Tetra Tech EM Inc.

Date

Daily Construction Quality Control Report (DCQCR)
 Corrective Action Plan Implementation
 St. Paul, Alaska

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 19-Aug-04 **DCQCR Version:** 1

Management on Site:

| | | | |
|--------------------|---|--------------|--|
| <i>Contractor:</i> | Eric DeRuyter (lead) Christine O'Donovan | | |
| <i>NOAA:</i> | David B. Winandy | Greg Gervais | |
| | Greg Weigel (EPA, departed today) | | |
| | Robert Aguirre | | |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 6,652 | 372 | 7,024 |
| | Backfill Volume (CY) | 1,093 | 425 | 1,518 |
| | <i>Personnel</i> | | | |
| | Personnel Cost | \$136,164.41 | \$4,968.47 | \$141,132.88 |
| | Personnel Hours | 1528.5 | 56.5 | 1585 |
| | <i>Equipment Hours</i> | | | |
| | Equipment Cost | \$105,730.19 | \$6,443.04 | \$112,173.23 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 1071.25 | 57.5 | 1128.75 |
| | Contractor Equipment Standby Hours | 0 | 0 | 0 |
| | Government Equipment Hours | 98 | 0 | 98 |
| | <i>Other Costs</i> | | | |
| | Sample Cost | \$28,700.41 | \$0.00 | \$28,700.41 |
| | Total Cost | \$285,484.04 | \$11,411.51 | \$296,895.55 |

NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting at 0700 (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI utilized the excavated PCS from the top of the lined PCS stockpile at the landfill, separated out debris and rocks greater than 12 inches in size, and loaded dump trucks bound for the landspread area.

KRI hauled 27 truck loads (B25B) of PCS from the landfill to the landspread area.

KRI hauled 4 loads (B25B) of rock and debris from the PCS stockpile at the landfill to the southwest side of the landfill.

KRI hauled 1 load (773B) of dredged Salt Lagoon Channel sediment to NOAA's clean backfill stockpile and 16 loads (773B) of dredged Salt Lagoon Channel sediment to the Lukanin Bay site for backfill.

KRI utilized the 980 C loader to backfill and compact backfill at the Lukanin Bay site.

Tetra Tech disassembled the skimmer and diaphragm pump to determine the lack of suction head (pieces of vegetation and a small rounded pebble) and a problem with water in the oiler unit due to insufficient knockout of moisture. Will call the manufacturer tomorrow.

Tetra Tech continued operation of the submersible pump to pump water from the dewatering area to the GAC drum for treatment and then to the Area 3B excavation.

Tetra Tech began designing a trench box for application of installing GAC-filled sandbags in an maximum 8.5' trench.

Date: 19-Aug-04

Problems Encountered or Anticipated:

None.

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA stated that work can progress 10' eastward into Area 3C tomorrow chasing visual hot spots in the eastern sidewall of the Area 3B excavation. To speed the process, all overburden in Area 3C can be considered PCS and hauled directly to the landspread area (if dry) or the dewatering area (if wet).

NOAA stated that the GAC treatment trench shall be 2 feet wide by 6 feet tall for the lengths indicated on the figures (93' and 106') extending from an elevation of -1 MLLW up to +5 MLLW. Tetra Tech began designing a trench box for application of installing GAC filled sandbags in an maximum 8.5' trench.

NOAA stated that even though the CAP states that the maximum excavation depth specified is -1.0 mean lower low water (MLLW), if there is visible sheen emanating from the soil in the excavator bucket as a confirmation is about to be collected, the sample may be collected and analyzed using TLC, but NOAA will direct Tetra Tech to excavate deeper until the sheen is no longer present. Visible sheen is the driving factor for the Diesel Seep removal action. Thus, if a confirmation sample contains elevated concentrations of petroleum contaminants, as long as the person that collected the soil sample did not see sheening during his/her sampling, the removal action has been sufficient.

Samples Collected:

None.

Prepared by:

Tetra Tech EM Inc.

19-Aug-04

Date

Kelly-Ryan, Inc.

19-Aug-04

Date

Received by:

National Oceanic and Atmospheric Administration

19-Aug-04

Date

Date: 19-Aug-04

Daily Log Review Comments:

1. Equipment selection option should be corrected to show Hitachi EX350 LCH tracked excavator..
2. Column width needs expansion for cost data display on-screen.
3. Need selection item for PCS to allow for concrete, boulders and debris removed from PCS and transported to separate staging or storage area.
4. Need selection item to allow for concrete and boulders to be transported and used as clean backfill.
5. The Lukanin Bay Site should be corrected to Site 33/TPA 12c.
6. Verify personnel and equipment hours hauling clean Salt Lagoon Channel sediments to NOAA clean fill stockpile.
7. Verify Bell B25B use under Option 19F, as Equipment Hours do not match Daily Log narrative. Walter Shane Opt 21f at 6.5 Hours does not match Bell B25B at Opt 19f at 6.5 Hours.
8. Verify Eric DeReuter's time against Option 19W, including morning meetings and daily report preparation (e.g. 19a).
9. TTEMI to provide cost estimate for trench box / shoring box / coffin box fabrication, Re: GAC installation in trench at Diesel Seep.
10. TTEMI to verify 2 stockpiles at Lukanin Bay Site meet ADEC cleanup levels before use as backfill.

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

1. Equipment selection is correct; no change.
2. Noted.
3. Noted.
4. Noted.
5. Noted.
6. Noted and resolved.
7. Noted and resolved.
8. Noted and resolved.
9. Noted; costs will be addressed in next contract modification.
10. Noted; TLC results for two samples less than 100 ppm.

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 20-Aug-04 **DCQCR Version:** 1

Management on Site:

| | |
|--------------------|--|
| <i>Contractor:</i> | Eric DeRuyter (lead) Christine O'Donovan |
| <i>NOAA:</i> | David Winandy (lead) Greg Gervais Robert Aguirre |

Daily Activities (Include in this section a detailed description):

| Summary: | Soil | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 7,024 | 422 | 7,446 |
| | Backfill Volume (CY) | 1,518 | 540 | 2,058 |
| | Personnel | | | |
| | Personnel Cost | \$141,132.88 | \$5,256.23 | \$146,389.11 |
| | Personnel Hours | 1585 | 59.5 | 1644.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$112,173.23 | \$6,467.94 | \$118,641.17 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 1128.75 | 60.5 | 1189.25 |
| | Contractor Equipment Standby Hours | 0 | 0 | 0 |
| | Government Equipment Hours | 98 | 0 | 98 |
| | Other Costs | | | |
| | Sample Cost | \$28,700.41 | \$283.54 | \$28,983.95 |
| | Total Cost | \$296,895.55 | \$12,007.72 | \$308,903.27 |

NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting at 0700 (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI utilized the EX 300LC-3 excavator to excavate PCS from the top of the lined PCS stockpile at the landfill, separated out debris and rocks greater than 12 inches in size, and loaded dump trucks bound for the landspread area. KRI utilized a B25B dump truck to haul 1 load of PCS from the lined PCS stockpile at the landfill to the landspread area. KRI utilized a 773B dump truck to haul 2 loads of PCS from the lined PCS stockpile at the landfill to the landspread area.

Per NOAA's direction, KRI utilized the PC 200-6 excavator to excavate a 10' wide x 80' long "hot spot" zone in Area 3C at the Diesel Seep Site. KRI hauled 5 B25B dump truck loads of dry PCS (Area 3C overburden) directly from the Diesel Seep Site to the landspread area. KRI hauled 19 B25B dump truck loads of wet PCS from Area 3C to the dewatering area. KRI hauled 6 B25B dump truck loads of dewatered PCS from the dewatering area to the landspread area.

KRI hauled 16 773B dump truck loads of dewatered Salt Lagoon Channel sand from KRI's dewatering area to the Lukanin Bay site for clean backfill. KRI hauled 6 B25B dump truck loads of dewatered Salt Lagoon Channel sand from KRI's dewatering area to the Lukanin Bay site for clean backfill.

KRI hauled 2 773B dump truck loads of dewatered Salt Lagoon Channel sand from KRI's dewatering area to the Icehouse Lake site for clean backfill.

KRI utilized the 980 C loader to complete backfilling and compaction of backfill at the Lukanin Bay site and Icehouse Lake site.

Tetra Tech continued operation of the submersible pump to pump water from the dewatering area to the GAC drum for treatment

Date: 20-Aug-04

Problems Encountered or Anticipated:

Overexcavation of a hot spot area in the southeast corner of Area 3B down to an elevation of approximately -2.5 feet MLLW still produced soil that sheened. Due to the depth and close proximity to sloughing sidewalls NOAA called off deeper excavation and directed Tetra Tech to collect a confirmation sample: SP34-CS-017-085. Soil in the sample contained sheen.

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA stated that all overburden in Area 3C can be considered PCS and hauled directly to the landspread area (if dry) or the dewatering area (if wet).

NOAA stated that even though the CAP states that the maximum excavation depth specified is -1.0 mean lower low water (MLLW), if there is visible sheen emanating from the soil in the excavator bucket as a confirmation is about to be collected, the sample may be collected and analyzed using TLC, but NOAA will direct Tetra Tech to excavate deeper until the sheen is no longer present. Visible sheen is the driving factor for the Diesel Seep removal action. Thus, if a confirmation sample contains elevated concentrations of petroleum contaminants, as long as the person that collected the soil sample did not see sheening during his/her sampling, the removal action has been sufficient.

NOAA requested that additional work be performed at the Blubber Dump where a sump area needs to be filled in and the entire area requires "dressing up" (grading to a gradual uniform slope).

Samples Collected:

Confirmation bottom sample in the SE corner of Area 3B
SP34-CS-017-085 (black sand with sheen).

Stockpile sample of excavated sand from Area 3C
SP34-SS-015-000 (black sand with sheen).

Per NOAA's request, 2 samples from Area 3C were collected for "TLC-only" analysis.

Prepared by:

Tetra Tech EM Inc.

20-Aug-04

Date

Kelly-Ryan, Inc.

20-Aug-04

Date

Received by:

National Oceanic and Atmospheric Administration

20-Aug-04

Date

Date: 20-Aug-04

Daily Log Review Comments:

1. NOAA approved the draft design for the trench box, but did not approve construction. Still awaiting cost estimate from TTEMI on cost of construction.
2. Sand balls cemented by petroleum were excavated from eastern Area 3B and western Area 3C. Came from soil removed from below open excavation water surface.
3. Bell B25B breakdown. Had 2 dump trucks for 1-1/2 hours. No dump trucks for 3/4 hours. At one point, 3 of 6 KRI dump trucks experiencing mechanical malfunctions and out of service. NOAA obtained waiver from ADEC for use of NOAA Kenworth T800B to haul PCS without dump bed cover.
4. ADEC approved removal of site monitoring wells without formal decommissioning.
5. TDX requested to move the remainder of the crab pots from Area 3C. TDX personnel unavailable, do not work Saturday or Sunday, and will not be working on Monday due to a local TDX holiday. TDX did not give NOAA permission to move the crab pots when requested. Crab pots to be moved on Tuesday, 24 Aug 04, at the earliest.
6. TTEMI directed to take 3 samples from the Salt Lagoon and Channel sediments and analyze for both lead and select PAHs, to meet clean fill requirements for Lukanin Bay. However, TTEMI also authorized to backfill Lukanin Bay and Ice House Lake before fixed lab confirmation results have been returned.
7. Qualified operators are in short supply on-island. KRI Superintendent filling gaps by operating equipment more and more.
8. Verify hours for both Eric DeReuter and Christina O'Donovan. Neither worked 10 hours on Option 21f for PCS Stockpile Relocation, Landsreading, etc. There was project management time, time for backfill of two sites, etc.
9. CASE 980 Frontend loader used for less than 1/2 hour at Ice House Lake, so neither equipment nor operator time separately recorded.

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

1. Noted.
2. Noted.
3. Noted.
4. Noted.
5. Noted.
6. Noted.
7. Noted.
8. Noted and resolved.
9. Operator and equipment charged for Ice House Lake.

Tetra Tech EM Inc.

Date

Daily Construction Quality Control Report (DCQCR)
 Corrective Action Plan Implementation
 St. Paul, Alaska

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 21-Aug-04 **DCQCR Version:** 1

Management on Site:

| | |
|--------------------|--|
| <i>Contractor:</i> | Eric DeRuyter (lead) Christine O'Donovan |
| <i>NOAA:</i> | David Winandy (lead) Greg Gervais Robert Aguirre |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 7,446 | 789 | 8,235 |
| | Backfill Volume (CY) | 2,058 | 0 | 2,058 |
| | <i>Personnel</i> | | | |
| | Personnel Cost | \$146,389.11 | \$5,831.91 | \$152,221.03 |
| | Personnel Hours | 1644.5 | 64.5 | 1709 |
| | <i>Equipment Hours</i> | | | |
| | Equipment Cost | \$118,641.17 | \$7,910.62 | \$126,551.79 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 1189.25 | 73.5 | 1262.75 |
| | Contractor Equipment Standby Hours | 0 | 0 | 0 |
| | Government Equipment Hours | 98 | 0 | 98 |
| | <i>Other Costs</i> | | | |
| | Sample Cost | \$28,983.95 | \$749.01 | \$29,732.96 |
| | Total Cost | \$308,903.27 | \$14,491.54 | \$323,394.81 |

NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting at 0700 (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI utilized the EX 300LC-3 excavator to excavate PCS from the top of the lined PCS stockpile at the landfill, separated out debris and rocks greater than 12 inches in size, and loaded dump trucks bound for the landspread area. KRI hauled 13 truck loads (773B) of PCS from the landfill to the landspread area.

Tetra Tech continued excavation in Area 3C. KRI hauled 7 B25B truck loads of PCS from Area 3C to the dewatering area. KRI hauled 4 B25B truck loads of dry PCS from Area 3C directly to the landspread ara.

KRI hauled 11 B25B truck loads of dewatered PCS from the dewatering area to the landspread area. KRI hauled 8 773B truck loads of dewatered PCS from the dewatering area to the landspread area.

Tetra Tech continued operation of the submersible pump to transfer water from the dewatering area to the GAC drum for treatment and then to the Area 3B excavation. Still waiting for replacement parts for oil skimmer system to combat the moisture problem.

Tetra Tech assisted NOAA personnel with procuring materials required to perform a bench-scale test of the GAC treatment trench on sheen emanating from soil on groundwater/surface water.

Tetra Tech continued construction of a trench box for the application of installing GAC-filled sandbags in a maximum 8.5' trench.

Date: 21-Aug-04

Problems Encountered or Anticipated:

None.

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA stated that work shall progress further east into Area 3C than the original 10'-wide N-S swath specified yesterday. To speed the process, all overburden in Area 3C can be considered PCS and hauled directly to the landspread area (if dry) or the dewatering area (if wet).

NOAA stated that there has not been a bench-scale test performed yet to determine the feasibility of NOAA's proposed granular activated carbon (GAC) treatment trench. Tetra Tech and NOAA agreed to conduct an informal bench-scale test using columns to test the ability of the GAC to sufficiently remove sheen from Diesel Seep Soil. Equipment for bench-scale test includes: clear Geoprobe boring sleeves, Geoprobe endcaps, flexible tubing, silicone glue, cloth (to keep fines in-place), hose clamps, 5-gallon buckets, GAC, water, and contaminated Diesel Seep Site soil.

NOAA stated that future work depended upon response from the U.S. Army Corps of Engineers to delay the deadline (August 31, 2004) for working in the Salt Lagoon Channel. If the deadline gets pushed back, then Plan A is to (1) muck out the Area 3C hot spot, (2) place a boom in the excavation trapping sheen, (3) backfill a land bridge in the location planned for the eastern treatment trench, (4) continue chasing the hot spot east until the edge of Area 3C is reached, if necessary, (5) remove Areas 1 and 2 down to -1.0 MLLW and construct design sideslope, (6) backfill Area 3B, and (7) install treatment trenches.

If the deadline remains August 31, 2004, then Plan B is to (1) muck out the Area 3C hot spot, (2) place a boom in the excavation trapping sheen, (3) remove Areas 1 and 2 down to -1.0 MLLW and construct the design sideslope, (4) backfill a land bridge in the location planned for the eastern treatment trench, and (5) continue chasing the hot spot east until the edge of Area 3C is reached, if necessary.

NOAA agrees with Tetra Tech observation that the degraded diesel contamination seems to be trapped within the sediment at depth. Sheen only appears when the bottom sediment is agitated. NOAA agrees that the best approach would have been to find the clean edge of the upper-most gradient and excavate while dewatering the excavation in strips. Each strip would be backfilled before moving downgradient to the next strip. The problem, of course, would have been containing the massive quantity of water and treating it while keeping up with excavation/backfill activities.

Date: 21-Aug-04

Samples Collected:

Tetra Tech collected 4 samples of dewatered soil from the dewatering area and tested them using the paint filter test method. All 4 samples passed.

Per NOAA's request, Tetra Tech collected 9 "TLC-only" soil samples from the perimeter of the existing excavation in Areas 3B and 3C (all samples were collected from below the water level).

Tetra Tech collected 3 characterization soil samples (for clean backfill) to be analyzed for PAH (only) from the Salt Lagoon Channel sediments/sand:

- SPSL-CH-001-015 (NOAA Clean Backfill Stockpile)
- SPSL-CH-002-015 (Northern-most portion of Salt Lagoon Channel)
- SPSL-CH-003-015 (Stockpile within Salt Lagoon Channel across channel from Diesel Seep Site)

Prepared by:

Tetra Tech EM Inc.

21-Aug-04
Date

Kelly-Ryan, Inc.

21-Aug-04
Date

Received by:

National Oceanic and Atmospheric Administration

21-Aug-04
Date

Date: 21-Aug-04

Daily Log Review Comments:

1. The latest daily report version known is 08/22/2004. This needs to be converted.
2. Clean fill characterization samples were to be analyzed for both total lead and the select PAHs.
3. Additional backfill, minor debris removal and recontouring defined and awaiting in-progress contract admin before starting additional work at the Blubber Dump.
4. Excavation overfilled at Ice House Lake. Approx. 18 inches of sand to be removed and replaced by 12 inches of compacted scoria, as the City water truck uses the area and requires bearing capacity.
5. Excavation at Lukanin Bay filled and inspected. After survey by NOAA to confirm no additional contouring required, metal stakes and barrier tape are to be removed and boulders repositioned to protect against vehicle traffic.
6. Merwyn Johnson, Superintendent, pitching in to make project progress by operating equipment. KRI short on qualified operators and drivers. Need to resolve pay scale for when operating equipment and driving.
7. At the NWS Landsread Site, TTEMI to plan for relocation of access road and crushed rock to the west of current location. NOAA to place additional grade stakes on site with warning tape tied for equipment operator visibility.
8. Five (5) personnel and nine (9) pieces of equipment/vehicles do not have labor hours assigned against any one or multiple site / contract item(s). Please verify hours against the site/contract item.
9. Still awaiting trench box cost estimate before construction approval is provided.

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

1. Noted and resolved.
2. Noted. Samples will be collected.
3. Noted.
4. Noted; excess sand will be removed and replaced with scoria.
5. Noted.
6. Noted; hours correct as charged.
7. Noted.
8. Noted and resolved.
9. Noted; costs will be addressed in next contract modification.

Tetra Tech EM Inc.

Date

Daily Construction Quality Control Report (DCQCR)
 Corrective Action Plan Implementation
 St. Paul, Alaska

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 6-Sep-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|---|
| <i>Contractor:</i> | Eric DeRuyter (lead) Christine O'Donovan |
| <i>NOAA:</i> | Jim Wright (lead) Nir Barnea |

Daily Activities (Include in this section a detailed description):

| Summary: | Soil | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 11,376 | 12 | 11,388 |
| | Backfill Volume (CY) | 6,392 | 450 | 6,842 |
| | Personnel | | | |
| | Personnel Cost | \$223,064.70 | \$4,621.35 | \$227,686.04 |
| | Personnel Hours | 2,576.5 | 52.0 | 2,628.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$208,083.13 | \$6,972.75 | \$215,055.88 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 2,017.8 | 73.0 | 2,090.8 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 99.0 | 0.0 | 99.0 |
| | Other Costs | | | |
| | Sample Cost | \$31,432.95 | \$283.54 | \$31,716.49 |
| | Total Cost | \$477,469.81 | \$11,877.64 | \$489,347.45 |

NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting at 0800 (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

Tetra Tech sets up the laser survey equipment.

NOAA places stakes at the top of the shoreline slope (shoulder) for the next section of Areas 1 and 2 to be restored.

KRI sorts materials (rocks and soil) at the landfill using the EX300.

KRI backfills Areas 1 and 2 from south to north. The EX350 excavates PCS from Areas 1 and 2. The B25B truck no. 1 hauls one load of PCS from Areas 1 and 2 to the dewatering area. B25B truck no. 2 hauls eight loads of clean sand from NOAA's stockpile to backfill Areas 1 and 2 and 22 loads of rock from the rock staging area to Areas 1 and 2. A 980C loads the sand and rock from NOAA's stockpile area into B25B truck no. 2.

Note: Mr. Walter Shane (KRI) loaded one B25B truck with the 980C front-end loader. The B25B truck and the 980C front-end loader were kept running all day, so each piece of equipment incurred 10 hours.

NOAA, KRI, and Tetra Tech place a 50-foot segment of filter fabric in the next section for shoreline restoration. KRI places a layer of rock on top of the filter fabric to anchor it to the slope.

Date: 6-Sep-04

Problems Encountered or Anticipated:

An oil sheen is observed on backfill rock placed at the water's edge due to the foam in the water (the oil sorbent booms are not absorbing all of the sheen; they are merely holding it until the tide changes direction, at which time sheen seems to be emanating from the booms).

During backfill operations to the north, Tetra Tech collects a confirmation (CS) soil sample in Area 2 from approximately -1.0 foot MLLW, but the soil has a sheen and strong petroleum odor (incidentally, the CS was not collected from the petroleum-impacted soil). As a result, KRI uses the EX350 to excavate (one truck load of PCS) an additional 0.5 to 1 foot of soil/sediment from the bottom of this area (Areas 1 and 2 at approximately 120 to 130 feet south of the northern edge of Areas 1 and 2). This makes the excavation deeper than the originally planned -1.0 foot MLLW depth of excavation. However, an oil sheen was still observed to originate from sediment located at this deeper elevation. During this excavation activity (one truck load), saturated PCS dripped from the excavator bucket and back of the truck over the clean backfill that KRI had placed. NOAA and Tetra Tech decide to cease additional excavation activities in areas where removal has previously been completed down to -1.0 foot MLLW (See "Discussion with NOAA Personnel" below).

During placement of the 50-foot segment of filter fabric, the middle portion of the filter fabric develops a kink, making it difficult to straighten for placement on the slope. KRI uses the EX350 to gently place soil at the top edge of the filter fabric, which flows downward and straightens the filter fabric. For the next segment of filter fabric to be placed, a third piece of string will be attached to the center of the filter fabric so that it can be pulled straight (the current placement method uses a piece of string on each of the two western-most corners of filter fabric).

DCQCR Template Issues

- "Rock - NOAA" should be added to the Backfill dropdown menu (manually input)

Discussions With NOAA Personnel or Island Entity Personnel:

Jim Wright (NOAA) and Eric DeRuyter (Tetra Tech) agree to excavate additional material from Areas 1 and 2, because of the sheen and odor observed in the soil collected for the purpose of a confirmation sample.

Because of the difficulties encountered during removal of additional PCS from Areas 1 and 2, NOAA and Tetra Tech ultimately decide to not pursue all of the PCS in Areas 1 and 2. Mr. Wright and Nir Barnea (NOAA) tell Mr. DeRuyter that John Lindsay (NOAA) was aware that some residual contamination may be left in place at Areas 1 and 2.

Date: 6-Sep-04

Samples Collected:

Tetra Tech collected the following two confirmation samples from Areas 1 and 2:
SP34-CS-020-080
SP34-CS-021-035

The confirmation samples were collected from the bucket of the excavator. Sample SP34-CS-020-080 was collected from Area 2 (80 feet south of the northern edge of Area 2) at an elevation of approximately -1.0 foot MLLW. Sample SP34-CS-021-035 was collected from Area 1 (80 feet south of the northern edge of Area 1) at an elevation of approximately -1.0 foot MLLW. The samples will be analyzed for BTEX, GRO, DRO, and RRO at a fixed laboratory. The samples will also be analyzed using TLC.

Prepared by:

Tetra Tech EM Inc.

6-Sep-04
Date

Kelly-Ryan, Inc.

6-Sep-04
Date

Received by:

National Oceanic and Atmospheric Administration

6-Sep-04
Date

Daily Log Review Comments:

Edit the following sentence as shown:

Mr. Wright and Nir Barnea (NOAA) tell Mr. DeRuyter that John Lindsay (NOAA) was aware that some residual contamination may be left in place at Areas 1 and 2, ~~and that additional removal actions might be necessary in the future.~~

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

Noted and resolved.

Tetra Tech EM Inc.

Date

Daily Construction Quality Control Report (DCQCR)
 Corrective Action Plan Implementation
 St. Paul, Alaska

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 7-Sep-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|---|
| <i>Contractor:</i> | Eric DeRuyter (lead) Christine O'Donovan |
| <i>NOAA:</i> | Jim Wright (lead) Nir Barnea |

Daily Activities (Include in this section a detailed description):

| Summary: | Soil | Previous | Today | YTD |
|----------|------------------------------------|---------------------|-------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 11,388 | 12 | 11,400 |
| | Backfill Volume (CY) | 6,842 | 195 | 7,037 |
| | Personnel | | | |
| | Personnel Cost | \$227,686.04 | \$3,757.46 | \$231,443.51 |
| | Personnel Hours | 2,628.5 | 43.0 | 2,671.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$215,055.88 | \$5,614.55 | \$220,670.43 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 2,090.8 | 66.0 | 2,156.8 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 99.0 | 0.0 | 99.0 |
| | Other Costs | | | |
| | Sample Cost | \$31,716.49 | \$141.77 | \$31,858.26 |
| | Total Cost | \$489,347.45 | \$9,513.79 | \$498,861.24 |

NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting at 0800 (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

Tetra Tech sets up the laser survey equipment.

NOAA places stakes at the top of the shoreline slope (shoulder) for the next section of Areas 1 and 2 to be restored.

KRI sorts materials (rocks and soil) at the landfill using the EX300.

KRI continues to place a layer of rounded rock on top of the section of filter fabric placed the previous day.

NOAA, KRI, and Tetra Tech place a 50-foot segment of filter fabric in the next section for shoreline restoration. KRI places a layer of rock on top of the filter fabric to anchor it to the slope.

The EX350 excavates PCS from Areas 1 and 2. The B25B truck hauls one load of PCS from Areas 1 and 2 to the dewatering area. The B25B truck hauls four loads of angular rock from NOAA's rock staging area to Areas 1 and 2 prior to filter fabric placement. The B25B truck hauls nine loads of rounded rock from NOAA's rock staging area to Areas 1 and 2 after filter fabric placement. A 980C loads the rock from NOAA's stockpile area into the B25B truck.

Note: Mr. Walter Shane (KRI) loaded one B25B truck with the 980C front-end loader. The B25B truck and the 980C front-end loader were kept running all day, so each piece of equipment incurred 10 hours.

NOAA and Tetra Tech place a segment of boom across the channel to partition the newest section of completed shoreline.

NOAA, KRI, and Tetra Tech go to the Telegraph Hill and Polovina Hill quarries to see the topsoil and scoria available for use at the Diesel Seep Site.

Date: 7-Sep-04

Problems Encountered or Anticipated:

An angry Tanadgusix Corporation (TDX) representative stated Merwyn Johnson (KRI) that KRI does not have permission to backfill or even be present at the Ice House Lake Site. The TDX representative also stated KRI needs to remove a trash pile at Ice House Lake that was present at the site prior to any work being performed at that site. In addition, the TDX representative stated KRI is NOAA's contractor, and that NOAA is responsible for getting permission to be on-site. John Lindsay (NOAA) called TDX and resolved the issue.

DCQCR Template Issues

- "Rock - NOAA" should be added to the Backfill dropdown menu (manually input)

Discussions With NOAA Personnel or Island Entity Personnel:

None.

Samples Collected:

Tetra Tech collected the following confirmation sample from Area 1:
SP34-CS-022-035

The confirmation sample was collected from the excavator bucket. Sample SP34-CS-022-035 was collected from Area 1 just north of the last completed segment at an elevation of approximately -1.0 foot MLLW. The sample will be analyzed for BTEX, GRO, DRO, and RRO at a fixed laboratory. The sample will also be analyzed using TLC.

Prepared by:

Tetra Tech EM Inc.

7-Sep-04
Date

Kelly-Ryan, Inc.

7-Sep-04
Date

Received by:

National Oceanic and Atmospheric Administration

7-Sep-04
Date

Date: 7-Sep-04

Daily Log Review Comments:

No comments

Jim Wright

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

Not applicable.

Tetra Tech EM Inc.

Date

Daily Construction Quality Control Report (DCQCR)
 Corrective Action Plan Implementation
 St. Paul, Alaska

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 8-Sep-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|---|
| <i>Contractor:</i> | Eric DeRuyter (lead) Christine O'Donovan |
| <i>NOAA:</i> | Jim Wright (lead) Nir Barnea |

Daily Activities (Include in this section a detailed description):

| Summary: | Soil | Previous | Today | YTD |
|----------|------------------------------------|---------------------|-------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 11,400 | 288 | 11,688 |
| | Backfill Volume (CY) | 7,037 | 245 | 7,282 |
| | Personnel | | | |
| | Personnel Cost | \$231,443.51 | \$3,979.02 | \$235,422.53 |
| | Personnel Hours | 2,671.5 | 45.5 | 2,717.0 |
| | Equipment Hours | | | |
| | Equipment Cost | \$220,670.43 | \$5,050.65 | \$225,721.08 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 2,156.8 | 52.5 | 2,209.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 99.0 | 0.0 | 99.0 |
| | Other Costs | | | |
| | Sample Cost | \$31,858.26 | \$283.54 | \$32,141.80 |
| | Total Cost | \$498,861.24 | \$9,313.21 | \$508,174.45 |

NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting at 0800 (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

Tetra Tech sets up the laser survey equipment.

KRI sorts materials (rocks and soil) at the landfill using the EX300.

NOAA re-establishes the boom that was accidentally unmoored during the excavation of Area 1 on the previous day.

Tetra Tech ships via U.S. Postal Service Express Mail one cooler of samples to Friedman & Bruya, Inc. for laboratory analyses. Tetra Tech also returned the original malfunctioning manifold for the oil-water skimmer pump to Elastec (see Problems Encountered or Anticipated).

Tetra Tech disposes of excess soil sample volume at the landfill (for soil samples that have already been analyzed).

The EX350 excavates PCS and places sand and rock backfill at the southern portions of Areas 1 and 2. The B25B truck hauls 24 loads of PCS from Areas 1 and 2 to the dewatering area. The B25B truck hauls four loads of angular rock from NOAA's rock staging area to Areas 1 and 2 prior to filter fabric placement. The B25B truck hauls four loads of sand backfill from NOAA's rock staging area to Areas 1 and 2. A 980C loads the rock from NOAA's stockpile area into the B25B truck.

KRI uses the 992C excavator to load three 773 trucks with topsoil at Telegraph Hill to the NOAA staging area. The topsoil will be used for shoreline restoration activities. Five truckloads are hauled.

Date: 8-Sep-04

Problems Encountered or Anticipated:

An oil sheen is observed on backfill rock placed at the water's edge due to the foam in the water (the oil sorbent booms are not absorbing all of the sheen; they are merely holding it until the tide changes direction, at which time sheen seems to be emanating from the booms). This has been observed for the past several days. Jim Wright (NOAA) wants to add a third boom--the 200-linear-foot (LF) yellow rigid containment boom that Tetra Tech ordered 2 weeks ago. NOAA and Tetra Tech find a 100-LF segment of boom, but not the new 200-LF boom. Tetra Tech calls Alaska Cargo Express (ACE) and Northern Air Cargo (NAC), and learn that the new boom has not yet arrived on St. Paul Island.

NOAA's pressure washer does not work. Tetra Tech observes a significant crack in the pump manifold. Because of the inoperable pressure washer, KRI cannot decontaminate the bed of the B25B truck, which is about to change from hauling PCS to clean backfill. In order to decontaminate the B25B, KRI loads the dirty truck with clean sand that is then dumped into the dewatering area. Mr. Jim Wright approves of the procedure. KRI's mechanic attempts to repair the pressure washer. He notices that the valve for soap intake has been opened, which cuts the pressure in half. He closes the soap valve and pressure is restored.

North Star Truck Rentals contacts Tetra Tech and states the rental truck must be returned by 1400 today. Tetra Tech inquired about a truck rental from BSE, but Julie Shane states that BSE has no trucks available. Tetra Tech returned the truck to North Star Truck Rentals, and NOAA allows Tetra Tech to use the service truck.

DCQCR Template Issues

- "Rock - NOAA" should be added to the Backfill dropdown menu (manually input)

Discussions With NOAA Personnel or Island Entity Personnel:

Jim Wright (NOAA) states that he would like to try the U.S. Coast Guard's recommendation of using dog food as an absorbant for the oil sheen. NOAA and Tetra Tech collect a bucket of water and oil sheen from the Salt Lagoon Channel and add a handful of dog food. The oil sheen is captured and absorbed by the dog food.

Samples Collected:

Tetra Tech collected the following two confirmation samples from Areas 1 and 2:

- SP34-CS-023-035
- SP34-CS-024-060

The confirmation samples were collected from the bucket of the excavator. Sample SP34-CS-023-080 was collected from Area 1 at an elevation of approximately -1.0 foot MLLW. Sample SP34-CS-024-060 was collected from the sidewall of Area 1 just below groundwater level. The samples will be analyzed for BTEX, GRO, DRO, and RRO at a fixed laboratory.

Tetra Tech collected six samples from the PCS dewatering area to conduct paint filter tests. The soil/sediment sample was excavated from Areas 1 and 2 on September 5 through 7, 2004. Four samples passed the paint filter test and two samples, collected from saturated soil at the bottom of the stockpile failed the paint filter test.

Prepared by:

Tetra Tech EM Inc.

8-Sep-04
Date

Kelly-Ryan, Inc.

8-Sep-04
Date

Received by:

National Oceanic and Atmospheric Administration

8-Sep-04
Date

Date: 8-Sep-04

Daily Log Review Comments:

No comments.

Jim Wright

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

Not applicable.

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 9-Sep-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|--|
| <i>Contractor:</i> | Eric DeRuyter (lead) Christine O'Donovan Brian Croft |
| <i>NOAA:</i> | Jim Wright (lead) Nir Barnea |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 11,688 | 598 | 12,286 |
| | Backfill Volume (CY) | 7,282 | 345 | 7,627 |
| | <i>Personnel</i> | | | |
| | Personnel Cost | \$235,422.53 | \$8,064.07 | \$243,486.60 |
| | Personnel Hours | 2,717.0 | 93.5 | 2,810.5 |
| | <i>Equipment Hours</i> | | | |
| | Equipment Cost | \$225,721.08 | \$12,412.51 | \$238,133.60 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 2,209.3 | 106.0 | 2,315.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 99.0 | 0.0 | 99.0 |
| | <i>Other Costs</i> | | | |
| | Sample Cost | \$32,141.80 | \$0.00 | \$32,141.80 |
| | Total Cost | \$508,174.45 | \$20,476.58 | \$528,651.03 |

NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting at 0800 (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

Tetra Tech sets up the laser survey equipment.

KRI sorts materials (rocks and soil) at the landfill using the EX300.

The 773 hauls 10 truckloads of PCS from the dewatering area to the landspreading area.

B25B trucks haul 24 truckloads of PCS and 5 truckloads of petroleum-impacted rock from the landfill to the landspreading area.

The EX350 excavates PCS and places sand and rock backfill at the southern portions of Areas 1 and 2. The B25B truck hauls 12 loads of angular rock from NOAA's rock staging area to Areas 1 and 2 prior to filter fabric placement. The B25B truck hauls 4 loads of rounded rock (cobble) from NOAA's rock staging area to Areas 1 and 2 after filter fabric placement. The B25B truck hauls 7 loads of sand backfill from NOAA's rock staging area to Areas 1 and 2. The 980C loads the rock from NOAA's stockpile area into the B25B truck.

Note: Mr. Walter Shane (KRI) loaded one B25B truck with the 980C front-end loader. The B25B truck and the 980C front-end loader were kept running all day, so each piece of equipment incurred 10 hours.

NOAA, KRI, and Tetra Tech place a segment of filter fabric in the next section for shoreline restoration. KRI places a layer of rock on top of the filter fabric to anchor it to the slope.

Tetra Tech operates the oil-water skimmer at the dewatering area where the oil sheen is visible.

Brian Croft (Tetra Tech) arrives on St. Paul Island.

Date: 9-Sep-04

Problems Encountered or Anticipated:

NOAA and Tetra Tech conduct a second trial using dog food as an absorbant for the oil sheen. NOAA and Tetra Tech collect a bucket of water and oil sheen from the Salt Lagoon Channel and add a handful of dog food. The oil sheen is broken into smaller portions but is not captured or absorbed by the dog food.

A tooth broke off the loader bucket, and backfilling activities temporarily stop. The tooth is repaired and work resumes.

Road repairs are made using the 16G grader. Time is allocated to Option 21f, because road degradation likely is due to trucks hauling to the NWS landspreading site.

DCQCR Template Issues

- "Rock - NOAA" should be added to the Backfill dropdown menu (manually input)
- The rock listed above should be broken down into "angular" and "rounded-cobble" rock

Discussions With NOAA Personnel or Island Entity Personnel:

Mike Baldwin (KRI) informs Eric DeRuyter (Tetra Tech) that approximately five more 773 truckloads of angular rock will be needed to complete the shoreline restoration activities.

Jim Wright (NOAA), and Eric DeRuyter, Christine O'Donovan, and Brian Croft (Tetra Tech) meet at the Diesel Seep Site to discuss the Area 3C excavation. Tetra Tech suggests excavating potholes at the eastern edge of Area 3C in the vicinity of previous sampling locations that contained elevated concentrations of petroleum hydrocarbons in soil to determine the boundary of the petroleum-impacted soil (edge of the excavation). NOAA and Tetra Tech also discuss dewatering the excavation and excavating in strips to prevent water from infiltrating into the excavation. Mr. Wright states that he will discuss these proposed methods with John Lindsay and Greg Gervais (NOAA) on Friday.

Samples Collected:

None.

Prepared by:

Tetra Tech EM Inc.

9-Sep-04
Date

Kelly-Ryan, Inc.

9-Sep-04
Date

Received by:

National Oceanic and Atmospheric Administration

9-Sep-04
Date

Date: 9-Sep-04

Daily Log Review Comments:

- (1) It is incorrectly stated that PCS impacted rocks were hauled from Tract 42 to the NWS site. Upon questioning Brian Croft today (9/13) he states that no rocks have been hauled from Tract 42 to the NWS site. In any case, no rocks should be hauled from Tract 42 to the NWS site.
- (2) Why was there such a low production rate with the material hauling at Tract 42? The report lists 19 total hours for two B25B dump trucks but they only hauled 29 loads to the landspread area. They should be able to haul at least 2 loads per hour per truck, so I would've expected 40+ loads. We spent about \$7800 this day to relocate 348 CY. This works out to over \$22k per 1000 CY, which is higher than it should be.
- (3) Hauling PCS from the dewatering cell to the landspread area should be charged to an appropriate item in Option 19, not Option 21f.
- 4) Please note that Jim Wright did not agree that the second dog food absorbing test failed. The bucket initially had a 100% coverage with an oil sheen, and after addition of the dog food, coverage was limited to 5 or 10%.

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

- (1) The daily report incorrectly stated that five B25B truckloads of sorted rocks were relocated from Tract 42 to the land spreading area; the rocks were relocated within Tract 42.
- (2) Tetra Tech and KRI are working with NOAA to identify the root cause of the lower-than-anticipated production rate. When the reason(s) is identified, it will be communicated to NOAA, and corrective action will be taken.
- (3) Noted; hours have been reallocated.
- (4) Noted.

Tetra Tech EM Inc.

Date

Daily Construction Quality Control Report (DCQCR)
 Corrective Action Plan Implementation
 St. Paul, Alaska

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 10-Sep-04 DCQCR Version: 3

Management on Site:

| | |
|--------------------|--|
| <i>Contractor:</i> | Eric DeRuyter (lead) Christine O'Donovan Brian Croft |
| <i>NOAA:</i> | Jim Wright (lead) Nir Barnea |

| Daily Activities (Include in this section a detailed description): | | | | |
|---|------------------------------------|---------------------|--------------------|---------------------|
| Summary: | <i>Soil</i> | Previous | Today | YTD |
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 12,286 | 588 | 12,874 |
| | Backfill Volume (CY) | 7,627 | 270 | 7,897 |
| | Personnel | | | |
| | Personnel Cost | \$243,486.60 | \$8,857.01 | \$252,343.61 |
| | Personnel Hours | 2,810.5 | 103.0 | 2,913.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$238,133.60 | \$8,913.58 | \$247,047.18 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 2,315.3 | 70.0 | 2,385.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 99.0 | 0.0 | 99.0 |
| | Other Costs | | | |
| | Sample Cost | \$32,141.80 | \$141.77 | \$32,283.57 |
| | Total Cost | \$528,651.03 | \$17,912.37 | \$546,563.40 |

NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting at 0800 (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI sorts materials (rocks and soil) at the landfill using the EX300.

KRI hauls 45 B25B truckloads of PCS from the landfill to the landspreading area.

The EX350 excavates PCS and places sand and rock backfill in the final section at the southern portions of Areas 1 and 2; the EX350 was removed from the site for barge loading and the PC200 was used for the remainder of the day. The B25B truck hauls 4 loads of PCS from the southern portions of Areas 1 and 2 to NOAA's dewatering cell. The B25B truck hauls 7 loads of angular rock from NOAA's rock staging area to Areas 1 and 2 prior to filter fabric placement. The B25B truck hauls 9 loads of rounded (cobble) rock from NOAA's rock staging area to Areas 1 and 2 after filter fabric placement. The B25B truck hauls 2 loads of sand backfill from NOAA's rock staging area to Areas 1 and 2. The 980C loads the rock and sand from NOAA's stockpile area into the B25B truck.

Note: Mr. Walter Shane (KRI) loaded one B25B truck with the 980C front-end loader. The B25B truck and the 980C front-end loader were kept running all day, so each piece of equipment incurred 10 hours.

Per NOAA, KRI used the B25B truck to haul 3 loads of metal and trash debris from the site to the half-high container staged behind the Garco Building.

NOAA, KRI, and Tetra Tech placed a segment of filter fabric in the final section for shoreline restoration. KRI places a layer of rock on top of the filter fabric to anchor it to the slope.

Tetra Tech operates the oil-water skimmer at the dewatering area where the oil sheen is visible.

Date: 10-Sep-04

Problems Encountered or Anticipated:

The crab pots near the north portion of Area 3C will need to be moved prior to excavation activities there. NOAA stated that TDX (owner of the pots) has been requested to relocate the pots.

DCQCR Issues:

- No selections are available for the 3 loads of metal and debris that were hauled and placed in the half-high container behind the building (manually input into new table on "PCS, Backfill" worksheet.
- No selection available for angular rock (manually input).
- No selection available for rounded rock/cobbles (manually input).

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA and Tetra Tech discussed future activities to be conducted at Area 3C; it was agreed that several test pits would be excavated to try to determine more accurate boundaries of contamination on the north, east, and south sides of this area.

NOAA requested that Tetra Tech have KRI install the new yellow containment boom in the channel and remove the existing boom (silt and sorbent) from the channel. In addition, NOAA is working to purchase additional sorbent boom to address sheen present on the channel surface.

Samples Collected:

One confirmation sample was collected from the south end of Area 2 at a depth of approximately -1 MLLW:
SP34-CS-025-090

Prepared by:

Tetra Tech EM Inc.

Date 10-Sep-04

Kelly-Ryan, Inc.

Date 10-Sep-04

Received by:

National Oceanic and Atmospheric Administration

Date 10-Sep-04

Date: 10-Sep-04

Daily Log Review Comments:

No comments.
Jim W.

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

Not applicable.

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 11-Sep-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|---------------------------------|
| <i>Contractor:</i> | Brian Croft (lead) |
| <i>NOAA:</i> | Jim Wright (lead) Nir Barnea |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|-------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 12,874 | 96 | 12,970 |
| | Backfill Volume (CY) | 7,897 | 15 | 7,912 |
| | Personnel | | | |
| | Personnel Cost | \$252,343.61 | \$3,301.02 | \$255,644.63 |
| | Personnel Hours | 2,913.5 | 37.0 | 2,950.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$247,047.18 | \$4,371.26 | \$251,418.44 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 2,385.3 | 38.0 | 2,423.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 99.0 | 0.0 | 99.0 |
| | Other Costs | | | |
| | Sample Cost | \$32,283.57 | \$0.00 | \$32,283.57 |
| | Total Cost | \$546,563.40 | \$7,672.27 | \$554,235.67 |

NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting at 0800 (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI sorts materials (rocks and soil) at the landfill using the EX300.

The B25B truck hauled 1 load of rounded rock (cobbles) from NOAA's rock staging area to Areas 1 and 2. The PC200 finished placing rounded rock backfill in the final section at the southern portions of Areas 1 and 2.

KRI removed PCS from the temporary road along the south and west sides of the dewatering cell; during previous excavation activities in Areas 1 and 2, saturated PCS was unavoidably spilled from the trucks, causing minor contamination along the roadway. The B25B truck hauled 8 loads of PCS from this area to the dewatering cell.

A representative of TDX arrived onsite to move the crab pots from Area 3C. The pots were relocated to an area near the main road.

KRI excavated 11 test pits along the boundaries of Areas 3C and 3D in an attempt to delineate the contamination boundaries of these areas. Each test pit was excavated to approximately 1 foot below the water table to inspect for signs of sheening and contamination. Contamination was noted outside the currently mapped boundaries along the north side of Area 3D and near the southeast corner of Area 3C. Eight TLC samples were collected and analyzed from the bottom of the test pits. Based on discussions with NOAA, test pits deeper than 3 to 4 feet were backfilled with clean sand; excavated soil was left beside each pit pending TLC results.

KRI personnel installed the new yellow containment boom in the channel; the existing sorbent and silt booms were removed and hauled to the dewatering cell for staging. Additional posts were installed to aid in securing the boom when the channel block is removed and water currents increase.

The KRI mechanic removed the pressure manifold from the Hotsy pressure washer so that it can be returned to the manufacturer for replacement.

Date: 11-Sep-04

Problems Encountered or Anticipated:

DCQCR Issues

- The "PCS, Backfill" dropdown menu does not include a selection for round rock (manually input).

Discussions With NOAA Personnel or Island Entity Personnel:

None.

Samples Collected:

Eight TLC samples were collected from the 11 test pits excavated at Areas 3C and 3D.

Prepared by:

Tetra Tech EM Inc.

11-Sep-04

Date

Kelly-Ryan, Inc.

11-Sep-04

Date

Received by:

National Oceanic and Atmospheric Administration

11-Sep-04

Date

Date: 11-Sep-04

Daily Log Review Comments:

No comments
Jim Wright

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

Not applicable.

Tetra Tech EM Inc.

Date

Daily Construction Quality Control Report (DCQCR)
 Corrective Action Plan Implementation
 St. Paul, Alaska

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 13-Sep-04 DCQCR Version: 3

Management on Site:

| | |
|--------------------|--------------------------------------|
| <i>Contractor:</i> | Brian Croft (lead) Alex Globerson |
| <i>NOAA:</i> | Jim Wright (lead) |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 12,970 | 600 | 13,570 |
| | Backfill Volume (CY) | 7,912 | 105 | 8,017 |
| | Personnel | | | |
| | Personnel Cost | \$255,644.63 | \$6,492.97 | \$262,137.60 |
| | Personnel Hours | 2,950.5 | 75.0 | 3,025.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$251,418.44 | \$8,214.14 | \$259,632.58 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 2,423.3 | 77.0 | 2,500.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 99.0 | 0.0 | 99.0 |
| | Other Costs | | | |
| | Sample Cost | \$32,283.57 | \$0.00 | \$32,283.57 |
| | Total Cost | \$554,235.67 | \$14,707.11 | \$568,942.78 |

NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting at 0800 (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI sorted materials (rocks and soil) at the landfill using the EX300. The B25B trucks hauled 26 loads of PCS from Tract 42 to the NWS landspreading area.

The PC200 loaded PCS from the dewatering cell (primarily associated with previous activities at Areas 1 and 2). The B25B trucks hauled 24 loads of PCS from the dewatering cell to the NWS landspreading area.

KRI, under its U.S. Army Corps of Engineers contract, removed the plug from the Salt Lagoon channel this morning; as a result, current flow through the channel increased significantly, causing oil sheen to be released from within the containment boom installed at the Diesel Seep site. NOAA and Tetra Tech worked to remove oily foam and debris from the south end of the containment boom and applied sorbent material to remaining sheen within the boom. However, strong current flow mobilized sheen from the sediment that was disturbed during previous excavation activities, and the sheen was forced under the containment boom. Based on conversations among NOAA representatives, it was decided that the sheen conditions will likely continue for some time, and continued efforts will be made to control the sheen to the maximum extent possible. Additional sorbent boom is due on-island and will be installed inside the containment boom upon receipt.

KRI excavated four additional test pits at Area 3C to further investigate sheen and contamination. Because the B25B trucks were needed to haul PCS from Tract 42 to the NWS landspreading area, the 980C loader transported 10 bucket loads of clean overburden to a staging area during test pit activities. Evidence of contamination was noted in each test pit, although there is some discrepancy over the need for excavation in those areas (see Discussions With NOAA Personnel, below). The 980C loader hauled 11 loads of clean sand to backfill the test pits.

Date: 13-Sep-04

Daily Activities (Continued):

KRI mechanic re-installed the pressure manifold for the Hotsy pressure washer to allow the decontamination of equipment for test pit activities at Area 3C.

Alex Globerson (Tetra Tech) arrived on-island yesterday to provide oversight for the PCS relocation activities at Tract 42 and the NWS landspreading area.

Problems Encountered or Anticipated:

DCQCR Issues

- Alex Globerson (Tetra Tech) needs to be added to the personnel list (manually input).

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA and Tetra Tech discussed actions to be taken regarding sheen being released periodically from the containment boom at the Diesel Seep site. Based on discussions, personnel will work to the maximum extent possible to contain, absorb, and remove sheen. Additional sorbent boom, due on-island tomorrow, will be installed immediately. However, it is recognized that this is a problem that likely will continue for some time, because current flow in the Salt Lagoon Channel has increased significantly as a result of the channel plug removal, and increased flow rate through the channel is apparently mobilizing sheen from the sediment that was disturbed during excavation activities along the shoreline.

NOAA and Tetra Tech discussed the need for the Hotsy pressure washer during test pit activities and future excavation of clean overburden from Area 3C. NOAA decided that a new manifold would be ordered because of the limited cost effect, and that KRI should re-install the pressure manifold and continue to use the pressure washer.

NOAA and Tetra Tech discussed future excavation activities at Area 3C and the need to clearly outline a "plan of attack". It was agreed that a meeting would be held at 0700 tomorrow to further discuss this issue with NOAA personnel (Greg Gervais and John Lindsay).

Samples Collected:

None.

Prepared by:

Tetra Tech EM Inc.

13-Sep-04
Date

Kelly-Ryan, Inc.

13-Sep-04
Date

Received by:

National Oceanic and Atmospheric Administration

13-Sep-04
Date

Date: 13-Sep-04

Daily Log Review Comments:

No comments
Jim Wright

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

Not applicable.

Tetra Tech EM Inc.

Date

Daily Construction Quality Control Report (DCQCR)
 Corrective Action Plan Implementation
 St. Paul, Alaska

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 14-Sep-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|-------------------------------------|
| <i>Contractor:</i> | Brian Croft(lead) Alex Globerson |
| <i>NOAA:</i> | Jim Wright (lead) |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|-------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 13,570 | 198 | 13,768 |
| | Backfill Volume (CY) | 8,017 | 905 | 8,922 |
| | Personnel | | | |
| | Personnel Cost | \$262,137.60 | \$4,524.36 | \$266,661.96 |
| | Personnel Hours | 3,025.5 | 53.0 | 3,078.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$259,632.58 | \$4,774.20 | \$264,406.77 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 2,500.3 | 56.0 | 2,556.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 99.0 | 0.0 | 99.0 |
| | Other Costs | | | |
| | Sample Cost | \$32,283.57 | \$148.04 | \$32,431.61 |
| | Total Cost | \$568,942.78 | \$9,446.59 | \$578,389.37 |

At 0700, NOAA and Tetra Tech EM, Inc. (Tetra Tech) discussed issues at Area 3C. Discussions are summarized below in the Discussions with NOAA Personnel section.

NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting at 0800 (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI sorted materials (rocks and soil) at the landfill using the EX300. One B25B truck hauled 14 loads of PCS from Tract 42 to the NWS landspreading area. Operations at the landfill were halted after lunch. See Problems Encountered for discussion.

The 980C loader moved 6 buckets of PCS excavated from test pits the previous day from Area 3C to the dewatering cell.

The 980C loader moved 87 loads of clean sand from the backfill staging area to backfill the excavation at Area 3B; the westernmost portion of the excavation was left open to allow discharge of water from the treatment system. The loader also moved 94 loads of clean overburden from Area 3C to the staging area.

KRI excavated clean overburden from Area 3C extending from the backfill placed today eastward to the line of test pits excavated today. Overburden was removed to a depth of approximately +5 MLLW.

Date: 14-Sep-04

Problems Encountered or Anticipated:

Merwyn Johnson (KRI) stated that two Bell trucks are down. The one available truck worked at the landfill for a half day hauling PCS to the land spreading site. *After Jim Wright (NOAA) expressed a concern that the desired cost efficiency could not be maintained loading PCS at the landfill with only one truck,* Mr. Johnson shut down the landfill operations after lunch and directed KRI personnel to work elsewhere until repairs can be made to the equipment.

DCQCR Template Issues

- Option 19O (Removal of Additional PCS from Site) is not included in the dropdown menus (manually input).
- Alex Globerson is not included in the Personnel dropdown menu (manually input).

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA and Tetra Tech discussed future excavation activities at Area 3C. It was agreed that a portion of the open excavation would be backfilled to create a "dam" to block groundwater; the westernmost portion would be left open to allow future discharge of water from the treatment system. Clean overburden will be removed from Area 3C based on test pit excavations, and PCS will then be excavated in small 20-foot sections, which will be backfilled before opening another section to minimize the impact of groundwater entering the excavation. Each section will be dewatered to allow visual inspections of soil conditions, and excavations will be conducted to remove PCS to the maximum extent practicable.

By e-mail, Greg Gervais (NOAA) has directed that all excavation work dating back to September 11, 2004, be cost-allocated to Option 19o. Daily reports back to that date will be revised to reflect this issue.

Samples Collected:

One stockpile sample was collected from the dewatering cell (soil excavated from Areas 1 and 2):
SP34-SS-023-015

One characterization sample was collected from clean overburden that was removed from Area 3C during test pit activities:
SP34-CH-024-015

Prepared by:

Tetra Tech EM Inc.

14-Sep-04

Date

Kelly-Ryan, Inc.

14-Sep-04

Date

Received by:

National Oceanic and Atmospheric Administration

14-Sep-04

Date

Date: 14-Sep-04

Daily Log Review Comments:

IN the problems section, insert the following:
After Jim Wright expressed a concern that the desired cost efficiency could not be maintained loading PCS at the landfill with only one truck, Mr. Johnson shut down the landfill operations after lunch and directed KRI personnel to work elsewhere until repairs can be made to the equipment.

Jim Wright

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

Comment noted. Revision is presented in italicized text.

Tetra Tech EM Inc.

Date

Daily Construction Quality Control Report (DCQCR)
 Corrective Action Plan Implementation
 St. Paul, Alaska

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 18-Sep-04 DCQCR Version: 3

Management on Site:

| | |
|-------------|--|
| Contractor: | Brian Croft (lead) Alex Globerson |
| NOAA: | David B. Winandy (lead) Paula Souik |

Daily Activities (Include in this section a detailed description):

| Summary: | Soil | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 15,505 | 740 | 16,245 |
| | Backfill Volume (CY) | 9,632 | 1,135 | 10,767 |
| | Personnel | | | |
| | Personnel Cost | \$280,103.67 | \$5,949.10 | \$286,052.77 |
| | Personnel Hours | 3,237.5 | 68.5 | 3,306.0 |
| | Equipment Hours | | | |
| | Equipment Cost | \$280,518.20 | \$11,033.03 | \$291,551.23 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 2,669.3 | 62.0 | 2,731.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 109.0 | 10.0 | 119.0 |
| | Other Costs | | | |
| | Sample Cost | \$33,707.54 | \$283.54 | \$33,991.08 |
| | Total Cost | \$609,218.45 | \$17,265.67 | \$626,484.11 |

At 0800, NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI continues removing PCS from Area 3C. Additional short trench sections were excavated north to south along the same line as the excavations completed on the previous day. Depths of excavations reached approximately -3 to -4 MLLW. Each section was backfilled with rock (leftover from shoreline restoration at Areas 1 and 2) and clean overburden from the backfill staging area. The EX350 excavator loaded PCS from Area 3C. One B25B truck hauled 36 loads of PCS from Area 3C to the dewatering cell. The 980C loader moved 72 buckets of clean overburden from the backfill staging area to backfill the excavations at Area 3C.

The EX300 excavator loaded PCS from Tract 42. Two 773 trucks hauled a total of 8 loads of PCS from Tract 42 to the National Weather Service (NWS) landspreading site.

Tetra Tech continued to operate the large diaphragm pump to remove water from the dewatering cell that did not have a visible sheen. The water was pumped into the open excavation at Area 3B.

Per discussions between NOAA, KRI, and Tetra Tech on the previous day, KRI loaded and hauled clean backfill material from the NOAA-owned portion of Telegraph Hill to the backfill staging area. The D-9L bulldozer was used to push material down to the bottom of the slope, and the 992C loader was used to load the material into two 773 trucks. The two 773 trucks hauled a total of 31 loads of backfill (scoria mixture) from Telegraph Hill to the backfill staging area.

Problems Encountered or Anticipated:

None.

Discussions With NOAA Personnel or Island Entity Personnel:

None.

Date: 18-Sep-04

Samples Collected:

Two confirmation samples were collected from the bottom of the excavation at Area 3C at a depth of approximately -4 MLLW:
SP34-CS-032-100
SP34-CS-033-100

Five soil samples were collected from PCS at the dewatering cell to conduct paint filter tests.

Prepared by:

Tetra Tech EM Inc.

Date 18-Sep-04

Kelly-Ryan, Inc.

Date 18-Sep-04

Received by:

National Oceanic and Atmospheric Administration

Date 18-Sep-04

Date: 18-Sep-04

Daily Log Review Comments:

1. "Previous" total costs do not correctly summarize.
2. Labor hours at Telegraph Hill Quarry for loading and moving clean fill totals 13.0 hours (Merwyn Johnson and Ray Hill) and Equipment Time is 11.5 hours (CAT 992 and D9-L). Please resolve.
3. Alex Globerson was driving the NOAA Ford F250 Service Truck with Crane.

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

1. Noted and resolved.
2. 1.5 hours of Merwyn Johnson's time have been removed from Option 19o on the Personnel sheet.
3. Noted; "Service Truck" has been added to Equipment sheet.

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 20-Sep-04 **DCQCR Version:** 1

Management on Site:

| | |
|--------------------|--|
| <i>Contractor:</i> | Brian Croft (lead) Alex Globerson |
| <i>NOAA:</i> | David B. Winandy (lead) Paula Souik |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 16,245 | 1,505 | 17,750 |
| | Backfill Volume (CY) | 10,767 | 145 | 10,912 |
| | Personnel | | | |
| | Personnel Cost | \$286,052.77 | \$6,773.82 | \$292,826.60 |
| | Personnel Hours | 3,306.0 | 78.5 | 3,384.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$291,551.23 | \$10,854.19 | \$302,405.42 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 2,731.3 | 80.0 | 2,811.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 119.0 | 20.0 | 139.0 |
| | Other Costs | | | |
| | Sample Cost | \$33,991.08 | \$1,415.20 | \$35,406.28 |
| | Total Cost | \$626,484.11 | \$19,043.22 | \$645,527.33 |

At 0800, NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI continued removing PCS from Area 3C. Additional short trench sections were excavated from north to south. Depths of excavations reached approximately -4 MLLW. Each section was backfilled with rock (remaining from shoreline restoration at Areas 1 and 2) and backfill obtained from the NOAA-owned portion of Telegraph Hill (hailed to the backfill staging area on September 18). The EX350 excavator loaded PCS from Area 3C. One B25B truck hauled 13 loads of PCS from Area 3C to the dewatering cell. The 980C loader moved 29 buckets of clean rock and scoria from the backfill staging area to backfill the excavations at Area 3C.

The EX350 excavator loaded PCS from the dewatering cell. Two 773 trucks and one B25B truck hauled a total of 19 loads and 9 loads, respectively, of PCS from the dewatering cell to the National Weather Service (NWS) land spreading site. The D-8N bulldozer was used at the NWS landspreading site to level the PCS.

KRI resumed hauling PCS from Tract 42 to the NWS landspreading site. The EX300 excavator loaded PCS from Tract 42. Two 773 trucks hauled a total of 28 loads of PCS from Tract 42 to the NWS landspreading site.

The silt skirt boom and absorbent boom were removed from the dewatering cell and placed into a half-high conex located west of the Garco Building.

KRI retrieved a drum from the shoreline that had been utilized for storing oil-contaminated material derived from within the containment boom in the Salt Lagoon channel. The contents of the drum were emptied into the dewatering cell.

Note: Two additional hours were added to this daily report for Alex Globerson for work conducted on Sunday 9/19/04. On this date, NOAA and Tetra Tech personnel met to discuss the current project activities and conducted site visits to the NWS land spreading site, Tract 42, and Icehouse Lake.

Date: 20-Sep-04

Problems Encountered or Anticipated:

NOAA personnel have been unable to conduct a GPS survey at Tract 42 due to the height of the sorted PCS stockpiles. The stockpiles may be causing interference with the GPS signal, so the survey will be delayed until the stockpiles have been removed.

Discussions With NOAA Personnel or Island Entity Personnel:

None.

Samples Collected:

One stockpile sample and one duplicate sample were collected from PCS excavated from Area 3C and hauled to the dewatering cell SP34-SS-026-015 and SP34-SS-026-300

One confirmation sample and one duplicate sample were collected from the base of Section 16 within the excavation of Area 3C at a depth of approximately -4 MLLW:
SP34-CS-034-100 and SP34-CS-034-300

Prepared by:

Tetra Tech EM Inc.

Date 20-Sep-04

Kelly-Ryan, Inc.

Date 20-Sep-04

Received by:

National Oceanic and Atmospheric Administration

Date 20-Sep-04

Date: 20-Sep-04

Daily Log Review Comments:

1. Hitachi EX700 tracked excavator was not used at Diesel Seep, as originally planned, due to requirement to fly in and install a replacement master switch. It was deadlined.
2. Before movement of the silt skirt boom and the oil absorbent boom, TTEMI verified no free liquid dripping from either.
3. KRI's two F-150s were both used under options 19o and 21f. On this date, the total hours for these two trucks adds up to 24.5 or an average of 12.25 hrs/F-150. If they actually have three F-150s, I could see being billed for 24.5 hrs. in one day. If they only have two, it seems to me a max of 20 hrs. per day should be billable. Please verify number of F-150s used and resolve billable hours.

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

1. Noted.
2. Noted.
3. Three trucks were used this date for a total of 24.5 hours.

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 21-Sep-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|--------------------------------------|
| <i>Contractor:</i> | Brian Croft (lead) Alex Globerson |
| <i>NOAA:</i> | Dave Winandy (lead) Paula Souik |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 17,750 | 1,795 | 19,545 |
| | Backfill Volume (CY) | 10,912 | 135 | 11,047 |
| | Personnel | | | |
| | Personnel Cost | \$292,826.60 | \$7,890.98 | \$300,717.58 |
| | Personnel Hours | 3,384.5 | 90.0 | 3,474.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$302,405.42 | \$13,716.77 | \$316,122.20 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 2,811.3 | 99.0 | 2,910.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 139.0 | 0.0 | 139.0 |
| | Other Costs | | | |
| | Sample Cost | \$35,406.28 | \$992.39 | \$36,398.67 |
| | Total Cost | \$645,527.33 | \$22,600.14 | \$668,127.48 |

At 0800, NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI continued removing PCS from Area 3C. Additional short trench sections were excavated from north to south. Depths of excavations reached approximately -4 MLLW. Each section was backfilled with rock (leftover from shoreline restoration at Areas 1 and 2) and backfill obtained from the NOAA-owned portion of Telegraph Hill (hauled to the backfill staging area on September 18). The EX350 excavator loaded PCS from Area 3C. One B25B truck hauled 15 loads of PCS from Area 3C to the dewatering cell. The 980C loader moved 27 buckets of clean rock and scoria from the backfill staging area to backfill the excavations at Area 3C.

KRI removed clean overburden from Area 3D; clean overburden was also removed from the wetland bordering Area 3D to the north to a distance within reach of the excavator while setting on Area 3D in accordance with previous discussions between NOAA and ADEC. One B25B truck hauled 15 loads of clean overburden from Area 3D to the backfill staging area.

KRI began removing PCS from Area 3D. Short trench sections were excavated with depths of excavation reaching approximately -2 MLLW. One B25B truck hauled 4 loads of PCS from Area 3D to the dewatering cell.

KRI continued relocating PCS from Tract 42 to the National Weather Service (NWS) landspreading site. ~~Two-Three~~ 773 trucks hauled ~~32-36~~ loads of PCS from Tract 42 to the NWS landspreading site, and one B25B truck hauled another 7 loads of PCS to the NWS landspreading site. In addition, one B25B truck hauled 5 loads of rock from the stockpile to the northeast corner of Tract 42 (these loads are not included in the "PCS, Backfill" worksheet).

The ZX800 excavator loaded PCS from the dewatering cell. Two 773 trucks and one B25B truck hauled a total of 10 loads and 2 loads, respectively, of PCS from the dewatering cell to the National Weather Service (NWS) landspreading site. The D-8N bulldozer was used at the NWS landspreading site to level the PCS.

Date: 21-Sep-04

Problems Encountered or Anticipated:

None.

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA informed Tetra Tech that based on GPS survey data, approximately 14,500 cubic yards of PCS remain at Tract 42. Because approximately this quantity of PCS is required to complete closure activities at Tract 42, no further PCS removal will be conducted at Tract 42. Remaining PCS will be consolidated into a 2-foot cap over Tract 42.

Samples Collected:

One confirmation sample was collected from the bottom of Area 3C at a depth of approximately -4 MLLW:

SP34-CS-035-100

One confirmation sample and one duplicate sample were collected from the south wall of Area 3C at a depth of approximately 7 feet below ground surface (bgs):

SP34-CS-036-100 and SP34-CS-036-300

Three characterization samples and one duplicate sample were collected from clean overburden removed from Area 3D:

SP34-CH-027-015 and SP34-CH-027-300

SP34-CH-028-015

SP34-CH-029-015

Five soil samples were collected from PCS at the dewatering cell to conduct paint filter tests.

Prepared by:

Tetra Tech EM Inc.

21-Sep-04
Date

Kelly-Ryan, Inc.

21-Sep-04
Date

Received by:

National Oceanic and Atmospheric Administration

21-Sep-04
Date

Date: 21-Sep-04

Daily Log Review Comments:

1. NOAA surveyed PCS remaining at Landfill Tract 42 and calculated approximately 14, 500 CY remaining. No additional PCS to be removed.
2. One Bell B25B and two CAT 773s were seen hauling PCS from Tract 42 to the NWS Landspread Area. The Bell B25B did more than haul rocks within the Tract 42 site. Make narrative above consistent to visual sighting and noted 7 Bell B25B loads on the PCS, Backfill sheet.
3. The narrative describes two CAT 773s as hauling PCS from Tract 42 to the NWS Landspread Area, but the Equipment Sheet shows three CAT 773s. Make accurate and consistent.
4. Correct narrative above that states a total of 32 CAT 773 loads were hauled from Trcat 42 to LS, while there are 36 loads noted on the PCS, Backfill sheet. Make accurate and consistent.
5. Include duplicate sample SP34-CS-036-300 on the Sample sheet (+\$141.77).
6. Three F150 pickup trucks for crew transportation are charged to Option 21f. Suggest one F150 gets charged to Option 19o and the other two charged to Option 21f.
7. The D-8 bulldozer and operator (Ray Hill) were charged at 10 hours to Option 19o for spreading out PCS at the NWS Landspreading Area. However, the PCS, Backfill page shows over half the PCS taken there on this day came from the PCS Stockpile. Recommend splitting the costs for Ray and the D-8 between Option 19o and Option 21f based roughly on the amount of PCS from each contract option.
8. TTEMI should note use of NOAA vehicle and ATV for transport (e.g., ATV 2, Maroon Chevrolet Silverado HD 2500).

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

1. Noted.
2. Noted; revisions are shown in redline-strikeout format.
3. Noted; revisions are shown in redline-strikeout format.
4. Noted; revisions are shown in redline-strikeout format.
5. Noted; the sample has been added to Samples sheet.
6. Noted; hours have been revised on Equipment sheet as requested.
7. Noted; hours have been revised on Personnel and Equipment sheets as requested.
8. Noted; "ATV2" (option not available; manually input) and "Pickup Truck" have been added to Equipment sheet.

Tetra Tech EM Inc.

Date

Daily Construction Quality Control Report (DCQCR)
 Corrective Action Plan Implementation
 St. Paul, Alaska

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 23-Sep-04 DCQCR Version: 3

Management on Site:

| | |
|--------------------|--|
| <i>Contractor:</i> | Brian Croft (lead) Alex Globerson |
| <i>NOAA:</i> | David B. Winandy (lead) Paula Souik |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 20,025 | 725 | 20,750 |
| | Backfill Volume (CY) | 11,472 | 295 | 11,767 |
| | Personnel | | | |
| | Personnel Cost | \$305,535.93 | \$6,423.00 | \$311,958.94 |
| | Personnel Hours | 3,529.5 | 75.0 | 3,604.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$320,147.60 | \$7,975.10 | \$328,122.70 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 2,950.3 | 58.5 | 3,008.8 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 159.0 | 22.5 | 181.5 |
| | Other Costs | | | |
| | Sample Cost | \$36,965.75 | \$425.31 | \$37,391.06 |
| | Total Cost | \$677,538.31 | \$14,823.41 | \$692,361.72 |

At 0800, NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI removed PCS from the dewatering cell. The ZX800 excavator loaded PCS from the dewatering cell. Three 773 trucks hauled a total of 14 loads of PCS to the National Weather Service (NWS) landspreading site. The D-8N bulldozer was used at the NWS landspreading site to level the PCS.

KRI continued excavating PCS from Area 3D. Short trench sections were excavated from west to east to minimize the impact of groundwater entering the excavations. Depths of excavation generally reached -1 to -2 MLLW. The EX350 excavator loaded PCS. One B25B truck hauled 25 loads of PCS from Area 3D to the dewatering cell. Each excavation was backfilled using the scoria mixture (hauled from Telegraph Hill on September 18) on the bottom and clean overburden removed previously from Area 3C for the upper 2 to 3 feet. The excavation will be filled to grade when site restoration activities are conducted. The 980C loader hauled 50 buckets of backfill from the backfill staging area to Area 3D. During excavation activities at Area 3D, oily sheen was noted emanating from the north wall of the excavation beyond the reach of the excavator; the location of the oily sheen was noted and a confirmation sample (SP34-CS-041-045) was collected from the north sidewall within the area of oily sheen.

Tetra Tech operated the large diaphragm pump to remove water with no visible sheen from the dewatering cell. The water was pumped into the open excavation at Area 3B.

KRI removed the debris pile remaining from burn operations conducted at Icehouse Lake on the previous day. The PC200 excavator loaded one B25B truck that hauled 3 loads of burned debris to the NOAA open pit at Tract 42.

KRI, NOAA, and Tetra Tech applied seed mixture along with fertilizer and installed erosion control mats at the Lukanin Bay PCS Corrective Action Site. The PC200 excavator was used to place boulders, staged at the site, along the roadside, western boundary of the mats for protection from damage and to reduce access.

Date: 23-Sep-04

Daily Activities (Continued):

KRI relocated the D3 and D4 bulldozers to Tract 42 for use in grading operations.

KRI began grading activities at Tract 42. The D-8N was used to spread soil at the PCS stockpile. The EX300 excavator was used to excavate three test pits on the northeast side of the landfill to delineate the extent of municipal solid waste (MSW). The first test pit contained MSW and was backfilled. The second test pit did not contain MSW. Sand excavated from this pit will be stockpiled and used for backfill and the excavation will be used to hold debris from the site. The third test pit contained MSW and will be used to hold debris from the site. During activities at Tract 42, Merwyn Johnson operated the EX300 for 3.5 hours, although his hours for the day are billed as superintendent.

Problems Encountered or Anticipated:

DCQCR Issues:

- Barbara Johnson (KRI) and Rodney Mercurief (KRI) need to be added to the personnel list (manually input)

Discussions With NOAA Personnel or Island Entity Personnel:

KRI, NOAA, and Tetra Tech participated in a site walk at Tract 42 to discuss grading activities and PCS cap installation. It was agreed that MSW must not extend farther than the 50-foot setback within the boundary of Tract 42. Wooden stakes, marking the 50-foot setback, were installed by NOAA. Tract 42 will be graded to a 3:1 slope with a minimum 2-foot thick PCS cap layer. Current steep slopes will be cut back and open pits will be filled with debris and excess soil to accommodate the 3:1 slope. NOAA installed stakes across the eastern and southern slopes to aid in the determination of minimum PCS cap thickness. Additional stakes will be installed as grading activities continue.

Tetra Tech and NOAA discussed the oily sheen identified emanating from the north wall of the excavation at Area 3D. It was decided that no further excavation could be conducted to the north because it was outside of the excavator's reach, and previous discussions between NOAA, ADEC, and Tetra Tech had determined that the excavator would not be tracked into the wetland to pursue contamination.

Tetra Tech visited the on-island Tanadgusix Corporation (TDX) office and spoke with Anthony Philemonoff and Bill Arterbum (by telephone) concerning the borrow source for scoria that will be mined for use as backfill at the Diesel Seep Site. Mr. Arterbum stated that the Lake Hill Quarry will be used for this activity. Tetra Tech informed TDX that background characterization samples would be collected from that location.

Samples Collected:

One confirmation sample and one duplicate sample were collected from the north sidewall of Area 3D at a depth of approximately 4.5 feet below ground surface (bgs):

SP34-CS-041-045 and SP34-CS-041-300

One confirmation sample was collected from the bottom of Area 3D at depth of approximately 9 feet bgs:

SP34-CS-042-090

Five soil samples were collected from PCS at the dewatering cell to conduct paint filter tests.

Prepared by:

Tetra Tech EM Inc.

23-Sep-04

Date

Kelly-Ryan, Inc.

23-Sep-04

Date

Received by:

National Oceanic and Atmospheric Administration

23-Sep-04

Date

Date: 23-Sep-04

Daily Log Review Comments:

1. TTEMI personnel were using Government ATV 2 and the Maroon Chevrolet Silverado 2500 HD pick-up truck. Please add to the Equipment sheet.
2. Please note in the second paragraph that the Area 3D section backfilled will be brought up to grade at a future date when site restoration is completed.
3. EX350 was used to load PCS from Area 3D, not Area 3C. Please correct Equipment sheet.
4. NOAA to verify whether intended PCS cover material can extend into the 50' setback area, or if only the municipal solid waste (MSW) can not extend into the 50' setback area.
5. The contract task order only allowed for use of the D8-N and the NOAA D-3 bulldozers at the Landfill tract closure activities. Explain why KRI also moved the KRI CAT D-4 bulldozer to the landfill.
6. At the landfill, KRI was told to use the NOAA D-3 in lieu of the KRI D-4, but that if there was a true need to use the D-4, then Merwyn needed to discuss with James Swantz in Seattle, who could discuss with Ken Valder, TTEMI, and Greg Gervais. NOAA provided the D-3 that KRI trucked out on the City low boy from the Old Equipment Garage to Landfill Tract 42.
7. In discussion with NOAA section, please note that the 4' wood stakes delineating the 50' setback area were installed yesterday. Today, the stakes, marking tape and paint provided by KRI were used to delineate the toe of the subgrade and were a minimum of 2' of cover material was to be emplaced.
8. The wood debris ash and debris removed from Ice House Lake was placed at and in the SW debris pit, Landfill Tract 42, to differentiate from the NE Debris Pit, Landfill Tract 42.
9. The 3 test pits dug on the north side of the landfill tract 42, this date only uncovered buried MSW. There was no clean sand uncovered this date.
10. NOAA needs to measure, recalculate and stake slope pullback requirements adjacent the NE corner of Landfill Tract 42.
11. NOAA directed that the PCS liner berms be removed at the tract 42 landfill, so as to make more PCS available for use as covered material. Merwyn Johnson, KRI, used EX300 to cut and pull out berms.
12. NOAA requested that City, Louis Jones, remove rat traps and bait stations from Landfill Tract 42.
13. Since the USACE work has finished for the season, please explain why are we paying Mrs. Johnson overtime in lieu of straight time.
14. Approximately 75% of the site restoration area completed at the Lukanin Bay site.
15. TTEMI/KRI are making good progress with minor Pribilovian hiccups.

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

1. Noted; "Pickup Truck" and "ATV2" (manually input) have been added to Equipment sheet.
2. Noted; revisions shown in redline-strikeout format.
3. Noted and resolved.
4. Noted.
5. The contract task order allows for the use of numerous equipment items, including the D-4 LGP dozer. However, in discussions between NOAA (Greg Gervais) and Tetra Tech (Ken Valder), it was agreed that if practicable, the NOAA D-3 would be used in lieu of the KRI D-4. The D-4 was moved to the landfill because the lowboy was being used, and in case it is needed.
6. Noted.
7. Noted.
8. Noted.
9. Noted.
10. Noted.
11. Noted.
12. Noted.
13. Although this daily report template only shows an "overtime" rate for the clerk, her hours will be billed at "straight" time (the daily is overestimating her cost).
14. Noted.
15. Noted.

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 24-Sep-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|--|
| <i>Contractor:</i> | Brian Croft (lead) Alex Globerson |
| <i>NOAA:</i> | David B. Winandy (lead) Paula Souik |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 20,750 | 615 | 21,365 |
| | Backfill Volume (CY) | 11,767 | 215 | 11,982 |
| | Personnel | | | |
| | Personnel Cost | \$311,958.94 | \$6,562.03 | \$318,520.97 |
| | Personnel Hours | 3,604.5 | 75.5 | 3,680.0 |
| | Equipment Hours | | | |
| | Equipment Cost | \$328,122.70 | \$9,894.61 | \$338,017.30 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 3,008.8 | 65.5 | 3,074.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 181.5 | 0.0 | 181.5 |
| | Other Costs | | | |
| | Sample Cost | \$37,391.06 | \$708.85 | \$38,099.91 |
| | Total Cost | \$692,361.72 | \$17,165.49 | \$709,527.21 |

At 0800, NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI removed petroleum-contaminated soil (PCS) from the dewatering cell. The ZX800 excavator loaded PCS. Three 773 trucks hauled a total of 12 loads of PCS to the National Weather Service (NWS) landspreading site.

KRI continued excavating PCS from Area 3D. Short trench sections were excavated from west to east to minimize the impact of groundwater entering the excavations. Depths of excavation generally reached approximately -2 MLLW. The EX350 excavator loaded PCS. One B25B truck hauled 21 loads of PCS from Area 3D to the dewatering cell. Each excavation was backfilled using the scoria mixture (hauled from Telegraph Hill on September 18) on the bottom and clean overburden removed previously from Area 3C for the upper 2 to 3 feet. The 980C loader hauled 43 buckets of backfill from the backfill staging area to Area 3D. During excavation activities in the northeast corner of Area 3D, oily sheen was noted emanating from the east wall of the excavation; the location of the oily sheen was noted and a confirmation sample (SP34-CS-044-045) was collected from the east sidewall within the area of oily sheen. After discussions between Tetra Tech and NOAA, no further excavation was conducted to the east because of the presence of the wetland in that area.

KRI continued grading activities at Tract 42. The D-8N was used to spread soil at the PCS stockpile. The 988B loader moved boulders and concrete debris from the base of the PCS stockpile to a long, narrow pit adjacent to the north side of the access road in the northeast portion of the site. The EX300 excavator placed the boulders and concrete debris along the southern slope of the pit. This material will form the boundary between the municipal solid waste (MSW) to the south and the 50-foot setback from the perimeter of Tract 42 to the north. The EX300 excavated and loaded clean sand, free of MSW, from a test pit in the northeast portion of the site. The sand was moved by the 988B loader and stockpiled in an area directly south of the long, narrow pit.

KRI and Tetra Tech completed the installation of erosion control mats at the Lukanin Bay PCS Corrective Action Site.

Date: 24-Sep-04

Problems Encountered or Anticipated:

DCQCR Issues:

- Barbara Johnson (KRI) and Rodney Mercurief (KRI) need to be added to the personnel list (manually input).

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA and Tetra Tech discussed the presence of oily sheen emanating from the east wall of Area 3D. It was decided that no further excavation would be conducted in that direction at this time because of the presence of the wetland in that area. Future excavation may be conducted in that direction if it is deemed necessary.

NOAA requested that KRI haul a load of boulders from the NOAA-owned portion of Telegraph Hill to the Lukanin Bay site for placement as a vehicle barrier.

Samples Collected:

Two stockpile samples were collected from PCS excavated from Area 3D and placed in the dewatering cell:

SP34-SS-027-015
SP34-SS-028-015

Two confirmation samples were collected from the bottom of Area 3D at a depth of approximately -2 MLLW:

SP34-CS-043-090
SP34-CS-045-090

One confirmation sample was collected from the east sidewall of Area 3D at a depth of approximately 4.5 feet below ground surface (bgs):

SP34-CS-044-045

Six soil samples were collected from PCS at the dewatering cell to conduct paint filter tests.

Prepared by:

Tetra Tech EM Inc.

24-Sep-04
Date

Kelly-Ryan, Inc.

24-Sep-04
Date

Received by:

National Oceanic and Atmospheric Administration

24-Sep-04
Date

Date: 24-Sep-04

Daily Log Review Comments:

1. Three additional test pits were excavated on the north side of the Landfill Tract 42, but within the perimeter to the north formed by the 50' setback area. These were all located east of the three test pits dug yesterday. In the eastern and western test pits, subsurface municipal solid waste (MSW) was encountered. The middle test pit uncovered clean sand fill, and NOAA directed that it be temporarily stockpiled atop the boulder/rock wall placed in the access road pit's south side.
2. KRI tracked the PC200 excavator from the Lukanin Bay site to Telegraph Hill Quarry in preparation to pick 10-12 each, 2.5'-3' diameter boulders and load into one Bell B25B dumptruck, per NOAA's direction. Boulders are to complete barrier to discourage vehicle/ATV traffic on site under erosion control & revegetation at Lukanin Bay.
3. D. Winandy, NOAA, walked Landfill Tract 42 with A. Globerson, TTEMI, and explained intent and pending actions for KRI.
4. Since there is no USACE work, please explain why NOAA paying overtime to TTEMI for Mrs. Johnson's services.

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

1. Noted.
2. Noted.
3. Noted.
4. Although this daily report template only shows an "overtime" rate for the clerk, her hours will be billed at "straight" time (the daily is overestimating her cost).

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 25-Sep-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|--|
| <i>Contractor:</i> | Brian Croft (lead) Alex Globerson |
| <i>NOAA:</i> | David B. Winandy (lead) Paula Souik |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 21,365 | 725 | 22,090 |
| | Backfill Volume (CY) | 11,982 | 950 | 12,932 |
| | Personnel | | | |
| | Personnel Cost | \$318,520.97 | \$6,580.40 | \$325,101.37 |
| | Personnel Hours | 3,680.0 | 75.5 | 3,755.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$338,017.30 | \$12,629.31 | \$350,646.61 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 3,074.3 | 74.5 | 3,148.8 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 181.5 | 23.5 | 205.0 |
| | Other Costs | | | |
| | Sample Cost | \$38,099.91 | \$2,203.10 | \$40,303.01 |
| | Total Cost | \$709,527.21 | \$21,412.81 | \$730,940.02 |

At 0800, NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI loaded and hauled clean backfill material from the NOAA-owned portion of Telegraph Hill to the backfill staging area. The D-9L bulldozer was used to push material down to the bottom of the slope, and the 992C loader was used to load the material into three 773 trucks. The three 773 trucks hauled a total of 30 loads of backfill (scoria mixture) from Telegraph Hill to the backfill staging area. One 773 truck also hauled 1 load of rock to the Lukanin Bay PCS Site. The rock will be placed along the eastern edge of the site to prevent vehicle access.

KRI removed PCS from the dewatering cell. The ZX800 excavator loaded PCS. Three 773 trucks hauled a total of 12 loads of PCS from the dewatering cell to the National Weather Service (NWS) landspreading site.

KRI continued excavating PCS from Area 3D. Short trench sections were excavated from west to east to minimize the impact of groundwater entering the excavations. Depths of excavation generally reached approximately -2 MLLW. The EX350 excavator loaded PCS. One B25B truck hauled 10 loads of PCS from Area 3D to the dewatering cell. Each excavation was backfilled using the scoria mixture (hauled from Telegraph Hill) on the bottom and clean overburden removed previously from Areas 3C and 3D for the upper 2 to 3 feet. The 980C loader hauled 35 buckets of backfill from the backfill staging area to Area 3D. Oily sheen was again noted emanating from the east wall of Area 3D, but excavation was not continued in that direction based on previous discussions between NOAA and Tetra Tech; the area of oily sheen was noted and a confirmation sample (SP34-CS-047-045) was collected.

KRI continued grading activities at Tract 42. The D-8N bulldozer was used to spread soil at the PCS stockpile. The D3 bulldozer was used to push soil down and grade the eastern and southern slopes. The EX300 excavator was used to remove debris and re-contour the northern and western slopes at Tract 42. Debris was separated and placed into a pit located in the southwest portion of the site. The EX300 also segregated large boulders and concrete from the northeast corner of the site for later use as barriers to vehicle access. During activities at Tract 42, Merwyn Johnson installed protective glass around the cab of the D3 bulldozer for 2.5 hours and operated the bulldozer for 3.5 hours (glass installation hours are not included on the equipment spreadsheet, because the bulldozer was not operating at that time).

Date: 25-Sep-04

Problems Encountered or Anticipated:

DCQCR Issues:

- Barbara Johnson (KRI) and Rodney Mercurief (KRI) need to be added to the personnel list (manually input).

Discussions With NOAA Personnel or Island Entity Personnel:

On Sunday, September 26, NOAA informed Tetra Tech that upon completion of PCS excavation activities at Area 3D, activities would switch to the excavation of another trench for the installation of sandbags containing granular activated carbon (GAC). The trench will be excavated such that GAC sandbags will maximize the treatment of groundwater flowing through Area 3C as well as Area 3D.

Samples Collected:

Three characterization samples and one duplicate sample were collected from the Lake Hill Quarry to characterize the scoria that will be obtained from TDX for use as backfill at the Diesel Seep Site:

SPLH-CH-001-015 and SPLH-CH-001-300

SPLH-CH-002-015

SPLH-CH-003-015

One stockpile sample was collected from the PCS excavated from Area 3D and placed in the dewatering cell:

SP34-SS-029-015

One confirmation sample was collected from the bottom of Area 3D at a depth of approximately -2 MLLW:

SP34-CS-046-090

One confirmation sample was collected from the east sidewall of Area 3D at a depth of approximately 4.5 feet below ground surface:

SP34-CS-047-045

Prepared by:

Tetra Tech EM Inc.

25-Sep-04
Date

Kelly-Ryan, Inc.

25-Sep-04
Date

Received by:

National Oceanic and Atmospheric Administration

25-Sep-04
Date

Date: 25-Sep-04

Daily Log Review Comments:

1. D. Winandy, NOAA, showed Guy Miller, KRI, the types and quantities of boulders to load while at Telegraph Hill. Mr. Miller used the PC 200 excavator to pick and load boulders into a Bell B25B dump truck. Correct the narrative above and the Equipment sheet that calls out a CAT 773 dumptruck for carrying the boulders.
2. Explain authorization to modify Government equipment (e.g., CAT D-3 partial cab enclosure). Material used was plexiglass, an acrylic plastic. Under this reimburseable contract, the work belongs to the federal government. The field modification is excellent. It is proving invaluable in this qualified-personnel-constrained resource environment, and in providing improved operator comfort / QOWL. Material costs need to be provided.
3. NOAA staked out slopes, toe of subgrade and top of subgrade slope, on the north and west face of slopes abutting NW corner of the Tract 42 Landfill. Alex Globerson, TTEMI, was shown where slopes were to be pulled back at top, debris had to be removed and buried in one of the two debris pits, filling the SW pit first, then the NE pit last, and where the City burn box debris had to be pulled back into the NOAA MSW area.
4. In the narrative above, 3 CAT 773s hauled 12 loads of PCS from the Diesel Seep dewatering Area to the NWS LANDspread Area in a combined 10.5 hours, as listed on the Equipment sheet. On the PCS, Backfill sheet, 23 CAT 773 PCS loads are cited. Please correct.

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

1. Mr. Miller used the PC200 excavator to load a 773 dump truck and haul rock to the Lukanin Bay site. The PC200 is not billed; no changes made.
2. Noted; material costs are minimal and are within the range of general supplies and materials expenses expected for this project (zip ties and sheets of plexiglass). Costs will be provided separately, if they are billed.
3. Noted.
4. The PCS, Backfill sheet has been corrected to reflect that 12 loads of PCS were hauled.

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 27-Sep-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|--|
| <i>Contractor:</i> | Brian Croft (lead) Alex Globerson |
| <i>NOAA:</i> | David B. Winandy (lead) Paula Souik |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 22,090 | 670 | 22,760 |
| | Backfill Volume (CY) | 12,932 | 265 | 13,197 |
| | Personnel | | | |
| | Personnel Cost | \$325,101.37 | \$6,568.40 | \$331,669.77 |
| | Personnel Hours | 3,755.5 | 74.5 | 3,830.0 |
| | Equipment Hours | | | |
| | Equipment Cost | \$350,646.61 | \$9,006.54 | \$359,653.15 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 3,148.8 | 71.5 | 3,220.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 205.0 | 28.0 | 233.0 |
| | Other Costs | | | |
| | Sample Cost | \$40,303.01 | \$991.14 | \$41,294.15 |
| | Total Cost | \$730,940.02 | \$16,566.09 | \$747,506.11 |

At 0800, NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI completed PCS excavation activities at Area 3D. The EX350 loaded PCS. One B25B truck hauled a total of 18 loads of PCS from Area 3D to the dewatering cell. The 980C loader moved a total of 34 buckets of backfill from the backfill staging area to the excavations at Area 3D.

Based on discussions between NOAA and Tetra Tech regarding the need for additional PCS volumes at Tract 42 to construct the 2-foot cap, two 773 trucks hauled a total of 16 loads of PCS from the dewatering cell directly to Tract 42 (not to the National Weather Service landspreading site). The ZX800 loaded PCS. The PCS was placed on top of the stockpile at Tract 42 and moved by the D-8N bulldozer.

In preparation for installation of a second granular activated carbon (GAC) trench near the western edge of Area 3C, KRI began placing backfill in the area of the proposed trench to provide traction for the loader and a working surface for the excavator. The 980C loader moved a total of 19 buckets of backfill from the backfill staging area to Area 3C. The EX350 levelled and compacted the backfill.

KRI continued grading activities at Tract 42. The D-8N bulldozer was used to spread soil at the PCS stockpile. The D3 bulldozer was used to push soil down and grade the southern and western slopes. The EX300 excavator was used to remove debris, segregate boulders, and recontour the northern and western slopes at Tract 42. Debris was seperated and placed into a pit located in the southwest portion of the site. Segregated boulders were piled outside of the 50-foot setback on the western portion of the site for later use as barriers to vehicle access. Surface municipal solid waste (MSW) located outside of the 50-foot setback on the southern and western portions of the site was pushed upslope by the D3 bulldozer to an area that would later be covered by at least two feet of PCS during grading activities.

NOAA conducted further GPS survey activities at Tract 42 to estimate volumes of PCS present for construction of the 2-foot cap.

Date: 27-Sep-04

Problems Encountered or Anticipated:

Construction of the 2-foot cap at Tract 42 may require more PCS than is currently located there.

DCQCR Template Issues:

- Barbara Johnson is not on the Personnel dropdown menu (manually input).
- ATV2 is not on the Equipment dropdown menu (manually input).

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA and Tetra Tech discussed the situation regarding necessary volumes of PCS at Tract 42 for installation of the 2-foot cap. It was decided that additional PCS could be easily incorporated into the cap. As such, PCS removed from the dewatering cell this date was hauled to Tract 42 rather than the NWS landspreading site.

Samples Collected:

One stockpile and duplicate sample were collected from the PCS excavated from Area 3D and placed in the dewatering cell:
SP34-SS-030-015 and SP34-CS-030-300

One confirmation and one duplicate sample were collected from the bottom of Area 3D at a depth of approximately -2 MLLW:
SP34-CS-048-090 and SP34-CS-048-300

Prepared by:

Tetra Tech EM Inc.

27-Sep-04
Date

Kelly-Ryan, Inc.

27-Sep-04
Date

Received by:

National Oceanic and Atmospheric Administration

27-Sep-04
Date

Date: 27-Sep-04

Daily Log Review Comments:

1. Verify Merwyn Johnson's total hours, as they should be 10. He has 2 hours as Superintendent and 6 hours as grading on the NOAA CAT D-3 bulldozer, but the bulldozer has 8 hours listed. Merwyn was working all day, as photos show. Ray Hill and Guy Miller, and respective equipment hours, are accounted for at the Landfill.
2. Verify there is an agreed upon rate for Mrs. Johnson, as an overtime rate is being shown. Since KRI has only NOAA/TTEMI work on-island, why should we be paying overtime. Please verify the negotiated pay rate and include in the personnel sheet.

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

1. Merwyn Johnson's hours have been corrected to total 10 hours.
2. Although this daily report template only shows an "overtime" rate for the clerk, her hours will be billed at "straight" time (the daily is overestimating her cost).

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 28-Sep-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|--|
| <i>Contractor:</i> | Brian Croft (lead) Alex Globerson Kevin Matherne (arrived today) |
| <i>NOAA:</i> | David B. Winandy (lead) Paula Souik |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 22,760 | 90 | 22,850 |
| | Backfill Volume (CY) | 13,197 | 200 | 13,397 |
| | Personnel | | | |
| | Personnel Cost | \$331,669.77 | \$7,193.61 | \$338,863.38 |
| | Personnel Hours | 3,830.0 | 83.5 | 3,913.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$359,653.15 | \$7,584.50 | \$367,237.65 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 3,220.3 | 68.0 | 3,288.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 233.0 | 16.0 | 249.0 |
| | Other Costs | | | |
| | Sample Cost | \$41,294.15 | \$0.00 | \$41,294.15 |
| | Total Cost | \$747,506.11 | \$14,778.11 | \$762,284.21 |

At 0800, NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI continued to place backfill in preparation for installation of the second granular activated carbon (GAC) trench along the western side of Area 3C. GAC trench operations involved the excavation of short sections, placement of the trench boxes, placement of fill material to secure the trench boxes, and filling of the trench boxes with sand bags loaded with GAC followed by removal of the trench boxes. Two trench boxes were used in a "leap frogging" fashion proceeding from south to north. Each excavation was advanced to at least -1 MLLW and GAC bags were placed from -1 to +5 MLLW. NOAA provided elevation data using GPS equipment as the laser level was inoperable. The EX350 was used to excavate trenches, maneuver the trench boxes, and place and compact backfill. The 980C loader was used to transport backfill and GAC bags to the trench locations. Initially, soil removed from the trench sections was placed beside the excavation for use as backfill; however, it was determined that material being removed was still contaminated and was deemed PCS based on discussions between NOAA and Tetra Tech. Subsequently, PCS removed from the trench sections was transported to the dewatering cell (temporarily stockpiled soil from the excavation will be relocated upon completion of backfilling activities at the trench area due to accessibility issues). One B25B truck hauled a total of 6 loads of PCS from the GAC trench at Area 3C to the dewatering cell. Two additional laborers were onsite to assist with placement of GAC bags. The 980C loader moved a total of 40 buckets of backfill from the backfill staging area to the trench location at Area 3C. A total of seven trench box sections were completed this date.

KRI continued grading activities at Tract 42. The D-8N bulldozer was used to spread soil at the PCS stockpile. The D3 bulldozer was used to push soil down and grade the western slope. The EX300 excavator was used to remove debris and re-contour the western and northern slopes at Tract 42. Debris was separated and placed into a pit located in the southwest portion of the site. Following disposal of the debris, the southwestern pit was filled with sand and PCS and contoured for later grading by the D3. Concrete and metal debris was also removed from the northeastern pit located adjacent to the access road and placed into a pit further east.

Date: 28-Sep-04

Daily Activities (Continued):

The EX300 was also used at Tract 42 to excavate eight test pits on the top portion of the PCS stockpile at Tract 42 to determine PCS depth from the ground surface to the plastic liner covering the municipal solid waste (MSW). The test pits revealed that the PCS was approximately 4 to 5 feet thick across the site with thickness generally tapering down to the west.

Using GPS, NOAA and Tetra Tech installed stakes at Tract 42 to demark the perimeter of the PCS stockpile, where the grade will be finished to 100:1. The area outside of the stakes will be the beginning of the downslope, where the grade will be finished to 3:1.

Kevin Matherne (Tetra Tech) arrived on island this date.

Problems Encountered or Anticipated:

Soil removed from the GAC trench excavations was initially thought to be "clean"; however, contamination was noted and soil removed from subsequent excavations was deemed PCS and transported directly to the dewatering cell.

Due to high winds and heavy rains, Tetra Tech procured a rental vehicle (F150) from KRI this date and returned ATV 2 to NOAA.

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA and Tetra Tech discussed contamination noted in soil removed from the GAC trench excavations. It was decided that soil removed from subsequent excavations would be transported directly to the dewatering cell.

Samples Collected:

None.

Prepared by:

Tetra Tech EM Inc.

28-Sep-04
Date

Kelly-Ryan, Inc.

28-Sep-04
Date

Received by:

National Oceanic and Atmospheric Administration

28-Sep-04
Date

Date: 28-Sep-04

Daily Log Review Comments:

1. Verify there is an agreed upon rate for Mrs. Johnson, as an overtime rate is being shown. Since KRI has only NOAA/TTEMI work on-island, why should we be paying overtime. Please verify the negotiated pay rate and include in the personnel sheet.
2. There is a 2 cents round off error on the equipment sheet. Additionally, the \$7,315.01 (\$7.315.03 manual calc) shown as the Daily Total for Contractor Equipment does not include the cost (\$269.49) for the pick-up truck (Alexay Merculief's) rented that day. Insertion of a line in the spreadsheet may have adversely affected the summation formula.
3. After GPS stakeout, the stakes were installed to delineate the outer edge of the former PCS stockpile's liner berm, as well as the depth of cover material (PCS) at the respective stake locations. The PCS stockpile perimeter would have been on the inside of the liner berm.
4. GAC trench installation, personnel and equipment should be charged against 19Y and not 19o.
5. Charge TTEMI pick-up truck rental against 21f (GSA).

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

1. Although this daily report template only shows an "overtime" rate for the clerk, her hours will be billed at "straight" time (the daily is overestimating her cost).
2. Rounding error noted; manual over-write not performed. Tetra Tech truck was rented from KRI, not Alexay Merculief and is correct as noted. However, summation formula has been corrected to include the rental truck charge.
3. Noted.
4. Because Option 19Y was previously completed, the new GAC trench is correctly allocated to Option 19o.
5. Tetra Tech pickup rental is correctly allocated to Option 19o.

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 29-Sep-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|---|
| <i>Contractor:</i> | Brian Croft (lead) Alex Globerson (departed today) Kevin Matherne |
| <i>NOAA:</i> | David B. Winandy (lead) Paula Souik (departed today) Nir Barnea (arrived today) |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 22,850 | 105 | 22,955 |
| | Backfill Volume (CY) | 13,397 | 140 | 13,537 |
| | Personnel | | | |
| | Personnel Cost | \$338,863.38 | \$7,669.21 | \$346,532.59 |
| | Personnel Hours | 3,913.5 | 88.5 | 4,002.0 |
| | Equipment Hours | | | |
| | Equipment Cost | \$367,237.65 | \$7,534.30 | \$374,771.95 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 3,288.3 | 68.0 | 3,356.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 249.0 | 15.0 | 264.0 |
| | Other Costs | | | |
| | Sample Cost | \$41,294.15 | \$0.00 | \$41,294.15 |
| | Total Cost | \$762,284.21 | \$15,203.51 | \$777,487.72 |

At 0800, NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI continued to install the second granular activated carbon (GAC) trench along the western side of Areas 3C and 3D. GAC trench operations involved the excavation of short sections, placement of the trench boxes, placement of fill material to secure the trench boxes, and filling of the trench boxes with sand bags loaded with GAC followed by removal of the trench boxes. Two trench boxes were used in a "leap frogging" fashion proceeding from south to north. Each excavation was advanced to at least -1 MLLW and GAC bags were placed from -1 to +5 MLLW. NOAA provided elevation data using GPS equipment as the laser level was inoperable. The EX350 was used to excavate trenches, maneuver the trench boxes, and place and compact backfill. The 980C loader was used to transport backfill and GAC bags to the trench locations. Soil removed from the trench sections was deemed PCS based on discussions between NOAA and Tetra Tech, and was transported to the dewatering cell (temporarily stockpiled soil from the excavation will be relocated upon completion of backfilling activities at the trench area due to accessibility issues). One B25B truck hauled a total of 7 loads of PCS from the GAC trench at Area 3C to the dewatering cell. Two additional laborers were on site to assist with placement of GAC bags. The 980C loader moved a total of 28 buckets of backfill from the backfill staging area to the trench location at Area 3C. A total of nine trench box sections were completed this date.

KRI placed rock at the Lukanin Bay site to provide a barrier to vehicle access.

KRI excavated additional test pits to determine the depth to liner at various locations across the top of the stockpile at Tract 42. Based on discussions between NOAA, Tetra Tech, and KRI (see below), grading plans have been modified; instead of two slopes extending outward from a middle line to the north and south, a single slope will be constructed. The slope is being graded such that the southern boundary of the top of the stockpile is the high point with a 100:1 (or greater) slope extending down in elevation toward the north boundary of the PCS stockpile. NOAA, Tetra Tech, and KRI began placing grade stakes along the southern, middle, and northern boundaries of the PCS stockpile area, which will be used to establish adequate levels of cover material during grading operations.

Date: 29-Sep-04

Daily Activities (Continued):

KRI continued grading activities at Tract 42. The D-8N bulldozer was used to spread soil at the PCS stockpile. The D3 bulldozer was used to push soil down and grade sideslopes. The EX300 excavator was used to remove debris and re-contour the sideslopes at Tract 42.

Nir Barnea (NOAA) arrived on island this date. Paula Souik (NOAA) and Alex Globerson (Tetra Tech) demobilized from site this date.

Problems Encountered or Anticipated:

Issues regarding cap installation at Tract 42 have arisen (see Discussions section below).

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA and Tetra Tech discussed the order of priorities for work at the Diesel Seep. NOAA stated that the upcoming tasks would be conducted in the following order: completion of the second GAC trench; restoration of the shoreline at Area 2; backfill of Areas 3A, 3B, 3C, and 3D, including placement of a scoria wear surface; removal of additional PCS from Area 3C; and removal of the dewatering cell. In addition, installation of a third GAC trench remains a possibility. Each task will be implemented on a time- and cost-permitting basis. Removal of the dewatering cell must be completed before the end of the 2004 field season, and, as such, may be conducted before completion of the other priority tasks based on evaluation of remaining budget and time constraints.

NOAA, Tetra Tech, and KRI met at Tract 42 to review and discuss grading operations. It was decided that alternate plans would be implemented to meet the primary requirements for the cap installation as follows: 2-foot cover over all municipal solid waste (MSW); 3:1 (or greater) slopes for the sides of Tract 42; 100:1 (or greater) slopes for the top of the stockpile area. As such, it was determined that KRI would begin pushing material from the south to the north along the top of the stockpile based on depths to the PCS liner identified during earlier test pit operations. Excess material will be used to fill in potential low spots as well as boundary areas along the north and west sides of Tract 42. If necessary, additional material may be hauled from the National Weather Service landspreading area at a future date.

NOAA stated that cover material may extend to within the 50-foot setback area at Tract 42 as long as no MSW is deposited there.

Samples Collected:

None.

Prepared by:

Tetra Tech EM Inc.

29-Sep-04

Date

Kelly-Ryan, Inc.

29-Sep-04

Date

Received by:

National Oceanic and Atmospheric Administration

29-Sep-04

Date

Date: 29-Sep-04

Daily Log Review Comments:

1. The Work Date should be the September 29, 2004.
2. Verify there is an agreed upon rate for Mrs. Johnson, as an overtime rate is being shown. Please verify the negotiated pay rate and include in the personnel sheet.
3. There is a round off error on the equipment sheet. Additionally, the Daily Total for Contractor Equipment does not include the cost for the pick-up truck (Alexay Merculief's) rented that day. Please correct.
4. GAC trench installation, personnel and equipment should be charged against 19Y and not 19o.
5. Charge TTEMI pick-up truck rental against 21f (GSA).
6. In discussions, TTEMI/KRi was also to build up to the minimum of 2' cover material on the SE corner of the landfill "summit".

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

1. Noted and resolved.
2. Although this daily report template only shows an "overtime" rate for the clerk, her hours will be billed at "straight" time (the daily is overestimating her cost).
3. Rounding error noted; manual over-write not performed. Tetra Tech truck was rented from KRi, not Alexay Merculief and is correct as noted. However, summation formula has been corrected to include the rental truck charge.
4. Because Option 19Y was previously completed, the new GAC trench is correctly allocated to Option 19o.
5. Tetra Tech pickup rental is correctly allocated to Option 19o.
6. Noted.

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 30-Sep-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|--------------------------------------|
| <i>Contractor:</i> | Brian Croft (lead) Kevin Matherne |
| <i>NOAA:</i> | Dave Winandy (lead) Nir Barnea |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 22,955 | 105 | 23,060 |
| | Backfill Volume (CY) | 13,537 | 450 | 13,987 |
| | Personnel | | | |
| | Personnel Cost | \$346,532.59 | \$6,829.44 | \$353,362.02 |
| | Personnel Hours | 4,002.0 | 77.0 | 4,079.0 |
| | Equipment Hours | | | |
| | Equipment Cost | \$374,771.95 | \$7,544.87 | \$382,316.83 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 3,356.3 | 68.0 | 3,424.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 264.0 | 16.0 | 280.0 |
| | Other Costs | | | |
| | Sample Cost | \$41,294.15 | \$0.00 | \$41,294.15 |
| | Total Cost | \$777,487.72 | \$14,374.31 | \$791,862.03 |

At 0800, NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI completed installation of the second granular activated carbon (GAC) trench along the western side of Areas 3C and 3D. GAC trench operations involved the excavation of short sections, placement of the trench boxes, placement of fill material to secure the trench boxes, and filling of the trench boxes with sand bags loaded with GAC followed by removal of the trench boxes. Two trench boxes were used in a "leap frogging" fashion proceeding from south to north. Each excavation was advanced to at least -1 MLLW and GAC bags were placed from -1 to +5 MLLW. NOAA provided elevation data using GPS equipment as the laser level was inoperable. The PC200 was used to excavate trenches, maneuver the trench boxes, and place and compact backfill. The 980C loader was used to transport backfill and GAC bags to the trench locations. Soil removed from the trench sections was determined to be PCS based on discussions between NOAA and Tetra Tech, and was transported to the dewatering cell. KRI began backfilling the second GAC trench location. PCS that was temporarily stockpiled on the west side of the trench was hauled to the dewatering cell. One B25B truck hauled a total of 7 loads of PCS from the GAC trench at Area 3C to the dewatering cell. Two additional laborers were onsite to assist with placement of GAC bags. The 980C loader moved a total of 90 buckets of backfill from the backfill staging area to the trench location at Area 3C. A total of three trench box sections were completed this date.

KRI continued grading activities at Tract 42. The D-8N bulldozer was used to spread soil at the PCS stockpile. The D3 bulldozer was used to grade the top and sideslopes of the stockpile. The 988B loader was used to haul excess material from the north side to the south side of the stockpile. Additional discussions were held between NOAA, Tetra Tech, and KRI at Tract 42 to address details of present and future grading operations.

Date: 30-Sep-04

Problems Encountered or Anticipated:

See Discussions section below.

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA, Tetra Tech, and KRI met at Tract 42 to continue discussions regarding grading operations. It was determined that KRI would continue pushing material from the south to the north along the top of the stockpile based on depths to the PCS liner identified during earlier test pit operations. It was also determined that the stakes placed along the south boundary were actually located along the outside (south) edge of the liner/berm. As such, it was agreed that the south stake line would be moved north by 8 feet ~~to more accurately identify the location of PCS within the berm~~ allow buildup of a 1 percent slope to the top area of the PCS cap material and a minimum of 2 feet of cap material on top of the MSW, while at the same time not altering the 3:1 slope extending from the top of the stockpile down to the toe. This results in significantly less material being required for cover material and sideslope adjustments along the south boundary. Excess material being pushed to the north boundary line will be used to fill in potential low spots as well as boundary areas along the north and west sides of Tract 42. Slopes at the western end of the area will be contoured with currently existing topography as sufficient cover material is already in place; that is, slopes will extend down toward the west and southwest from the stakes marking the western edge of the liner. If necessary, additional material may be hauled from the National Weather Service landspreading area at a future date.

Sideslopes at the southeast corner of Tract 42 are presently slightly steeper than 3:1; however, it was agreed that slightly steeper slopes were acceptable in this area as no MSW is located there.

NOAA, Tetra Tech, and KRI met at the Diesel Seep Site to discuss activities to be conducted upon completion of the second GAC trench installation. NOAA requested that backfill begin at Area 3C to the east side and proceed west toward the shoreline. NOAA originally proposed to begin shoreline restoration activities at Area 2 prior to beginning backfill activities at Areas 3B, 3C, and 3D. However, NOAA determined that beginning at the east would allow better access to complete shoreline restoration activities and minimize travel distance to the shoreline. Additionally, NOAA and Tetra Tech discussed the design of the shoreline restoration. NOAA stated that filter mesh was to be filled with topsoil, seed, and fertilizer and wrapped into a roll along the rockwall at the shoreline. NOAA stated the filter mesh wrap was to be backfilled/covered with a topsoil and vegetation mix to be acquired from Telegraph Hill. According to NOAA, the topsoil and vegetation backfill would cover the filter wrap and extend to the east from the rockwall to the backfill grade beginning at Area 3B.

Samples Collected:

None.

Prepared by:

Tetra Tech EM Inc.

30-Sep-04
Date

Kelly-Ryan, Inc.

30-Sep-04
Date

Received by:

National Oceanic and Atmospheric Administration

30-Sep-04
Date

Date: 30-Sep-04

Daily Log Review Comments:

Please delete ~~strikethrough~~, and incorporate **bold**. Explanation in (parentheses)

1. "As such, it was agreed that the south stake line would be moved north by 8 feet to ~~more accurately identify the location of PCS within the berm.~~ **allow buildup of 1% slope to the top area of the PCS cap material and a minimum of 2 ft of cap material on top of the MSW while at the same time not altering the 3:1 slope extending from the top of the stockpile down to the toe.** This results in significantly less material being required for cover material and sideslope adjustments along the south boundary. (The location of the stakes accurately represented the boundary of the MSW. The reasons we moved the stakes is to prevent unnecessary changes to the 3:1 slope already built).

2. Please mention that the GAC trench was completed and GPS'd.

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

- 1. Requested revision shown in redline-strikeout format.
- 2. Noted.

Tetra Tech EM Inc.

Date

Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 1-Oct-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|--------------------------------------|
| <i>Contractor:</i> | Brian Croft (lead) Kevin Matherne |
| <i>NOAA:</i> | Nir Barnea (lead) |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 23,060 | 0 | 23,060 |
| | Backfill Volume (CY) | 13,987 | 705 | 14,692 |
| | Personnel | | | |
| | Personnel Cost | \$353,362.02 | \$6,315.14 | \$359,677.16 |
| | Personnel Hours | 4,079.0 | 70.0 | 4,149.0 |
| | Equipment Hours | | | |
| | Equipment Cost | \$382,316.83 | \$8,520.75 | \$390,837.58 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 3,424.3 | 79.0 | 3,503.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 280.0 | 17.0 | 297.0 |
| | Other Costs | | | |
| | Sample Cost | \$41,294.15 | \$0.00 | \$41,294.15 |
| | Total Cost | \$791,862.03 | \$14,835.89 | \$806,697.92 |

At 0800, NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI began backfilling the open excavations at the Diesel Seep site, including those at Areas 2, 3B, and 3C. Backfill activities were initiated at the east edge of Area 3C and progressed to the west toward the shoreline at Area 2. Backfill was placed to approximately 1 foot below grade to accommodate future placement of a scoria wear surface. Backfill was placed in the excavation at Area 3B only in the north portion to allow excavator access to Area 2; the remainder of the excavation at Area 3B will be filled when additional quantities of backfill have been hauled from Telegraph Hill. Backfill was placed in Area 2 up to approximately 5 feet from the rock wall along the shoreline to a grade of approximately 1 foot below the height of the rockwall. Additional fill was placed along the 5-foot-wide section along the rock wall to approximately 2 feet below the top of the rock wall, which will accommodate the topsoil and fabric wrap that will be placed along the rock wall at a later date. The PC200 excavator placed and compacted backfill. The 980C loader hauled a total of 116 buckets of backfill from the backfill staging area to Area 3C.

KRI loaded and hauled backfill from the NOAA-owned portion of Telegraph Hill. The 992C loader was used to load backfill. One 773 dump truck hauled a total of 5 loads of backfill from Telegraph Hill to the backfill staging area.

KRI continued grading activities at Tract 42. The D-8N bulldozer was used to spread soil at the PCS stockpile. The D3 bulldozer was used to grade the top and sideslopes of the stockpile. The 988B loader was used to haul excess material from the north side to the south side of the stockpile.

Date: 1-Oct-04

Problems Encountered or Anticipated:

None.

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA, Tetra Tech, and KRI met at Tract 42 to discuss grading operations. It was agreed that the southwest portion would be graded in a radial pattern extending downward toward the south and west to accommodate the slightly lower elevations present in this area. The area in question is outside (west of) the stake line marking the boundary of the PCS stockpile liner, and sufficient cover material has already been placed in this area. This plan for grading reduces the need for additional volumes of cover material to be hauled.

NOAA, Tetra Tech, and KRI decided to haul remaining PCS from the dewatering cell to Tract 42 for placement as cover material tomorrow morning. If necessary, additional PCS may be hauled from the National Weather Service (NWS) landspreading site.

NOAA, Tetra Tech, and KRI reaffirmed the need to meet the basic requirements for placement of cover material at Tract 42, including 2-foot cover over municipal solid waste (MSW), 3:1 or greater sideslopes (except in the southeast corner, where no MSW is present), and 100:1 or greater slope for the top of the PCS stockpile.

NOAA provided general schematics for the design and construction of the fabric and topsoil roll to be placed along the rockwall at Area 2. NOAA has decided to use two pieces of jute mesh to wrap the topsoil, seed, and fertilizer mix (instead of filter fabric as stated yesterday). The area was backfilled as specified in Daily Activities, above, to accommodate the design specifications provided. Topsoil and vegetation mix were to be required over the fabric wrap, based on discussions held yesterday; however, no cover will be placed over the jute mesh roll. The final scoria cap will extend from the east up to the jute mesh. Per the design specifications provided today, the jute mesh roll will extend approximately 1 foot above the height of the rock wall along the shoreline.

Samples Collected:

None.

Prepared by:

Tetra Tech EM Inc.

1-Oct-04
Date

Kelly-Ryan, Inc.

1-Oct-04
Date

Received by:

National Oceanic and Atmospheric Administration

1-Oct-04
Date

Date: 1-Oct-04

Daily Log Review Comments:

Reviewed this daily report and have no comments. --- Nir

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

Not applicable.

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 2-Oct-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|--------------------------------------|
| <i>Contractor:</i> | Brian Croft (lead) Kevin Matherne |
| <i>NOAA:</i> | Nir Barnea (lead) |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 23,060 | 775 | 23,835 |
| | Backfill Volume (CY) | 14,692 | 225 | 14,917 |
| | Personnel | | | |
| | Personnel Cost | \$359,450.82 | \$6,932.38 | \$366,383.20 |
| | Personnel Hours | 4,148.5 | 77.5 | 4,226.0 |
| | Equipment Hours | | | |
| | Equipment Cost | \$390,015.65 | \$11,227.80 | \$401,243.44 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 3,492.8 | 86.5 | 3,579.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 257.0 | 16.5 | 273.5 |
| | Other Costs | | | |
| | Sample Cost | \$41,152.38 | \$0.00 | \$41,152.38 |
| | Total Cost | \$805,507.88 | \$18,160.18 | \$823,668.06 |

At 0800, NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI hauled PCS from the dewatering cell to Tract 42 (see Discussions section below). The ZX800 loaded PCS. Two 773 dump trucks hauled a total of 10 loads of PCS from the dewatering cell to Tract 42.

KRI continued grading operations at Tract 42. The D3 bulldozer was used to grade sideslopes. Grading activities focused along the west and northwest portions of Tract 42. In addition, KRI used the D8 bulldozer and 988B loader at the National Weather Service (NWS) landspreading area to pile and load PCS for hauling to Tract 42, where it is being used to provide additional cover material (see Discussions, below). One 773 dump truck hauled 21 loads of PCS from the NWS landspreading area to Tract 42. The 773 dump truck was then decontaminated at the dewatering cell.

KRI mobilized the EX350 excavator from the Diesel Seep to Telegraph Hill to load backfill and topsoil. One 773 dump truck hauled 3 loads of backfill (scoria mixture) and 3 loads of vegetated topsoil from Telegraph Hill to the backfill staging area. Vegetated topsoil was obtained from the area previously designated by NOAA by scraping the grassy layer from the surface. The topsoil material will be used in shoreline restoration/revegetation at Area 2.

KRI continued backfill activities at Area 3B. The PC200 excavator placed and compacted backfill. The 980C loader hauled 15 buckets of backfill from the backfill staging area to Area 3B.

Date: 2-Oct-04

Problems Encountered or Anticipated:

None.

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA, Tetra Tech, and KRI agreed that PCS from the dewatering cell would be hauled to Tract 42 to provide additional soil volume for use as part of the required 2-foot cover. In addition, it was agreed that PCS would be hauled from the NWS landspreading area to Tract 42 to meet the necessary requirements for the 2-foot cover and 3:1 sideslopes.

NOAA, Tetra Tech, and KRI clearly identified the Tract 42 boundary stakes to ensure that no cover material is placed outside the property boundary.

NOAA delineated the area at Telegraph Hill for removal of vegetated topsoil for use at Area 2 prior to removing the material.

Samples Collected:

None.

Prepared by:

Tetra Tech EM Inc.

2-Oct-04
Date

Kelly-Ryan, Inc.

2-Oct-04
Date

Received by:

National Oceanic and Atmospheric Administration

2-Oct-04
Date

Date: 2-Oct-04

Daily Log Review Comments:

I reviewed this report and have no comments. --- Nir

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

Not applicable.

Tetra Tech EM Inc.

Date

Daily Construction Quality Control Report (DCQCR)
 Corrective Action Plan Implementation
 St. Paul, Alaska

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 4-Oct-04 DCQCR Version: 3

Management on Site:

| | |
|--------------------|--------------------------------------|
| <i>Contractor:</i> | Brian Croft (lead) Kevin Matherne |
| <i>NOAA:</i> | Nir Barnea |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 23,835 | 825 | 24,660 |
| | Backfill Volume (CY) | 14,917 | 465 | 15,382 |
| | Personnel | | | |
| | Personnel Cost | \$366,609.54 | \$7,001.29 | \$373,610.83 |
| | Personnel Hours | 4,226.5 | 78.0 | 4,304.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$402,065.38 | \$10,077.26 | \$412,142.63 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 3,589.8 | 88.0 | 3,677.8 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 313.5 | 14.0 | 327.5 |
| | Other Costs | | | |
| | Sample Cost | \$41,294.15 | \$0.00 | \$41,294.15 |
| | Total Cost | \$824,858.10 | \$17,078.55 | \$841,936.65 |

At 0800, NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI continued grading activities at Tract 42. The D3 bulldozer continued to grade sideslopes as well as the top of the stockpile area. During grading activities, municipal solid waste (MSW) was discovered within 1 foot of the surface near the northwest corner of the stockpile area. Subsequent discussions between NOAA, Tetra Tech, and KRI determined that MSW from this area would likely need to be relocated in order to accommodate placement of a 2-foot cover and 3:1 sideslopes (see Discussions section below). The D4 was used for 2 hours this date while the KRI mechanic attached additional cab enclosures to the NOAA-owned D3 for protection from wind and rain.

KRI also continued to haul PCS from the National Weather Service (NWS) landspreading area to Tract 42 for additional cover material. The D8 bulldozer pushed PCS into a pile. The 988B loader loaded PCS. One 773 dump truck hauled a total of 33 loads of PCS from the NWS landspreading area to Tract 42.

KRI continued backfill operations at the large open pit at Area 3B using the PC200-6 excavator and 980C loader. The open pit area was partially backfilled until the water level rose too high to continue. The water will be allowed to equilibate prior to continuing backfill operations at Area 3B.

KRI completed backfill Area 3D with the vegetated topsoil mixture and sand using the PC200-6 excavator and 980C loader. Area 3D was backfilled by placing sand in the low areas at the bottom of the area. Sand was also used to reconstruct the slope on the south side of the Area 3D. Backfill at Area 3D was completed by placing a final layer of vegetated topsoil over the underlying sand.

KRI began staging backfill material at Area 2 and began placing backfill in the five foot wide section along the east side of the rock wall using the PC200-6 excavator and 980C loader. Prior to placing backfill against the rock wall, a layer of jute mesh was placed along the entire length of the rockwall as part of the jute mesh wrap to be constructed. The mesh was rolled out along the rockwall with an approximate 1 foot toe of jute mesh placed at the bottom to the east side of the rockwall. The remaining mesh was laid over the rock wall until backfill of the area is completed per NOAA's design. The jute mesh will be folded over the backfill after the application of seed and fertilizer. KRI then began placing backfill along the rock wall to hold the first layer of jute mesh in place.

Date: 4-Oct-04

Problems Encountered or Anticipated:

MSW was discovered within 1 foot of the surface near the northwest corner of the stockpile area at Tract 42. A plan will be developed to address this situation and accomodate placement of the 2-foot cover and 3:1 sideslopes over this area (see Discussions section below).

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA, Tetra Tech, and KRI met at Tract 42 to discuss the discovery of MSW near the northwest corner within 1 foot of the surface. Options were discussed including relocation of the MSW to the open pit at the northeast corner, relocation of the MSW to the former pit (currently covered) at the southwest corner, and relocation of MSW to a new pit (to be excavated) in an area with sufficient cover. It was decided that further discussions would be held among NOAA representatives to determine the best solution. Until a decision is made, KRI will continue to work the sideslopes along the north side of the stockpile area.

Samples Collected:

None.

Prepared by:

Tetra Tech EM Inc.

Date 4-Oct-04

Kelly-Ryan, Inc.

Date 4-Oct-04

Received by:

National Oceanic and Atmospheric Administration

Date 4-Oct-04

Date: 4-Oct-04

Daily Log Review Comments:

I reviewed this report and have a question: To my recollection, the 988 loader loading PCS at the NWS site broke down at some point during the day. Is that correct? If yes, please adjust hours accordingly. If the 988 loader was used for 10 hours then the misunderstanding is mine, and the report is correct.

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

The 988 loader was repaired on 10/07/04. No change required.

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 5-Oct-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|--------------------------------------|
| <i>Contractor:</i> | Brian Croft (lead) Kevin Matherne |
| <i>NOAA:</i> | Nir Barnea (lead) |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 24,660 | 0 | 24,660 |
| | Backfill Volume (CY) | 15,382 | 715 | 16,097 |
| | Personnel | | | |
| | Personnel Cost | \$373,610.83 | \$6,680.61 | \$380,291.44 |
| | Personnel Hours | 4,304.5 | 79.0 | 4,383.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$412,142.63 | \$8,170.85 | \$420,313.48 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 3,677.8 | 77.5 | 3,755.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 327.5 | 18.0 | 345.5 |
| | Other Costs | | | |
| | Sample Cost | \$41,294.15 | \$0.00 | \$41,294.15 |
| | Total Cost | \$841,936.65 | \$14,851.45 | \$856,788.10 |

At 0800, NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI continued grading activities at Tract 42. The D3 bulldozer continued to grade sideslopes as well as the top of the stockpile area. KRI also excavated the municipal solid waste (MSW) discovered within 1 foot of the surface near the northwest corner of the stockpile area. The EX350 excavator was used at Tract 42 for 2 hours to remove the MSW and load into a 773 dump truck. The 773 dump hauled five loads of MSW from the area and placed the MSW into a low lying area located to the north of Tract 42. The D4 was also used for 2 hours this date to assist with placing PCS and grading the stockpile area.

KRI hauled 21 loads of rock from Telegraph Hill to Tract 42 during today's activities. The rock will be used to circle the perimeter of Tract 42 when final grading operations are completed. The rock was loaded into 773 dump trucks using the EX300 excavator.

KRI continued backfill operations at the large open pit at Area 3B using the PC200-6 excavator and 980C loader. The open pit area was again partially backfilled to leave an open area large enough to pump water into the dewatering cell. The remaining section of the pit will remain open until the dewatering cell is no longer required at the Diesel Seep Site.

KRI completed staging backfill material with the PC200-6 excavator at Area 2 along the rock wall. The 5-foot-wide section along the rock wall was filled and compacted with a mound of topsoil to a height of one foot above the top of the rockwall. KRI then placed seed and fertilizer along the length of the backfill and covered the mound with jute mesh per the NOAA design criteria. (please see comment below) Restoration activities at Area 2 were completed during today's activities.

Date: 5-Oct-04

Problems Encountered or Anticipated:

None.

Discussions With NOAA Personnel or Island Entity Personnel:

During today's activities, NOAA notified Tetra Tech that additional excavation will be required along the east side of Area 3C. NOAA surveyed the eastern boundaries of the originally proposed area of excavation for Area 3C using GPS and marked the boundaries with survey stakes. Additionally, NOAA located and staked two previous sampling locations within the additional area of excavation. The previous sampling locations exhibited elevated concentrations of petroleum hydrocarbons. NOAA requested that excavation begin along the eastern boundary of Area 3C previously excavated, and continue westward based on observation of PCS and sheening in groundwater.

Samples Collected:

None.

Prepared by:

Tetra Tech EM Inc.

Date 5-Oct-04

Kelly-Ryan, Inc.

Date 5-Oct-04

Received by:

National Oceanic and Atmospheric Administration

Date 5-Oct-04

Date: 5-Oct-04

Daily Log Review Comments:

KRI then placed seed and fertilizer along the length of the backfill and covered the mound with jute mesh per the NOAA design criteria. **In deviation from the design, three side-by-side strips of jute mesh were needed to cover the length of the mound in order to achieve adequate coverage. The design called for two such strips.** Restoration activities at Area 2 were completed during today's activities.

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

Noted.

Tetra Tech EM Inc.

Date

Daily Construction Quality Control Report (DCQCR)
 Corrective Action Plan Implementation
 St. Paul, Alaska

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 6-Oct-04 DCQCR Version: 3

Management on Site:

| | |
|--------------------|-----------------------------------|
| <i>Contractor:</i> | Kevin Matherne (lead) |
| <i>NOAA:</i> | Nir Barnea (lead) Greg Gervais |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$14,889.03 | \$0.00 | \$14,889.03 |
| | PCS Volume (CY) | 24,660 | 210 | 24,870 |
| | Backfill Volume (CY) | 16,097 | 1,530 | 17,627 |
| | Personnel | | | |
| | Personnel Cost | \$380,418.74 | \$6,476.47 | \$386,895.21 |
| | Personnel Hours | 4,383.5 | 73.0 | 4,456.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$420,313.48 | \$8,996.15 | \$429,309.63 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 3,755.3 | 82.0 | 3,837.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 345.5 | 18.0 | 363.5 |
| | Other Costs | | | |
| | Sample Cost | \$41,294.15 | \$283.54 | \$41,577.69 |
| | Total Cost | \$856,915.40 | \$15,756.16 | \$872,671.56 |

At 0800, NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI continued grading operations at Tract 42 using the NOAA D-3 bulldozer.

KRI quarried backfill from the NOAA Telegraph Hill pit for the Diesel Seep Site. The quarry was excavated using the EX350 excavator. Backfill was hauled to the Diesel Seep Site using the 773 and B25B dump trucks.

KRI began excavating clean overburden from the area of additional excavation delineated by NOAA at Area 3C. The clean overburden was removed using the Hitachi 800 excavator from approximately +9 MLLW to approximately +4 MLLW. Clean overburden material was hauled to the staging area using the B25B dump truck and the 980C loader.

Upon completion of clean overburden removal at Area 3C, KRI began excavation of PCS. Excavation of PCS was conducted in sections approximately 20 feet long by 20 feet wide using the PC200-6 excavator. PCS was loaded into a B25B dump truck and hauled to the dewatering cell. Tetra Tech monitored the sections of excavation for visual signs of sheening when groundwater was encountered, and for olfactory evidence of contamination when the layer of soil below groundwater was encountered. Excavation of the sections were terminated when no odors were detected at the bottom of the excavation. KRI completed two sections this date.

Tetra Tech collected one characterization sample from the clean overburden removed at Area 3C. Additionally, Tetra Tech collected one confirmation sample during today's PCS removal activities.

Date: 6-Oct-04

Problems Encountered or Anticipated:

None.

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA and Tetra Tech met to discuss further delineation and PCS removal at Area 3C. NOAA stated that removal of clean overburden will be conducted from the original area delineated for excavation proposed by NOAA in the Corrective Action Plan. NOAA directed Tetra Tech and KRI to remove PCS from the area of excavation starting at the west and moving east until sheening is not observed from the eastern sidewalls. NOAA stated that excavation beyond the latest area of delineation will not be conducted unless approval is received by NOAA to extend the bounds of PCS excavation.

NOAA and Tetra Tech met to discuss progress of the Tract 42 PCS grading operations. GPS survey conducted by NOAA indicated that the eastern slope of Tract 42 is steeper than 3:1. NOAA stated that KRI must add material and regrade the eastern slope to meet this requirement.

Samples Collected:

One characterization sample was collected from clean overburden removed from Area 3C:
SP34-CH-030-015

One confirmation sample was collected from the open excavation at Area 3C, and a depth of 10 feet bgs:
SP34-CS-049-100

Prepared by:

Tetra Tech EM Inc.

Date 6-Oct-04

Kelly-Ryan, Inc.

Date 6-Oct-04

Received by:

National Oceanic and Atmospheric Administration

Date 6-Oct-04

Date: 6-Oct-04

Daily Log Review Comments:

I reviewed this daily report and have no comments. --- Nir

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

Not applicable.

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 7-Oct-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|-----------------------------------|
| <i>Contractor:</i> | Kevin Matherne (lead) |
| <i>NOAA:</i> | Nir Barnea (lead) Greg Gervais |

| Daily Activities (Include in this section a detailed description): | | | | |
|---|------------------------------------|---------------------|--------------------|---------------------|
| Summary: | <i>Soil</i> | Previous | Today | YTD |
| | Total Backfill Royalties Cost | \$14,889.03 | \$2,158.08 | \$17,047.11 |
| | PCS Volume (CY) | 24,870 | 955 | 25,825 |
| | Backfill Volume (CY) | 17,627 | 709 | 18,336 |
| | Personnel | | | |
| | Personnel Cost | \$386,895.21 | \$9,072.42 | \$395,967.62 |
| | Personnel Hours | 4,456.5 | 102.5 | 4,559.0 |
| | Equipment Hours | | | |
| | Equipment Cost | \$429,309.63 | \$12,186.62 | \$441,496.25 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 3,837.3 | 100.5 | 3,937.8 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 363.5 | 18.0 | 381.5 |
| | Other Costs | | | |
| | Sample Cost | \$41,577.69 | \$425.31 | \$42,003.00 |
| | Total Cost | \$872,671.56 | \$23,842.43 | \$896,513.99 |

At 0800, NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI continued grading activities at Tract 42. The NOAA D-3 bulldozer continued to grade sideslopes as well as the top of the landfill surface along the east side and near the northwest corner of the stockpile area. KRI used the EX300 excavator and a Bell truck to move 9 loads of PCS from the bottom of the stockpile area to the top of Tract 42 for spreading.

KRI continued to haul PCS from the PCS dewatering cell to Tract 42 for additional cover material. KRI used the ZX800 excavator to haul three loads of PCS with a 773 truck and four loads of PCS with a Bell B25B truck from the PCS dewatering cell at the Diesel Seep Site to Tract 42. Additionally, KRI continued to haul PCS from the National Weather Service (NWS) landspreading area to Tract 42 for additional cover material. One 773 dump truck hauled a total of 7 loads of PCS from the NWS landspreading area to Tract 42. The D8 bulldozer pushed PCS into a pile. The 988B loader loaded PCS.

KRI continued excavating PCS at Area 3C. Excavation was conducted in sections approximately 20 feet long by 20 feet wide using the PC200-6 excavator. PCS was loaded into a Bell B25B dump truck and hauled to the PCS dewatering cell; 34 loads of PCS were hauled from Area 3C to the PCS dewatering cell. Tetra Tech monitored the sections of excavation for visual signs of sheening when groundwater was encountered, and for olfactory evidence when the layer of soil below groundwater was encountered. Excavation of each section was terminated when no odors were detected at the bottom of the excavation. KRI completed six sections this date. The 980C loader was used to backfill the sections upon completion of PCS excavation. The sections were backfilled to approximately 2 feet above the water table. 65 buckets of backfill material were moved with the 980C loader from the staging area to Area 3C during backfill activities.

Bering Sea Eccotech, Inc. (BSE) began delivering scoria backfill to the Diesel Seep Site. The scoria will be used as final cover across the site. The scoria was loaded into 10CY dump trucks at the Ridgewall Scoria Pit using a 966 loader. BSE delivered a total of 32 loads of scoria to the Diesel Seep Site this date.

Tetra Tech collected three confirmation samples during PCS excavation activities at Area 3C (see below).

Date: 7-Oct-04

Problems Encountered or Anticipated:

None.

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA and Tetra Tech discussed the status of the Tract 42 grading operations. NOAA stated that GPS data indicated lack of 2-foot cap over municipal solid waste (MSW) located along the east side of Tract 42. Additional material will be required in the area to provide the required 2-foot cover and allow a 3:1 slope at the east side of Tract 42. (see comment below, adding details to this discussion).

Samples Collected:

The following confirmation samples were collected this date:

- SP34-CS-050-090 - Sidewall sample collected above groundwater at approximately 9 feet below ground surface (bgs)
- SP34-CS-051-120 - Bottom sample collected at approximately 12 feet bgs (-3 MLLW)
- SP34-CS-052-080 - Sidewall sample collected above groundwater at approximately 8 feet bgs

Prepared by:

Tetra Tech EM Inc.

Date 7-Oct-04

Kelly-Ryan, Inc.

Date 7-Oct-04

Bering Sea Eccotech, Inc.

Date 7-Oct-04

Received by:

National Oceanic and Atmospheric Administration

Date 7-Oct-04

Date: 7-Oct-04

Daily Log Review Comments:

NOAA and Tetra Tech also discussed survey needs at Tract 42, and agreed that NOAA will use its GPS to closely monitor slope rise, and to provide KRI with stake markers at the northwest slope in the area was the trash was removed, and at the southeast slope, where cap coverage and slope rise may be insufficient at this point.

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

Noted.

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 8-Oct-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|--|
| <i>Contractor:</i> | Kevin Matherne (Option 19 lead) Carl Zietz (Option 21 lead) (arrived today) |
| <i>NOAA:</i> | Nir Barnea (lead) Greg Gervais Jim Wright (arrived today) |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$17,047.11 | \$1,652.28 | \$18,699.39 |
| | PCS Volume (CY) | 25,825 | 1,120 | 26,945 |
| | Backfill Volume (CY) | 18,336 | 859 | 19,195 |
| | <i>Personnel</i> | | | |
| | Personnel Cost | \$395,967.62 | \$8,829.25 | \$404,796.87 |
| | Personnel Hours | 4,559.0 | 100.0 | 4,659.0 |
| | <i>Equipment Hours</i> | | | |
| | Equipment Cost | \$441,496.25 | \$12,588.82 | \$454,085.07 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 3,937.8 | 108.0 | 4,045.8 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 381.5 | 18.0 | 399.5 |
| | <i>Other Costs</i> | | | |
| | Sample Cost | \$42,003.00 | \$708.85 | \$42,711.85 |
| | Total Cost | \$896,513.99 | \$23,779.20 | \$920,293.18 |

At 0800, NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI continued grading activities at Tract 42. The NOAA D-3 bulldozer continued to grade sideslopes as well as the top of the stockpile area along the east side and near the northwest corner.

KRI continued to haul PCS from the PCS dewatering cell to Tract 42 for additional cover material. KRI used the ZX800 excavator to haul 10 loads of PCS with two 773 trucks from the PCS dewatering cell at the Diesel Seep Site to Tract 42. Additionally, KRI continued to haul PCS from the National Weather Service (NWS) landspreading area to Tract 42 for additional cover material. The D8 bulldozer pushed PCS into a pile. The 988B loader loaded PCS. One 773 dump truck hauled a total of 24 loads of PCS from the NWS landspreading area to Tract 42.

KRI continued excavating PCS at Area 3C. Excavation of PCS was conducted in sections approximately 20 feet long by 20 feet wide using the PC200-6 excavator. PCS was loaded into a Bell B25B dump truck and hauled to the PCS dewatering cell. A total of 18 loads of PCS were hauled from Area 3C to the dewatering cell during excavation activities. Tetra Tech monitored the sections of excavation for visual signs of sheening when groundwater was encountered, and for olfactory evidence when the layer of soil below groundwater was encountered. Excavation of the sections were terminated when no odors were detected at the bottom of the excavation. KRI completed four sections this date. The 980C loader was used to backfill the sections upon completion of PCS excavation. The sections were backfilled to approximately two feet above groundwater. 101 buckets of backfill material were moved with the 980C loader from the staging area to Area 3C during backfill activities. KRI completed PCS excavation at Area 3C this date.

KRI excavated two test pits at Area 4 (see Problems Encountered or Anticipated, below).

BSE continued delivering scoria backfill to the Diesel Seep Site. The scoria will be used as final backfill cover across the site. The scoria was loaded into 10CY dump trucks at the Ridgwall Scoria Pit using a 966 or L-70 loader. BSE delivered a total of 25 loads of scoria to the Diesel Seep Site this date.

Date: 8-Oct-04

Problems Encountered or Anticipated:

A concrete slab was encountered in the first test pit excavated at the west end of Area 4 at approximately 2 feet below ground surface (bgs). The slab was photographed, and the pit was backfilled. 2-inch metal piping was uncovered approximately 3 to 4 feet bgs at the second test pit excavated at the center of Area 4. The piping ran from west to east across the majority of the exposed bottom. An elbow was located at the east end of the pit, and the piping ran to the south from the elbow. Upon discovery of obstructions at both test pits excavated in Area 4, NOAA discontinued further attempts at excavating test pits until more detailed analysis of the area concerning potential subsurface obstructions can be performed.

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA requested that three test pits be excavated at Area 4 of the Diesel Seep Site. NOAA used GPS to stake the boundaries of Area 4 and directed Tetra Tech to excavate the test pits at the west, central, and east sides of Area 4. Discussions regarding problems encountered during the test pit excavation activities are provided in Problems Encountered or Anticipated, above.

Samples Collected:

The following confirmation samples were collected at Area 3C this date:
SP34-CS-053-090 collected at sidewall above groundwater zone approximately 9 feet bgs
SP34-CS-054-120 collected at bottom of excavation approximately 12 feet bgs
SP34-CS-055-080 collected at sidewall above groundwater zone approximately 8 feet bgs
SP34-CS-056-080 collected at sidewall above groundwater zone approximately 8 feet bgs

One stockpile sample was collected at the PCS dewatering cell this date:
SP34-SS-031-015

Prepared by:

Tetra Tech EM Inc.

8-Oct-04
Date

Kelly-Ryan, Inc.

8-Oct-04
Date

Bering Sea Eccotech, Inc.

8-Oct-04
Date

Received by:

National Oceanic and Atmospheric Administration

8-Oct-04
Date

Date: 8-Oct-04

Daily Log Review Comments:

I reviewed the report and have no comments. --- Nir

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

Not applicable.

Tetra Tech EM Inc.

Date

Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 9-Oct-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|--|
| <i>Contractor:</i> | Kevin Matherne (Option 19 lead) Carl Zietz (Option 21 lead) |
| <i>NOAA:</i> | Jim Wright (lead) Greg Gervais Nir Barnea |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$18,699.39 | \$1,022.84 | \$19,722.23 |
| | PCS Volume (CY) | 26,945 | 575 | 27,520 |
| | Backfill Volume (CY) | 19,195 | 852 | 20,047 |
| | Personnel | | | |
| | Personnel Cost | \$404,796.87 | \$8,179.46 | \$412,976.33 |
| | Personnel Hours | 4,659.0 | 93.0 | 4,752.0 |
| | Equipment Hours | | | |
| | Equipment Cost | \$454,085.07 | \$11,588.83 | \$465,673.90 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 4,045.8 | 103.0 | 4,148.8 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 399.5 | 28.0 | 427.5 |
| | Other Costs | | | |
| | Sample Cost | \$42,711.85 | \$353.80 | \$43,065.65 |
| | Total Cost | \$920,293.18 | \$21,144.93 | \$941,438.12 |

At 0800, NOAA and Kelly-Ryan, Inc. (KRI) employees attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech).

KRI continued grading activities at Tract 42. The NOAA D-3 bulldozer continued to grade side slopes as well as the top of the landfill cover.

KRI continued to haul PCS from the PCS dewatering cell to Tract 42 for additional cover material. KRI used the ZX800 excavator to haul 10 loads of PCS with two 773 trucks from the PCS dewatering cell at the Diesel Seep Site to Tract 42. Additionally, KRI continued to haul PCS from the National Weather Service (NWS) landspreading area to Tract 42 for additional cover material. The D8 bulldozer pushed PCS into a pile. The 988B loader loaded PCS at the NWS. One 773 dump truck hauled a total of 6 loads of PCS from the NWS landspreading area to Tract 42.

KRI continued backfilling areas of excavation at Area 3C with sand/topsoil material using the PC200-6 excavator. Backfill was placed into the excavated areas to a depth of approximately 1 foot below ground surface (bgs) to allow for the final scoria cap at the Diesel Seep site. 65 loads of backfill were moved with the 980C loader from the staging area to the areas of excavation. In order to ensure that adequate backfill was available, KRI excavated additional backfill material from the NOAA-owned portion of the Telegraph Hill quarry. The EX350 excavator was used to mine and load material. A total of 9 loads of backfill were hauled from Telegraph Hill to the staging area using two 733 trucks. Upon completion of backfill activities, KRI began spreading the final 1-foot-thick scoria wear surface at Areas 3B and 3C using the PC200-6 excavator and D-3 bulldozer. Additionally, 2 loads of PCS were hauled from the dewatering cell to the NWS land spreading area this date. To prepare for removal of the dewatering cell, Tetra Tech began pumping water from the cell into the open excavation at Area 3B. The discharge was monitored for sheens during pumping activities.

BSE continued hauling scoria from the Ridgeway quarry to the Diesel Seep Site. A total of 10 loads of scoria were hauled in two 10 CY dump trucks from the quarry to Areas 3B and 3C. The scoria was loaded at the quarry using a 966 loader. In addition, BSE delivered 5 loads of scoria to the City of Saint Paul Public Works to be used for road repairs associated with hauling activities out to the Vehicle Boneyard.

Date: 9-Oct-04

Daily Activities (Continued):

BSE hauled approximately 100CY of topsoil material from the staging area to the Vehicle Boneyard this date. The material was loaded into dump trucks using a 966 loader. A total of 10 loads of topsoil/sand were hauled in two 10CY trucks to the Vehicle Boneyard this date.

Problems Encountered or Anticipated:

None.

Discussions With NOAA Personnel or Island Entity Personnel:

None.

Samples Collected:

One stockpile sample was collected from the PCS dewatering cell this date:
SP34-SS-032-015

Prepared by:

Tetra Tech EM Inc.

9-Oct-04
Date

Kelly-Ryan, Inc.

9-Oct-04
Date

Bering Sea Eccotech, Inc.

9-Oct-04
Date

Received by:

National Oceanic and Atmospheric Administration

9-Oct-04
Date

Date: 9-Oct-04

Daily Log Review Comments:

- (1) Note that NOAA installed stakes to demark the perimeter of the Vehicle Boneyard area to be covered with clean sand and topsoil.
- (2) On the PCS, Backfill page, need to allocate all Ridge Wall scoria costs to Option 19o.

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

- (1) Noted.
- (2) Noted and resolved.

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 10-Oct-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|-----------------------------------|
| <i>Contractor:</i> | Kevin Matherne (Option 19 lead) |
| <i>NOAA:</i> | Jim Wright (lead) Greg Gervais |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|-------------------|---------------------|
| | Total Backfill Royalties Cost | \$19,722.23 | \$0.00 | \$19,722.23 |
| | PCS Volume (CY) | 27,520 | 0 | 27,520 |
| | Backfill Volume (CY) | 20,047 | 0 | 20,047 |
| | Personnel | | | |
| | Personnel Cost | \$412,976.33 | \$1,505.24 | \$414,481.58 |
| | Personnel Hours | 4,752.0 | 17.5 | 4,769.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$465,673.90 | \$652.05 | \$466,325.96 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 4,148.8 | 9.5 | 4,158.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 427.5 | 8.0 | 435.5 |
| | Other Costs | | | |
| | Sample Cost | \$43,065.65 | \$0.00 | \$43,065.65 |
| | Total Cost | \$941,438.12 | \$2,157.30 | \$943,595.42 |

At 0830, one Kelly-Ryan, Inc. (KRI) employee attended a safety meeting (at the Diesel Seep Site), conducted by Tetra Tech EM Inc. (Tetra Tech); NOAA did not attend the daily safety meeting. KRI began activities today at 0800.

KRI continued spreading the final scoria wear surface at the Diesel Seep Site using the PC200-6 excavator and KRI D-3 bulldozer. The scoria was compacted using equipment tracks. The open excavation at Area 3B was left open to accommodate water from the dewatering cell, and Tetra Tech continued pumping water from the dewatering cell into Area 3B in preparation of upcoming cell removal activities. The discharge into Area 3B was monitored for sheens during pumping activities.

Problems Encountered or Anticipated:

None.

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA and Tetra Tech met at Tract 42 to discuss final grading required. NOAA stated that the majority of the slopes were within the 3:1 or greater tolerances and the municipal solid waste was covered in all areas with 2 feet (or thicker) cap of cover material. Based on observations at Tract 42, additional grading was noted at the north side of the stockpile and at the south side of the stockpile. NOAA also stated that pieces of liner exposed during grading operations would require burial or removal prior to completion of grading activities, and that the rock barrier would need to be completed.

NOAA and Tetra Tech met at the Telegraph Hill quarry to determine if suitable material was available to complete repairs to the north side of Area 2. NOAA identified a pile of material located near the KRI shop comprised of minus 6-inch rock mixed with finer soil. NOAA stated that the material observed or a similar type material is recommended for repair at Area 2.

Date: 10-Oct-04

Samples Collected:

None.

Prepared by:

Tetra Tech EM Inc.

Date 10-Oct-04

Kelly-Ryan, Inc.

Date 10-Oct-04

Received by:

National Oceanic and Atmospheric Administration

Date 10-Oct-04

Date: 10-Oct-04

Daily Log Review Comments:

No comments received.

Ken Valder (10/21/04)

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

Not applicable.

Tetra Tech EM Inc.

Date

Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 11-Oct-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|--|
| <i>Contractor:</i> | Kevin Matherne (Option 19 lead) Carl Zietz (Option 21 lead) |
| <i>NOAA:</i> | Jim Wright (lead) Greg Gervais |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$19,722.23 | \$3,096.72 | \$22,818.95 |
| | PCS Volume (CY) | 27,520 | 180 | 27,700 |
| | Backfill Volume (CY) | 20,047 | 404 | 20,451 |
| | Personnel | | | |
| | Personnel Cost | \$414,481.58 | \$9,224.50 | \$423,706.08 |
| | Personnel Hours | 4,769.5 | 105.5 | 4,875.0 |
| | Equipment Hours | | | |
| | Equipment Cost | \$466,325.96 | \$8,801.68 | \$475,127.64 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 4,158.3 | 101.0 | 4,259.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 435.5 | 22.0 | 457.5 |
| | Other Costs | | | |
| | Sample Cost | \$43,065.65 | \$0.00 | \$43,065.65 |
| | Total Cost | \$943,595.42 | \$21,122.90 | \$964,718.32 |

At 0800, Kelly-Ryan, Inc. (KRI) and NOAA attended a safety meeting (at the Diesel Seep Site), conducted by the Tetra Tech EM Inc. (Tetra Tech) Option 19 Task Leader.

KRI continued grading operations at Tract 42 using the NOAA D-3 bulldozer. A 988 loader was used to move PCS around Tract 42 during grading operations. Additionally, KRI began placing the rock barrier around the completed portions of Tract 42 using the EX300 excavator. The rocks for the barrier were moved around the perimeter of Tract 42 using a B25B dump truck.

KRI began demobilization of the dewatering cell at the Diesel Seep Site. The PC200-6 excavator was used to scrape PCS from the liner and load PCS from the cell into a B25B dump truck. KRI also used the PC200-6 excavator to begin pulling the liner from the southeast corner of the cell. During liner removal activities, the liner began ripping into small pieces. Based on the liner integrity, it was decided to rip out the liner and shake residual PCS off inside the cell. The portions of liner removed were staged at the north end of the cell. The removed liner will be staged into a NOAA open-top conex box for off-island disposal at a later date. This date, 12 loads of PCS were hauled from the dewatering cell to the NWS landspreading area. The D-8 bulldozer was used to level PCS delivered to the NWS landspreading area.

KRI hauled two loads of 6-inch minus rock from the NWS to Area 2. The rock was hauled to Area 2 using a B25B truck and was staged at the north end of the Area 2. Restoration of the north end of Area 2 will began later this week.

At 0800, Tetra Tech and NOAA attended a safety meeting (at Poss Camp), conducted by Bering Sea Eccotech, Inc. (BSE).

BSE continued hauling backfill and began grading operations at the Vehicle Bone Yard (VBY). NOAA surveyed the area of restoration using GPS surveying equipment prior to beginning today's activities. BSE mobilized equipment to the VBY using the city lowboy truck. Upon completion of surveying activities, BSE hauled 33 loads of sand from Northeast Point to the VBY using two BSE 10 CY dump trucks and the NOAA dump truck. The sand was graded using the KRI D-4 bulldozer and the BSE EX150 excavator.

Date: 11-Oct-04

Problems Encountered or Anticipated:

As the liner at the PCS dewatering cell was being removed, it began ripping into small pieces. Because of its poor integrity, removal of all liner from the cell may require more effort than expected. The smaller pieces of the liner will require greater sifting of the overlying PCS in order to recover all liner material for disposal.

Discussions With NOAA Personnel or Island Entity Personnel:

NOAA and Tetra Tech met near the end of today's activities to discuss the progress of Tract 42 grading operations. NOAA stated that the slope at the southeast corner of Tract 42 was steeper than the 3:1 slope requirements. NOAA stated that KRI should haul 3 to 5 more loads of cover material to Tract 42 to add material and regrade the southeast slope.

Samples Collected:

None.

Prepared by:

Tetra Tech EM Inc.

Date 11-Oct-04

Kelly-Ryan, Inc.

Date 11-Oct-04

Bering Sea Eccotech, Inc.

Date 11-Oct-04

Received by:

National Oceanic and Atmospheric Administration

Date 11-Oct-04

Date: 11-Oct-04

Daily Log Review Comments:

No comments
Jim Wright

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

Not applicable.

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 12-Oct-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|--|
| <i>Contractor:</i> | Kevin Matherne (Option 19 lead) Carl Zietz (Option 21 lead) |
| <i>NOAA:</i> | Jim Wright (lead) Greg Gervais John Lindsay (Arrived on island this day) |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|---------------------|
| | Total Backfill Royalties Cost | \$22,818.95 | \$0.00 | \$22,818.95 |
| | PCS Volume (CY) | 27,700 | 335 | 28,035 |
| | Backfill Volume (CY) | 20,451 | 0 | 20,451 |
| | Personnel | | | |
| | Personnel Cost | \$423,706.08 | \$9,712.11 | \$433,418.19 |
| | Personnel Hours | 4,875.0 | 114.0 | 4,989.0 |
| | Equipment Hours | | | |
| | Equipment Cost | \$475,127.64 | \$8,554.75 | \$483,682.39 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 4,259.3 | 89.0 | 4,348.3 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 457.5 | 10.0 | 467.5 |
| | Other Costs | | | |
| | Sample Cost | \$43,065.65 | \$707.60 | \$43,773.25 |
| | Total Cost | \$964,718.32 | \$18,974.46 | \$983,692.78 |

At 0800, Kelly-Ryan, Inc. (KRI) and NOAA attended a safety meeting (at the Diesel Seep Site), conducted by the Tetra Tech EM Inc. (Tetra Tech) Option 19 Task Leader.

KRI completed grading operations at Tract 42 using the NOAA D-3 bulldozer. Four loads of PCS were hauled to Tract 42 from the PCS dewatering cell (DW) using a B25B truck. The PCS will be used to complete grading of the southeast slope of the landfill cover to the required 3:1 slope. Additionally, KRI completed placing the rock wall barrier around Tract 42. The rock was placed around the perimeter of Tract 42 using an EX300 excavator.

KRI continued demobilization of the DW at the Diesel Seep Site. The PC200-6 excavator pulled liner material from inside and around the outside of the DW, sift pieces of liner material from the PCS, and stockpile PCS for transport. Four loads of PCS were hauled to Tract 42 using a B25B dump truck. Five loads of PCS were hauled to the NWS landspread area using a B25B dump truck, and seven loads were hauled using a 773 dump truck. The B25B and 773 dump trucks were loaded at the DW using a 988 loader. Additionally, the 988 loader was used to scrape soil and clean the haul routes located around the Diesel Seep Site. Liner material sifted from PCS at the DW was loaded with the PC200-6 into the 988 loader. The 988 loader transferred the liner material into a NOAA open-top conex box staged near the east side of Area 3C. The removal of liner material from the DW and transfer to the conex box was completed this date.

KRI assisted Tetra Tech with demobilization of NOAA wastewater treatment equipment and miscellaneous equipment staged at the Diesel Seep Site. Equipment was transported to the NOAA Maintenance Building for storage, including various plumbing fittings, hoses, extension cords, the oil/water separator, the 2-inch diaphragm pump, the 10-gallon-per-minute (gpm) sump pump, air compressor, oil skimmer/diaphragm pump, and two empty 55-gallon drums. The oil/water separator, oil skimmer, and 2-inch hosing was decontaminated at Tract 42 prior to its transfer to the Maintenance Building.

Date: 12-Oct-04

Daily Activities (Continued):

At 0800, Tetra Tech and NOAA attended a safety meeting (at the Poss Camp), conducted by Bering Sea Eccotech, Inc. (BSE).

BSE completed grading operations at the Vehicle Bone Yard (VBY). Topsoil staged at the VBY during previous activities was moved from the staging area to the sand fill area using the 966D loader. The topsoil was graded using the KRI D-4 dozer. Upon completion of grading activities, BSE mobilized the D-4 dozer to the Diesel Seep Site using the City of Saint Paul lowboy.

BSE mobilized equipment to the Cascade Building and began removal of PCS this date. The EX150 excavator was mobilized to the site using the City of Saint Paul lowboy. BSE excavated a total of four pits; PCS removed from the pits was hauled to the NWS landsread area using two BSE 10-cubic-yard (CY) dump trucks. A total of 2.5 loads of PCS was hauled to the NWS landsread area this date.

BSE fabricated and installed a cover over an open electrical panel located inside the Cascade Building. The panel was covered to prevent accidental public access to energized circuits.

Problems Encountered or Anticipated:

Unidentified 4-inch polyvinyl chloride (PVC) pipe was uncovered in one of the pits excavated inside the Cascade Building. BSE was notified to halt excavation at the pit and leave the pipe undisturbed, pending the results of thin-layer chromatography (TLC) analysis from a sample collected from the bottom of the pit.

Discussions With NOAA Personnel or Island Entity Personnel:

Tetra Tech met with NOAA and discussed the following concerns related to the Cascade Building:

1. Lack of maintainance has caused severe corrosion to sheeting and structure, which will shorten the life cycle of the building.
2. One of the columns on the East side of the building is not attached to the foundation and free to move.
3. The primary power panel was missing a cover and provided ready access to unprotected bus bars carrying 120- and 240-volt power (NOAA directed a cover be fabricated and placed in the interest of public safety).

In separate discussions with NOAA and BSE, Tetra Tech noted that the estimate and plan for demolishing the Connector Building between the Municipal Garage and Old Machine Shop under Option 21D does not include equipment or planning adequate to provide for safe removal of the structure, given the corrosion damage to the building, type of structure involved, and local high wind conditions. Tetra Tech met with John Lindsey (NOAA) and discussed possible damage to adjacent buildings during demolition of the Connector Building. Mr. Lindsey stated that limited cosmetic damage to the adjacent buildings would be acceptable, as long as the structural integrity is maintained.

Date: 12-Oct-04

Samples Collected:

Four TLC samples were collected from inside the Cascade Building:
SP-9F-TLC-101-027 - Bottom of PIT 06 at 2.7 feet below ground surface (bgs)
SP-9F-TLC-102-027 - Bottom of PIT 06 at 2.7 feet bgs
SP-9F-TLC-103-037 - Bottom of PIT 01 at 3.7 feet bgs
SP-9F-TLC-104-040 - Bottom of PIT 09 at 4 feet bgs

Two stockpile samples were collected at the Cascade Building:
SP-9F-SS-101-020 - From first 50 CY stockpiled PCS
SP-9F-SS-102-020 - From first 50 CY stockpiled PCS

Prepared by:

Tetra Tech EM Inc.

Date 12-Oct-04

Kelly-Ryan, Inc.

Date 12-Oct-04

Bering Sea Eccotech, Inc.

Date 12-Oct-04

Received by:

National Oceanic and Atmospheric Administration

Date 12-Oct-04

Date: 12-Oct-04

Daily Log Review Comments:

Please confirm the TLC sample locations, numbers and depths. The sample locations, numbers and depths that I received from Carl Zietz in the field, after he corrected the numbers to agree with the CAP are a bit different from what is reported above:

| Location | Number and depth |
|----------|------------------|
| TLC-06 | 101-027 |
| TLC-01 | 103-037 |
| TLC-09 | 104-040 |
| TLC-07 | 105-040 |

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

Confirmed.

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 13-Oct-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|--|
| <i>Contractor:</i> | Kevin Matherne (Option 19 lead) Carl Zietz (Option 21 lead) |
| <i>NOAA:</i> | Jim Wright (lead) Greg Gervais John Lindsey |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|---------------------|--------------------|-----------------------|
| | Total Backfill Royalties Cost | \$22,818.95 | \$112.40 | \$22,931.35 |
| | PCS Volume (CY) | 28,035 | 195 | 28,230 |
| | Backfill Volume (CY) | 20,451 | 20 | 20,471 |
| | Personnel | | | |
| | Personnel Cost | \$433,418.19 | \$9,969.94 | \$443,388.13 |
| | Personnel Hours | 4,989.0 | 118.0 | 5,107.0 |
| | Equipment Hours | | | |
| | Equipment Cost | \$483,682.39 | \$10,345.75 | \$494,028.14 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 4,348.3 | 115.5 | 4,463.8 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 467.5 | 0.0 | 467.5 |
| | Other Costs | | | |
| | Sample Cost | \$43,773.25 | \$2,122.80 | \$45,896.05 |
| | Total Cost | \$983,692.78 | \$22,550.89 | \$1,006,243.67 |

At 0800, Kelly-Ryan, Inc. (KRI) and NOAA attended a safety meeting (at the Diesel Seep Site), conducted by the Tetra Tech EM Inc. (Tetra Tech) Option 19 Task Leader.

KRI continued demobilization of the dewatering cell at the Diesel Seep Site. The ZX800 excavator was used to scrape residual PCS from the inside of the dewatering cell (DW) and surrounding area. A total of five loads of PCS was hauled from the DW to the NWS using a 773 truck. The 988 loader was used at the DW to load PCS into the 773. KRI spread PCS received from the DW and the Cascade Building at the National Weather Service (NWS) landspreading area using the D-8 bulldozer.

Additionally, KRI began final grading operations at the DW using a D-4 bulldozer. KRI completed repairs at the north side of Area 2 at the Diesel Seep site. 6-inch minus rock backfill was placed along the north end of the Area 2 restoration site, which was previously damaged and eroded during a storm event. Prior to placing the rock material over the area, a mixture of soil and root matter was spread over the area. The repair activities were conducted with the PC200-6 excavator.

KRI began mobilizing unused GAC bags staged near the DW to the NOAA Maintenance Building. The GAC bags were secured to pallets using shrink wrap, and the pallets were loaded onto a lowboy truck using a forklift. The wrapped pallets of GAC bags were unloaded from the lowboy with the forklift and staged in the Maintenance Building as directed by NOAA.

At 0800, the Tetra Tech Option 21 Task Leader and NOAA attended a safety meeting (at the Poss Camp), conducted by Bering Sea Eccotech, Inc. (BSE).

BSE continued excavation and PCS removal activities at the Cascade Building. The EX150 excavator was used to excavate pits inside the building. Two BSE 10-cubic-yard (CY) dump trucks hauled a total of 7 loads of PCS to the NWS landspreading area. Due to the location of open pits in the building, backfill of open pits was required to access remaining areas of excavation. BSE backfilled three open pits. Backfill was hauled from the Ridgewall scoria pit to the Cascade Building using two BSE 10 CY dump trucks. A total of 2 loads of scoria were hauled to the building. The scoria was loaded at the Ridgewall scoria pit using the 966 loader. The 10 CY trucks and excavator were deconned between PCS excavation and clean backfill activities.

Date: 13-Oct-04

Daily Activities (Continued):

BSE conducted maintenance activities at the Cascade Building this date. BSE repaired the rolldown door located on the north side of the building. The door was repaired to prevent unauthorized access to the building in the future.

Problems Encountered or Anticipated:

None.

Discussions With NOAA Personnel or Island Entity Personnel:

Tetra Tech, BSE and NOAA met to continue discussions regarding the demolition of the Connector Building between the Machine Shop and Municipal Garage. Carl Zietz (Tetra Tech) expressed concerns about high wind conditions that could affect safety aspects of the building demolition. Mr. Zietz stated that a window of approximately 3 days of winds below 20 to 25 knots is required to safely demolish the building.

Samples Collected:

Five (5) thin-layer chromatography (TLC) samples were collected at the Cascade Building:
SP21-TLC-106-040, bottom of PIT 3 at approximately 4 feet below ground surface (bgs)
SP21-TLC-107-040, bottom of PIT 13 at approximately 4 feet bgs
SP21-TLC-108-080, southeast sidewall of PIT 6 at approximately 8 feet bgs
SP21-TLC-109-060, bottom of PIT 3 at approximately 6 feet bgs
SP21-TLC-110-020, north sidewall of PIT 6 at approximately 2 feet bgs

Two (2) stockpile samples were collected at the Cascade Building:
SP21-SS-103-020
SP21-SS-104-300 (Duplicate of SP21-SS-103-020)

Four (4) characterization samples were collected at the Cascade Building:
SP21-CS-101-085, bottom of PIIT 6 at approximately 6 feet bgs (refusal)
SP21-CS-102-070, NE corner PIT 6 at approximately 7 feet bgs (refusal at concrete slab)
SP21-CS-103-020, NE corner PIT 6 at approximately 2 feet bgs (refusal at manhole)
SP21-CS-104-300 (Duplicate of SP21-CS-103-020)

Four (4) confirmation samples were selected from previously collected TLC samples:
SP21-CS-105-040 (SP21-TLC-104-040)
SP21-CS-106-040 (SP21-TLC-105-040)
SP21-CS-107-040 (SP21-TLC-107-040)
SP21-CS-108-060 (SP21-TLC-109-060)

Prepared by:

Tetra Tech EM Inc.

13-Oct-04

Date

Kelly-Ryan, Inc.

13-Oct-04

Date

Bering Sea Eccotech, Inc.

13-Oct-04

Date

Received by:

National Oceanic and Atmospheric Administration

13-Oct-04

Date

Date: 13-Oct-04

Daily Log Review Comments:

No Comments
Jim Wright

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

Not applicable.

Tetra Tech EM Inc.

Date

**Daily Construction Quality Control Report (DCQCR)
Corrective Action Plan Implementation
St. Paul, Alaska**

Contract: 50-EANC-9-00047, Request No. L007 Mods. 15/16/17/18/19

Work Date: 14-Oct-04 **DCQCR Version:** 3

Management on Site:

| | |
|--------------------|--|
| <i>Contractor:</i> | Kevin Matherne (Option 19 lead -- departed this date) Carl Zietz (Option 21 lead) |
| <i>NOAA:</i> | Jim Wright (lead) Greg Gervais John Lindsay |

Daily Activities (Include in this section a detailed description):

| Summary: | <i>Soil</i> | Previous | Today | YTD |
|----------|------------------------------------|-----------------------|--------------------|-----------------------|
| | Total Backfill Royalties Cost | \$22,931.35 | \$584.48 | \$23,515.83 |
| | PCS Volume (CY) | 28,230 | 50 | 28,280 |
| | Backfill Volume (CY) | 20,471 | 104 | 20,575 |
| | Personnel | | | |
| | Personnel Cost | \$443,388.13 | \$7,145.78 | \$450,533.91 |
| | Personnel Hours | 5,107.0 | 84.5 | 5,191.5 |
| | Equipment Hours | | | |
| | Equipment Cost | \$494,028.14 | \$5,397.62 | \$499,425.76 |
| | Equipment Standby Cost | \$0.00 | \$0.00 | \$0.00 |
| | Contractor Equipment Hours | 4,463.8 | 74.0 | 4,537.8 |
| | Contractor Equipment Standby Hours | 0.0 | 0.0 | 0.0 |
| | Government Equipment Hours | 467.5 | 12.0 | 479.5 |
| | Other Costs | | | |
| | Sample Cost | \$45,896.05 | \$3,538.00 | \$49,434.05 |
| | Total Cost | \$1,006,243.67 | \$16,665.88 | \$1,022,909.55 |

Option 19

At 0800, Kelly Ryan, Inc. (KRI) and NOAA attended the daily Health and Safety meeting conducted by Tetra Tech EM Inc. (Tetra Tech) at the Diesel Seep Site.

KRI continued final backfill and grading activities at the Diesel Seep Site and City of St. Paul (SNP) roadways. The KRI grader and D-3 bulldozer were used to grade the area east of the PCS dewatering cell and Area 3C. Additionally, the grader was used to continue grading the SNP roadways from the Diesel Seep Site to the NWS landspreading area.

KRI completed relocating unused GAC bags from the Diesel Seep Site to the NOAA Maintenance Building. Additionally, KRI used the 988 loader to mobilize the open-top conex box containing the liner from the dewatering cell removed at the Diesel Seep Site to the Old Power Plant/Harbor. KRI also mobilized a metal sled container from the Blubber Dump to the Old Power Plant/Harbor using the 988 loader.

KRI deconned and demobilized the EX300 excavator and a 773 dump truck from Tract 42.

Option 21e

At 0800, Tetra Tech and NOAA attended the daily Health and Safety meeting conducted by Bering Sea Eccotech, Inc. (BSE) at the BSE airport office (POSS Camp).

BSE continued excavation of PCS at the Cascade Building. A total of five loads of PCS were excavated during today's activities using the EX150 excavator. Two of the loads were hauled to the NWS landspreading area using two BSE 10-cubic yard (CY) dump trucks. Due to solvent-like odors detected in the remaining soils excavated at the Cascade Building, the soils were staged on a liner inside the Cascade Building. Upon completion of excavation activities, BSE deconned the equipment and backfilled three of the pits excavated during PCS removal activities. A total of 2 loads of scoria were hauled from the Ridgeway Scoria Pit and hauled to the Cascade Building using one BSE 10 CY dump and the NOAA dump truck. Additionally, BSE hauled a total of six loads of scoria to the Diesel Seep Site using one BSE 10 CY dump truck and the NOAA dump truck.

Date: 14-Oct-04

Problems Encountered or Anticipated:

At approximately 1630, elevated readings (45-75 ppm) of carbon monoxide (CO) were detected in the Cascade Building during today's operations. Work was discontinued and equipment was shut down for 20 minutes in order to ventilate the building. Increase in CO suspected due to wind shift and use of generator in building to power electric ventilation fan. It was suspected that the generator was producing more CO in the exhaust than the fan was capable of moving out the building. Fan and generator were shut down during today's operations.

Excavation was suspended at sampling location TLC-02 due to underground obstructions encountered in the excavation. A concrete foundation was encountered to the south, a concrete slab to the north, and a primary energy cable (unenergized) in possible transite piping in the center of the excavation. Confirmation samples were collected from the excavation.

Discussions With NOAA Personnel or Island Entity Personnel:

Tetra Tech, NOAA, and BSE discussed demolition of the connector building between the Municipal Garage and Machine Shop. A decision was made to suspend demolition activities. However, NOAA later indicated that Tetra Tech and BSE should proceed with interior clearing of the building and structural bracing to prepare for demolition. NOAA is anticipating that demolition may progress further if wind conditions allow for a three day window to complete demolition activities.

Tetra Tech and NOAA met during excavation activities at the Cascade Building to discuss solvent-like odors detected during PCS removal. The odor was detected at two locations during excavation activities at depths of approximately six feet below ground surface (ft-bgs) or greater. Upon NOAA's request, the soils excavated from the suspect areas were staged in the Cascade Building on a liner. Tetra Tech collected samples of the soils for volatile organic compound (VOC) analysis. The soils will be staged on the liner inside the building pending analytical results.

Date: 14-Oct-04

Samples Collected:

The following confirmation samples were collected at the Cascade Building during today's activities:

- SP21-CS-109-040. Bottom of excavation at approximately 4 ft-bgs.
- SP21-CS-110-060. Bottom of excavation at approximately 6 ft-bgs.
- SP21-CS-110-300. Duplicate sample of SP21-CS-110-060.
- SP21-CS-111-060. Bottom of excavation at approximately 6 ft-bgs.

The following soil stockpile samples were collected from PCS excavated at the Cascade Building during today's activities:

- SP21-SS-105-014.

The following TLC samples were collected at the Cascade Building during today's activities:

- SP21-TLC-111-080. Bottom at approximately 8 ft-bgs.
- SP21-TLC-112-070. Bottom at approximately 7 ft-bgs.
- SP21-TLC-113-080. Bottom at approximately 8 ft-bgs.

The following TLC samples were selected as confirmation samples during today's activities:

- SP21-TLC-104-040 submitted as SP21-CS-105-040
- SP21-TLC-105-040 submitted as SP21-CS-106-040
- SP21-TLC-107-040 submitted as SP21-CS-107-040
- SP21-TLC-109-060 submitted as SP21-CS-108-060
- SP21-TLC-112-070 submitted as SP21-CS-112-070

Prepared by:

Tetra Tech EM Inc.

Date 14-Oct-04

Kelly-Ryan, Inc.

Date 14-Oct-04

Bering Sea Eccotech, Inc.

Date 14-Oct-04

Received by:

National Oceanic and Atmospheric Administration

Date 14-Oct-04

Date: 14-Oct-04

Daily Log Review Comments:

On the "Equipment" sheet, there are 2 hours shown for the "Sierra Super" pickup truck for Superintendent transportation, but no hours shown for the superintendent. Was this truck used by someone else, or is this an error?

Jim Wright

National Oceanic and Atmospheric Administration

Date

Corrections/Explanations of Daily Log Review Comments:

Personnel hours for Merwyn Johnson (2 hours - superintendent) and Barbara Johnson (1 hour - clerk) were previously omitted, but have been added.

This addresses my comment above.

Jim Wright, 10/20/04

Tetra Tech EM Inc.

Date

CONTACTS

- ALASKA AIRLINES (1.800.252.7522)
- CAPT. COOK HOTEL (1.800.843.1950)
- PEN AIR (1.800.448.4226)
- HAGELAND AIR (1.866.239.0119)
- KEN VALDER work (1.425.673.3680)
- " " cell? (1.206.300.5624)
- DONNA LACOMBE work (1.425.673.3641)
- cell (1.425.478.2886)
- home (1.206.546.0317)
- ST. PAUL TE HOUSE (1.907.546.3161)
- GREG GERVAIS (NOAA COTR)
 - WORK (206.526.4821)
 - cell (206.295.7927)
- JIM WRIGHT (NOAA ON-SITE CONTACT)
 - WORK (206.526.4583)
 - cell (206.910.4612)
- JOHN LINDSEY (PROGRAM MANAGER)
- JULIE SHANE (BSU) 546 - 2312
- NOAA STAFF QTRS = 907.546.5019
- NOAA HOUSE (GIRLS) = 907.546.2729
- KELLY-RYAN ⇒ 907.546.2251
 - Terry Johnson
 - Roy Hill

NOTES:

- SNP LANDFILL, CORRECTIVE ACTION FOR CELL B MSW INCL. BURN BOX PAD! ACCESS RD. & ASH DISPOSAL CELL
MID-AUG TO EARLY SEPT 2003
 - TASK 1: RELOCATE SURFACE SOLID WASTE IN CELL B (CITY LAND) TO TRACK 42 (NOAA LAND)
→ APPROX. 1,000 yd³ TO 2' BGS
 - TASK 2: RECONTOUR CITY SAND DUNES TO MAKE 100'X100' PAD FOR BURN BOX ON CELL B. NEED TO CONSTRUCT ACCESS RD./COMPACT/GRADE
 - TASK 3: BUILD PAD FOR BURN BOX @ CELL B W/DEPRESSION FOR ASH @ END OF PAD
-
- NOAA'S DRAFT CORRECTIVE ACTION PLAN FOR ST. PAUL ISLAND LANDFILL CLOSURE (MAY 2003)
 - LENGTH OF SIDE Z
 - TRACT 42 = 5.78 ACRES = 501.77x501.77
 - LANDFILL HAS 3 CELLS: A, B, & C
 - A & B ARE OUTSIDE OF TRACT 42
 - CELL C IS INSIDE TRACT 42

4 Location ST. PAUL LANDFILL Date AUG 2003

Project / Client SNP LANDFILL CLOSURE
NOAA 120' x 155'

- CELL A IS "PARTIALLY" CAPPED WITH SAND/SCORIA (INSTALLED 2000).
- CELL A CONTAINS CONSTRUCTION WASTE.
- MSW IS PERMITTED TO BE LANDFILLED TO WITHIN A 50-FOOT SETBACK FROM THE BOUNDARY OF TRACT 42
- 2 PARTS TO CORRECTIVE ACTION PLAN (CAP)
 - 1) CLOSURE OF CELLS A, B, & C
 - 2) REMOVAL OF PETROLEUM CONTAM. SOIL (PCS) FROM 4 AREAS IN THE VICINITY OF THE LANDFILL NEAR CELLS A & B
- MORE NOTES REGARDING LANDFILL
- REMOVE MSW WITHIN 500' RADIUS OF LANDFILL & WITHIN 50' SETBACK ZONE INSIDE TRACT 42
- RE-CONTOUR TOP OF CELL A & CELL C TO MAINTAIN SLOPE $1\% \leq \text{SLOPE} \leq 3:1$
- FIELD SCREENING, CONFIRMATION, AND STOCKPILE CHARACTERIZATION SAMPLES SHALL BE COLLECTED FOR PCS
- LIMITS OF RELOCATING WASTE AND EXC. PCS = REMOVED TO REFUSAL, CONTAM. GOES UNDER STRUCTURE, OR GW IS REACHED

5 Location ST. PAUL LANDFILL Date AUG 2003

Project / Client SNP LANDFILL CLOSURE
NOAA

- PCAS OF PCS REMOVAL
- MAIN CONTAMINANT = DIESEL RANGE ORGANICS (DRO)
 - CLEANUP LEVELS
 - GRO = 300 mg/kg
 - DRO = 250 mg/kg
 - PRO = 10,000 mg/kg
 - WILL ALSO SAMPLE FOR PAHs (1 SAMPLE TO BE COLLECTED @ MOST-CONTAM SPOT) AND BTEX
 - BTEX CLEANUP LEVELS
 - BENZENE = 0.02 mg/kg, but may use 0.5 mg/kg to be more realistic
 - ETHYLBENZENE = 5.5 mg/kg
 - TOLUENE = 5.4 mg/kg
 - TOTAL XYLENES = 78 mg/kg
 - 4 AREAS TOTAL EXC. = 10,000 yd³ OF PCS TO A DEPTH OF 12 FEET AND + 500 yd³ POTENTIALLY CONTAM.
 - FIELD SCREENING USING TLC
 - COLLECT 3 SAMPLES FOR INITIAL 10 yd³ EXC. @ EACH AREA, THEN 1 SAMPLE PER 250 SF OF

6

Location ST. PAUL LANDFILL Date AUG 2003
 Project / Client SNP LANDFILL CLOSURE
NOAA

EXPOSED GROUND. AFTER 2,500 SF GROUND SURFACE IS EXPOSED, COLLECT ONE SAMPLE PER 500 SF EXCAVATED.

• IN OTHER TERMS (FOR SCREENING / CONFIRM.)

→ 1ST 10 YD³ = 3 SAMPLES

→ 250 SF - 2,500 SF = 10 SAMPLES

→ ABOVE 2,500 SF = 1 PER 500 SF

• CHARACTERIZATION SAMPLES

→ 1 SAMPLE PER 50 yd³ (1 SAMPLE PER 5 TRUCK LOADS) UP TO 500 yd³ (50 TRUCK LOADS) = 10 SAMPLES

→ ABOVE 500 yd³, COLLECT 1 SAMPLE EVERY 500 yd³ (50 TRUCK LOADS)

• SOIL NOT BELIEVED TO BE CONTAM.

→ 1 SAMPLE PER 50 yd³ (5 TRUCK LOADS)

COVER DESIGN BY POLARCONSULT ALASKA, INC.

- ALLOWS FOR POST-CONST. SETTLEMENT OF 10-15%.

- SLOPES NOT TO EXCEED 3:1 SLOPES

- SURFACE WATER ALLOWED TO RUN INTO NATIVE SOILS (ADJACENT TO CAP) UNRESTRICTED.

- REFUSE COVER = 18-INCH SAND + 6-INCH TOPSOIL

Location ST. PAUL LANDFILL Date AUG 2003
 Project / Client SNP LANDFILL CLOSURE
NOAA

- ACCESS ROAD AND BORROW AREA ADJACENT TO ~~LAND~~ TRACT 42 TO RECEIVE 6-INCH COMPACTED SLOZIA
 - SUBGRADE PREP

• COMPACT = 3 PASSES W/JOHN DEERE 1102D COMPACTOR OR AS NEEDED TO REACH 85% ^{UNDER EARTH FILL} RELATIVE COMPACTION (ASTM D1557)

• ^{UNDER} SAND-LEVELING COURSE TO BE COMPACTED TO 90%, MIN. 12-INCH ON WHICH GEOSYNTHETICS WILL BE PLACED (GCL?)

• 1' LOOSE LIFTS MAXIMUM

• NOTE: NO GEOSYNTHETICS SHOWN ON DESIGN DWGS

DESIGN TO BE REVISED BY CE2 ENGINEER (ANCHORAGE)

1) REDUCE LANDFILL VOLUME (POLARCONSULT ASSUMED SEVERAL YRS. OF DISPOSAL ACTIVITY, BUT IT ISN'T GONNA HAPPEN.)

2) MAY BE WAIVED OF 50-FT SETBACK

3) FROM ALASKA MSW REGS

3) PCS MONOFILL ATOP MSW BUT BENEATH COVER SYSTEM

Project / Client SNP LANDFILL CLOSURE
NOAA

- 4) REVISE SLOPE FROM 3:1 TO 5:1
 5) ARMOR LANDFILL W/ COBBLE-SIZED SCORIA TO PREVENT WIND EROSION OF SANDY COVER THAT IS PROPOSED.

PER KEN VALDER ARRIVE ON ST. PAUL ISLAND BY AUG. 17TH (SUNDAY) TO START WORK ON MONDAY AUG 18TH.
 AUG 18 - NO KELLY - RYAN PERSONNEL
 AUG 19 - NO KELLY - RYAN PERSONNEL
 AUG 20 - NO KELLY - RYAN PERSONNEL
 AUG 21 - NO KELLY - RYAN PERSONNEL
 AUG 22 - KELLY - RYAN PERSONNEL ARRIVE

Project / Client SNP LANDFILL CLOSURE
NOAA

- 0750 ARRIVE FOR H'S MEETING.
 0830 DISCUSS FOUNDATION ISSUE AT THE MACHINE SHOP W/ JIM WRIGHT. JIM IS STILL WAITING TO HEAR FROM CERVAIS FOR A DECISION TO PROCEED.
 0900 GO OVER DESIGN DRAWINGS AT NOAA.
 1030 VISIT LANDFILL SITE WITH JIM WRIGHT AND ALICIA LOMAS. ALICIA PLOTS 50' SETBACK CORNERS AND MIDPOINTS WITH GPS UNIT. JIM ALSO HAS ALICIA STAKE THE 18'-CONTOUR ON THE DUNE TO THE NORTH OF THE SITE.
 1230 LUNCH
 1330 JIM PICKS ME UP TO VISIT THE MACHINE SHOP. HIS IDEA NOW IS TO PUT ROCKS/CONCRETE INTO 55-GALLON DRUMS AND PLACE AT BOTTOM OF EXCAVATION STACKED UP TO ~~TOP OF~~ BOTTOM OF FOOTING WHILE USING A FORK LIFT TO HOLD IT IN PLACE DURING

Location ST PAUL ISLAND Date 8.21.03
 Project / Client SNP LANDFILL CLOSURE
NOAA

PLACEMENT.

1500 VISIT LANDFILL WITH JIM W. WHO IS LOOKING FOR SUPPORT I-BEAMS TO USE AT THE MACHINE SHOP. I PUT RIBBONS ON THE STAKES PLACED THIS A.M. WE TALK W/LANDFILL PERSONNEL WHO MOVED BURN BOX AND DUMPED CONTENTS AT SOUTH DEPRESSION AREA OF TRACT 42. JIM WRIGHT WILL GET THEIR WORK SCHEDULE TOMORROW SO THAT WE WILL BE ABLE TO COORDINATE WITH OUR CLOSURE WORK.

1600 VISIT MACHINE SHOP AND FORMER DIESEL TANK FARM,

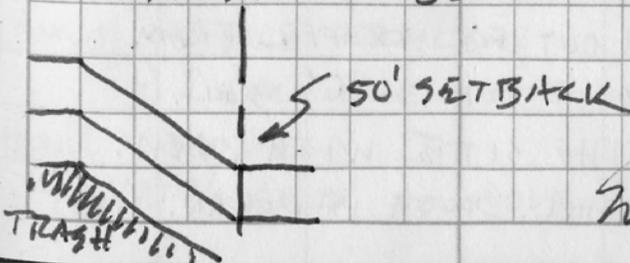
1700 END OF DAY.

Jim Wright
8.21.03

Location ST. PAUL ISLAND Date 8.23.03
 Project / Client SNP LANDFILL CLOSURE
NOAA

NOTE: ON 8.22.03, I WAS SICK AND SPENT THE DAY SLEEPING. KELLY-RYAN PERSONNEL ARRIVED ON-ISLAND. 1330 ON SAT, 8.23.03. MEET AT NOAA WITH JIM WRIGHT (NOAA) AND TERRY JOHNSON (KELLY-RYAN) TO DISCUSS THE LANDFILL CLOSURE. 1430 VISIT LANDFILL SITE WITH JIM AND TERRY.

- START AT 8 A.M. MONDAY, 8/25/03
- MOVE RCP CULVERTS WHERE? JIM.
- REMOVE FENCE AND INCORPORATE INTO LANDFILL.
- SPRAY PAINT GW MONITORING WELLS ORANGE AND GET 2"x4"s TO PLACE AROUND THEM TO PROTECT.
- JIM TO DETERMINE IF THE TOE OF THE EVENTUAL CAP MUST BE AT THE 50' SETBACK OR IF THE TRASH CAN BE AT THE 50' SETBACK



Jim Wright
8.23.03

0800 ARRIVE AT GATE TO LANDFILL.
MEET TERRY JOHNSON, RAY HILL,
ROB-DOG, AND ALEXAY WITH
JIM WRIGHT. DESCRIBE
PROJECT TO TEAM: INCORPORATE
CELL B INTO TRACT 42 AND
CONSTRUCT SCORIA PAD AT CELL B
PRIOR TO THE WINTER. ALSO
DISCUSS:

- 8 a.m. - 7 p.m., 10-hr day, 6 days/week
schedule. LUNCH AT 12-NOON TO 1 p.m.
- HARD HAT, STEEL-TOED BOOTS/STEEL
SHANKS, ORANGE VESTS, SAFETY GLASSES.
- EYE CONTACT W/EQUIP OPERATORS.
- WATCH OUT FOR SLIPS/TRIPS/FALLS ESP,
WITH CABLE STICKING OUT OF GROUND
AND NAILS POPPING OUT OF BOARDS.
- LINES OF COMMUNICATION. T_E IS NOAA'S
CLIENT AND KELLY-RYAN TAKES
DIRECTION FROM T_E.
- WATCH OUT FOR TRAFFIC FROM DUMP
TRUCKS TO DUMP PCS SOIL.

0840 WALK THE SITE WITH CREW. NORTH
IS WINDMILL. SOUTH IS OCEAN. WEST

IS RADIO TOWER. EAST IS WETLANDS.
STAY AWAY FROM THE WETLANDS.

0900 ORDER OF TASKS:

- 1) SPRAY PAINT / 2" X 4" AROUND ALL
GW MONITORING WELLS.
- 2) SCRAPE SURFACE DEBRIS FROM
SE CORNER AND EXCAVATE TO
DETERMINE DEPTH OF AVAILABLE
SPACE TO PUT TRASH.
- 3) STOCKPILE CLEAN SOIL FROM SE
CORNER BETWEEN PROPERTY LINE
AND 50' OFFSETS PER JIM WRIGHT.
- 4) BUILD ROADS AT SE CORNER AND
OUT TO NW CORNER OF CELL B.
- 5) REMOVE FENCE AND INCORPORATE
INTO LANDFILL. KEEP FENCE UP
ALONG CURRENT ACCESS ROAD.

0915 ITEMS FOR JIM:

- 1) FIND THE DOZER
- 2) DETERMINE WHERE TO PUT THE
OFFICE TRAILER
- 3) DETERMINE WASTE VS TOE OF CAP
ISSUE
- 4) WHERE TO MOVE RCP CULVERTS

14

Location

ST. PAUL ISLAND

Date

MONDAY
8-25-03

Project / Client

SNP LANDFILL CLOSURE
NOAA

0930 STILL NEED LATHS TO BLOCK OFF OIL SEEP PIT AND THE OTHER SPOTS THAT HAVE BEEN DESIGNATED BY NOAA TO BE PETROLEUM-CONTAM.

0940 TERRY WILL GET RADIOS FOR ON-SITE PERSONNEL.

0945 RAY ASKS ABOUT USING THE CLEAN TREATED SOIL AT THE LANDFILL TO BUILD ROADS AT CELL B. I TOLD HIM THAT PER NOAA WE CAN USE THIS SOIL, BUT, IF POSSIBLE, TO USE IT SPARINGLY. IF THE SOIL AT CELL B IS TOO SANDY, THEN WE'LL HAVE TO USE IT.

0950 JIM WRIGHT LEAVES AND SO DO KELLY-RYAN TO PERFORM VARIOUS TASKS AND MOBILIZE.

1000 WALK THE SOUTHERN PORTION OF LANDFILL. WEATHER IS CLOUDY, BUT NO RAIN, SLIGHT BREEZE (SW).

1030 WALK THE WEST AND NORTH PORTION OF LANDFILL. LOTS OF WINDBLOWN TRASH. WIND IS COMING FROM SW SO I LOOK FOR SOURCE. NO SOURCE FOUND.

Location

ST. PAUL ISLAND

Date

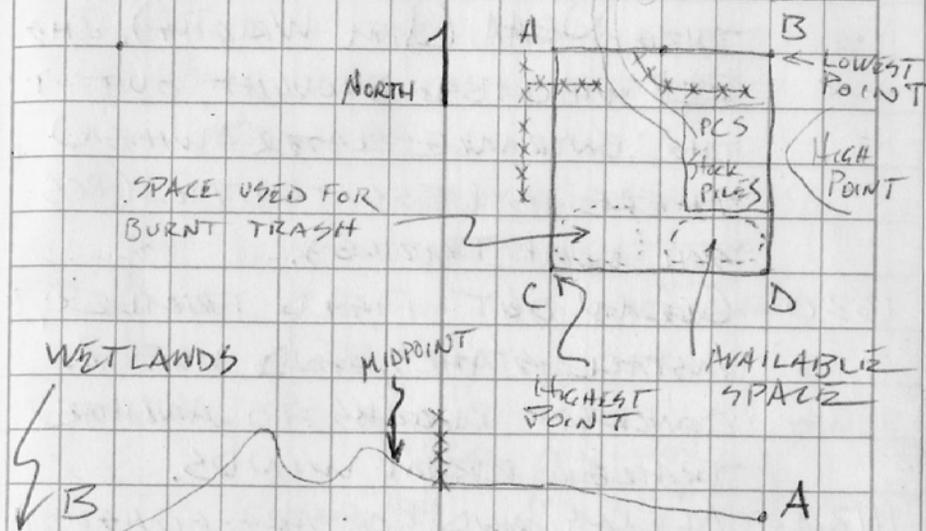
MONDAY
8-25-03

15

Project / Client

SNP LANDFILL CLOSURE
NOAA

1100 SKETCH X-SECTIONS OF 50' OFF-SET BOUNDARIES.



1115 RAY HILL ARRIVES. TERRY ARRIVES WITH PC200 EXCAVATOR. ROB AND ALEXANDER ARRIVE WITH FIELD TRAILER AND 2X4s.

1130 PLACE 2X4s BY EACH MONITORING WELL AND BACK TRAILER INTO CELL A LOCATION.

1155 LUNCH

1300 ARRIVE ON-SITE.

1320 TERRY IS STAGING RCP AT CELL A AND MOVING CONCRETE BLOCKS TO

NORTH OF SEPTIC SOLIDS DISPOSAL AREA PER DIRECTION OF CITY THRU NOAA (JIM WRIGHT). THE RCP WILL BE BROUGHT OUT TO THE ENTRANCE LATER WHEN THERE IS LESS TRAFFIC (PCS SOIL DUMP TRUCKS).

1330 CLEAN OUT FIELD TRAILER, INSTALL STAIRS, AND USE 2 CONCRETE BLOCKS TO ANCHOR TRAILER FROM WINDS.

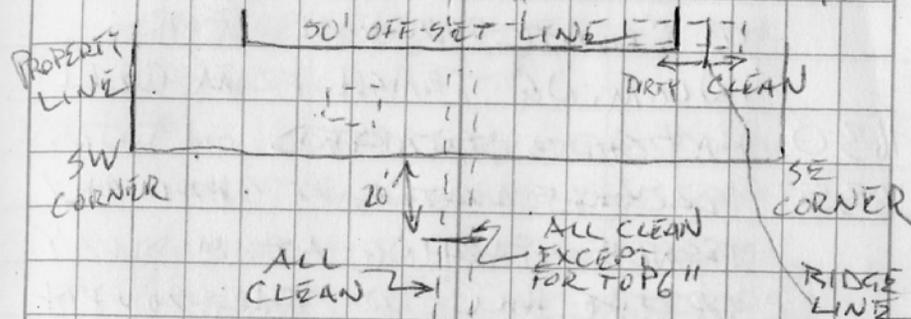
1430 ALEXANDER AND ROB ARE FINISHED WITH MARKING ALL THE GW MONITORING WELLS. THEY LEAVE WITH TERRY TO GET THE NOAA DOZER AND MOXY 6200S DUMP TRUCK.

1435 TERRY BEGINS TEARING DOWN THE FENCE WITH THE EXCAVATOR.

1530 TERRY FINISHES TEARING DOWN THE FENCE. PER JIM WRIGHT, THE FENCE NEAR THE ACCESS ROAD WILL REMAIN THRU THE WINTER.

1535 TERRY BEGINS PULLING BACK THE SOUTHERN-MOST EXPOSED TIP OF THE LANDFILL'S TRASH PILE, WHICH IS NEAR THE 50' OFFSET.

1545 TERRY IS READY FOR POTHOLES.



1550 START POTHOLES JUST INSIDE OF SE 50' OFFSET. FIRST 6" CLEAN BUT DIRTY DEEPER. TRASH EXTENDS DOWN 3'-4' AND HEADS EAST OUTSIDE OF THE 50' OFFSET CORNER FOR ANOTHER 10' AND THEN ENDS AS IT HITS A RIDGE LINE.

1605 MOVE TO MIDDLE OF SE AREA AND POTHOLE DEEP. THE TOP 3'-5' IS TRASH, BELOW THAT IS NATIVE MATERIAL.

1620 JIM WRIGHT ARRIVES. WE AGREE

TO HAVE RAY USE THE DOZER TO SCRAPE THE TOP 3'-5' OF TRASH TOWARD THE LANDFILL AND THEN SCRAPE AS MUCH OF THE NATIVE MATERIAL TO THE OUTSIDE AS POSSIBLE TO CREATE VOLUME FOR INCOMING TRASH FROM CELL B.

1630 RAY GETS STARTED ON DOZER.

1635 TERRY EXCAVATES A SHALLOW TRENCH STARTING AT MIDWAY UP THE HILL TO THE SOUTH OF LANDFILL AND MOVES DOWN THE HILL (NORTH) TOWARD LANDFILL'S MIDPOINT. ALL OF THIS APPEARS TO BE CLEAN NATIVE MATERIAL EXCEPT FOR SURFICIAL DEBRIS IN THE TOP 6" ABOUT 10'-20' OUTSIDE OF PROPERTY BOUNDARY.

1645 POT HOLE IN SW AREA SHOWS CLEAN NATIVE MATERIAL DOWN TO 5' BGS. ONLY SURFICIAL DEBRIS.

1655 HAVE ROB AND ALEXANDER MOVE THE MATTRESS INTO THE LANDFILL

PER JIM WRIGHT'S REQUEST. 1700 MOVE FERRY TO NW CORNER OF CELL B. A BUSTED UP SHACK APPEARS AT THE BOTTOM/SIDE OF A RAVINE. NO TRASH BELOW GROUND SURFACE. TERRY STOCKPILES THE SHACK DEBRIS.

1730 JIM WRIGHT ARRIVES. SHOW HIM THAT ONLY THE SHACK ON SURFACE IS THE TRASH. NOTHING BGS. HE AGREES.

1900 JIM SEES DOZER PROGRESS IN SE CORNER AND DECIDES TO NOT MOVE ANY MORE TRASH. HE FEELS THERE IS NOT ENOUGH SPACE IN THE SE QUADRANT TO MOVE 3'-5' DEPTH OF TRASH, THEN MOVE CLEAN NATIVE MATERIAL AND MAKE ROOM FOR ADDITIONAL CELL B TRASH BELOW CURRENT GROUND SURFACE. THUS, THE DIRECTION IS TO SMOOTH OUT THE SE QUADRANT TO ALLOW FOR

TRUCKS TO DELIVER CELL B MATERIAL ON TOP OF CURRENT GROUND SURFACE. NOTE: JIM HAD CRAIG (NOAA) DETERMINE AVAILABLE DEPTH. USING GPS TO AID HIS DECISION TO NOT EXCAVATE FOR ADDITIONAL VOLUME IN THE SE AREA.

1830 JIM AND I DISCUSS HOW TO ATTAIN GREATER VOLUME CAPACITY. JIM WOULD LIKE TO USE THE TREATED "CLEAN" STOCKPILED SOIL ON THE CAP FOR BACKFILL AT THE CURRENT PCS SITES. HOWEVER, AFTER VIEWING IT, THERE IS SOME CONCERN BECAUSE TRASH SEEMS TO BE INTERMINGLED WITH IT AND IT SHOULDN'T BE. WE PLAN TO USE IT FOR ACCESS/AUL ROADS FROM REMOTE CELL B AREAS TO SE CORNER. END OF DAY

1900 8.25.03 Jim DeR

0800 H'S TAILGATE MEETING. DISCUSS SLIPS, TRIPS, FALLS AND SINCE ROB AND ALEXAY ARE ON DUMP TRUCKS TODAY, WATCHING OUT FOR DUMP TRUCK TRAFFIC AND GIVING THE RIGHT-OF-WAY.

0820 ROB AND ALEXAY LEAVE TO GET CITY DUMP TRUCK.

0825 WIND IS FROM THE NORTH TODAY. CLOUDY, BUT NO RAIN.

0830 DISCUSS KELLY-RYAN'S DAILY REPORT WITH TERRY.

0840 TERRY AND RAY BEGIN TO CONSTRUCT HALL ROAD FOR HAULING CELL B MATERIAL TO TRACT 42.

0850 TERRY ON EXCAVATOR SMOOTHING OUT SLOPE STARTS FINDING TRASH IMMEDIATELY. TRASH EXTENDS DOWN TO AROUND 3' BGS AND THEN THERE APPEARS TO BE CLEAN NATIVE MATERIAL.

0900 JIM WRIGHT IS ON SITE AND SEES PROGRESS.

Location St. Paul Island Date TUESDAY 8-26-03
 Project / Client SNP LANDFILL CLOSURE
NOAA

0915 DISCUSS A SUGGESTION I MADE TO JIM YESTERDAY REGARDING THE PETROLEUM "SPOTS" OF CONTAMINATION ALONG THE NORTH EDGE OF CELL B THAT WE HAVE BEEN DIRECTED TO AVOID. MY SUGGESTION WAS THAT IF WE COULD SOMEHOW MOVE THEM INTO THE PCS STOCKPILE AREA, WE WOULD (1) BE ABLE TO USE THE EXISTING NORTHERN ACCESS ROAD AND (2) TAKE CARE OF A REMOVAL ACTION NOW INSTEAD OF NEXT SEASON, ULTIMATELY SAVING EVERYONE TIME AND MONEY. JIM APPROACHED JOHN LINDSEY ABOUT IT AND JOHN SAID HE WOULD PULL THE CURRENT TANK FARM CREW TO DO CONFIRMATION SAMPLES, ETC.

0930 THE CITY DUMP TRUCK IS STUCK ON THE NEW ACCESS ROUTE.

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 Project / Client SNP LANDFILL CLOSURE
NOAA

A NEW ROUTE WILL BE MADE, BUT WILL MEET AT A BAD CORNER OF THE BUSY MAIN ROAD TO THE LANDFILL. WITH ALL OF THE PCS TRUCK TRAFFIC, JIM WRIGHT AGREES THAT IT WOULD BE BEST FOR K-R TO HIRE ON A FLAGGER.

0950 TERRY LEAVES TO GET FLAGGER. RAY WILL PULL OUT STUCK TRUCK AND WORK ON NEW ACCESS ROUTE. I LEAVE W/ JIM TO SEE ABOUT PULLING THE TANK FARM CREW AND CONTRACTING LOGISTICS.

1010 JIM CALLS NOAA. MAY NEED TO DO A MODIFICATION TO THE SCOPE OF WORK FOR BSE.

1055 Call Julie w/ BSE TO FIND OUT IF WE CAN ACCESS THEM USING A NOAA MAINTENANCE CONTRACT WITH THEM. THEY (BSE) HAVE MAXED OUT THE MAINT. CONTRACT OF \$30,000 SO JULIE WILL SEE WHAT SHE CAN DO.

1105 JIM CALLS GREG GIERVANS WHO SAYS

THAT THE PETROLEUM CONTAM.
MEETS THE PETROLEUM EXEMPTION
AND, THEREFORE, K-R CAN DO THE
WORK. HANDLING IT IS OK, BUT
DISPOSAL OF THE UR AND TAR DRUM
SHOULD NOT BE PLACED INTO THE
PCS STOCKPILE AREA. JIM SAYS IT
WILL BE PLACED IN OVERPACK DRUMS
IF SMALL QUANTITY. IF LARGE QUANT.
THEN PLACE ON LINER.

1140 WALK TO T+ HOUSE. CALL JULIE
(BSE) TO TELL HER WE WON'T
BE ACCESSING BSE THRU THEIR NOAA
MAINT. CONTRACT FOR THE PETROLEUM
SPOTS AT THE LANDFILL. WE'LL DO IT.

1200 LUNCH AND CALL KEN VALDER TO
BRIEF HIM ON OUR DIRECTION FROM
NOAA.

1300 BACK ON-SITE. MEET ALEXANDER
WHO IS OUR FLAGGER AT THE BUSY
BLIND CORNER INTERSECTION.

1310 THE MOXY DUMP TRUCK IS BEING WORKED ON.
A HOSE IS BEING REPLACED.

1325 THE EXCAVATOR IS RACING STOCKPILED

FENCE MATERIAL INTO THE FIXED
MOXY FOR TRANSPORT TO THE SE
CORNER.

1340 TALK W/TERRY. THE TREATED SOIL
HAS TOO MANY FINES AND NOT
ENOUGH SCORIA TO BE SUITABLE FOR
A HAUL ROAD. IF THE CITY DUMP
TRUCK KEEPS GETTING STUCK, K-R
WILL GET SCORIA FROM BORROW
PIT (TELEGRAPH HILL) TO ^S MAKE UPGRADE
THE HAUL ROAD.

1400 THE MOXY (12-15 CY PAYLOAD) AND
CITY TRUCK (10-12 CY PAYLOAD) ARE
BEING LOADED WITH CELL B MAT'L
AND TRANSPORTED TO SE CORNER.
THE MOXY DRIVES DOWN SLOPE TO
SE CORNER TO DUMP. THE CITY
TRUCK DRIVES TO EDGE AND DUMPS
DOWN SLOPE @ SIDE OF ROAD.
DOZER PUSHES IT AND ORGANIZES
THE SE CORNER.

1430 EAST SIDE X-SECTION



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Location

ST PAUL ISLAND

Date

TUESDAY
8-26-03

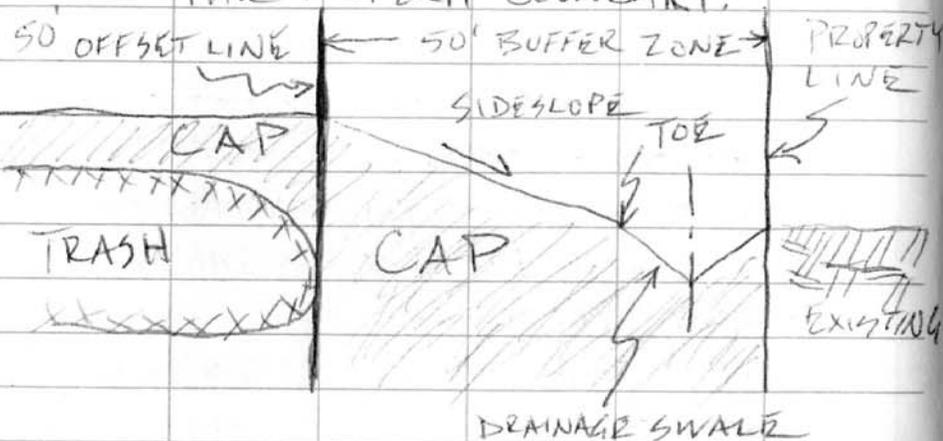
Project / Client

SNP LANDFILL CLOSURE

NOAA

1500

JIM RADIOED TO SAY THAT NOAA'S INTERPRETATION OF THE 50' OFFSET RULE IS THAT WASTE CAN BE PLACED UP TO, BUT NOT BEYOND, THE 50' OFFSET. THE TOE OF THE CAP CAN OCCUR ANYWHERE BETWEEN THE 50' OFFSET AND THE PROPERTY BOUNDARY.



1520

SUNNY FOR THE LAST 3 HOURS. WIND STILL FROM THE NORTH.

1610

CITY DUMP AVERAGES 5-7 SCOOPS FROM EXCAVATOR AND MOXY TRUCK AVERAGES 7 TO 9 SCOOPS.

1630

LOUIS ARRIVES TO SET THE BURN BOX ABLAZE. I REQUEST THAT HE WAIT TIL 7 p.m. WHEN WE ARE FINISHED

Location

ST PAUL ISLAND

Date

TUESDAY
8-26-03

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Project / Client

SNP LANDFILL CLOSURE

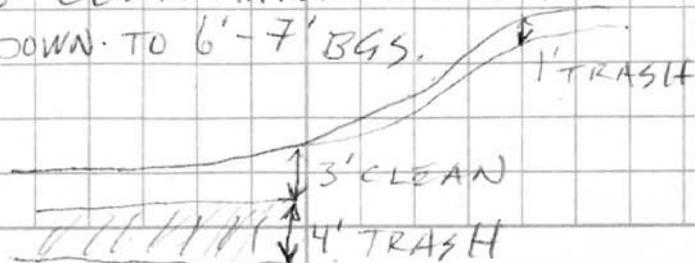
NOAA

SINCE THE SMOLDERING MASS HAS BEEN SMOKING OUT OUR DOZER AND TRUCK DRIVERS/OPERATORS. LOUIS SAYS THAT IS NO PROBLEM. WE CHECK OUT THE BURN BOX AND IT HAS SELF-LIT ITSELF SO LOUIS DOESN'T NEED TO START IT ANYWAY TODAY. NORTHERN WINDS ARE BAD SINCE WE WORK SOUTH OF BURN BOX. WINDS FROM SW ARE OK BECAUSE THEY BLOW OVER THE WETLANDS AREA WHERE WE AREN'T WORKING.

1645 SITE TOUR FOR PAULA (NOAA).

1700 JIM WRIGHT ARRIVES. SHOW HIM OUR PROGRESS IN SE CORNER AND EXCAVATING IN NW OF CELL B.

THE SLOPE OF DUNES HAD TRASH ON TOP 1' AND NATIVE BELOW. THE FLAT AREAS IN CELL B HAVE 3' BGS OF CLEAN MATERIAL AND THEN TRASH DOWN TO 6'-7' BGS.



Location ST PAUL ISLAND Date TUESDAY 8-26-03Project / Client SNP LANDFILL CLOSURE
NOAA

- 1800 JIM TAKES SEVERAL PICTURES AND THEN LEAVES FOR THE DAY.
- 1850 PARK EQUIPMENT.
- 1900 END OF DAY

Jim DeRosa
8-26-03

Location ST. PAUL ISLAND Date WEDNESDAY 8-27-03Project / Client SNP LANDFILL CLOSURE
NOAA

- 0800 HES TAILGATE MEETING. DISCUSS THE BURN BOX SMOKE. THE WIND TODAY IS AGAIN BLOWING FROM THE NORTH, WHICH MEANS THE DUMP TRUCKS AND DOZER WILL BE WORKING DOWNWIND FROM IT. IF ANYONE FEELS THE NEED TO TAKE A BREAK FROM THE SMOKE, THEN GO AHEAD AND TAKE ONE. THE STRONGER WIND SHOULD DISPERSE IT, BUT IT COULD STILL GET OVERWHELMING. ALSO, WE HAVE ALEXANDER AS A FLAGGER TODAY FOR THE BUSY BLIND CORNER SO USE HIM AND BE SAFE.
- 0830 RAIN.
- 0900 EXCAVATOR STILL WORKING IN THE NW CORNER OF CELL B. PULLING UP LOTS OF TRASH FROM AS DEEP AS 7' BGS. PULLED UP LOTS OF CABLE, WIRE, ROPE, ALUM. CANS, A COULH, AND ELECTRICAL WIRE.
- 1000 RAINING INTERMITTENTLY.
- 1020 TALK WITH RAY. THERE ARE 2

Location St PAUL ISLAND Date 8-27-03 ^{WEDNESDAY}Project / Client SNP LANDFILL CLOSURE
NOAA

DECKS BEING CREATED IN THE SE CORNER. THE LOWER DECK FROM THE MOXY TRUCK AND THE UPPER DECK (NEXT TO THE PCS STOCKPILES) FROM THE CITY TRUCK. THE COMPACTOR WILL BE ON-SITE TOMORROW FOR COMPACTING THE SE CORNER.

THE LOWER DECK WILL BE COMPACTED AND THEN RAY WILL DOZE DOWN THE UPPER DECK ONTO THE LOWER DECK IN LIFTS FOR SUCCESSIVE ROUNDS OF COMPACTION

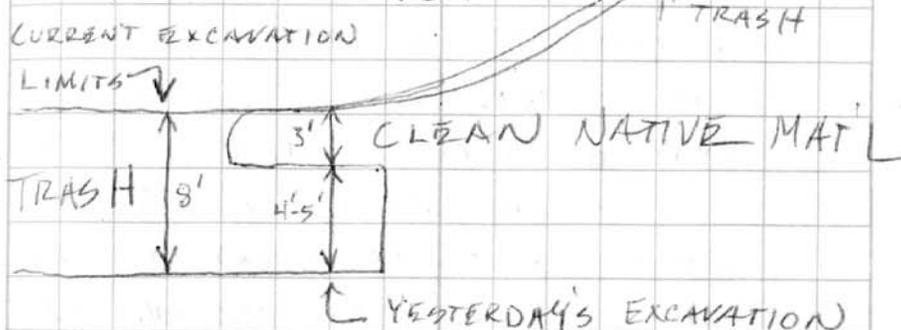
1030 TAKE RAY OFF-SITE TO THE EAST FOR A 10-MINUTE BREAK AWAY FROM THE BURN BOX SMOKE, HE SAYS HE'S FINE AND DIDN'T NEED IT.

1045 JIM WRIGHT ARRIVES. HE AGREES WITH OUR APPROACH IN THE SE CORNER.

1115 JIM AND I VIEW EXCAVATION AT NW CORNER OF CELL B. IT IS

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NOW OBVIOUS THAT THE CLEAN ~~OVER~~ INTERVAL OF SOIL WE SAW OVER THE TRASH YESTERDAY WAS JUST A SMALL ISOLATED POCKET. NOW IT IS ALL TRASH FROM SURFACE DOWN TO APPROX 8' BGS.



1130 JIM SEES A LARGE 4'x2' DIAM. CYLINDER AND WANTS TO CHECK IT OUT. IT'S AN AIR COMPRESSOR CYLINDER. JIM TAKES PHOTO AND SAYS TO INCORPORATE IT INTO THE LANDFILL.

1200 LUNCH

1300 HAVE TERRY USE THE EXCAVATOR TO MOVE A 6'x6'x6' CONCRETE BOX FROM THE CURRENTLY LOCATED BETWEEN THE 50' OFFSET AND

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PROPERTY BOUNDARY ON EAST TO WITHIN THE 50' OFFSET ON THE SOUTH SIDE OF THE LANDFILL OUT OF THE WAY OF OUR OPERATIONS IN THE SE CORNER.

1400 WE SEEM TO HAVE FOUND A CLEAN AREA (SURFACE DOWN TO DEPTH) IN THE MIDST OF THE TRASH (0'-3' DEEP) IN THE NW AREA OF CELL B.

1530 JIM WRIGHT ARRIVES ON-SITE. SHOW HIM EXCAVATION PROGRESS AT CELL B AND DOZING IN SE CORNER.

1700 JIM LEAVES SITE.

1730 EXCAVATOR HITS A 55-GALLON DRUM CONTAINING OILY SUBSTANCE, WHICH RELEASES TO THE GROUND.

1820 AFTER PLACING OIL ABSORBING MATERIAL ON THE SPILL, THE DRUM WAS ~~HOISTED~~ PLACED IN AN OVERPACK DRUM. A SMALL QUANTITY OF SOIL THAT HAD OIL ON IT WAS ALSO SHOVELLED BY HAND INTO

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THE OVERPACK DRUM.

1840 THE OIL ABSORBANT MATERIAL AND OIL-STAINED GRASS AND TOPSOIL WAS EXCAVATED INTO THE CITY TRUCK PER JIM WRIGHT'S DIRECTION. HE ARRIVED ON-SITE AT 1800 AND SAW THE DRUM BEING PLACED IN THE OVERPACK DRUM.

1850 DURING REMOVAL OF OIL-STAINED SOIL AND GRASS, ADDITIONAL DRUMS ARE DISCOVERED IN THE SAME HILLSIDE AREA.

1900 ONE DRUM IS FULLY CRUSHED, BUT HAS PRODUCT IN THE BOTTOM. A 2ND OVERPACK DRUM IS BROUGHT OVER AND THE CRUSHED DRUM AND ITS CONTENTS ARE PLACED INSIDE OF IT.

1920 JIM DECIDES TO NOT GO AFTER ANY MORE SOIL/TRASH IN THIS AREA DUE TO THE POSSIBILITY OF FINDING MORE DRUMS AND POSSIBLY PUNCTURING THEM.

1930 PER JIM WRIGHT'S DIRECTION, THE OIL-STAINED GRASS AND TOPSOIL IS PLACED IN THE PCS STOCKPILE

- 2000 AREA FROM THE CITY DUMP TRUCK THE EXCAVATOR BUCKET IS DECONTAMINATED BY SCRUBBING WITH BRUSHES AND ALCONOX AT THE PCS STOCKPILE AREA. THE BED OF THE CITY DUMP TRUCK IS ALSO DECONTAMINATED IN THE PCS STOCKPILE AREA WITH THE ALCONOX / WATER SOLUTION AND SCRUB BRUSHES.
- 2015 UPON INSPECTION BY JIM WRIGHT, THE EXCAVATOR AND DUMP TRUCK ARE CONSIDERED CLEAN AND REMOVED FROM THE PCS STOCKPILE AREA AFTER RINSING PERFORMED BY JIM WRIGHT.
- 2030 TYVEK IS DISPOSED OF IN ONE OF THE OVERDRAFT DRUMS.
- 2035 END OF DAY.


8.27.03

- 0800 HRS TAILGATE MEETING. DISCUSS ROLES AND PROTOCOL FOR ANY FUTURE RELEASES AND CLEANUPS OF PETROLEUM DRUMS / SPILLS. HARD HAT, STEEL-TOED BOOTS, SAFETY GLASSES, TYVEK, AND GLOVES. NO EATING, DRINKING, CHEWING, SMOKING, ETC.
- 0820 STAGE THE OVERDRAFT DRUMS NEXT TO THE FIELD TRAILER.
- 0845 INSTALL WOODEN LATHES AROUND PERIMETER OF HILLSIDE THAT CONTAINS DRUMS TO DESIGNATE THE AREA THAT WE WILL NOT EXCAVATE ANY FURTHER.
- 0900 EXCAVATING NW AREA OF CELL B. ONLY ONE DUMP TRUCK IS BEING USED (THE CITY ONE) BECAUSE ALEXAY IS NOT HERE THIS MORNING. HIS DAD IS ILL AND HE WAS UP ALL NIGHT.
- 1000 JIM WRIGHT ARRIVES WITH CRAIG RUSSEL WHO USES GPS TO SURVEY THE HILLSIDE OF DRUMS THAT WE DISCOVERED YESTERDAY.

- 1025 RIDGE WITH JIM TO POLOVINE MOUNTAIN WHERE A BORROW SOURCE FOR SCORIA IS LOCATED.
- 1100 JIM DROPS ME OFF AT THE SITE.
- 1110 BEGIN COMPACTING THE SE CORNER WITH THE VIBRATORY COMPACTOR.
- 1130 TERRY USES EXCAVATOR TO POT-HOLE AT SEVERAL LOCATIONS IN THE NW AREA OF CELL B. THEY ARE ALL CLEAN.
- 1145 JIM ARRIVES BACK ON SITE WITH A GROUP OF PEOPLE TO SEE THE LANDFILL PROGRESS.
- 1200 JIM COMMENTS THAT NOAA WOULD LIKE TO GPS-SURVEY THE CLEAN POT-HOLED LOCATIONS.
- 1205 LUNCH
- 1300 ALEXAY IS BACK ON SITE.
- 1310 ROB IS ON COMPACTOR, RAY IS ON DOZER, TERRY ON EXCAVATOR, AND ALEXAY ON MOXY TRUCK.
- 1315 MEET WITH JOHN R (CITY MGR)

- POLAR CONSULT, JIM WRIGHT, AND JOE (CITY UTILITIES) AND DISCUSS LOCATION OF THE YET-TO-BE-CONSTRUCTED BURN BOX PAD. POLAR CONSULT WILL SEND REVISED DRAWINGS. THEY WOULD LIKE TO SEND THE REPORT(S) ON CHARACTERIZATION/INVESTIGATION OF THE PCS AROUND THE LANDFILL.
- 1445 THE GROUP MEETING IS OVER.
- 1450 JIM AND I NOTICED A LEAK COMING FROM THE MOXY. A HOSE HAS BROKEN AND A REPAIR TRUCK IS ON THE WAY.
- 1505 TALK WITH RAY AND ROB AT SE CORNER. RAY IS TRACK-WALKING THE SIDESLOPES FOR COMPACTION AND ROB IS COMPACTING. JIM IS PLEASED WITH OUR WORK.
- 1520 ROB SWITCHES TO DUMP TRUCK AND ALEXAY JUMPS ON COMPACTOR.
- 1715 THE MOXY IS FIXED, SO ALEXAY JOINS ROB ON THE DUMP TRUCK SQUAD.

- 1720 CHECK COMPACTION AT S.E. CORNER.
IT'S SOLID. RAY WILL BEGIN
DOZING THE NEXT LIFT.
- 1800 NOTE: TODAY WAS CLOUDY WITH
THE WIND, AGAIN, BLOWING FROM
THE NORTH.
- 1830 EXCAVATION CONTINUES IN THE NW
AREA OF CELL B WITH TRASH
FOUND 0' - 7' BGS.
- ~~1900 END OF DAY.~~
- 1845 JIM WRIGHT ARRIVES ON SITE
FOR A QUICK VISIT.
- 1900 END OF DAY.


8.28.03

- 0800 HEALTH AND SAFETY MEETING. WIND
FROM NORTH TODAY, BUT BURN
BOX ISN'T BURNING. DISCUSS
EMERGENCY PROCEDURES: CHANNEL
16 ON ALEXAY'S CB TO GET
AMBULANCE. MEDICAL CLINIC IS
IN TOWN NEXT TO KING EIDER.
- 0840 WHILE JIM AND I ARE CHECKING OUT
THE LANDFILL, FRANK FROM THE CITY
ARRIVES TO ASK FOR A DOZER. K-R
WILL RENT THEIR D4 AT THE
BORROW PIT TO THEM.
- 0900 HELP RAY REMOVE NETTING
FROM TRACKS OF HIS DOZER.
- 0915 UPON JIM'S REQUEST, WE ARE
GOING AFTER SOME TRASH
JUST NORTH OF THE MONITORING
WELL WITHIN THE CURRENT
EXCAVATION AREA.
- 0930 RAY ON DOZER IN SE CORNER
PREPARING LIFT. ALEXAY ON
COMPACTOR ON ACCESS ROAD,
ROB ON EXCAVATOR TO REMOVE
SPECIFIC TRASH AREA, AND

TERRY AND I BACK TO HOUSE
TO DO PAPERWORK.

1200 LUNCH.

1300 JIM WANTED TO KNOW HOW MANY
HOURS ARE LOGGED ON THE DOZER.
IT READS 1,226.3 HOURS.

1315 JULIE SHANE ARRIVES TO TALK
WITH TERRY ABOUT THE DOZER.

1330 TERRY LEAVES TO GET RATTIES
FOR JULIE.

1345 ALEXAY COMPACTING ON SE
CORNER. RAY USING DOZER TO
COMPACT SIDESLOPES. ROB
EXCAVATING AT CELL B AND
THEN DRIVING CITY TRUCK TO
DUMP ON THE UPPER DECK.

1410 MAKE ALEXAY TAKE A BREAK
FROM THE COMPACTOR.

1430 TERRY IS BACK ON-SITE. ROB
BACK ON TRUCK.

1500 CHECK COMPACTION IN S.E. CORNER.
IT'S SOLID. COMPACTING SINCE
9:30 a.m., ABOUT 4 HRS. HAVE
ALEXAY GET ON MOXY.

1510 CITY TRUCK IS DUMPING ON
LOWER DECK AND DOZER IS
PUSHING THE UPPER DECK DOWN
TO MAKE THE NEXT LIFT. MOXY
IS ALSO DUMPING ON LOWER DECK.

1530 HELP PAULA DUMP PRODUCT FROM
BLUE BUCKETS ONTO TRASH AT
BURN BOX, PAULA PLANS PER
PAUL'S (FROM LANDFILL EXPERT
HERE AT ST. PAUL LANDFILL). PAULA
PLANS TO USE THE BUCKETS TO
CONTAINERIZE FUEL FROM AN
ABANDONED FUEL LINE NEAR
THE MACHINE SHOP, WHICH
WILL BE BROUGHT BACK TO THE
BURN BOX AND USED AS A FUEL
SOURCE, PER PAUL AND LOUISE
(ST. PAUL LANDFILL).

1615 MOVE EXCAVATION AT CELL B FURTHER
WEST.

1630 JIM ARRIVES ON SITE. SHOW HIM
THE NEXT LIFT OF MSW BEING
PLACED ON THE SE CORNER.
JIM SAYS, "IT LOOKS SO GOOD"

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YOU'RE GOING TO HAVE TO START CHARGING ADMISSION."

- 1710 SHOW JIM EXCAVATION ON NW CORNER OF CELL B. WE FIND AN AVOCADO GREEN STOVE (OR REFRIGERATOR) AND A CASSETTE TAPE, OAK RIDGE BOYS "AMERICAN MADE" FROM 1983. JIM WOULD LIKE US TO SMOOTH THE SLOPES OUT IN OUR CELL B EXCAVATION FOR A MORE CONTOURED LOOK.
- 1745 JIM LEAVES AS THE COMPACTOR BEGINS COMPACTING NEXT LIFT OF MSW IN THE SE CORNER.
- 1850 LAST DUMP TRUCK LOAD OF THE DAY.
- 1900 END OF DAY

Eric Decker
8-29-03

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- 0800 HES TAILGATE MEETING. WIND FROM NORTH, CLOUDY.
- 0815 THE MOXY'S BATTERY IS HISsing AND IT SOUNDS LIKE ITS ARCING.
- 0830 ROB IS ON COMPACTOR. TERRY IS ON EXCAVATOR AND RAY IS ON DOLER. HE IS GOING TO SMOOTH OUT OUR EXCAVATION IN THE CELL B AREA AND REMOVE THE LAST TIDBITS OF DEBRIS.
- 0850 JIM WRIGHT LEAVES.
- 0910 TERRY IS EXCAVATING THE SURFICIAL DEBRIS TO THE SOUTH OF OUR CURRENT EXCAVATION AT CELL B.
- 0940 WIND HAS CHANGED. NOW IT IS COMING FROM THE NORTHWEST SO IT'S BLOWING DIRECTLY INTO THE SE CORNER OF THE LANDFILL WHERE ROB IS COMPACTING.
- 0950 HAVE ROB TAKE A BREAK FOR SOME FRESH AIR.
- 1040 HAVE ROB TAKE ANOTHER BREAK.
- 1110 TERRY CONTINUES EXCAVATION

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AT CELL B TO THE WEST AND SOUTH.

1145 THE DOZER HAS SMOOTHED OUT AND DRESSED UP THE ORIGINAL EXCAVATION AREA AT CELL B.

1200 LUNCH

1300 DOZER MOVES TO SE CORNER AND WORKS ON SIDESLOPES

WHILE COMPACTOR CONTINUES COMPACTING. MOVE ITEMS FROM SIDESLOPES INTO MIDDLE OF LANDFILL BY HAND. THESE ITEMS ARE SUCH THINGS AS RUBBER TIRES, PIECES OF METAL, AND OTHER OBJECTS THAT COULD POSSIBLY POKE OUT THE SIDES OF THE SIDESLOPE.

1400 USE EXCAVATOR TO POT HOLE THE EXTERIOR OF CELL B. NOAA WILL SURVEY THE POT HOLE LOCATIONS AT A LATER DATE. EXCEPT FOR THE OCCASIONAL SURFACE DEBRIS ALL POT HOLES WERE CLEAN NATIVE SOIL DOWN TO 4' TO 5'.

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POT HOLING WAS ONLY PERFORMED DOWN TO A MAX OF 5' BGS AND EFFORTS WERE MADE TO LIMIT DAMAGE TO THE VEGETATION AND NATURAL LANDSCAPE FROM THE EXCAVATOR.

1520 JIM ARRIVES ON SITE TO TAKE A QUICK LOOK. JIM SAYS IT LOOKS GOOD AND APPRECIATES OUR EFFORTS, WHICH HAS FREED HIM UP TO HELP OUT ON GEOPROBE EFFORTS WITH GREG AND PAULA.

1540 JIM LEAVES AFTER GIVING US DIRECTION TO DEPOSIT BOULDERS ON THE EAST SIDE OF THE ACCESS ROAD IN THE DEPRESSION NORTH OF THE WETLANDS AREA.

1625 THE DUMP TRUCK IS HAVING PROBLEMS IN THE SAND NEAR THE EXCAVATION IN CELL B. MAY NEED SKORIA.

1645 SPRINKLE RAIN.

1745 JIM ARRIVES AND WE TOUR THE POT HOLES SURROUNDING CELL B. HE WILL HAVE CRAIG RUSSELL COME OUT

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(POSSIBLY TOMORROW DURING OUR DAY OFF) TO GPS-SURVEY THE LOCATIONS OF THE POTHOLES.

1800. LAST TRUCK LOAD TO THE SE CORNER TODAY. RAY IS WILL GRADING MATERIAL FOR THE NEXT LIFT IN THE SE CORNER.

1815 RELOCATING BOULDERS USING EXCAVATOR AND CITY TRUCK TO NOAA-DESIGNATED LOCATION.

1850 EQUIPMENT HEADS BACK TO SITE STAGING AREA NEAR FIELD TRAILER AT CELL A.

1855 JIM LEAVES.

1900 END OF DAY AND WORK WEEK.

Jim DeL
8.30.03

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NOAA

0800 HES TRILGATE MEETING. LIGHT BREEZE FROM THE NORTHWEST. DISCUSS REMOVAL OF PCS HOT SPOTS TODAY. SPOTS WILL BE EXCAVATED AND PLACED INTO THE MOXY TRUCK. LOADS WILL BE STOCKPILED AND DUMPED INTO THE PCS STOCKPILE AREA. EXCAVATED AREAS WILL BE MARKED WITH PIN FLAGS FOR NOAA PERSONNEL TO COLLECT CONFIRMATION SAMPLES.

0830. BEGIN EXCAVATION OF HOT SPOT NEAR THE ACCESS ROAD. AFTER 6" HAS BEEN REMOVED, JIM SMELLS THE SOIL AND SAYS TO JUST DIG DOWN 3' BECAUSE HE STILL SMELLS PETROLEUM AND WANTS TO GO DEEP ENOUGH. ACTUALLY, HE GAVE HIS ORDERS FROM JOHN LINDSEY ^{ARE} TO GO DOWN 3' IN THESE HOT SPOTS EVEN THOUGH CONTAMINATION HAS BEEN SHOWN TO EXTEND 15' ~~665~~. "THE REMOVAL ACTION IS INTENDED TO GET THE

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- BULK OF THE CONTAMINATION AND THE CITY IS IN AGREEMENT, ^{SAYS JIM} JIM.
- 0845 I SMELL THE SOIL AND TELL JIM THAT IT SMELLS LIKE THERE IS MORE THAN JUST PETROLEUM. JIM SAYS THAT TETRA TECH'S CHARACTERIZATION REPORT INDICATES THAT
- ONLY PETROLEUM CONTAMINATION EXISTS EVEN THOUGH SAMPLES WERE RUN THRU A FULL SUITE. THEREFORE, JIM IS GOING TO ASSUME THAT THERE IS ONLY PETROLEUM IN THE AREAS WE ARE DIGGING.
- 0900 DISCOVER THAT BSE PARKED THEIR FRONT-END LOADER AT THE ENTRANCE OF THE PCS STOCKPILE AREA.
- 0915 ALEXAY LEAVES TO GET THE KEY FOR THE LOADER FROM ITS OPERATOR, JASON.
- 0930 THE COMPACTOR IS BEING USED ON THE TOP LIFT OF THE SE CORNER AND THE DOZER IS

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- TRACK-WALKING THE SIDESLOPES. JIM SAYS HE WOULD LIKE TO HAVE LESS COMPACTION EFFORT THAN WE ~~HAVE~~ USED FOR THE FIRST THREE LIFTS LAST WEEK. JIM SPECIFIES THAT FROM NOW ON TO DO ONLY ONE PASS WITH THE COMPACTOR MOVING HALF WAY OVER EACH RUN WIDTH.
- 0945 ALEXAY IS BACK WITH KEY TO F.L. LOADER. MOVES IT AND THEN STARTS HAULING MORE TRUCKLOADS.
- 1030 ROB IS FINISHED COMPACTING THE LIFT ON THE SE CORNER AND JUMPS ON CITY TRUCK TO HELP WITH THE PCS HOT SPOTS.
- 1100 LOOK AT TAR DRUM AND TAR PIT HOLE WITH JIM. BECAUSE WE FIND MULTIPLE DRUMS BELOW THE EXPOSED DRUM AND ITS ^{LE} CLOSE PROXIMITY TO THE HILLSIDE OF DRUMS IN THE DUNE, JIM SAYS TO LEAVE THE TAR PIT ALONE AND NOAA/BSE WILL TAKE CARE OF IT.

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NOAA

1130 CITY TRUCK IS HAVING TROUBLE BECAUSE THE BED WON'T RISE ALL THE WAY UP. THE MECHANIC IS CALLED TO ADD HYDRAULIC FLUID.

1200 LUNCH. CITY TRUCK IS REPAIRED.

1300 PCS EXCAVATION CONTINUES ALONG NORTH ACCESS ROAD. JIM IS ON SITE.

1315 DOZER IS CLEANING OFF THE DEBRIS-STREWN SURFACE AT THE NORTHEAST END OF CELL B, PER JIM'S DIRECTION.

1345 JIM WANTS TO GET CAMERA. THERE ARE SEVERAL HOT SPOTS IN THE CURRENT EXCAVATION THAT JIM AND I HAVE FOUND USING A SHOVEL. ALTHOUGH JIM ORIGINALLY SPECIFIED 5' DEEP TO THE LIMITS HE LATERALLY SPECIFIED WITH PIN FLAGS. HE IS NOW CONSIDERING GOING DEEPER TO GO IN A SPOT TO CHECK IT AND SEE JUST HOW DEEP IT GOES.

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1415 EXCAVATOR HAS COMPLETED EXCAVATING PCS TO THE LIMITS THAT JIM SPECIFIED (3' BGS, NORTH OF NORTHERN ACCESS ROAD).

1420 JIM IS BACK ON-SITE. WE'VE POTHOLED EVERY 20' LINEAL ALONG THE BOTTOM OF THE EXCAVATION AND ADDITIONAL 5' BGS SO JIM CAN GET AN IDEA OF HOW EXTENSIVE THE PETROLEUM EXTENDS. JIM TAKES PHOTOS AND OPS TO KEEP THE POTHOLES OPEN UNTIL NOAA PERSONNEL CAN COME OUT AND COLLECT CONFIRMATION SAMPLES. THE 2 WESTERN-MOST POTHOLES APPEAR CLEAN. THE REST OF THE POTHOLES TO THE EAST (3) ARE DIRTY (VISUAL AND SMELL).

1430 REMOVE SEVERAL PETROLEUM HOT SPOTS TO THE SOUTH OF THE NORTHERN ACCESS ROAD. THESE SPOTS ARE VISIBLY IDENTIFIABLE AND JIM DIRECTS ONLY A BUCKET OR TWO TO CAPTURE THEM IN EACH LOCATION.

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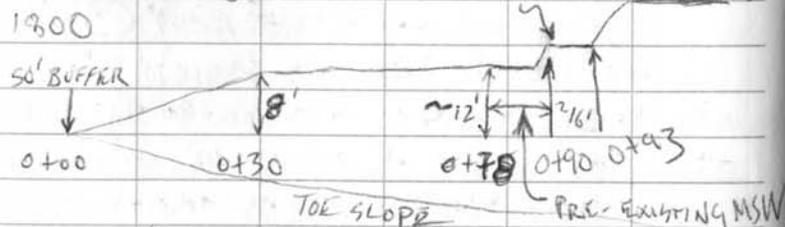
1445 DECONTAMINATE THE EXCAVATOR BUCKET AND BEDS OF BOTH DUMP TRUCKS USING SCRUB BRUSHES AND ACESONOX/WATER AT PCS STOCKPILES.

1515 JIM APPROVES DECONTAMINATION AND EXCAVATION OF MSW BEGINS FOR THE DAY AT NW CORNER OF CELL B.

1520 JIM LEAVES SITE.

1530 WIND IS NOW BLOWING DIRECTLY FROM THE WEST. IT'S NOW SPRINKLING.

1700 STILL EXCAVATING NW CORNER OF CELL B. AND PLACING NEXT LIFT AT SE CORNER OF LANDFILL.



1800 JIM ARRIVES ON SITE JUST AS WE BEGIN COMPACTING THE 2ND LIFT OF DAY.

1900 END OF DAY. Jim Durr
9.1.03

Location St. Paul Island Date TUESDAY 9.2.03
 Project / Client SNP LANDFILL CLOSURE
NOAA

0800 H'S S TAILGATE MEETING. BE CAREFUL OF EXISTING EXCAVATION IMMEDIATELY ADJACENT TO NORTH ACCESS ROAD. JIM IS GIVEN DIRECTION AT THIS MORNING'S CONFERENCE CALL TO GO AFTER AND CHASE THE PCS HOT SPOTS.

0815 EXCAVATE MSW AT THE END OF THE ACCESS ROAD IN THE HILL ADJACENT TO THE STAKED OFF PORTION WHERE DETEIORATED 55-GALLON DRUMS ARE LOCATED. THE PLAN IS TO EXCAVATE ALL REMAINING MSW AT THE END OF THE ACCESS ROAD BECAUSE CHASING THE PCS WILL LIKELY BE DEEP ENOUGH TO REQUIRE REMOVING THE ACCESS ROAD DUE TO EXCAVATION SLOPES.

0830 RAY IS DOZING THE SLOPE AT THE FARTHEST NW CORNER OF CELL B WHERE THE OLD SHED HAD BEEN REMOVED.

0945 ROB IS FINISHED COMPACTING

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AT THE SE CORNER AND JUMPS ON THE CITY TRUCK SO NOW BOTH TRUCKS ARE UTILIZED.

1015 CRAIG ARRIVES ON-SITE. SHOW HIM ALL THE POTHOLE LOCATIONS SO HE CAN GPS SURVEY, ALSO HAVE HIM DO A SURVEY OF THE SE CORNER OF THE LANDFILL SO WE CAN GET AN ACCURATE ESTIMATE OF VOLUME.

1045 THE DOZER IS FINISHED SHAPING ON THE NW CORNER OF CELL B AND ALL STOCKPILES OF MSW HAVE BEEN REMOVED FROM AROUND THE NORTH ACCESS ROAD.

1100 RELAY TO JIM THAT WE WILL BEGIN PCS EXCAVATION ~~AT~~ AFTER LUNCH. EXCAVATOR IS LOADING BOTH TRUCK FROM THE STOCKPILED MATERIAL AT THE CENTER OF CELL B. THE DOZER IS SHAPING THE NEXT LIFT.

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1150 THE MECHANIC IS HERE TO WELD THE PIN CONNECTION FOR THE CITY DUMP TRUCK. THE PIN IS LOOSE AND HAS BEEN VIBRATING OUT.

1300 MECHANIC FINISHES PUTTING ON A NEW TOOTH ON THE EXCAVATOR BUCKET.

1305 CONTINUE EXCAVATING MSW FROM CENTER OF CELL B.

1400 WE HAVE ENOUGH MSW IN THE SE CORNER FOR THE NEXT LIFT SO WE MOVE TO THE 3' PCS EXCAVATION FROM YESTERDAY TO CHASE THE CONTAMINATION BY SIGHT AND SMELL.

1415 JIM ARRIVES ON-SITE. SINCE THIS IS A PCS SITE, SAMPLES WILL BE COLLECTED: CHARACTERIZATION SAMPLES PER TRUCK LOADS (10 PER 50 TRUCKS, THEN 1 EVERY 50 TRUCKS) + CONFIRMATION PER AREA. OUR AREA IS APPROX. 25' X 100' = 2,500 SF (10 SAMPLES). 3 SAMPLES ARE REQUIRED FOR THE 1ST LIFT.

| 1040 ³ | SITE # | SAMPLE # | DEPTH |
|-------------------|--------|----------|-------|
| EXAMPLE: | SP04 | -SS | -001 |
| | CS | | =15.5 |

1730 THE LAST CHARACTERIZATION SAMPLE TIME. IT IS A DUPLICATE FOR THE 1700 SAMPLE. THEY ARE CALLED SPO4-SS-010-000 (ORIGINAL) AND SPO4-SS-011-000 (DUP) WITH THE ANALYSIS FOR TPH ADDED.

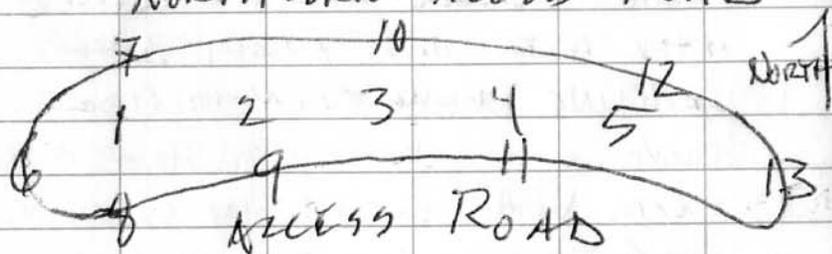
1830 ~~BEGIN TAKING~~ STICK PIN FLAGS IN LOCATIONS WHERE I WILL COLLECT CONFIRMATION SAMPLES TOMORROW. THERE IS NOT ENOUGH TIME TODAY. KELLY-RYAN PERSONNEL REALLY CAN'T SHOULDN'T WORK MORE THAN 60-HOUR WEEKS.

1900 END OF DAY.

~~Jim Dick
9-2-03~~

- 0800 HES TAILGATE MEETING.
- 0815 DECON THE EXCAVATOR BUCKET FROM YESTERDAY'S PCS REMOVAL.
- 0820 WIND FROM WEST AND RAIN.
- 0830 LOAD AND HAUL STOCKPILED MSW IN CENTER OF CELL B TO SE CORNER. DOZER IS "DRESSING UP" AREA NEAR DRUM HILL DUNE THAT WAS EXCAVATED OUT LAST WEEK. COMPACTOR IS ON THE SE CORNER.
- 0915 LIFT ON SE CORNER IS COMPACTED. ROB JUMPS ON DUMP TRUCK.
- 0920 JIM WRIGHT LEAVES SITE. HE SAID TO LEAVE THE PCS EXCAVATION OPEN INDEFINITELY. JIM WILL TALK WITH BSR ABOUT ~~ADDER~~ REMOVING DRUMS FROM HILLSIDE DUNE. JIM IS WAITING TO HEAR BACK FROM NOAA ON DECOMMISSIONING THE GW MONITORING WELL LOCATED IN THE WAY OF THE FUTURE PAD.
- 0930 ROB LEAVES TO FILL UP CITY TRUCK TIRE WITH AIR.
- 0940 DOZER MOVES TO SE CORNER TO

- SHAPE NEXT LIFT.
- 1000 LEAVE TO GET COOLER FOR SAMPLES.
TALK WITH LEW VALDER.
- 1100 RETURN TO SITE. THE NEXT LIFT IS READY FOR COMPACTOR.
- 1200 LUNCH. WIND IS NOW BLOWING FROM THE SOUTH.
- 1300 JULIE SHANE ARRIVES TO SEE DRUMS IN HILLSIDE DUNE AND THE TAR DRUM AND TAR PIT SOUTH OF THE NORTHERN ACCESS ROAD.
- 1330 START SAMPLING AT THE PCS EXCAVATION NORTH OF THE NORTHERN ACCESS ROAD



- | | | | |
|------|--------------|------|-------------|
| 1330 | #1 @ 11' BGS | 1410 | #5 @ 6' BGS |
| 1340 | #2 @ 10' BGS | 1420 | #6 @ 5' BGS |
| 1350 | #3 @ 9' BGS | 1430 | #7 @ 5' BGS |
| 1400 | #4 @ 7' BGS | 1440 | #8 @ 4' BGS |

- | | | | |
|------|--------------|------|--------------|
| 1450 | #9 @ 4' BGS | 1520 | #12 @ 5' BGS |
| 1500 | #10 @ 7' BGS | 1530 | #13 @ 3' BGS |
| 1510 | #11 @ 3' BGS | 1540 | #14 @ 3' BGS |
- #14 IS A DUPLICATE OF #13
#7 AND #9 WERE THE HOTTEST
LOOKING SPOTS AND WILL BE
ANALYZED FOR PAHs.
- 1600 SEE JIM AS I LEAVE TO PREPARE SAMPLES FOR SENDING TOMORROW. HE IS GOING TO TAKE A QUICK LOOK AROUND.
- 1800 BACK ON SITE. NEXT LIFT IN SE CORNER IS READY FOR COMPACTION.
- 1830 DISCUSS USING SCORIA ON ACCESS HAUL ROAD TO CENTER OF CELL B. THE CITY TRUCK KEEPS GETTING STUCK.
- 1900 LEAVE SITE.
- 1915 TALK WITH JIM ABOUT GETTING SCORIA. HE'LL MAKE ARRANGEMENTS TOMORROW IF WE NEED IT.
- 1930 END OF DAY.
- Jim Valder 9-3-03

Location ST. PAUL ISLAND Date THURSDAY 9.4.03

 Project / Client SNP LANDFILL CLOSURE
NOAA

- 0800 H&S YALGATE MEETING. K-R's BOSS IS ARRIVING TODAY AND WILL BE USING THE VEHICLE SO I WILL NEED TO GET MY OWN. HARD HATS TO BE WORN AT ALL TIMES, INSIDE CABS, TOO.
- 0815 WIND IS BLOWING FROM THE NE. CLEAR WITH A FEW CLOUDS.
- 0830 K-R WILL ATTEMPT TO USE THE TREATED SOIL (^{LOCATED} ON THE LANDFILL) TO MAKE A HAUL ROAD SO THE CITY TRUCK DOESN'T GET STUCK BEFORE GETTING SCORIA.
- 0845 PACK SAMPLES. 64 4-OZ JARS + 1 TRIP BLANK = 4 COOLERS.
- 1220 SEND SAMPLES BY POSTAL EXPRESS.
- 1230 LUNCH
- 1300 VISIT FORMER DIESEL TANK FARM WITH BOB TO SIZE WATER LINE. NEEDS CLEAN FILL ON THE DOWNHILL SIDE COMPACTED. ~~TO~~
- 1330 ANOTHER 2 LIFTS HAVE BEEN PLACED ON THE SE CORNER.

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- 1400 WE NEED VOLUME SOON SO WE PLAN TO UTILIZE THE MIDDLE-SOUTH AREA BY FILLING IT IN WITH BILTEMS AND THEN COVERING WITH COMPACTED LIFTS.
- 1430 JIM ARRIVES. DISCUSS OPTIONS FOR USING THE AREA WHERE THE BURN BOX DUMPS. JIM SAYS THEY WILL BE MOVING THE CITY'S BURN BOX OPERATIONS TO THE NEW PAD BY OCT 2003, SO THAT MEANS WE CAN START TO USE THEIR AREA FOR VOLUME.
- 1450 EXCAVATOR IS USED TO BREAK APART THE CONCRETE BOX AND INCORPORATE IT INTO THE LANDFILL.
- 1520 BEFORE WE BEGIN FILLING THE MIDDLE-SOUTH AREA, I WANT TO SHOW JIM THAT THERE IS STILL SOME MSW LOCATED OUTSIDE OF THE 50' LINE IN THE SE CORNER SO WE POTHOLE AROUND SE AREA. JIM AGREES THAT THIS MSW

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SHOULD BE REMOVED, BUT WANTS TO KEEP THE GW MONITORING WELL THAT IS AT THE SE CORNER. I TELL HIM THAT WE WOULD USE THE HILL TO THE NORTH FOR BACKFILL. HE AGREES.

1600 THE CITY TRUCK IS NOT GOOD AT GETTING AROUND, ESPECIALLY IN THE SE CORNER. THE MOXY HAS ONLY 2 OF IT'S 6 WHEELS PULLING. SWAP OUT THE CITY TRUCK FOR THE DJB (ZACY).

1700 BEGIN EXCAVATION IN SE CORNER

PRE-EXISTING GROUND SURFACE
 TRASH 5'-6' FROM CELL B
 PRE-EXISTING TRASH
 TRASH TO BE REMOVED AND THEN BACK FILLED WITH SAND.

50' BUFFER LINE

1800 THIS SCENARIO ALLOWS FOR GREATER VOLUME BECAUSE THE TOE BEGINS AT-GRADE INSTEAD OF 5'-6' BGS.

1900 END OF DAY Jim D
9.4.03

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0800 H'S TAILGATE MEETING.
 0815 EXCAVATE WITH PC200 INTO THE DJB DUMP TRUCK. HAUL TO MIDDLE-SOUTH AREA WHERE THE DOZER GRADES AND THE COMPACTOR COMPACTS EACH LIFT. ONE TRUCK OPERATION.
 0830 MSW CONTINUES TO REACH APPROX 5'-6' BGS IN THE SE CORNER. THE MSW IS CONSISTENT WITH MSW FROM CELL B. TRASH.
 0845 THE PC200 IS SLOW IN PRODUCTION COMPARED TO THE PAYLOAD OF THE DJB. IT ALSO HAS TO REACH EXTRA HIGH TO DUMP INTO THE DJB BED. DISCUSS WITH TERRY AND HE RECOMMENDS UPGRADING THE EXCAVATOR TO A HITACHI EX 350 H-5. DISCUSS WITH JIM AND HE REQUESTS THAT K-R GIVE ~~IT~~ THE RATES SO THAT TE CAN ADD THEIR MULTIPLIER AND THEN SEND TO NOAA FOR JIM'S APPROVAL.

- 0915 MY RENTAL TRUCK IS ON-SITE.
- 0920 ~~DRIVE TO~~ C/D WARM AND SUNNY.
- 0930 MERWYN JOHNSON ARRIVES ON-SITE.
HE GIVES ME K-R RATES TO
UPGRADE TO A HITACHI EX350.
- 0945 EXCAVATION IS PROCEEDING ALONG
THE EASTERN 50' BUFFER LINE
FROM NORTH TO SOUTH. THERE
IS SOME MSW PURPOSELY LEFT
IN-PLACE BEYOND THE 50'
BUFFER LINE DUE TO THE
STEEP SLOPE THAT SUPPORTS
THE PCS STOCKPILE AREA. THIS
MSW IS LEFT IN-PLACE BECAUSE
REMOVING IT UP TO THE 50'
BUFFER LINE, WOULD SERIOUSLY
JEOPARDIZE THE ENTIRE
SIDEWALL, ESPECIALLY SINCE
PART OF THE SIDEWALL WOULD
ALSO NEED TO BE REMOVED. Will
SHOW JIM WHEN HE COMES BACK
TO THE SITE.
- 1000 LEAVE TO FAX EXCAVATOR
RATES TO KEN VALDER.

- 1055 TALK WITH JULIE SHANE AFTER
SENDING FAX TO KEN VALDER. SHE
WILL HAVE BSE ON-SITE THIS
AFTERNOON TO TAKE CARE OF DRUM
HILL AND THE TAR PIT.
- 1115 RADIO JIM. HE'S GOING TO DROP
OFF POLARCONSULT DRAWINGS THAT
SHOW THE LOCATION OF THE NEW
BURN BOX PAD.
- 1130 TALK WITH HONOLULU TO TELL
THEM I NEED TO STAY OUT HERE
ANOTHER WEEK.
- 1145 JIM DROPS OFF DRAWINGS.
- 1200 LUNCH
- 1300 CONTINUE EXCAVATION IN SE CORNER.
CURRENTLY, WE ARE LOCATED AT THE
SW GW MONITORING WELL, AND
- 1320 MEETING WITH JULIE SHANE, MIKE
BALDWIN, JIM WRIGHT, AND BOB
HELVERSON (TEMI). DISCUSS
REMOVAL OF TAR DRUM AND HILLSIDE
DRUMS. PLACE DRUMS CONTAINING
PRODUCT INTO OVERPACK DRUMS
AND SMALL QUANTITIES OF CONTAM.

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PRODUCT/SOIL INTO THESE OVERPACK DRUMS ALSO. LARGE QUANTITIES OF PCS SHALL BE TRUCKED TO THE PCS STOCKPILE AREA. BOB SAYS THAT LEVEL B SHOULD BE USED FOR ANY SITUATION THAT INVOLVES A DRUM W/ UNKNOWN CONTENTS. JIM SAYS THAT THIS AREA HAS BEEN WELL-CHARACTERIZED AND ONLY PETROLEUM PRODUCT SHOULD BE EXPECTED. LEVEL C RESPIRATORS SHOULD BE GOOD ENOUGH, SAYS JIM.

1415 TALK WITH LOUIS, LANDFILL SUPER, ABOUT FILLING THE CURRENT BURN BOX DISPOSAL AREA. HE IS FINE WITH US FILLING THE AREA AS LONG AS HE STILL HAS ACCESS TO SOIL THAT CAN BE MIXED WITH THE ASH SO IT DOESN'T BLOW AWAY. JIM ASKS HIM ABOUT WHERE TO PLACE AN ADDITIONAL LINED/BERMED PAD FOR SOIL CONTAMINATED WITH UNKNOWN CONTENT FROM THE

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DRUM REMOVAL OPERATION. JIM NOW FEELS WE SHOULD SAMPLE AND CHARACTERIZE THE SOIL REMOVED AND STOCKPILED SEPARATELY BEFORE BEING PLACED INTO THE PCS STOCKPILE AREA. LOUB SAYS THE AREA NORTH OF THE BURN BOX IS FINE FOR THE PAD.

1435 EXCAVATION HAS TURNED THE CORNER AND IS NOW HEADING WEST ALONG THE SOUTH EDGE OF THE 50' LINE. JIM SEES THE SW GW MONITORING WELL SITTING IN AN ISLAND OF TRASH THAT EXTENDS BEYOND THE 50' BUFFER LINE AND NOW WANTS TO DECOMMISSION IT ALONG WITH THE ONE ON THE HILLSIDE OF DRUMS.

1900 JIM SEES THE TRASH THAT EXCEEDS THE 50' BUFFER LINE, BUT SUPPORTS THE STEEP SLOPE OF THE

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PCS STOCKPILE AND AGREES THAT IT SHOULDN'T BE EXCAVATED. JIM SAYS THAT IT WILL BE ADDRESSED AT A LATER DATE - NEXT SUMMER.

1515 ASK JIM ABOUT WHAT WE CAN USE FOR BACKFILL BECAUSE I WOULD LIKE TO BACKFILL AS SOON. THE EXCAVATION OF MSW IN THE SW CORNER IS COMPLETE. JIM SAYS, "WHY CAN'T WE JUST LEAVE IT OPEN?" I TELL HIM THAT THE VERTICAL WALLS OF MSW ARE NOT NECESSARILY STABLE AND WOULDN'T SUPPORT MORE LIFTS AND COMPACTING ON THE SE CORNER CELL. JIM WILL GET BACK TO ME ON WHAT TO USE FOR CLEAN FILL.

1530 CRAIG ARRIVES TO SURVEY THE CORNERS OF THE NEW BURN BOX PAD AND BORROW AREA.

1600 POLARCONSULT'S DRAWINGS GIVE

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NO DIMENSIONS TO SPATIALLY LOCATE ANY CORNERS OF THE BORROW AREA (DISPOSAL PIT). CALL JIM TO GET THIS INFO FROM THEM. NOTE: JIM LEFT SITE AT 1530 WHEN CRAIG ARRIVED.

1615 BSE ARRIVES ON-SITE.

1700 BSE HAS PLACED THE TAR DRUM AND NEARBY HARDENED TAR/SOIL INTO AN OVERPACK DRUM.

1710 BSE IS SLOWLY EXCAVATING WITH A BACKHOE TO LOOK FOR MORE DRUMS.

1715 JIM ARRIVES ON-SITE.

1730 BSE LEAVES FOR THE DAY.

1735 K-R IS FINISHED EXCAVATING THE MSW THAT EXTENDED OUTSIDE THE 50' BUFFER LINE IN THE SE CORNER OF TRACT 42.

1740 JIM SAYS THAT THE TREATED SOIL CAN BE USED FOR BACKFILL.

1745 BEGIN BACKFILLING THE EXCAVATION.
 1750 SOME OF TREATED SOIL HAS

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WIRE AND CABLE AND OTHER ITEMS IN IT. TERRY REMOVES THESE ITEMS BEFORE LOADING IT INTO THE DUMP TRUCKS (DJB AND MOXY), BUT NOT EVERY MISCELLANEOUS ITEM.

JIM SEES THIS, BUT SAYS IT'S OK.

1815 THE DJB DUMP TRUCK HAS A PROBLEM WITH ITS SHIFTER AND THE MOXY CONTINUES TO ONLY HAVE 2 OF 6 WHEEL DRIVE.

1830 WALK LANDFILL WITH JIM. CRAIG IS BACK ON-SITE SURVEYING THE CORNERS OF THE BURN BOX DISPOSAL AREA BECAUSE HE GOT A DIMENSION FROM POLAR CONSULT.

1845. JIM SAYS THAT WELLS WILL BE DECOMMISSIONED BY POURING BENTONITE PELLETS DOWN WELL AND CUTTING OR PULLING UP WELL.

1900 END OF DAY. in War
9-5-03

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0800 HHS TAILGATE MEETING. BE CAREFUL OF VERTICAL WALL OF MSW WHILE BACKFILLING THE SITE EXCAVATION. BE CAUTIOUS OF BSE TRAFFIC AS THEY WILL BE WORKING TODAY TO MAKE UP FOR LABOR DAY.

0815 JIM: THE GW WELLS WILL BE DECOMMISSIONED BY:

- 1) FILLING CASING WITH BENTONITE CHIPS UP TO GROUND SURFACE.
 - 2) CUTTING OFF CASING "JUST BELOW" GROUND SURFACE.
 - 3) EXCAVATING MSW FROM AROUND THE WELL.
 - 4) BACKFILLING WITH CLEAN MATERIAL, IF NEEDED, FOR EXAMPLE AT THE SE CORNER.
- JIM HAS ONLY RECEIVED A PHONIC CALL AT THIS POINT AND SAYS TO WAIT UNTIL HE GETS WRITTEN APPROVAL.

0830 BACKFILLING AND COMPACTING THE SE EXCAVATION CONTINUES.

0840 BSE ARRIVES. CONDUCT HHS TAILGATE MEETING. HARD HAT, STAIL

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FOOD BOOTS, TYVEX, GLOVES, SAFETY GLASSES, AND HEARING PROTECTION (IF DESIRED) SHALL BE USED DURING REMOVAL OF DRUMS. OUR GOAL IS TO REMOVE DRUMS AND PLACE INTO OVERPACK DRUMS. OBVIOUS CONTAMINATED SOIL WILL BE STOCKPILED AND THEN HAULED TO A LINED/BERMED PAD TO BE CONSTRUCTED NORTH OF BURN BOX.

0900 TERRY WILL REMOVE TREATED SOIL FROM NORTH OF THE BURN BOX FOR THE BSE PAD.

0915 JIM ARRIVES ON-SITE. WATCH BSE LOAD THEIR 2ND & 3RD OVERPACK DRUMS. (1ST down was yesterday). DIRTY SOIL STOCKPILED IN PIT.

0930 JIM AGREES WITH OUR APPROACH.

0940 TALK WITH TERRY REGARDING THE TREATED SOIL BEING USED FOR BACKFILL IN THE SE CORNER. THE TREATED SOIL CONTAINS BITS AND PIECES OF MSW. JIM ACCEPTS THIS FACT AND APPROVES ITS

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USE AS BACKFILL OUTSIDE THE 50-FOOT BUFFER LINE.

0950 JIM SAYS THE TRASH OUTSIDE OF THE 50-FOOT LINE SUPPORTING THE PCS STOCKPILE WILL HAVE TO BE ADDRESSED NEXT YEAR AND AGREES WITH OUR LEAVING IT THERE.

1000 THE SE WALL WILL BE DECOMMISSIONED AFTER BACKFILLING UP TO THE ORIGINAL GRADE. THEN THE MSW WILL BE EXCAVATED OUT AND BACKFILLED WITH CLEAN MATERIAL.

1015 BSE OVERPACKS ANOTHER DRUM.

1030 JIM LEAVES TO ORDER MORE OVERPACK DRUMS.

1130 BSE HAS PLACED A TOTAL OF 5 DRUMS INTO OVERPACKS. AT LEAST ONE MORE IS VISIBLE IN THE PIT. THEY NEED JIM TO OPEN THE MACHINE SHOP SO THEY CAN GET MORE.

1200 LUNCH. CALL JIM AND HAVE HIM OPEN THE MACHINE SHOP.

- 1300 BACK TO BACKFILLING SE EXCAVATION WITH TREATED SOIL.
- 1315 BSE ARRIVES WITH MORE OVERPACK DRUMS.
- 1330 BEGIN CONSTRUCTION OF LINED/BERMED PAD NORTH OF BURN BOX.
- 1415 FINISH CONSTRUCTION OF PAD. JASON ON THE F.E. LOADER HELPED A LOT. TREATED SOIL WAS USED FOR BERM AND HOLDING DOWN THE LINER ON THE OUTSIDE OF THE BERM.
- 1430 BSE BEGINS EXCAVATION FOR MORE DRUMS.
- 1450 ANOTHER DRUM IS PUT INTO AN OVERPACK. THAT MAKES 6. THIS ONE HAD TAR AND SOME OTHER NON-PETROLEUM TYPE SMELL.
- 1510 K-R IS 2.5' DEPTH AWAY FROM COMPLETING BACKFILL IN SE CORNER.
- 1530 JIM AND PAUL (NOAA) ARE ON-SITE AND WATCHING BSE REMOVE LARGE CHUNKS OF TAR/SOIL AND PLACING THEM IN 2 OVERPACK DRUMS.
- 1545 STILL MORE TAR/SOIL CHUNKS. WE ONLY HAVE 4 EMPTY OVERPACK

- DRUMS REMAINING.
- 1600 JIM DIRECTS US TO ONLY PUT DRUMS WITH FREE-FLOWING PRODUCT INTO OVERPACK DRUMS. ALL OTHER DRUMS AND CONTAMINATED SOIL SHALL BE HAULED TO THE NEW/LINED PAD AND STOCKPILED. THE CURRENT-FILLED OVERPACK DRUMS WILL ONLY BE EMPTIED IF THE 4 REMAINING DRUMS ARE USED UP AND MORE FREE-FLOWING PRODUCT DRUMS ARE FOUND.
- 1630 JIM AND PAUL TOUR THE LANDFILL TO SCORE GOOD SPOTS FOR PAUL'S VIDEO FOOTAGE ON MONDAY.
- 1700 K-R IS FINISHED EXCAVATING THE SE CORNER. START EXCAVATING TMSW IN THE CENTER OF CELL B. ALEXA MOVES FROM COMPACTOR TO THE MOKY.
- 1715 BSE LEAVE SITE.
- 1730 ~~JIM~~ PAUL LEAVES SITE
- 1800 JIM LEAVES SITE.
- 1830 RAY HAS ENOUGH MATERIAL

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FOR THE NEXT LIFT ON THE
 CELL IN THE SE CORNER.

1335 BEGIN DUMPING MSW IN
 THE DEPRESSION AREA WHERE
 THE BURN BOX DUMPS TRASH.

1445 WIND HAS BEEN BLOWING FROM
 THE EAST ALL DAY. BURN
 BOX ^{SMOKE} WAS NOT AN ISSUE TODAY
 BECAUSE LOUIS IS NOT GOING TO
 START THE FIRE UNTIL AFTER
 WE'RE FINISHED TODAY.

1900 END OF DAY.

Jim Del

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0800 HES TRUCKATE MEETING. WIND
 IS BLOWING FROM NORTH. NO RAIN.
 BE CAREFUL OF PCS TRAFFIC AND
 LOCAL FROM BSE REMOVING DRUMS
 AND CONTAMINATED SOIL.

0820 EXCAVATING MSW IN CENTRAL CELL B.
 DUMPING IN BURN BOX DISPOSAL AREA.
 COMPACTING ON TOP OF SE CORNER.
 TRACK WALKING SIDESLOPES W/DOZER.

0830 MY RENTAL TRUCK HAS A FLAT. ALEXAY
 GIVES ME HIS CIGARETTE LIGHTER AIR
 COMPRESSOR TO FILL IT UP.

0900 BSE ARRIVES ON-SITE. HIS MEETING.

0930 BSE HAS SORTED THROUGH THE
 OVERPACK AND FOUND 4 WITH FREE-
 FLOWING PRODUCT.

0935 CALL JIM TO OPEN MACHINE SHOP
 AND CHECK TO SEE IF CURRENT
 WATER LINE INSTALLATION IS
 BLOCKING ENTRANCE TO MACHINE
 SHOP.

0950 LOAD 2 OVERPACK DRUMS STAGED
 NEAR FIELD TRAILER THAT
 CONTAIN DRUMS THAT K-R DISCOVERED

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- IN THE HILLSIDE DUNE 1.5 WEEKS AGO.
- 1030 BSE LEAVES TO PUT THE 6 DRUMS W/ FREE-FLOWING PRODUCT INTO THE MACHINE SHOP PER JIM WRIGHT.
- 1035 TALK W/ OUR NEW FLAGGER, ROMAN, WHO HAS BEEN ON-SITE FOR 1.5 HRS. TALK HIS AND HE SIGNS OFF.
- 1100 SHOW TERRY THE CORNERS FOR THE NEW BURN BOX DISPOSAL PIT. WE WILL BE ALLOWED TO BORROW FROM TAIL AREA FOR CLEAN FILL, PER JIM WRIGHT.
- 1120 BSE ARRIVES ON-SITE.
- 1130 K-R GREASES THEIR EQUIPMENT AND THE PC200 FOR BSE TO USE AFTER LUNCH.
- 1200 LUNCH.
- 1300 BSE USES EXCAVATOR (PC200) TO REMOVE CONTAMINATED SOIL AND DRUMS WITH NON-FREE-FLOWING MATERIAL FROM THE TAR PIT. WALTER IS HAULING IT TO THE NEW PAD TO THE NORTH OF THE BURN BOX.

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- 1330 START HITTING LARGE POCKETS OF TRASH (MSW) MIXED IN WITH SOLIDIFIED PIECES OF TAR.
- 1335 RADIO JIM. HE SAYS TO GO AHEAD AND INCLUDE THE TRASH ALONG WITH THE TAR/SOIL TO THE NEW LINED/BERMED PAD.
- 1340 POT HOLE DOWN ~ 10-12 FEET AT CENTER OF TAR PIT LOOKING FOR MORE DRUMS. (IT'S CLEAN).
- 1410 JIM ARRIVES ON SITE.
- 1420 JULIE AND ELARY (BSE) ARRIVE ON SITE FOR A SHORT VISIT.
- 1430 THE CONTAMINATED SOIL PILE IS ALREADY BUILDING UP IN THE NEW PAD. JIM SAYS TO ONLY REMOVE DRUMS AND CHUNKS OF TAR - NO MORE!
- 1500 APPEARS THAT WE ARE REMOVING A LATTICE OF WOOD PALLETS THAT THE DRUMS USED TO BE STORED ON - THERE IS TAR STUCK TO THE BOARDS SO THEY GO TO THE PAD.
- 1530 1ST CHARACTERIZATION SAMPLE

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- From TAR PIT. SPO4-~~013~~^{SS}-012-000.
- 1600 POT HOLE DEEP (10-12' DEEP) TO LOOK FOR MORE DRUMS. NO DRUMS, BUT CONTAMINATED SOIL, WHICH WE ARE NO LONGER EXCAVATING.
- 1615 COLLECT CONFIRMATION SAMPLE AT BOTTOM OF TARPIT. POT HOLE.
- 1630 BSE COMPLETES DRUM SEARCH / TAR REMOVAL AT THE TAR PIT. 12 TRUCK LOADS OF SOIL AND CHUNKS OF TAR (120 CY) AND 1 LOAD OF FENCE POSTS WITH TAR STUCK ON THEM.
- 1645 DISCUSS METHOD AND APPROACH FOR GOING AFTER DRUMS ON HILLSIDE DUNE. PAUL ARRIVES TO SHOOT VIDEO OF MSW REMOVAL.
- 1700 BSE GOES TO GET SCORIA FOR A SHORT ACCESS ROAD WE WILL HAVE TO BUILD SO THE DUMP TRUCK CAN GET BACK TO THE AREA. 2^{CO}
- 1730 BSE FINISHES DAY WITH GETTING 2 TRUCK LOADS OF SCORIA.

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- 1745 J.M. LEAVES.
- 1800 K-R MECHANIC LEAVES. HE HAS BEEN WORKING ON THE COMPACTOR, WHICH BLEW A HYDRAULIC LINE.
- 1815 K-R FINISHES CENTRAL CELL B EXCAVATION, CLOSE TO THE MAIN ACCESS ROAD.
- 1835 CRAIG RUSSELL SHOWS UP TO SURVEY THE EXTENT OF THE SE EXCAVATION AND RE-ESTABLISH THE TOR ALONG THE SOUTH SIDE.
- 1940 END OF DAY.

Tim Deitz
 9-8-03

- 0800 HES THIRGATE MEETING FOR K-R. WATCH S-T-F. WATCH FOR FLAGGER'S SIGNALS. HES GOING TO BE MOVING TO DIFFERENT INTERSECTIONS DEPENDING ON WHERE WORK IS HAPPENING. STAY AWAY FROM CONE NEAR ACCESS ROAD WHERE A MONITORING WELL IS LOCATED.
- 0815 EXCAVATE AT SOUTHWEND OF CELL B.
- 0830 RAY IS USING DOZER TO CUT A ROAD THRU THE HILLSIDE DUNE SO THAT BSE DUMP TRUCK CAN ACCESS THE AREA.
- 0845 BSE ARRIVES. HES MEETING. TYVEN, GLOVES, SAFETY GLASSES, AND RESPIRATOR AT THE READY FOR DRUM REMOVAL. ONLY TAKE DRUMS AND THICK CHUNKS OF CONCENTRATED CONTAMINATION.
- 0900 BSE LEAVES TO GET MORE SCORIA.
- 0915 RAY FINISHES ROAD CUT FOR BSE AND MOVES TO BURN BOX DISPOSAL PIT TO SPREAD NEXT LIFT OF MSW.
- 1015 COLLECT STOCKPILE SAMPLE

- SPO4-SS-013-000. THIS SAMPLE CONTAINS SOIL AND PIECES OF TAR.
- 1020 JIM WRIGHT IS PICKING UP GREG CIERVAKS FROM AIRPORT.
- 1030 BSE BEGINS EXCAVATING FOR DRUMS IN THE HILLSIDE DUNE. TWO DRUMS ARE FOUND IMMEDIATELY. ONE DRUM IS EMPTY AND HAS RUSTED OUT EXTERIOR. THE OTHER DRUM IS INTACT AND FULL.
- 1045 LAY DOWN LINER AFTER A BERM IS CREATED. PUT THE DRUM ON LINER. DON RESPIRATORS. OPEN BUNG HOLE. ~~NEED STINGER~~ INSERT STINGER CONNECTION. PUMP LIQUID INTO NEW 55-GALLON DRUM.
- 1115 PAUL ARRIVES AND VIDEOTAPES LAST SEQUENCE.
- 1130 OLD DRUM IS PLACED INTO YELLOW OVERPACK DRUM. MEET GREG CIERVAKS.
- 1200 LUNCH. BRIAN CROFT WILL ARRIVE AT 3 PM FRIDAY.
- 1300 BSE CONTINUES EXCAVATION INTO HILLSIDE.

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- 1330 THREE MORE EMPTY DRUM CARCASSES ARE FOUND.
- 1415 PAUL SHOWS UP TO FILM.
- 1530 PAUL IS DONE FILMING DRUM REMOVAL.
- 1545 CRAIG SHOWS UP TO SURVEY EAST 50' BUFFER LINE.
- 1615 JIM CALLS TO BRING OUT LAST OVERPACK DRUM. JULIE, ELARY, AND SOMEBODY ELSE JUST LEFT AFTER VISITING/VIDEO TAPING FOR A SHORT 1/2 HOUR VISIT.
- 1630 JIM AND CRAIG GERVAIS ARRIVE ON-SITE. DISCUSS APPROACH SINCE WE ARE LOW ON OVERPACK DRUMS AND THERE ARE LOTS STILL VISIBLE. TOMORROW, WE WILL PUT DRUM CARCASSES THAT CONTAIN RESIDUE INTO THE NEW LINED/BERMED PAD. ONLY DRUMS LIKE THE TAR DRUM SHALL REMAIN IN OVERPACKS. ALL OTHERS CURRENTLY IN OVERPACKS SHALL BE REMOVED AND PLACED IN NEW BERMED/LINED PAD.

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- 1700 POINT OUT TO GREG & JIM THAT WE BSE FOUND A POCKET OF USED BATTERIES THAT WE HAVE STOCKPILED. THEY WILL BE PLACED IN OVERPACK. GREG & JIM ARE OK WITH THAT.
- 1730 BSE LEAVES SITE FOR DAY.
- 1735 CONDUCT POTHOLES ALONG NORTH SIDE OF 50' OFFSET. TRASH IS FOUND WITHIN THE 50' OFFSET AND OUTSIDE THE 50' OFFSET NEAR THE MAIN ACCESS ROAD. ...
- 1800 FENCE IS REMOVED FROM ALONG THE ACCESS ROAD.
- 1830 ASSIST CRAIG IN SURVEYING RECENT POTHOLES IN NORTH SIDE OF LANDFILL.
- 1835 NOTE: JIM AND GREG JUST LEFT. BECAUSE K-R IS WAITING FOR BSE TO FINISH REMOVING DRUMS, NOAA MAY HAVE K-R WORK ON A FEW THINGS AT CELL A TO KEEP BUSY.
- 1900 END OF DAY. Jim Del

Location ST. PAUL ISLANDS Date WEDNESDAY 9.10.03Project / Client SNP LANDFILL CLOSURE
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- 0800 H'S TAILGATE MEETING. SE
GREG AND JIM ARE ALSO PRESENT.
IT'S STILL DARK SO USE YOUR
LIGHTS AND BE CAREFUL. WILL
BE REMOVING WELL IN SE
CORNER AND CELL B TODAY.
WEAR SAFETY GLASSES WHEN
OFF/OUTSIDE YOUR EQUIPMENT.
- 0830 BEGIN EXCAVATING AROUND
WELL IN SE CORNER. RAY IS
WORKING ON THE TOE AND
SIDESLOPES ON THE FORMED
~~TA~~ SUBGRADE (TRASH) IN THE
SE CORNER.
- 0900 Well in SE CORNER IS DECOMMISSION.
- 0930 K-R FINISHED EXCAVATING SE
WELL AREA.
- 0935 BSE HAS BEEN WORKING AT DRUMS IN
HILLSIDE SINCE 0900, AFTER A H'S
TAILGATE MEETING. HOT SOIL WILL
BE STOCKPILED ON NEW LINED ~~BERMED~~
PAD. ONLY DRUMS THAT HAVE PRODUCT
THAT CAN'T BE PUMPED SHALL BE
OVERPACKED. ALL OTHER DRUMS

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- WILL BE STOCKPILED AT THE
NEW PAD.
- 0940 JIM AND GREG ARRIVE. POUR
MORE H₂O DOWN CELL WALL NEAR
HILLSIDE DRUMS.
- 0950 WALK CELL A WITH JIM &
GREG. THEY WANT SIDESLOPES
PULLED BACK AT 3:1. TRASH
PULLED BACK SHALL BE RE-
LOCATED INTO CELL A DEPRESSIONS
OR TRANSPORTED TO ~~CELL B~~
LANDFILL CELL.
- 1000 PER GREG & JIM, NO COVER IS
NEEDED ON THE LANDFILL CELL
WHEN WORK IS FINISHED THIS FALL.
- 1015 SCORIA IS A PRIORITY SO K-R
CAN BEGIN HAULING AND
STOCKPILING FOR THE NEW PAD.
- 1030 JIM AND GREG LEAVE.
- 1045 EXPLAIN WORK TO TERRY.
- 1100 VISIT BSE TO TALK ABOUT GETTING
SCORIA. FERRY IS IN MTNG, SO
JULIE TALKS WITH ME ABOUT IT.
SITE WILL HAVE FERRY VISIT

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- 1130 THE LANDFILL TODAY TO DISCUSS
 CAN DONNA LACOMBE. PASS ON
 TO HER THAT GREG WOULD LIKE
 TO HAVE 3 PEOPLE OUT NEXT
 WEEK FROM TE, NOT JUST CROFT.
 DONNA SAYS BRIAN GOODMAN IS
 COMING OUT ON SUNDAY. SHE
 WILL TRY TO FIND ANOTHER.
- 1200 LUNCH
- 1300 K-R BEGINS EXCAVATING AROUND
 CW WELL NEAR HILLSIDE DUNE.
 THE SE CORNER WELL WAS
 DECOMMISSIONED, MSW REMOVED,
 AND BACKFILLED/COMPACTED
 WITH TREATED SOIL BEFORE LUNCH.
- 1330 RAY IS SHARPING NEXT LIFT
 IN ASH DISPOSAL PIT. ALEXAY
 IS COMPACTING SE CORNER AREA
 AND SOUTH SIDE OF LANDFILL
- 1345 BSE HAS BEEN STOCKPILING
 CONTAMINATED SOIL AT THE HILL-
 SIDE DUNE BECAUSE THEIR
 DUMP TRUCK IS WAITING FOR
 A PART.

Location ST PAUL ISLAND Date 9-10-03
 Project / Client SNP LANDFILL CLOSURE
NOAA

- 1355 BSE GIVES THEIR COMPRESSOR
 TO ANOTHER BSE TO FIX
 AFFILIATE AT ANOTHER
 SITE.
- 1405 BSE HITS A DRUM WITH
 PRODUCT AND THERE IS A
 RELEASE. POUR "SPHAG SOBS"
 ON IT (ENVIRONMENTALLY SAFE
 INDUSTRIAL ABSORBENT FOR
 SPILLS ON LAND OR WATER).
 2 LBS OF "SPHAG SOBS" WILL
 ABSORB 1 GALLON OF OIL.
- 1410 THERE IS STILL PRODUCT IN THE
 DRUM, BUT IT CAN'T BE PUMPED
 OUT BECAUSE THE AIR
 COMPRESSOR IS GONE. ON THE
 DIRECTION, BSE MOVES DRUM
 WITH EXCAVATOR AND PLACE
 IT ON ~~BERMED~~ TEMPORARY
 BERMED/LINED PAD WHERE
 OTHER DRUMS THAT HAD
 CONTAINED PRODUCT ARE
 STOCKPILED. NO LEAKS DURING
 TRANSFER.

- 1415 BSE EXCAVATES SOIL CONTAM.
BY SPILL AND PLACES ON
STOCKPILE BOUND FOR NEW
PAD NORTH OF BURN BOX
- 1420 BSE CONTINUES EXCAVATION
INVESTIGATION FOR MORE DRUMS.
- 1425 K-R FINISHED WITH GW WELL
DECOMMISSIONING AND MSW
REMOVAL.
- 1430 K-R REMOVING MSW NORTH
OF 50' (OUTSIDE) OF 50'
BUFFER LINE NEAR MAIN
ACCESS ROAD.
- 1440 ELARRY AND COMPANY ARRIVE.
- BSE CONTROLS ALL QUARRY SITES
- TX BOYS FROM BSE
- LESIAN MAT'S SALES AGREEMENT
- QUANTITY, TRUCK CY, - JULIE
- 1510 JULIE, ELARRY, JOE, AND JOHN R. LEAVE
SITE. SCORIA NEEDED = $100' \times 100' \times 2' = \frac{20,000 \text{ FC}^3}{740 \text{ yd}^3}$
- 1515 BSE BACK TO WORK. $\frac{200' \times 200' \times 2' = 80,000 \text{ FC}^3}{2,963 \text{ yd}^3}$
- 1535 JIM WRIGHT CALLS TO SAY HE
IS LEAVING THE ISLAND.
- 1550 BSE FINDS A FULL 55-GALLON

- DRUM.
- 1555 BSE PUMPS OUT PRODUCT, WHICH
IS A GASOLINE/OIL MIXTURE.
WE NOW HAVE 2.5 DRUMS
OF PRODUCT THAT HAS BEEN
DUMPED OUT OF DETERIORATED
DRUMS.
- 1610 K-R IS HAVING TO EXCAVATE
SOME PIPES THAT ARE HALF
IN AND HALF OUT OF THE 50'
BUFFER ALONG THE NORTH LINE.
- 1 ACRE = $43,560 \text{ ft}^2 = 208.71' \times 208.71'$
SCORIA FOR 1 ACRE PAD = $210' \times 210' \times 2'$
= $88,200 \text{ ft}^3$
= $3,267 \text{ yd}^3$
- 1650 K-R IS GOING TO HAVE TO
REMOVE POLES/MSW FURTHER
FURTHER INSIDE ~~50'~~ LANDFILL
TO GET ALL OF IT THAT
LAYS OVER THE 50' BUFFER.
- 1730 BSE LEAVES SITE FOR THE DAY.
- 1745 MEET GLEN FAUST W/ GREN. GLEN WOULD
LIKE TO HAVE 5:1 SIDESLOPES.
- 1755 GLEN IS IMPRESSED WITH THE

Location St PAUL ISLAND Date WEDNESDAY 9.10.03Project / Client SNP LANDFILL CLOSURE
NOAA

PROGRESS K-R HAS MADE ON THE LANDFILL.

- 1820 GLEN WOULD LIKE TO HAVE THE SLOPE SUPPORTING THE PCS THAT EXTENDS BEYOND THE EASTERN 50' BUFFER REMOVED NOW INSTEAD OF NEXT YEAR.
- 1915 LEAVE LANDFILL FOR DAY.
- 1930 DROP OFF ROMAN'S TIMECARD TO K-R.

Tim Doll
9.10.03

Location St PAUL ISLAND Date THURSDAY 9.11.03Project / Client SNP LANDFILL CLOSURE
NOAA

- 0800 H'S TAILGATE MEETING. GREG GIERVAIS PRESENT. WIND IS BLOWING FROM THE WEST.
- 0815 CONTINUE EXCAVATING MSW NORTH OF 50-FOOT BUFFER, ~~AND~~ HAULING TO CURRENT ASH PIT, AND COMPACTING IN 16-INCH LIFTS.
- 0845 BSE ARRIVES. H'S TAILGATE MEETING.
- 0900 BSE HAULS CONTAMINATED SOIL STOCKPILED AT DRUM SITE TO THE NEW PAD NORTH OF BERM BOX.
- 0910 GREG G. AND GLEN FAUST ARRIVE.
- 0915 GREG VIDEOTAPES BSE HAULING SOIL TO PAD.
- 0945 DIG HOLE IN CELL A COVER WITH SHOVEL TO DETERMINE DEPTH OF SCORIA COVER. IT'S ABOUT 6"-10". PLAN TO USE 12" FOR NEW PAD = $100' \times 100' \times 1' = 370 \text{ yd}^3$
WILL ASK BSE FOR 400 yd^3 .
WITH 10CY TRUCK = 40 TRIPS
WITH 28CY TRUCK = 15 TRIPS
WITH 40CY TRUCK = 10 TRIPS
- 1000 GREG AND GLEN LEAVE SITE.

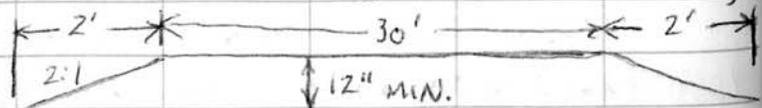
1015 USE ORANGE PAINT TO MARK OFF EXCAVATION LIMITS ALONG THE ACCESS ROAD. IT IS CLEAR THAT MSW EXISTS BELOW THE ACCESS ROAD, BUT WE ARE NOT GOING TO REMOVE IT NOW WITH ALL THE PCS ACTION FROM OTHER SITES BOUND FOR PCS STOCKPILE.

1045 DECIDE TO HALT EXCAVATION ON NORTH SIDE OF ACCESS ROAD BECAUSE OF ALL THE TRUCK TRAFFIC.

1100 MOVE EXCAVATION TO SOUTH SIDE OF MAIN ACCESS ROAD ALONG WHERE OUR DB TRUCK IS OFF THE MAIN ROAD FOR LOADING.

1115 CALCULATE VOLUME OF SCORIA NEEDED FOR NEW ACCESS ROAD.

ASSUME 30' WIDE WITH 2:1 SIDESLOPE LENGTH = 230' (VERIFY WITH GREG).



$$\begin{aligned} \text{VOLUME}_{\text{ROAD}} &= 30' \times 230' \times 1' + 2 \left(\frac{1}{2} \right) (2') (230) \\ &= 7,360 \text{ ft}^3 = 273 \text{ yd}^3 \end{aligned}$$

$$\begin{aligned} \text{VOLUME}_{\text{PAD}} &= 100' \times 100' \times 1' = 10,000 \text{ ft}^3 \\ &= 370 \text{ yd}^3 \end{aligned}$$

$$\text{TOTAL} = 273 + 370 = 643 \text{ yd}^3$$

SAY 650 yd³

WITH 10 CY TRUCK = 65 TRIPS

WITH DJB TRUCK = 24 TRIPS

WITH 40 CY TRUCK = 17 TRIPS

1300 DOZER IS SHAVING SURFACE MSW AWAY FROM SLOPES ON OPPOSITE SIDE OF DRUM HILL.

1330 JOHN R., JOE, AND GREG ARRIVE ON-SITE

1345 JULIE AND FLARRY ARRIVE ON-SITE

1400 THE KOMATSU EXCAVATOR THAT BSE IS USING BLOWS A HYDRAULIC LINE AND BSE MECHANIC IS FROM KELLY - RYAN IS CALLED.

1430 JOHN R AND COMPANY LEAVE.

1440 GET GAS FOR RENTAL TRUCK.

1455 CALL DONNA LALOMBIE TO TELL HER BSE IS SENDING HER A CONTRACT FOR SCORIA.

Location ST PAUL ISLAND Date THURSDAY 9-10-03Project / Client SNP LANDFILL CLOSURE
NOAA

- 1520 ACTUALLY, IT WAS THE WATER PUMP BEARINGS AND SEAL BROKE ON THE EXCAVATOR. MECHANIC SAYS IT CAN'T BE MOVED OR FIXED UNTIL SATURDAY.
- 1530 BSE CONTINUES REMOVING DRUMS FROM HILLSIDE USING SHOVELS.
- 1600 CRAIG RUSSEL ARRIVES. SURVEY X-SECTIONS FOR PAD, 4 OF MAIN ROAD, AND EXCAVATION LIMITS NORTH OF CELL B AND 50' BUFFER.
- 1730 BSE LEAVES. NEW PAD IS FULL.
- 1800 GREE ARRIVES. FROM NOW ON BSE ~~WE~~ CAN TAKE SOIL FROM THE HILLSIDE (PCS) AND DUMP AT THE PCS STOCKPILE. UPON RECEIVING JOHN R.'S OK, WE ARE ALLOWED TO MOVE SAND AROUND A ~~PARCEL~~ (INSIDE A PARCEL), WHICH MEANS WE CAN USE SURROUNDING CITY SAND FOR BACKFILL ALONG

Location ST PAUL ISLAND Date THURSDAY 9-10-03 97Project / Client SNP LANDFILL CLOSURE
NOAA

- LANDFILL 50-FOOT EDGES, WHICH IS NEEDED ON THE WESTERN AND NORTHERN SIDES. WE AWAIT JOHN R.'S OK.
- 1900 TREATED SOIL SHALL BE USED FOR BACKFILL OF THE EXCAVATION AT THE STILL REQUIRED AT THE ~~SE~~ CORNER OF THE SLOPE SUPPORTING THE SE PORTION OF THE PCS STOCKPILE.
- 1915 SHOW PCS SPOTS ON NW-MOST EXCAVATION AT CELL B TO CORRECT. CORRECT SAYS TO TAKE OFF TOP FOOT AND PUT INTO PCS STOCKPILE. THIS IS KELLY-RYAN WORK.
- 1930 END OF DAY.

Eric Dell
9-10-03
18

Location ST PAUL ISLAND Date FRIDAY 9.12.03Project / Client SNP LANDFILL CLOSURE
NOAA

0800 H'S TAILGATE MEETING. NO WIND AND CLOUDY. NO RAIN. SINCE K-R IS WAITING FOR: ① BSE TO FINISH DRUM HILL ② APPROVAL FROM JOHN R. TO USE CITY SAND NEARBY FOR BACKFILL AGAINST THE WESTERN SIDE OF EXPOSED MSW ③ BSE TO PULL BACK SE CORNER OF PCS STOCKPILE ④ RESULTS OF SURVEY OF EXTENT OF MSW EXCAVATION ALONG THE 50' OFFSET WORK TODAY IS GOING TO START AT CELL A STOCKPILING BOULDERS, AND PULLING BACK SIDESLOPES TO 3:1, AND FILLING IN LOW AREAS TO 2' BELOW CURRENT GRADE AT EXISTING SCORIA PAD.

0900 BSE ARRIVES. H'S TAILGATE MEETING.

0930 BSE IS USING BACKHOE (BECAUSE THE PC 200 BLEW A WATER PUMP YESTERDAY) TO EXCAVATE FOR DRUMS.

1000 MEETING ON PCS STOCKPILE w/ Greg, Julie Shore, Bob, and myself to

Location ST PAUL ISLAND Date FRIDAY 9.12.03Project / Client SNP LANDFILL CLOSURE
NOAA

DISCUSS ① PULLING BACK SE SLOPE OF THE PCS STOCKPILE ② TYPE OF LINER TO USE AS COVER ON PCS STOCKPILE OVER WINTER, AND ③ CONFIGURATION OF EXPANSION OF PCS STOCKPILE AREA ONTO SE CORNER OF MSW.

1100 BSE DECIDES TO BRING IN THEIR OWN EXCAVATOR TO DIG THE HILL OF DRUMS AND SPEED THE PROCESS ALONG.

1200 HELP GREG CUT THE CW WELL NEAR THE ACCESS ROAD AND POUR BENTONITE CHIPS DOWN IT.

1230 PROVIDE LUNCH

1300 CALL GREG TO GIVE HIM EST. OF SAND TO CONSTRUCT ROAD TO NEW BURN BOX PAD. 2,600 CY OF SAND.

1400 JERRY HIT SOME TAR DRUMS WHILE PULLING BACK THE NE SIDESLOPE OF CELL A. TELL HIM TO MOVE SOUTH AND CONTINUE PULLING BACK SIDESLOPES.

1445 BSE CONTINUES EXCAVATION FOR DRUMS

Project / Client SNP LANDFILL CLOSURENOAA

1500 INSTALL FENCE ALONG MAIN
ACCESS ROAD AND THE
NORTHERN EXCAVATION.

1545 GREG IS ON SITE SHOW HIM
THE YAR DRUMS AT CELL A.
HE WOULD LIKE BSE TO
INVESTIGATE THIS AREA
AFTER THEY ARE FINISHED
WITH DRUM HILL.

1600 WIND BLOWING FROM SE IS
THICK AND I TALK BSE TO
TAKE BREAKS AND BREATHE
FRESH AIR.

1630 JASON FROM BSE ARRIVES
WITH 320B (CAT) EXCAVATOR
TO PULL BACK SIDESLOPES IN
SE CORNER OF PCS STOCKPILE.
HE PARKS IT AND LEAVES SITE.

1700 INSTALL FENCING ALONG NORTH
PCS EXCAVATION NORTH OF
CELL B.

1800 GREG ARRIVES. TOP OF PAD = 22' ELEV AND
SLOPES TO SIDES TO 20' ELEV. CAN
USE SAND (CITY) FOR BACKFILL. *him*

1900 END OF DAY FOR K.R. BSE, + TE *him*

Project / Client SNP LANDFILL CLOSURE

0800 onsite safety mtg.

- BSE to continue ops @ drum hill
- Kelly Ryan to excavate access road to
relocate MSW within landfill
footprint (north end of footprint)

0900 tour site w/ Eric D. & Greg G.

1000 Kelly Ryan continues to excavate
MSW from access road north of landfill
footprint - heading to SW corner &
dozing/compacting there

1030 BSE continues to search for drums
@ drum hill area.

~~NOTE:~~

~~SE corner of landfill - BSE~~

NOTE: BSE also using Cat 320B to
pull back east side of PCS stockpile to
a 3:1 slope

AREAS TO BE ADDRESSED (per Eric & Greg)

* SE corner of landfill - small amt. of MSW
outside footprint - don't jeopardize integrity
of liner

* Drum hill - finish removal & prepare area for
pad construction

* expand PCS stockpile new liner (wrap around southern
west side of
current PCS pile)

Project / Client SINP Landfill Closure

- * West side of landfill - need to cover up exposed MSW w/ 18" compacted lift
- * Need access road to future burn box pad in area of drum hill

1145 BSE finished searching for drums @ hill
 - still have to pump off several drums & remove MTs & PCS (small pile)

1200 LUNCH

1300 Kelly-Ryan continues to remove MSW from access road

BSE using city low boy trailer to move CAT 320 to Telegraph Hill

1350 Kelly-Ryan finished moving MSW - moving excavator to excavate sand to replace - getting from small dune on city property

1430 Kelly-Ryan continues to haul sand to rebuild access road

Laura (NORTH) onsite - surveying excavation limits of access road

note: BSE removed one drum from hill area today
 - pump 3 drums - filled 1 pay area w/ batteries

Project / Client SINP Landfill Closure

1500 BSE cannot move PCS from drum hill (or drums) until Kelly-Ryan completes reconstruction of access road - BSE moving to location of 2 tar drums discovered @ NE corner of Cell A

1510 Kelly-Ryan continues to reconstruct access road
 also spreading sand/fill along north side of LF (exposed MSW)

~~1530~~
 1530 BSE offsite - will finish on Monday morning

1700 Kelly-Ryan continues road reconstruction

1830 Kelly-Ryan has finished road construction - sand used to fill road to grade of original road - will haul scoria from Telegraph Hill on Monday to form road surface to allow vehicle traffic

Kelly-Ryan doing maintenance on heavy equipment

1900 EOD

BSC

Project / Client SNP Landfill Closure

0755 safety mtg w/ Kelly-Ryan

- ① haul scoria for access road - using new truck (rocks from Merwyn)
- ② work on new pad area - after BSE completes drum removal ops
- ③ continue covering/sloping exposed MSW on north & west sides of LF
- ④ remove MSW ^{PCS} outside LF @ southeast corner of pile

0810 Kelly-Ryan sends Alexey to Telegraph to begin hauling scoria for LF access road

0935 Kelly-Ryan using Cat 773B (truck) & Cat 992B (loader) to load/haul scoria from Telegraph Hill

note: BSE has loaded up 2 MT drums & small loader to haul to staging area near existing burn box - but, cannot get to staging area until scoria is in place on LF access road

0945 Kelly-Ryan also continues to place/slope fill around exposed MSW on north/west sides of LF

1030 2 loads scoria hauled from Telegraph Hill so far LF access road - 1 more should be all that is needed

Kelly-Ryan using compactor on scoria on access road

1045 3rd load scoria dumped (last load) - dozing & compactingProject / Client SNP Landfill Closure

note: BSE will stage drums (currently on flat bed) in Cell A on pallets - cannot put in Machine Shop right now because of city's water main project (open hole) - will also move 4 poly overpacks (to drums) from near north end of PCS stockpile to Cell A as well as keep in one local area

1130 access road complete - BSE hauling PCS & MT drums from drum hill to stockpile & staging area, respectively

Kelly-Ryan continues to toe in north/west sides of LF w/ fill material from dunes

1200 LUNCH - BSE still has 2-3 more loads PCS to move to stockpile

1300 Kelly-Ryan moving equipment to SE corner of LF ^{PCS pile} to begin removing MSW from outside the footprint

note: DJB dump truck has hydraulic leak - back to town for repairs/replacement

1330 Kelly-Ryan continues to remove MSW from outside 50 ft. offset @ SE corner of LF ^{PCS} _{sc} pile

Kelly-Ryan also using compactor to compact area along east side of Cell A

BSE continues hauling PCS from drum hill to stockpile

Project / Client SNP Landfill Closure

1345 BSE has finished removing PCS @ drum hill
 - will begin loading out poly overpacks @ north side of PSE stockpile onto flatbed for transport into town - per NOAA, will store drums from LF @ DPP (either in bldg. if accessible, or on DPPA pad near where drill rig is currently staged)

1400 BSE hauling drums to town for staging
 Kelly-Ryan finished @ southeast corner of PCS pile - only small amounts of MSW were found in this area

Kelly-Ryan moving ops to area of drum hill & new burn box pad to begin relocating MSW from this area

1450 Kelly-Ryan continues removal of MSW from area of new burn box pad (slightly north of) - discovered pocket of significant amount of MSW - will investigate to determine extent

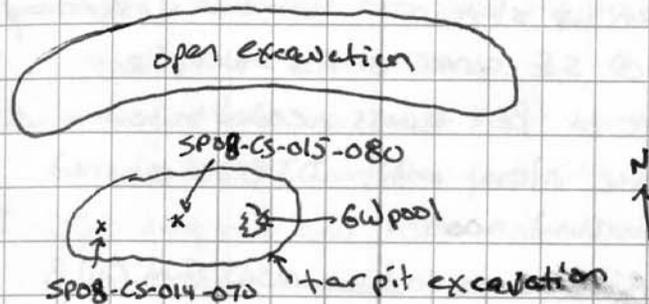
note: also, KR continues to place / slope fill on west side of LF

note: MSW from new burn box pad is being moved & compacted in SW corner of LF

1510 pocket of MSW discovered earlier appears to be on isolated area based on pothole observations

Project / Client SNP Landfill Closure

1530 Tt collects 2 confirmation samples @ tarpit
 1535 SPOB-CS-014-070 - west end tarpit
 1540 SPOB-CS-015-080 - center tarpit



note: BSE back onsite to remove Hitachi EX 150

note: DSB dump truck w/ hydraulic back loader changed out for new Bell 825 B (2nd one onsite now) @ approx 1330-1400

1600 K-R continues to haul MSW from Cell B new pad area to SW portion of LF

1700 per NOAA request, K-R moving ops to SE corner of PCS pile to build up 3:1 slope to support area & cover corner of liner that has come loose due to high winds

1830 K-R continues to build slope @ SE corner of PCS stockpile - using sand from small dune just east of this area (on NOAA property)

1900 EOD 7
BSC

Project / Client SNP Landfill Closure

0755 safety mtg

- ① continue to haul MSW from Cell B to SW portion of LF - grade/correct
- ② clean up slope area installed yesterday
 - ⓐ SE corner of PCS stockpile

note: one of Bell trucks needed in town - will use Moxey until DJB is returned around noon

0830 K-R continues to haul MSW from Cell B to SW portion of LF - grading/correcting

0920 Moxey having too much trouble - sending back for maintenance & to hopefully get DJB back

0930 met w/ NOAA Greg G. - toured area @ SE corner of PCS stockpile - satisfied, but says we may have taken sand from city property - will account for in talks w/ city (a 10 loads - Bell B25 - were used yesterday)

also: - requested Tt to look into hauling K-R do additional work @ Cell A - hauling scoria & capping remainder of area
- permission to fill in for pit & adjacent excavation wherever possible

Project / Client SNP Landfill Closure

note: requested K-R Merwyn Johnson to bill the Kanatsu PC 200 that was used by BSE for drum removal directly to Tt, not BSE or NOAA - per NOAA request to avoid extra mark-ups

1010 K-R continues to move MSW using Bell B25B from Cell B to SW landfill

1015 DJB dump truck back onsite - continue to haul MSW from Cell B

note: spoke w/ Terry J., K-R, - will try to finish hauling MSW from Cell B before excavating PCS in small road (2-3 ft deep) between tar pit & adjacent excavation - will then backfill both holes

1130 K-R continues to haul MSW from Cell B / pad area to SW LF

1145 NOAA Greg G. onsite:

- survey marker @ Cell B / pad area - NOAA can remove if removed
- city's engineer (M. Dahl) to be onsite tomorrow w/ Pen Air Flight - Tt needs to have plan for access road to new pad area - will focus on getting new pad constructed - road may be designed to correct @ NE pad now??

Project / Client SNP Landfill Closure

- will excavate PCS on road between for pit & excavation to 2-3 ft deep, collect CS samples & backfill pits. for now, will plan on pulling sand for fill from dunes to SW of Cell B - won't use sand just north of pits - Greg mentioned ^{leaving} using these for "visual barrier" to landfill from main road

1200 Lunch

1300 resume ops K-R removing concrete posts by rat box & survey marker because they are directly over MSW that needs to be relocated - staging posts / marker @ parking area on Cell A

1400 K-R continues MSW removal @ area of Cell B / new pad along south edge of new pad - pulling out long cables, old water header, etc.

note: K-R using Komatsu PC200 this afternoon ^{Hitachi EX 350 has broken "thumb" being repaired}

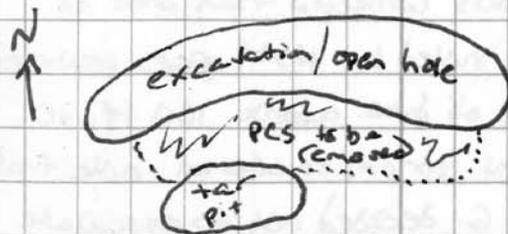
1425 K-R to use dozer @ cell B / pad area to begin pushing high spots & leveling area for new pad construction

K-R also moving excavator & dump trucks to PCS area @ tor pit & excavation to begin removing small road surface (2-3 ft)

Project / Client SNP Landfill Closure

1500 K-R raised issue that they had heard city / John R wanted to "save" the grass from dune @ east end of new pad area - spoke w/ Greg G. (NOAA) - he said not to worry about it for that particular dune, but for the next dune to be used for backfill sand (west/south of our ops) to scrape grass back & pile off to side before taking backfill

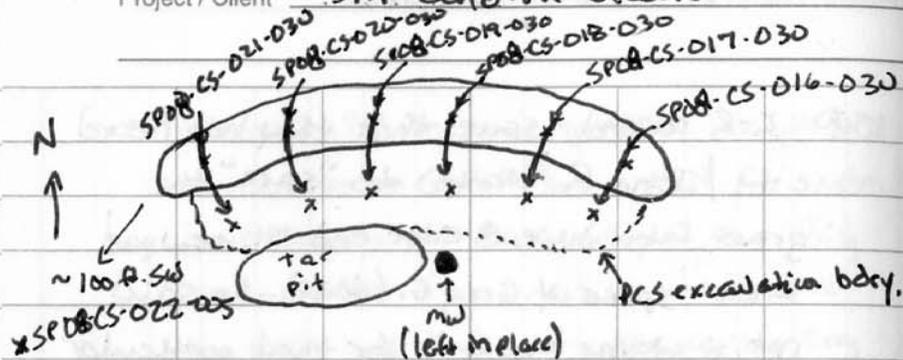
1520 K-R excavating PCS @ tor pit / excavation road



K-R also using dozer to build road to next area / dune for backfill sand - SW of our ops

1600 K-R continues excavating PCS - working from east to west -

TT collecting CS samples as excavation progresses

Project / Client SNP Landfill Closure

1605 SPOB-CS-016-030 - east end of PCS excava. (bottom)

1615 SPOB-CS-017-030 - bottom of excava

1635 SPOB-CS-018-030 - bottom of excava

1655 SPOB-CS-019-030 - bottom of excava

1710
to 1755 SPOB-CS-020-030 - bottom of excava.1720
to 1755 SPOB-CS-021-030 - west end of PCS excava. (bottom)

1745 SPOB-CS-022-005 collected from area of stained soil noted by NOAA reps previously on west side of dune approx 100 ft. to the S-SW of tar pit/excavation. note that NOAA Greg G. decided not to excavate in this area - has been overblown w/ sand & not sure where exactly contamination was - collected CS sample from suspected area ~ 6 inches high

1800 K-R prepory to haul sand to backfill tar pit - Greg (NOAA) trying to get Laura to come out to GPS sample locations

Project / Client SNP Landfill Closure

1830 K-R backfilling tar pit w/ sand

NOAA reps relocated NW & SW corners of new bumper pad - trying to locate 17 ft. elevation to east of new pad, but GPS is giving errant elevation of approx 17 meters ??

K-R continues to backfill tar pit

1900 EOD

take note: open hole excavation to be left open per NOAA (until later)

BSC

Project / Client SNP Landfill Closure

0755 safety mtg.

- ① finish backfilling for pit - open hole excavation will remain open per NOAA Greg in order to use fill material most efficiently (on new pad construction)
- ② begin forming new pad area - knock off dune @ east end & use fill for rest - elevation marked @ 17ft for initial "target" to get pad started
 - will use excavator to pick off grass from fill area & transport to pit for possible future use (per city request)

note: Josh not working today -

using 2 Bell B25 trucks for hauling

0845 K-R hauling "grass" from dune area (fill) to stockpile & save - piling near north side of north access road & east of tarpit (excavation) dozer also building road to provide access for trucks to dump @ pad area

note: TE returned to town to package & ship samples

1015 K-R continues to haul sand for placement/dumping @ new pad area (Cell B)

-using 2 Bell trucks to haul

1100 K-R rep onsite to take one Bell B25 truck back to

Project / Client SNP Landfill Closure

town - switching to DJB again for hauling sand along w/ other Bell truck

1130 K-R continues to work on new pad area

1200 LUNCH

1300 K-R using their bobcat trailer to load up the compactor which is needed elsewhere - also using dozer to build ramp to get compactor onto trailer

excavator ^{& dozer} _{is} doing minor repairs to the access road to the sand dune being used for fill material - building stockpile

1430 K-R truck drivers (Rob & Alexei) return from town dropping off compactor - resume hauling

1515 K-R continues to haul sand for pad area - dumping @ top of pile & dozer pushing off sides to build up area at peak

1540 NOAA Greg & Laura onsite - tour Cell A area to get some elevation estimate to rough out how much fill would be needed for possible expansion of pad there
~ 11-12 ft above msl in southern portion vs. 18-20 on current pad

1630 K-R continues to haul sand for pad

Project / Client SNP Landfill Closure

1700 City Mgr John R. Mercurio & Polar
Consult engineer Mike Dahl onsite to
discuss activities - tour site - key
points

① pad elevation will be 22 ft in middle
21 ft on sides including $\frac{1}{2}$ ft of
compacted scoria

② pad access road will be aimed @
NE corner of pad - 2 ft. compacted scoria

③ sand to north of Cell B can be used
w/ property bdy identified by John R. &
Mike Dahl - city is planning to
eventually dump dredge spoils in
this area

④ will keep elevation \geq 4-5 ft above
GW in sand dune being mined for
fill

⑤ Cell A - will cap area w/ 2 ft. scoria - not
build elevation up any more

⑥ will leave "extra" area on pad @ SE corner -
already in place - city to put bldg here??
- will not be capped w/ scoria though (only
100' x 100' pad)

1830 John R. & M. Dahl offsite - Greg to prepare summary memo

1900 EOD

BSC

Project / Client SNP Landfill Closure

0755 safety mtg.

① continue pad construction

0830 K-R using dozer to clean up sand dune (fill)
to continue access for trucks

1005 K-R continues to construct pad area - hauling
sand using 2 Bell trucks

note: spoke w/ Greg (NWA) onsite - preparing a
memo summarizing yesterday's meeting w/
John R. & M. Dahl - will submit to city
& proceed as planned

K-R shooting for 21 ft middle 20 ft sides on
pad w/ sand (add 1 ft scoria)

1100 K-R continues to haul & doze sand
for new pad

1200 LUNCH

1300 K-R resumes pad construction

NWA Laura onsite to shoot ^{current} pad elevations
- currently range from 17.5 - 18.9 - also still have
to add area @ 4 corners

1600 K-R continues to haul sand for pad
construction

note: Terry Johnson (K-R excavator) will be
leaving site as of tomorrow - his replacement,
Simon (mayor?) is onsite to get up to speed w/
ops - now running excavator to mine sand

Project / Client SNP Landfill Closure

Note: City burn box in operation again - started @ approx 1400 hrs - drifting to ^{smoke} east/southwest ^{west} ^{west}

1730 Bell truck slipped/sunk into road being used to haul sand up to NW corner of the pad area - bed of the truck rolled slightly over - had to use excavator & dozer to pull Bell out - no major problems

1750 K-R continues to haul sand for pad construction

1800 John R (city mgr.) & Mike Dahl (Polar Consult) onsite - stating out their possible pad expansion - not going to north as originally planned, but possibly to west by an additional 50 ft/100 ft

1930 EOD

B5C

Project / Client SNP Landfill Closure

0800 safety mtg

① continue pad construction

note: Simeen Sautsoff onsite as excavator operator

0830 K-R continues hauling sand for pad construction

0915 K-R using dozer to clean up ^{truck} turn-around @ ^{truck} being used for fill

1000 K-R continues to construct new pad

NOAA Laura Murray onsite to survey available sand dunes for volume estimates that city can use for their pad expansion - also conducting topo of some dune areas

1130 K-R continues pad construction -

note: 2 Bell trucks in operation today

1300 K-R continues pad construction operations

1325 NOAA Greg G. onsite to verify dunes for fill - four areas:

① next fill will be from dune directly west of current fill dune (at edge of city property)

② long dune ^{west of SW} adjacent to ^{SE} portion of LF

note: K-R using D5B & one Bell truck this afternoon - other Bell taken elsewhere

1430 city reps onsite - firing up burn box

Project / Client SNP Landfill Closure

^{2nd}
1530 Bell truck back on site & in service
DJB on standby - Marilyn said they
would likely move it into town

1715 K-R continues pad construction - beginning
to dump loads near NE corner of pad in
prep for access road construction

1810 NOAA reps Greg G. & Nir Barnea onsite for
tour & update

1900 EOD

BC

Project / Client SNP Landfill Closure

0755 safety mtg

- ① continue pad & road construction
- may have to move to new dune for
fill today

0830 K-R continues to haul sand for pad
construction

0900 NOAA Laura Murray onsite to survey in
corners of pad & toe-in locations - also
to locate points of 5 ft above msl for
dune that is being mined for sand/fill
based on Laura's points, significant amounts of
fill are still required to build up the
SW corner of pad

1110 K-R continues to haul sand for pad
construction - trucks are dumping @ top
of pad on south & west sides
dozer currently grading on access road
to the next dune to be used for fill -
located just west of current dune -
dozer is pushing grass/topsoil off to side
as best as possible for future re-use per
city request

1200 LUNCH

1300 K-R resumes hauling sand for pad construction

Project / Client SNP Landfill Closure

1530 K-R continues hauling sand

note: NOAA Nir Barnea was onsite to videotape pad construction - spoke w/ him regarding the need to fill in the open excavation adjacent to former tar pit in order to allow installation of north slope of city's pad expansion area - he agreed

1655 Nir onsite. asked him about the monitoring well located @ east end of open excavation near former tar pit - will have to be addressed prior to construction of city pad - he said if we have on relatively easy way to extend well, then do it, otherwise decommission it w/ bentonite & they will drill a new well

1745 K-R continues pad construction - have likely spread enough soil to make 3:1 slope on ^{south} west & east sides - now working on north side

1900 EOD

BC

Project / Client SNP Landfill Closure

0800 safety mtg.

- ① continue pad construction - enough to be able to make slopes
- ② backfill open excavation near tar pit
- ③ work on access road construction

0900 K-R continues pad construction

0930 K-R working on backfilling the open excavation near tar pit

note: Hitachi EX350 excavator has some sort of electrical connection problem - mechanic onsite to check - switching to Komatsu PC200 for now

note: spoke w/ Julie Shore (ESE/TX) regarding scoria needs - she said we need another MSA because Kelly Ryan's is only good for the work they are doing in hours - will make the calls to Elroy & set up for Terra Tech for the landfill ops (including city's pad area) - will draw from Lake Hill quarry area - preliminary estimate is for 3,000 yds³ (to include NOAA & city pads, access road to pad, & Cell A)

1000 NOAA Nir & Laura onsite

- spoke w/ Nir about need to decommission MW next to east end of open excavation

Project / Client SNP Landfill Closure

- also spoke w/ N/R about proposed sequence of events: 1) backfill pit 2) work on access road from NE pad corner toward existing road 3) will haul scoria from Lake Hill & stockpile so we can get city access opened up as quickly as possible

- Laura stated SW pad corner & 3 mid-points of access road to be constructed

1045 K-R continues to haul sand for backfill @ open excavation - dozer is cleaning up truck turnaround @ load out area

1130 Hitachi EX350 has been repaired & is back in service

K-R continues to backfill open excavation

1200 LUNCH

1300 K-R resumes backfilling open excavation

1315 spoke w/ N/R onsite - trying to schedule road construction to limit downtime for city access - trash removal (according to Phyllis) is Weds, Thurs, & Fri - Fri is residential (most important) - may possibly do Cell A sand hauling on Friday if schedule works out, then do road on Sat, Mon, etc. will have to see

Project / Client SNP Landfill Closure

1500 K-R continues to backfill pit

1545 pit backfilled - K-R begins/resumes construction of access road - staying out of existing LF road to avoid access issues for city vehicles

note: Bob Hatter (K-R driver) had to leave for family emergency - replaced by new driver

1700 K-R continues to haul sand for access road construction

1830 NOAA N/R & John Lindsay onsite - touring property - John L. did not feel that slopes on Cell A were 3:1 - will excavate additional materials to meet 3:1 slope

1900 EOD

late note: rainy & windy all day; winds SE 10-30

OSL

Project / Client SNP Landfill Closure

0755 safety mtg

- discussed possibility of moving to later start time because of darkness/low visibility - crew wants to stay w/ 8^{am} & say they can be safe - GO slow if necessary

0830 K-R continues to build access road to pad

note: compactor to be onsite this morning per request to Merwyn

0910 met w/ Nir Bomea, John Lindsay & Phyllis Suetzof @ City Hall - requested city to change residential garbage pickup from Fri. to Thurs. to accommodate road construction @ LF (^{she} they agreed) - John R. was unavailable - also, requested city to decide on sign contract w/ Kelly Ryan for their pad extension as soon as possible, before Monday morning

1000 back at LF - K-R continues road construction

note: Alexey back to town to pick up compactor - John R. back onsite as 2nd driver

1020 compactor onsite - being offloaded from K-R haulboy

1100 K-R continues to haul, dose, & compact sand for access road construction

1200 LUNCH

Project / Client SNP Landfill Closure

1300 K-R resumes road construction ops

1315 NOAA Nir & John Lindsay onsite - Nir

gave me TLC results for SPOB samples collected in excavations & hot spot - 2 samples from small road excavation were above DRO cleanup levels & hot spot sample was above RRO cleanup levels - Nir to talk to Greg^{G.} about these (note: excavations have been back filled already)

1400 K-R continues road construction - excavator has moved to next dune for fill (just west)

- K-R also doing some sand onto Cell to provide truck access there when needed

1630 NOAA Nir & John L. onsite touring areas

of high TLC results - John L. said to leave high DRO hits (^{small road} their pit / ^{open} excavation)

because the city's pad & slope will cover it; said to excavate area of high RRO hit & collect CS samples - appears to be localized contamination

- John L. & Nir to speak w/ John R. regarding sand @ proposed ash disposal cell - John L. says the idea was for NOAA to use existing sand in this area to build pad - ^{he} will speak w/ Greg G.

- John L. also wants all slopes of Cell A pulled back further & sloped more to avoid any encroachment on the existing wetland - also said the original plan was to build this area up to match the grade of existing pad (contrary to Greg G.'s discussion of John R.) - he will look into w/ Greg

1700 K-R continues to haul sand for road construction - shaping w/ dozer & compacting w/ roller

1900 EOD

b/c

0800 safety mtg.

- (1) continue hauling sand for pad access road - build up as much as possible w/out blocking existing road
- (2) re-slope Cell A boundaries - avoid wetland encroachment - watch for dums - BSE will have to deal w/ any dums discovered

note: Nir stated that John L. now wants to remove contaminated soil @ both the RR hot spot (west side of dune) & DR hot spots (small access road near for pit excavation) - will confirm & get back to me

0915 K-R continues road construction

note: spoke w/ Dana LaCombe (Te-Security) regarding MSA for some fun TDX - she signed electronically and forwarded to BSE (Elany & Julie) -

Spoke w/ Julie @ BSE office - she gave approval to haul scoria from Lake Hill - she said that CY price is higher because they are not hauling the material

note BSE Jason Kosloff onsite @ PCS stockpile - using Volvo loader to make additional room for trucks to haul more PCS to be excavated from the Diesel Tank Farm based on further TUC results

Thursday 24
 Sept. 24 '06
 Wednesday
 Sept. 24

SNP Landfill Closure

1030 K-R finished w/ access road for road - dozing
 last piles of sand

K-R moving to Cell A ops - will first remove boulders
 from southern tip & stockpile w/ others @ NE
 corner of PCS stockpile

K-R also sending Josh & Robert (drivers) to
 Lake Hill to begin hauling scoria - will stockpile
 approx. 400 CY on existing pad @ Cell A

1120 K-R continues Cell A ops - removing small
 windrow of debris @ south end - will begin
 re-sloping sides next

note: dozer has been clearing up access roads to
 fill areas for future use

1200 LUNCH

1300 K-R resumes re-sloping sides of Cell A - pulling
 material up & back from wetland areas &
 placing w/in Cell A boundaries - dozing when
 necessary - sloping sides $\geq 3:1$

1445 K-R continues to re-slope sides of Cell A
 - also continue to haul scoria from Lake Hill using
 7736, dump trucks plus loader (?) @ pit
 - using dozer to keep scoria piled neatly in
 a corner of Cell A on existing pad area

1600 K-R continues to re-slope Cell A - finding lots of

Thursday 24
 Sept. 24 '06
 Wednesday
 Sept. 24

SNP Landfill Closure

1745 Cell A ops continue along SE side - all
 materials removed from slope are being
 incorporated into Cell A, which will be
 built up to match elevation of existing
 pad area

1900 EOD

BSC

Friday 25
 Sept. 25
 25/25
 Thursday
 Sept. 25

Project / Client SNP Landfill Closure

0800 safety mtg.

(1) continue re-sloping Cell A sides - watch pipes flipping around - LF traffic

(2) remove PCS hotspots

0850 K-R continues to re-slope Cell A sides - using dozer to shape piles dumped by Bell truck in lower areas -

1000 K-R continues to re-slope Cell A - working from south side around to north side

1120 spoke to Merwyn (K-R) - he said that their contract w/ city to extend pad is a go

1200 LUNCH

1300 K-R begins excavating hot spot PCS

locations near tarpit & on west side of dune (sample locations SPOB-CS-016-030, SPOB-CS-019-030, and SPOB-CS-022-005)

John R. & Joe (Public Works) onsite to look

@ dune/sand fill situation - John R. says that we do not have permission to mine the large dune that was going to be our next source - To said we need to talk to NOAA & figure out -

1355 collect sample SPOB-CS-016-065 from hot spot excavation (former SPOB-CS-016-030)

Friday 25
 Sept. 25
 25/25
 Thursday
 Sept. 25

Project / Client SNP Landfill Closure

1400 collect sample SPOB-CS-019-070 from hot spot excavation (former SPOB-CS-019-030)

1405 collect sample SPOB-CS-022-030 from hot spot excavation (former SPOB-CS-022-030)

1410 Nir (NOAA) on site - informed him of my conversation w/ John R. & Joe - specifically the "no permission" for sand from the large dune
 K-R continues to re-slope Cell A

note: hot spot excavations @ CS-016 & CS-019 consisted of ^{trenches} approx each approx. 5 ft wide by 6 ft long (016 to 6.5 ft by 6 ft & 019 to 7 ft by 6 ft) - excavation @ CS-022 was approx 5 ft by 5 ft. to depth of 3 ft by 5

1650 K-R continues to re-slope sides of Cell A - also using dozer to begin constructing the side slope on south side of NOAA pad area

1820 K-R continues re-sloping Cell A - discovered 2 tar drums (small amt. in each) approx. 40 ft. south of the northern extent of NE side of Cell A - staged to side

1850 Cell A sideslopes complete

1900 EOD
 BSC

Project / Client SNP Landfill Closure

0800 safety mtg.

- ① backfill hot spot excavations
- ② access road construction

0810 NOAA Nir & Laura onsite to locate middle of road w/ GPS - note actual starting elevation @ north end of our road is 16 ft. (not 18 ft) - discussed w/ Nir - he agreed that we should just do what works - same for arc portion of road leading to pad.

0830 K-R continues to haul sand for access road - working from south to north

note Tt drilling crew arrived on site this morning to decommission various wells @ landfill - just told them to stay off haul road & watch for heavy equipment moving around area

1000 mtg. w/ John R. et al delayed til 10:30 til

John R. can be here

note: MWSNPLF-5 has been filled w/ bentonite chips by drilling crew - well will be covered by city pad

1035 John R. onsite w/ Joe & ?? - discussing sand situation & needs for next & city ops (now & future)

NOAA Laura & Tt marking 5 ft. elevation (above msl) around current dune being mined for fill

Project / Client SNP Landfill Closure

1130 K-R continues to haul sand for access road construction

note Laura checked elevation of low area near NW corner of Tract 42 - most of area is ≥ 5.5 ft above msl - one small pit is 2.5 ft above msl

1200 LUNCH

1300 K-R continues to haul sand for access road construction - now using compactor as well

1330 John R. back onsite w/ Nir - agreed to cut small access road to lower portion of cell A along west side (adjacent to where road will branch off to pad) - will require "cutting" down a portion of the existing slope - worried about snow accumulation - also discussed sand sources - Joe Keller (city PD) placed "property" stakes w/ pink flags as well as buffer line stakes w/ green flags - John R. said it was OK to go inside their 50' ft. buffer stakes on the dune we are currently mining, but they want to lead enough so that TDX cannot claim that sand from their property is falling onto the city's property - also wants to go ahead & mine road to dune to 5 ft. above msl

Project / Client SNP Landfill Closure

1700

1500
30

K-R continues to haul sand for access road construction - still mining from the 2nd dune since ops began on pad & road construction

note: City to stake area along north side of their property which will be mined for fill - NOAA will also GPS this area

note: Spoke w/ Nir regarding ^{portion of} landfill access road south of our current extent of reworking - slope appears to be a little steeper than we (and likely the city) would like - so, agreed that we would build this area up as well & add 2 ft. scoria to make the slope a little more gradual

1900 EOD

BSC

Project / Client SNP Landfill Closure

137

0800 safety mtg

① continue access road construction - likely begin ^{scoria} ~~scoria~~ in afternoon

0900 K-R continues to haul sand for access road construction

1045 road construction continues - hauling, shaping, & compacting sand - still mining from the 2nd dune area

note: Nir onsite shooting video - TC requested that Laura be onsite early after noon to remark some mid points of road & some elevations for reference

1200 LUNCH

1300 K-R continues hauling sand for access road

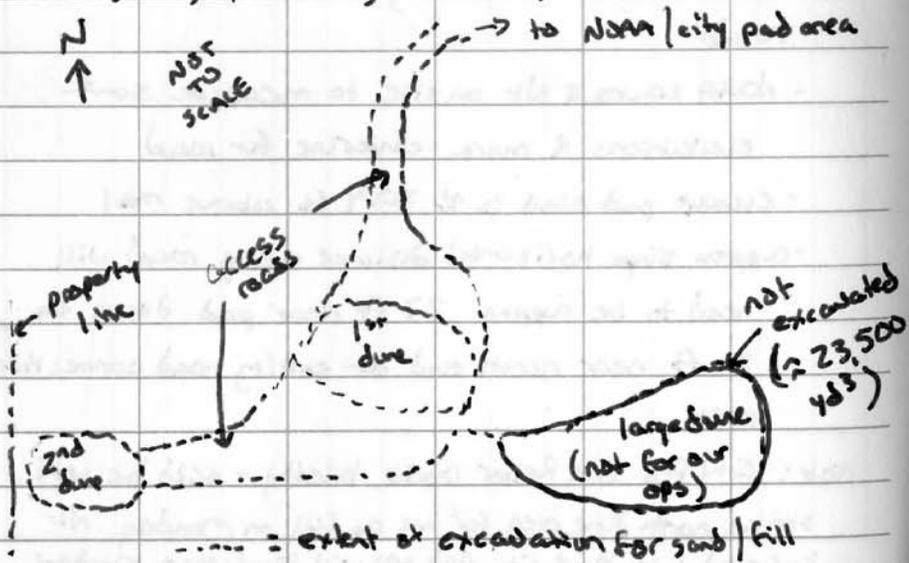
- NOAA Laura & Nir onsite to measure some elevations & mark centerline for road
- current pad elev. is \approx 20.4 ft above msl
- approx slope horizontal distance along road will need to be approx. 27 ft near pad down to 21 ft near north end of existing road connection area

note: City Pub Joe Reller onsite briefly - said he will stake north dune area for use as fill on Monday - Nir informed him that city pad ops will likely start Monday

Project / Client SNP Landfill Closure

1440 last load of sand being hauled for road today - equipment moving over to begin hauling & compacting scoria - will spread scoria approx. 1 ft. thick to start in order to ensure enough is on hand @ stockpile to open road - will then add another foot as far as our supply will go & get more on Monday or Tuesday, as conditions allow (i.e. availability at Kelly-Ryan's equip. @ Lake Hill)

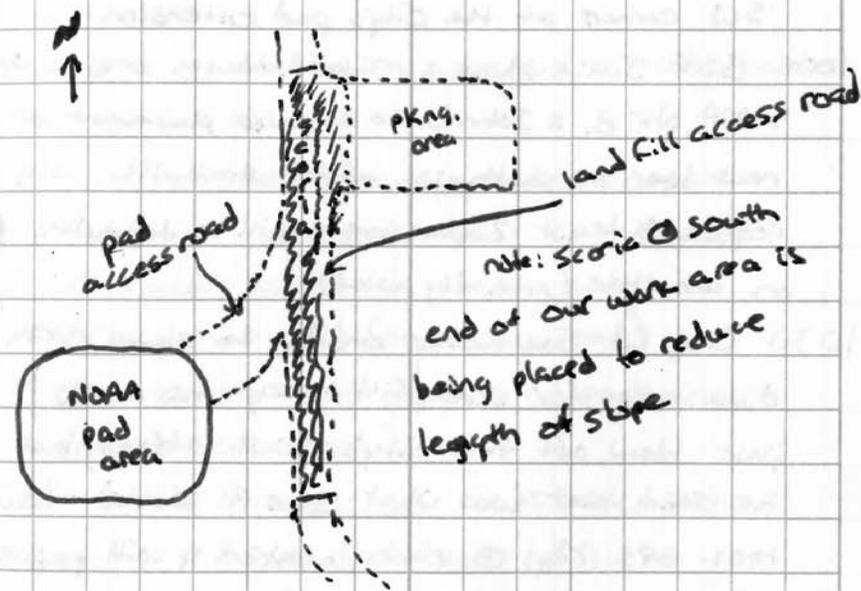
note: mining of sand at second dune is pretty much finished (based on 5 ft. above MSL & city's "buffer" area near TDX property line) - when we need more sand, will begin excavating the access road down to 6 ft above msl (per city request) & working our way back towards site

Project / Client SNP Landfill Closure

- dozer cleaning up access road construction area in prep for scoria
- Tt marked shoulders of road (15 ft each side from center points)

1500 began placing scoria for road surface - 1 ft thick layer to start

1730 K-R continues to place & compact scoria on landfill access road



1750 Merwyn J. (K-R) onsite - discussed need for more scoria on Monday - will use Simon on loader & driver @ Lake Hill to haul - Ray onsite to spread - Alexey to compact

1900 EOD

GSC

Project / Client SNP Landfill Closure

0800 safety mtg.

① haul scoria for LF access road

0900 K-R hauling, spreading, & compacting scoria from Lake Hill - using Cat 988B loader @ pit to load the 2 Bell trucks for hauling - the Cat 773 trucks are busy in town for other K-R ^{work} ~~trucks~~

note: NOAA Laura onsite to restake the NW & SW corners of the city's pad extension

1000 BSE Julie Shea & Mike Baldwin onsite w/ NOAA Nir B. & John L. to discuss placement of new liner on south side of PCB stockpile - will require @ least 2 operators & will be dependant on weather (primarily wind)

1030 City Pw Joe Keller onsite to stake north dune area for sand/fill mining - his marks just blew off the city's 50 ft. offset, but he said that was what John R. wanted - Laura took GPS rdgs @ each location & will prepare map & volume estimate based on amount of material available above elevation of 6 ft. above msl

1120 K-R continues to haul, spread, & compact scoria along LF access road

Project / Client SNP Landfill Closure

note: both NOAA & Tt have spoken to K-R reps (Menayn, J., Ray, etc) about starting later in morning (after dark) due to H&S concerns - K-R reps insist on staying w/ 8-7 shift - still working safely - this is because their lunch/dinner schedule for entire crew (LF & those in town) is based on Dunc's kitchen who prepares their meals

1200 LUNCH

1300 K-R resumes hauling scoria (14 loads hauled so far today)

1415 K-R continues to haul, spread, & compact scoria on LF access road - last load for this area - will begin placing scoria on arc part of road (pad access road)

1700 K-R continues to place & compact scoria on pad access road

1830 landfill & pad access roads are complete w/ scoria - K-R using last loads to fill in low areas along landfill access road (north end) & place some for small road that will lead to lower level of Cell A

1900 EOD ?
ASC

Project / Client SNP Landfill Closure
City Pad Area

0755 Safety mtg.

① Begin city pad - haul sand - begin mining sand from access road area

0905 K-R mining sand from access road area - It showed Sinean (excavator) area to be mined to elevation of approx \geq 6 ft above msl - currently excavating \approx 2 ft from lower area (starting elevation of approx. 8.8 ft above msl)

- Hauling to city pad extension area

note: Alexei has moved/demolished loader from Lake Hill back to Telegraph Hill

- also moving/demolishing compactor back to town

1015 K-R continues to haul sand for city pad construction

note: Mike Sturdevan (It) onsite for replacement - hauling landfill for update on past, current & future activities

note: BSE reps (3) onsite to prepare new area for installation of liner - using loader & blue 10 yd³ dump to haul the thermally desorbed soil from near burn box to build up a berm & also removing some large metal debris

1105 K-R continues to haul sand from access road for city pad

Project / Client SNP Landfill Closure
City Pad Areanote: NOAA's estimate of sand volume in access road (above 6 ft ^{above} msl) is 12,000 cy; estimate for dunes located by Joe Keller @ north end of property is approx. 5,000 cy (above 6 ft. over msl)

1135 used dozer to remove metal monument from monitoring well MW/SNP LF-5, which will be covered by city pad extension (slope) - casty was cut off @ approx. 6 inches bgs

1200 LUNCH

1300 K-R resumes hauling sand for city pad extension

1400 NOAA Laura onsite to check slope of Cell A sideslopes - east side & SE corner have areas that are still not quite 3 to 1 - will discuss w/ Nir & John L.

- also marked elevations along access road & north dune area which are/will be mined for sand - stakes set @ approx. \geq 6 ft. above msl (city's request for bottom of mining)

1500 K-R continues to haul sand for city pad extension

1540 BSE continues to prepare area for new liner - used up all but approx 50-100 cy of treated soil by burn box building berm - using

Project / Client SNP Landfill ClosureCity Pad Area

loader @ Telegraph Hill to haul host of material needed to build the berm - liner will not be installed today due to heavy wind

Project / Client SNP Landfill ClosureCity Pad Area

0800 safety mtg.

① continue to haul sand for city pad extension area

note: met w/ Julia S. (TDX/BSS) to give update of volume of scoria obtained to date from Lake Hill for landfill activities (1,136 yd³) - will email us w/ell

1000 K-R continues to haul sand for city pad extension. Note: Nir directs TREMI to make decisions on sideslopes for Area A, ~~NOA~~ wants it to conform to spec & plan approved by ADEC.

1110 Continue to mine sand & haul to pad extension

1200 Lunch

1300 K-R resumes hauling sand

1330 Robert's truck undergoes maintenance of rear light by Steve (maintenance)

1400 Robert resumes hauling

Wed. Oct. 1

Project / Client

SNP Landfill Closure
City Pad Area

1400 John L visits sites to video progress. Mentions that John R wants new landfill pit to be above 5'msl and 3' above water table. John cites previous agreement to meet only 7.5' msl. City will need to pay for any additional work.

1430 B25B is taken out of service for maintenance. Replaced by ~~625B~~ Big Hunter (DJB)

1730 Bull Trucks all back in commission. DJB sidelined. Steve maintenance leaves site.

1915 END OF DAY

John L. Darling

The manufacturers of "Rite in the Rain" all-weather writing products are grateful to the numerous environmental experts who have contributed to the development of this book. Should you have any additions, improvements or corrections for future publications of this field book or have suggestions for other environmental field book formats, we welcome your input.

Although much effort has been taken to insure the accuracy of the following reference pages, the J. L. Darling Corp. can not guarantee the accuracy of the data contained herein.

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Common Field Data Error Codes

Error Codes Are Used to Explain Common Mistakes and Are Written Above or Close to the Mistake
Commonly Used Error Codes Include:

RE Recording Error
CE Calculation Error
TE Transcription Error
SE Spelling Error
CL Changed for Clarity
DC Original Sample Description
Changed After Further Evaluation
WO Write Over
NI Not Initialled and Dated at Time of Entry
OB Not Recorded at the Time of Initial Observation

Note: Error Code Should Be Circled When Recorded

Hazard Classifications

Class 1 Explosives
Class 2 Gas
Class 3 Flammable Liquid
Class 4 Flammable Solids (Potential spontaneous combustion, or emission of flammable gases when in contact with water)
Class 5 Oxidizing Substances and Organic Peroxides
Class 6 Toxic (poisonous) and infectious substances
Class 7 Radioactive material
Class 8 Corrosives
Class 9 Miscellaneous dangerous goods

Container type abbreviations (for sampling guidelines):

BR - Boston Round
ABR - Amber Boston Round
AJ - Amber Jug
CWM - Clear Wide Mouth
AWM - Amber Wide Mouth
Poly - Polyethylene Bottles
BOD Bottle

Location _____ Date _____

Project / Client _____

Alaska Airlines 1-800-252-7522

PenAir 1-800-448-4226

Hageland Air 1-866-239-0119

K-R Phone (907) 546-5096

K-R Fax (907) 546-5097

Captain Cook Hotel (Anchorage) (907) 276-6000

Location SNP LANDFILL Date 10/2Project / Client SNP LANDFILL CLOSURE / NOAA

0800 Safety Mtg. city pad extension beware working in little light conditions slip, try, fall. Upon completion of city pad began regrading cell A.

Note Nir wants to complete regrading of cell A prior to hauling scoria. Also may want to consider placing something on sideslope of pad

1070 Readjust stakes offset 30' on line to receive fill. Continue to mine sand & place on city pad - 2 Bell trucks, cat dozer & excavator

Nir wanted to know how much scoria, I calculated no more than 1000 cy if they cover all three sides 1 foot thick

4 Location St Paul SNP Landfill Date 10/2/03
Project / Client SNP Landfill Cap / NOAA
City Pad Extension

1200 Break for Lunch

1300 Back from lunch K-R
continues to mine sand and
haul to city pad extension

1600 Steve Melovidov - city worker
Joel Groves - Polar Consult
surveying pad to determine
sloria estimate.
Briefed them both on talcgate
safety provided hard hats & vest

1615 Nir visits will go bring Laura
to survey corners of pad and
shoot elevations

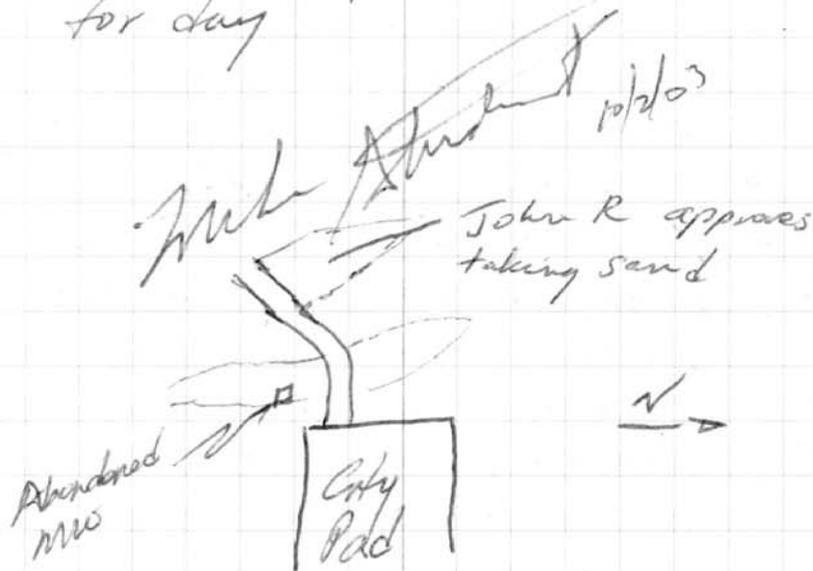
1645 John R city manager walks
site recommend additional dump
for sand borrow. Likes idea
of road off back on pad into
sand borrow area. Move Ray
off pad to grab John R approved
sand borrow area.

1700 Nir and Laura NOAA survey
with me to determine

5 Location SNP Landfill Date 10/2/03
Project / Client SNP Landfill Cap / NOAA
City Pad Extension

cut elevations for sand
and Area A side slope
cuts that need to take place
to accommodate 2' cap

1900 K-R almost finished
with city pad shut down
for day



Location

Date

10/3/03

Project / Client

SNP Landfill Cap
City Pad Extension

0750 Safety Mtg/Plan of Activities
0800 end Safety Mtg. & Start
of Work. Continue to
hurry sand and begin filling
access road into west end
of city pad

1100 Laura, NOAA surveyed elevations
at pad corners & checked bottom
of sand borrow area 76' MSL

1200 Completed hauling sand to city
pad. Lunch break

1300 Excavator & 2 Bell trucks
begin on resloping Cell A
Dorer continues grading pad
& side slopes. Dorer moves to Cell A

1430 Laura & Nir NOAA survey 1430
in southwest corner of city
pad. Laura then checks
new slope excavated for 3:1
excavated material is placed
on southwest area of Cell A

1800 Jim Wright & Nir visit site to
update progress to Jim

Location

St Paul

Date

10/3/03

Project / Client

SNP Landfill Cap
Cell A

1830 Checked cut slopes, marked
out areas that need to be
cut deeper.

1900 End work shift and leave
site

Mark Stuberant
10/3/03

8
Location St Paul SNP Landfill Date 10/04/03
Project / Client SNP Landfill / NOAA
Cell A

0800 Begin work - Safety Mtg
slip, trip, fall / stop work
on Cell A side slope if
drums are encountered move
to other locations. If drum
is punctured pickup and place
on tarp

1015 K-R continues to excavate
side slope to a 3:1 at
Cell A. Also moving slope
back 6' at bottom to make
room for 2' cap. Material
is used to fill low area on
southwest corner of Cell A
Rain begins

1200 Break for Lunch

1300 K-R returns from lunch continues
to work on Cell A side slopes
and filling lower area in
southwest corner.

1450 K-R finishes placing msu on
low area of Cell A

9
Location St Paul SNP Landfill Date 10/04/03
Project / Client SNP Landfill / NOAA
Cell A

Nir & Jim Wright perform
survey of slopes and fill area

1050 K-R continues to excavate
slope on Northeast corner of
Cell A. ~~also~~ Picked up leaking
drum placed on tarp.
Found another drum with
solid tar residue placed it
on tarp

1705 Unearthed two drums that
are intact - Stopped work.
in area will contact BSE
to process drums, h.

1800 Jim Wright & Nir NOAA
arrive to survey side slopes

They check unearthed intact
drums and determine they are
empty. K-R places them on
empty drum pile.

1905 K-R encounters more drums
in northeast corner of side slope
drums show a liquid. These
will require removal by BSE

Location Sh Paul SNP Landfill Date 10/04/03
 Project / Client SNP Landfill / NOAA
Cell A

1930 K-R bypasses this area and continues to finish. Excavator opens another area with compromised drums with sludge. Nir / Jim / NOAA decide that material can be placed in Tract 42 on PCS pile. Material is hauled and placed.

2000 Work Ends R-R leaves site

Note: Call BSE first thing Monday to remove drums.

1830 Dozer demands / Alexis leaves

Excavator bucket and Bell Truck will undergo decon

Mike ~~Shurden~~
10/4/03

Location J. Paul SNP Landfill Date 10/06/03
 Project / Client SNP Landfill / NOAA
Cell A

0800 Tailgate Safety Mtg.
 BSE has been notified to pick up and excavate drums on Northeast side slopes.
 K-R perform decon of excavator bucket and Bell Truck dumped. Decon is performed over PCS pile

0825 Excavator begins mining more sand Trucks hauling to south west corner of Cell A. Dozer continues to dress up side slopes.

0930 Jim Wright confirms that NOAA agrees that additional sand cover is not required on southwest side of Cell A except for the eye corner (furthest southwest corner)

0935 BSE Walter & Travis show up to remove drums from north east corner of Cell A

Location St. Paul SNP Landfill Date 10/04/03
 Project / Client SNP Landfill Cap / NOAA
Cell A

1100 BSE has mobilized backhoe and dump truck with over pack drums. Sludge drums placed on tarp and drums laying on ground are gathered and hauled to PCS stockpile with loader. Drums in side slope will be hand dug.

1200 K-R begins cutting back slopes determined to be greater than 3:1 by NOAA survey.

BSE continues to dig up drums and overpack.

1350 BSE completes drum removal and sludge soil removal from northeast corner of Cell A.

4 overpack drums are filled, K-R will have to stage drums. K-R continues to

Location St Paul SNP Landfill Date 10/04/03
 Project / Client SNP Landfill Cap / NOAA
Cell A

1420 Nir & I begin surveying slopes checking for 3:1
 Pt 137 15.6' Southwest corner
 138 3.9
 $11.7 \times 3 = 35.1'$
 Actual 49.7' > 3:1.

139 3.7 End of sand slope

140 13.7 heading east

- 3.7
 $10 \times 3 = 30'$ > 3:1
 Actual 25.7

141 16.0

142 1.8

$14.2 \times 3 = 42.6$
 Actual 38.44

Dist 45.1'

2.1 18.0

2.1

15.9

3

47.7

Need to
 slope back
 at this
 location

Location St Paul SNP Landfill Date 10/6/03
Project / Client SNP Landfill / NOAA
Cell A

144 4.32
145 17.73
+ 2.00 56.2

19.73
- 4.32

15.41

x 3

46.23

Need this distance
actual 73.1

11/10 ~~144~~ Nir is collecting
NOAA pad elevation
147 19.89 East end
~~148~~ 20.57 Middle
149 - 20.46

Side Slopes Cell A

150 16.3

151 46

11.7

3

35.1

Actual
38.5
measured (73.1)

152 3.8

10.3

3.8

14.5

14.5

3

43.5

Need this dist.
Actual 48.78
73.1

Location St Paul SNP Landfill Date 10/6/03
Project / Client SNP Landfill / NOAA
Cell A

1700 Oil Drum is punctured
during excavation, empty contents
on tarp. Excavator is taken
up to PCS pile and down bucket
1730 Start mining more sand
for Cell A cover

1900 End of Shift

~~W. J. Sturdevant~~
10/6/03



Location St. Paul SNP Landfill Date 10/7/03
 Project / Client SNP Landfill / NOAA
Cell A

0800 K-R begins work - Continue cutting back side slope and hauling sand for cover. If drums are encountered K-R will stop. TTRMZ will assess If empty - crush and landfill. If contains solids remove along with solids and stockpile on small PCS pile next to burn box. If drum contains liquid contents try to place in overpads. If liquids are already spill into bucket place contents on tarp. After all PCS soil, sludge, oil is removed down truck bed and excavator bucket

0855 Beginning of Liquid K-R continue to cut back slope and shape excavated side slopes

Location St. Paul SNP Landfill Date 10/7/03
 Project / Client SNP Landfill / NOAA
Cell A

Estimate quantity of sand to finish cell A cover



Area already covered by sand 1.5 ft deep

Area
 ①A 24 Paces
 51 Paces
 77 Paces

70
 22.6
 20.5

470 cy

③ 18 $1.5 \times 52 \times 22.6 = 435$ 652 cy

①B 5 14.7 $(14.7 + 44.1) \div 2 = 29.4$
 29 85.3 $(85 + 82) \div 2 = 83.5$
 15 44.1
 28 82 $1.5 \times 29.4 \times 83.5 = 360$ cy

Location St Paul SNP Landfill Date 10/7/03
 Project / Client SNP Landfill / NOAA
Cell A

(2) 16^v 47 x 82 x 15
 28 214 cy

TOTAL SAND 1470 cy
 loose sand 10% 1600 cy

1020 Nir & Mike survey cell A
 Center of Scorin Pad Cell A

Pt. 153 Elev. 19.20'

Pt. 154 Elev. 19.17'

Pt. 155 Elev. 19.18

Cell A side slope checks

Pt. 156 Northeast side slope

Top 13.97

Pt. 157 bottom 1.75

13.97

1.75

35.5 Actual

12.22

3

36.60

Needs dressing
 with dozer

South East Corner Cell A

Pt. 158 Bottom 2.12' elev.

159 Top 15.57

Location St Paul SNP Landfill Date 10/7/03
 Project / Client SNP Landfill / NOAA
Cell A

15.57
 2.12
 13.45 41.30 Actual
 3
 40.35 needed for 3:1 Slope 73:1

Monitoring Well Elev.
 MWSNPF-6

Elev. 22.650

Top of Casing

HC-2 Elev. 17.546

Top of Casing

Sand Today

16 load

16 load

32

576 cy 10/7

1044 10/6

1600 cy to date

2000 Land Bank

Location St Paul SNP Landfill Date 10/7/03Project / Client SNP Landfill / NOAACell A

1300 Start Shift

K-R continues to excavate sand out past city pad hauling to Cell A for cap

BSE is working on placing material on top of PCS liner extension.

1330 BSE demob loader & laborers

1420 BSE mob loader & laborers back onto liner

1500 Finished removing sand from dune area. Began hauling MSW from northeast corner up adjacent to PCS pile on Tract 42

City visits site to determine if an area exists for further sand mining.

No decision is made. City will get back to NOAA later in day.

1700 Excavator encounters more drums in northeast corner. Dig up 4 drums and stage them on tarp.
Excavate oily soil around drums

Location St Paul SNP Landfill Date 10/7/03Project / Client SNP Landfill / NOAACell A

and place on tarp. Decon bucket of excavator.

Dover continues to dress up slopes on the east slopes of Cell A.
1715 Nir, I check elevations on top Pt. 114 17.84 of sand

1840 Completed slope excavation of northeast corner except for a small area on top slope that contains numerous drums. BSE will continue to excavate slope.
1900 Shift Ends

[Signature]
10/7/03

St Paul SNP Landfill 10/8/03
 Project / Client SNP Landfill / NOAA

0800 Start of Shift
 Tailgate Safety Mtg.
 More cutting needed on
 top slope northeast corner
 to meet max. 3:1 slope
 hauling to Tract 41.
 City will mark out area
 for 1000 cy SAND

● 1000 Excavator hits full drums
 which leaks into bucket. Work
 is stopped. BSE is called in
 to use sorbent pads and
 filler to remove liquid. Drums
 is placed in overgrade as well
 as sorbent material.
 BSE is asked to provide
 excavator to finish cutting
 side slope in northeast corner
 1025 Excavator is taken to PCS
 pile to decan bucket by BSE
 crew.

100
 200 240
 271 20,000
 189 10,000
 10,000

41
 18 740
 20

41 LOADS
 SORBA

St Paul SNP Landfill 10/8/03
 Project / Client

1100 Excavator operator moves
 to get loader for scoria.
 Truck operators move to
 get ~~roller~~ roller to place
 scoria. BSE
 1130 Julie visits to size up
 drum removal and to finish
 cutting back side slope at
 Cell A
 1135 BSE picks up drums & soil
 from tarp using Cat front end
 loader. 966D
 1145 K-R Mobilizer Roller
 & Cat 988 Loader
 1155 Cat 320B is mobilized by
 BSE. Visit NOAA obtain stakes
 to be used for hubs for scoria work
 Prep Set hubs (1 foot marker)
 for scoria on pad K-R
 begins haul
 Jason Korloff BSE operator
 EX-320B Walter on front end
 loader, Travis-laborer

IX III

Location St Paul SNP Landfill Date 10/8/03
 Project / Client SNP Landfill / NOAA
Cell A / Pad

2:20 2:30

1500 BSE / work
 1510 Nit Survey Sand Borrow area

Cell A Northeast side

Pt 189 15.3 Top of slope

Pt 190 3.7 Bottom

11.0

3

need 34.8 Actual 44.

Pt. 191 3.7 Bottom

192 ~~12.8~~ Top

3.1

3.8

3

2.4

36 A

Pt. 193 16.04 Top

194 5.6 Bottom

10.4

3

Need 31.2

Actual
50.00

Location St Paul SNP Landfill Date 10/8/03
 Project / Client SNP Landfill / NOAA
Cell A / NOAA Pad

1545 BSE encounters numerous drums. One contains liquids and is placed in overpack. This brings the total to 6 overpacks staged next to the trailer.

BSE continues to excavate slope

1730 11 Loads KR Ball Trucks

12 loads KR Ball Trucks

23 x 18 = 414 cy

15% compaction $11,178 \times \frac{15}{100} = 9,720$

check to see if actual area covered

matches haul Estimate 100x100

Need to thin out layer by 4 inches

1730 BSE ends shift

still need to excavate a short distance along slope to match previous excavation

1900 K-R more than 1/2 done with pad

15 loads 520 cy

14 loads

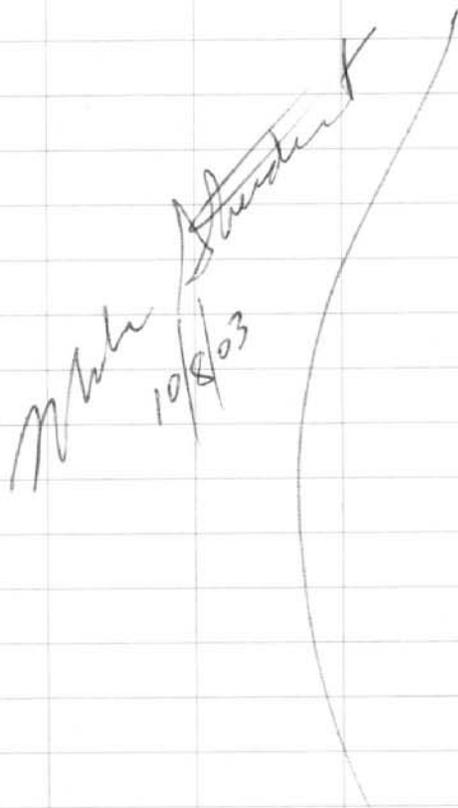
29 x 18

Total Required 815

Location St Paul SNP Landfill Date 10/8/03
 Project / Client SNP Landfill / NOAA
Cell A / NOAA & City Pad

1910 Quick estimate of area covered by scoria clastey matches number of loads hauled.

1915 Shift Ends leave site



Location St Paul SNP Landfill Date 10/9/03
 Project / Client SNP Landfill / NOAA
Cell A / NOAA & City Pad

0750 Conduct Tailgate Safety Mtg and cover activities for today

- 1) Continue to work on NOAA/ City Pad covering with 1 foot of scoria
- 2) BSE will continue cutting back side slope at northeast corner of Cell A and hauling sludge drums to small PCS pile. If needed NOAA gives approval to extend pile on back side of burn box
- 3) K-R will haul Blubber Dump matl. when they complete scoria haul
- 4) K-R will dressout slopes of Cell A after BSE complete their work on northeast corner.
- 5) TRENZ will collect confirmation samples from 2 areas when BSE is finished digging soils & drums at northeast corner
- 6) K-R will use EX-360 to flatten msw pile in northeast corner and msw hauled to Tract 42

0840 BSE crew arrives to begin work on northeast corner. During

Location St Paul SNP Landfill Date 10/9/03Project / Client SNP Landfill / NOAACell A / NOAA & City Pad 11:30
12:00

Starting on excavator hydraulic line breaks. BSE places absorbant pads under machine to soak up leaking fluid. Operation is shut down until excavator can be fixed. K-R continues to haul scoria from Lakehill Quarry and placing on NOAA/ City Pad.

1045 BSE excavator remains broken down crew has left site. 1120 crew returns to site. Pick up adsorbant pads and place in garbage bags. I've received approval from K-R to rent Komatsu excavator just need to record hours of operation.
*1136 BSE operator (Jason) starts excavator and inspects fluid levels. 1150 BSE breaks. 1200 K-R shift ends for lunch.

8 load 7 load 15 load 270 CY
Total to date 790 CY ON PAD
Nearly complete. 4 more truck loads.
1500 K-R back to work hauling scoria from Lakehill quarry and placing on NOAA/ City Pad. 1305 BSE returns from lunch to start work on Northeast corner of cell A.

Location St Paul SNP Landfill Date 10/9/03Project / Client SNP Landfill / NOAA

Cell A / NOAA & City Pad

1400 Jim Wright NOAA & I set hubs along E of pad to establish 1' crown down center need approx. 4 loads.
1425 BSE cutting top of slope back in northeast corner of cell A.

SPO5-CS-01-000 Confirmation Sample furthest northeast corner where 74 drums were removed by BSE.

SPO5-CS-02-000 75' south of previous point along side slope approximately in center of slope.

*1455 BSE is complete with work and deconed equipment over PCS pile.

1530 Kevin & I collect confirmation samples DRS, GRD, RRO, BTEX, PAH SPO5-CS-01-000 and

SPO5-CS-02-000. 1540 Check grade of scoria on pad. 1545 K-R begins using EX-360 to level MSW piles on northeast corner of Cell A.

1645 Dorer completes scoria pad and moves to northeast corner of cell A to finish grade slopes and flatten top. Excavator moves to

Location St Paul SNP Landfill Date 10/9/03Project / Client SNP Landfill / NOAA
Cell A / NOAA & City Pad

Tract #2 MSW dump to smooth out piles. Excavator digs a hole to place large debris. Trucks continue to haul contaminated material from Blubber Dump and dump at PCS pile, ~~B~~

1900 Trucks finish there haul from Blubber Dump Dozer completes dressing slopes on east side of Cell A and excavator completes smoothing piles of MSW on southwest corner of Tract #2, End of Shift

*Walter
Stratton
10/9/03*

Location St Paul SNP Landfill Date 10/10/03Project / Client SNP Landfill / NOAA
Cell A / NOAA & City Pad

0750 Target Safety Mtg. Activities for today. Pick up tarps of contaminated soil and haul to small PCS pile. 2) Dig sand from new cell landfill area as directed by City & place on east side of Cell A 3) Compact scoria on pad and compact sand on flat areas of Cell A. 4) Compact MSW placed on Tract #2.

0800 Start of shift 1 Bell truck dozer, excavator and roller. Picked up tarp with contaminated soil and hauled to PCS pile. Dozer dresses up slopes 0830 Deon truck and excavator bucket over big PCS pile 0900 start excavation of sand and hauling sand to cell A. Compactor begins at pad 1000 & check elevations 1115 Compactor finishes compacting sand cover on south east corner of Cell A. Check elevations of excavation to make sure we maintain 8' rise at bottom using a laser level from K-R

Location St. Paul SNP Landfill Date 10/10/03
 Project / Client SNP Landfill / NOAA
Cell A / NOAA & City Pad

Dozer continues to spread sand
 cover over MSW on east side
 of cell A. 1200 K-R hauled sand
 18 loads (324 cy) which clearly
 makes earlier estimate for bench
 area (A) Land Break.

1300 K-R Start. Dozer is pushing
 sand layer on northeast corner
 of Cell A. Excavator is mining
 sand from new landfill cell.
 1330 Checked grade on bottom of
 excavation area to make sure K-R
 does not go below 8' MSL. 1430
 checked slope depth needs to add
 another 6 inches - instructed
 operator. 1440 Talked to NOAA
 to advise that we will need more
 sand. NOAA will gain approval
 from city to mine dune they
 have previously marked out. Before
 city releases new area to mine NOAA
 need to flatten new cell area to
 8' above MSL. 1500 Both trucks
 break down. Dozer then moves

Location St. Paul SNP Landfill Date 10/10/03
 Project / Client SNP Landfill / NOAA
Cell A / NOAA & City Pad

to bottom of new landfill cell
 and begins to grade out to
 8' above MSL. 1530 DJB
 is mobilized to site. Excavation
 of sand starts again @ 1600
 1630 Check grade at bottom of
 excavation. Check grade and
 depth of slope @ 1645. 1730
 Check bottom elevation and grade
 on Cell A slope. Estimate that
 another 400 cy are required to
 finish cap on cell A. 1840 Check
 elevation in bottom of new landfill
 cell > 8' MSL. Moved excavator
 further to the south to dig approx.
 800 cy. Dozer continues to spread
 sand over east slope of Cell A
 Talked to Jim Wright about keeping
 trucks busy hauling in the morning
 while a new road is cut to reach
 the sand dune that has been
 staked out by the city surveyor -
 1900 Shift ends K-R leaves
 site John Stender
10/10/03

Location St. Paul SNP Landfill Date 10/11/03
 Project / Client SNP Landfill / NOAA
Cell A / Blubber Dump

0750 Tailgate Safety Mtg. Activities today 1) level new landfill cell to 78' MSL 2) Cut road to new sand borrow area 3) Haul Blubber Dump PCS to PCS land fill on tract 424) Haul sand to Cell A east slope 5) Haul scoria to Cell A top.

0800 Ex-350 works on cutting road to new borrow area Dozer works on leveling bottom new landfill for city. 2 Bell trucks hauling blubber dump PCS. Another Ex-350 loading trucks at blubber dump 1050 Ex-350 completes cutting in road to back 40 sand done. Moves back to cell A shut down. Startup 988 loader to flatten piles of PCS hauled from blubber dump. 1100 One Bell Truck is shut down for repair. 1130 Dozer completes grubbing new sand borrow area Loader continues to flatten out PCS Pile DJB is now hauling Blubber Dump PCS to the PCS piles
 1200 Lunch Break

Location St. Paul SNP Landfill Date 10/11/03
 Project / Client SNP Landfill / NOAA
Cell A / Blubber Dump

1300 K-R starts hauling with Cat 77B from Blubber Dump. Both Balls go to Blubber Dump to discuss with Sprayer. 1315 Big truck gets stuck sl. cutt road, Dozer, EX-340 and 988 loader push it out. 1330 Bell trucks arrive and begin hauling sand from back 40 sand done to Cell A east slope. 1415 Big truck comes in with second load 1420 check thickness of sand layer on slope (1/2 feet thick) 1450 checked excavation of sand made sure depth was above 6' msl 1540 checked side slope of Cell A slope has 18" cover throughout. 1650 Complete hauling sand. The Bell Trucks will continue hauling PCS from Blubber Dump. EX-340 is done for the day. The 988 Loader will now smooth out piles. Dozer continues to dress out sand on side slope of Cell A

Location St. Paul SNP Landfill Date 10/11/03
 Project / Client SNP Landfill / NOAA
Cell A / Blubber Dump

Checked the slope of the PCS pile. Slope is too steep. The EX-350 works on cutting back the slopes of PCS to match existing grade. 1830 Bell trucks finish hauling from Blubber Dump. Both are covered over PCS Pile. Dozer shapes up all slopes at Cell A. Jim Wright & I mark out top area that will receive scoria. Property line is marked on northeast corner. Northeast corner is on DOT property and FRA easement, therefore scoria will not be placed on those areas.

1900 End of Shift



John [Signature]
10/11/03

Location St. Paul SNP Landfill Date 10/13/03
 Project / Client SNP Landfill / NOAA
Cell A / Blubber Dump

0755 Tailgate Safety Mtg. Activities for today. 1) Haul Scoria from Lake Hill Quarry to Cell A top area spread @ 6 inches 2) Excavator finish winging back side slope of PCS pile (blubber dump material) to a 3:1 slope 3) Complete filling in low area of new city landfill cell. 4) Compact sand in northeast corner of Cell A. 5) Haul PCS from Blubber Dump.

0800 Dozer mobs to city landfill cell and levels piles of sand into low lying area 985 loader mobs to quarry with 2 Bell EB trucks, EX-350 mobs to PCS pile. 0820 Dozer completes grading of sand at city's new landfill cell. First load of scoria is dumped on southwest corner of Cell A. 0935 EX-350 completes slope of blubber dump PCS pile and

Location St. Paul SNP Landfill, Date 10/13/03

Project / Client SNP Landfill / NOAA

Cell A / Blubber Dump

Levels a MSW pile on south west corner of Tract 42, 0940 operator of EX-350 moves to begin hauling Blubber Dump PCS. Ask Jim Wright if NOAA would like K-R wing back all slopes on PCS pile. He will check with NOAA headquarters, 1030 Jim Wright calls and wants K-R to cut back north ~~west~~^{north} side slope to 3:1. I calculate that after removing berm at top edge need to cut slope down a minimum of 8' feet and back approx. 20 feet. 1100 I go to John R.'s office to get approval to haul 1500 cy of scoria for city. John R. is out, Phyllis will get a hold me with an answer. 1130 Explain plan of cutting back north slope of PCS pile to K-R loader like we need to fold back edge and material removed by EX-350 and hauled to bottom with DSB.

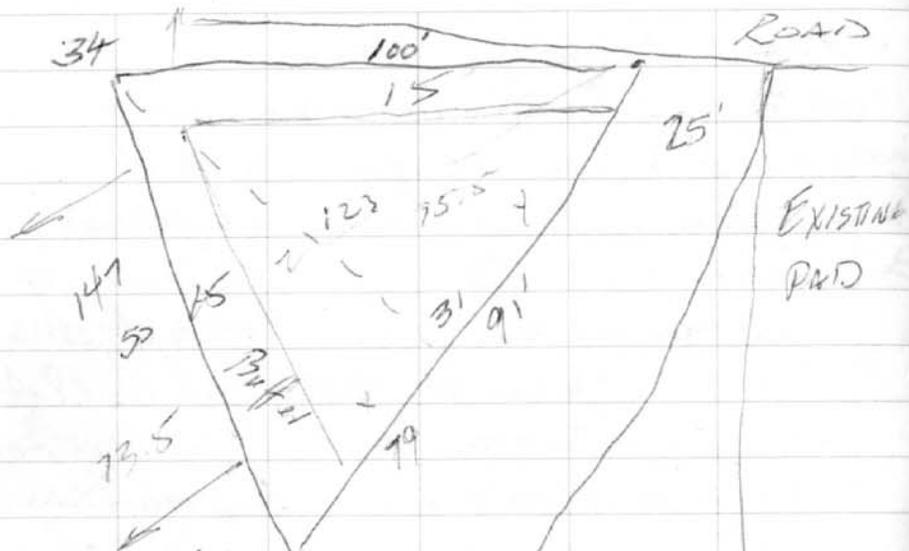
Location St. Paul SNP Landfill, Date 10/13/03

Project / Client SNP Landfill / NOAA

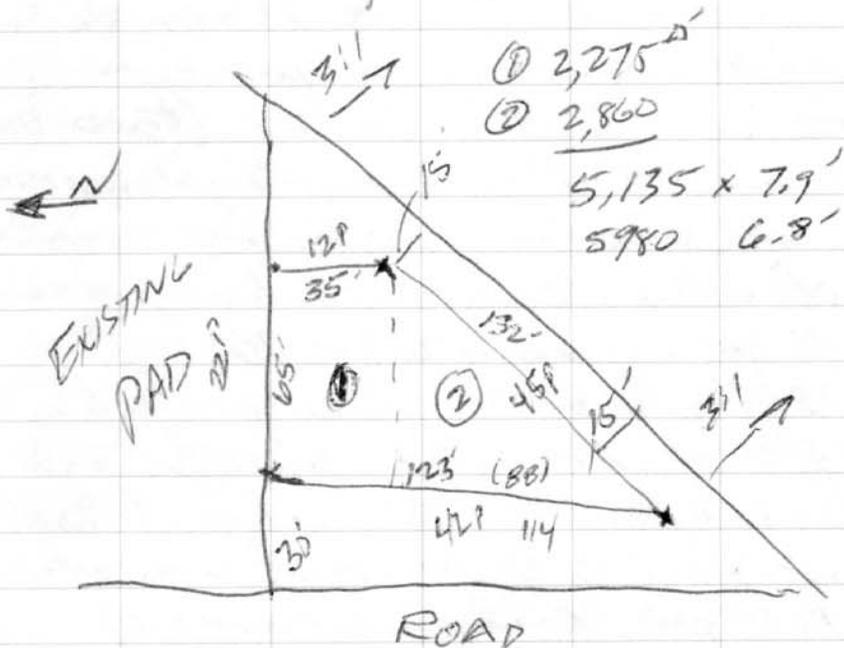
Cell A / Blubber Dump

1200 Lunch Break
 @1300 Phyllis, city clerk gives me approval to haul scoria for city. K-R continues to haul scoria from Lake Hills Quarry and spread on northeast side and southwest side of Cell A. EX-350 flattens out PCS dumped loads and begins cutting down north slope of PCS pile. No work at Blubber Dump. I tell K-R not to use Cat #13 truck. It's too expensive compared to running 2 Bell Trucks (\$1300 vs. \$140/hr). 1550 Jim Wright approves fill of scoria on southwest corner of cell. He decides that compaction is not necessary where 1500 cy stockpile of scoria is going to be placed. 1600 Check side slope on PCS pile EX-350 + DSB continue to haul and place on southernmost area of PCS pile. BSE loader works piles dumped by DSB and BSE trucks.

40 Location St. Paul SNP Landfill Date 10/13/02
 Project / Client SNP Landfill / NOAA
Cell A / PCS Pile



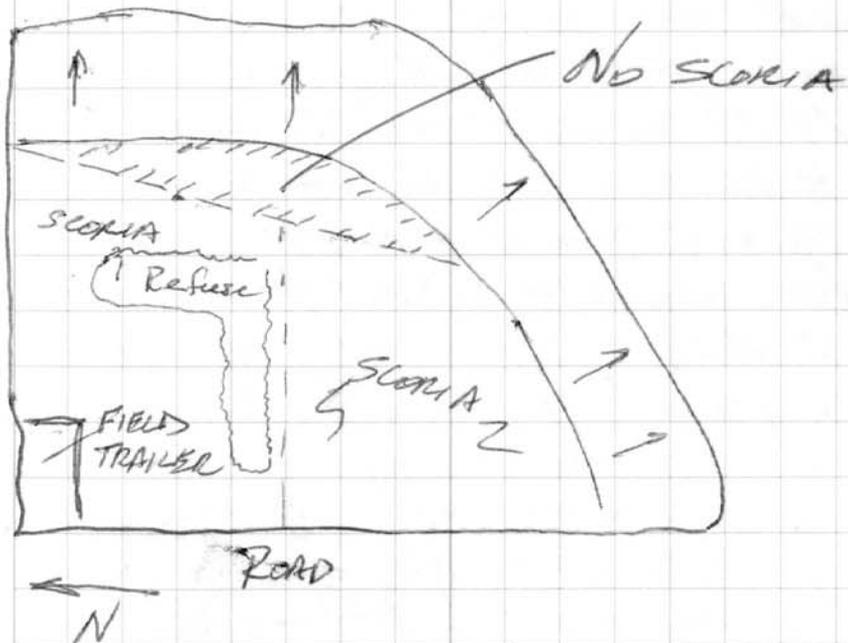
Not Large Enough for 1500cy



1500cy = 83 LOADS BELL TRUCKS

41 Location St. Paul SNP Landfill Date 10/13/02
 Project / Client SNP Landfill / NOAA
Cell A / PCS Pile

hauling from Cascade excavation.
 1030 R.R. Nearly complete with scoria placement on northeast corner. Asked Tim if we are still only placing scoria up to property easement line. He said that is correct. Therefore, a sliver of the top of Cell A will not have scoria



1730 Bells begin hauling scoria for city stockpile. 988 loader is also now working on City project

Location St Paul SNP Landfill Date 10/13/03
 Project / Client SNP Landfill / NOAA
Cell A / PCS Pile

Doxer completes grading scoria on northeast corner of Cell A. K-R will work within defined boundary and will pile as high as practical. 1750 K-R EX-350 works on sloping north slope of PCS pile. Cable direction to bench top 4' so he can reach bottom of slope. Will wing back slope tomorrow and use only BSE loader to move soil to other side of pile. 19 loads for NOAA 24 loads for NOAA 4 loads for City 4 loads for City 720 cy scoria for Cell A. 8 loads for city (144 cy). 1900 Shift ends.

[Handwritten signature]
 10/13/03

Location St Paul SNP Landfill Date 10/14/03
 Project / Client SNP Landfill / NOAA
Cell A / PCS Pile

0755 Talpote Safety Mtg. Activities for today 1) Haul scoria for city stockpile 2) Continue to cut back side slope on PCS pile to 311 and move it to back side of PCS pile. 0815 CAT D-5 grades scoria stockpile. 2 Ball CB trucks begin hauling scoria from Lake Hill's Quarry. 988 Loader loads Bed 2B trucks. EX-350 starts grading north slope of PCS pile. Jim Wright, NOAA mentions that NOAA is seeking approval from ADEC to place 16" scoria on side slopes of Cell A as opposed to topsoil. He wants to make sure that we leave enough room around stockpile to haul & place scoria. BSE arrives on site 0840 starts up loader then leaves for the maintenance shop. 1038 BSE Truck Driver operates front end loader to smooth out PCS piles dumped

Location St. Paul SNP Landfill Date 10/14/03Project / Client SNP Landfill / NOAACell A Scoria Stockpile / PCS Pile

from BSE dump trucks 1107
BSE loader is shutdown.

1200 Break for lunch

1300 2 Bell 2B trucks begin hauling
scoria from Lake Hill quarry. 988
Loader begins loading. Ex-350

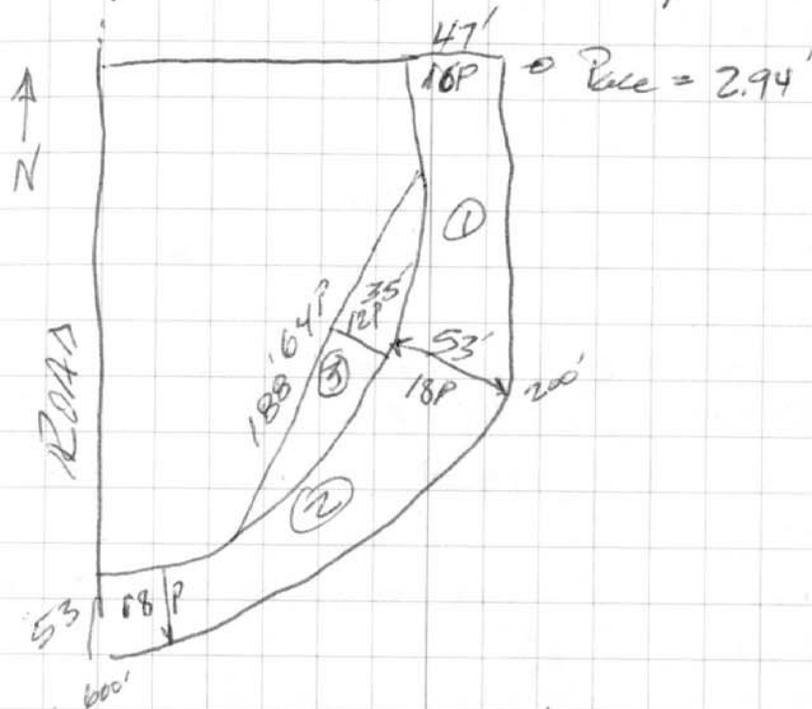
continues shaping side slopes and
leveling PCS piles. BSE loader levels
PCS pile. 1500 BSE operator leaves
site 1530 Ex-350 completes grading
north & south slope of PCS pile.

Ex-350 works on gathering MSW Cell A
together to haul to MSW pile on
Tract 42. K.R. Bells continue to haul
scoria. 1620 Use one Bell 2B truck
to haul MSW from Cell A to MSW pile
on Tract 42. 1700 Bell 2B and Ex-350
complete hauling MSW from Cell A to
Tract 42. The Ex-350 then demobs
from Landfill heading for the Lake
Hill Quarry. 46 loads (828 cy)
Need 29 loads. 18:40 Bell Trucks
are done hauling. Operators grease
trucks. Door continues to pile

6:05 21 25
20 24
19 23

Location St. Paul SNP Landfill Date 10/14/03Project / Client SNP Landfill / NOAACell A Scoria Stockpile / PCS Pile

Scoria Estimate to Cover Side Slope
Side Slope 600 ft length at mid slope 222



$$\textcircled{1} 50 \times 200 = 10,000 \text{ sq ft}$$

$$\textcircled{2} 53 \times 400 = 21,200 \text{ sq ft}$$

$$\textcircled{3} 188 \times 35 = 6,580 \text{ sq ft}$$

$$\text{Total Area} = 37,780 \text{ sq ft}$$

$$4'' \text{ Scoria} \times 0.33$$

$$12,593 \div 27 = 466 \text{ cy}$$

$$25\% \text{ Comp} = 583 \text{ cy}$$

$$\text{Say } 600 \text{ cy}$$

Estimate 2 DAY effort

Location St Paul SNP Landfill Date 10/14/03
 Project / Client SNP Landfill / NOAA
Cell A Stockpiling Scoria

up scoria on south west corner
 of cell A. 1900 complete shift

Mike Steward
 10/14/03

Location St Paul SNP Landfill Date 10/15/03
 Project / Client SNP Landfill / NOAA
Cell A Stockpiling Scoria / Haul Blubber

0755 Taulgate Safety meeting
 Activities for today 1) Finish
 hauling scoria for City 2)
 Bench scoria pit 3) Haul PCS
 from Blubber Dump.

0800 Cat D-5 grades scoria
 stockpile for City, 2 Bell
 2B trucks start hauling scoria
 from Lake Hills Quarry. Ex-350
 excavator begins benching the
 scoria quarry, 9BB wheel
 loader begins loading Bell
 trucks.

0930 Talked to Ken Valder about
 the email asking for sample locations
 collected by Eric DeRube. Looked
 through log book and found descrip
 of locations, relayed info to Ken.

0945 R-R continues to haul scoria
 for City stockpile, BSE continues
 to haul PCS to PCS pile

1013 Checked side slopes of PCS
 pile. BSE is operating a front loader
 to smooth out piles. I placed 2

Location St Paul SNP Landfill Date 10/15/03

Project / Client SNP Landfill / NOAA
Cell A City Stockpile / PCS pile

stakes in dump area to keep trucks far enough away from edge of berm so that a 3:1 slope can be maintained
 1118 Checked excavation of Lake Hill Quarry. EX-350 is benching side walls. After city stockpile is complete a couple of benches will be cut from the bottom face which may interfere with buried cable. K-R will locate lines by notifying utility company prior to excavation 1130 Bell trucks continue to haul scoria. 16 loads were hauled this morning. Need 13 more loads. 1255 Bells begin hauling scoria. Dozer continues to shape stockpile. EX 350 continues benching scoria quarry
 988 Loader loads trucks. BSE loader continues to flatten pile. Winds are from north to north east at 30mph mixed rain

Location St Paul SNP Landfill Date 10/15/03

Project / Client SNP Landfill / NOAA
Cell A City Stockpile / PCS

1525 Bell completes hauling City scoria. Bell #2 finishes hauling scoria at 1540. Cat 5D completes piling scoria and move to city pad to grade side slopes. Both Bells begin hauling Blubber Dump PCS.
 1700 K-R continues to excavate and load PCS from Blubber Dump Hauling with 2 Bell 23 trucks to the Landfill PCS pile. Cat 5D continues sloping side slopes of City/NOAA pad 1730 met with Jim Wright at landfill. Talked to Jason, BSE loader operator about achieving a 3:1 slope. Jason would like to use NOAA excavator to cut back slope on south west corner of PCS pile. He will continue to use loader on west side as it is built out with Blubber Dump PCS and PCS from removal actions by BSE. 1800 Went to Blubber Dump to talk with Jim, NOAA

Location St. Paul SNP Landfill Date 10/15/03
 Project / Client SNP Landfill / NOAA
City Stockpile / PCS Blubber Dump

to define limits of PCS removal.
 I wanted to know if we should
 treat the rocks differently and
 segregate from PCS that goes to
 the landfill. Also we need to
 define where the bottom liner should
 go. The excavator is pulling up
 pieces, should be segregate pieces?
 Also there is a separate bermed
 area on the northwest side. Do
 we treat this different or combine
 it with PCS. Tom Wright will
 get back to me. 1900 Shift
 End

John Hubbard
 10/15/03

Location St. Paul SNP Landfill Date 10/15/03
 Project / Client SNP Landfill / NOAA
Blubber Dump / Quarry / Landfill PCS pile

0755 Target Safety Mtg.
 Watch for other traffic, be
 careful when approaching BSE
 loader. Careful when backing
 especially in the dark of morning.
 Activities for the day 1) Haul
 Blubber Dump PCS to landfill
 PCS pile 2) Cat D-5 continue
 to grade side slopes of NOAA/
 City Pad then push grubbed
 material over borrow areas.
 3) Complete benching quarry
 and mob Ex-350 back to landfill.
 Tom Wright, NOAA wants to know
 if we can add one more truck
 hauling Blubber Dump PCS. Talked
 to Merwyn K-R he said we
 could use the DIB. 1100 BSE
 leaves sight with loader ^{Cat 5D moyer fronted} ~~in~~ borrow area.
 Tom Wright gives approval to use DIB
 K-R is directed to start hauling
 with 3 trucks. 1150 Visit quarry
 to see what progress has been
 made. K-R Ex-350 has benched

Location St Paul Landfill Date 10/15/03

Project / Client NOAA / SNP Landfill

Blubber Dump / Quarry / Landfill PCS Pile

sidewalls and stockpiled about 600 cy of scoria into the bottom of the quarry. Estimate 2 hrs left to finish and walk Ex-350 back to landfill will take 2 hrs. 1158

Jim Wright gives permission to tear up bottom liner at Blubber Dump and load it with PCS to be placed into Landfill PCS pile. This will speed up excavation.

1200 Lunch Break

1300 Direct K-R Ex-350 operator to load bottom liner with PCS into the trucks. 1350 Check

with BSE loader operator (Jason) give him a radio to communicate with K-R drivers to direct them while backing. 1400 K-R Cat 5D

continues to place topsoil/grass over sand borrow areas. BSE operator continues to smooth out piles dumped by Bell trucks at PCS pile. 1730 K-R Ex-350 continues to load PCS from

Location St Paul SNP Landfill Date 10/15/03

Project / Client SNP Landfill / NOAA

Blubber Dump

Blubber Dump. BSE operator finished for the day. Both Bell 213 trucks continue to haul and dump on Landfill PCS pile.

1830 Talked to Jim Wright about renting City dump truck for hauling from Blubber Dump because K-R DTB brake down. Also, I will prorate excavator & operator time for quarry work based on volume of scoria removed plus 600 cy accumulated in the quarry. 1900 End of Shift

John Sturdevant

Location St. Paul SW Landfill Date 10/17/03Project / Client SNP Landfill / NOAA
Blubber Dump / Revegetation

0755 Tailgate Safety Mtg.

K-R will continue to haul Blubber Dump PCS to landfill PCS pile using 2 Bell 2B trucks loaded by Ex-350. Cat 5-D will continue revegetation (pushing grubbed matl. back over cleared areas).

0935 Met with Myron City of St. Paul PW about renting City Truck. They will add the rental on the present open PO. They will supply a fully fueled truck. Talked to Merwyn K-R about supplying a driver. The truck and driver will start 1300. This will bring the total to 3 trucks hauling from the Blubber Dump. 1035 Visit with K-R Ex-350 operator he wants to brush northwest corner. I tell him to hold off until I talk to Tom Wright on why this area was segregated from the rest of the pile.

Location St. Paul SW Landfill Date 10/17/03Project / Client SNP Landfill / NOAA
Blubber Dump / Revegetation

1100 Meet with BSE loader operator leveling hauled PCS piles. I want a road to the top to dump off the leading edge of the pile. I mention that the Cat 5D will be available later today to work slopes. Currently the dozer is spreading grubbed material over sand borrow areas.

1200 Break for lunch

1300 K-R operates roller to smooth out NOAA/City Pad after being roughed up from dozer grading side slopes. Both Bell 2B trucks haul PCS from Blubber Dump. BSE front loader continues to smooth pile. The City Rental Truck is now in operation. City Public Works is renting the truck through an existing TTRM PO agreement. 1400 City Workers try to start City's Dozer Cat D6H and it won't start. 1436 Compactor completes working on NOAA/City Pad.

Location St. Paul SNP Landfill Date 10/17/03

Project / Client SNP Landfill / NOAA

Blubber Dump PCS Pile

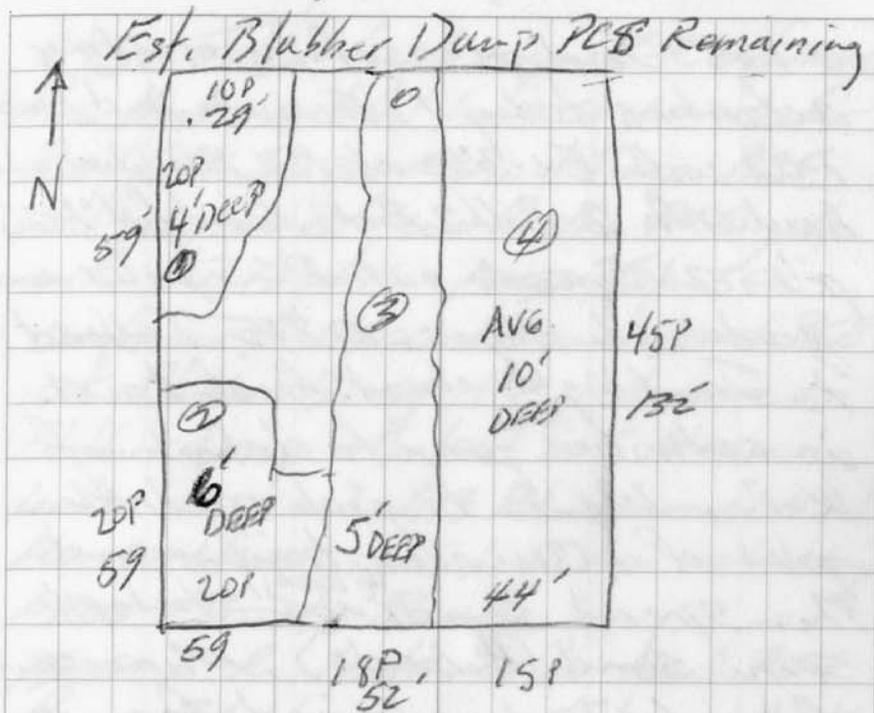
244 (3rd shift). Also compact scoria around city stockpile. 1545 LR continues to operate 3 trucks hauling Blubber Dump PCS to landfill PCS pile. Cat D-5 continues to spread grabbed material over sand borrow areas. 1610 Tim Wright asks me to pick up a couple of people at the airport @ 1630. BSE loader continues to spread hauled PCS from the Blubber Dump. 1730 BSE shifts over. CAT D-5 moves on PCS pile. I ask Pat to cut a ramp to the top to speed production by dumping off the leading edge and giving the trucks plenty of space to turn around on top. All three trucks now are able to dump without waiting. 1848 Trucks are done hauling. 1900 End of Shift.

Mike
10/17/03

Location St. Paul SNP Landfill Date 10/17/03

Project / Client SNP Landfill / NOAA

Blubber Dump PCS Pile



$$P = 2.94'$$

$$\textcircled{1} 29 \times 59 \times 4 \div 27 = 232$$

$$\textcircled{2} 59 \times 59 \times 6 \div 27 = 4289.773$$

$$\textcircled{3} 52 \times 52 \times 132 \div 27 = 127$$

$$\textcircled{4} 44 \times 132 \times 10 \div 27 = 2,151$$

3300 CY

$$14' \times 48' \times 5' = 1076 \text{ CY SPACE GIVEN}$$

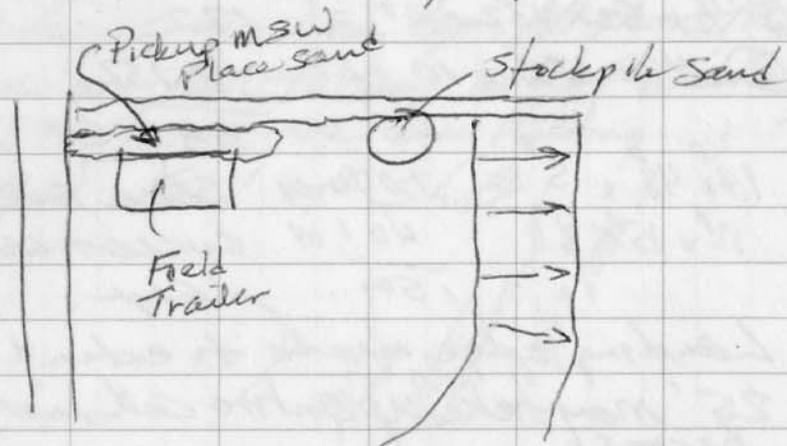
$$12' \times 15' \times 8' = 401 \text{ CY CURRENT LEADING EDGE}$$

1500

Leading edge needs to extend 25' may take up entire cell inside berms

Location St. Paul SNP Landfill Date 10/18/03
 Project / Client SNP Landfill / NOAA
Blubber Dump

0755 Tailgate safety meeting activities today 1) Excavate and load PCS with Ex-350 at the Blubber and haul with 2 Bell 2B to landfill PCS pile. 2) Smooth out PCS piles and grade side slopes, 0815 Talked to Jim Wright about final touch up activities prior to demob of K-R. Wants to pick up little piles of MSW near trailer and then spread sand ^(# loads) and stockpile some sand (# loads). Mine sand from last dune mined, face is still exposed. If we haul scoria for side slope of cell A we will place scoria on top of sand



Location St. Paul SNP Landfill Date 10/18/03
 Project / Client SNP Landfill / NOAA
Blubber Dump

0930 Talked to Merwyn K-R informed him that we didn't have any work for Ray CAT 5D on Mon. & Tues. BSE will continue to work the PCS pile with the loader. 1050 Ex-350 continues to excavate and load PCS at Blubber Dump, 1100 Rd leaves Blubber Dump with load 1105 Aloxi leaves with load. 1118 Rd returns. 1121 Aloxi returns. 15 to 18 min roundtrip 1200 Lunch Break 1300 K-R continues to haul PCS from Blubber Dump. Items that need to be completed at landfill PCS 1) Crown top 2) Pick big rocks off side slopes 3) Slope back side slope on south west ^{and south east} corner to 3:1 using excavator. 1324 Took some photos of bench out quarry will send to Ken Valder and NOAA as proof that commitments have been fulfilled for TDX requirements. Snowing hard and blowing

Location St. Paul SNPLandfill Date 10/18/03
 Project / Client SNPLandfill / NOAA
Blubber Dump PCS

1030 Continue to haul and dump on PCS pile.

Need 2 loads of scoria with to cover sand at Cell A near field trailer. 1835 Checked

fill at PCS pile going to ~~to~~ extend leading edge to make room for remaining material at Blubber Dump. 1900 End of Shift

[Handwritten signature]
 10/18/03

Location St. Paul SNPLandfill Date 10/20/03
 Project / Client SNPLandfill / NOAA
Blubber Dump / PCS stockpile

0750 Tailgate Safety Mtg.

Dark now until 10:00 AM

snowing/blowing use caution

2 Bell 2B trucks begin to

haul and EX-350 loads at

Blubber Dump. Talk to J.

Wright, NOAA about small northeast

west corner area. He directs

us to go ahead and remove as

PCS. 0820 Talk to K-R

operator of EX-350 and direct

him to excavate and load north

west corner of Blubber Dump

0830 K-R mechanic works

on starting City Truck (rented)

0840 City Truck begins hauling.

1030 BSE is working on removing

steel plates at Blubber Dump.

After scraping of plates operator

is scheduled to move to Landfill

PCS Pile. Material on surface

of plates is placed on PCS piles

1115 BSE loader operator begins

pushing dumped piles over leading

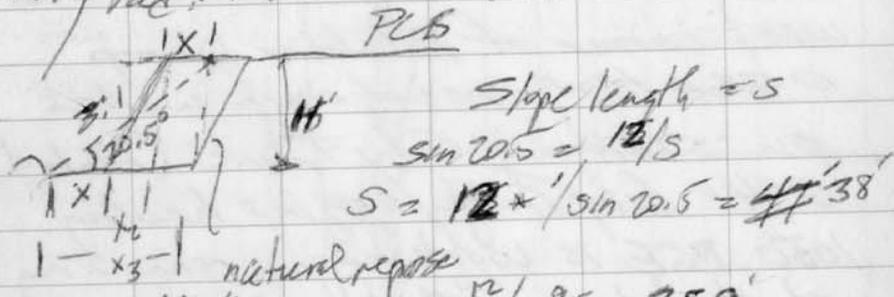
Location St Paul/SNP Landfill Date 10/29/03Project / Client SNP Landfill / NOAABlubber Dump / PCS stockpile

edge of landfill PCS stockpile

1200 LUNCH BREAK

1300 K-R continues to excavate & load from Blubber Dump PCS pile

BSE is not at landfill to spread material. BSE is currently scraping material off steel plates at Blubber Dump. Cutting welding plates attached to the top of the sheet piles in order to separate sheets. City placed geotextile over sand slopes of NOAA / City Pad. 1600 Robert NOAA plus GPS reading



$$\sin 20.5 = \frac{H}{5}$$

$$S = \frac{H}{\tan 20.5} = 47'38''$$

$$X_3 = \frac{H}{\tan 20.5} = \frac{11.4}{0.95} = 35.9'$$

$$X_2 = \frac{H}{\tan \alpha} \text{ natural repose } \frac{11.4}{\tan 39^\circ} = 17'$$

$$\text{Natural repose } X = 36 - 17 = 19'$$

$$\text{Elev } 21.0 \quad T-35.3 \quad \text{DIST. } 20.4 \text{ Horiz}$$

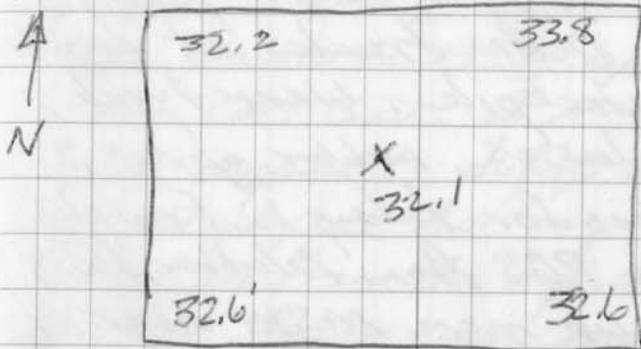
$$\tan \alpha = \frac{35.3 - 21.0}{20.4} = 0.696 \quad \alpha = 38.71^\circ$$

Height of PCS stockpile

$$H = 32.4 - 21.0 = 11.4'$$

Location St Paul/SNP Landfill Date 10/29/03Project / Client SNP Landfill / NOAABlubber Dump / PCS stockpile

TOP OF PCS



Place a minimum of 3 ft in center and slope towards edges to achieve 2% slope.

No. 50 BSE loader has difficulty moving dumped PCS piles. Talk to J. Wright he gives approval to use NOAA Cat 5D to push piles. Jason BSE will start tomorrow with dozer. 1730 BSE ends shift. BSE uncovered and cut 2 pads (18 plates each). Started clearing #3 pad. All cleared matl. was placed on Blubber Dump PCS pile. K-R continues to haul Blubber Dump PCS with three trucks. 1900 End of Shift Mike Strubel

Location Sp. Paul SNP Landfill Date 10/21/03
 Project / Client SNP Landfill / NOAA
Blubber Dump / PCS Stockpile

0750 Target Safety Mtg.
 Need to Decon trucks at landfill
 PCS stockpile. Wear tyvek,
 safety glasses, rubber gloves.
 Activities for today 1) Finish
 hauling PCS from Blubber Dump
 2) Pick up more MSW near field
 trailer. Then cover area with
 sand (4 loads) stockpile 4 loads
 of sand. 0845 BSE takes
 loader from landfill PCS stockpile
 to Blubber Dump. First truck
 dumps at landfill PCS. 1005
 BSE operator uses NOAA Cat 5-D
 to push piles on top of landfill
 PCS stockpile. 1100 K-R 988
 Loader brings connex box to Blubber
 Dump. Ex-350 then begins to fill
 with old liner debris piled on
 south side of dump and a half
 connex with more liner. 1200 Lunch
 1300 Ex-350 continues loading
 connex and trucks with PCS.
 1315 Ex-350 is finished loading

Location Sp. Paul SNP Landfill Date 10/21/03
 Project / Client SNP Landfill / NOAA

Connex. 1320 I explain 3:1
 slope points to BSE operator
 of the CAT 5D. I mark out
 other areas to dump on the
 PCS stockpile holding the loads
 10 feet in from the top of slope
 so that dozer can maintain
 3:1 slopes as they build up top.
 1330 Cat 988 tries to lift connex
 not enough power. 1340 I have
 Ex-350 dig 6 test holes to see
 if contaminated soil extends to depth
 Talk to J Wright he agrees to get
 the D-8 to scrap entire area 4 to
 6 inches to address surficial PCS
 that was under liner. Since 7 trucks
 are currently hauling PCS to the
 landfill PCS stockpile we need to
 keep the NOAA Cat 5-D there to
 grade out piles 1515 I check
 side slope at land PCS stockpile.
 Set top of slope stakes on the
 leading edge. 1530 loader 992
 hooks up to connex and moves

Location St. Paul SNP Landfill Date 10/21/03
 Project / Client SNP Landfill / NOAA
Blubber Dump / PCS stockpile

offsite to NOAA storage area. K-R
 Cat D-8 begins scraping top layer
 off Blubber Dump toward the north
 west corner for the EX-350 to load
 into trucks. 1400 J. Wright lets
 me know that ADEC has approved
 a 4" layer of scoria in place of
 topsoil. 1700 Talked to Myron City
 PW he said it was OK to rent City
 Truck for 2-3 days more. I informed
 him that we will be hauling scoria.
 1808 Cat D-8 finishes scraping hot spot
 surfaces that I point out. All
 scraped material is piled near EX-350
 Talked to Merwyn about having Ray
 run Cat 5-D in morning on the pile
 at the landfill then move to Cell A
 to place scoria on side slopes.

1900 End of Shift

[Handwritten signature]
 10/21/03

Location St. Paul SNP Landfill Date 10/22/03
 Project / Client SNP Landfill / NOAA
Blubber Dump / Landfill / PCS Stockpile / Cell A

0750 Tailgate Safety Mtg. Emphasize
 on decon procedure. Activities
 for today 1) Complete hauling PCS from
 Blubber Dump 2) Decon trucks at landfill
 PCS along with Cat 5-D 3) Haul &
 Place scoria on side slopes of Cell
 A with 3 trucks est. 900 cu (50 loads)
 Cat D-8 will be brushed near
 remaining PCS pile at Blubber Dump
 After remaining PCS is placed in
 truck the bucket will be deconed
 over bed of truck that contains
 PCS. 0820 I attend BSE
 safety mtg and inform them
 that K-R will be using NOAA
 Cat D-8 to level piles at landfill
 PCS stockpile then will be spreading
 scoria this afternoon. BSE
 will take a loader to the landfill
 if they have any trucks hauling
 from CAP sites after noon.
 0910 I take decon equipment
 to Blubber Dump. I talked
 to Julie Shaw about the

Location St Paul SNP Landfill Date 10/22/03Project / Client SNP Landfill / NOAA
Blubber Dump / Landfill PCS / Cell A

scoria issue, I asked if she is billing the City direct. She said that she is trying to get a contract in place. Need to talk to Julie in a couple of days to ^{see} what progress has been made. 0930 City Rental Truck (Freightliner) has a front flat tire. I go see Myron City RW. They don't have a tire to replace flat. K-R mechanic is called in. He replaces front tire with one back wheel so that the truck can be returned to PW. K-R will look for a spare since City does not have a readily available truck. Other rental is being used by BSE to haul scoria for backfill at Cascade CAP site. 1000 Work is complete at Blubber Dump. EX-350 bucket is downed. Cat D-8 is downed and moved to Cell A to begin scoria placement on side slopes. 1st load of scoria is dumped from Bell 2B. 1100 City Truck is returned to PW to have new tire placed on front.

Location St Paul SNP Landfill Date 10/22/03Project / Client SNP Landfill / NOAA
Blubber Dump / Landfill PCS / Cell A

1115 J. Wright directs us to scrap a small area on north west corner of blubber dump. ~~into~~ Cat D-8 will pile it up and we will have BSE dirty truck pick up pile with loader that is picking up plates. A bucket is available for loader. BSE operator & laborer continue to remove steel plates at Blubber Dump. 1200 Lunch Break USK17 Pickup Bruce Hopper at Airport with Brian Croft. Bruce has grey back pack 1300 Talked to Julie Sham BSE. After D-8 piles PCS scraping on northwest corner of Blubber Dump, BSE loader will load BSE truck and haul to landfill PCS stockpile. She will schedule this activity after they finish backfilling Cascade Bldg excavation. 1400 Talk to Jason BSE operator of NOAA 320 Excavator located on top of PCS stockpile.

Location St. Paul SNP Landfill Date 10/22/03

Project / Client SNP Landfill / NOAA
Cell A / Landfill PCS Stockpile

I set top of slope stakes for Ex 320 to cut back to in order to achieve 3:1 slope. Also, directed operator to pick large boulders off side slopes and place outside of berm. In addition the east slope needs to be smoothed out and cut back in the southeast corner.

1700 B Craft onsite - K.R. continues to haul scoria for Cell A - per Jim Wright, they are doing scoria on both sides of ~~the~~ on top of area associated w/ DOT property (still part of Cell A disposal area)

1900 EOD

BSC

Thursday

Location SNP Landfill Date 10-23-03

Project / Client SNP Landfill Closure

0800 safety mtg - based on phone conversation w/ Ken Valder last night, scoria ops are on hold until further notice - must speak w/ John R. regarding payment for City's scoria on pad & in 1500 yd stockpile
 - K.R. to remove MSW @ NW corner of Cell A & spread sand up to boulder pile to complete this area - Jim Wright in agreement

0900 visit City Hall; meet w/ John R. & Sherry (City Finance) - discussed need for payment of scoria & Tt oversight of stockpile, benching, & pad ops

John R. & Sherry agreed to pay immediately for 2,049 CY scoria, & 40 hrs of Tt oversight

$$\begin{aligned} 2,049 \text{ CY scoria} &= \$11,679^{30} (5.70/\text{CY}) \\ 40 \text{ hrs @ } \$70/\text{hr} &= \$2,800 \end{aligned}$$

- Sherry gave me a check for \$14,479.30 & I Express Mailed it to Tt office

1030 leave City office w/ check - to post office - also stopped @ K-R office & gave Merwyn approval to resume scoria hauling from Lake Hill

1115 K-R continues to haul scoria completed

Thursday
23-10-23-03

SNP Landfill Closure

MSW & sand ops @ NW corner of cell A - 4 load sand are stockpiled for when the boulder pile is moved (waiting on word from Jim Wright on what is to be done w/ them)

1200 LUNCH

1305 K-R continues to haul scoria from Lake Hill

note: MSW from NW corner of Cell A was hauled to SW corner of NOAA landfill area (Tract 42) this morning

note: BSE reps onsite @ PCS stockpile - moving tar-contaminated ^{drum} soil (from former Landfill Drum Removal ops) into roll-off box (plastic lined)

1500 K-R continues to haul scoria for Cell A sideslopes / surface pad

met w/ Jim Wright & Merwyn Johnson

- discussed placing boulders along ^{entire} Cell A perimeter except for gate access near current entrance - use onsite boulders 1st
- NOAA will pay for K-R equipment & personnel to haul additional boulders from K-R area @ Telegraph / quarry for placement along toe of Cell A (no charge by K-R for boulders)

- will finish hauling scoria for Cell A ops first
- discussed equip. for boulders placement - loader @
- spoke BC Telegraph, loader @ Cell A, excav @ Cell A

Thursday
10-23-03

SNP Landfill Closure

- also spoke w/ Jim Wright about:

- billing for BSE for landfill drum ops - he said to bill to Diesel Tank Farm to be consistent w/ past activities
- inquired about excavation depth @ Rubber Dump between old steel plates - he will check w/ Greg - should know freight
- will "tar" soil be put into PCS stockpile.
• he will check w/ Greg - should know freight

1655 K-R continues to haul scoria - working on NW corner of Cell A @ this time

1730 K-R also hauling boulders from in town for placement around perimeter of Cell A as a barrier to prevent ATV access, per Jim Wright - 1st few loads are free from Kelly-Lyon, but will be \$7/cy after that

1900 scoria hauling complete

EOD

note: Citycar rented City truck was returned to Pul place area this date @ approx. 1700 hrs.

BSC

Location _____ Date 10-24-03

Project / Client SNP Landfill Closure

0800 safety mtg

- placing boulders around cell at perimeter - use 988 loader to stockpile at top of slope - use Ex 350 to place - minimize effect on scoria surface by going straight down slope
- Alexei on site to demolish ~~compactor~~ ^{sc} of haulway
- watch heavy equip & people
- also using 992 @ quarry to load boulders into truck

0820 K-R begins placing boulders - beginning @ NE corner of cell A using pile of existing boulders that had been removed from sideslopes to meet 3:1 slope requirements

0900 Jim Wright on site to inspect boulders - stated that small rocks to be left where they are - ops OK

0905 K-R also hauling boulders from quarry using Bell 25B truck

note: Jim Wright stated that we cannot move tar soil near ^{city} burn box to PCS stockpile yet - they are waiting for PCB analyses??

1035 K-R continues to place boulders along perimeter of Cell A - starting from NE corner down along southern boundary

Location _____ Date 10-24-03

Project / Client SNP Landfill Closure

1140 K-R continues to place boulders @

Cell A - nearing SW corner of Cell A
note: BSE has been dealing w/ ^{tar} drums near burn box - lining cover box & placing drums into it for future disposal

1200 LUNCH

1300 K-R resumes placement of boulders

1340 K-R delivery 2 loads boulders for Cell A (1-773 load / 1-Bell load)

1345 collect CS sample:

SP07-CS-030-000 - ^{actual} tar material

collected from temporary ^{liner} stockpile adjacent

to burn box - per Jim Wright this morning, the sample was collected for

tar from
landfill
drum removal
ops

→ PCB analyses only

1515 K-R continues to place boulders - working along north border of Cell A

note: change of plans per Jim Wright - now, we will not place boulders along west side of Cell A (access road)

*Note: Jim Wright now also wants to add GRO/STEX, DRO, RRO, PATHS to list of analyses for the tar sample (SP07-CS-030-000) - was only PCBs - also wants quick turnaround for lab results - wait ship til Monday

Project / Client SNP Landfill Closure

1530 K-R also using D-5 dozer to spread sand & eventually scoria - using EX350 to move smaller rocks so sand & scoria can be spread (2 boulder piles @ N & NE portions of Cell E) - scattering small rocks behind large boulders placed earlier along north side of Cell A

1740 K-R spreading stockpiled sand & scoria (D-5) @ N end of cell A where boulders & smaller rock had been piled - had to move boulders first & will then finish placing along Cell A perimeter

- EX350 is cleaning up small rocks that were left over after boulders were dropped @ top of sidelopes around Cell A

1830 K-R placing large boulders along north boundary of Cell A - will have dress up the area & relocate small rocks tomorrow

1900 EOD

BSC

Project / Client SNP Landfill Closure

0800 safety mtg.

- moving rock
- dressing up areas disturbed by excavator
- run compactor over area we last time

0815 K-R continues moving rock - replacing small rock w/ larger rock to use it up

1020 K-R continues to relocate last of small rock pile - moving to northern edge

1045 K-R finished moving small rock & placing boulders

- servicing EX350 & 988
- begin dressing up site w/ D-5
- clean out grease tubes, equip., etc. from small NOAK trailer

1140 demobing 988 loader to Kamhista Quarry for other K-R project work

1200 LUNCH

1300 using D-5 to clean up side slopes of Cell A

1445 K-R dressing up surface of cell A - D-5

1605 K-R begins using compactor on Cell A to dress up / compact scoria surface

1750 EOD - Landfill ops complete

BSC

TUESDAY, 8-17-04

- REMOVING THE LAST OF PCS FROM THE DEWATERING AREA.
- 1625 PER DAVE, KRI BEGINS WORKING ON ESTABLISHING A HAUL ROAD FOR AREAS 1 AND 2. CELL 1 OF AREA 3B WILL BE BACKFILLED WITH SAND TO MATCH ADJACENT AREA 2 AND ADD STABILITY.
- 1730 SHOW DAVE DEWATERING / PUMPING / TREATING / SKIMMING ~~AT~~ SYSTEMS.
- 1745 DAVE AGREES TO START TOMORROW WITH TRANSPORTING PCS STOCKPILE AT LANDFILL TO LANDSPREAD AREA UNTIL DISCUSSION / AGREEMENT FOR APPROACH TO BUILDING JIM'S DESIGN FOR AREAS 1 AND 2.
- 1800 KRI TO DO DAILY REPORT.
- 1930 CHECK PUMPS / SKIMMER.
- 2000 DO X-SECTION OF AREA 1 & 2.
- 2030 SHOW X-SECTION TO DAVE AND WE DISCUSS.
- 2100 ARRIVE BACK @ HOUSE
- in D.D. 8-17-04

WEDNESDAY, 8-18-04

- 700 H&S MEETING AT LANDFILL.
- 715 WORK BEGINS ON REMOVING PCS FROM THE LANDFILL AND HAULING IT TO THE LANDSPREAD AREA. JASON IS ON THE EXCAVATOR AND PICKING OUT ROCKS / DEBRIS GREATER THAN 12" IN DIAMETER PER ~~WORK PLAN~~ ^{CAP PLAN}.
- 740 GAS UP GENERATOR AND START SKIMMER IN EXCAVATION AND SUBMERSIBLE PUMP IN DEWATERING AREA.
- 815 MEETING @ NOAA WITH DAVE & MERVA. DAVE WILL FIND OUT: (1) CAN WE BACKFILL THE CURRENT EXCAVATION W/O SAMPLE RESULTS YET? JOHN L. HAD EXPRESSED INTEREST IN EXCAVATING DEEPER ~~@~~ ^{ED} THAN -1' @ HOT SPOTS. (2) DO WE NEED TO SAMPLE THE SALT LAGOON DREDGE SPOILS FOR LEAD? CAP FOR LUKANIN BAY SAYS SO. (3) NOAA HAS AN UPDATED CAP FOR DIESEL SEED SITE DATED JUNE 14, 2004 THAT DAVE & I DO NOT HAVE.

WEDNESDAY, 8-18-04

- (4) DOES ^{ED} FILTER FABRIC STILL REQUIRED ON THE SLOPE OF AREA 1 & 2?
- 0920 END OF MEETING. ROBERT FROM NOAA WILL SURVEY:
(1) EXCAVATION LIMITS OF AREA 3B. (2) ELEVATIONS EVERY 25' ALONG BOTH THE EAST AND WEST SIDES OF AREA 2.
- 0930 CHECK SKIMMER/PUMP.
- 0950 HOUSE 55 TO GET OLD SAMPLES/JARS TO DISPOSE AT THE LANDFILL.
- 1000 PHONE CALLS: STAN AND INST, DAVE (NOAA), AND KEN VALDE (MESSAGE).
- 1030 DAVE WOULD LIKE A COST EST. FOR KRI TO CONSTRUCT A TRENCH BOX FOR USE IN INSTALLING THE GAC TRENCH.
- 1100 TALK W/KRI ABOUT COST ESTIMATE.
- 1130 CHECK SKIMMER/PUMP.
- 1150 TO LANDFILL TO DUMP SOIL

WEDNESDAY, 8-18-04

- FROM OLD SAMPLE JARS. DAVE SAID TO SAVE THE JARS TO PUT INTO 5-GALLON BUCKETS AT LAB INTENDED FOR LAB WASTE.
- 240 LUNCHEON
- 315 DROP CHRISTINE OFF AT KRI.
- 325 CHECK GAS IN GENERATORS.
- 340 FILL GAS CANS.
- 355 PUT AIR IN TRUCK TIRES.
- 420 LANDFILL. JASON HAS REMOVED ALL OF THE STOCKPILES AND IS NOW LOADING TRUCKS FROM THE NE CORNER OF THE UPPER DECK. HE HAS MADE A 3.5' CUT INTO THE UPPER DECK WHERE THE LIFT OF SOIL FROM LUKANIN BAY WAS PLACED.
- 450 LANDSPREAD AREA. RAY IS LEVELING THE NORTHERN-MOST AREA OF THE LANDSPREAD AREA, JUST NORTH OF THE ACCESS ROAD. TRUCKS HAVE BEEN DUMPING TO THE SOUTH OF THE ACCESS ROAD. RAY'S LIFT IS 18" AND MATCHES THE MARKED GRADE

WEDNESDAY, 8-18-04

STAKES AT THE SITE. RAY
TIED "CAUTION" TAPE TO THE
STAKES SO THE TRUCK DRIVERS
WOULD SEE THEM.

1515 REFUEL GENERATORS FOR THE
PUMP AND SKIMMER.

1530 WORK ON MOISTURE PROBLEM
WITH THE SKIMMER.

1535 GREG GERVAS AND DAVE
WINANDY VISIT. GREG AGREES
WITH APPROACH USING THE
SUBMERSIBLE PUMP DIRECTLY
TO THE GAL, ESSENTIALLY
BYPASSING THE O/W SEPARATOR
BECAUSE IT IS 5x FASTER
AND LITTLE TO NO SHEEN.

IN FACT, GREG SAYS THAT IF
THERE ISN'T ANY SHEEN, HE
SEES NO PROBLEM WITH PUMPING
DIRECTLY FROM THE Dewatering
POND INTO THE EXCAVATION.

DAVE AGREES.

1550 KRI'S DUMP TRUCK FROM THE
SALT CHANNEL OFFLOADS ON
THE STOCKPILE AREA AND

WEDNESDAY, 8-18-04

DAVE/GREG SEE LOOSE LIQUID.
WE TELL MERWIN THAT ALL
TRUCK LOADS WITH LOOSE
LIQUID SHALL BE DUMPED
INTO KRI'S DEWATERING POND.

620 AT KRI FIELD OFFICE TO DO
DAILY REPORT. CHRISTINE TAKES
TRUCK TO (1) FIND EXTENSION CORD,
(2) FILL 3rd GAS CAN, AND (3) DROP
OFF SPENT SAMPLE JARS AT
THE LAB.

815 FINISH DAILY REPORT.

1930 REFUEL GENERATORS.

845 THERE IS NO SUCTION ON THE
SKIMMER PUMP. FIND GRASS
STEMS IN THE LINE AND PUMP
INTAKE. WILL LOOK AT 2MORROW

900 END OF DAY. NOTE: DAVE TALKED
TO JOHN L. AND HE SAID THAT
AS LONG AS WE DIG TO -1.0 MBL
WE CAN TAKE CS SAMPLES AND
NO NEED TO TLC. JOHN IS
ONLY CONCERNED ABOUT SHEEN.

in Dal
8-18-04

THURSDAY, 8.19.04

0700
0715

HIS MEETING @ DIESEL SEEP SITE
 ON-SITE MEETING WITH DAVE &
 GREG. NOAA CLARIFIES THAT
 EVEN THOUGH WE MAY DIG
 TO -1.0 MLLW, IF THERE IS
 VISIBLE SHEEN EMANATING
 FROM THE SOIL TO BE
 SAMPLED, THEN WE NEED
 TO DIG DEEPER. THUS, THE
 LAST 2 CONFIRMATION SAMPLES
 I COLLECTED ON 8/17 IN THE
 SE CORNER OF 3B WERE HOT
 (VISIBLE SHEEN) AND SHOULD
 BE OVEREXCAVATED. DAVE
 SAYS WE ARE GOING TO GO
 AFTER HOT SPOTS IN AREA 3C AS
 VIEWED FROM AREA 3B SIDE-
 WALLS SO WE CAN OVER-
 EXCAVATE THIS AREA THEN
 AND RECOLLECT THE 2
 BOTTOM CONFIRMATION SAMPLES
 RE-FUEL AND START PUMP IN
 DEWATERING AREA.
 DISASSEMBLE SKIMMER PUMP
 TO TAKE BACK TO HOUSE 55

SP34-
 CS.
 0154
 016 ←
 40

0745

0800

THURSDAY, 8.19.04

AND DISASSEMBLE PUMP TO CLEAN
 OUT DISCHARGE BLOCKAGE LINE.
 0715 DAVE SAYS JIM'S REVISED GAK
 TRENCH IS 2' WIDE X 6' DEEP
 @ -1 TO +5 EL. THUS, MERWYN
 WILL NEED TO BUILD THE TRENCH
 BOX 8' HIGH.
 0900 HOUSE 55.
 0920 DAVE CALLS TO COME OVER
 TO CONFIRM SAMPLE LOCATIONS
 ON ROBERT'S DWG.
 0930 HOUSE 55. GO NOAA HQ. DAVE/GREG
 GIVE ME A COPY OF MOD 19
 - DEMOLISH GARAGE STRUCTURE
 - SOIL REMOVAL FROM CASCADE BLDG
 - RELOCATE 15,000 CY OF PCS FROM
 NOAA'S TRACT 42 TO THE
 LANDSPREAD AREA
 - OPTION 19 = DIESEL SEEP SITE
 COMBINING INTO SINGLE SCOPE
 - OPTION 23 = Hydrogeologic Final
 (Heather Vick)
 010 ROBERT WORKING ON DIESEL SEEP
 SITE DWG.
 030 TALK W/ MERWYN ABOUT TRENCH BOX
 DIMENSIONS.

OPTION
 21

THURSDAY, 8.19.04

- 1200 LUNCH
- 1300 TAKE APART SKIMMER PUMP
- 1350 REMOVE LODGED PEBBLE AND
LOTS OF PIECES OF WEEDS.
- 1430 WORK ON MOISTURE KNOCKOUT
CANISTER AND OIL CANISTER
WHICH IS NOW FILLED WITH
WATER AND EMULSIFIED
10 WT OIL. I JUST PUT
NEW 10 WT. OIL IN ON TUESDAY.
- 1515 CALL UNITECH AND ASK DAVE
ABOUT GETTING A 2" CAM LOCK
FITTING WITH THREADED MALE
- 1600 CHRISTINE RETURNS.
- 1615 KRI TO DO DAILY REPORTS AND DWG.
- 1745 MATT FROM KRI COMPLETES
DWG FOR TRENCH BOX. MERWYN'S
INPUT STILL REQUIRED FOR
BUCKET-WIDTH VS BOX WIDTH.
- 1800 ON-SITE TO REFUEL GENERATOR.
- 1810 DAVE & GREG SHOW UP. 1) WE CAN
EXCAVATE 10' OF AREA 3C TOMORROW.
DO NOT NEED TO DISTINGUISH CLEAN
OVERBURDEN - ASSUME IT IS PCS.
2) KRI NEEDS TO KNOW THE CITY WANT
TO SALVAGE STEEL BEAMS IN
BUILDING TO BE DEMOLISHED

THURSDAY, 8.19.04

- UNDER THE NEW MODIFICATION.
I WILL TELL KRI TOMORROW SO
THEY CAN ESTIMATE THE
ADDITIONAL LOE REQUIRED TO
DE-CONSTRUCT THE STEEL
BEAMS/COLUMNS/GIRDERS/ETC.
- 1930 GREG SAYS HE HAS NOT
RECEIVED ANY DAILY REPORTS.
I WILL TELL KEN THAT GREG
PLANS TO "CHEW HIM OUT."
- 845 END OF DAY.

Eric Welton
8.19.04

FRIDAY, 8-20-04

0700 HES MEETING AT DIESEL SECT
TODAY, WE WILL EXCAVATE
10' EAST INTO AREA 3C.
DRY SOIL CAN GO DIRECTLY
TO THE LANDSPREAD AREA.
WET SOIL NEEDS TO BE
DEWATERED FIRST.

0730 CALL KEN & LEAVE A MESSAGE.
0740 CALL ELASTEC. TALK TO CHARLIE
MALLOW. HE HAS NOT HEARD
OF MOISTURE PROBLEMS WITH THE
MINI-PUMP, BUT SAYS THAT WATER
WILL SURELY CORRODE THE AIR
MOTOR, WHICH COSTS \$1500
\$680 ALONE. IT'S THE SAME
TYPE OF MOTOR THAT IS
USED IN DENTIST'S OFFICES.
THE MOISTURE KNOCKOUT POT
AND OILER UNIT COST \$150
(TOTAL) BUT ELASTEC WILL
REPLACE IF STILL UNDER
WARRANTY (IT IS!). CHARLIE
WILL CALL BACK AFTER DOING
SOME RESEARCH.

0815 CHARLIE CALLS BACK. HE WILL SEND

FRIDAY, 8-20-04

OUT A HEAVY DUTY MOISTURE
KNOCKOUT POT PLUS A NEW MANIFOLD
W/MOISTURE KNOCKOUT POT & OILER UNIT
FOR THE MINI PUMP. HE WILL INVOICE
FOR THE HEAVY DUTY MOISTURE UNIT,
ONLY.

0900 ON-SITE. KRI HAS BENCHMARKED DOWN TO
2.5' ABOVE G.W. IN THE SW CORNER OF
AREA 3C AND IS MOVING NORTH IN
THE 10' SWATH THAT NOAA WANTS.
ONCE THE BENCH IS COMPLETE,
ADD'L EXCAVATION WILL OCCUR BELOW
-1 MLLW IN THE SW^{ED} SE CORNER
OF AREA 3B AND 2 CONFIRMATION
SAMPLES WILL BE COLLECTED. DRY
SOIL IS BEING DIRECTLY HAULED TO
THE LANDSPREAD AREA. KRI IS
ALSO HAULING SAND FROM THE
SALT LAGOON CHANNEL TO THE
LUKWIN BAY SITE AS CLEAN
BACKFILL.

0930 LUKWIN BAY. RAY IS ON LOADER
FILLING THE EXCAVATION AND
MAKING PASSES TO COMPACT.
1000 LANDFILL. DUMP OLD SAMPLES FROM

FRIDAY, 8-20-04

- ZIPLOC BAGS INTO THE LINE PCS AREA. TAKE PICTURES TO DOCUMENT REMOVAL OF PCS STOCKPILE TO LANDSPREAD AREA.
- 1025 LANDSPREAD AREA. NORTH OF ACCESS ROAD IS LEVELLED AND TRUCKS CONTINUE TO STOCKPILE SOUTH OF THE ACCESS ROAD.
- 1045 VISIT BLUBBER DUMP WHERE DAVE SAID THERE WAS DEBRIS TO TAKE CARE OF. THIS DEBRIS IS CABLE (1" THICK), SEVERAL PIECES OF METAL AND ONE LARGE PIECE OF METAL. THIS DEBRIS IS ALL NEW FROM WHEN WE COMPLETE WORK AT THE BLUBBER DUMP ON 7/1/04.
- 1100 ON-SITE AT BLD DIESEL SEEP. THERE IS A 10' SWATH ALONG THE WEST SIDE OF AREA 3C.
- 1150 DAVE TAKES US OUT TO BLUBBER DUMP. HE WANTS A SUMP TO BE FILLED AND THE ENTIRE DUMP TO BE DRESSED UP ON

FRIDAY, 8-20-04

- A GRADUAL UNIFORM SLOPE. DAVE KNOWS THE DEBRIS IS NEW.
- 1215 LUNCH
- 1300 ON-SITE. EXCAVATION BEGINS ON SE CORNER OF AREA 3B AND THEN BEGINS DOWN TO -1 MLLW IN THE SOUTH SIDE OF THE AREA 3C 10' SWATH MOVING NORTH
- 1330 RAY HAS FINISHED AT LUKANIN BAY IS NOW SETTING UP FOR TRUCKS TO DELIVER CLEAN BACKFILL (SALT LAKE SAND) TO THE ICEHOUSE LAKE EXCAVATION.
- 1400 DAVE OBSERVES THAT SHEENING IS OCCURRING ON SAND FROM -1 MLLW
- 1455 GREG & DAVE AGREE THAT WE'VE GONE AS FAR AS POSSIBLE IN DEPTH BELOW -1 MLLW BY ABOUT 1.5'-2.0'
- 1535 SAMPLE TIME FOR ~~ES-20~~ SP34-CS-017. OBS IN SE CORNER.
- 1600 SAMPLE TIME FOR SP34-SS-015.000 FROM DEWATERING AREA.
- 1655 PER GREG/DAVE, CHRISTINE ~~SAID~~
- 1730 COLLECTS TLC-ONLY SAMPLES (2)

FRIDAY, 8-20-04

1815 BEGIN DAILY REPORT.
1930 FINISH DAILY REPORT.
2000 DROP OFF REPORT AND
DRAFT TRUNK BOX
DIP CUT SHEET DRAWING
TO DAVE. HE APPROVES.
2015 END OF DAY.

~~END~~

~~8-20-04~~

SATURDAY, 8-21-04

700 H&S MEETING @ DIESEL SEEP SITE.
715 PUT GAS IN GENERATOR.
800 NOAA MEMOS TO HQ.
835 COLLECT 4 SAMPLES FROM DEWATERING
WATER FOR PAINT FILTER TESTS.
845 KRI ASKED NOAA IF THEY COULD USE
THEIR DS IN THE SPACE DEWATER-
ING AREA. NOAA SAYS, "HOW MUCH
WOULD KRI CHARGE US FOR 4 DS?"
850 TALK W/ KRI. NEED TO KNOW YEAR
OF DS. NOAA SAYS 1997.
855 PICK UP LASER SURVEY EQUIP.
NEED TRIPOD.
830 JASON IS EXCAVATING AREA 3C.
CHRISTINE IS OVERSIGHT. SHE SAYS
ALL 4 PAINT FILTER TESTS
PASSED.
900 MERVYN BRINGS TRIPOD.
915 DAVE & GREG WANT TO PURSUE A
HOT SPOT FURTHER EAST THAN
EXISTING EXCAVATION. DECISION TO
REMOVE DEWATERED SOIL AND THEN
START ON HOT SPOT SO ALL OF IT
CAN QUICKLY GO INTO DEWATER CELL.
915 KRI ACQUIRING 2ND TRUCK TO SPEED

SATURDAY, 8-21-04

UP REMOVAL FROM DEWATERING CELL.

0945 SHOW CHRISTINE HOW TO SET UP LASER EQUIPMENT.

0955 SAMPLE TIME FOR CHARACTERIZATION OF THE SALT CHANNEL SAND STOCKPILED IN NOAA'S CLEAN BACKFILL STOCKPILE AREA, PER NOAA'S REQUEST FOR PBT AND LEAD ANALYSIS OF THIS MATERIAL.

0955 ~~SP33-CH-001~~ SPSL-CH-001-015

1010 DRIVE/VISIT LUKANIN BAY (DONE), ICEHOUSE LAKE (DONE), LANDFILL (MILLIE IS SEPARATING ROCK AND DEBRIS AND EXCAVATING A 3' LIFT FROM THE TOP OF THE PCS STOCKPILE AND LANDSPREAD AREA (NUK AND PETER ARE DUMPING SOIL FROM DEWATERING AREA).

1050 CHRISTINE PREPARES TO SAMPLE.

1100 CHRISTINE RIDES OUT TO SALT LAGOON WITH ALEXAY TO COLLECT 2 ADD'L CH

1115 ED

SATURDAY, 8-21-04

SAMPLES, SPSL-CH-002-015 AND SPSL-CH-003-015 (@1125).

30 TALK WITH GREG. HE WOULD LIKE TO DO A BENCH SCALE TEST FOR THE TREATMENT METHOD USING COLUMNS. I THOUGHT THIS HAD ALREADY BEEN DONE BEFORE NOAA PREPARED THE CAP/SOW. WE'LL WORK ON IT THIS AFTERNOON ALONG WITH DISCUSSING HORIZONTAL/VERTICAL CONTROL FOR JIM'S CROSS-SECTION.

300 LUNCH

300 CHRISTINE LABELING SAMPLES & PACKING SAMPLES^{ED} JARS (EMPTY) INTO LAB WASTE 5-GALLON BUCKETS.

330 GET ICE & SMALL COOLER FOR LAB.

400 VRI TO DO DAILY REPORT

545 MEETING @ SITE W/ Dave & Greg^{ED} Greg.
→ Plan A: (1) muck out hot spot, (2) place boom, (3) land bridge where the eastern treatment trench will be (4) continue east for rest of Area 3C, if necessary. (5) do Areas 1 & 2, (6) treatment trenches.
→ Plan B: to use if USACE does not

SATURDAY, 8-21-04
 extend deadline for
 channel work: (1) muck out
 hot spot, (2) place boom, (3) do
 Areas 1a 2, (4) land bridge, (5) do
 Area 3C, (6) treatment trenches.

1700 Gray and I look for materials
 to do a bench scale test
 for the GAC treatment trench
 using a column.

1730 Grocery store

1800

Meet Dave King on-site.
 It is obvious that the degraded
 diesel is trapped in the sediment
 @ depth. Sheen only appears when
 the bottom sediment is agitated.

Dave King agree that the best
 approach would have been to fix
 the clean edge of the upper-
 gradient and dewater/excavate/
 backfill in strips moving down-
 gradient, as TERRA Tech
 INITIALLY SUGGESTED - BUT

1830

DENATERING WAS NOT AN OPTION.
 PER NOAA, CHRISTINE COLLECTS
 9 "TLC-ONLY" SAMPLES FROM
 EDGE OF EXCAVATION. →

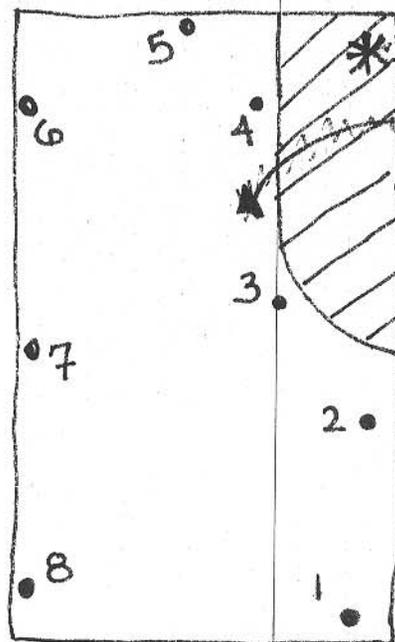
1900

END OF DAY. In Wilkes 8-21-

SP35-TC-001-020

to

SP35-TC-009-020



Approximate
 Location of
 Sample #9
 Collected From
 Bucket of
 Excavator

*all samples collected from below
 the water level*

SATURDAY, 9-4-04

1745 KRI HAS BACKFILLED APPROXIMATELY 25' WITH SAND IN AREA 3A AND PARTIAL AREA 2.

1800 KRI WILL HAUL DEWATERED SOIL FROM TODAY'S (THIS A.M.) EXCAVATION TO THE LANDSPREAD AREA TOMORROW SO I COLLECTED 2 TEST SAMPLES FOR THE PAINT FILTER TEST @ 1600 TODAY AND THEY BOTH PASSED. THERE WAS APPROXIMATELY 200 CY OF SOIL EXCAVATED TODAY, THUS THE 2 SAMPLES.

1830 END OF DAY.

Eric Dell
9-4-04

MONDAY, 9-6-04

0800 HES TAILGATE MEETING @ DIESEL SEPT SITE. HEAVY RAIN!

0820 GET SURVEY EQUIP FROM KRI OFFICE.

0840 SET UP SURVEY EQUIPMENT.

0850 KRI IS CONTINUING TO BACKFILL NORTHWARD IN AREAS 1, 2, & 3A.

0900 TALK W/ JIM ABOUT CS SAMPLES. WE WILL COLLECT THEM PERIODICALLY TODAY FROM BELOW THE WATER @ -1.0' MLLW AS WE PROCEED WITH BACKFILL NORTHWARD.

0930 HOME 55 FOR PAPERWORK.

1030 ON SITE. SHEEN IS SHOWING UP ON BACKFILL ROCK PLACED AT THE WATER'S EDGE DUE TO THE FOAM IN THE WATER.

1045 PULL UP SOME SEDIMENT FROM AREA 2 PRIOR TO BACKFILLING TO COLLECT A CONFIRMATION SAMPLE. THE AREA IS STILL AROUND -1.0' MLLW BUT STILL

MONDAY, 9-6-04

LOOKS/SMELLS HOT.

1100 CALL SIM WHO COMES OUT TO SITE. ASK SIM IF IT IS OK TO GO AFTER SOME MORE OF THIS "HOT" MATERIAL. SIM SAYS "OK".

1130 DECIDE TO NOT GO AFTER ANY MORE "HOT" STUFF. MIKE SCRAPED THE BOTTOM 6"-1' OF AREAS 1 & 2 @ APPROX. 120' SOUTH OF NORTH EDGE TO 130' " " " " " " DOWN TO AND DEEPER THAN -1.0' MCLW AND WE WERE STILL SEEING SHEEN. ~~But~~ IT SEEMS TO BE ENDLESS. THE SPLATTER OF THE "HOT" STUFF BEING REMOVED OVER THE CLEAN BACKFILL JUST PLACED AND COMPACTED ~~AND IN TO THE BACK OF THE DUMP TRUCK~~ IT JUST SEEMED TO BE WORKING AGAINST OURSELVES; ESSENTIALLY, CONTAMINATING CLEAN MAT'L TO GO AFTER "HOT" MAT'L THAT WE'VE ALREADY TRIED OUR BEST TO

MONDAY, 9-6-04

REMOVE.

1200 LUNCH.

1230 DROP OFF LOE SPREADSHEET FOR SIM SHOWING LOE TO MOVE PCS FROM THE LANDFILL TO THE LANDSPREAD AREA. ALSO TALK WITH SIM AND NIR ABOUT DECISION TO STOP GOING AFTER "HOT" MATERIAL FROM AREAS 1 + 2 THAT WE HAVE ALREADY REMOVED FROM. SIM AND NIR DISCUSSED OVER ~~AND~~ LUNCH AND ARE IN TOTAL AGREEMENT. THEY TELL ME THAT JOHN LINDSAY TOLD THEM ~~AS~~ TO BEFORE HE LEFT ISLAND THAT HE KNOWS THERE WILL BE CONTAMINATION LEFT OVER AND HAS ALREADY ACCEPTED THE FACT THAT SOMETHING MORE MAY NEED TO BE DONE LATER.

1300 KRI CONTINUES TO BACKFILL NORTHWARD.

1330 NIR ARRIVES TO STAKE OUT

MONDAY, 9-6-04

POINT 15 SO MAKE CAN ALIGN THE "TOP SLOPE SHOULDER" FOR THIS SECTION.

1400 VISIT LANDFILL. GUY IS BUSY PICKING OUT 12" + ROCKS FROM THE LANDFILL PCS STOCKPILE AREA AND STOCKPILING FOR WHEN WE START HAULING AGAIN TO THE LANDSPREAD AREA.

1430 ON SITE.

1440 SAMPLE TIME FOR SP34-CS-020-080 FROM AREA 2. THIS SAMPLE CAME FROM 1.0' MW @ 80' SOUTH OF THE NORTHERN EDGE.

1450 SAMPLE TIME FOR SP34-CS-021-080 FROM AREA 1. THIS SAMPLE CAME FROM 1.0' MW @ 80' SOUTH OF THE NORTHERN EDGE.

1500 KRI CONTINUES BACKFILLING AREAS 1 & 2.

1600 KRI IS FINISHING UP BACKFILLING IN PREPARATION OF PLACING FILTER FABRIC. JIM, NIK, & CHRISTINE ON SITE.

MONDAY, 9-6-04

1615 THE 3rd SECTION IS EXACTLY 100' LONG. WE PLAN TO PLACE LINER IN 2 SECTIONS OF 50' EACH.

1630 JIM IS IN CHEST WINDERS AT THE OTHER SIDE OF THE CHANNEL AND NIK IS FILMING.

1640 DIFFICULTY PLACING FILTER FABRIC. NEED ANOTHER ROPE ATTACHED TO THE MIDDLE OF THE FABRIC TO PULL OUT KINKS IN THE MIDDLE. WILL IMPLEMENT FOR NEXT PIECE. FOR NOW, THE EXCAVATOR THUMB PULLS ON IT A LITTLE. WHAT ACTUALLY WORKS IS JIM'S IDEA TO PLACE SAND AT THE TOP EDGE AND AS IT FLOWS DOWN IT UNKINKS THE FABRIC.

1700 FILTER FABRIC IS IN PLACE AND MIKE PLACES ROCK TO ANCHOR AND THEN ON THE SLOPE.

1830 END OF DAY.

Jim DePiet 9-6-04

TUESDAY, 9.7.04

- 0900 H'S MEETING @ DIESEL SEEP SITE.
0915 DISCUSS WITH JIM IDEA OF MAKING THE NEXT 2 SECTIONS, WHICH ARE VERY SHORT, INTO ONE LONGER SECTION TO SAVE TIME AND ~~MAKED~~ CREATE MORE LAND EMBANKMENT. JIM AGREES AS LONG AS ~~LONG AS~~ ^{IF} WE EXCAVATE TO THE EXHIT UNTIL WE STOP SEEING SHEEN.
0930 KRI CONTINUES PLACING ROCK ONTO FILTER FABRIC PLACED YESTERDAY. ANGULAR ROCK BELOW WATER AND ROUND ROCK ABOVE WATER.
0930 PREP NEXT 50' SECTION OF ~~LINER~~ ^{LINER} FILTER FABRIC WITH 3 HOLES (2 ON N & S EDGES AND 1 IN THE MIDDLE) TO PULL THE FILTER FABRIC ACROSS THE WATER WITH CORDS.
1000 JIM AND NIR ARRIVE TO HELP PLACE THIS 50' SECTION OF FILTER FABRIC. JIM IN CHEST WADERS ON OTHER SIDE OF CHANNEL AND NIR FILMING.
1040 LINER IS ANCHORED ON TOP

TUESDAY, 9.7.04

- EDGE OF SHOULDER. OPERATION WAS VERY SMOOTH TODAY.
1045 KRI BEGINS PLACING ROCK ON SIDESLOPES.
1050 JIM, NIR, AND ERIC RE-ESTABLISH ORANGE PERIMETER FENCING ON THE N, S, AND E SIDES OF THE DIESEL SEEP SITE.
1130 JIM AND NIR LEAVE SITE.
1200 LUNCH
1230 MERWYN TELLS ME THAT ANTHONY FROM TDX HAD HARSH WORDS FOR MERWYN AND KRI RE: THE ICEHOUSE LAKE SITE (NO PERMISSION TO BE ON SITE TO BACKFILL HOLE AND NEED TO REMOVE KRI'S PILE OF TRASH). KRI IS NOAA'S CONTRACTOR SO NOAA NEEDS TO GET PERMISSION, IF ANY. ALSO, THAT PILE OF TRASH WAS @ THE SITE PRIOR TO ANY WORK DONE THERE AND IS NOT KRI'S. WILL RELAY TO NOAA.
1240 KRI CONTINUES PLACING ROCK ON SIDESLOPE.

TUESDAY, 9-7-04

- 1400 KRI HAS COMPLETED PLACING
ROCK ON THE LAST SECTION
OF FILTER FABRIC.
- ~~1415 RELAY BY PHONE & RADIO TO KRI
TO 2D~~
- 1420 INSTALL SEGMENT OF BOOM ACROSS
THE CHANNEL TO PARTITION THE
NEWEST SECTION OF COMPLETED
SHORELINE. NOTE THAT THERE
WERE 2 CLEAN (NEW) SEGMENTS
OF BOOM + 1 USED SEGMENT
(FROM FORMER SETUP PRIOR TO
REMOVAL ACTION) UTILIZED
FOR THIS PER SIM WRIGHT.
- 1430 NIR IS ON-SITE AND CONFIRMS
SIM'S DIRECTION TO USE THE
USED SECTION OF BOOM. KRI
HAD BALKED AT ~~NOT~~ INSTALLING
IT W/O NOAA'S CONSENT. I WAS AT
KRI'S OFFICE @ 1415 WHEN THEY
HEARD FROM ME TO INSTALL IT
THAT WAY. I DROVE TO SITE
AND INSTALLED IT AS SIM HAD
SAID AND THEN NIR CONFIRMED.

TUESDAY, 9-7-04

- 1440 RELAY TDX'S WORDS WITH
MERWYN TO NIR & JIM @
NOAA. THEY CALL JOHN L.
AND I EXPLAIN TO HIM.
- 1445 KRI BEGINS EXCAVATION OF
AREA 1 TO THE SOUTH OF
THE NEWLY COMPLETED
100' STRETCH OF RESTORED
SHORELINE.
- 1530 KRI TO REVIEW CHRISTINE'S
DAILY REPORT.
- 1600 REINDEER @ KRI SHOP!
- 1615 BACK @ SITE. COLLECT A
CONFIRMATION SAMPLE FROM
AREA 1 @ THE ~~END~~ JUST NORTH
OF THE LAST SEGMENT.
- 1620 SP34-CS-022-035 SAMPLE TIME
- 1645 DISCUSS TOP SOIL AND GLORIA W/
SIM.
- 1715 GO TO TELEGRAPH HILL TO SEE
TOPSOIL AVAILABLE AND POLOVINA
TO SEE GLORIA AVAILABLE.
- 1830 END OF DAY.

Jim Wright
9-7-04

WEDNESDAY 9-8-04

0800 HES MING @ DIESEL SUMP SITE.

0815 MIKE HEADS DOWN TO CHANNEL
BLOCK TO CLOSE GATES.

0830 JIM IS IN WADERS TO RE-ESTABLISH
BOOMS THAT ACCIDENTALLY WERE
UNMOORED YESTERDAY WHILE
MIKE WAS EXCAVATING AREA 1.

0840 AS MENTIONED YESTERDAY, STAIN
IS EMANATING FROM THE BOOMS
EVERYTIME THE TIDE CHANGES.

JIM SAYS LET'S ADD A 3RD
BOOM - THE BRAND NEW YELLOW
CONTAINMENT BOOM. JIM AND
I FIND 100' IN CONNEX BOX.
THE NEW 200' THAT WAS
ORDERED ~~LAST~~ SEVERAL WEEKS
AGO STILL NEEDS TO BE FOUND

0900 MIKE HAS BEEN EXCAVATING
THE LAST BIT OF AREA 1 ON
THE FURTHEST SOUTH END. AS
HE FINISHES, CHRISTINE COLLECTS
A CONFIRMATION SAMPLE
FROM -1.0' ALLW.

→ SP34-LS-023-035

WEDNESDAY 9-8-04

0915 KRI TRIES TO START NOAA'S
PRESSURE WASHER, BUT IT
DIDN'T WORK. SHOW JIM THAT
THE PUMP MANIFOLD IS
CRACKED AND WILL SOON
GIVE OUT ENTIRELY. HE PLANS
TO ORDER A NEW ONE.

0925 KRI LOADS THE DIRTY DUMP
TRUCK WITH A CLEAN LOAD
OF SAND THAT IS THEN
DUMPED IN THE DEWATERING
AREA. THIS PROCEDURE IS TO
DECON THE BED OF THE
TRUCK W/O THE PRESSURE
WASHER WORKING. JIM AGREES
AND APPROVES OF PROCEDURE.

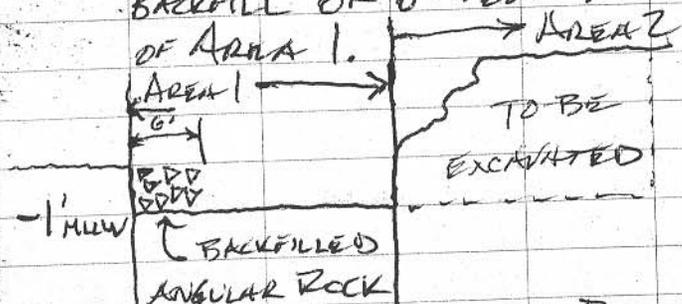
0940 KRI BEGINS BACKFILLING THE
FURTHEST WEST 6' AREA OF
AREA 1 WITH ANGULAR ROCK.

0950 HOUSE 55. PALE SAMPLES. BOOR
HOTEL IN ANCHORAGE VIA TRAVIZON.

1030 SEND SAMPLES TO LAB AND
RETURN ORIGINAL MANIFOLD FOR
SKINNER TO ELASTEK. "

WEDNESDAY, 9-8-04

1040 KRI HAS BEGUN EXCAVATION OF AREA 2 AFTER COMPLETING BACKFILL OF 6' WEST SECTION OF AREA 1.



1050 VISIT JULIE @ BSE. BIFF SAID WE HAVE TO RETURN THE TRUCK BY 2 P.M. SO NOW WE'RE ASKING BSE IF THEY HAVE A RENTAL TRUCK AVAILABLE. THEY DON'T BUT JULIE WILL LOOK INTO IT.

1100 CHECK ACE AND NAC AND NONE OF THEM HAVE THE NEW YELLOW CONTAINMENT BOOM FOR EXTRA TECH. HAS NOT ARRIVED YET.

1115 DROP OFF CHRISTINE @ KRI

1120 JIM SAYS WE CAN USE NOAA'S SERVICE TRUCK IF NEEDED.

1125 ON SITE. KRI CONTINUES EXCAVATION

WEDNESDAY, 9-8-04

OF AREA 2.

1200 PICK UP CHRISTINE FOR LUNCH.

1210 CALL ALIX GLOBESON WHO WILL BE ARRIVING ON ISLAND SUNDAY.

1240 DROP NOAA SNIPPERS OFF @ GATED MACHINE SHOP SO JIM AND N.R. CAN CUT NEXT STRIP OF FILTER FABRIC.

1300 DUMP EXTRA VOLUME OF SOIL SAMPLES @ RES-LINED KS STOCKPILE @ LANDFILL.

1315 GET GAS FOR RENTAL TRUCK AND GAS CANS.

1335 DROP OFF CHRISTINE @ KRI.

1340 UNLOAD COOLERS AND GEAR @ HOUSE 55.

1350 UNLOAD SURVEY GEAR @ DIESEL SEEP SITE.

1400 DROP OFF RENTAL TRUCK @ BIFF'S HOUSE ON TIME.

1405 WALK TO SITE.

1415 JIM GIVES ME NOAA'S SERVICE TRUCK.

1425 UNLOAD CUT PIECE OF

WEDNESDAY, 9-8-04

FILTER FABRIC FROM NOAA'S TRUCK ON SOUTH SIDE OF SITE.

1435 SIM WANTS TO EXPERIMENT W/ ABSORBANT POWER OF DOG FOOD ON SHEEN. COAST GUARD RECOMMENDED DOG FOOD FOR AN ABSORBANT.

1445 GATHER WATER W/ SHEEN IN BUCKET AND THROW IN HANDFUL OF DOG FOOD.

1500 SHEEN SEEMS TO BE CAPTURED BY DOG FOOD.

1505 KRI IS EXCAVATING WEST OF THE DEWATERING AREA. WE EXCAVATE AS FAR EAST AS SIM ~~SAYS~~ SAYS TO GO LOOKING @ SOIL AS IT COMES OUT IN EACH BULKET. TEN FEET NORTH OF THE G.W. WELL ON THE WEST SIDE OF THE DEWATERING AREA
| COLLECT A SIDEWALL SAMPLE
→ SP34.CS.024.060, WHICH IS AT JUST BELOW G.W. LEVEL.

WEDNESDAY, 9-8-04

1530 TO KRI OFFICE TO CHECK DAILY REPORT.

1630 ON SITE. KRI HAS COMPLETED EXCAVATION OF THE SECTION AND BEGINS TO BACKFILL WITH SAND, ANGULAR ROCK, AND A CONCRETE SLAB.

1645 KRI HAS A MECHANIC ON-SITE TRYING TO FIX NOAA'S PRESSURE WASHER. THE VALVE FOR THE SOAP INTAKE HAS BEEN OPEN, CUTTING THE PRESSURE IN HALF. DALE CLOSES THE SOAP VALVE AND PRESSURE IS RESTORED.

1700 TOTAL VOLUME IN THE DEWATERING AREA = $60' \times 50' \times 6'$
= $18,000 \text{ ft}^3$ = **666 CY** (CONSERVATIVE)
SO 6 PAINT FILTER TEST SAMPLES ARE COLLECTED. 4 PASS AND 2 DID NOT THAT WERE COLLECTED FROM SAT'D SOIL AT THE BOTTOM OF THE PILE. KRI WILL HAUL THE

WEDNESDAY, 9-8-04

DEWATERED SOIL TO THE
LANDSPREAD AREA TOMORROW
MORNING STARTING @ 7 a.m.

1430 END OF DAY.

E: D.R.
9-8-04

THURSDAY, 9-9-04

0800 HHS MEETING @ DIESEL SEEP
SITE.

0820 HOUSE 55 TO DOWNLOAD PHOTOS
FOR NOAA ONTO THEIR FLASH
CARD.

0830 CALL LEN RE: WORK NEXT WEEK
(DIESEL SEEP SITE & LANDFILL).

0900 KRI IS FINISHED HAULING DE-
WATERED SOIL TO THE LANDSPREAD
AREA. THIS MORNING, KRI STARTED
@ 7 a.m. HAULING TO LANDSPREAD AREA.

0930 SET UP LASER FOR SHOULDER
HEIGHT OF EMBANKMENT.

1000 KRI CONTINUES PLACING ANGULAR
ROCK/SAND MIXTURE BACKFILL.
THEY STARTED THIS A.M. @ 0800.

1015 PICK UP GRADUATED SURVEY ROD
FROM KRI'S RUCK, ^{WHO IS} _{IS} CONSTRUCTING
DUPLEXES FOR MEDICAL PERSONNEL.

1045 ACQUIRE KRI'S 3:1 SLOPE
GUIDE FRAMEWORK FOR NEXT
WEEK'S WORK ON LANDFILL.

1100 MOVE SKIMMER TO DEWATERING
AREA WHERE SHEEN IS PILESOFT.

THURSDAY, 9-9-04

1200 LUNCH. CLEAN HOUSE.

1245 CHRISTINE TO KRI.

1300 TALK W/MIKE. WE WILL NEED APPROX. 5 MORE TRUCK LOADS [773] OF ANGULAR ROCK TO COMPLETE SHORELINE RESTORATION. 150 CY ANGULAR ROCK.

1340 MERVIN IN MEETING SO CAN'T GET ROCK YET.

1400 KRI TO GET CHRISTINE; CHECK DAILY REPORT (ALREADY SENT), AND CHECK EMAIL.

1430 NOTE: 2ND TRIAL W/DOG FOOD YIELD: NEGATIVE RESULTS. THE 2ND TRIAL DID NOT USE A "SWIRLING OF THE WATER" AFFECT. THE SHEEN IS BROKEN INTO SMALLER PIECES, BUT IS STILL PRESENT.

1450 MEASURE AND CUT FILTER FABRIC FOR PLACING ON NEXT TO LAST SECTION OF SLOPE.

1500 JIM IS IN WADERS AND ACROSS CHANNEL TO PULL FILTER FABRIC INTO PLACE.

THURSDAY, 9-9-04

1520 MIKE BEGINS PLACING ROCKS TO ANCHOR THE FILTER FABRIC.

1540 MIKE BEGINS PLACING ROCK ON SIDESLOPES.

1550 CHRISTINE LEAVES TO PICK UP BRIAN.

1650 BRIAN ON SITE.

1700 MEETING WITH JIM, BRIAN, & CHRISTINE RE: EXCAVATION OF AREA 3C. SUGGEST PATHOLING @ EAST OF AREA 3C TO DETERMINE TRUE BOUNDARY OF EXCAVATION. ALSO DISCUSS DEWATERING THE EXCAVATION AND EXCAVATING/BACKFILLING IN STRIPS TO ALLEVIATE THE PROBLEMS WE'VE HAD WITH THE CURRENT OPEN EXC. TECHNIQUE WE'VE USED W/ AREA 3B. JIM IS OPEN TO ALL SUGGESTIONS AND WILL DISCUSS W/GREG AND JOHN TOMORROW MORNING.

1710 WORK HAS HALTED BECAUSE A

THURSDAY, 9.9.04

TOOTH HAS COME OFF ON THE
LOADER BUCKET. MIKE HAS
BEEN WAITING TO RECEIVE
MORE LOADS OF ROCK TO
BACKFILL, BUT THE TOOTH
MUST BE REPLACED FIRST.

1715 SHOW BRIAN THE SITE, INCLUD-
ING THE ORIENTATION OF THE
GAC TRENCH AND EAST EDGE
OF AREA 2, AS LOCATED BY
THE REVISED DESIGN.

1730 LOADER BUCKET HAS TOOTH
AND BACKFILLING RESUMES.

1750 DROP LASER OFF @ KRI.

1800 DROP CHRISTINE OFF @ HOUSE.

1810 ON SITE. KRI STOPS BACKFILLING
TO GREASE MACHINES.

1815 DISCUSS NEED FOR ANGULAR ROCK
BY MID-MORNING TOMORROW.

1825 CIRCULARY GORE FOR BRIAN.

1830 END OF DAY.

in Well
9.9.04

FRIDAY, 9.10.04

0800 H'S MEETING @ DIESEL SLEEP SITE.

ERIC AND CHRISTINE ARE LEAVING
THE ISLAND TODAY. KRI WILL
FINISH BACKFILLING W/ROUND ROCK
THE 2ND TO LAST SHORELINE
SECTION AND THEN MOVE TO
EXCAVATION OF THE LAST
SECTION OF SHORELINE. MERWYN
WILL HAVE MORE ANGULAR
ROCK HAULED TO THE SITE
AS WE ARE NOW OUT OF IT.

0840 TO LANDFILL. USE MERWYN'S
3:1 GAGE TO CHECK SIDESLOPES
@ LANDFILL. THEY ARE CLOSER
TO 4:1. ALSO USE HAND LEVEL
TAPE MEASURE, AND GRADUATED
SURVEY ROD TO CHECK SLOPE.
IT WILL BE EASIER FOR ONE
PERSON TO USE MERWYN'S
3:1 GAGE FRAMEWORK TO
CHECK SLOPES AND LAY
GRADE STAKES. OTHERWISE, 2
PEOPLE ARE REQUIRED FOR
THE HAND LEVEL / ROD METHOD.

FRIDAY, 9.10.04

0915 TALK W/GUY @ LANDFILL WHO IS USING THE EXCAVATOR TO LOAD PCS INTO DUMP TRUCKS HAULING TO THE LANDSPREAD AREA.

0935 House 55, Call Ken. He needs ~~more~~ PCS QUANTITIES AND CLEAN OVERBURDEN QUANTITIES REMOVED FROM THE DIESEL SUMP SITE BLUNDER DUMP, LECHONG LAKE, AND LUKANAN BAY.

1015 DROP OFF CHRISTINE & KRI.

1030 ON SITE. KRI HAS BEEN EXCAVATING AREA 2 OF THE LAST SECTION OF CHANNEL RESTORATION.

1045 JIM INSPECTS A FEW BUCKETS AND DECLARES THAT HE DOESN'T SEE ANY SHEEN NOR SMELL ANY PETROLEUM AT THE CURRENT SIDEWALLS (SOUTH END AND EASTERN). JIM DIRECTS TO CLEAN UP THE

FRIDAY, 9.10.04

SIDEWALLS AND PREPARE TO BACKFILL.

1100 COLLECT CONFIRMATION SAMPLE S134-CS-025-090 @ 1 MLY @ 10' NORTH OF SOUTH END OF AREA 2.

1115 MIKE CLEANS UP SIDEWALL

1130 PER NOAA DIRECTION, PLACE TRASH (METAL DEBRIS, WOOD, WIRE, ETC) INTO HALF-BRIGHT BOXES.

1145 KRI MUST CHANGE OUT EXCAVATOR BECAUSE THE CURRENT ONE NEEDS TO GO ON THE BARGE.

1210 LUNCH.

1300 KRI CONTINUES TO CLEAN UP SIDEWALL
*preparing to place angular rock @ base
Eric & Christine packing to leave island - Panda
flight is since early @ 1420 today

1330 check Eric & Christine in @ airport

1355 meet briefly w/ Jim w/ & Eric @ NOAA to discuss Area 3C activities - agreed that we would "pothole" to try to break the eastern edge of contamination

9-10-04
Friday

note: Nir provided a soil sample collected from
drum near Equip. Shop - requested TT to ship
for analyses - confirmed today that it was
to be run for PCBs, PATTs, & lead - still need
to determine what site it will be for

note: Jimul to try to find out status of TDX
moving crab pots from Area 3C

1420 Drop Christine & Eric @ airport for flight

1425 KRI continues placing angular rock

1510 layer of angular rock has been placed -
beginning to lay out filter fabric & anchor
w/ additional angular rock

1710 KRI placing round rock to finish at
restoration

1720 @ KRI trailer to review/enter draft
daily rpt. for 83c 9-9-04 to Ken Valder

- Spoke w/ Meswayne - requested him to
provide boat/personnel to install new
containment boom @ diesel seep, per
NCAA request.

1800 KRI continues to place round rock @
South end of Area 1

1830 FOOD

BSC

9-11-04
Saturday

0800 safety ops mtg.

- Finish placing round rock
- excavate "PCS" from "road" area @
Areas 1, 2, 3A where loading operations
has spilled some previously - backfill
area slightly
- pathole in Area 3C - NOAA to locate
map-designated boundaries w/ GPS -
will pathole along east edge to search
for contamination
- KRI surveyors to install new containment
boom in channel

0830 KRI loading rock - using PC200 to load
rather than loader, which was picking up too
much sand

0910 KRI placing rounded rock @ Area 1 slope

1000 KRI finished placing round rock - a
begin removing PCS from Area 3A where
trucks had been loaded w/ saturated PCS

note: Nir B. onsite earlier - TT helped to
locate/mark boundary corners for Area 3C
- based on locations, crab pots must be
moved to allow pathing - NOAA coordinate
w/ TDX to do this - TDX were supposed to
have someone here earlier, but never
arrived

9-11-04
Saturday

note: also marked boundaries for Area 3D
- NOAA wants to remove PCS there as well -
checked w/ Ken Valder last night - said
it was OK to do because new cost estimate
includes 3D as well

1035 TDX rep John Kushin onsite to move
crab pats

1050 Mergin (KRI) radioed to say that surveyors
will be onsite @ 1300 to install new
containment boom in channel

1130 KRI using PC 200 to move trench boxes
so TDX can move/access last crab pats

1200 LUNCH

1230 KRI resumes excavating PCS from along
roadway on south side of dewatering cell
TDX moving last of crab pats

note: spoke w/ Jim W (NOAA) regarding current
PCS excavation - he agreed w/ progress &
removal of thin layer (~6-8") along road
on south side of dewatering cell

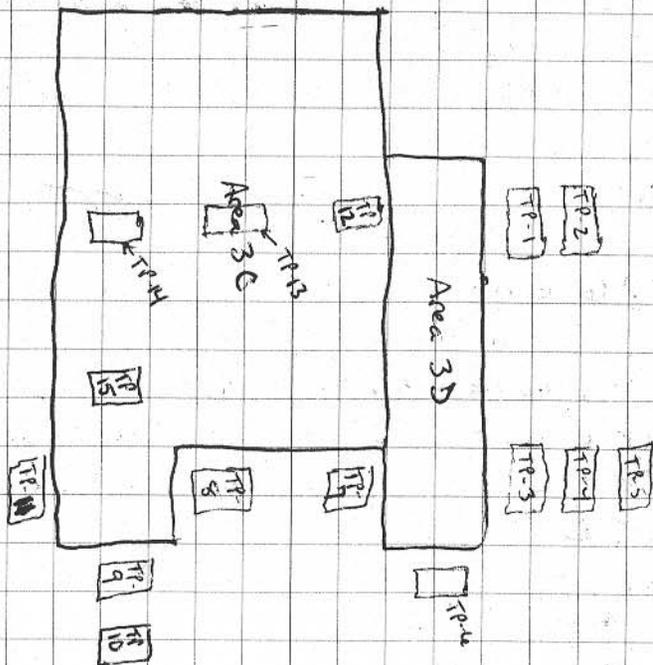
1305 KRI surveyors onsite - begin installing
new containment boom in channel

1330 KRI ready to begin test pit / pothole ops near
Areas 3C & 3D. Jim W on way to site to
observe

9-11-04
Saturday

→ 2

1345 begin test pit ops



TP-11
TP-10
TP-9
TP-8
TP-7
TP-6
TP-5
TP-4
TP-3
TP-2
TP-1

9-11-04
Saturday

- TP-1 - GW @ approx 2 ft bgs - fuel odor
TP-2 " " " " " " - TLC sample collected
fan soil @ water table
TP-3 GW @ approx 2 ft bgs - fuel odor
TP-4 GW @ approx 2 ft bgs - fuel odor
TP-5 GW @ approx 2 ft bgs - ~~fuel odor~~ - TLC
sample collected
TP-6 GW @ approx 4 ft bgs - TLC sample
collected
TP-7 GW @ approx $5\frac{1}{2}$ ft bgs - TLC sample collected
TP-8 GW @ approx 8 ft bgs - TLC sample collected
TP-9 GW @ approx 8 ft bgs - TLC sample collected
TP-10 " " " " " " " " " "
TP-11 " " " " " " " " " "

test pits were excavated to approx 1 ft below
water table (where TLC samples were collected per
NOAA & TT discussions)

1600 test pit ops complete - per NOAA, KRI is
backfilling test pits w/ clean sand backfill - excavated
soil being left next to holes until TLC results
are done - ~~only~~ soil from TP-9 was
obviously contaminated so it was transported
to secondary cell

9-11-04
Saturday

- obvious contamination also noted @:

TPA-1

TPA-3

TPA-4

- future decisions to be made based on
TLC results & discussions w/ Greg G. (NOAA)
1700 backfilling of test pits complete

KRI ~~is operating~~ will remove boom from
channel (used absorbent & block containment)

KRI & TT working to make adjustments to
the new yellow containment boom
installed earlier - installed new posts
& re-anchored boom @ N & S ends

1805 boom ops complete - KRI servicing
equipment

1825 EOD

note: Jim W. phoned
to say that ^{the} only TLC sample
collected that was above
250 ppm was TP-8

late note: per Jim's request
KRI mechanic removed pressure
manifold from the Hester pressure
washer so it can be shipped to
manufacturer for repairs/replacement

9-13-04
Monday

0800 safety/ops mtg.

- 1st haul PCS from decontam cell to NWS
- make boom from decontam cell to closed concrete box - Jim to verify w/ Greg/John
- Jim wants to test pit more to look for "sheen" causing soil instead of basing excavation on TLE results
- Alex (arrived yesterday) to discuss w/ Jim re Tract 42 activities
- Merwyn getting ^{pressure} manifold for Jim - removed, per NOAA, on Saturday by KRI mechanic
- KRI pulling channel plug today

0830 KRI hauling PCS from decontam cell to NWS

0855 to KRI trailer to discuss ops / daily rpts.

0900 mtg @ staff qtrs w/ Jim W & Alex to discuss

Diesel seep & landfill/NWS ops

- ^{NOAA} wants to do additional test pits within Area 3C to look for sheening ~~to look for sheening~~
~~sheen is being~~

- raised issue of removing clean overburden - trucks need to be decreased but pressure manifold was removed from ^{top of} pressure washer - Jim wants to put it back on, but has to check w/ manufacturer first to make sure he can get a new one - told me to wait on having KRI replace manifold

9-13-04
Monday

0945 drop off Alex @ service truck (@ airport) to go to landfill & close ops & discuss w/ operator (Guy Miller)

1000 KRI crew removing channel plug informed

TE & NOAA that sheening is going through channel opening - pretty heavy sheen - inspected boom @ diesel seep - appears that the increased current flow is washing sheen beneath the containment boom & into channel

- NOAA & TE start mucking out foam & debris @ south end of boom using 5 gal buckets ^{rs hands} - tried some small pump NOAA had, but unsuccessful

1215 mucked out as much as possible

@ south end of boom - Jim spread sorbent (sphagnum moss material) - wants to talk w/ Greg et al to decide next course of action

returned to House 55 to speak w/ Ken & blr & update him on situation

1240 @ staff qtrs. to speak w/ Jim W. & NOAA staff in Seattle regarding sheen in Salt Lagoon channel

9-13-04
Monday

Note: 2 Bell trucks went down for repairs earlier.

this morning - 1 has been repaired, but
other is still down - Mike Baldwin informed

Tt that the 2 remaining Bell trucks that
are running are going to be needed @ the
landfill - will have to decide what afternoon
ops will continue

- based on discussions w/ NOAA - they don't seem
too concerned - admit that increased flow
from channel plug removal has caused increased
streaming ~~being~~ escaping boom - PCS being
"mobilized" due to increased flow - likely will
occur often over ^{upcoming} weeks until conditions
stabilize

1300 per NOAA, will prepare to excavate additional
test pits @ Area 3C after finishing hauling
PCS from decontamination cell to NWS

Jim w/ instructed KRI to replace manifold on
Horsel pressure washer

Confirmed w/ Alex^(TU) & Jim^(NOAA) that no rocks
were heaved from Tract 42 barrels although
previous daily rot had started so

1345 KRI continues loading/hauling PCS from
decontamination cell to NWS

also using loader to re-work the existing
clean sand backfill pile to make room

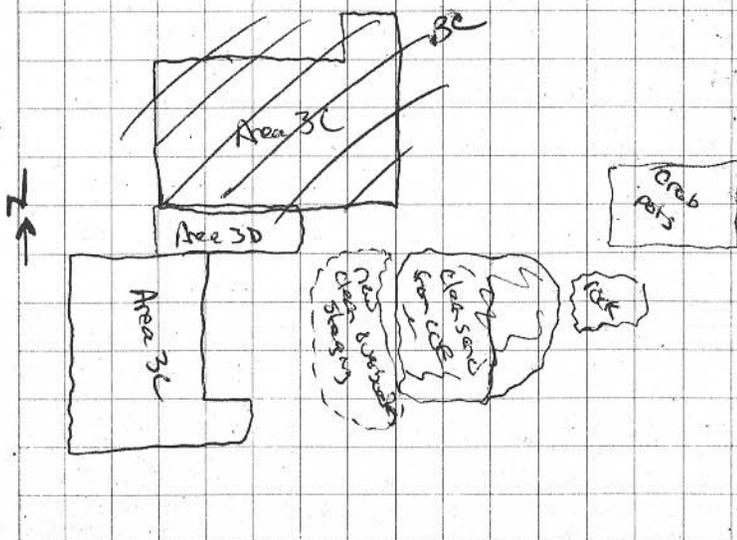
9-13-04
Monday

for staging future clean overburden removed

from Area 3C

1400 inspected boom in lagoon channel - no
sheen being released @ this time, likely because
tides have shifted

Note: KRI moving ^{yesterday's} test pit soil & staging in separate
pile for future backfill (based on TIC results) -
only TP-7 & TP-9 were determined to be
dirty & placed in decontamination cell - Jim w/ ^{TIC} looked
@ his results & found he had released
the results for TP-8 w/ TP-9 (9 was dirty,
but 8 was actually clean) - characterization
samples will be collected



9-13-04
Monday

note: discussed w/ Jim w/ the need for
somehow keeping clean overburden segregated
when relying on TLC sample results, then
collecting CH samples for lab analysis - just
don't want to have to track where each
pile of clean overburden is used for backfill,
but lab results could potentially vary from
TLC which would be a huge problem if
we had to go back and remove it later

1530 KRI mechanic onsite to re-install manifold for
HOTS pressure washer - KRI showing tracks on
excavator to decom prior to test pit ops

1600 begin test pits in Area 3C - see Figure/sketch
drawn on 9-11-04 - TP-12 → TP-15 excavated
today - per NORA, no TLC samples being collected
from test pits - looking only for signs of sheen

notes for test pit observations

TP-1 no sheen/cantam - gw @ ~ 2-3 ft bgs

TP-2 no sheen/cantam - gw @ ~ 2-3 ft bgs

TP-3 sheen noted gw @ ~ 2-3 ft bgs

TP-4 sheen noted gw @ ~ 2-3 ft bgs

TP-5 - minimal sheen gw @ ~ 2-3 ft bgs

TP-6 no sheen/cantam.

TP-7 no sheen/cantam.

TP-8 no sheen/cantam.

9-13-04
Monday

TPA-9 sheen & cantam noted

TPA-10 no sheen/cantam noted

TPA-11 no sheen/cantam noted

TPA-12 minimal sheen ~ gw @ ~ 3-4 ft bgs

TPA-13 sheen/cantam noted ~ gw @ ~ 5^{to} 6 ft bgs

TPA-14 sheen/cantam noted ~ gw @ ~ 5-6 ft bgs

TPA-15 sheen/cantam noted ~ gw @ ~ 5-6 ft bgs

1740 test pits complete; per NORA, KRI backfilling
today's pits w/ clean ~~settled~~ sand backfill (CofSofS)

note: Bell trucks were unavailable during test pits -
used 980 to stage clean overburden from each
pit, then stockpiled suspect PCS next to pits

note: Jim W. wants to have conference call tomorrow
morning @ 7^{am} to talk w/ Greg / John
regarding future plan of attack for Area 3C
excavation activities

1750 KRI greasing equipment

1820 NORA & Tt inspect boom along shoreline
try to make improvements, but current is
to stage - some sheen is still being released,
although now @ the north end due to
tide shift

1850 off site 7

BSC

9-14-04
Tuesday

- 0700 meet w/ Jim W. @ NOAA staff qtrs to discuss plan of action for Area 3C
- he spoke w/ John L. last night - finances may be the limiting factor for project
 - does not want to excavate in the wetland area (Area 3D) because it would likely require permits, etc - may install a GAC bench downstream of Area 3D
 - agreed w/ backfilling most of current excavation leaving some portion open for discharge of water from dewatering cell
 - will then remove clean overburden over a to-be-determined section of Area 3C
 - continue excavation of PCS - dewater excavation & pump to dewatering cell for treatment

0730 phone Greg Genovese to discuss further

- timing issues - estimates we need to be done w/ Diesel Seep in \approx 1 week, but will likely have additional time (needs to check #)
- Greg is on board w/ our approach

0800 onsite safety loop mtg

Merwyn stated that 2 Bell trucks are down - only one is available & is working @ landfill hauling PCS to landspread - doesn't know what if Bells will be running again - TC & NOAA discussed lack of production @ landfill - will discuss

9-14-04
Tuesday

further w/ Greg G. & Ken V.

today's ops:

- move PCS from yesterday's test pits into dewatering cell using 980
- decan & begin hauling clean sand to backfill approx $\frac{1}{2}$ of open excavation @ Area 3B/3C
- begin removing clean overburden from portions of Area 3C

0830 returned to house to call Ken V. for update on landfill production situation

KRI begins moving test pit PCS to dewatering cell w/ loader

0900 KRI decants loader bucket - approx 6 loader buckets of PCS were moved to the dewatering cell (from yesterday's test pits)

0930 KRI begins hauling backfill (COE sand) for excavation @ Area 3B/3C - using loader to haul & excavate to push/compact

1030 KRI continues to haul COE sand w/ 980 to backfill excavation @ Area 3B/3C

1045 collect subpile sample SP34-SS-023-015 from material in dewatering cell (leftover material from Areas 1 & 2)

1055 collect CH sample SP34-CH-024-015 from clean overburden removed from Area 3C during test pit activities

9-14-04
Tuesday

1155 KRI completes installation of dam (backfill)
of Section of Area 3B - left western most
portion (approx 10-15 ft) open to allow
future treated water discharge

1200 LUNCH

1230 KRI placing some additional fill material
along northern section of "dam"

1245 KRI begins excavating clean overburden
from Area 3C near south end - per NOAA,
excavating down to +5 MLLW to remove
overburden - will pull overburden out back (east)
to a line even w/ yesterday's test pits

Note: New base elevation for laser level
calibration is a stake placed @ the SW
corner of the open excavation in Area 3B -
elevation = +7.76 MLLW

1325 spoke Alex to KRI office to get him
started on daily rpts. (note: landfill ops
were shut down by Merwyn - inefficient &
he has other work that Guy M. can do)

1500 KRI switching PC200 out for EX350

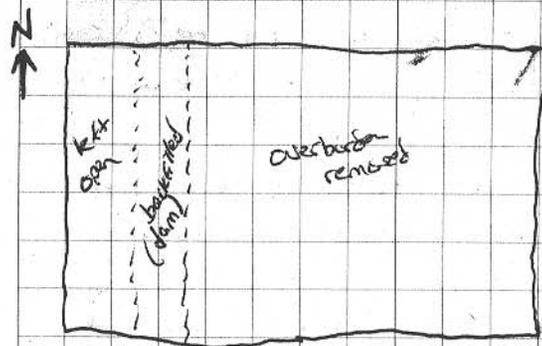
1620 KRI continues to remove clean overburden
from Area 3C - stockpiling near COE clean sand

1630 spoke w/ Merwyn - he wants to use

9-14-04
Tuesday

the EX300 & 3 773 trucks @ landfill to
move PCS to NWS when they are finished
w/ their other work (possibly early next
week) - thinks they can move approx
4,000 cy per day - EX300 rate is
almost \$300/day though - will run by
NOAA

1740 KRI continues to remove overburden
note: shallower @ north end because of sand
presence



1805 KRI finished removing overburden from
designated area
- performing equip maintenance

1830 office

BSC

9-20-04
Monday

0800 Safety/ops mtg

- haul PCS from D&D to land spread
- resume hauling PCS from Tract 42 to land spread

- Area 3C PCS excavation
- Area 3D - enclose clean area garden

note: NOAA's GPS having problems w/ batteries -

- have not surveyed land fill because they can't get signal w/ sorted piles on top of Tract 42 - thus KRI will haul only sorted piles forward so NOAA can survey area to get volume estimates

0830 KRI loading PCS @ dewatering cell to haul to NWS (PCS is from Area 3C excavations)

1020 KRI continues to load/haul PCS from dewatering cell to NWS

collect SP34-SS-026-015 (from dewatering cell [Area 3C PCS])

also collect dye SP34-SS-026-300

1200 lunch

1230 KRI resumes hauling PCS from dewatering cell to NWS land spread

1320 last load of PCS hauled from dewatering cell
KRI stopping the ramp leading into D&D cell for truck access

9-20-04
Monday

per Daveed, will try to make silt skirt beam (black) from D&D cell to the half-high container behind Garco Bldg, although "thumb" on EX350 is not working

1400 beam has been placed in half-high corner - absorbent beam was also put in half-high per Daveed.

1405 KRI begins excavating PCS from section 16 of Area 3C

1440 KRI finished excavating PCS @ section 16 to approx -4 mllwd ~~at section 16~~

Collect SP34-SS-034-100 from bottom of section 16 - wanted to get a sidewall sample on south side, but too much sloughing & dewatering cell is too close to go further to south

KRI begins backfilling (rock in bottom of hole - saw a fan Telegraph Hill on top, per Daveed.)

1535 backfill complete @ section 16 - begin removing PCS from section 17

1630 PCS removed @ section 17 down to approx -4 mllwd - begin backfilling - odd shaped section remains to be excavated - not enough time to remove today & backfill because we don't want to leave an open hole all night letting B&W fill in - will finish excavation tomorrow

9-20-04
Monday

Note: KRI resumed hauling PCS from Trest 42 to

NWS landspeed this afternoon

1740 backfill complet @ section 17 using scoria
obtained from Telegraph Hill

1750 KRI getting drum from shoreline that was
used to hold oil-contaminated material from
inside boom in lagoon channel - dumping in
decontamination cell

1805 KRI greasing equipment

1830 off site

bsc

9-21-04
Tuesday

0800 safety / ops mtg.

- continue excavating PCS @ Area 3C, then make
clean outarden @ 3D

- move PCS from Trest 42 to NWS - be sure to
poke PCS down w/ bucket below truck bed

0815 Walter had to take Bell truck to
shop to fill up w/ oil

Mike tracking excavator to 1/2-high console
behind Goza to max boom (block) ^{into} ~~scoria~~ _{sc}
re correct container - Walter had
incidentally placed it in wrong one

0835 resume excavating PCS @ Area 3C - working
in section 18

0915 collect SP34-CS-035-100 from bottom
of section 18 near east wall @ approx

0920 ^{-4 mww}
~~0925~~ KRI finished cleaning up section 18 - begin
backfilling

1010 backfill complet @ section 18 - begin
PCS excavation @ section 19

1105 Mike managed to get a sidewall sample
from south wall of excavation @ approx 7 ft by 5
collect SP34-CS-036-070 → A-036-305 (dup)

KRI has cleaned out excavation to approx -4 mww -
some shoring entry excavation from east wall -
will try to remove when we begin additional
excavation in Area 3C further to east

9-21-04
Tuesday

1115 KRI cleaning up surface of area where PCS had stopped out of bucket while loading trucks - will also pick up soil removed during test pit activities & place in dumpster as PCS

1200 Lukett

1230 KRI backfilling section 19 of Telegraph Hill material (rock on bottom of hole)

note: Dave w. spoke w/ me regarding a request from Greg G. to justify Alex G.'s hrs. for last week - told Dave that he has been working on a variety of issues incl. daily rpts, sample prep, paint filter tests, PCS/Bail/Overburden spreadsheet, etc. Dave w. agreed to justify hrs, but would like more info re Saturday 9-18 - I spoke w/ Alex @ after lunch, - his hrs. for Sat were for daily report & finishing the PCS/Bail/Overburden spreadsheet - stopped @ JSM staff gms, but Dave w. wasn't there - passed info along to Paula S., who agreed to talk to Dave & Greg saying that Alex's hrs. were no longer an issue ((PCS hauling @ Tract 42 is back running after temporary shutdown on Weds 9-15))

1330 backfill complete @ section 19 - KRI decommissioning equipment in prep for removing clean overburden @ Area 3D

9-21-04
Tuesday

1400 begin removing clean overburden @ Area 3D - only taking approx. 2 ft or less over this area - tapers down quickly to the north toward wetland - Area 3D overburden will be stockpiled just north of the existing stockpile of clean overburden removed from Area 3C

1500 KRI continues to remove & stockpile clean overburden from Area 3D

- PCS hauling ops @ Tract 42 are nearing completion per Merwyn - will max 2 773 trucks to dewatering cell to begin hauling PCS to NWS (endspread) & use Ex 800 to load (700 is down w/ ^{load} switch)

NOTE Dave w. & Paula S. stopped @ site to inspect ops - discussed moving 773 trucks to diesel seep - also discussed Dave's earlier concern over trucks hauling ~~by~~ wait to be loaded @ Tract 42 - he was no longer concerned saying that the work was getting done quickly

NOTE KRI also removing approx 6" layer of overburden from wetland area (only the area w/in reach of excavator while setting an upland section of Area 3D)

1600 KRI continues to load PCS from dewatering cell

9-21-04
Tuesday

using EX800 & 2 773s - Tract 42 ops.
are mainly loading list of ^{sorted} rock into Bell &
dumping @ NE corner of Tract 42

note: Dave W. told TK that based on his GPS
data collected @ lunch today, there is
approx. just shy of 15,000 cy remaining
@ Tract 42 (does not include sorted PCS sites
moved this afternoon); thus, no further
heaving of PCS is necessary @ this time - we
briefly discussed the need to identify additional
work for KRI to do (Icehouse Lake,
Lukonin Bay, etc.)

note: collected 5 paint filter samples before lunch
from PCS @ dewatering cell

note: Marvyn was operating EX800 @
dewatering cell until Mike finished EX350
removing overburden @ Area 3D - then Mike
operated EX800

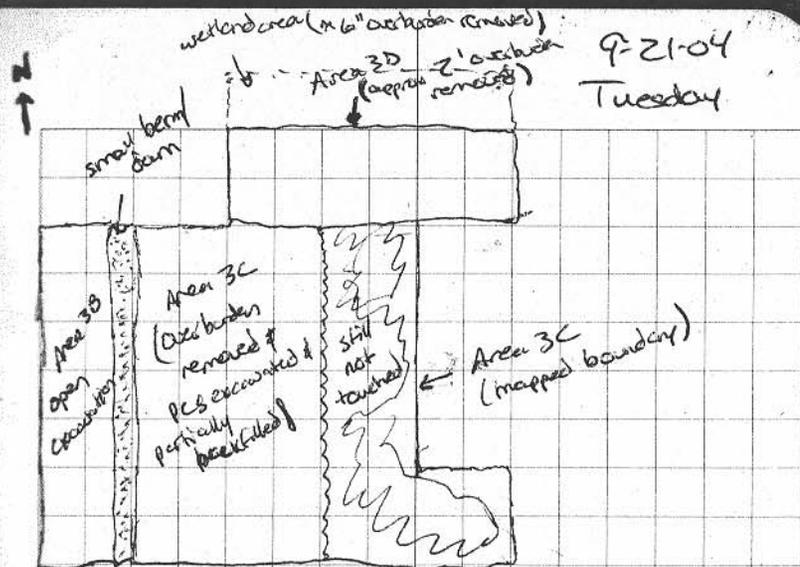
1710 collect following 3 CH samples from
clean overburden remaining from Area 3D

1710 SP34-CH-027-015 & 027-308 (dupe)

1715 SP34-CH-028-015

1725 SP34-CH-029-015

9-21-04
Tuesday



1735 PCS from dewatering cell is finished -
last load on way to NUS
- KRI cleaning EX800 tracks

1815 offsite

BSC

09-22-04
Wednesday

0850 safety/ops mtg

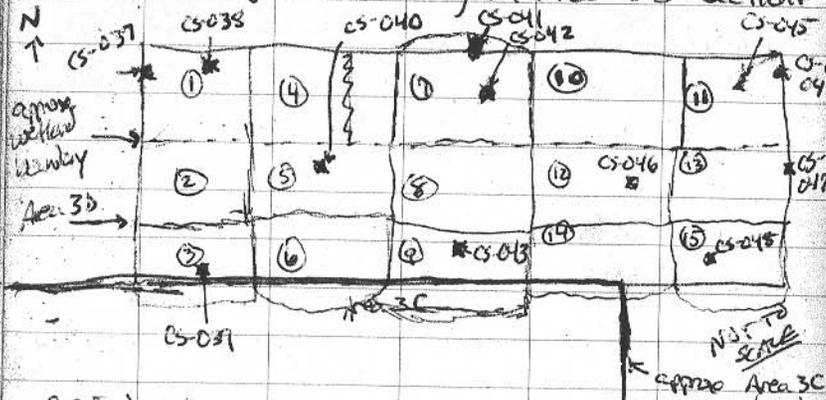
- excavate PCS @ Area 3D
- landfill: Dave said some slope material may need to be pulled off to meet 3:1 - according to Jim W, the toe of slopes were put in last year to leave room for 2 ft cap

0820 KRI greasy EX350

0840 KRI improving access ramp to area 3D so

Bell can maneuver into loading area

0855 KRI begins excavating in Area 3D - section



0920 down to approx 6.5 ft bps in section 1 - Dave W &

Paula S. onsite to observe - NO sheen coming from west or north - slight sheen from east and/or south (directions we will be digging)

0930 collect SP34-CS-037-045 from west sidewall @ approx 4.5 ft bps @ water level in hole

09-22-04
Wednesday

0935 collect SP34-CS-038-045⁶⁵ from bottom of section 1 @ approx 4.5 ft bps

note: Dave W. requested additional sample volume to be collected for potential TOC analyses - he will check w/ Seattle

0940 per discussions w/ Dave W, begin backfilling section 1 w/ screen mix from Telegraph Hill, 3C overburden sand ^{from top of} that, and 3D grassy overburden on top to help w/ revegetation

1020 backfill complete @ section 1 - grassy cover will be placed over all of 3D when we finish other areas because accumulated GW is pooled in one corner (NW) of the section & would overflow area if backfilled completely

KRI begins excavating section 2 (Area 3D) to the south of Sect. 1

1100 section 2 excavated down to approx 6.5-7 ft bps

- no sheen noted from west side, some from south & east - begin backfilling

note: KRI's staff obtained burn permit for about debris @ Icehouse Lake - KRI will burn @ 1400 - also to load up excess sand, backfill from that excavation & move to diesel sump backfill storage area - leftover burn debris will be hauled & dumped in WAPA's pit @ landfill

9-22-04
Wednesday

1200 LUNCH - backfill complete @ section 2

~~add to~~

1230 KRI resumes excavation of PCS @
section 3 (Area 3D)

1310 excavation @ section 3 complete down to approx.
9 ft bgs - collect SP34-CS-039-090 from
bottom of section 3 - no sheen observed @ bottom
soil head no odor - estimated @ -1 to -2 muw

KRI begins backfilling section 3

note: KRI (Merwin) began tracking PC200 out
to Icehouse Lake @ 1230

1345 section 3 backfilled - begin excavating
PCS from section 4

1440 excavation complete @ section 4 down to approx
7 ft bgs (x - 2 muw) - no odor noted

@ this depth - appears to be a clean layer beneath
Area 3D
@ this depth

1450 KRI backfilling section 4

Note KRI has been burning debris @ Icehouse Lake
and removing clean sand from previous backfill
there to make room for scoria wear surface -
hauling clean sand to diesel seep backfill
staging area - 980 @ has been loading
a Bell truck w/ scoria mix from diesel
seep site backfill staging area to install
wear surface @ Icehouse Lake

9-22-04
Wednesday

1535 backfill complete @ section 4

KRI begins excavating PCS @ section 5
Dave W. onsite for update

NOTE: spoke w/ Naama w/ City to extend
lease for house 55 through October - agreed

1620 collect SP34-CS-040-090 @ bottom
of section 5 @ approx -2 muw

KRI continues to muck out section 5 to -2 muw

1640 excavation complete @ section 5 - begin
backfilling - only noted slight sheen from outwall

1700 collect 6 point filter samples from PCS @
dewatering cell

1740 backfill complete @ section 5

KRI placing Telegraph Hill backfill in low
areas of Area 3C that have ponded
water sitting in them

1805 KRI servicing equipment

1830 offsite

55C

9-23-04
Thursday

0800 safety/ops mtg.

- haul PCS from dewatering cell to NWS - using EX800, 3 TT3s, + ~~1~~ 2
- haul burn debris from leachate lagoon to NOAA's debris pit @ Tract 42
- continue excavating PCS @ Area 3B
- mtg @ landfill @ 10^{AM} for AG, DW, PS, & MS to discuss future activities there
- Lukann Bay - installing jute mat

0820 KRI loading/hauling PCS from dewatering cell

0945 KRI continues loading/hauling PCS

TE began pumping water w/ no sheen from dewatering cell to open excavation @ Area 3B to remove accumulated rain water from past days

1000 stopped @ TDX office - spoke w/ Anthony P. & Bill Arterburn (by phone) to ask which quarry source will be mined for fuel diesel seep site. Bill said it would be the Lake Hill quarry - told them TE would be collecting background samples

1045 KRI completed moving PCS from dewatering cell to NWS - mobilizing D4 for diesel seep site to landfill for future ops there

- prepping to resume PCS excavation @ Area 3B

9-23-04
Thursday

KRI built temporary ramp w/ backfill soil

D4 could be loaded on lowboy trailer

1105 resume excavating PCS @ Area 3B (section 6)

1150 KRI continues PCS excav. @ section 6

Dave W. onsite for update - just wants to scoop out some of contaminated slough in bottom of hole - sheen seen only from east wall of excavation

1200 LWETT

1230 resume PCS excav @ section 6 - pulling out last of PCS possible - down to -1 to -2 mclw over this section

1250 excav. complete @ section 6 - begin backfilling

1300 Mike B. has to go to parent-teacher conference for son's school - in his absence, Walter will backfill section 6 operating both 980 & EX350 to place & compact fill in hole

1405 section 6 backfill complete - begin excavating PCS from section 7

note: Mike B. back onsite @ 1335

1425 some sheen noted on north wall - had Mike B. reach 2-3 ft further (maximum) & scrape wall - sheen stopped & no odor noted in soil @ or below or above water table - continue excavation @ section 7

9-23-04
Thursday

1500 as excavation progressed to ^{east} section 7,
more significant shearing was noted along north wall
- radioed Dave W. to cone back at

- KRI continues to muck out section 7

1515 Dave W. onsite to photo/video document sheen
emanating from north wall of section 7 (Area 3D) - per
discussion, we will not chase any further to north -
will continue trench excavations to east and south
as we have all along

1520 collect SP34-CS-041-045⁵ from sidewall
of section 7 @ approx 4.5 ft bgs @ water table (sheen
noted in this area)

1525 collect SP34-CS-042-090 from bottom of
section 7 (backhoe bucket) @ approx 9 ft bgs

1530 KRI begins backfilling section 7

1625 backfill complete @ section 7 - begin

PCS excav. @ section 8

1710 excavation complete to ~~approx~~ approx - 2 mwd -
sheen seen only from east & south walls - begin
backfill of section 8

NOTE: pumped water from dewatering cell (no sheen)
for whole day - stopped now because steady
sheen entering water from PCS @ Area 3D

1750. KRI continues backfilling section 8

9-23-04
Thursday

1805 collect 5 point filter samples from PCS @

dewatering cell

1825 off site

BSL

9-24-04
Friday

0800 safety/ops mtg.

- haul PCS from decontam cell to NW's
- landfill - begin pushing out PCS to build cap
- Lukem Bay - finish put mat installation
- spoke w/ Dave W. about needing more backfill sand from Telegraph Hill - said to go check & haul 30 more loads w/ 773 trucks

0820 KRI loading/hauling PCS from decontam cell to NW's

0830 collect SP34-SS-027-015 from PCS @ decontam cell (Area 3D)

0835 collect SP34-SS-028-015 from PCS @ decontam cell (Area 3D)

1045 PCS hauling complete from D to NW's

- greasing 350 - have to use 800 grease gun
- because 350's is empty & no more grease buckets @ this time

- decanning 773s in prep for hauling clean backfill from Telegraph Hill

1120 decan complete of 773s - rather than open @ hole @ Area 3D which will fill w/ water before we can complete PCS removal because at lunch break, TE & KRI are moving the fold-out tub that was initially used

9-24-04
Friday

to muck out oily debris & foam from inside the containment basin in lagoon channel - tub is moved to decontam cell where it is emptied (oily shear on it 10-20 gallons water)

1135 Delta Fuel onsite to fuel up equipment

1150 early lunch

1220 KRI resumes excavating PCS @ Section 9

note: Dave W. has requested to have KRI load/haul a B25 load of boulders from Telegraph Hill to Lukem Bay to place as a vehicle boundary - will talk to Merwyn.

1315 section 9 excavation down to approx -2 mwd - collect SP34-CS-043-090 from bottom of section 9

- KRI mucking out 1 last truck load from section 9

1325 begin backfill @ section 9 - light sheen emanating from east wall only - no other sheen noted

note: spoke w/ Merwyn - to get boulders from Telegraph Hill, will need PC200, currently @ Lukem - cannot reach Dave on radio right now to verify he wants to track the PC200 out (and back) to Telegraph - Merwyn is heading to LF, will try Dave from out there (Dave at is likely @ Vehicle Boundary for GPS survey)

9-24-04
Friday

1415

backfill complete @ section 9 - begin

PCS removal @ section 10

1505 PCS excav complete @ section 10 to approx

- 2 mwd - no sheen noted on north wall - some
sheen noted on south & east wall

begin backfill of section 10

1610 backfill complete @ section 10 - begin removing

PCS @ section 11

1700 excavation @ section 11 complete to approx - 2 mwd -

although sheen was noted emanating from east wall,
did not expand further in that direction because of
hole size & I went to discuss w/ Dave (unavailable
at this time - working @ conveyor) - chosing to the
east will require more excavator into wetland

collect SP 34-CS-044-045 from east sidewall @

approx 4.5 ft bgs (just @ water table)

1705 collect SP 34-CS-045-090 from bottom of

section 11 @ approx 9 ft bgs (-2 mwd)

KRI backfilling section 11 - will talk to Dave about
east wall tuber

1715 collect 6 paint filter samples from PCS

@ the dewatering cell

1755 backfill complete - KRI cleaning tracks on

EX 350

1830 off site

SSC

9-25-04
Saturday

0800 safety/ops mtg.

- hauling additional clean backfill (soil
mixture) from Telegraph Hill

- continue PCS excavation from Area 3D

- haul PCS from dewatering cell

- haul 1/2 load of boulders from Telegraph Hill to
Lukman for barrier wall

- continue Tract 42 ops (end of day)

0930 KRI continues to bulldoze & load & haul
backfill from Telegraph Hill to the backfill
staging area @ the Diesel Sump

- using D9, 992, & 3 773s

0940 repairs being made to 992 by mechanic

0950 992 back running & loading again

1000 @ landfill to inspect progress

1130 KRI continues to haul back fill from
Telegraph Hill

1315 KRI loading & hauling PCS from dewatering
cell to NWS

1330 Alex G to Lake Hill quarry to collect
backfill characterization samples from scoria
to be obtained from TDK for the Diesel Sump

1350 SPLH-CH-001-015 (and dupe - 001-300)

1355 SPLH-CH-002-015

1400 SPLH-CH-003-015

9-25-04
Saturday

1400 collect SP34-SS-029-015 from
PCS @ dewatering cell (Area 3D)

KRI continues to load/haul PCS from DW to
Nuss' loadspreading area

1445 last load PCS being hauled from dewatering
cell to Nuss - KRI cleaning tracks on ~~Ex 800~~ &
starting equip for PCS excav @ 3D (Ex 800, Bell, 980)

1540 collect SP34-CS-046-090 from bottom of
section 12 (Area 3D)

KRI continues to muck out section 12

1555 excavation complete @ section 12 @ approx
- 2 m.u.w. - shear only noted from south
wall - KRI begins backfilling section 12

1645 backfill complete @ section 12 - KRI begins
excavating section 13

1710 shear seen emanating from east wall of section
13 - not chosing red for NVA, but may excrete
further to exist in future - KRI continues to excavate
down @ section 13

1700 collect SP34-CS-047-045 from east sidewall

1720 @ section 13 @ approx 4.5 ft bgs w/in area
of shear

1735 excavation complete @ section 13 - begin backfill

1805 backfill complete - greasy equipment

1825 offsite 7
BSC

9-27-04
Monday

0800 safety/ops mtg.

- PCS excav @ Area 3B

- haul PCS from DW → Nuss - b/c of concerns
about meety 2-ft thickness @ Treat 4Z,
will haul ~~to~~ Treat 4Z instead (per discussion
w/ Dave & Paula)

- prepare for GAE trench install (Paul w. informed
TE that this will be next operation)

0825 begin excavating PCS from section 14 (Area 3D)

0930 excavation @ section 14 down to approx

- 2 m.u.w. - shear coming from east &
south (Area 3C) - KRI to finish clearing
out slough from bottom of excavation

0945 excavation complete @ section 14 - begin
backfilling

TE using large diaphragm pump to remove
excess water (no shear) from dewatering cell -
pump to open excavation @ Area 3B

1015 backfill complete @ section 14 - begin
excavation of PCS @ section 15

1100 section 15 excav. down to approx - 2 m.u.w.
collect SP34-CS-048-090 ^{to Area (418-320)} from bottom of
section 15 @ approx - 2 m.u.w.

KRI continues to clean out section 15 (east side)

9-27-04

Monday

1115 excavation complete @ section 15 - ^{light} Sheen noted

from south wall - too much slough from east wall to see if there is any sheen or to take a sample from the sidewall

KRI begins backfilling section 15

1120 collect 6 paint filter samples from PCS @ dewatering cell

1140 backfill complete @ section 15 - KRI using excavator to scrape up PCS from area where Bell truck was located. (empty PCS that stopped over/lost of bucket)

1200 lunch

1230 KRI finishing up cleanup of stopped PCS near truck located

Dave w. onsite to GPS sampling locations & excavation extents (Areas 3C & 3D)

1255 KRI begins to load/haul PCS from dewatering cell to landfill (not NUS - can use extra volume @ Tract 42 to form the 2nd cell ^{dup} (030-300))

1330 collect SE34-SS-030-015 from PCS @ dewatering cell

KRI continues to load/haul PCS from dewatering cell

1600 last load of PCS being hauled from DW to NUS
- KRI fixing ramp into DW, clearing tracks; - will prepare to begin placing backfill is soft, wet

9-27-04

Monday

a lading areas of excavation @ Area 3B/3C to allow installation of GAC trench

note: Dave w. informed that earlier ~~the~~ trench ^{case} will include Area 3D (west end) as well as 3C

1630 begin placing backfill for upcoming GAC trench installation activities

1740 KRI continues to place backfill in prep for GAC trench installation

1805 KRI changing grease bucket on E0300 & greasy

1830 ^{greasy} ~~offsite~~

35C

9-28-04
Tuesday

0800 safety/ops mtg.

landfill - continue dozing/grading/contouring

- Dave W. wants to meet @ LF later
this morning (NARA, TC, KRI) to
discuss

Diesel Seep - continue backfilling for GAC
trench installation

- begin GAC trench install - KRI has
2, maybe 3 labors coming @
1000 to assist

Note: due to heavy rains, wind, TC now
renting a F150 from KRI -

0910 KRI continues to spread backfill for GAC
trench install - using a mix of the
"scoria" from Telegraph & clean overburden
sand from Drums 30/30 to get
best results - difficult to lastly
water & additional rock = mud

Note: requested NARA to provide elevation data
@ DS in prep for GAC trench ops - Paula
said she would do it this morning
- KRI's laser level is down & out!!!

also verified w/ Dave W. that elevation for
GAC bags will be -1 mllw to +5 mllw, as

9-28-04
Tuesday

was done w/ previous trench - bags will be
approx 2 ft wide (width of trench box)

1000 Paula S. onsite to shoot elevations for
GAC trench - does not have calculator to
convert to mllw - she will call Seattle

- KRI continues to backfill for a platform to
work from for GAC trench

1120 Paula S. reviewed w/ elevation conversions -

@ south end (starting point), elevation is
+5.28 mllw; north end is approx +4.75 mllw
KRI staging trench boxes near trench designated area

1200 Lunch

1230 begin excavating trench from south
to north for GAC bag installation - using
2 trench boxes, excavating to -1 mllw
or lower to accommodate trench boxes
& deal w/ sloping sidewalls

Note: KRI also had 2 additional labors
onsite beginning @ 10 AM to assist
w/ GAC ops

1305 1st trench box installed - soil removed
from excavation back PCS side - Dave W.
onsite to inspect - we discussed and
decided to haul excavated soil from
trench to decontamination cell & use clean
backfill from staging area

9-28-04

Tuesday

1800 GAC trench ops complete for today:

- 7 "trench box" sections were completed
- installed foam - 1 mesh to approx 15 mesh (NAA to GPS & verifying top elevation)^{@ top only}
- trenches left open - to be backfilled after NAA checks / GPS.
- briefly pumped water from one excavation using large asphalt pump, but was not very successful - able to stick bags well despite this - other excavations did not require pumping
- last trench box left in place overnight for "starting point" in morning

9-29-04

Wednesday

0800 safety/ops mtg.

- "clean up" area around trench by adding some backfill for traction of loader
- continue GAC trench installation
- continue backfill ops

0815 KRI doing additional fill in area along trench to provide traction surface for loader access

T6 begins pumping water from last trench box excavation (to dewatering cell)

note: Kevin Mathene (T6) onsite this date

0945 KRI begins excavating for placement of next trench box (#8)

1200 - LUNCH

1335 ARRIVE @ SITE KRI Crew PREP TO CONTINUE GAC TRENCH. THIRD

TRENCH BOX OF DAY IN PLACE

1410 - NAA previous elevations ON COMPLETED GAC TRENCH

FROM Dewatering Cell ELEVATIONS

ARE 4.7', 4.2', 4.8' WITH

DOO 1 TO 2 MORE BAGS LEFT

ACROSS TOP

9/29/04 STA - Diesel sleep
1800 - Complete GAC Trench ops for Day.
KRL Begin prep to end trench activities
- Total 9 Trench Boxes installed/filled
Today w/ GAC Bags
- 7 Truckloads PSB To Sewater Cull Km
- 10 Backhoe Loads Sand Backfill Km
- 18 Backhoe Loads Scoria Backfill Km
1820 - Depart site for Day Km

9/30/04 Thursday STA
0800 - Arrive @ Site. Conduct
H&S Daily Meeting Km
- KRL Continues Windfall ops
- KRL Continues GAC Trench
- KRL Will Backfill @ GAC
Trench Within Trench Compounds.
0815 - KRL Begins Prepping
GAC Trench Area. Km
0850 - Begin Trench Box
Activities @ OSS. Km
1045 - Completed Installation of
GAC Trench from South to North.
Notified NOAA that GPS of
Wall Calculations Required. Km
1130 - NOAA Arrives @ Site to
Survey GAC Wall. Km
1140 - GPS Not Working. NOAA
Will Make Decision on Surveying
GAC Wall & Activities to be Done
Next @ OSS After Lunch. Km
1145 - Lunch. Km
1230 - Arrive @ Site. NOAA Has
GPS GAC Wall & Identified Low
Spots. NOAA Directs Areas to AD

Km

9/30/04 THURSDAY DSS.

1230 (cont) - SANDBAGS. NOAA WILL NOT
RESURVEY WALL. NOAA ALSO DIRECTED
TREAT TO BELOW BACKFILL LN

BACKFILL @ DSS FROM EAST SIDE.
WORKING TO LABOR TO WEST. — FM

1340 - COMPLETED ADDITION OF SANDBAGS
TO LOW LYING AREAS DESIGNATED BY
NOAA. KRT BEGINS BACKFILL. WILL
BACKFILL OVER GAC WALL/COVER W/
SAND. KRT WILL ALSO REMOVE

STACKPILE OF PCS SOIL STORED DURING
WALL INSTALLATION REMAINING IN AREA LN

1500 - CONDUCT SITE WALK W/ DAVID
WINDY/NIR BARNEA & DISCUSS PROGRESSION
OF ACTIVITIES TO COMPLETE DSS. — FM

- BACKFILL TO 1' BELOW GRADE

- COVER W/ 1' SCORIA CAP.

- BURRITO ROLLS ALONG SHORELINE W/
TOPSOIL BACKFILL COVER

- TOPSOIL/BACKFILL COVER @ NORTH
SIDE @ WETLANDS. — FM

1720 - BACKFILL CONTINUES @ DSS/30 — FM

1815 - KRT PREPS TO END DAY'S ACTIVITIES — FM

- 7 LOADS PCS TO DEWATER CELL — FM

- 90 BACKHOE LOADS BACKFILL @ DSS BACKFILL OPS — FM

1825 - DEPART SITE FOR DAY. — FM

10/01/04 FRIDAY

0800 - MORNING SAFETY MEETING

- OPS CONTINUE @ LANDFILL.

KRT GRADING PCS CAP

- KRT CONTINUES BACKFILL OPS
@ DSS. ADDITIONAL BACKFILL
MAY BE REQUIRED FROM
TELEGRAPH HILL TO COMPLETE.

- NOAA WILL VERIFY FINAL
DESIGN @ AREA 2 / DSS — FM

1100 - BACKFILL OPS @ DSS CONTINUES — FM

1150 - FUEL PC 200 & BACKHOE
LOADER — FM

1200 - LUNCH. — FM

1230 - BACK @ SITE. BACKFILL @
DSS CONTINUES. — FM

1310 - MOVE TO NOAA STAFF QTRS.
TO DISCUSS RESTORATION @ AREA
2. — FM

1325 - NOAA PROVIDES SCHEMATICS
FOR RESTORATION @ SITE / AREA 2.

DETAILS PROVIDED ON SCHEMATICS.
DEVIATIONS FROM YESTERDAY'S

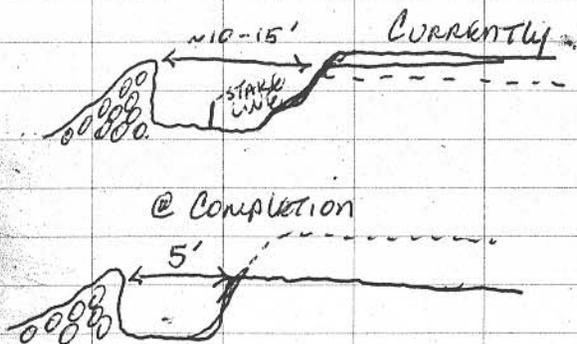
CONVERSATIONS INCLUDE USE OF
JUTE MAT INSTEAD OF FILTER

FABRIC, AND THE MAT WILL NOT
BE COVERED W/ TOPSOIL MIX @ ONCE

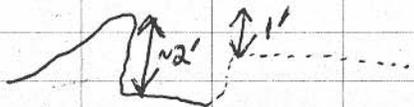
IN PLACE ALONG ROCK WALL / SHORE — FM

10/01/04 Friday DSS site.

1420 - MARK FIVE-FOOT SECTION OFF
ROCK WALL @ SHORELINE ALONG LENGTH OF
ROCK WALL. KRT WILL CUT DOWN
SAND BEAM @ AREA 3 AND BACK
FILL UP TO STAKES TO THE WEST.
BACKFILL GRADE TO TOP OF ROCK WALL.



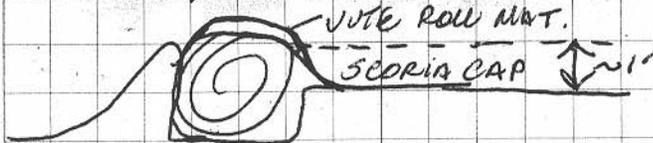
1545 - REWALKED SHORELINE/ROCK WALL @
AREA 2 w/ NOAA. NOAA DIRECTED
SAND BACKFILL PLACED ~1' BELOW
ROCK WALL UP TO 5' FROM ROCK
WALL TO ALLOW 1' SCORIA CAP.



10/01/04 Friday DSS site

- ADDITIONALLY NOAA DIRECTED
THAT LOW AREA HOLDING JUTE
ROLL BE MAX DEPTH OF 2'
BELOW TOP OF ROCK WALL TO
ENSURE SUFFICIENT TOE & OVERLAP
OF JUTE MAT AND TOE IN ON
OPPOSITE SIDE. ————— Km

- JUTE ROLL WILL EXTEND ~1'
OVER TOP OF ROCK WALL ————— Km



1600 - KRT WILL MOVE MORE
BACKFILL THIS AFTERNOON FROM
TELEGRAPH HILL. ————— Km

- NOAA REQUESTED SAND BACKFILL @
SITE BE SAVED FOR SHORELINE
RESTORATION ACTIVITIES AND NOT
USED FOR GENERAL BACKFILL ————— Km

1630 - MOVE TO KRT TRAILER TO
COMPLETE DAILY REPORT FOR
YESTERDAY, 9/30/04. ————— Km

1930 - MOVE TO DSS. ————— Km

[Signature]

10/01/04 Friday DSS site

1745 Backfill ops @ DSS continue.

KRT also stockpiling Backfill
from Telegraph Hill

1800 - KRT Preps to end days
activities

- 5 loads Backfill from Telegraph Hill

- 116 ^{101 B25B} loads w/ loader to DSS Backfill

1830 - Depart site for day

* NOTE: Collected 2 paint filter samples

10/02/04 Saturday DSS

0800 - Conduct daily H&S

Tribute Meeting. Activities

for day as follows:

- Haul PCB from DW to
Landfill

- Continue grading ops @
Landfill

- Continue Backfill @ DSS

0820 - KRT Begins hauling
PCB to Landfill w/ 2 dumps

1000 - KRT completes hauling PCB
from DW to Landfill. Total of

11 B25B Truck loads. Direct
KRT to Decon Truck & Prep

350 excavator to move to Telegraph
Hill for Soil/Grass Backfill to

Backfill Wetlands Area @ DSS to
North. NOAA states that Area

can be partially Backfilled/
Reconstructed w/ Sand prior to

Final Soil/Grass Cap

1050 - Move to Telegraph Hill w/
NOAA to locate Area to obtain
Top Soil/Grass fill

~ ~ ~

10/02/04 SATURDAY

1100. NOAA STATES KRI ALSO NEEDS
TO PLACE ROCK BARRIER @ LUKEANIN
BAY SIDE WHEN ROCK BARRIER
COMPLETED @ NADHILL

1110 - BACK @ DSS. KRI CONTINUES
DECONNING TRUCK & EXCAVATOR TO MOVE
TO TELEGRAPH HILL

- KRI CONTINUES AREA 2 RESTORATION W/
PC200 EXCAVATOR WHILE EQUIP DECON
CONTINUES.

1125. KRI MOVES 350 EXCAVATOR TO
TELEGRAPH HILL

1200. LUNCH.

1230. MOVE TO TELEGRAPH HILL

1255. KRI BEGINS EXCAVATING/HAULING
TOP SOIL/VEG BACKFILL @ TELEGRAPH HILL

1410. COMPLETE EXCAVATION OF TOP SOIL/
VEGETATION BACKFILL @ TELEGRAPH HILL

MOVE TO OTHER BACKFILL PIT. KRI
WILL CONTINUE TO HAUL GENERAL FILL
TO DSS.

1445 - CONTRACTOR NOAA REGARDING
GENERAL FILL SOURCE @ TELEGRAPH HILL.

KRI CONCERNS DIGGING FURTHER INTO
HILL MAY UNDERMINE ROAD ON TOP. NOAA
WILL MEET @ TELEGRAPH HILL TO DIRECT

10/2/04 SATURDAY DSS.

WHERE ADDITIONAL FILL WILL BE
COLLECTED FROM.

1500. NOAA DIRECTS KRI TO
CONTINUE REMAINING BACKFILL FROM
SIDES OF ORIGINAL AREA AS MUCH
AS FEASIBLE AND TO PLACE ROCK
@ BASE OF HILL WHERE DEPRESSION
BEGINNING TO UNDERMINE HILL
SIDE TO PREVENT FURTHER
ACCESS.

* NOTE: 3 LOADS TOPSOIL/VEGETATION
HAULED FROM TH TO DSS

1510. BEGINS HAULING SCORIA BACKFILL
TO DSS FROM TH.

1613. FINAL LOAD GENERAL
BACKFILL/SCORIA HAULED FROM
TH TO DSS. TOTAL OF 3 LOADS.

PER NOAA'S REQUEST KRI WILL
SLOPE ROADWAY MORE INTO AREA
TOPSOIL/VEGETATION BACKFILL REMAINS
ALONG EDGE OF ROAD.

1620. KRI MOVES 350 EXCAVATOR
TO KRI SHOP @ TH.
- MOVE TO DSS.

FIN

10/2/04 SATURDAY DSS

1635 KRI CONTINUES BACKFILL @ OPEN

EXCAVATION/DEEP PIT @ AREA 3C ~~fin~~

MOVE TO KRI TRUCK TO COMPLETE

DAILY REPORT FOR YESTERDAY ~~fin~~

1730- ARRIVE @ DSS. KRI CONTINUE

BACKFILL OPS @ AREA 3C/DEEP PIT. ~~fin~~

*-ALWAY MEDICAL DEPARTS SITE FOR DAY

ONE-HOUR SUPPLY.

1835- DEPART SITE FOR DAY ~~fin~~

[Large handwritten scribble]

10/04/04 MONDAY DSS

0800. ARRIVE @ DSS ATTEND

MORNING H&S MEETING ~~fin~~

- CONTINUE BACKFILL @ DSS ~~fin~~

- CONTINUE GRADING @ TRACT 42 ~~fin~~

- DSO'S - MEET W/ NOAA @ STAFF

QTRS TO DISCUSS UNCOMMIT SCHEDULE

- AWAITS RESOLUTION FROM BSE W/
GLORIA ~~fin~~

- COMPLETE CONCRETE

- COMPLETE BACKFILL @ DSS

- COMPLETE WORK @ DSS

- POSS. MORE EXCAVATION @ DSS

- REMOVE DWC @ DSS

- ADD MATERIAL @ VEH. BAY YARD
& COVER W/ DTE. ~~fin~~

0845. BACK @ DSS. KRI CONTINUE

BACKFILL @ 3C. ~~fin~~

1015. KRI PARTIALLY COMPLETES

BACKFILL OF DEEP PIT @ AREA 3C.

STOP BACKFILL DUE TO RISING WATER IN

PIT. MOVE TO NORTH TO BEGIN

BACKFILL OF WESTERN AREA 3B ~~fin~~

1155. LUNCH ~~fin~~

1235. ARRIVE, BACK @ SITE. KRI

CONTINUES BACKFILL @ AREA 3B ~~fin~~

~~fin~~

10/4/04 Monday Diesel Supp.
1350 - Backfill ops @ 3B Completed.
Prep to Begin Jute Mesh wrap/Backfill
Along Shoreline @ Area 2. — Thu
— KRI STAGES Full Material @ Area 2 — Thu
1630 - Begin Jute Mesh Application @
Area 2. — Thu
1730 - Alexey Mirculuit DEPARTS Site FOR
CNA. KRI CONTINUES BACKFILL BETWEEN
FIRST LAYER Jute Mesh ADJACENT TO ROCK
WALL. — Thu
1805 - Move to KRI TRAILER TO COMPLETE
Daily report for 10/2/04. KRI will
Continue Backfill @ Area 2 TH 1830 — Thu

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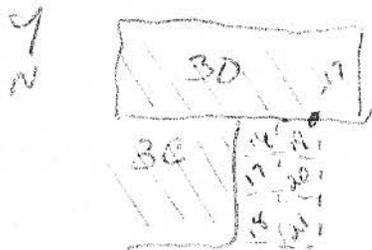
10/5/04 TUESDAY DSS
0800 - ARRIVE @ SITE. ATTEND DAILY
MEETING @ GATE MTS. ACTIVITIES TODAY
— CONTINUE RESTORATION @ AREA 2
— MOVE ROCK TO TRACT 42 / CONTINUE
Grading ops.
0820 - KRI COMMENCES BACKFILL OPS
@ 5' MARCH ADJACENT TO ROCKWALL
@ AREA 2 — Thu
1900 - LUNCH — Thu
1240 - ARRIVE BACK @ SITE. KRI
CONTINUES BACKFILL/Jute wrap ops @
AREA 2. — Thu
1405 - BACKFILL MOUND @ AREA 2 COMPLETED.
PREP TO APPLY LIMEFLOX AND GATES
BEFORE ARRIVE TO FILL Jute COVERING — Thu
1630 - Jute wrap Completed on
mound @ ROCKWALL @ AREA 2. KRI
CONTINUES PARTIALLY BACKFILLING
DEEP PIT @ AREA 3B. — Thu
1830 - KRI COMPLETES BACKFILL @
AREA 3B LEAVING OPEN HOLE TO PUMP
WATER. MARKS OLD BOUNDARIES OF
AREA 3C AND HOTSPOTS. DETERMINES
AREA TO CONTINUE EXCAVATION TOMORROW
— DEPART SITE FOR DAY — Thu

10/6/04 WEDNESDAY DSS

0800. ATTEND DAILY H&S MEETING w/
NOAA & KRI. ACTIVITIES TODAY:

- BEGIN ADDITIONAL EXCAVATION @
AREA 3C
- CONT. GRADING TRACT 42
- HAUL BACKFILL FROM TH TO DSS

0830. KRI BEGINS STRIPPING CLAMM
OVERBURDEN @ EAST SIDE OF AREA
3C. km



0910. MOVE TO TRACT 42 TO DISCUSS OPS
w/ BRUN CROFT km

1010 - DISCUSSED TRACT 42 CONDITIONS w/
B. CROFT & REMAINING GRADING OPS TO COMPLETE
MOVE TO DSS km

10/6/04 WEDNESDAY DSS

1015. KRI CONTINUES REMOVING OVERBURDEN
@ AREA 3C. NOAA DIRECTED REMOVAL
OF MATERIAL TO ~ +4 MHW km

- SECTIONS 16 THRU 21 WILL BE SECTION
SEQUENCE km

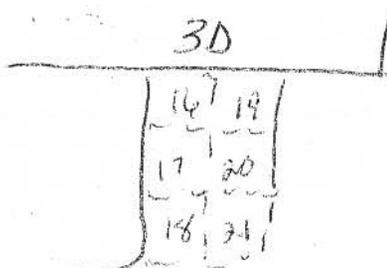
1100. COLLECT SP34-CH-030-015 FROM
CLAMM OVERBURDEN. km

1110. BEGIN EXCAVATION @ SECT 16
BELOW +4 MHW km

1130. SECT 16 EXCAVATED TO ~ -2 MHW
SHELLS OBSERVED. BW @ ~ 9' bgs
BOTTOM APPEARS CLEAN @ -2 MHW. STRONG
ODORS FROM SOIL ABOVE BW. km

1140. KRI BACKFILL @ SECT 16 TO ~ +1 MHW
1200. LUNCH km

270. ARRIVE @ DSS. KRI FINISHES
BACKFILL @ SECT 16. WILL EXCAVATE
SECT. 19 EAST OF SECT. 16 km



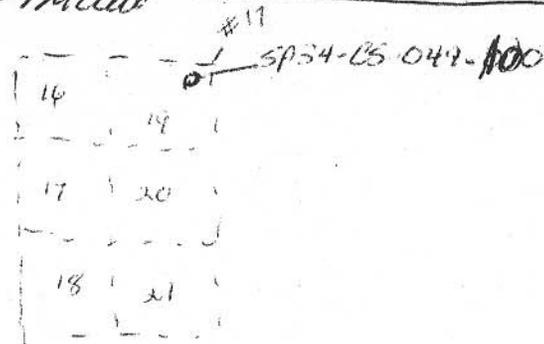
10/6/04 WEDNESDAY DSS.

1345. BEGAN EXCAVATION @ SECT 19. — Km

1305. COLLECT SP34-CS-249-100 @ NE CORNER SECT 19. SECT 19 EXCAVATED TO ~ 2 MUD — Km

1315. CONTACTED BY NOAA. DIRECTIONS TO REMOVE CLEAN OVERBURDEN AND EXCAVATE TO ORIGINAL AREA PROPOSED FOR EXCAVATION. EXCAVATION OUTSIDE ORIGINALLY DELIMITED AREA NOT PROPOSED @ THIS TIME UNLESS NOAA APPROVED. — Km

-KRI WILL COMPLETE EXCAVATION @ SECT 19 TO ~ 2 MUD & BACKFILL TO ~ 1 MUD — Km



1325 - KRI BACKFILLING SECT. 19. KRI WILL REMOVE CLEAN OVERBURDEN OVER ENTIRE DELIMITED AREA PRIOR TO EXCAVATION POS.

* NOTE: SILENS OBSERVED FROM EAST END OF SECT. 19. — Km

10/6/04 WEDNESDAY DSS.

1340. MOVE TO PUBLIC WORKS TO FUEL VEHICLE/ROAD TRUCK. — Km

-KRI BACKFILLING SECTIONS 10 & 19 TO CONSTRUCT ACCESS ROAD INTO AREA 3C FOR STORAGE DELIVERY PRIOR TO REMOVING OVERBURDEN TOWARDS SECTA / DENVER COLL. — Km

1400. BACKFILL @ NORTH ROUTES ROAD BETWEEN AREA 3B/3C COMPLETED. DECOR 773 & PREP TO HORN OVERBURDEN. — Km

1405. KRI WILL NOT DECOR TRUCK. WILL MOVE OVERBURDEN TO STAGING AREA W/ 9500 LOADER INSTEAD. — Km

1410. KRI BEGINS OVERBURDEN REMOVAL. — Km

1500. MOVE B. CRUIT TO AIRPORT — Km

1520. BACK @ SITE. KRI CONTINUES REMOVING OVERBURDEN @ 3C & MOVING BACKFILL FROM TELEGRAPH HILL. — Km

1530. KRI COMPLETES REMOVAL OF OVERBURDEN TO ~ 4 MUD. WILL CONTINUE EXCAVATION @ SECT. 17 TO ~ 2 MUD — Km

1545. BEGAN EXCAVATION @ SECT 17 — Km

[Handwritten signature]

9/13/04

Purpose: Observe transfer of soil from landfill to NWS location

Weather: clear 50's

Personnel: TG (TB), Guy (Kelly Ryan)

1430 @ landfill. Discuss several questions w/ Guy.

- Soil sorting conducted when trucks are not loading. Plenty of time to complete sorting w/ no delay in filling.

- More trucks would be helpful. The sorting is not the limiting factor. More trucks w/ another excavator would be even better. 1 excavator could keep up w/ 3 trucks; still have time to sort.

- rocks \geq 1ft sorted out and piled. No rocks have been trucked to NWS location. Several truckloads have been dumped to the side of the landfill pile to make room for activities. Guy stated that Near (sp?) had asked them or suggested they do this.

9/13/09

B25B truck @ landfill to fill (8 min)

1438 Truck Filled & leaves

1452 2 x B25B trucks arrive.

1453 ~~1st truck Filled & leaves. 2nd truck Filling~~ (3 min) fu

1456 A6

1453 1st truck getting Filled

1456 1st truck Filled & leaves (3 min)

2nd truck getting Filled

1459 2nd truck leaves (3 min)

Suggestion: Get more trucks, use larger trucks, get more trucks & another excavator. No need to stop sorting. Limiting Factor is trucks

1508 1st truck returns (12 min)

1511 1st truck Filled & leaves (3 min)

1513 2nd truck returns (14 min)

1515 2nd truck Filled & leaves (2 min)

Discontinue timing, just count truckloads

Truck count: IIII IIII IIII

1630 offsite

9/13/09

Notes:

- Jim will need service truck @ end of Tuesday
- Tues, stay @ landfill to observe. 8 am safety mtg. Jim & Brian will get in touch if needed.

- ~ 5 min to fill a truck,
- ~ 15 min to leave, dump, & return
- * ~ 20 min total for 1 truck

9/14/04

Purpose: observe transfer of soil
from landfill to NWS site

Weather: cloudy, drizzle, 40's

Personnel: AG, Guy

9:00 @ landfill. Guy sorting soil as
trucks leave. Fills them when
they are available.

* Only 1 truck available today

Truck count IIII IIII

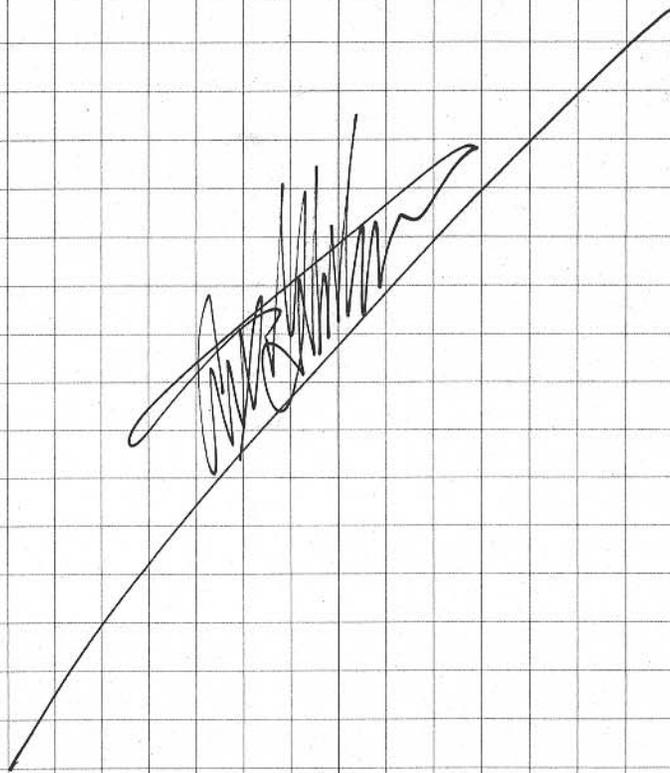
1145 Leave site for lunch

1315 @ landfill, maintenance being
done on excavator. Guy not
on site. Worker stated that
there will not be any more soil
removal since there is only
1 truck to fill. They will wait until
there are more trucks to
continue.

Notes: 10,000 cu to remove
25 cu capacity in BZSB truck
400 loads to remove soil

9/14/04

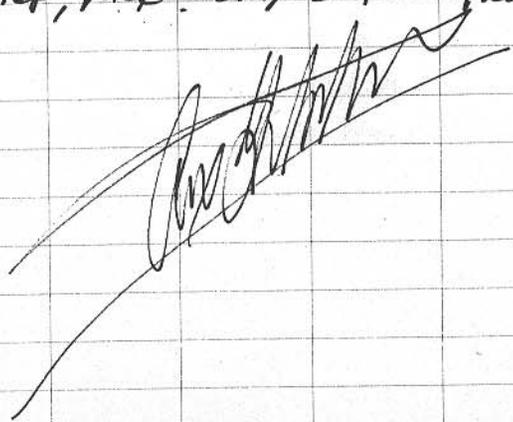
Notes (cont): 1 truck makes ~25 loads/day
16 days for 1 truck to haul
8 days for 2
~5 days for 3
1330 Return to diesel seep.



Wed 9/15/07

Daily Activities

- No work @ LF due to lack of productivity w/ truck maintenance problems and more cost effective use of personnel and equipment elsewhere.
- safety meeting
- summarize 9/14 notes for daily report.
- Soil samples collected for paint filter tests
- hrs & equipment/personnel info received from Lyle
- complete draft of 9/14 daily for review by Brian Craft (BC)
- corrections made by Brian and revisions made to draft
- prep, pack & ship soil samples



Thurs 9/16/07

Daily Activities

- safety mtg
- summarize 9/15 notes for daily report
- hrs & equipment/personnel info from Lyle
- Freezer packs ordered from lab
- complete draft of 9/15 daily for review by BC
- Revisions made to daily based on BC comments
- review P&S & backfill volumes from previous daily reports



Fri 9/17/09

Daily activities

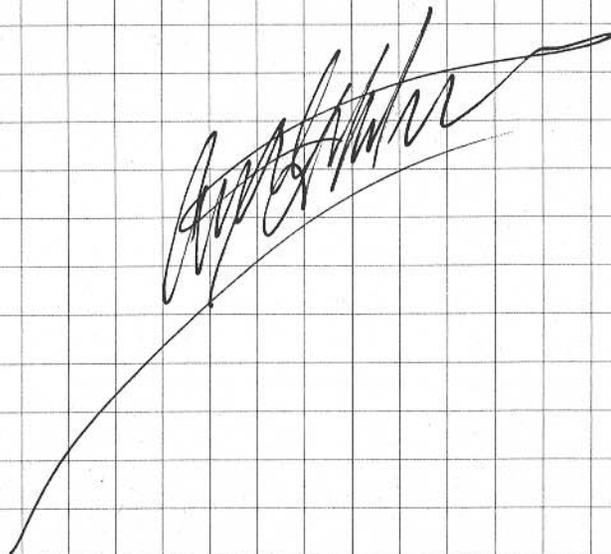
- safety mtg
- summarize 9/16 notes for daily report
- week's soil samples prepped and ready for shipment next week
- hrs breakdown from Lyle
- complete 9/16 draft, draft to BC, revisions back: email to Ken
- mtg @ NOAA staff quarters & discuss project.
- soil samples collected to conduct paint filter tests

A handwritten signature in black ink, written over a diagonal line that spans across the bottom of the page.

Sat 9/18/09

Daily activities

- safety mtg
- summarize 9/17 notes for daily report.
- PCS & backfill volumes noted from previous daily reports and input into tables.
- hrs breakdown from Lyle
- complete 9/17 report, draft to BC, revisions back and email draft to Ken.

A handwritten signature in black ink, written over a diagonal line that spans across the bottom of the page.

Sun 9/19/04

Daily activities

- mtg w/ Dave & Paula to review project information & progress
- site visit to landspreading area, landfill and icohouse bldg.



Mon 9/20/04

Daily activities

0800 safety mtg

- summarize 9/18 daily notes

1420 @ landfill to observe operations.

One EX300 loading from sorted stockpiles at top of landfill PCS. 2x 773 hauling

~5 min to load 773

~10 min to haul & return.

Very little downtime for excavator.

Less than 3 min wait time if one truck is being loaded while other waits.

1540 Speak w/ Terry who operates the EX300.

States that he expects the top stockpiles @ the landfill to be removed fully

by Thurs or Fri. NOAA has not yet used GPS @ LF as far as he knows. Expects to have a BZSB added to morrow. No sorting being done.

1600 meet w/ Paula & Dave to discuss

landfill. Currently the soil will be removed from the top of the

LF w/out sorting. They state that some days they may require

9/20/09

the number of loads hauled prior to the daily report submittal. They will not fly us in advance if this is needed. Tomorrow (9/21) they will need help w/ staking the landspreading site.

- hrs from Lyle
- complete 9/18 report, draft to Brian, revisions made & Brian emails report to Ken.

Tues 9/21/09

0800 safety mtg

0830 summarize daily notes from 9/20

0900 Meet w/ Fowler to stake out area at land spreading site. Stakes placed in ground w/ 18" line marked for soil depth determination.

1130 Prep sample labels & sample equipment for KRI sampling to be conducted southeast of Diesel Seep site.

1200 Freezer packs from lab received

1400 @ LF to observe progress. The B25B and 2x 773 trucks are being used. The EX300 is constantly loading the trucks. Very little wait time for trucks. Approximately 5 min wait time at most if one truck is being loaded. Loading will probably be completed by end of day.

1530 @ KRI office to get hrs from Lyle. Not ready yet.

1630 Hrs from Lyle.

1845 Draft daily for 9/20 complete & ready for review.

Wed 9/22/09

800 safety mtg

915 Packing samples and shipping

1305 Samples shipped

1340 Observe controlled burn @ Lukemin Bay.

(Wood waste burned to reduce amount of piled waste to be hauled from site. Excavator loading BZSR truck w/ excess sand located @ site.

Sand hauled to backfill staging area.

1350 @ LF to help NCTA stake out the 50' ± 8' setbacks

1630 @ KRI office for Mrs Framlyle

1650 @ LF to continue staking

1800 Finish @ LF

1900 @ KRI office to complete daily

2045 Finish daily.

Thurs 9/23

800 safety mtg

815 summarize daily notes from 9/22

1000 @ LF w/ Paula, Dave, & Mervyn to

discuss grading. KRI will pull msw

back upgrade at least to 50' setback

which is marked w/ green flagging.

This will be the maximum toe of the subgrade municipal waste.

If the waste extends this far then

2' Ft of PCS cover will be placed

here & then can naturally spread

downslope extending past the 50'

setback line. ^{current} Steep slopes will be cut

back to allow for 3:1. Current

open excavations will be filled to allow

3:1. Paula & Alex will stake across

Tract 42 to help w/ determining 2' PCS

depth. stakes will be placed perp. to

ground surface and marked w/

2' measurement. E & S sides will be

marked first today & KRI will begin

those sides tomorrow.

1130 continue w/ daily report

1300 @ Lukemin Bay to see site. Then

9/23/07

drive to Nutt equipment area. Pick up seed, fertilizer, & hay ground cover mats. Seed & fertilizer spread across Lukamin Bay site. Cover mats placed on top, layered on top of each other across the bare soil, and stapled into the ground using 6" staples. Rodney & Alexay help through entire day.

1800 Merwyn @ Lukamin Bay to operate excavator w/ thumb. Large boulders moved to the western edge of the mats near the road to use as barriers for the site.

1830 Finish Fieldwork. Contime daily.

1900 End of day

Fri 9/24/07

800 safety mtg. Will meet w/ Paula w/ Dawn to work on Lukamin Bay erosion control mats. Alexay will join us after hauling jets from DW
1000 Pick up erosion mats, extra staples & equipment.

1030 @ Lukamin Bay site. Begin laying out & securing mats.

1115 Alexay @ site

1210 Alexay offsite. Paula & Dawn arrive. Dawn wants extra boulders brought from Telegraph Hill & placed on roadside perimeter of site.

1230 offsite for extra mats & supplies.

1300 @ Lukamin. Rodney & Alexay on site. Dawn has contacted Merwyn & boulders will be brought to site while excavator is still here to move them into place.

1440 Finish erosion control mat installation.

1520 @ LF to observe grading. Paula & Dawn also on site. The loader brought large boulders and concrete to the long narrow open pit located adjacent to the access road

Fr. 9/24/09

on the NE side of the landfill. The excavator moved the material within the pit. The concrete will form the boundary between the municipal waste & the setback.

Excavation pits were made east of the access road. The pits were used to determine MSW extent. Pits without waste will be used as cover & these new pits will be used to place debris into.

The ponded area on the northern portion of the landfill was drained & the debris/soil pile adjacent to the pond was distributed across & within the LF by a dozer. The dozer continues to move PCS across the top portion of the landfill.

Note: photos of the filled in long, narrow pit & excavation pits were taken.

1030 Pick up his break down from KSI office

1045 @ LF for overnight

1740 Leave LF to continue daily report.

Similar operations continue @ LF.

Sat 9/25/09

800 safety mtg

815 Daily report writing

1130 Hours breakdown from Barbara.

1215 @ LF to observe activity. Ray using

dozer to spread PCS @ top of stockpile.

Soil pushed from southern edge of stockpile to NE corner.

Note: Photo taken of NE pit filled w/ rocks & of test pit that had been excavated for sand backfill & as an open area to dump random debris from the LF.

Merwyn & mechanic working on small D3 dozer. Merwyn then operates the D3 atop the PCS stockpile. Dave Windandy onsite to observe activity. Dozers push PCS to S & SE sides of the stockpile. Guy operating the excavator on the northern slope of the LF. Leveling out the area & sorting large debris from the soil.

1645 Dave leaves LF

1730 Paula & Dave @ LF to GPS the site.

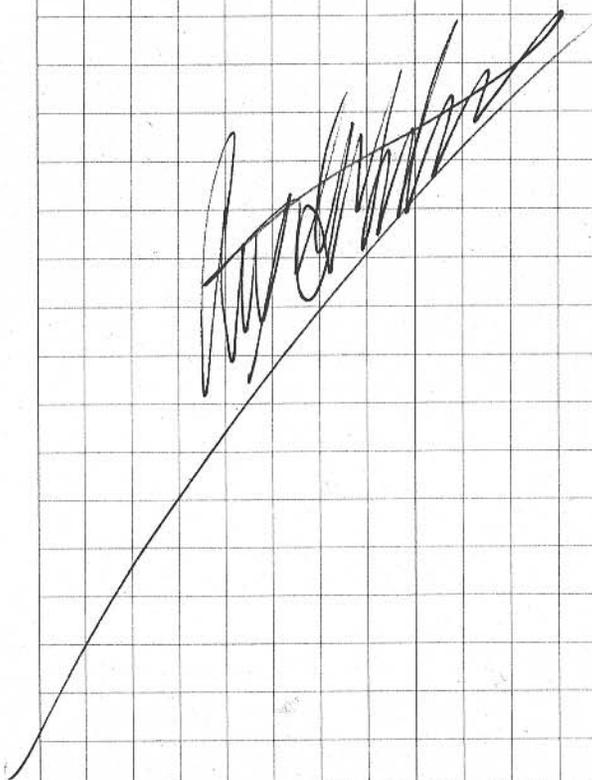
GPS & stake the north slope & 1/2 of the western slope. Thin fluorescent orange

9/25/09

stakes area being used to indicate the depth that PCS must cover. They have been installed w/ the top @ 2' so when they are buried then the proper depth has been achieved. Tall stakes, painted a dull orange were installed @ the top of the slope where the ground cover must be reduced in gradient & pulled back. Dave would like all protruding metal & debris segregated from the soil. The slopes should be leveled out to provide a smooth surface for the PCS to be laid upon. The western slope still has considerable amt of MSW that must be pulled back to within the 50' setback line. Also the northern slope will need to either cut back or fill will have to be placed on it to reduce the gradient of the slope. It currently is too steep. Dave stated that he would like debris placed into the SW corner pit before anywhere else leaving

9/25/09

the NE corner open until the very end. The bottom of the northern side of Tract 42 will be the last area for grading activity.
1815 OFF site.



Mon 9/27/09

800 safety mtg

830 Daily report notes summary.

940 KRI office

1000 @ LF. Guy, Ray & Merwyn onsite.

Discuss staking system for ~~W~~ & N slopes.

skinny + placement stakes demark MSW grade level @ base & minimum PCS cover @ top. Show Guy & Merwyn

the long stakes w/ dull orange that mark areas that need to be cut back.

Discuss separating piping, metal debris, and large objects from the pile & moving them to the SW corner pit.

Leaving NW corner pit open until the end.

Ray moving PCS on top w/ D8.

Merwyn working @ grading the S & W slopes w/ D3.

Guy separating large objects on W & N slopes and cutting back the steep slopes that have been staked by North

1130 Leave LF

1200 Preping & packing soil samples, summarizing daily report information for 9/25.

9/27/09

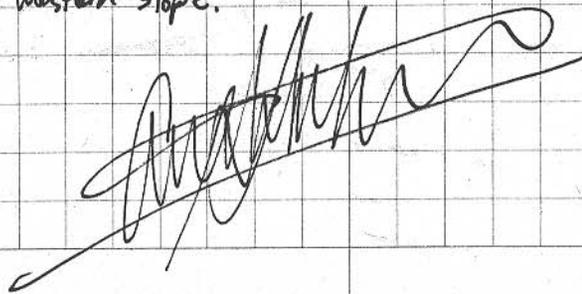
1530 @ KRI office to write up daily report.

1500 Finish daily. Ready for BC review.

1530 Fill up Chevy pickup

1540 @ LF. Fitz's handling PCS from DW directly to LF now & not LS. PD pushing PCS across top. D3 grading south slope.

Paula onsite & asks that a surface layer be scraped back from around the perimeter of the site to pull in surface debris. Guy begins cutting back the SW side of the site just north of the open pit. Boulders separated and piled to the side for later use as barriers. Piles pulled back w/ EX300 and metal debris and other waste separated to be placed into SW pit. D9 concentrating on pushing PCS over western slope.



Tues 9/28

800 safety meeting. Will hear from Dave about time to meet @ LF to discuss current activity.

930 Dave radios to say that he can not meet @ LF. Must attend to other priorities.

Pack all samples for shipping.

1100 meet w/ Dave & Paula. Discuss GW sampling for Woods Hole & LF.

Paula has bottles, HCl, and most equipment for GW sampling. Need to check in Conex for peristaltic pump, tubing, 5 gal buckets. No parameters will be monitored so do not need flow through a YSI. Water will be purged for 10 min & then sampled. NOAA will get proper maps and well locators and will take care of the paperwork & shipping. Paula stated that this is not a priority at this point and that LF should be done first.

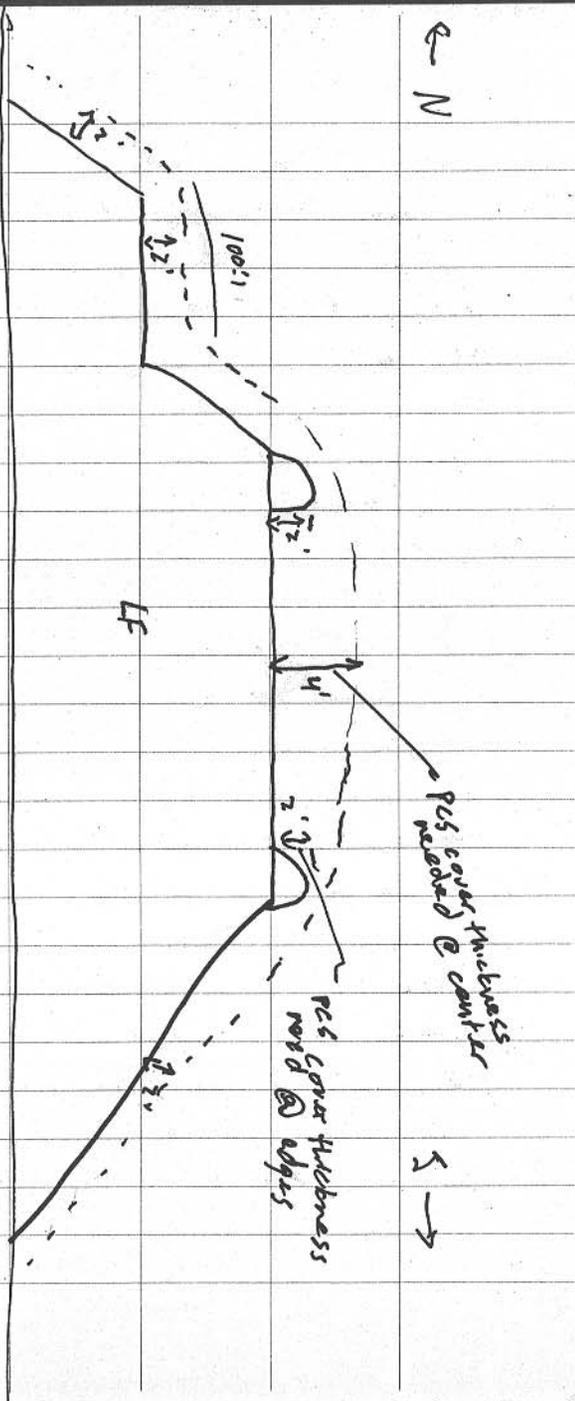
9/28

Dave had several concerns w/ the LF. He wanted to make sure that all rebar and rope & debris that was not just boulders were removed from the skinny pit adjacent to the road. This debris needs to be placed into the more eastern pit.

Dave discussed PCS layer necessary @ top of PCS pile. @ middle need minimum of 4' between surface and liner. Suggests digging several test pits to determine current depth to liner. Also needs 2' cover from liner to surface along the edge of the top area where the berm used to be located.

1130 @ LF. D3 being used on the western slope to grade PCS. Have Mervyn stop to discuss the PCS thickness @ top. Guy excavates two test pits N & S of center of top (approximately) w/ EX300. Test pits used to determine PCS thickness to liner. N pit

Approximate view of LF w/ PCS pile & covers. Not to scale.



9/28

shows a thickness of 5'. South pit shows thickness to 6'. Large piles of PCS still available to E so no pits examined there. Will dig 2 more pits to the W where the grade slopes off. These will be checked after lunch.

11:30 Paula @ LF. Discuss situation w/ Merwyn. He will need the center of the top & the edges prior to the side slopes staked out. Right now it is understood that the top will be approximately a dome w/ 100:1 ^{4' thickness with} grade that slopes to 2' thickness @ edge prior to side slopes. Alex tells Merwyn about moving debris from one pit @ NE corner to the more eastern pit. He will tell Guy to move this. Merwyn gives us stakes for use as markers to determine 2' PCS thickness along slopes. Alex installs stakes on western

9/28/04

slope. Marwyn stated that they will have enough work for a couple of days to cover the time needed to stake out the top of the PDS pile.

1730 offsite.

1310 @ LF. Have EK300 continue to make test pits. Generally there is a 5' depth to line from center out. 8 pits made all w 5' except those to the west where the slope grades down. Showed Marwyn the 50' setback perimeter on west side. Paula onsite, says they have GPS coordinates and will come back soon to stake out the center line and perimeter of top. The top will now be an arch and not a dome. The length of the arch is E \leftrightarrow W. Guy is separating the concrete rubble & rebar from one pit on NE side and placing it into the pit more to the east. Some work had been done to fill in

9/28/04

the SW open pit. Some of the dune ~~had~~ had been pulled into the pit. Asked Paula if this was what was wanted or do we want to keep the dune in place. Paula is asking Dave if they even want to be filling this at this point.

1500 @ airport to see when Pen Air flight w/ Kevin is expected. They say @ 4:30pm.

1515 @ LF. Paula arrives. Attempt to GPS stake pits @ top of Pila but GPS can not get a signal. Can set up the repeater but this may not be possible since the winds are steady @ above 40 mph. She will find out the status.

1545 Pick up hours from KRS office.

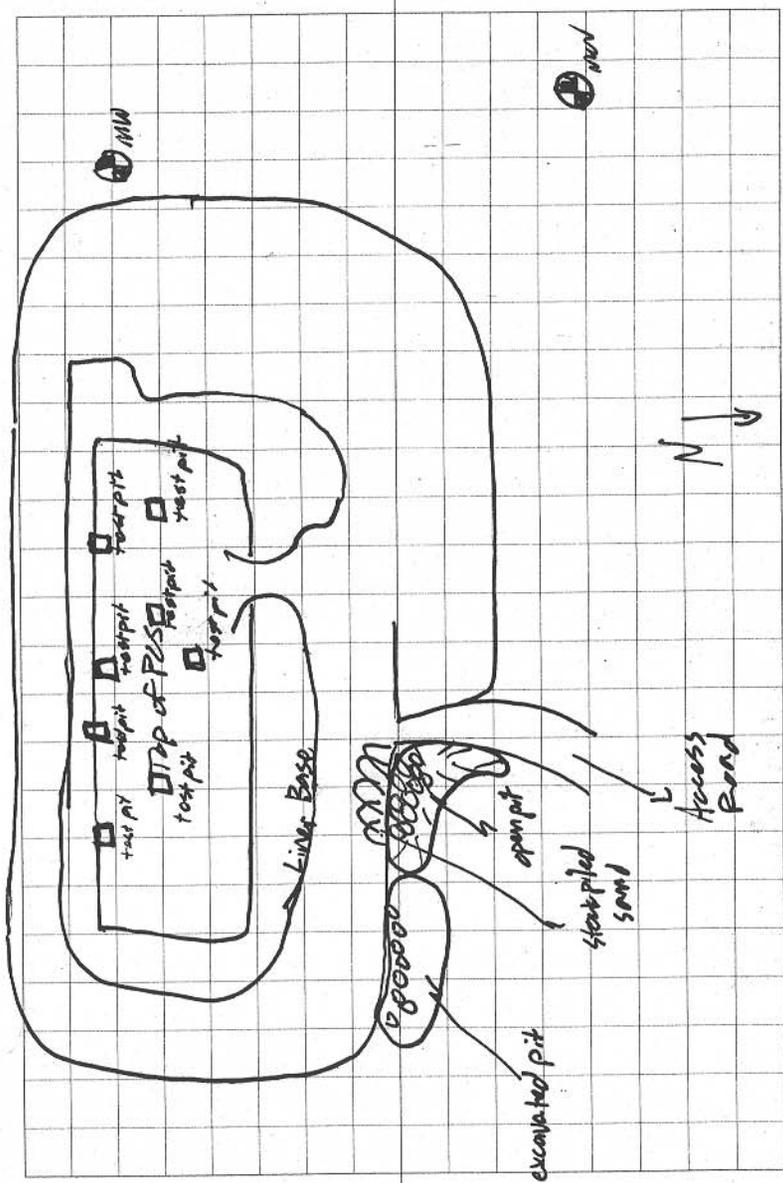
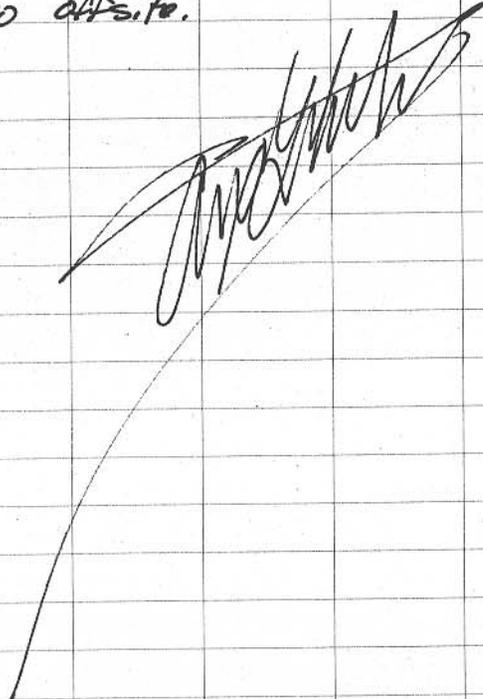
1600 @ staff quarters to help gather equipment to set up repeater for GPS on Diamond Pt.

1620 Pick up Kevin @ airport.

1645 meet Paula @ LF to GPS stake top part of PDS stack/pile

1/28/04

Winds are extremely high & rain making it difficult to GPS. Top perimeter staked out, Ray continues to smooth out soil on top. Guy using EX300 to distribute soil on N slope West of the access road. 1620 GPS's to.



Wednesday
9/29/04

1000 meet @ Tract 42 w/ Dave W., Paul S.,
Alex G., & Mervyn J. to observe ops &
discuss plans

- dug additional test pits to check depths
to liner
- liner on south side of Tract 42 seems to
be @ higher elevation than rest of area
- may require additional 2 ft cover over this
portion
- eyeballing the PCS & areas to be covered, it
appears that there may not be enough PCS
to install the cap over entire designated area &
be able to meet the 100:1 slope for the top
of the cap
- 3:1 slopes seem good everywhere except @
SE & NE portions - Dave W. said PCS ~~can~~
can be placed ^{5 ft} ~~in~~ the 50-ft setback of
the Tract 42 boundary - I was not aware
of this - he said only MSW cannot be
in this area - this applies @ SE corner where
dunes affect placement of the cap - @ NE
corner, 3:1 slopes not in place yet because
of road & ^{or in} pits on north side of road
- laid out middle line of top of cap & checked
depth along it (3 test pits)

Wednesday
9/29/04

- depth to liner along middle line
east end → 6 ft
middle → 5 ft -
west → 2.5 ft
- depth to liner along south side (top) were
basically 2 ft ± along the length except
@ SE corner (0.5 ft bps)
- discussed w/ Dave W. issue of not enough
PCS for cap - he agreed; mentioned
possibly hauling PCS back from NUS

1200 Lunch

spoke w/ Ken V. to update on SNP site's
status - he will talk further w/ Greg.

1300 talk w/ Dave W. @ staff qtrs.

priorities for SNP - Diesel Seep (time & \$ permitting)

- finish 2nd Gae trench
- shoreline restoration (Area 2) - topsoil wrapped w/ jute mat &
seeded/fertilized
- backfill Areas 3A, 3B, 3C, 3D (in that order)
- place scarifier work surface
- excavate remaining PCS (& overburden) from Area 3C ^{Y₆}
- decontam cell must be removed before end of season

Wednesday
9-29-04

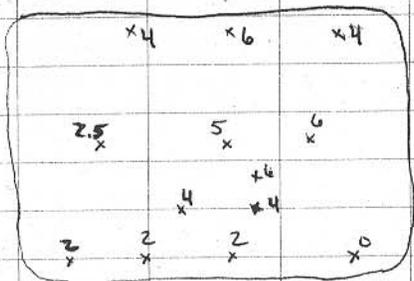
Primitives @ Tract 42

- likely will haul PCS back from NWS to complete crap installation
- will meet @ LF again to discuss options further

1400 meet @ landfill / Tract 42 w/ Dave W.

- additional test pits excavated
- KRI / TE suggested to Dave possibly using south end where depth to liner is already 2 ft as the high point & sloping top down to north - more test pits to see if this will work (i.e. meet 2 ft cover reqmt) (as opposed to using middle line as high point)

Depths to liner



1600 Dave W. taking more GPS readings for reference data for proposed south to north sloping of top (instead of middle line as high point)

1620 Nir B. onsite - discuss site plan w/ Nir, Dave W., of KRI (Maxym) - all agreed that best plan is

Wednesday
9-29-04

to slope down from south to north using south line of platform (established as 2 ft above liner via test pits) as starting point - KRI will use laser level to get base pt. on south side & install grade stakes @ middle line of area (mark as -1) and @ north line of area (mark as -2) - need approx. 2 ft drop between south end (start) & north end ("finish")

- may need to buy more PCS from NWS when we reach the western end, but @ least have a plan, & will deal w/ this issue as time nears - also may need more material @ NE & NW corners, but will see how much material is "shaved" off in grading top. from south → north

1720 Setup laser level on top of stockpile to set grade stakes for dozers

- South line = 0

- middle line = -1 (drop elevation from south to middle by 1 ft)

- north line = -2 (drop elevation from middle to north by another 1 ft)

1745 laser unit battery died - will charge in Maxym's truck overnight & set stakes in morning

KRI continues grading & contouring ops

1830 offsite 7 BSC

Thursday
9-30-04

0800 safety/ops mtg (@ Diesel Secp)

- continue grading top of stockpile south → north
- will set stakes this morning

note: slope reqmt for top = 100:1

slope reqmt for sides = 3:1 or greater

cover reqmt = 2ft minimum

0920 KRI continues grading ops on top of stockpile

- also moving concrete blocks from NE corner to lower ground near base of new lumber pad to make room to push material for cover down the NE slope (toward the previously excavated pit)
- using EX300 & 988B loader

0930 Dave & NirB. onsite

begin placing grade stake along perimeter of top of stockpile - marking south (ie, middle, & north lines based on staking (used transit because laser level is down & out again), it was determined that additional volume will be required on south line, thus requiring additional volume & significant effort to fix slopes there as well

initiated large discussion between NORA, TO, KRI

- issues raised included:

- is the south line of stakes marking the inside or outside of the berm/liner? - makes

Thursday
9-30-04

a large difference in how much volume/work will be required - 5-8 ft would be huge!!

- SE corner needs to be raised ± 2 ft causing problems w/ changing slope

- Merwyn said building up from the bottom was the wrong way to start, but NORA wanted to continue - new slopes are already set & significant work will be required if top of stockpile needs to be raised

1100 KRI continues to grade, contour top of stockpile - pushing material from south to north & using 988B to haul "excess" to build up SE corner - working in eastern half of stockpile

Nir to check w/ Seattle on issues

1200 LWSCH

1230 KRI resumes grading ops @ top of stockpile

1300 NirB. onsite

- * accordg. to Dave W., stakes on south line were placed on outside of liner berm; as such, stake line will be moved north 8 ft. & remarked using transit to establish fill level there.
- SE corner (top) will be filled using "excess" material pushed to north end (ongoing)

Thursday
9-30-04

1430 to KRI office to work on daily rpt for 9-29

1600 return to Tract 42

KRI continues grading ops

- D8 pushing material from N \rightarrow S
- D3 grading material
- 988B hauling excess from N side to low spots along top of stockpile

\rightarrow try to build up south state line as well as other low points, particularly in western half of stockpile

1700 Nir B. onsite to video/inspect ops

1830 offsite

35

Friday
10-1-04

0800 self/ops mtg (@ Diesel Shop)

- continue brofill grading ops

- Menwyn requested verification of western & north boundary (i.e. where KRI can begin to slope down while maintain 2 ft cover) - one stakes marking inner edge

0830 to KRI trailer to farm timesheet

Menwyn had questions regarding Dave W.'s

comments on 9-18 daily report

- spoke w/ Ken V. to resolve
- also discussed scheduling / timetable for Tract 42 completion

0920 to Tract 42

- re-checked grade stakes w/ KRI - some stakes had been knocked down during grading

1015 Nir B. onsite - discuss w/ Menwyn

- all agreed w/ current plans/ops

- top of stockpile being sloped from south to north @ 100:1 - excess being moved to south side to build up
- western portion will be sloped down to east - south west to match existing contours - enough fill is already in place for 2-ft. cover
- 3:1 slopes for sides, except in SE corner where no msul is located

Saturday
10-2-04

0800 safety/ops mtg

- haul DJ PCS - to Tract 42 for extra cover material
- continue Diesel Seeps ops
- mae Ex350 to Telegraph Hill to haul grassy topsoil for Diesel seep & rocks for landfill (around perimeter of Tract 42)
 - maybe today or Mon. morning

0815 KRI hauling PCS from DJ to Tract 42 - Tract 42 crew to use as cover in lower areas, particularly west portion - Mervyn also feels that they will likely need to haul more material from NWS

0910 @ landfill

KRI dumping 773 loads of PCS from DJ @

NW, W, & SW portions of top of stockpile

- using 988B to move to specific areas
- using D8 to push
- using D3 to grade

0945 spoke w/ Mervyn - will need more material, especially near northeast corner & north side

- D8 pushing last of piles @ NE corner - will move to NWS to begin pushing up landspread PCS to haul back to Tract 42

Saturday
10-2-04

- we all agreed that better to bring "more than we need" so we are sure to have enough if don't have to go back again - estimating for approx 1,000 CY to haul back
- use D8 to push into pile, 988B to load, 773 to haul

1100 D8 continues to push up material @ NWS landspreading area

988B loading 1-773 truck to haul to Tract 42

1120 D3 continues to grade slopes along west side of stockpile - building up w/ material being hauled from NWS

1300 KRI continues to haul PCS from NWS to Tract 42 - D3 grading/building slopes on west side of stockpile

1410 checked sideslopes using KRI's 3:1 gauge - wider frame creation

- south side is greater than or equal to 3:1 along entire length
- SE corner less than 3:1 (approx 2:1), but not a concern b/c no MSW there
- SW corner is 3:1
- NE corner is less than 3:1, but Mervyn is currently grading in this area

Saturday
10-2-04

1500 to KRI trailer to do daily rpt.

1630 back @ Tract 42

KRI continues to haul PCS from NWS to Tract 42 - dump loads along NE portion @ top of slope and also occasionally @ NW portion where Merwyn is using D3 to grade side slopes

met w/ Nir - wanted to make sure we weren't going to be pushing any material onto City property (outside Tract 42 boundary) - we inspected stakes & it's clear that we are well w/in Tract 42 boundaries, though some PCS/cover material is/will extend beyond the 50-ft setback

1700 checked ^{North} west sideslope again (north of dune area) - still slightly less than 3:1 - Merwyn will continue to shape slope & extend to meet 3:1

note: Nir stated he is satisfied w/ using the 3:1 gauge supplied by KRI (wood frame)
Nir also GPS'd various points @ top of stockpile to check 100:1 slope - indicated some of area near SW portion is still a little high - discussed w/ Merwyn, who will address slight re-grading after shaping sideslopes

Monday
10-4-04

0800 safety laps mtg.

- continue Tract 42 grading - haul NWS PCS
- continue shoreline restoration @ Diesel Seep

0810 mtg @ Staff qtrs. w/ Nir - order of priorities

KRI Tract 42 crew {
- landfill - cap & place rock (1,515 ft of ^{1 linear span} ~~span~~ ^{per meter} ~~rock~~)
- haul scoria - place / compact if ready
- tear down dew storage cell

- additional work (besides Diesel Seep)
- vehicle storage yard (BSE) - hauling / placing more fill
- snow fence installation @ NWS landspad (BSE?)

0845 to house for phone calls

- called for Victor @ TDX - had left message Friday late afternoon - he was not in, but left msg. for him to call back
- called Ken V. to see if he had any insight on our mtg this morning w/ Nir

1000 @ Tract 42 - KRI continues to haul PCS from NWS to Tract 42 - D3 grading sideslopes, primarily in NW corner

1045 KRI will have to extend toe of NW slope out further into 50-ft setback to meet 3:1 slope & 2-ft cover requirements - Merwyn dug small test pit @ top of slope & MSW also @ ~ 2ft - can't scrape any more from top

- told Merwyn that we cannot extend PCS cover beyond the stakes marking Tract 42 boundary - he said not a problem

Monday
10-4-04

1100 Nir onsite - updated him on current activities

- he gave us a figure showing cover in place now based on GPS survey data - doesn't seem all that accurate based on Merwyn's test-pits this morning

- Nir asked about road conditions (potholes, washboard/etc) along Polaris Tpk from town to airport because City complained - Merwyn told him there has not been that much truck traffic since they finished maintaining the road during their COE project - Merwyn said it was due as much to normal vehicle traffic as it was to heavy truck traffic

- Nir wants to place rock around entire perimeter of slopes @ Tract 42 when we get to that point as long as we don't tear up the tundra vegetation

1120 KRI continues to work slopes near W/NW position of stockpile

1200 LUNCH

1245 KRI continues to work on building up sideslopes to 3:1 along W/NW - hauling PCS from NWS

1450 KRI continues grading @ W/NW side slopes - Nir onsite - KRI coming very close to (w/ 5 ft)

Monday
10-4-04

of the Tract 42 boundary, but still keeping w/ in the boundary

note: KRI using D4 this afternoon while mechanic fabricates additional plexi-glass cover for front end of NOAA's D3 cab

1520 MSW encountered @ NW corner near top of slope @ ~~less~~ approx 1 ft bgs.

- to team to discuss w/ Nir (Merwyn shifting ops to north side)

1540 onsite @ Tract 42 w/ Nir

- pointed out location of shallow MSW

- we discussed options:

- relocate MSW to open pit @ NE corner ^{inside} of 50-ft setback
- relocate MSW to former NOAA pit @ SW corner - currently covered over
- dig pit on top of stockpile where good coverage is present & relocate MSW there

Nir to photo & talk to John Lindsay to decide on options

KRI to continue working on slopes along north side of area (from west to east)

- continue hauling PCS from NWS

1620 KRI switched back to NOAA D3 - "windshield" complete

Monday
10-4-04

1655 Nir received → KRI to continue slope work on north side - he emailed photos & info to John L. & Laura J. - will decide what to do by/in morning

1730 KRI continues grading ops along north side

1830 offsite

bc

Tuesday
10-5-04

0800 safety/ops mtg @ Deal Seep

- continue grading ops on north side
- - NOAA still deciding on where to put MSW that needs to be excavated @ NW corner

- b/c D8 is down (fuel line), KRI will haul rock from Telegraph Hill for perimeter of Tract 42

- continue shoreline restoration @ Area 2

0825 went to TDX office to speak w/ Victor regarding scoria for Deal Seep (500 cy) - he wasn't in - due in @ approx 9 AM

note: Nir thought the slope where MSW was found (NW corner Tract 42) was greater than 3:1, so maybe KRI could just build back up - TT told him that the 3:1 gauge we use indicated slope was 3:1 or just above, & still would not allow for 2ft cover & 3:1 slope w/in Tract 42 property boundary there - not enough room

0930 spoke w/ Victor Moradit @ TDX office - he said he (not Anthony P.) knew about the scoria - told me to speak w/ Julie Shore

Tuesday
10-5-04

0945 @ airport to speak to Julie's

- Julie said they would haul ~ 500 CY of scoria by Thurs or Fri. this week - will use 2 BSE trucks + 1 NAAT kid truck can do it in 1 day

1025 @ landfill

KRI using D3 to grade slopes along N of SW sides - NW section being test for msd

KRI hauling rock (2-4' aggregate) from Telegraph Hill - dumping loads along east, south sides for placement @ toe of slope as a vehicle barrier

1040 Nir B. realized to say he is setting up repeater station on Dinosaur Hill to survey slopes @ Tract 42 - will meet on site shortly

1100 Nir B. onsite to GPS slope @ NW corner

also discussed to open pit @ NE corner which may be used for any msd excavated @ NW corner - Nir states that msd cannot be placed below 9 ft above msd

1120 KRI continues to haul rock from Telegraph - using 2 Bell B25B trucks to haul

Tuesday
10-5-04

1145 based on Nir's GPS data, slopes @ NW of N side, are approx 4.5 to 1 - as such, it was decided that:

- msd will be excavated from NW corner identified yesterday & placed in pit @ NE corner
- excess P&S cover to be removed from top of NW slope to top of pit to be used to "steepen" slope to 3 to 1
- N slope, although ~ 4.5 to 1, will remain as is b/c of concerns regarding msd based on previous grade studies placed by NAAT (Paul & Dewald)

KRI to continue/complete hauling rock, then use EX300 to excavate ~~msd~~ msd & then P&S lean barrier

1200 Nir B. & TE checked slope @ W edge - approx 3.5 to 1

1215 Lunnet

1300 @ Telegraph Hill - KRI continues to load rocks using EX350 into B25B's (2)

1355 @ Tract 42

KRI continues to use D3 to grade top of stockpile

rock being dumped currently along west side slopes

Tuesday
10-5-04

1530 KRL continues to grade top of stockpile (100 ft)
Based on grade sheets & haul road from
Telegraph Hill - new stockpiling rack near
SE corner of City lumber pad for future
placement along north boundary when corner is finished

1620 NOWA N/W & Greg G. inspects tour area
Greg G. in agreement that slope detection does
not matter as long as wheelbase is
and on top

- N/S @ NW corner will be relocated to
pit @ NE corner
- PCS cover @ bottom of dump stockpile @
NW corner will be relocated to top of
slope to re-adjust slope (currently 2:1, to
be closer to 3 to 1) - also to pull back
further from Tract 42 boundary

Note: KRL hauled last of rocks for pad near
perimeter moving to Tract 42 for road work

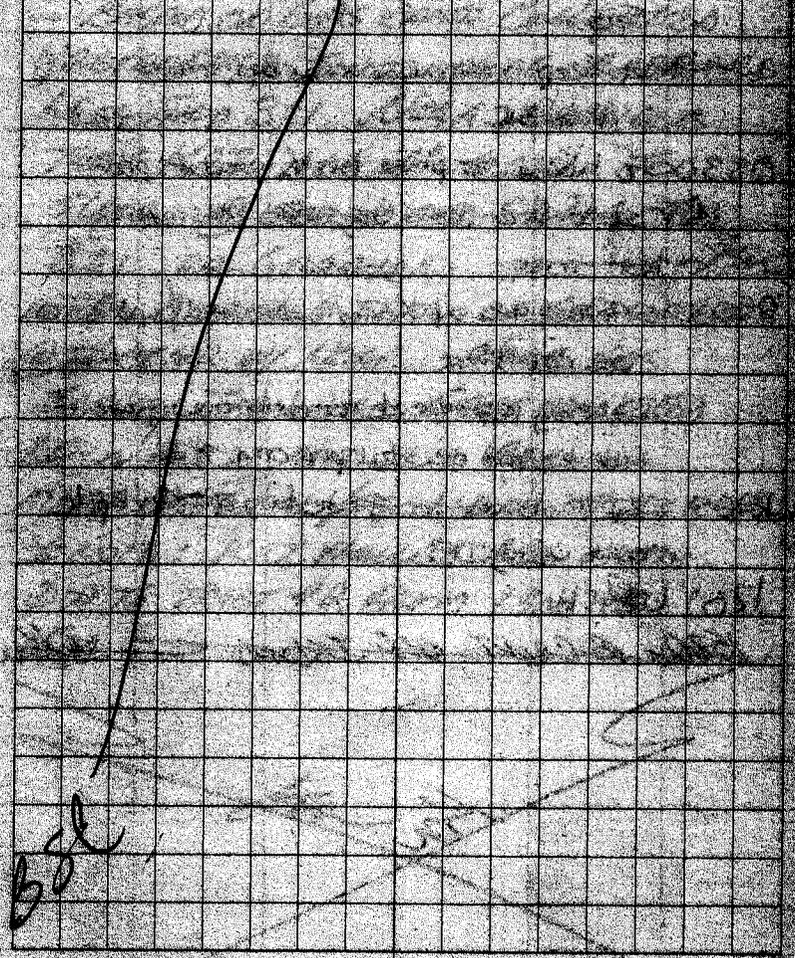
1700 KRL continues grading top of stockpile (100 ft)
also using D4 to push piles @ N/NE corner
- E0300 pulling out MSW from NW corner - today
in 8255 to haul to pit @ NE

1750 6 loads (8255) moved from NW
corner to NE pit

Tuesday
10-5-04

1700 KRL begins regrading PCS from NW corner
NW corner to top of slope @ NW corner
61 E0300 into 8255

1830 offsite



Wednesday
10-6-04

0800 safety/ops mtg @ Diesel Seep

- continue grading
- Ray / Guy to Telegraph Hill to mine/brak more backfill for Diesel Seep
- Diesel Seep - remove overburden from Area 3C

0830 to house to phone Ken V. about price for sand from TDK - Greg asked this morning - left msg.

0900 to Tract 42 w/ Kevin M. to view/update him on ops there

KRI using laser level to determine grade @ western end of stockpile area

1005 KRI continues to grade top of stockpile area using D3

1200 Lunch

1530 - B. CROFT off Island. ———— Km

Km.

10/7/04 THURSDAY TRACT 42

0800. He's Meeting. ———— Km

- KRI Will continue hauling PDS from Nuts to Tract 42 and continue grading ops. ———— Km

- BASED ON GPS DATA COLLECTED YESTERDAY, SOUTH SLOPE APPEARS LESS THAN 3:1. NOAA REQUESTS THAT KRI ADD MATERIAL TO SLOPE @ SOUTH AND GRADE TO 3:1 OR GREATER. ———— Km

1530. DISCUSSED STATUS OF GRADING OPS @ TRACT 42 w/ NOAA. NOAA GPS SURVEY INDICATES EAST SLOPE @ LE ~ 2.8:1 AND WILL REQUIRE MORE MATERIAL / REGRADING TO 3:1 ———— Km

* NOTE: KRI HAULED PDS FROM DW TO TRACT 42 FROM 1300 TO 1530. ———— Km

Km

10/12/04

Summary of TRACT 42
Activities 10/8-12/04.

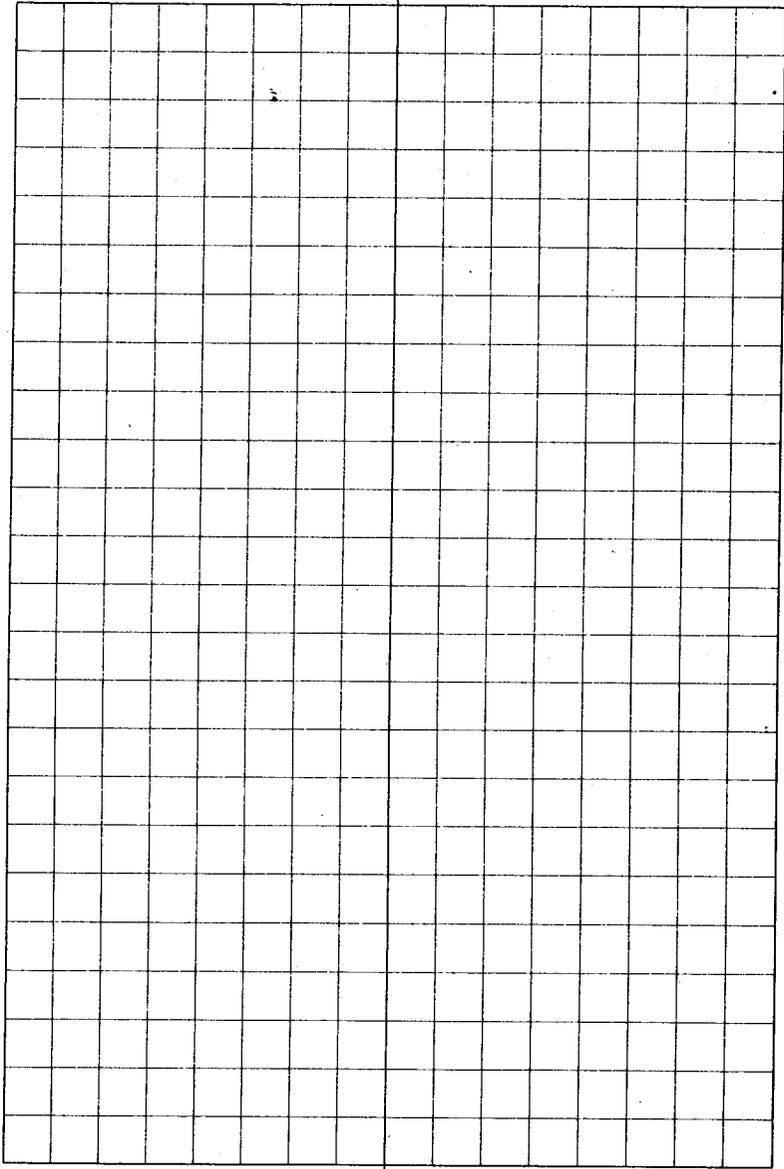
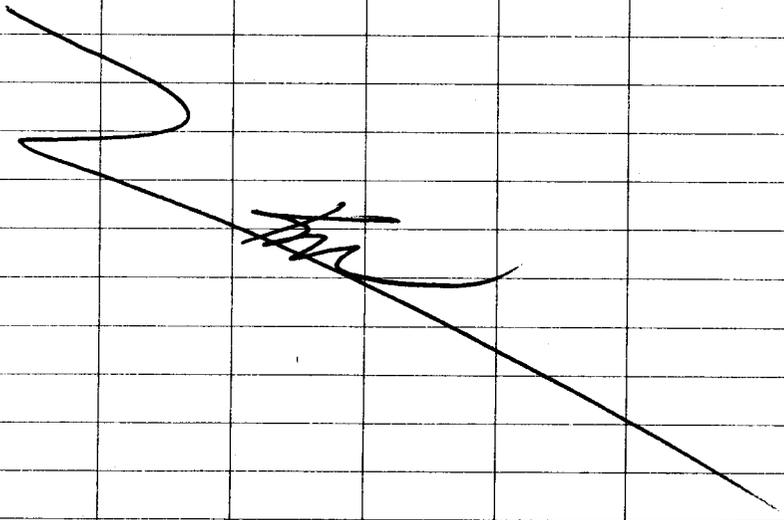
- KRT CONTINUED GRADING OPS @ TRACT 42
USING MATERIAL FROM DW & NUBS.

- ON 10/11/04 NOAA DETERMINED S/E SLOPE
@ TRACT 42 TOO STEEP. KRT WAIVES
MORE PLS TO REGRADE SLOPE TO 3:1 OR
GREATER.

 km

- 10/12/04 NOAA DETERMINED ALL SLOPES @
TRACT 42 WITHIN 3:1 SLOPE. KRT
COMPLETES GRADING OPS @ 42 & COMPLETES
ROCK BARRIER AROUND STOCKPILE PER
CAP.

 km



APPENDIX C

SLOPE CALCULATIONS

**SLOPE CALCULATIONS
ST. PAUL LANDFILL
ST. PAUL ISLAND, ALASKA**

| ST. PAUL LANDFILL CELL C (Site 5/TPA Site 5a) | | | |
|---|--|--|-------------------------------|
| Measurement Location ^a | Horizontal Change ^b (feet) | Vertical Change ^b (feet) | Calculated Slope ^c |
| North Side | 58.01 | 12.64 | 4.6 to 1 |
| East Side | 48.25 | 14.61 | 3.3 to 1 |
| South Side | 63.35 | 15.62 | 4.1 to 1 |
| West Side | 59.42 | 10.43 | 5.7 to 1 |
| Top | 181.04 | 1.92 | 94.3 to 1 |

- a Measurements shown in this table are a representative sampling of the steepest cross section from each side of Cell C.
- b Measurements of the horizontal and vertical change was obtained from Trimble Total Station 5700 GPS®.
- c Slope was calculated by dividing the vertical change into the horizontal change.

APPENDIX D

**PCS VOLUMES AND CONTAMINANT CONCENTRATION ASSESSMENT FOR
LANDFILL CELL C CLOSURE CAP AND NWS LANDSPREADING AREA
ST. PAUL ISLAND, ALASKA**

D1.0 Background

The total amount of PCS within the Landfill Cell C cap and at the NWS landspreading area is 35,965 CY. NOAA used an estimated 25,267 cubic yards (CY) of this petroleum-contaminated soil (PCS) as cap material for closing St. Paul Landfill Cell C. NOAA also placed an estimated 10,698 CY of this PCS at its National Weather Service (NWS) landspreading area, with 9,801 CY originating from the same PCS sources as those supplying PCS for the Cell C closure cap and an estimated 897 CY of this PCS originating from different sources than the Cell C closure cap.

NOAA collected representative characterization samples for the PCS to determine the contaminant levels for disposal method selection. This appendix summarizes the volumetric movement of excavated PCS from their contaminated sites and stockpiles to the final locations of PCS and describes the approach used to calculate the average contaminant concentrations for PCS used in the Cell C closure cap as well as PCS placed at the NWS landspreading area.

D2.0 PCS Volumes

This section provides data for PCS excavated in 2003 and 2004, and the movement of the PCS to its final disposal sites in 2004.

D2.1 2003 CORRECTIVE ACTION ACTIVITIES

Tetra Tech EM Inc. (Tetra Tech) performed corrective action implementation and reporting for NOAA in 2003. Table D2-1 summarizes the quantity of PCS removed from each 2003 site and its location at the end of the 2003 field season.

D2.2 2004 CORRECTIVE ACTION ACTIVITIES

Tetra Tech performed corrective action implementation and reporting for NOAA in 2004. Table D2-2 summarizes the quantity of PCS removed from each 2004 corrective action site.

D2.3 2004 PCS DISPOSAL ACTIVITIES

Tetra Tech disposed of all NOAA PCS described in D2.1 and D2.2 above at either the NOAA NWS landspreading area or as Landfill Cell C closure cap material. At the beginning of the 2004 field season, there was an estimated 23,397 CY of PCS stored in NOAA's short-term stockpile atop Landfill Cell C during 2003. Tetra Tech removed an estimated 575 CY of PCS from the Tract 50 Foundation PCS site in

June 2004, placing the material directly on top of the landfill surface, adjacent to the western edge of the short-term PCS stockpile at Landfill Cell C as approved by the Alaska Department of Environmental Conservation ([ADEC] 2004a). PCS removed from the Diesel Seep, Lukanin Bay, Icehouse Lake, and the Blubber Dump sites in June and July 2004 was placed in the Landfill Cell C short-term stockpile.

NOAA completed site preparation work for the ADEC-approved landspreading area at the NWS station in mid-August 2004 (ADEC 2004b; NOAA 2004c). During June and July 2004, PCS removed from the Diesel Seep in August, September, and October 2004 was placed at both the landspreading area and Landfill Cell C as this PCS consisted of poorly-graded sands and was excellent landfill closure cap material. All PCS excavated from the Cascade Building in 2004 was placed at the NWS station landspreading area. In August and September 2004, Tetra Tech sorted large rocks from the PCS atop Landfill Cell C, as these rocks were not suitable for placement at the landspreading area should NOAA subsequently choose to plow this soil to enhance contaminant remediation. Some of the sorted PCS was transported from Landfill Cell C to the landspreading area after rock sorting. Later, some PCS was transported to Landfill Cell C from the landspreading area in order to ensure cap thickness and slope requirements per the landfill closure design. Table D2-3 summarizes the hauling of PCS in 2004.

D3.0 Previous PCS Concentration Reporting

This section summarizes NOAA's estimations of contaminant concentrations in the PCS as the corrective actions were completed.

D3.1 2004 TETRA TECH REPORTING

Tetra Tech performed corrective action implementation and reporting for NOAA in 2003 and 2004. Tetra Tech prepared a PCS stockpile characterization technical memorandum to document the characterization of PCS in NOAA's short-term PCS stockpile atop Landfill Cell C at the end of the 2003 field season (Tetra Tech 2004). Tetra Tech calculated the contaminant concentrations for the stockpile using a weighted average based on the concentration from each PCS source (in other words, each PCS corrective action or an existing PCS stockpile such as the former Blubber Dump PCS stockpile). Tetra Tech's results are summarized in Table D3-1.

An evaluation of Tetra Tech's weighted average approach is worthy of scrutiny for the following reasons:

PCS stockpile characterization samples were inadvertently not collected from several sites during 2003

corrective actions, with an estimated 1,760 CY of PCS or 8 percent of the total 2003 PCS volume. NOAA assumed that the weighted concentration of the other 92 percent of PCS represents the 8 percent that was not sampled.

The stockpile sampling results presented for the Blubber Dump's 5,571 CY of PCS were for samples collected in 1999. As described in NOAA's 2002 Enhanced Thermal Conduction operations report for treating soil on St. Paul Island (NOAA 2005), the soil represented by the 1999 samples had largely been treated by the end of 2002. Therefore, much of the 5,571 CY of PCS moved from the Blubber Dump to Tract 42 in 2003 had been added to the Blubber Dump stockpile after 2002 and may not be represented by the 1999 samples. Additionally, the 5,571 CY of PCS removed from the Blubber Dump in 2003 includes an estimated 700 CY of PCS removed from beneath the Blubber Dump PCS stockpile liner with no collection of stockpile samples.

The average concentration of all the PCS excavated may be statistically biased because NOAA used different approaches for determining the number of stockpile samples collected for each site's PCS. Sites excavated prior to mid-2003 normally used a removed-PCS sampling frequency of two samples for the first 50 CY removed, then one sample for each additional 50 CY removed. Samples were normally collected at random from the PCS stockpile generated after removal activities ceased for the specific site. After mid-2003 NOAA switched, with regulator approval, to a sliding scale that generally decreased the frequency of sample collection to once every 500 CY after a total of 500 CY was removed from a site. Additionally, NOAA switched from collecting the total calculated number of samples for a site from its final stockpile location to collecting samples directly from the excavator bucket during dump truck loading.

Nevertheless, all the PCS stockpile samples were collected in compliance with ADEC regulations. Although combining all these stockpile samples to calculate the average PCS concentration may introduce some bias toward sites excavated in 2003, it is unlikely that this significantly affects the overall average contaminant concentrations calculated because the nature of all the sites that have been excavated to date and the methods used to determine how much soil to excavate at each site has been consistent.

D3.2 2004 NOAA SESOIL MODELING

NOAA prepared a chemical fate and transport model in support of decision-making for selecting a PCS disposal alternative for St. Paul Island PCS. NOAA input unweighted, average contaminant concentrations for PCS in its short-term PCS stockpile at the end of the 2003 field season (NOAA

2004b). NOAA considered the average of all the characterization sample results collected from the soil in the stockpile more representative than the weighting approach (see D3.1 above), assuming the PCS sites were similar in nature such that approximately 80 samples collected at random “locations” from a PCS stockpile would adequately represent the heterogeneity of the PCS. NOAA calculated the average concentrations for PCS contaminants of concern for soil stockpiled at the end of the 2003 field season as shown in Table D3-2. Note that the unweighted average DRO concentration calculated by NOAA (1,665 mg/kg) is significantly lower than the weighted average DRO concentration calculated by Tetra Tech (2,869 mg/kg).

NOAA erroneously included seven field duplicate sample results and two characterization results for material eventually disposed off-island in the 2004 calculations, causing additional error in the average calculations. NOAA’s 2004 SESOIL modeling effort had shown that DRO was the one constituent with a potential to cause contamination in groundwater near the ADEC groundwater cleanup level (under 18 AAC 75.345 Table C) if the PCS DRO level was assumed to be near that estimated as described above using a non-weighted approach. The SESOIL model run assuming the DRO concentration was 1,665 mg/kg resulted in a predicted a maximum groundwater DRO concentration of 0.50 milligrams per liter (mg/l). The model predicted that this level would be reached in approximately 26 years. The Tetra Tech weighted average concentration of 2,869 mg/kg DRO is significantly higher than the original NOAA DRO soil concentration estimate.

Because of this, NOAA re-ran the SESOIL model to determine whether the increase in DRO might cause the SESOIL model to predict that groundwater at the site may exceed the ADEC groundwater cleanup level of 1.5 mg/kg. However, NOAA had also collected soil samples from the NWS landspreading site in 2004 to measure the actual total organic carbon (TOC) concentration, after the completion of the initial Sesoil modeling effort. These soil samples showed that the TOC concentration of the soil at the site (1.4%) as shown in Table D3-3 was much higher than the TOC concentration assumed in the first Sesoil modeling effort (.1 %). TOC is an important parameter governing transport of organic contaminants in soil because higher organic carbon in soil tends to absorb the organic contaminants and retard their migration. The result of the SESOIL modeling re-run using both the higher DRO concentration of 2,869 mg/kg and the higher TOC concentration of 1.4% was that the highest expected DRO concentration in groundwater would only be 3.7×10^{-5} mg/l. The model predicted that this level would be reached in approximately 195 years. Therefore, according to the SESOIL model, the migration of DRO is so sensitive to TOC that an increase of about one order of magnitude in TOC concentration from 0.1% to

1.4% causes a four order of magnitude decrease in predicted DRO concentration at this site.

D4.0 PCS Concentration Evaluation and Calculation Approaches

The average concentration for the 25,267 CY of PCS used in the St. Paul Landfill Cell C closure cap was calculated with the initial 9,801 CY of PCS placed at the NWS Landspreading Area since the PCS came from the same sources. The calculation approach used for this Landfill/Initial Landspreading PCS was the same as that used in 2004 by NOAA, as described in D3.2 above, except field duplicate results and results for waste disposed off-island were excluded. These average concentrations are shown in Table D4-1.

NOAA subsequently calculated the average concentration of the additional 897 CY of PCS placed at the NWS Landspreading Area, as shown in Table D4-2.

D5.0 Results

The average contaminant concentrations for PCS used for the Landfill Cell C closure cap are summarized in Table D5-1. The average contaminant concentrations for PCS placed at the NWS landspreading area can be approximated by a weighted average of the Landfill/Initial Landspreading PCS and the additional Landspreading PCS concentrations, with the Landspreading Area containing an estimated 9,801 CY and an estimated 897 CY, respectively.

D6.0 References

Alaska Department of Environmental Conservation (ADEC). 2004a. Verbal communication between Louis Howard of ADEC and John Lindsay of the National Oceanic and Atmospheric Administration (NOAA) regarding ADEC approval for stockpiling petroleum-contaminated soil from the Tract 50 Foundation PCS site on bare ground along the western side of Landfill Cell C. June 20.

ADEC. 2004b. *St. Paul Island Risk Evaluation, Petroleum-Contaminated Soils*. June.

National Oceanic and Atmospheric Administration (NOAA). 2004a. *Operations Work Plan, Petroleum Contaminated Soil Remediation by Landspreading*. St. Paul Island, Alaska. June 23.

NOAA. 2004b. *Addendum 2, Landfill Closure Plan, St. Paul Landfill*. St. Paul Island, Alaska. August

25.

NOAA. 2005. *Draft Project Report for 2002 Petroleum-Contaminated Soil Remediation*. St. Paul Island, Alaska. February 8.

Tetra Tech EM Inc. 2004. *Letter Report, Summary of 2003 Field Season Stockpile Activities, St. Paul Island, Alaska*. July 23.

Table D2-1: Summary of 2003 Corrective Action PCS Volumes

| Corrective Action Site | PCS Removed (cubic yards) | Location at End of 2003 Field Season |
|--|----------------------------------|---|
| Sites 6,7/TPA Sites 5b,5c - St. Paul Landfill | 1,426 | Landfill Cell C Short-Term PCS Stockpile |
| Site 19/TPA Site 9d - West Dock Fuel Transfer Facility | 250 | Landfill Cell C Short-Term PCS Stockpile |
| Site 20/TPA Site 9e - Municipal Garage/Machine Shop | 2,805 | Landfill Cell C Short-Term PCS Stockpile |
| Site 21/TPA Site 9f - Cascade Building (2003) | 3,510 | Landfill Cell C Short-Term PCS Stockpile |
| Site 22/TPA Site 9g - Former Fouke Bunkhouse | 155 | Landfill Cell C Short-Term PCS Stockpile |
| Site 24/TPA Site 9i - Duplex Building and Former E-Shop | 160 | Landfill Cell C Short-Term PCS Stockpile |
| Site 25/TPA Site 9j - Five Car Garage and Anderson Building | 80 | Landfill Cell C Short-Term PCS Stockpile |
| Site 26/TPA Site 9k - AST Saddles Complex | 1,370 | Landfill Cell C Short-Term PCS Stockpile |
| Site 27/TPA Site 9l - Old Sealing Plant | 10 | Landfill Cell C Short-Term PCS Stockpile |
| Site 54/TPA Site 9r - Tract A House 102 | 50 | Landfill Cell C Short-Term PCS Stockpile |
| Site 30/TPA Site 11 - Former Diesel Tank Farm | 6,550 | Landfill Cell C Short-Term PCS Stockpile |
| Site 47 - Blubber Dump | 5,571 | Landfill Cell C Short-Term PCS Stockpile |
| Site 50/TPA Site 9o - Former Gasoline/Diesel Drum Storage Area | 1,160 | Landfill Cell C Short-Term PCS Stockpile |
| Site 51/TPA Site 9p - Decommissioned Power Plant Annex | 300 | Landfill Cell C Short-Term PCS Stockpile |
| TOTAL | 23,397 | |

Table D2-2: Summary of 2004 Corrective Action PCS Volumes

| Corrective Action Site | PCS Removed (cubic yards) |
|--|----------------------------------|
| Site 33/TPA Site 12c - Lukanin Bay PCS Site | 1,778 |
| Sites 34&35/TPA Site 13a & 13b - Diesel Seep | 9,234 |
| Site 58/NTPA - Tract 50 Foundation PCS (June 2004) | 575 |
| Site 36/TPA Site 14 - Icehouse Lake | 72 |
| Site 47 - Blubber Dump (2004) | 12 |
| Site 21/TPA Site 9f - Cascade Building Interior (2004) | 145 |
| Site 58/NTPA - Tract 50 Foundation PCS (October 2004) | 752 |
| TOTAL | 12,568 |

Table D2-3: Summary of 2004 Final Relocation of PCS

| From Site | To Landfill Cell C Closure (cubic yards) | To NWS Landspreading Area (cubic yards) | Total PCS Cubic Yards |
|--|---|--|--------------------------|
| Existing PCS Volume at End of 2003 in Tract 42 PCS Stockpile | 23,397 | 0 | 23,397 |
| Sites 34&35/TPA Site 13a & 13b - Diesel Seep | 2,034 | 7,200 | 9,234 |
| Site 47 - Blubber Dump (2004) | 12 | 0 | 12 |
| Site 36/TPA Site 14 - Icehouse Lake | 72 | 0 | 72 |
| Site 33/TPA Site 12c - Lukanin Bay PCS Site | 1,778 | 0 | 1,778 |
| Site 21/TPA Site 9f - Cascade Building Interior (2004) | 0 | 145 | 145 |
| Stie 58/NTPA - Tract 50 Foundation Pad | 575 | 752 | 1,327 |
| Landfill to NWS Landspreading Area | -4,876 | 4,876 | 0 |
| NWS Landspreading Area to Landfill | 2,275 | -2,275 | 0 |
| TOTAL | 25,267 | 10,698 | 35,965 |

Note: Negative values in the table signify soil that was removed from Landfill Cell C or the NWS Landspreading Area.

Table D3-1: Tetra Tech PCS Average Concentration Findings for End of 2003 Field Season

| Sample Number | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Total Xylenes (mg/kg) | GRO (mg/kg) | DRO (mg/kg) | RRO (mg/kg) | Lead (mg/kg) |
|---|--------------------|--------------------|-------------------------|--------------------------|----------------|----------------|----------------------|------------------|
| SUMMARY OF CONTAMINANT CONCENTRATIONS IN STOCKPILED SOIL | | | | | | | Soil Removed: | 23,397 CY |
| Weighted Average | 1.5 | 3.1 | 1.8 | 8.0 | 124 | 2,869 | 1,112 | 81.5 |
| Minimum | 0.02 U | 0.02 U | 0.02 U | 0.02 U | 1.00 U | 10.00 U | 50.00 U | 2.30 |
| Maximum | 140 | 130 | 73 | 360 | 3,900 | 27,400 | 23,000 | 995 |
| Detection Frequency | 19/129 | 24/129 | 24/129 | 70/129 | 64/107 | 123/129 | 65/69 | 20/20 |

Table D3-2: NOAA PCS Average Concentration Findings for End of 2003 Field Season

| Benzene | | Toluene | | Ethylbenzene | | Total Xylenes | | GRO | | DRO | |
|---|--------------|-------------|--------------|--------------|--------------|---------------|--------------|------------|--------------|--------------|--------------|
| 2003 St. Paul Short-Term PCS Stockpile Average Concentrations - NOAA | | | | | | | | | | | |
| 0.26* | mg/kg | 4.21 | mg/kg | 2.40 | mg/kg | 10.9 | mg/kg | 214 | mg/kg | 1,656 | mg/kg |

Notes: * Benzene result based on excluding one result of 140 mg/kg, which is two orders of magnitude higher than the median concentration of 0.045 mg/kg and more than nine standard deviations (15.64 mg/kg) NOAA considers the 140 mg/kg result as valid, but that it only represents a small volume of PCS removed from the Old Coal Shed (Cascade Building) Site.

Table D3-3: Total Organic Carbon in Soil Samples, National Weather Service Landspreading Area, St. Paul Island, Alaska

| Sample Name | Jar | Depth Below Ground Surface, feet | Total Organic Carbon (TOC) ¹ mg/kg | Percent TOC |
|--------------------|-----|----------------------------------|---|--------------|
| Hole 1, 0-0.5' | 1 | Hole 1, 0-0.5' | 22,300 | 2.20% |
| Hole 1, .5-3.75' | 2 | Hole 1, .5-3.75' | 2,950 | 0.30% |
| Hole 1, 4-7' | 3 | Hole 1, 4-7' | 4,790 | 0.50% |
| Hole 1, 12-13.3' | 4 | Hole 1, 12-13.3' | 28,400 | 2.80% |
| Hole 2, 5.5-8' | 5 | Hole 2, 5.5-8' | 3,540 | 0.40% |
| Hole 2, 8-9.25' | 6 | Hole 2, 8-9.25' | 18,500 | 1.90% |
| Hole 4, 2-4' | 7 | Hole 4, 2-4' | 3,290 | 0.30% |
| Hole 5, .75-2' | 8 | Hole 5, .75-2' | 31,600 | 3.20% |
| Average TOC | | | 14,421 | 1.40% |

Note: ¹ Data from TOC samples collected by NOAA personnel in May 2004, and analyzed by Friedman & Bruya/North Creek Analytical using EPA Method SW-846 9060.

TABLE D4-1

Landfill/Initial Landspreading PCS Average Concentrations

| Sample Number | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Total Xylenes (mg/kg) | GRO (mg/kg) | DRO (mg/kg) | RRO (mg/kg) | | |
|---|-----------------|-----------------|----------------------|-----------------------|-------------|-------------|-------------|----------------------|-----------------|
| 2003 FIELD SEASON | | | | | | | | | |
| Sites 6,7/TPA Sites 5b,5c - St. Paul Landfill | | | | | | | | Soil Removed: | 1,426 CY |
| SP07-SS-901 | 0.12 U | 0.12 U | 0.12 U | 0.12 U | 6 U | 950 | 8,700 | -- | -- |
| SP07-SS-902 | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 7 U | 430 | 5,400 | -- | -- |
| SP07-SS-903 | 0.09 U | 0.09 U | 0.09 U | 0.09 U | 4 U | 270 | 3,500 | -- | -- |
| SP07-SS-904 | 0.23 U | 0.23 U | 0.23 U | 1.1 | 110 | 6,400 | 3,400 | -- | -- |
| SP07-SS-905 | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 9 U | 200 | 2,300 | -- | -- |
| SP07-SS-906 | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 6 U | 2,900 | 16,000 | -- | -- |
| SP07-SS-907 | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 6 U | 2,100 | 18,000 | -- | -- |
| SP07-SS-908 | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 6 U | 3,700 | 23,000 | -- | -- |
| SP07-SS-909 | 0.02 U | 0.02 U | 0.02 U | 0.02 U | 1 U | 25 | 250 | -- | -- |
| SP07-SS-910 | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 6 U | 3,000 | 17,000 | -- | -- |
| SP07-SS-912 | 0.09 U | 0.09 U | 0.09 U | 0.09 U | 5 U | 3,100 | 19,000 | -- | -- |
| Site 19/TPA Site 9d - West Dock Fuel Transfer Facility | | | | | | | | Soil Removed: | 250 CY |
| SP19-SS-901 | 0.02 UJ | 0.02 UJ | 0.02 UJ | 0.02 UJ | 1 UJ | 26,000 | 6,700 | -- | -- |
| SP19-SS-902 | 0.20 U | 0.20 U | 0.20 U | 0.25 | 10 U | 21,000 | 4,300 | -- | -- |
| SP19-SS-903 | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 9 U | 7,000 | 2,100 | -- | -- |
| SP19-SS-904 | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 10 U | 23,000 | 5,500 | -- | -- |
| Site 20/TPA Site 9e - Municipal Garage/Machine Shop | | | | | | | | Soil Removed: | 2,805 CY |
| SP20-SS-001 | 0.03 U | 0.08 | 0.03 U | 0.16 | 2 U | 260 | 1,600 | -- | -- |
| SP20-SS-002 | 0.09 U | 0.09 U | 0.75 | 4.3 | 150 | 450 | 73 | -- | -- |
| SP20-SS-003 | 0.06 | 0.04 | 0.16 | 2 | 200 | 5,100 | 170 | -- | -- |
| SP20-SS-004 | 0.03 U | 0.03 | 0.03 U | 0.07 | 2 U | 110 | 50 U | -- | -- |
| SP20-SS-005 | 0.4 U | 0.4 U | 0.4 U | 2.8 J | 160 J | 1,400 | -- | -- | -- |
| SP20-SS-006 | 0.4 U | 0.4 U | 1.0 J | 4.9 J | 250 J | 6,100 | -- | -- | -- |
| SP20-SS-007 | 0.4 U | 0.4 U | 2.2 J | 9.9 J | 480 J | 5,500 | -- | -- | -- |
| SP20-SS-008 | 0.02 U | 0.02 U | 0.02 U | 0.56 | 35 | 480 | -- | -- | -- |
| SP20-SS-009 | 0.3 U | 0.3 U | 0.41 | 4.2 | 280 | 6,400 | -- | -- | -- |
| SP20-SS-010 | 0.04 U | 0.04 U | 0.04 U | 0.33 | 38 | 1,100 | -- | -- | -- |
| SP20-SS-011 | 0.03 U | 0.03 U | 0.03 U | 0.19 | 23 | 760 | -- | -- | -- |
| SP20-SS-012 | 0.04 U | 0.04 U | 0.04 U | 0.11 | 13 | 440 | -- | -- | -- |
| SP20-SS-013 | 0.03 U | 0.03 U | 0.03 U | 0.08 | 9 | 150 | -- | -- | -- |
| SP20-SS-014 | 0.05 U | 0.05 U | 0.05 U | 0.18 | 17 | 950 | -- | -- | -- |
| SP20-SS-015 | 0.04 U | 0.04 U | 0.04 U | 0.04 U | 2 | 250 | -- | -- | -- |
| SP20-SS-016 | 0.03 U | 0.03 U | 0.03 U | 0.03 U | 2 U | 170 | -- | -- | -- |
| SP20-SS-017 | 0.03 U | 0.03 U | 0.03 U | 0.05 | 4 | 180 | -- | -- | -- |
| SP20-SS-018 | 0.03 U | 0.03 U | 0.03 U | 0.15 | 20 | 680 | -- | -- | -- |
| SP20-SS-019 | 0.06 U | 0.06 U | 0.06 U | 0.18 | 19 | 1,600 | -- | -- | -- |
| SP20-SS-020 | 0.03 U | 0.03 U | 0.03 U | 0.05 | 5 | 500 | -- | -- | -- |
| SP20-SS-021 | 0.04 U | 0.04 U | 0.15 | 2.0 | 170 | 3,000 | -- | -- | -- |
| Site 21/TPA Site 9f - Cascade Building (2003) | | | | | | | | Soil Removed: | 3,510 CY |
| SP21-SS-001 | 0.67 | 1.5 | 0.19 | 1.2 | 13 | 400 | -- | -- | -- |
| SP21-SS-002 | 0.08 | 0.11 | 0.04 U | 0.15 | 9 | 510 | -- | -- | -- |
| SP21-SS-003 | 140 J | 79 J | 21 J | 55 J | 1,700 J | 76 | -- | -- | -- |
| SP21-SS-004 | 0.14 | 0.06 | 0.37 | 0.71 | 190 | 540 | -- | -- | -- |
| SP21-SS-005 | 4.4 | 130 | 73 | 350 | 2,400 | 6,200 | -- | -- | -- |
| SP21-SS-006 | 0.29 | 2.4 | 6.7 | 36 | 460 | 580 | -- | -- | -- |
| SP21-SS-007 | 0.04 U | 0.04 U | 0.04 U | 0.20 | 21 | 3,500 | -- | -- | -- |
| SP21-SS-008 | 0.77 J | 0.33 U | 1.8 J | 3.2 J | 560 J | 2,700 | -- | -- | -- |
| SP21-SS-009 | 0.15 | 0.07 | 0.13 | 0.78 | 41 | 650 | -- | -- | -- |
| SP21-SS-010 | 0.072 | 0.13 | 0.04 | 0.16 | 1 | 28 | -- | -- | -- |
| SP21-SS-011 | 0.11 | 0.13 | 0.05 | 0.17 | 2 | 25 | -- | -- | -- |
| SP21-SS-012 | 0.03 | 0.09 | 0.05 | 0.13 | 3 | 510 | -- | -- | -- |
| SP21-SS-013 | 1.1 | 1.5 | 0.48 | 1.6 | 55 | 1,100 | -- | -- | -- |
| SP21-SS-014 | 0.13 U | 0.13 U | 0.13 U | 0.39 U | 13 | 2,600 | -- | -- | -- |
| SP21-SS-015 | 0.15 U | 0.15 U | 0.15 U | 0.45 U | 16 | 1,900 | -- | -- | -- |
| SP21-SS-016 | 3.4 J | 110 J | 71 J | 360 J | 3,900 J | 6,200 | -- | -- | -- |
| SP21-SS-016 | 0.56 | 0.09 | 0.04 | 0.24 | 4 | 10 U | 50 U | -- | -- |
| SP21-SS-017 | 0.03 U | 0.03 U | 0.03 U | 0.09 U | 2 U | 10 U | 50 U | -- | -- |

TABLE D4-1

Landfill/Initial Landspreading PCS Average Concentrations

| Sample Number | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Total Xylenes (mg/kg) | GRO (mg/kg) | DRO (mg/kg) | RRO (mg/kg) | | |
|---|--------------------|--------------------|-------------------------|--------------------------|----------------|----------------|----------------|----------------------|-----------------|
| Site 22/TPA Site 9g - Former Fouke Bunkhouse | | | | | | | | Soil Removed: | 155 CY |
| SP22-SS-901 | 0.02 | 0.02 | 0.02 U | 0.03 | 1 U | 80 | 91 | -- | -- |
| SP22-SS-902 | 0.03 U | 0.03 U | 0.03 U | 0.04 | 2 U | 110 | 77 | -- | -- |
| SP22-SS-903 | 0.02 U | 0.02 | 0.02 U | 0.04 | 1 U | 350 | 75 | -- | -- |
| SP22-SS-904 | 0.02 U | 0.04 | 0.02 U | 0.07 | 1 U | 250 | 69 | -- | -- |
| SP22-SS-905 | 0.02 U | 0.02 U | 0.02 U | 0.03 | 1 | 140 | 79 | -- | -- |
| SP22-SS-906 | 0.02 U | 0.02 | 0.02 U | 0.03 | 1 U | 10 U | 77 | -- | -- |
| Site 24/TPA Site 9i - Duplex Building and Former E-Shop | | | | | | | | Soil Removed: | 160 CY |
| No stockpile samples collected | | | | | | | | | |
| Site 25/TPA Site 9j - Five Car Garage and Anderson Building | | | | | | | | Soil Removed: | 80 CY |
| No stockpile samples collected | | | | | | | | | |
| Site 26/TPA Site 9k - AST Saddles Complex | | | | | | | | Soil Removed: | 1,370 CY |
| SP26-SS-002 | 1.2 U | 1.2 U | 1.2 U | 3.6 U | 59 | 7,600 | 1,800 | -- | -- |
| SP26-SS-003 | 0.02 U | 0.02 U | 0.02 U | 0.06 U | 1 U | 180 J | 50 U | -- | -- |
| Site 27/TPA Site 9l - Old Sealing Plant | | | | | | | | Soil Removed: | 10 CY |
| No stockpile samples collected | | | | | | | | | |
| Site 54/TPA Site 9r - Tract A House 102 | | | | | | | | Soil Removed: | 50 CY |
| No stockpile samples collected | | | | | | | | | |
| Site 30/TPA Site 11 - Former Diesel Tank Farm | | | | | | | | Soil Removed: | 6,550 CY |
| SP30-SS-002 | 0.09 U | 0.09 U | 0.09 U | 0.09 U | 5 U | 5,400 J | -- | -- | -- |
| SP30-SS-003 | 0.42 U | 0.42 U | 0.42 U | 0.66 | 36 | 7,100 | -- | -- | -- |
| SP30-SS-004 | 0.23 U | 0.23 U | 0.23 U | 1.4 | 120 | 3,100 | -- | -- | -- |
| SP30-SS-005 | 0.04 U | 0.04 U | 0.05 | 0.42 | -- | 960 | -- | -- | -- |
| SP30-SS-006 | 0.07 U | 0.07 U | 0.07 U | 0.48 | -- | 3,000 | -- | -- | -- |
| SP30-SS-007 | 0.03 U | 0.03 U | 0.03 U | 0.03 U | -- | 10 U | -- | -- | -- |
| SP30-SS-008 | 0.03 U | 0.03 U | 0.03 U | 0.04 | -- | 490 | -- | -- | -- |
| SP30-SS-009 | 0.03 U | 0.03 U | 0.03 U | 0.07 | -- | 900 | -- | -- | -- |
| SP30-SS-010 | 0.05 U | 0.05 U | 0.05 U | 0.42 | -- | 2,000 | -- | -- | -- |
| SP30-SS-011 | 0.06 U | 0.06 U | 0.06 U | 0.22 | -- | 2,000 | -- | -- | -- |
| SP30-SS-012 | 0.05 U | 0.05 U | 0.05 U | 0.64 | -- | 2,600 | -- | -- | -- |
| SP30-SS-013 | 0.03 U | 0.03 U | 0.03 U | 0.03 U | -- | 320 | -- | -- | -- |
| SP30-SS-014 | 0.06 U | 0.06 U | 0.06 U | 0.18 | -- | 2,700 | -- | -- | -- |
| SP30-SS-015 | 0.03 U | 0.03 U | 0.03 U | 0.04 | -- | 440 | -- | -- | -- |
| SP30-SS-016 | 0.03 U | 0.03 U | 0.03 U | 0.06 | -- | 520 | -- | -- | -- |
| SP30-SS-017 | 0.03 U | 0.03 U | 0.03 U | 0.15 | -- | 53 | -- | -- | -- |
| SP30-SS-018 | 0.09 U | 0.09 U | 0.09 U | 0.58 | -- | 5,400 | -- | -- | -- |
| SP30-SS-019 | 0.05 U | 0.05 U | 0.05 U | 0.1 | -- | 1,300 | -- | -- | -- |
| SP30-SS-020 | 0.04 U | 0.04 U | 0.04 U | 0.04 | -- | 430 | -- | -- | -- |
| SP30-SS-021 | 0.02 U | 0.02 U | 0.02 U | 0.09 | -- | 310 | -- | -- | -- |
| SP30-SS-022 | 0.03 U | 0.03 U | 0.03 U | 0.03 U | -- | 10 U | -- | -- | -- |
| SP30-SS-023 | 0.03 U | 0.03 U | 0.03 U | 0.03 U | -- | 10 U | -- | -- | -- |
| SP30-SS-024 | 0.13 U | 0.13 U | 0.13 U | 0.5 | -- | 4,900 | -- | -- | -- |
| Site 47 - Blubber Dump | | | | | | | | Soil Removed: | 5,571 CY |
| No representative stockpile samples collected | | | | | | | | | |
| Site 50/TPA Site 9o - Former Gasoline/Diesel Drum Storage Area | | | | | | | | Soil Removed: | 1,160 CY |
| No stockpile samples collected | | | | | | | | | |
| Site 51/TPA Site 9p - Decommissioned Power Plant Annex | | | | | | | | Soil Removed: | 300 CY |
| No stockpile samples collected | | | | | | | | | |

TABLE D4-1

Landfill/Initial Landspreading PCS Average Concentrations

| Sample Number | Benzene (mg/kg) | | Toluene (mg/kg) | | Ethylbenzene (mg/kg) | | Total Xylenes (mg/kg) | | GRO (mg/kg) | DRO (mg/kg) | | RRO (mg/kg) | | | | |
|--|-----------------|---|-----------------|---|----------------------|---|-----------------------|---|-------------|-------------|-------|-------------|----------------------|----|--------------|-----------|
| 2004 FIELD SEASON | | | | | | | | | | | | | | | | |
| Site 33/TPA Site 12c - Lukanin Bay PCS Site | | | | | | | | | | | | | Soil Removed: | | 1,778 | CY |
| SP33-SS-001-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | -- | 150 | | 340 | | -- | -- | |
| SP33-SS-002-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | -- | 280 | | 680 | | -- | -- | |
| SP33-SS-003-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | -- | 310 | | 2,300 | | -- | -- | |
| SP33-SS-004-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | -- | 6,900 | | 3,200 | J | -- | -- | |
| SP33-SS-005-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | -- | 170 | | 630 | | -- | -- | |
| SP33-SS-006-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | -- | 23 | | 120 | | -- | -- | |
| SP33-SS-007-000 | 0.05 | U | 0.05 | U | 0.05 | U | 0.15 | U | -- | 380 | | 1,700 | | -- | -- | |
| SP33-SS-008-000 | 0.05 | U | 0.05 | U | 0.05 | U | 0.15 | U | -- | 110 | | 640 | | -- | -- | |
| SP33-SS-009-000 | 0.05 | U | 0.05 | U | 0.05 | U | 0.15 | U | -- | 2,600 | | 9,100 | J | -- | -- | |
| SP33-SS-010-000 | 0.05 | U | 0.05 | U | 0.05 | U | 0.15 | U | -- | 300 | | 99 | | -- | -- | |
| SP33-SS-011-000 | 0.05 | U | 0.05 | U | 0.05 | U | 0.15 | U | -- | 10 | U | 50 | U | -- | -- | |
| SP33-SS-012-000 | 0.05 | U | 0.05 | U | 0.05 | U | 0.15 | U | -- | 52 | | 340 | | -- | -- | |
| SP33-SS-013-000 | 0.05 | U | 0.05 | U | 0.05 | U | 0.15 | U | -- | 25 | | 50 | U | -- | -- | |
| SP33-SS-014-000 | 0.05 | U | 0.05 | U | 0.05 | U | 0.15 | U | -- | 120 | | 530 | | -- | -- | |
| SP33-SS-015-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | U | 300 | 1,500 | | -- | -- | |
| SP33-SS-016-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | U | 2,100 | 4,600 | | -- | -- | |
| SP33-SS-017-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | U | 100 | 370 | | -- | -- | |
| SP33-SS-018-000 | 0.02 | U | 0.08 | U | 0.03 | U | 0.11 | U | 1 | U | 94 | 110 | | -- | -- | |
| SP33-SS-019-000 | 0.1 | U | 0.2 | U | 0.1 | U | 0.4 | U | 5 | U | 310 | 1,300 | | -- | -- | |
| SP33-SS-020-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | U | 22 | 78 | | -- | -- | |
| SP33-SS-021-000 | 0.02 | U | 0.07 | U | 0.02 | U | 0.06 | U | 1 | U | 380 | 980 | | -- | -- | |
| SP33-SS-022-000 | 0.02 | U | 0.38 | U | 0.05 | U | 0.27 | U | 2 | U | 120 | 570 | | -- | -- | |
| SP33-SS-023-000 | 0.02 | U | 0.06 | U | 0.02 | U | 0.06 | U | 1 | U | 10 | 50 | U | -- | -- | |
| SP33-SS-024-000 | 0.02 | U | 0.06 | U | 0.02 | U | 0.06 | U | 2 | U | 110 | 410 | | -- | -- | |
| SP33-SS-025-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | U | 10 | 50 | U | -- | -- | |
| SP33-SS-026-000 | 0.02 | U | 0.17 | U | 0.04 | U | 0.17 | U | 1 | U | 39 | 150 | | -- | -- | |
| SP33-SS-027-000 | 0.02 | U | 0.05 | U | 0.03 | U | 0.08 | U | 1 | U | 39 | 130 | | -- | -- | |
| SP33-SS-028-000 | 0.02 | U | 0.21 | U | 0.03 | U | 0.15 | U | 1 | U | 22 | 66 | | -- | -- | |
| SP33-SS-029-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | U | 10 | 50 | U | -- | -- | |
| SP33-SS-030-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | U | 10 | 50 | U | -- | -- | |
| SP33-SS-031-000 | 0.02 | U | 0.46 | U | 0.06 | U | 0.33 | U | 2 | U | 13 | 65 | | -- | -- | |
| SP33-SS-032-000 | 0.02 | U | 0.06 | U | 0.02 | U | 0.06 | U | 1 | U | 17 | 74 | | -- | -- | |
| SP33-SS-033-000 | 0.1 | U | 0.4 | U | 0.1 | U | 0.4 | U | 5 | U | 31 | 67 | | -- | -- | |
| SP33-SS-034-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | U | 13 | 50 | U | -- | -- | |
| SP33-SS-035-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | U | 10 | 50 | U | -- | -- | |
| SP33-SS-036-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | U | 28 | 50 | U | -- | -- | |
| SP33-SS-037-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | U | 10 | 50 | U | -- | -- | |

TABLE D4-1

Landfill/Initial Landspreading PCS Average Concentrations

| Sample Number | Benzene (mg/kg) | | Toluene (mg/kg) | | Ethylbenzene (mg/kg) | | Total Xylenes (mg/kg) | | GRO (mg/kg) | DRO (mg/kg) | RRO (mg/kg) | | |
|--|--------------------|---|--------------------|---|-------------------------|---|--------------------------|---|----------------|----------------|--------------------------|------------------|----|
| Sites 34&35/TPA Site 13a & 13b - Diesel Seep | | | | | | | | | | | Soil Removed: | 9,234 CY | |
| SP34-SS-001-000 | 0.2 | U | 0.2 | U | 0.2 | U | 0.6 | U | 80 | 22,000 | 1,800 | -- | -- |
| SP34-SS-002-000 | 0.2 | U | 0.2 | U | 0.2 | U | 0.6 | U | 20 | 10,000 | 870 | -- | -- |
| SP34-SS-003-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | 160 | 50 | U | -- |
| SP34-SS-004-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | 270 | 61 | -- | -- |
| SP34-SS-005-000 | 0.2 | U | 0.2 | U | 0.2 | U | 0.6 | U | 21 | 20,000 | 1,300 | -- | -- |
| SP34-SS-006-000 | 0.2 | U | 0.2 | U | 0.2 | U | 0.6 | U | 69 | 11,000 | 850 | -- | -- |
| SP34-SS-007-000 | 0.2 | U | 0.2 | U | 0.2 | U | 0.6 | U | 44 | 8,700 | 680 | -- | -- |
| SP34-SS-008-000 | 0.2 | U | 0.2 | U | 0.2 | U | 0.6 | U | 91 | 17,000 | 1,200 | -- | -- |
| SP34-SS-009-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | 47 | 50 | U | -- |
| SP34-SS-010-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | 39 | 50 | U | -- |
| SP34-SS-011-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.07 | | 3 | 1,600 | 160 | -- | -- |
| SP34-SS-012-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | 10 | 50 | U | -- |
| SP34-SS-013-015 | 0.02 | U | 0.03 | | 0.05 | | 0.59 | | 26 | 1,000 | 98 | -- | -- |
| SP34-SS-014-015 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | 15 | 50 | U | -- |
| SP34-SS-015-015 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 3 | 360 | 50 | U | -- |
| SP34-SS-016-015 | 0.1 | U | 0.2 | | 0.1 | | 0.3 | | 12 | 900 | 96 | -- | -- |
| SP34-SS-017-000 | 0.1 | U | 0.1 | U | 0.1 | U | 0.3 | U | 5 | 530 | 50 | U | -- |
| SP34-SS-018-000 | 0.03 | U | 0.03 | U | 0.03 | U | 0.09 | U | 2 | 10 | 50 | U | -- |
| SP34-SS-019-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | 10 | 50 | U | -- |
| SP34-SS-020-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | 10 | 50 | U | -- |
| SP34-SS-021-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 2 | 10 | 50 | U | -- |
| SP34-SS-022-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | 27 | 50 | U | -- |
| SP34-SS-023-015 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 4 | 520 | 64 | -- | -- |
| SP34-SS-024-015 | 0.02 | U | 0.02 | | 0.02 | U | 0.21 | | 16 | 810 | 120 | -- | -- |
| SP34-SS-025-015 | 0.2 | U | 0.2 | U | 0.2 | U | 0.6 | U | 30 | 850 | 120 | -- | -- |
| SP34-SS-026-015 | 0.2 | U | 0.2 | U | 0.2 | U | 0.6 | U | 10 | 2,100 | 340 | -- | -- |
| SP34-SS-027-015 | 0.02 | U | 0.02 | U | 0.03 | | 0.07 | | 5 | 1,300 | 50 | U | -- |
| SP34-SS-028-015 | 0.02 | U | 0.02 | U | 0.02 | U | 0.16 | | 16 | 3,500 | 400 | -- | -- |
| SP34-SS-029-015 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | 10 | 50 | U | -- |
| SP34-SS-030-015 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | 370 | 120 | -- | -- |
| SP34-SS-031-015 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 2 | 300 | 50 | U | -- |
| SP34-SS-032-015 | 0.2 | U | 0.2 | U | 0.2 | U | 0.6 | U | 10 | 260 | 60 | -- | -- |
| Site 58/NTPA - Tract 50 Foundation PCS (June 2004) | | | | | | | | | | | Soil Removed: | 575 CY | |
| No representative stockpile samples collected | | | | | | | | | | | | | |
| Site 36/TPA Site 14 - Icehouse Lake | | | | | | | | | | | Soil Removed: | 72 CY | |
| SP14-SS-001-000 | 0.02 | U | 0.05 | | 0.02 | U | 0.06 | U | 1 | 290 | 180 | -- | -- |
| SP14-SS-002-000 | 0.02 | U | 0.05 | | 0.02 | U | 0.06 | U | 1 | 290 | 180 | -- | -- |
| Site 47 - Blubber Dump (2004) | | | | | | | | | | | Soil Removed: | 12 CY | |
| SP47-SS-001-000 | 0.02 | U | 0.02 | U | 0.02 | U | 0.06 | U | 1 | 22 | 60 | | |
| SP47-SS-002-000 | 0.2 | U | 0.2 | U | 0.2 | U | 0.6 | U | 10 | 410 | 300 | | |
| Landfill/Initial Landspreading PCS Concentration Averages | | | | | | | | | | | Soil Represented: | 35,068 CY | |
| | 1.0 | | 2.2 | | 1.2 | | 5.5 | | 99 | 2,136 | 1,778 | -- | |

TABLE D4-2

Additional Landspreading Area PCS Average Concentrations

| Sample Number | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Total Xylenes (mg/kg) | GRO (mg/kg) | DRO (mg/kg) | RRO (mg/kg) | | |
|---|--------------------|--------------------|-------------------------|--------------------------|----------------|----------------|----------------|--------------------------|---------------|
| Site 21/TPA Site 9f - Cascade Building Interior (2004) | | | | | | | | Soil Removed: | 145 CY |
| SP21-SS-001-020 | 0.02 U | 0.02 U | 0.02 U | 0.06 U | 1 U | 28 | 93 | -- | -- |
| SP21-SS-102-020 | 0.2 U | 0.26 | 0.2 U | 0.6 U | 10 U | 10 U | 50 U | -- | -- |
| SP21-SS-103-020 | 0.02 | 0.11 | 0.02 U | 0.13 | 3 | 130 | 470 | -- | -- |
| SP21-SS-105-015 | 0.02 U | 0.07 | 0.02 | 0.13 | 5 | 590 | 2,600 | -- | -- |
| Site 58/NTPA - Tract 50 Foundation PCS (October 2004) | | | | | | | | Soil Removed: | 752 CY |
| SP-34 SS-101-015 | 0.02 U | 0.02 U | 0.02 U | 0.06 | 1 U | 18 | 50 U | -- | -- |
| SP-34 SS-102-015 | 0.7 | 1.5 | 6.3 | 38.0 U | 2,200 | 11,000 | 1,200 | -- | -- |
| SP-34 SS-103-015 | 0.2 U | 0.20 U | 0.20 U | 0.6 | 10 U | 400 | 50 U | -- | -- |
| SP-34 SS-103-300 | 0.02 U | 0.02 U | 0.10 | 0.12 U | 10 U | 250 | 50 U | -- | -- |
| SP-34 SS-104-015 | 0.02 U | 0.02 U | 0.02 U | 0.06 | 1 U | 10 U | 50 U | -- | -- |
| SP-34 SS-105-015 | 0.2 U | 0.2 U | 0.2 U | 0.6 | 35 | 990 | 100 | -- | -- |
| SP-34 SS-106-015 | 0.02 U | 0.02 U | 0.02 U | 0.11 | 18 | 1,300 | 50 U | -- | -- |
| SP-34 SS-107-015 | 0.02 U | 0.02 U | 0.02 U | 0.06 U | 1 U | 24 | 91 | -- | -- |
| Additional Landspreading Area PCS Concentration Averages | | | | | | | | Soil Represented: | 897 CY |
| | 0.1 | 0.2 | 0.6 | 3.4 | 191 | 1,229 | 405 | -- | -- |

TABLE D5-1**Average PCS Concentrations for Landfill Cell C and NWS Landspreading Area**

| PCS Description | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Total Xylenes (mg/kg) | GRO (mg/kg) | DRO (mg/kg) | RRO (mg/kg) | Volume (CY) |
|---|----------------------------|----------------------------|---------------------------------|----------------------------------|------------------------|------------------------|------------------------|------------------------|
| Landfill/Initial Landspreading PCS Average Concentrations | 1.0 | 2.2 | 1.2 | 5.5 | 99 | 2,136 | 1,778 | 35,068 |
| Additional Landspreading Area PCS Average Concentrations | 0.1 | 0.2 | 0.6 | 3.4 | 191 | 1,229 | 405 | 897 |
| Weighted Average PCS Concentration | 1.0 | 2.1 | 1.2 | 5.5 | 102 | 2,114 | 1,744 | 35,965 |

APPENDIX E

PROPOSED REVISION TO ST. PAUL LANDFILL POST-CLOSURE MONITORING PLAN

This appendix, dated September 19, 2005, serves as the proposed revision to the post-closure monitoring plan for the St. Paul Landfill Cell C (Polarconsult 2002). The existing monitoring plan is summarized below.

Existing Post-Closure Monitoring Plan:

1. Visual Inspection: A five-year visual inspection program (monthly for the first two years and semiannually the final three years) will be established to evaluate the following aspects of the landfill cover, in accordance with 18 AAC 60:
 - a. Signs of damage or potential damage from settlement, ponding, leakage, frost action, erosion, or cracking of the soil cover, including adequacy of the cap vegetation.
 - b. Generation or escape of leachate or any improper waste disposal.
 - c. Damage to the erosion control devices (vegetation layer).

2. Maintenance: Repairs and maintenance of the vegetation will occur as necessary, to include applying fertilizer (once per season) and revegetating barren areas.

NOAA proposes to replace the existing monitoring plan with the revised plan detailed below. NOAA's revised plan will address monitoring needs perpetuated by NOAA's use of petroleum-contaminated soil (PCS) for Landfill Cell C cover soil, NOAA leaving PCS in-situ within Landfill Cell B (Tetra Tech 2004), NOAA detecting total lead in groundwater during sampling of monitoring well MWSNPLF-1, and NOAA's desire to identify and quantify contaminants in groundwater up gradient Landfill Cells B and C and the new landfill operation of the City of St. Paul within the *Ataqan* subdivision.

Revised Post-Closure Monitoring Plan:

1. Visual Inspection: A five-year visual inspection program (once per year for five years, likely during the summer vegetation growing season months of June through September), using the example inspection form shown in Table E-1, will be established to evaluate the following aspects of the landfill cover, in accordance with 18 AAC 60:
 - a. Signs of damage or potential damage from settlement, ponding, leakage, frost action, erosion, or cracking of the soil cover, including adequacy of the cap vegetation.

- b. Generation or escape of leachate or any improper waste disposal.
 - c. Signs of trespassers and/or determining the effectiveness of the perimeter boulder barrier.
 - d. Damage to the erosion control devices (vegetation layer).
2. Maintenance: Perform as necessary to protect the closure cap during the five year post-closure monitoring period.
- a. Soil Cap: Repair areas of erosion using clean borrow sand from within Tract 42, or a suitable off-site source such as the NOAA NWS Landspreading Area. Cap areas prone to chronic erosion (e.g., side slopes) may require the installation of erosion control matting.
 - b. Vegetation: As needed, apply fertilizer once at the beginning of each growing season and revegetate barren areas using the seed mixture and fertilizer type recommended for St. Paul Island.
3. Groundwater Monitoring:
- a. Sampling Frequency and Duration: Annually for five years.
 - b. Wells to Sample: MWSNPLF-1, MWSNPLF-9, MWSNPLF-10, MWSNPLF-11, MWSNPLF-12, MWSNPLF-13, HC-4, and HC-5,
 - c. Contaminants of Concern: Gasoline-range organics, diesel-range organics, benzene, toluene, ethylbenzene, total xylenes, total lead, and dissolved lead (filtered in the field using a 0.45 micron filter, then preserved to < 2 pH units with reagent-grade nitric acid).
 - d. Sampling Reporting: Landfill groundwater monitoring results will be provided to ADEC as part of NOAA's periodic groundwater monitoring for St. Paul and St. George Islands.

TABLE E-1

Example Landfill Cell C Inspection Form

Inspection Date:

Inspector (Print Name/Signature)

A. Visual Inspection

| ----->Check one | | | |
|---|----|----------|-------|
| <i>Frequency: Annually for 5 years</i> | OK | Problems | Notes |
| 1. Signs of damage or potential damage from settlement, ponding, leakage, frost action, erosion, or cracking of the soil cover, including adequacy of the cap vegetation. | | | |
| 2. Generation or escape of leachate, or signs of surface water ponding or runoff | | | |
| 3. Signs of unpermitted waste disposal ("midnight dumping") | | | |
| 4. Other signs of trespassers (e.g., ATV tracks) | | | |
| 5. Overall condition and effectiveness of the perimeter boulder barrier. | | | |
| 6. Damage to the erosion control devices (vegetation layer). | | | |
| 7. Use attached map to document locations of problems or issues. | | | |
| 8. Attach photographs taken during inspection to show closure condition and any identified problems. | | | |

B. Maintenance

| |
|--|
| <i>Frequency: As needed during 5 year post-closure monitoring period.</i> |
| 1. Attach a description of any maintenance performed. Use attached map to document locations undergoing maintenance. |
| 2. Attach a description of any maintenance recommended but not performed at this time. Use attached map to document locations requiring maintenance. |
| 3. Attach any photographs taken during maintenance activities. |

C. Groundwater Monitoring

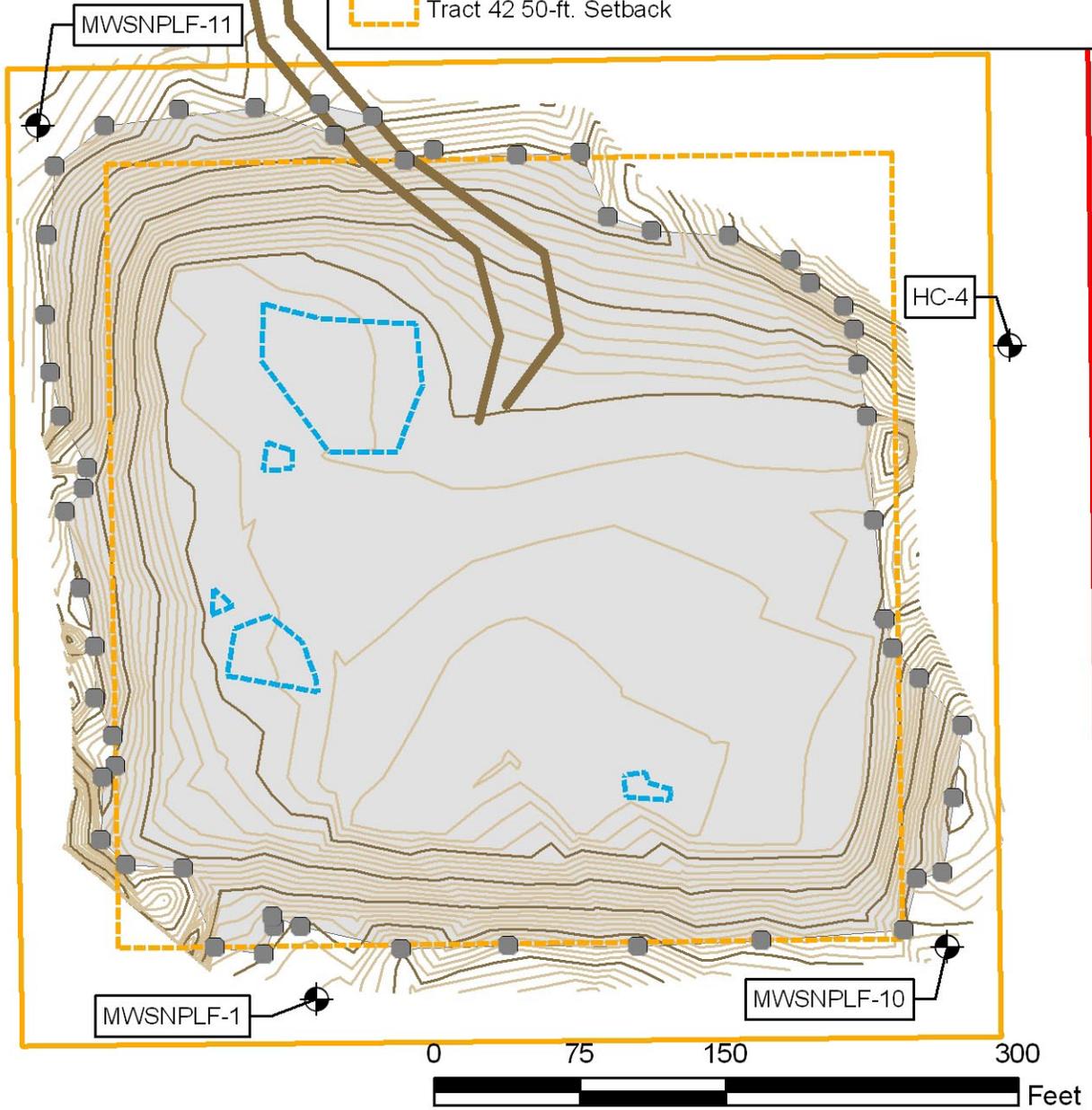
Frequency: Annually for 5 years.

| ----->Circle "X" when sample is collected for the listed contaminant(s) | | | | | |
|---|-----|------|-----|------------|----------------|
| Well | GRO | BTEX | DRO | Total Lead | Dissolved Lead |
| MWSNPLF-1 | X | X | X | X | X |
| MWSNPLF-9 | X | X | X | X | X |
| MWSNPLF-10 | X | X | X | X | X |
| MWSNPLF-11 | X | X | X | X | X |
| MWSNPLF-12 | X | X | X | X | X |
| MWSNPLF-13 | X | X | X | X | X |
| HC-4 | X | X | X | X | X |
| HC-5 | X | X | X | X | X |



Legend

- Monitoring Wells
 - Boulder Barrier
 - Standing Water
 - Access Road
 - PCS Cap
 - Tract 42 50-ft. Setback
 - Tract 42 Boundary
 - Ataqan Subdivision Boundary
- ### Cell C Final Topography
- 0.2 meter contour interval
 - 1.0 meter contour interval



APPENDIX F

ADEC APPROVAL OF CLOSURE REPORT



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Response and Restoration
Pribilof Project Office
7600 Sand Point Way N.E.
Seattle, Washington 98115
Ph 206-526-6965, fax 206-526-4819

September 19, 2005

Mr. Louis Howard
Project Manager
Alaska Department of Environmental Conservation
Division of Spill Prevention and Response
Contaminated Sites Program
555 Cordova Street
Anchorage, AK 99501-2617

Subject: Review and Approval of *Closure Report, Site 5/TPA Site 5a – St. Paul Landfill Cell C (Tract 42), St. Paul Island, Alaska*, dated September 19, 2005

Dear Mr. Howard:

Attached please find two hard copies and one electronic copy on CD of the subject Closure Report. NOAA requests your review at the earliest possible time. NOAA will consider this the final version only pending the receipt of any substantive comments that would otherwise alter the conclusions and recommendations reached in the document.

Additionally, NOAA requests that ADEC consider this closure report NOAA's documentation for consideration of conditional closure status for this site. NOAA has attached two copies of a signature page for ADEC's use. If ADEC considers this site conditionally closed, consistent with the Two-Party Agreement and applicable laws and regulations, please sign the attached pages and return one of them to NOAA. NOAA has sent a similar letter and request to the ADEC Solid Waste Program, requesting acceptance of Cell C's closure consistent with 18 Alaska Administrative Code Chapter 60 (Solid Waste Management) and approval for NOAA to initiate a five year post-closure monitoring period.



If you have any questions, please do not hesitate to contact me either in writing, or at (206) 526-4560.

Sincerely,

A handwritten signature in black ink, appearing to read "John A. Lindsay". The signature is fluid and cursive, with the first name "John" being the most prominent.

John A. Lindsay, Manager
Pribilof Project Office

cc: Leslie Simmons, ADEC EH Solid Waste (letter only)
St. Paul RAB Members (CD only)

Attachments



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Response and Restoration
Pribilof Project Office
7600 Sand Point Way N.E.
Seattle, Washington 98115
Ph 206-526-6965, fax 206-526-4819

September 19, 2005

Ms. Leslie Simmons
Alaska Department of Environmental Conservation
Division of Environmental Health
Solid Waste Program
555 Cordova Street
Anchorage, AK 99501-2617

Subject: Review and Approval of *Closure Report, Site 5/TPA Site 5a – St. Paul Landfill Cell C (Tract 42), St. Paul Island, Alaska*, dated September 19, 2005

Dear Ms. Simmons:

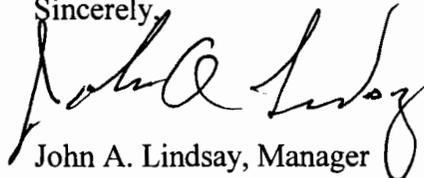
Attached please find two hard copies and one electronic copy on CD of the subject Closure Report. NOAA requests your review at the earliest possible time. NOAA will consider this the final version only pending the receipt of any substantive comments that would otherwise alter the conclusions and recommendations reached in the document.

Additionally, NOAA requests that Solid Waste Program accept Cell C's closure consistent with 18 Alaska Administrative Code Chapter 60 (Solid Waste Management) and approve NOAA's revised Post-Closure Monitoring Plan. The Plan is included as Appendix E of the Closure Report. NOAA has attached two copies of a signature page for ADEC's use. If ADEC considers this landfill closed, consistent with the applicable laws and regulations, please sign the attached pages and return one of them to NOAA. NOAA has sent a similar letter and request to the ADEC Contaminated Sites Program, requesting conditional closure of Cell C consistent with the Two Party Agreement between ADEC and NOAA.



If you have any questions, please do not hesitate to contact me either in writing, or at (206) 526-4560.

Sincerely,

A handwritten signature in black ink, appearing to read "John A. Lindsay". The signature is fluid and cursive, with a large initial "J" and "L".

John A. Lindsay, Manager
Pribilof Project Office

cc: Louis Howard, ADEC SPAR Contaminated Sites (letter only)
St. Paul RAB Members (letter only)

Attachments

STATE OF ALASKA

FRANK H. MURKOWSKI, GOVERNOR

**DEPT. OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL HEALTH
SOLID WASTE PROGRAM**

555 Cordova Street
Anchorage, Alaska 99501
PHONE: (907) 269-7590
FAX: (907) 269-7600
<http://www.dec.state.ak.us/>

November 7, 2005

Mr. John Lindsay
U.S. Department of Commerce
National Oceanic and Atmospheric Administration
7600 Sand Point Way NE
Seattle, Washington 98115

Certified Mail
7002 0510 0003 4244 9832
Return Receipt Requested

Subject: Closure Report for Site 5a, St. Paul Landfill Cell C, Tract 42

Dear Mr. Lindsay:

The Alaska Department of Environmental Conservation has completed review of the Closure Report for Site 5a, St. Paul Landfill Cell C, Tract 42, dated September 19, 2005, and approves closure of the landfill.

If you have any questions about closure and post-closure requirements, please contact me at (907) 269-7650. My email is leslie_simmons@state.dec.state.ak.us. I look forward to continuing our close relationship with your agency through the post-closure monitoring period.

Sincerely,



Leslie F. Simmons
Solid Waste Program Coordinator

RECEIVED

NOV 10 2005

**Request for Conditional Closure
St Paul Landfill Cell C, TPA Site 5a, NOAA Site 5
St. Paul Island, Alaska**

For the National Oceanic and Atmospheric Administration



John Lindsay
NOAA, Pribilof Project Office

9-19-05
Date

Approvals: In accordance with Paragraph 59 of the Two Party Agreement, this is to confirm that all corrective action has been completed to the maximum extent practicable at the St Paul Landfill Cell C, TPA Site 5a, NOAA Site 5, in accordance with the Agreement and that no further remedial action is required as a part of this conditional closure granted by ADEC.

For the Alaska Department of Environmental Conservation



Louis Howard
Alaska Department of Environmental Conservation
Remedial Project Manager

Oct 4, 2005
Date

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OCT 07 2005

**Request for Landfill Closure Acceptance, Start Post-Closure Monitoring
St Paul Landfill Cell C, TPA Site 5a, NOAA Site 5
St. Paul Island, Alaska**

For the National Oceanic and Atmospheric Administration



John Lindsay
NOAA, Pribilof Project Office

9-19-05
Date

Approvals: In accordance with Paragraph 59 of the Two Party Agreement, this is to confirm that all landfill closure activities have been completed at the St Paul Landfill Cell C, TPA Site 5a, NOAA Site 5, in accordance with 18 Alaska Administrative Code Chapter 60 and that ADEC approves NOAA's proposed revised post-closure monitoring plan dated September 19, 2005.

For the Alaska Department of Environmental Conservation



Leslie Simmons
Alaska Department of Environmental Conservation
Solid Waste Program Coordinator

10-27-05
Date

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