

OCT 8 2004

**Request for No Further Remedial Action Planned**

DEPT. OF ENVIRONMENTAL  
CONSTRUCTION

**Site:** House 103, also known as Two Party Agreement (TPA) Site 9s, National Oceanic and Atmospheric Administration (NOAA) Site 55, and Tract A Lot 103.

**Location:** St. Paul Island, Alaska is approximately 800 miles southwest of Anchorage in the Bering Sea. On the island, House 103 is located on the southeast portion of Village Hill along Gorbach Street in the City of St. Paul, near City Hall (170° 16' 54.53" W longitude, 57° 7' 14.17" N latitude; Figure 1).

**Legal Property Description:** The location of House 103 and the previously associated underground storage tank (UST) is Lot 3, Block 9, U.S. Survey No. 4943, Alaska, Tract "A", St. Paul Townsite, accepted by the Bureau of Land Management August 2, 1968 (Figure 2). The federal government currently owns the associated surface and subsurface estate.

**Type of Release:** Potential sources and release mechanisms include: 1) diesel fuel spills occurring during UST fueling; and 2) diesel fuel leaks occurring from the UST or its associated piping.

**History and Background:**

The 1940s era house served as quarters for government employees, although in subsequent years it was occupied by island school teachers. Sometime after 1987, island entities assumed beneficial rights to the house and rented it to various individuals. An UST was installed on House 103 property to store heating oil for the home. NOAA proposed to remove the UST in anticipation of the transfer of the real property under the Transfer of Property Agreement (TOPA; NOAA 1984) to Aleut Native American entities. NOAA prepared a corrective action plan (CAP; NOAA 2002) for the removal of the UST at House 103, implemented it in October 2002, and provided a corrective action report (CAR; NOAA 2004).

**Summary of Site Investigations:**

House 103 was only recently identified as a site of concern under Public Law 104-91. Therefore, no previous soil samples were collected at the House 103 property.

Groundwater flow has not been well described for this site. Several groundwater monitoring wells are in the general vicinity of House 103. NOAA contractors conducted quarterly groundwater monitoring from September 2000 to September 2001 at wells MWA-4 and MWA-6 (Figure 3). Low levels of diesel-range organic compounds (DRO) well below the Table C cleanup level of 1,500 µg/L were detected in both wells (IT Alaska Inc. 2002). Contractors also conducted quarterly groundwater monitoring from October 2003 to July 2004, sampling wells MWA-4, MWA-6, MWA-7, and MWA-8 (Figure 3). Data is currently available from the first three quarters. Petroleum constituents were not detected in MWA-4 or MWA-6. Low levels of DRO were detected in MWA-7 and MWA-8. A full report on 2003-2004 sampling events will be available late in 2004.

### **Summary of Applicable Cleanup Levels:**

NOAA employed ADEC Method Two cleanup criteria, discussed at 18 AAC 75.341(c) (ADEC 2000). Under the TPA, for benzene NOAA had the option to cleanup to the less stringent State of Alaska cleanup level in effect in 1991 (ADEC 1991). ADEC uses 15 feet below ground surface (bgs) to define subsurface soil to which residents will have a reasonable potential to be exposed through the inhalation or ingestion pathways (ADEC 2000; 18 AAC 75.340 (j)(2)). Therefore, NOAA is not obligated to excavate contaminated soil occurring at depths deeper than 15 feet to address the inhalation and ingestion pathways. Cleanup criteria were applied to the maximum extent practicable (18 AAC 75.325 (f), 18 AAC 75.990).

### **Summary of Clean up Actions:**

Excavation activities began on October 24, 2002 by NOAA contractor, Bering Sea Eccotech, Inc. (BSE). Contaminated soils were removed by an excavator (Figure 4), loaded on dump trucks, and hauled to the petroleum-contaminated stockpile at the Blubber Dump. The contaminated soils were eventually treated in an enhanced thermal conduction system and disposed of at the local landfill (BSE 2003). After the UST was exposed, approximately 900 gallons of diesel fuel were pumped out from it prior to its removal (Figure 5). The fuel was donated to community members of the City of St. Paul. On October 26, 2002, the UST was removed from the ground, placed directly on a flat bed truck and transported to BSE's garage facility at the St. Paul airport (Figure 6).

Following tank removal, the excavation was increased to a depth of 17 feet bgs. Excavation to greater depths was not feasible with available on-site equipment. A total of 80 cubic yards (yd<sup>3</sup>) of soil was removed from the UST excavation. The UST excavation was backfilled with clean fill material obtained from the scoria quarry at Telegraph Hill on St. Paul Island (Figure 7). The fill was placed in the excavation in 6- to 8-inch lifts and compacted with the excavator bucket. The site was restored to grade.

Prior to backfilling the excavation, seven confirmation samples were collected to confirm the condition of remaining in-place soils (Tables 1 and 2, Figure 8). Residual-range organic compounds (RRO) were the only compounds detected (50.1 mg/kg RRO; sample SNPTA103SS05) in the confirmation samples, and the concentration of RRO was well below the Method Two cleanup level. Gasoline range organics (GRO), benzene, toluene, ethylbenzene, and xylene (BTEX), DRO, and polynuclear aromatic hydrocarbons (PAHs) were not detected in any of the samples collected from the excavation.

The removed UST was cleaned with soap and water and cut into manageable pieces for recycling off-island. In accordance with Section 6.2.6 in the CAP (NOAA 2002), the rinsate generated during UST cleaning was transported to the Blubber Dump PCS stockpile and discharged onto the stockpile and ultimately treated.

In summary, the source of the contamination has been successfully removed (*i.e.*, 1,000-gallon UST) from the House 103 site. All accessible contaminated soils associated with the UST have been removed from the site and successfully treated and ultimately disposed of at the Tract 42 landfill.

**Recommend Action:**

In accordance with paragraph 59 of the Two Party Agreement (NOAA 1996), NOAA requests written confirmation that NOAA completed all appropriate corrective action at House 103, TPA Site 9s/Site 55 in accordance with the Agreement and that ADEC requires no further remedial action plan from NOAA.

**References**

Alaska Department of Environmental Conservation (ADEC). 1991. *Interim Guidance for Non-UST Contaminated Soil Cleanup Levels, Contaminated Sites Program*. July 17, 1991.

ADEC. 2000. Title 18 of the *Alaska Administrative Code 75*, Articles 3 and 9. *Oil and Hazardous Substances Pollution Control Regulations*. State of Alaska. Amended through October 28, 2000.

Bering Sea Eccotech, Inc. 2003. *Enhanced Thermal Conduction Yearly Report, St. Paul Island, Initial Draft*. February.

IT Alaska Corporation. 2002. Draft Annual Groundwater Monitoring Report 2001, St. Paul Island, Alaska. March.

National Oceanic and Atmospheric Administration (NOAA). 1984. Transfer of Property Agreement.

NOAA. 1996. *Pribilof Islands Environmental Restoration Two-Party Agreement*, Attorney General's Office File No. 66 1-95-0126. National Oceanic and Atmospheric Administration. January 26.

NOAA. 2002. *Corrective Action Plan, UST Removals, Selected U.S. Government Sites*, St Paul Island, Alaska. August 13.

NOAA. 2004. *UST Removal and Corrective Action Report TPA Site 9-S – House 103 St. Paul Island, Alaska*. February 9.

For the National Oceanic and Atmospheric Administration

  
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John Lindsay  
NOAA, Pribilof Project Office

9/30/04  
Date

**Approvals:** In accordance with Paragraph 59 of the Two Party Agreement, this is to confirm that all corrective action has been completed at House 103, TPA Site 9s/Site 55 in accordance with the Agreement and that no plan for further remedial action is required.

For the Alaska Department of Environmental Conservation

  
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Louis Howard  
Alaska Department of Environmental Conservation  
Remedial Project Manager

10/11/04  
Date

## Tables and Figures

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Table 1. Petroleum Hydrocarbon Analytical Data (mg/kg) Summary for Confirmation Samples, House 103, TPA Site 9s/Site 55, St. Paul Island, Alaska

Sample#	Sample Depth (feet)	GRO (AK101)	Benzene (EPA 8021B)	Toluene (EPA 8021B)	Ethylbenzene (EPA 8021B)	Total Xylene (EPA 8021B)	DRO (AK102)	RRO (AK103)
SNPTA103SS01	10	ND(8.91)	ND(0.0445)	ND(0.178)	ND(0.178)	ND(0.178)	ND(26.8)	ND(26.8)
SNPTA103SS02	7	ND(10.7)	ND(0.0533)	ND(0.213)	ND(0.213)	ND(0.213)	ND(28.8)	ND(28.8)
SNPTA103SS03	6.5	ND(6.35)	ND(0.0317)	ND(0.127)	ND(0.127)	ND(0.127)	ND(27.7)	ND(27.7)
SNPTA103SS04	6.5	ND(5.89)	ND(0.0295)	ND(0.118)	ND(0.118)	ND(0.118)	ND(27.6)	ND(27.6)
SNPTA103SS05	7	ND(5.39)	ND(0.0269)	ND(0.108)	ND(0.108)	ND(0.108)	ND(25.6)	50.1
SNPTA103SS06	9	ND(7.50)	ND(0.0375)	ND(0.150)	ND(0.150)	ND(0.150)	ND(25.1)	ND(25.1)
SNPTA103SS07	7	ND(7.05)	ND(0.0352)	ND(0.141)	ND(0.141)	ND(0.141)	ND(24.7)	ND(24.7)

NOTES:

1. ND=non-detect. The number provided in parentheses is the practical quantitation limit (PQL).
2. mg/Kg = milligrams per kilogram.

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Table 2. Polynuclear Aromatic Hydrocarbon Analytical Data (mg/kg) Summary for Confirmation Samples, House 103, TPA Site 9s/Site 55, St. Paul Island, Alaska

Sample#	Sample Depth (feet)	Benzo(a) Anthracene	Benzo[a] pyrene	Benzo[b] Fluoranthene	Benzo[k] fluoranthene	Chrysene	Dibenzo [a,h] anthracene	Fluorene	Indeno [1,2,3-c,d] pyrene	Naphthalene
SNPTA103SS01	10	ND(0.670)	ND(0.670)	ND(0.670)	ND(1.34)	ND(0.670)	ND(0.938)	ND(0.670)	ND(0.670)	ND(0.938)
SNPTA103SS02	7	ND(0.719)	ND(0.719)	ND(0.719)	ND(1.44)	ND(0.719)	ND(1.01)	ND(0.719)	ND(0.719)	ND(1.01)
SNPTA103SS03	6.5	ND(0.692)	ND(0.692)	ND(0.692)	ND(1.38)	ND(0.692)	ND(0.968)	ND(0.692)	ND(0.692)	ND(0.968)
SNPTA103SS04	6.5	ND(0.689)	ND(0.689)	ND(0.689)	ND(1.38)	ND(0.689)	ND(0.964)	ND(0.689)	ND(0.689)	ND(0.964)
SNPTA103SS05	7	ND(0.638)	ND(0.638)	ND(0.638)	ND(1.28)	ND(0.638)	ND(0.893)	ND(0.638)	ND(0.638)	ND(0.893)
SNPTA103SS06	9	ND(0.629)	ND(0.629)	ND(0.629)	ND(1.26)	ND(0.629)	ND(0.880)	ND(0.629)	ND(0.629)	ND(0.880)
SNPTA103SS07	7	ND(0.617)	ND(0.617)	ND(0.617)	ND(1.23)	ND(0.617)	ND(0.864)	ND(0.617)	ND(0.617)	ND(0.864)

NOTES:

1. ND=non-detect. The number provided in parentheses is the practical quantitation limit (PQL).
2. mg/kg = milligrams per kilogram.
3. Shading indicates instances when PQL is higher than applicable regulatory limits.

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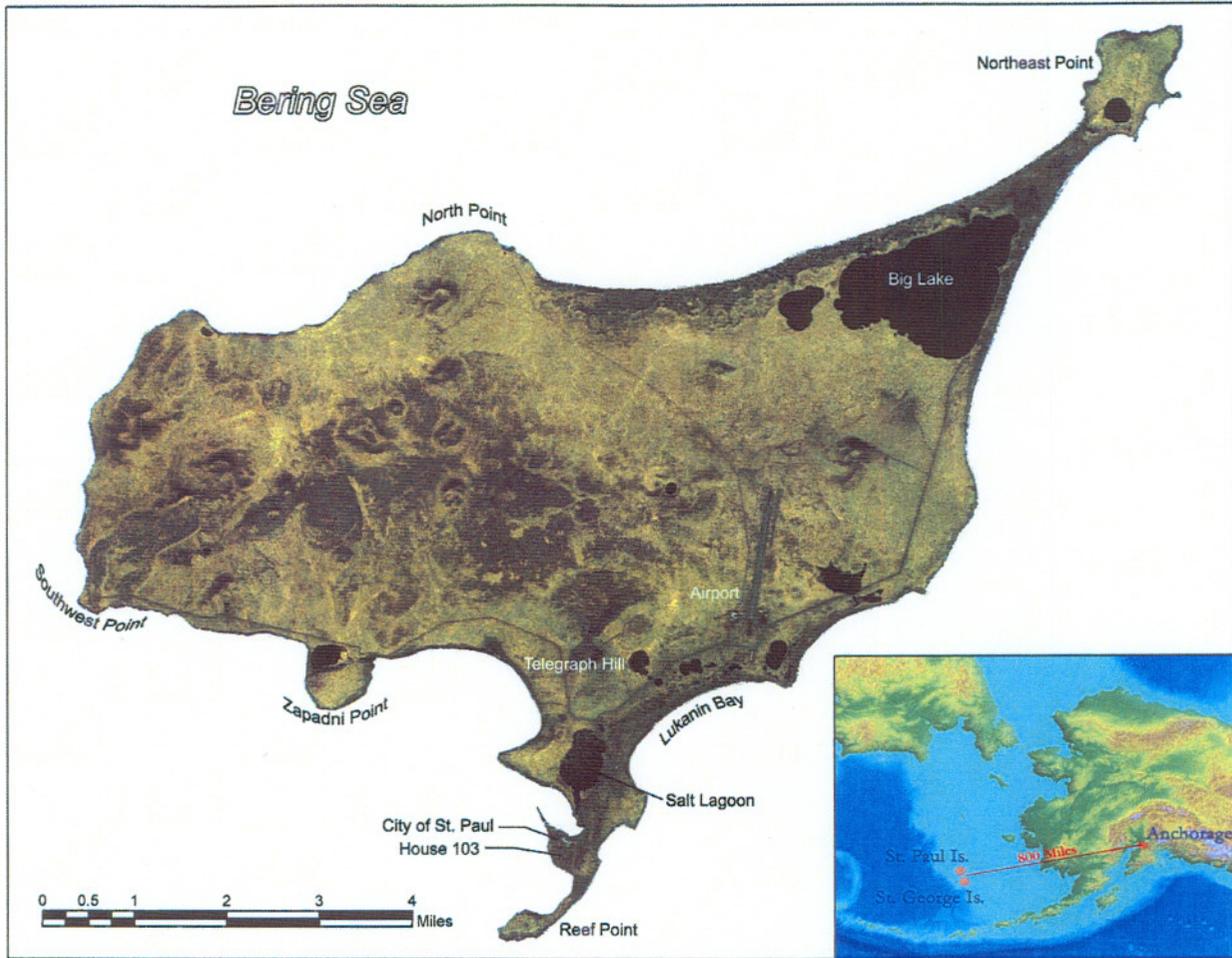
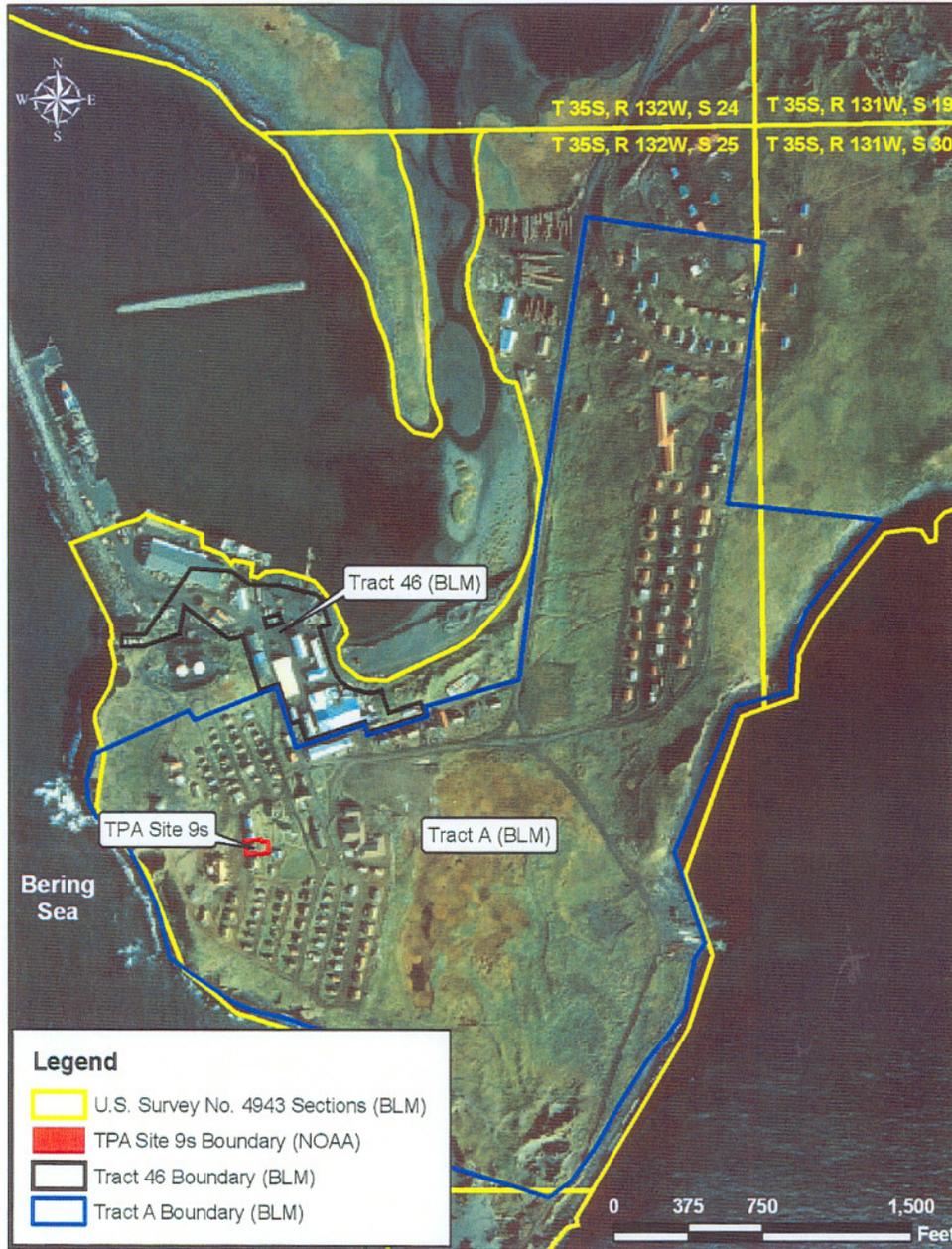


Figure 1	St. Paul Island Vicinity Map Location of House 103 NOAA Site 55/TPA Site 9s St. Paul Island, Alaska
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Source: Ikonos Satellite Imagery, 2001



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<p>Figure 2</p>	<p>Legal Property Description Map                  House 103 UST                  NOAA Site 55/TPA Site 9s                  St. Paul Island, Alaska</p>	<p>Sources: BLM Tracts (BLM MTPs 1983), TPA 9s Boundary (NOAA GIS 2004), Aerial Photo (Aeromap US 1996).</p>
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Figure 3 Groundwater Sampling Results House 103 UST NOAA Site 55/TPA Site 9s St. Paul Island, Alaska

Sources: Well locations and Excavation Extent (NOAA GPS 2002/2004), Aerial photo (Aeromap US 1996).





**Figure 4.** Excavation around the UST and utility lines.



**Figure 5.** Transfer of fuel from the UST to a portable storage tank.



**Figure 6.** UST on flatbed truck for transport to POSS Camp



**Figure 7.** Clean fill material placed in excavation

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