

Request for No Further Remedial Action Planned

Site: Old Movie Theater (OMT), also known as Two Party Agreement (TPA) Site 9a and National Oceanic and Atmospheric (NOAA) Site 16

Location: St. Paul Island is approximately 800 miles southwest of Anchorage in the Bering Sea. On the island, the OMT site is located below the summit and on the southerly side of Village Hill (57° 07' 17.52" N latitude, 170° 16' 59.68" W longitude; Figure 1). It is approximately 300 feet northerly of the City Municipal Building and 125 feet southeasterly of the city's concrete water supply tanks. The OMT is bounded to the south by Bartlett Boulevard and to the west by Pribilof Street. Private residences are located to the east and northwest.

Legal Property Description: The OMT is located in Lot 8, Block 5, U.S. Survey No. 4943, Alaska Tract "A", St. Paul Townsite, accepted by the Bureau of Land Management August 2, 1968 (Figure 2). The property is owned by Tanadgusix Corporation (TDX). [Note: TPA site boundaries are not defined in the TPA. At its discretion, NOAA established a boundary for this TPA site based on site characterization data and historic information. Though this boundary extends in Lot 9, corrective actions were only conducted within Lot 8.]

Type of Release: Potential release sources and mechanisms include diesel fuel spillage occurring during the filling of 55-gallon barrels storing fuel to provide heat to the theater.

History and Background:

The OMT was constructed around 1962 and served as a theater for the local community. Prior to construction, the area about the theater was undeveloped. The theater went into disuse in the 1980s and is presently abandoned and in disrepair. Specific dates of operation and modification are uncertain.

While not identified in the TPA proper, NOAA elected to include the OMT within the broader definition of TPA Site 9 and designated the site as TPA Site 9a.

Summary of Site Investigations:

NOAA identified the OMT as a site of concern after the signing of the TPA and following a site investigation and site characterization (SC) of TPA Site 9a and the vicinity (*i.e.* Tracts 46 and A) by NOAA's contractor Columbia Environmental Sciences, Inc. (CESI; CESI 2001a and 2001b). The SC identified aboveground storage tanks (ASTs) in the form of 55-gallon barrels (Figure 3) used to provide fuel to heat the OMT. The ASTs and associated piping were removed by CESI during 2001 (CESI 2001a).

The SC confirmed contamination in the soils below the ASTs. CESI collected seven soil samples from this site (CESI 2001a). The samples were analyzed at a fixed laboratory for petroleum hydrocarbons, volatile organic carbons, semi-volatile organic carbons, and heavy metals. Two of the samples exceeded the Alaska Department of Environmental Conservation (ADEC) Method Two regulatory limit of 250 mg/kg for diesel-range organic compounds (DRO), with a maximum concentration of 1,300 mg/kg.

NOAA contractors conducted quarterly groundwater monitoring from September 2000 to September 2001 and from October 2003 to July 2004 in the vicinity of the OMT (Figure 4). Groundwater wells installed in the area reached the water table at approximately 90 feet bgs (CESI 2001a). No monitoring wells are located up gradient of the OMT, and none are located directly down gradient. MWA-4 and MW46-2 are the closest wells to the OMT and are located in areas with groundwater elevations lower than that beneath the OMT (Mitretek Systems 2002). During the 2000-2001 monitoring, DRO were detected at 73 µg/L and 730 µg/L in MWA-4 and MW46-2, respectively (IT Alaska Inc. 2002). This is below the Table C cleanup level of 1,500 µg/L DRO. During the first three quarters of the 2003-2004 monitoring, DRO were not detected in either well. Data from the fourth quarter is not currently available; a full report on 2003-2004 sampling events will be available late in 2004.

Summary of Applied Cleanup Levels:

ADEC Method One (18 Alaska Administrative Code (AAC) 75.341(a); ADEC 2000) was selected for determining site cleanup levels. Based on distance between contamination and potable groundwater, mean annual precipitation, soil type, distance to drinking water wells, and the volume of contaminated soil, a matrix score was generated placing this site in cleanup category C. The category C cleanup level for DRO is 1,000 mg/kg.

Summary of Cleanup Actions:

Corrective action began at the OMT on June 26, 2002 and ended a day later (NOAA 2002 and 2003; Figures 5, 6, and 7). After a utility locate was conducted, contaminated soils were excavated, loaded into 10- to 12-cubic yard (yd³) dump trucks, and transported to the Blubber Dump petroleum contaminated soil (PCS) stockpile for subsequent treatment and disposal. Guided by field samples screened with a photo ionization detector, approximately 25 yd³ were removed from the excavation site. Final excavation limits were approximately 6 x 12 x 8 feet. Precaution was taken to ensure the integrity of the OMT's foundation and structure. Backfill was hauled with dump trucks and placed in the excavation area. The site was restored to grade and compacted with a front-end loader and by walking the excavator across the excavation several times. No archeological findings were encountered during the excavation activities.

Soils transported to the Blubber Dump PCS stockpile were treated by an enhanced thermal conduction (ETC) system, verified to be clean via analytical data (BSE 2003), and transported to the City of St. Paul Landfill for final disposal.

Confirmation samples (Table 1; Figure 8), contaminated stockpile samples, and backfill samples were collected and sent to an off-site laboratory for analysis. The four confirmation samples and two backfill samples collected were all below the cleanup levels for the compounds analyzed. The highest DRO concentration in the four stockpile samples (*i.e.*, samples collected from the removed soil) was 1,220 mg/kg.

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 the Old Movie Theater, TPA 9a/Site 16 in accordance with the Agreement and that ADEC requires no further remedial action plan from NOAA.

References:

Alaska Department of Environmental Conservation. 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*. Bering Sea Eccotech. February 2003.

Columbia Environmental Sciences, Inc. (CESI). 2001a. *Draft Site Characterization Report, Old Movie Theatre, St. Paul Island, Alaska*. Version 1.9. December 20, 2001. Columbia Environmental Sciences, Inc. Kennewick, WA.

CESI. 2000b. *Draft Site Characterization Report, Tract 46 and Vicinity (TPA Site 9), St. Paul Island, Alaska*, Version 2.1. December 16, 2001. Columbia Environmental Sciences, Inc. Kennewick, WA.

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

Mitretek Systems. 2002. *Groundwater Use and Classification in the Vicinity of Tract 46, St. Paul Island, Pribilof Islands, Alaska*. Prepared by Mitretek Systems, for the National Oceanic and Atmospheric Administration. June 5.

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

NOAA. 2002. *Draft Corrective Action Plan, St. Paul Island, Alaska, TPA Site 9 – Old Movie Theater*. May.

NOAA. 2004. *Corrective Action Report, St. Paul Island Alaska, TPA Site 9-A – Old Movie Theatre*. Prepared by NOAA Pribilof Project Office, Seattle, WA with Bering Sea Eccotech, Inc. February 5.

For the National Oceanic and Atmospheric Administration



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 the Old Movie Theater, TPA Site Number 9a/Site 16 in accordance with the Agreement and that no plan for further remedial action is required.

For the Alaska Department of Environmental Conservation



Louis Howard
Alaska Department of Environmental Conservation
Remedial Project Manager

10/11/04

Date

Tables and Figures

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Table 1: Analytical Data (mg/kg) Summary for Confirmation Samples from the Old Movie Theater, TPA9a/Site 16

Sample #	GRO	DRO	RRO	Benzene	Ethyl-benzene	Toluene	Total Xylenes	Location
SNP9ASS01-095	ND(5.82)	ND(28.8)	ND(28.8)	ND(.0291)	ND(.116)	ND(.116)	ND(.116)	Excavation bottom
SNP9ASS02-065	ND(6.67)	ND(25.7)	ND(25.7)	ND(.0334)	ND(.113)	ND(.113)	ND(.113)	East wall of excavation
SNP9ASS03-030	ND(3.44)	ND(22.0)	ND(22.0)	ND(.0172)	ND(.0688)	ND(.0688)	ND(.0688)	South wall of excavation
SNP9ASS04-028	ND(5.17)	ND(25.0)	ND(25.0)	ND(.0259)	ND(.103)	ND(.103)	ND(.103)	South wall of excavation
SNP99TB01	ND(2.36)	NA	NA	ND(.0118)	ND(.0472)	ND(.0472)	ND(.0472)	Soil trip blank

Notes:

NA: Not analyzed

ND: Analyte was analyzed for but not detected above method reporting limit (method reporting limit provided in parentheses)

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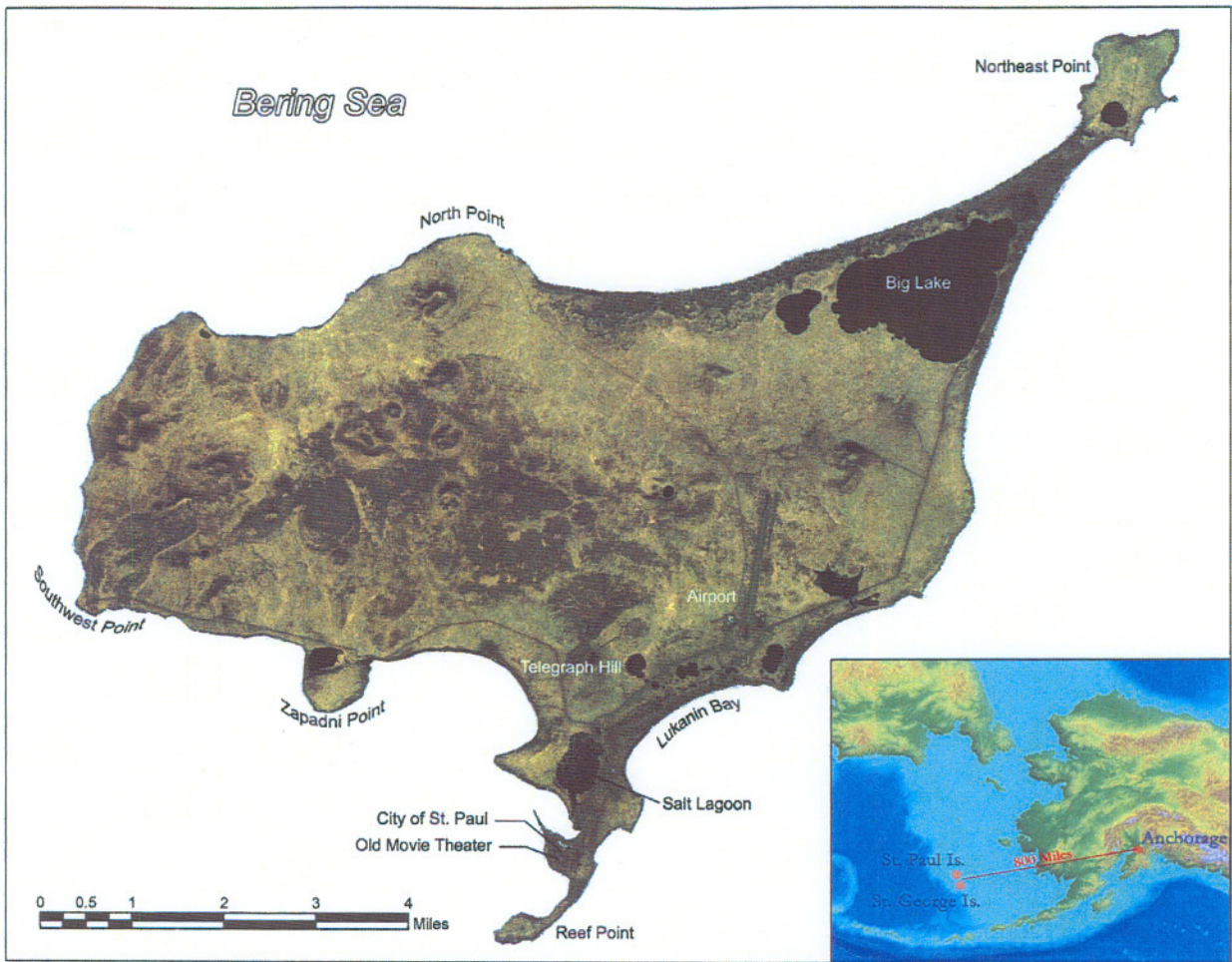



Figure 1	St. Paul Island Vicinity Map Location of the Old Movie Theater NOAA Site 16/TPA Site 9a St. Paul Island, Alaska	Source: Ikonos Satellite Imagery, 2001	 Pribilof Islands Restoration Project
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Figure
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Legal Property Description Map
 Old Movie Theater
 NOAA Site 16/TPA Site 9a
 St. Paul Island, Alaska

Sources: BLM Tracts (BLM MTPs 1983), TPA 9a Boundary (NOAA GIS 2004), Aerial Photo (Aeromap US 1996).





Figure 3	Historical Site Map, 1967 Old Movie Theater NOAA Site 16/TPA Site 9a St. Paul Island, Alaska	Source: NOAA Pribilof Project GIS, 2002.
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Figure 4 Groundwater Sampling Results
 Old Movie Theater
 NOAA Site 16/TPA Site 9a
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Sources: Final excavation extent, (NOAA GPS 2002), Well locations (NOAA GPS 2004), Aerial photo (Aeromap US 1996).





Figure 5. OMT excavation area prior to excavation activities



Figure 6. Extents of excavation



Figure 7. Final grading of clean backfill

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