UNITED STATES AIR FORCE
611TH AIR SUPPORT GROUP
611TH CIVIL ENGINEER SQUADRON

JOINT BASE ELMENDORF-RICHARDSON, ALASKA

NIKOLSKI RADIO RELAY STATION
NIKOLSKI, ALASKA

CERCLA RECORDS OF DECISION:

- **OT-001 FORMER COMPOSITE BUILDING**
- **ST-018 COMPOSITE BUILDING SEPTIC TANK AND OUTFALL**
- **WP-007 COMPOSITE BUILDING POL OUTFALL**

FINAL
SEPTEMBER 2011

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ACRONYMS AND ABBREVIATIONS

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
ARAR	applicable or relevant and appropriate requirements
AST	aboveground storage tank
bgs	below ground surface
BRA	baseline risk assessment
BTEX	benzene, toluene, ethylbenzene, and xylenes
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CFR	Code of Federal Regulations
COC	contaminant of concern
COPC	contaminant of potential concern
DEW	Distant Early Warning
DoD	Department of Defense
DRO	diesel-range organics
EPA	U.S. Environmental Protection Agency
ERP	Environmental Restoration Program
F	analyte was positively identified but numerical value is below reporting limit
FS	feasibility study
GAC	granular activated carbon
GRO	gasoline-range organics
HEAST	Health Effects Assessment Summary Tables
IC	institutional controls
IRIS	Integrated Risk Information System
IRA	Indian Reorganization Act
J	analyte was positively identified but quantitation is an estimate
LUC	land use controls
mg/kg	milligrams per kilogram

ACRONYMS AND ABBREVIATIONS (Continued)

MoGas	motor vehicle gasoline
NA	not applicable
NCP	National Contingency Plan
ND	not detected above reporting limit
NFRAP	no further remedial action planned
PA	preliminary assessment
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
POL	petroleum, oil, and lubricants
RA	removal action
RAB	Restoration Advisory Board
RAO	remedial action objective
ROD	Record of Decision
RRO	residual-range organics
RRS	Radio Relay Station
TRPH	total recoverable petroleum hydrocarbons
SARA	Superfund Amendments and Reauthorization Act
SI	site investigation
SVOC	semivolatile organic compound
UCL	upper confidence limit
USAF	U.S. Air Force
USC	United States Code
UST	underground storage tank
VOC	volatile organic compound

PART 1: THE DECLARATION

1.1 NAME AND LOCATION

1.1.1 OT-001

Facility Name: Former Composite Building and White Alice Arrays, Nikolski Radio Relay Station

Site Location: Nikolski, Alaska; Section 25; Township 083 South; Range 136 West; Seward Meridian

Latitude and Longitude: 52°56'13"N, 168°52'11"W

Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) ID Number: AK4570028684 (archived)

Alaska Department of Environmental Conservation Contaminated Sites Hazard ID Number: 133, site status is active

Operable Unit/Site: OT-001

1.1.2 ST-018

Facility Name: Composite Building Septic Tank and Outfall, Nikolski Radio Relay Station

Site Location: Nikolski, Alaska; Section 25; Township 083 South; Range 136 West; Seward Meridian

Latitude and Longitude: 52°56'13"N, 168°52'11"W

CERCLIS ID Number: AK4570028684 (archived)

Alaska Department of Environmental Conservation Contaminated Sites Hazard ID Number: 127, site status is active

Operable Unit/Site: ST-018 (formerly AOC-08)

1.1.3 WP-007

Facility Name: Composite Building Petroleum, Oil, and Lubricants (POL) Outfall (WP-007), Nikolski Radio Relay Station

Site Location: Nikolski, Alaska; Section 25; Township 083 South; Range 136 West; Seward Meridian

Latitude and Longitude: 52°56'13"N, 168°52'11"W

CERCLIS ID Number: AK4570028684 (archived)

Alaska Department of Environmental Conservation Contaminated Sites Hazard ID Number: 136, site status is active

Operable Unit/Site: WP-007

Each of these three sites were part of the Nikolski Radio Relay Station (RRS), located on Umnak Island in the Aleutian Island chain, approximately 900 air miles from Anchorage, Alaska, and 1.7 air miles from the village of Nikolski (Figure 1). These three sites are located on the topographic feature known as High Hill (Figure 2).

1.2 STATEMENT OF BASIS AND PURPOSE

This decision document presents the selected remedies for Environmental Restoration Program (ERP) sites OT-001, ST-018, and WP-007 at the Nikolski RRS in Nikolski, Alaska. The remedies were chosen in accordance with the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986 and to the extent practicable with the National Contingency Plan (NCP); and State of Alaska laws and regulations. This decision document is based on the Administrative Record file for each site, which can be accessed via the Internet at <www.adminrec.com> or at the Information Repository at the Nikolski Indian Reorganization Act (IRA) Council Office in the village of Nikolski.

1.2.1 Statement of Basis and Purpose under CERCLA

As the lead agency, the Department of the Air Force issues this document. The U.S. Air Force (USAF) is managing remediation at WP-007 and ST-018 in accordance with CERCLA as required by the Defense Environmental Restoration Program (DERP). This Record of Decision (ROD) is issued in accordance with and satisfies requirements of the DERP, United States Code (USC) Title 10, Section 2701 et seq.; CERCLA 42 USC 9601 et seq.; Executive Order 12580, Federal Register Title 52, Section 2923 (23 January 1987); and the NCP, Code of Federal Regulations Title 40, Chapter 300).

As the lead agency, the USAF has selected the remedies for WP-007 and ST-018. The Alaska Department of Environmental Conservation (ADEC) concurs that the selected remedies for WP-007 and ST-018, if properly implemented, will comply with state law.

The U.S. Environmental Protection Agency (EPA) was consulted regarding these sites and the other Nikolski RRS sites, consistent with the requirements of 10 USC 2705. In 1994, EPA Region 10 reviewed the Preliminary Assessment (PA) Report for the Nikolski RRS sites (USAF 1994). Using the EPA Hazard Ranking System, EPA determined that the Nikolski sites' status was No Further Remedial Action Planned (NFRAP) with respect to National Priorities List listing and response. Subsequently, EPA has deferred to ADEC for regulatory oversight of ERP activities at the Nikolski RRS.

1.2.2 Statement of Basis and Purpose under State of Alaska Regulations

Because petroleum compounds and polycyclic aromatic hydrocarbons (PAH) are contaminants of concern (COC) under State of Alaska regulations, the remedy for OT-001 is being addressed consistent with those applicable laws and regulations, including but not limited to Title 46 of the Alaska Statutes promulgated thereunder. The State of Alaska agrees that the selected remedy will meet State of Alaska regulatory requirements.

This document complies with the requirements of the *Alaska Oil and Hazardous Substances Pollution Control Act*, Alaska Administrative Code, Title 18 (18 AAC) 75, revised as of 9 October 2008.

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Figure 1 Location Map

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Figure 2 High Hill Site Map

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1.3 ASSESSMENT OF SITES

1.3.1 Assessment of Sites under CERCLA

1.3.1.1 OT-001

No response action under CERCLA is necessary at this site to protect the public health or welfare or the environment from actual or threatened releases of hazardous substances into the environment. No CERCLA COCs are present at the site above 18 AAC 75 soil cleanup levels.

1.3.1.2 ST-018

No response action under CERCLA is necessary at this site to protect the public health or welfare or the environment from actual or threatened releases of hazardous substances into the environment. No CERCLA COCs are present at the site above 18 AAC 75 soil cleanup levels.

1.3.1.3 WP-007

The response action selected in this ROD is necessary to protect the public health or welfare or the environment from actual or threatened releases of hazardous substances into the environment. The COC is polychlorinated biphenyls (PCB) which has been detected at this site above 18 AAC 75 soil cleanup levels. Due to commingling of PCBs with diesel-range organics (DRO) and residual-range organics (RRO), these petroleum contaminants are included as CERCLA COCs at WP-007 only.

Areas within Site WP-007 cannot support unlimited use and unrestricted exposure due to hazardous substances remaining in place after implementation of the selected remedy. Land use restrictions are required as part of this response action and will be achieved through the establishment of institutional controls (IC) that limit the use of those areas of the site that have contamination remaining in place.

1.3.2 Assessment of Sites under State of Alaska Regulations

1.3.2.1 OT-001

The response action selected in this ROD is necessary to prevent exposure to non-CERCLA COCs remaining in place after implementation of the selected remedy. The COCs are benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and RRO which have been detected above 18 AAC 75 soil cleanup levels. Areas within Site OT-001 cannot support unlimited use and unrestricted exposure due to the aforementioned COCs remaining in place after implementation of the selected remedy. Land use restrictions are required as part of this response action and will be achieved through the establishment of ICs that limit the use of those areas of the site that have contamination remaining in place.

The USAF is committed to implementing, monitoring, maintaining, and enforcing all components of the selected remedy to ensure that it remains protective of human health and the environment.

1.3.2.2 ST-018

No response action under State of Alaska regulations is necessary at this site to meet 18 AAC 75 soil cleanup levels.

1.3.2.3 WP-007

No response action under State of Alaska regulations is necessary at this site because commingled CERCLA and non-CERCLA contaminants are being addressed under CERCLA, and the remedy complies with applicable state law. Response actions under CERCLA are being taken at this site as indicated in Section 1.3.1.3 to protect the public health or welfare or the environment from actual or threatened releases of hazardous substances into the environment.

1.4 DESCRIPTION OF THE SELECTED REMEDIES

1.4.1 OT-001

Remedial alternatives for the Former Composite Building site (OT-001), which includes the adjacent Two 20,000-Gallon USTs site (TU-019, formerly AOC-09), were developed and evaluated during the Feasibility Study (FS) (USAF 2003a). Based on the results of the Feasibility Study, the USAF selected ICs as the preferred alternative for OT-001. The major components of the selected response action are presented in Section 1.4.1.2.

1.4.1.1 CERCLA-Selected Remedy

Releases at the site were found to solely contain petroleum products or petroleum product indicators. Under CERCLA Sections 101(14) and 101(33), petroleum products, to include any fractions or derivatives of crude oil, are excluded from the definitions of hazardous substances, pollutants, or contaminants. Therefore, the USAF is not selecting a CERCLA remedy for OT-001.

1.4.1.2 Remedy Required under State of Alaska Regulations

The Former Composite Building (OT-001), including the adjacent Two 20,000-Gallon USTs site (TU-019), are two of thirteen ERP sites at Nikolski RRS. The TU-019 site is in close proximity to Site OT-001. As documented in the 2004 Baseline Risk Assessment, a high degree of correlation exists between the PAH fingerprints from soil borings at OT-001 and TU-019, which indicates that the source of contamination at OT-001 was from a diesel fuel spill. In addition, the conceptual site model for OT-001 indicates that a likely source of the fuel spill that resulted in PAH contamination at OT-001 was from TU-019. Given the close proximity of the sites and similarity of PAH fingerprints, a technical memorandum discussing the administrative inclusion of TU-019 to OT-001 is included in Appendix C.

The general response actions that can be undertaken to satisfy remedial action objectives for protecting human health and the environment at the installation include limited actions (e.g. ICs), containment, ex situ treatment, in situ treatment, and removal/offsite treatment or

disposal. All of these options were considered as a remedy. The selected remedy is ICs, which is required under State of Alaska regulations, as petroleum contaminants will remain onsite above 18 AAC 75 soil cleanup levels.

ICs were selected as the site remedy given previous discussions between Chaluka Corporation and the USAF which indicated that, other than personnel stationed at Nikolski RRS when it was operational, people have not resided on High Hill in the past and do not intend to reside on High Hill in the future. Chaluka Corporation concurs with the USAF's selection of ICs as a remedy for the High Hill sites. The ICs will reduce human or environmental exposure to contamination, and prevent activities that may result in increased exposure or spread the extent of contamination. The major components of the selected remedy for OT-001 will include:

- ICs to prevent residential use and restrict surface excavation activities at the site. The ICs will be developed to encompass an area described as Tract 37C covering approximately 29.64 acres (Figure B-1 in Appendix B).
- The requirement that all surface excavation or digging activities within Tract 37C be subject to ADEC approval as may be required by State of Alaska regulations [e.g., 18 AAC 75.325(i)].
- USAF will conduct five-year reviews of the remedy since substances will remain onsite at levels above applicable State of Alaska cleanup levels specified in 18 AAC 75. These five-year reviews will also report on the effectiveness of the ICs. Reviews may become more frequent if conditions change.

The ICs established by the State of Alaska regulations will remain in effect indefinitely or until the COCs at OT-001 are below applicable 18 AAC 75 cleanup levels, at which point the ICs can be eliminated with the approval of ADEC in accordance with 18 AAC 75.375(f). USAF, as the responsible entity, will implement, monitor, and maintain the ICs in accordance with State of Alaska regulations. USAF will also provide a monitoring report to ADEC every five years after each monitoring event. If the site remedy is found to be deficient during an inspection, ADEC will be contacted and further corrective action will be planned. ADEC will be notified if the property subject to ICs is transferred or if any significant changes are made to the use and activity restrictions of the ICs. There are currently no tenants, contractors, or

occupants within the property subject to ICs. Table 1-1 presents the State of Alaska COCs present at OT-001.

The USAF will be responsible for implementing the selected remedy.

1.4.2 ST-018

The Composite Building Septic Tank and Outfall is one of 13 ERP sites at Nikolski RRS. The recommended action for ST-018 identified in the Feasibility Study (USAF 2003a) was onsite treatment of tank liquids and abandonment of the tank in place in accordance with ADEC guidance. This recommended action was completed at the site in 2007.

1.4.2.1 CERCLA-Selected Remedy

The CERCLA-selected remedy for ST-018 is No Further Action. In 2007, in accordance with ADEC guidance, the tank was closed, and remaining tank liquids were removed and disposed of in accordance with ADEC guidance. There is no contamination remaining onsite above 18 AAC 75 soil cleanup levels. No source materials constituting principal threats exist at ST-018.

1.4.2.2 Remedy Required under State of Alaska Regulations

No remedies are required under State of Alaska regulations. USAF has selected a CERCLA no-action remedy for ST-018 which meets all applicable requirements of the State of Alaska including but not limited to 18 AAC 75.

1.4.3 WP-007

Remedial alternatives for the Composite Building POL Outfall (WP-007) were developed and evaluated during the Feasibility Study (USAF 2003a). Based on the results of the Feasibility Study, USAF selected ICs as the preferred alternative for WP-007.

1.4.3.1 CERCLA-Selected Remedy

The Composite Building POL Outfall (WP-007) is one of thirteen ERP sites at Nikolski RRS. The general response actions that can be undertaken to satisfy remedial action objectives for protecting human health and environment at the installation include limited actions (e.g. ICs), containment, ex situ treatment, in situ treatment, and removal/offsite treatment or disposal. The CERCLA-selected remedy for WP-007 is ICs given that hazardous substances (PCBs), commingled with DRO and RRO, will remain onsite above 18 AAC 75 soil cleanup levels. The ICs will reduce human or environmental exposure to contamination, and prevent activities that may result in increased exposure or spread the extent of contamination. Major components of the CERCLA-selected remedy for WP-007 will include:

- ICs to prevent residential use and restrict surface excavation activities at the site. The ICs will be developed to encompass an area described as Tract 37C covering approximately 29.64 acres (Figure B-1 in Appendix B).
- Prohibiting residential use and occupancy within Tract 37C in excess of 33 days per year by any one individual (40 CFR 761.3).
- The requirement that all surface excavation or digging activities within Tract 37C be subject to ADEC approval as required by State of Alaska regulations [e.g., 18 AAC 75.325(i)].
- USAF will conduct five-year reviews of the remedy as required by CERCLA Section 121(c) since hazardous substances will remain onsite at levels above applicable State of Alaska cleanup levels in 18 AAC 75. These five-year reviews will also report on the effectiveness of the ICs. Reviews may become more frequent if conditions change.

The ICs will remain in effect indefinitely or until such time as the COCs at WP-007 are below applicable 18 AAC 75 cleanup levels (Table 1-1). USAF, as the responsible entity, will implement, monitor, and maintain the ICs in accordance with CERCLA and NCP regulations. USAF will also provide periodic monitoring reports to ADEC as part of five-year reviews. If the site remedy is found to be deficient during an inspection, ADEC will be contacted and further corrective action will be planned. ADEC will be notified if the property subject to ICs is transferred or if any significant changes are made to the use and activity restrictions of the ICs. There are currently no tenants, contractors, or occupants within the property subjected to ICs. Table 1-1 presents the CERCLA COCs present at OT-001 and WP-007.

The USAF will be responsible for implementing the selected remedy.

1.4.3.2 Remedy Required under State of Alaska Regulations

No additional remedies are required under State of Alaska regulations. The USAF has selected a CERCLA remedy for the site which meets all applicable requirements of the State of Alaska including but not limited to 18 AAC 75.

Table 1-1
Soil Contaminants of Concern and Cleanup Levels

Site	COC	Maximum Detected Concentration (mg/kg)	ADEC Method Two Cleanup Level (mg/kg)	Regulator
OT-001	Benzo(a)anthracene	20.1	9.0	ADEC[1]
OT-001	Benzo(a)pyrene	17.6	0.9	ADEC[1]
OT-001	Benzo(b)fluoranthene	21.8	9.0	ADEC[1]
OT-001	Dibenzo(a,h)anthracene	2.47	0.9	ADEC[1]
OT-001	RRO	8,600	8,300	ADEC[1]
WP-007	PCBs	2.04	1.0	CERCLA
WP-007	DRO	110,000	230	CERCLA
WP-007	RRO	54,100	8,300	CERCLA

Notes:
[1] Petroleum products are excluded as CERCLA hazardous substances under the CERCLA petroleum exclusion [42 USC 9601 (14)]. This is an integrated ROD documenting final remedies selected under both the CERCLA and Alaska State laws and regulations.
For definitions, see the Acronyms and Abbreviations section.

1.5 STATUTORY DETERMINATIONS

The selected remedies for OT-001, ST-018, and WP-007 are protective of human health and the environment, comply with promulgated requirements that are applicable or relevant and appropriate to the remedial actions, and are cost-effective.

The selected remedies represent the maximum extent to which permanent solutions can be used in a practicable manner at sites OT-001, ST-018, and WP-007. The remedies provide the

best balance of tradeoffs in terms of the balancing criteria while also considering state and community acceptance.

The NCP establishes the expectation that treatment will be used to address the principal threats posed by a site whenever practicable [40 CFR, Section 300.430(a)(1)(iii)(A)]. The selected remedies of ICs at OT-001 and WP-007 do not satisfy the statutory preference for treatment as a principal element of the remedies because ICs will be applied to control exposure pathways and minimize risk without treatment.

The remedies provided in this Final ROD are intended to minimize exposure of receptors to potential contamination. The remedy for WP-007 will result in CERCLA hazardous substances, pollutants, or contaminants and commingled petroleum contamination remaining at the site above levels that allow for unlimited use and unrestricted exposure. Therefore, a statutory review will be required at ERP Site WP-007 every five years after initiation of the remedial action to verify that the remedy is, or will be, protective of human health and the environment.

The remedy for OT-001 will result in petroleum contaminants remaining onsite above State of Alaska regulatory soil cleanup levels in 18 AAC 75 that allow for unlimited use and unrestricted exposure. Therefore, periodic reporting will be required at ERP Site OT-001 for submittal to ADEC to verify that the remedy is, or will be, protective of human health and the environment.

No source materials constituting principal threats exist at OT-001, ST-018, or WP-007.

1.6 DATA CERTIFICATION CHECKLIST

The following information is included in the Decision Summary section of this ROD:

- List of COCs and their respective concentrations (Table 1-1).
- Human health and ecological risk evaluation represented by the COCs (Section 2.7).
- Cleanup levels established for COCs (Table 1-1).

- How source materials constituting principal threat wastes will be addressed (Section 2.11).
- Current and reasonably anticipated future land use assumptions and beneficial uses used in baseline risk calculations and the ROD (Sections 2.6 and 2.7).
- Potential land and groundwater use that will be available at the site as a result of the selected remedy (Section 2.6).
- Estimated capital, annual operations and maintenance (O&M), total costs, and the number of years over which the remedy cost estimates are projected (Section 2.10, Table 2-18, and Table 2-19).
- Key factors that led to selecting the remedies (description of how the selected remedies provide the best balance of tradeoffs with respect to the balancing and modifying criteria, highlighting criteria key to the decision) (Section 2.10).

Additional information can be found in the Administrative Record files for ERP sites OT-001, STO-018, and WP-007, Nikolski RRS, Alaska, which can be accessed via the Internet at www.adminrec.com, or at the Information Repository at the Nikolski IRA Council Office in the village of Nikolski.

1.7 AUTHORIZING SIGNATURES

This signature sheet documents the USAF approval of the CERCLA remedies selected in this Record of Decision for Site ST-018 (Composite Building Septic Tank and Outfall) and Site WP-007 (Composite Building POL Outfall) at Nikolski RRS, Alaska).

This signature sheet documents the USAF approval of the remedy selected in this Record of Decision for Site OT-001 (Former Composite Building) at Nikolski RRS, Alaska.

By signing this declaration, ADEC concurs that proper implementation of the selected remedies for ST-018, WP-007, and OT-001 will comply with state environmental laws. These decisions will be reviewed and may be modified in the future if information becomes available that indicates the presence of contaminants or exposures that may cause unacceptable risk to human health or the environment.

Robyn M. Burk — 23 Sep '11

ROBYN M. BURK, Colonel, USAF
Commander, 611th Air Support Group

Date

John Halverson — 9/30/2011

JOHN HALVERSON, Environmental Program Manager
Federal Facilities Section, Contaminated Sites Program
Alaska Department of Environmental Conservation

Date