

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION
DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES PROGRAM

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November 18, 2009

Richard Thompson,
Southcentral Regional Manager
Division of Mining, Land and Water
Department of Natural Resources
550 West 7th Ave, Suite 900 C
Anchorage, AK 99515

Re: Record of Decision- ADNR Goose Bay Nike Admin & Prison Site
Cleanup Complete Determination

Dear Mr. Thompson:

The Alaska Department of Environmental Conservation (ADEC), Contaminated Sites Program, has completed review of the environmental records associated with the ADNR Goose Bay Nike Admin & Prison Site. Based on the information provided to date, the ADEC has determined that the contaminant concentrations remaining on site do not pose an unacceptable risk to human health or the environment, and this site will be closed.

This decision is based on the administrative record for the ADNR Goose Bay Nike Admin & Prison Site, which is located in the offices of the ADEC in Anchorage, Alaska. This letter summarizes the decision process used to determine the environmental status of this site and provides a summary of the regulatory issues considered in the Cleanup Complete Determination.

Introduction

Site Name and Location:

ADNR Goose Bay Nike Admin & Prison Site
End of Knik Goose Bay Road next to the Goose Bay Airport
Knik, Alaska

Name and Mailing Address of Contact Party:

Richard Thompson
Southcentral Regional Manager
Division of Mining, Land and Water
Department of Natural Resources
550 West 7th Ave, Suite 900 C
Anchorage, AK 99515

ADEC Site Identifiers:

ADEC Reckey: 1999220124201

File #: 2226.38.004

Hazard ID: 3175

Regulatory authority under which the site is being cleaned up:

18 AAC 75

Background

This site was the former administrative building for the former Nike Missile Launch Complex that operated from 1960 to 1980. The Nike complex consisted of a launch site, two weapon storage bunkers, and administrative facilities. In 1980, the administrative facilities were split off when the land was no longer needed for military purposes and transferred to the Alaska Department of Corrections (ADOC). This site was used by the ADOC as a prison until asbestos was identified as a health issue causing abandonment in 1989.

In 1999, petroleum contaminated soil was encountered during the removal of a 2,000 gallon underground heating oil tank (HOT) which was located 20 feet east of the former battery control building. During building decommissioning activities in 2006, additional contaminated soil was encountered where releases had occurred from three 55 gallon drums.

Contaminants of Concern

During the various investigations at this site, soil samples were analyzed for: diesel range organics (DRO); gasoline range organics (GRO); residual range organics (RRO); volatile organic carbons (VOCs), metals, and benzene, toluene, ethylbenzene, and xylenes (BTEX). The following Contaminants of Concern were identified:

- Benzene
- Tetrachloroethylene (PCE)

Cleanup Levels

The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Tables B1 and B2, Under 40 Inch Zone, Migration to Groundwater.

<u>Contaminant</u>	<u>Site Cleanup Level (mg/kg)</u>
benzene	0.025
tetrachloroethylene (PCE)	0.024

Site Characterization and Cleanup Actions

At the former 2,000-gallon HOT, 75 cubic yards of contaminated soil were removed during a 1999 excavation and stockpiled on site. Confirmation soil samples collected from the depths of the excavation at 8.5 feet below ground surface (bgs), contained diesel range organics (DRO) up to 7,800 mg/kg. The excavation was left open and was partially backfilled by sloughing from the excavation sidewalls.

In 2006, further activities were conducted at the site including the excavation of an additional 200 cubic yards of impacted soil, which was added to the 75 cubic yard stockpile remaining on

site. Confirmation samples collected from 17-21 feet below ground surface in the excavation did not contain detectable concentrations of contaminants. Stockpile samples contained DRO up to 3,030 mg/kg and approval was given by ADEC to use the stockpiled soil as backfill.

At the three spilled 55-gallon drums, 50 cubic yards of contaminated soil were removed in 2006 and thermally remediated. Confirmation soil samples collected from the base of the excavation at 12 feet bgs, contained benzene up to 0.13 mg/kg and tetrachloroethylene (PCE) up to 0.308 mg/kg.

Pathway Evaluation

The exposure pathways for human health that were evaluated for this site include the following: ingestion of soil and groundwater; indoor and outdoor inhalation of vapors; direct contact with soil; and migration to groundwater. Contamination remains in the subsurface soil above migration to groundwater cleanup levels at 12 feet bgs. However groundwater was not encountered during the investigations and remaining contamination is assumed to be de minimis.

Exposure pathways are the conduits by which contamination may reach human or ecological receptors. Potential exposure pathways presented in Table 1, were evaluated using ADEC's Exposure Tracking Model (ETM) which shows all pathways to be one of the following: De Minimis Exposure, Exposure Controlled, or Pathway Incomplete.

"De-minimis exposure" means that in ADEC's judgment receptors will be minimally affected by the small volume of remaining contamination. "Pathway incomplete" means that in ADEC's judgment contamination has no potential to contact receptors. "Exposure controlled" means there is an administrative mechanism in place limiting land or groundwater use, or a physical barrier in place that deters contact with residual contamination. The ETM results are summarized in Table 1 below.

Table 1 – Exposure Tracking Model Results

Pathway	Result	Explanation
Surface Soil Contact	De-minimis exposure	The soil stockpile has been land spread on site, but remaining levels of contamination are well below direct contact cleanup levels
Sub-Surface Soil Contact	De-minimis exposure	Contamination remains in the subsurface, but is well below direct contact cleanup levels
Inhalation – Outdoor Air	De-minimis exposure	Contamination remains in the subsurface, but is well below inhalation cleanup levels
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	There are no buildings at the site and any remaining contamination is well below inhalation cleanup levels
Groundwater Ingestion	De-minimis exposure	Contamination remains in the subsurface soil above migration to groundwater cleanup levels at 12 feet bgs. Groundwater was not encountered during the investigations. The source area and 50 cubic yards of contaminated soil has been removed. Remaining contamination is assumed to be de minimis. Furthermore this is state land which has been cleared of

		all structures; is adjacent to an airport; and residential land use is unlikely.
Surface Water Ingestion	Pathway Incomplete	There is no surface water located within ¼ mile of the site
Wild Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals.
Exposure to Ecological Receptors	De-minimis exposure	The soil stockpile has been land spread on site, but remaining levels of contamination are well below direct contact cleanup levels. Any exposure to ecological receptors is considered de minimis.

ADEC Decision

The cleanup actions to date have served to excavate and adequately remove contaminated soil from the site. Based on the information available, ADEC has determined no further assessment or cleanup action is required. There is no longer a risk to human health or the environment and the site will be designated as Cleanup Complete on the Department's database.

Although a Cleanup Complete determination has been granted, ADEC approval is required for off-site soil disposal in accordance with 18 AAC 75.325(i). It should be noted that movement or use of potentially contaminated soil in a manner that results in a violation of 18 AAC 70 water quality standards is unlawful.

This determination is in accordance with 18 AAC 75.380(d) and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that this site may pose an unacceptable risk to human health or the environment.

Appeal

Any person who disagrees with this decision may request an adjudicatory hearing in accordance with 18 AAC 15.195 -18 AAC 15.340 or an informal review by the Division Director in accordance with 18 AAC 15.185. Informal review requests must be delivered to the Division Director, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99801, within 15 days after receiving the department's decision reviewable under this section. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99801, within 30 days after the date of issuance of this letter, or within 30 days after the department issues a final decision under 18 AAC 15.185. If a hearing is not requested within 30 days, the right to appeal is waived.

If you have questions about this closure decision, please contact the ADEC Project Manager, Grant Lidren at (907) 269-8685.

Approved By,



Linda Nuechterlein
Environmental Manager

Recommended By,



Grant Lidren
Environmental Specialist