

STATE OF ALASKA

SEAN PARNELL, GOVERNOR

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

555 Cordova Street
Anchorage, AK 99501
PHONE: (907) 269-8685
FAX (907) 269-7649

File No: 2404.38.003
Return Receipt Requested
Article No: 7010 2780 0000 2089 6699

June 27, 2012

Randy Vanderwood
Alaska Department of Transportation & Public Facilities
CHA-Highways and Aviation
4111 Aviation
MS-2525
Anchorage, Alaska 99519-6900

Re: Decision Document; ADOT&PF Aniak Building 301
Cleanup Complete – Institutional Controls

Dear: Mr. Vanderwood

The Alaska Department of Environmental Conservation (ADEC), Contaminated Sites Program, has completed a review of the environmental records associated with the ADOT&PF Aniak Building 301. Based on the information provided to date and the administrative record, the ADEC has determined that the contaminant concentrations remaining on site do not pose an unacceptable risk to human health or the environment. No further remedial action will be required as long as the site is in compliance with established institutional controls.

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 – Institutional Controls Determination.

Introduction

Site Name and Location:

ADOT&PF Aniak Building 301
300 feet southeast of the Aniak Airport Runway; next to FAA Building 200
Aniak, AK 99557

Name and Mailing Address of Contact Party:

Randy Vanderwood
Alaska Department of Transportation & Public Facilities
CHA-Highways and Aviation
4111 Aviation
MS-2525
Anchorage, Alaska 99519-6900

ADEC Site Identifiers:

ADEC Reckey: 1992250933502

File: # 2404.38.003

Hazard ID: 1578

Regulatory authority under which the site is being cleaned up:

18 AAC 75

Background

Building 301 is located within the Airport 300 feet southeast of the Aniak Runway on Lot 1, Block 1. Currently, Building 301 is abandoned.

In 1995, petroleum contamination was encountered at Building 301 during an investigation at the adjacent FAA building 200. The petroleum contamination at Building 301 is associated with a former underground heating oil storage tank (HOT); however, pesticide contamination was also noted at the site. Further evaluation of the pesticide contamination will be conducted by FAA and tracked by ADEC under the site name "FAA-Aniak Pesticide Release". This decision document pertains only to the petroleum contamination associated with ADOT&PF Aniak Building 301.

Contaminants of Concern

During the investigations at this site, soil and groundwater samples were analyzed for the following: metals; polychlorinated biphenyls (PCBs); pesticides; polynuclear aromatic hydrocarbons (PAHs); gasoline range organics (GRO); diesel range organics (DRO); residual range organics (RRO); and volatile organic compounds (VOCs) including benzene, toluene, ethylbenzene, and xylenes (BTEX). Based on these analyses and knowledge of the source area, the following "contaminants of concern" (COCs) were identified:

- Diesel Range Organics (DRO)
- Gasoline Range Organics (GRO)
- Benzene
- Dichlorodiphenyltrichloroethane (DDT)

Cleanup Levels

The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Table B1 and B2, Migration to Groundwater (MTG) *Over 40 Inch Zone*.

<u>Contaminant</u>	<u>MTG Soil Cleanup Level (mg/kg)</u>
DRO	250
GRO	300
Benzene	0.025
DDT	7.3

The default groundwater cleanup levels for this site are established in 18 AAC 75.345 Table C Groundwater Cleanup Levels.

<u>Contaminant</u>	<u>Groundwater Cleanup Level (mg/L)</u>
DRO	1.5
GRO	2.2
Benzene	0.005

Site Characterization and Cleanup Actions

Soil at Building 301 was evaluated in 1996 to evaluate the extent of Dichlorodiphenyltrichloroethane (DDT) and petroleum contamination at the adjacent FAA building 200. Soil samples collected from one boring and 14 test pits contained DRO up to 30,900 mg/kg, GRO up to 807 mg/kg, and benzene up to 0.13 mg/kg. The highest petroleum contamination levels were found 2 to 4 feet below ground surface (bgs) south of Building 301 at the area of the former HOT. DDT was detected above the "migration to groundwater" (MTG) cleanup levels in only one soil sample collected 6 inches bgs from a test pit located 15 feet off the southwest corner of Building 301 adjacent to the FAA Building 200. This soil sample and duplicate contained DDT up to 42.8 mg/kg. A drinking water sample collected from a private well adjacent to the site did not contain detectable concentrations of contaminants.

In 1998, further evaluation of the area around the former HOT was conducted via the excavation of five test pits: one next to the former HOT vent piping; one underneath the former tank; and three to assess lateral extent. Soil samples collected contained DRO up to 5,510 mg/kg to a depth of 7 feet bgs. A soil sample collected 6 feet bgs from a test pit advanced 20 feet south west of the former HOT contained DRO at 1,190 mg/kg.

In 1999, three soil borings were advanced and completed as monitoring wells to the west and southeast of Building 301 to further evaluate the extent of petroleum contamination. Soil boring MW-1 advanced within the former HOT footprint contained DRO at 2,990 mg/kg in the sample collected from 12.5 to 14.5 feet below ground surface. Groundwater samples were collected from the three monitoring wells in 1999 and again in 2004. DRO was detected on both occasions, but below cleanup levels. The monitoring wells were decommissioned in 2004.

Funding became available through the ADEC Contaminated Sites Program Capital Improvement Project (CIP) budget, and petroleum impacted soil at the former HOT was excavated. Prior to excavation, two soil borings were advanced and samples were collected at 0.5 to 1.0 feet bgs, and 3.5 to 4.0 feet bgs. The samples were analyzed for pesticides, but there were no detections above cleanup levels. Therefore 72 cubic yards of contaminated soil were excavated to a depth of 4 feet bgs and landspread adjacent to the airport runway. The northern extent of the excavation was limited due to proximity of the building. A hydrocarbon odor was noted from the southern portion of the excavation. Six confirmation soil samples collected from the limits of the excavation contained DRO up to 9,310 mg/kg. (Although the remaining DRO contamination exceeds the "Migration to Groundwater" cleanup level, it is below the DRO Inhalation and Ingestion cleanup levels for the "Under 40 Inch Zone.") The excavation was then backfilled with clean fill. (See

attachment B.) Further monitoring of the land spread soil will be conducted in conjunction with other ADOT&PF projects in Aniak.

Pathway Evaluation

Following investigation and cleanup at the site, exposure to the remaining contaminants was evaluated using ADEC's Exposure Tracking Model (ETM). Exposure pathways are the conduits by which contamination may reach human or ecological receptors. ETM results show all pathways to be one of the following: De Minimis Exposure, Exposure Controlled, or Pathway Incomplete. A summary of this pathway evaluation is included in Table 1.

Table 1 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	De Minimis Exposure	Remaining petroleum constituents are below ingestion and direct contact cleanup levels.
Sub-Surface Soil Contact	De Minimis Exposure	Remaining petroleum constituents are below ingestion and direct contact cleanup levels.
Inhalation – Outdoor Air	De Minimis Exposure	Remaining petroleum constituents are below outdoor inhalation cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De Minimis Exposure	Benzene, the only vapor intrusion COC, was detected in soil but not groundwater. Contaminated surface soil was removed to a depth of 4 feet bgs and replaced with clean fill. The building is located within the airport and is currently abandoned. Risk via this pathway is considered insignificant.
Groundwater Ingestion	De Minimis Exposure	Subsurface soil contains petroleum contamination above migration to groundwater cleanup levels. However, water samples collected from a private well and monitoring wells were non-detect for contaminants, and below groundwater cleanup levels respectively. Contaminated surface soil and the source area have been removed. Future exposure via this pathway is considered insignificant.
Surface Water Ingestion	Pathway Incomplete	The Kuskokwim River located down gradient of this site is not considered a drinking water source.
Wild Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals. This area is not used for harvesting wild foods.
Exposure to Ecological Receptors	Pathway Incomplete	There are no complete exposure pathways to ecological receptors at this site.

Note to Table 1: “De minimis exposure” means that in ADEC’s judgment receptors are unlikely to be affected by the minimal 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.

ADEC Decision

There is contamination remaining above the most stringent cleanup levels at the ADOT&PF Aniak Building 301 (Attachment C), but ADEC has determined there is no unacceptable risk to human health or the environment. Therefore this site will be granted a Cleanup Complete- Institutional Controls determination subject to the following:

1. Any future change in land use may impact the exposure assumptions cited in this document. If land use and/or ownership changes, current institutional controls may not be protective and ADEC may require additional remediation and/or institutional controls. Therefore, ADOT&PF will report to ADEC every five years to document land use, or as soon as ADOT&PF becomes aware of any change in land ownership and/or use. **The report can be sent to the local ADEC office or electronically to DEC.ICUnit@alaska.gov**
2. Any proposal to transport soil or groundwater off-site requires ADEC approval in accordance with 18 AAC 75.325(i). A "site" [as defined by 18 AAC 75.990 (115)] means an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership (see Attachment B).
3. If contamination is encountered when the building is demolished, it must be addressed in accordance with applicable ADEC regulations, and/or an ADEC approved workplan.
4. Movement or use of potentially contaminated soil in a manner that results in a violation of 18 AAC 70 water quality standards is unlawful.
5. Installation of groundwater or drinking water wells at this site will require approval from ADEC.

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,

Recommended By,



Linda Nuechterlein
Environmental Manager



Grant Lidren
Environmental Program Specialist

Attachment B: Site Photographs taken by ADEC 5/25/12

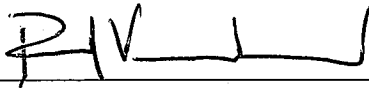


Attachment C: Site Figure



Attachment A: Cleanup Complete-ICs Agreement and Signature
Page*

ADOT&PF agrees to the terms of this Cleanup Complete determination as stated in this Closure Decision Document dated **June 27, 2012** for the ADOT&PF Aniak Building 301 site. Failure to comply with the terms of this agreement may result in ADEC reopening this site and requiring further remedial action in accordance with 18 AAC 75.380(d).



Signature of Authorized Representative, Title
ADOT&PF



Printed Name of Authorized Representative, Title
ADOT&PF

Note to Responsible Person (RP):

After making a copy for your records, please return a signed copy of this form to the ADEC project manager at the address on this correspondence within 30 days of receipt of this letter.

ADEC File:# 2404.38.003
Hazard ID: 1578
ADEC Project Manager: Grant Lidren

For Internal Use Only

***Attention ADEC Administration Staff:** Please follow the procedure below after Attachment A is signed/returned to ADEC.

1. Log-in and Date Stamp *Attachment A*
2. Scan and Save to the appropriate electronic folder on the network Drive
3. File the hard copy in the appropriate project/site file Correspondence Folder (blue in Anchorage).
4. Provide the Correspondence folder (with the filed *Attachment A* hard copy) to the ADEC Project Manager so that the PM can update the CS database.

DEPT. OF ENVIRONMENTAL
CONSERVATION

JUL 05 2012

RECEIVED