STATE OF ALASKA

SARAH PALIN, GOVERNOR

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

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File: 2245.38.031

April 15, 2008

Scott Nichols, Facilities Manager
Alaska Department of Corrections
Facilities Management Office
550 West 7th Ave., Suite 601
Anchorage, Alaska 99501

Re: Palmer Correctional Facility Greenhouse, ADEC Spill #1995220104401
Conditional Closure Approved

Dear Mr. Nichols:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC), reviewed the administrative file for the diesel fuel release, assessment, and cleanup actions conducted at the Palmer Correctional Center (PCC) Greenhouse. Based on this review, ADEC has determined that the sub-surface petroleum contamination remaining adjacent to the building foundation and under the building from a leak associated with the former 500 gallon above ground heating fuel tank, does not pose an unacceptable risk to human health or the environment, subject to site specific conditions outlined in this decision document.

Therefore, it is ADEC's decision that no further remedial action is required at this site and a conditional closure determination is approved. This letter summarizes the information considered in making this decision regarding the environmental status of this site.

Introduction

Site name and location:
Palmer Correctional Facility Greenhouse; Palmer, Alaska

Regulatory authority under which the site is being cleaned up:
This project was reviewed under the applicable regulatory authority in 18 AAC 75, Article 3, as amended through October 16, 2005.

Name and mailing address of current contact and/or responsible person:
Scott Nichols, Facilities Manager
Alaska Department of Corrections
Facilities Management Office
550 West 7th Ave., Suite 601
Anchorage, Alaska 99501

Land Owner:
State of Alaska

Background
Diesel No. 1 heating oil was released from an above ground storage tank system near the greenhouse facility at the Palmer Correctional Center near Palmer, Alaska. The release was identified during December, 1993 and was estimated to be less than 480 gallons. During February, 1995, PCC personnel excavated petroleum contaminated soil to 24 feet below the ground surface at the spill site. Excavated soil was stockpiled in a lined and bermed, passively ventilated biocell located west of the PCC facility.

A site assessment was conducted by DOWL Engineers (DOWL) at the PCC Greenhouse Oil Spill site after excavation activities. Confirmation soil samples collected from the base and sidewalls of the excavation, except the sidewall directly beneath the adjacent building foundation, contained diesel range organic (DRO) toluene, ethylebenzene, and xylene (BTEX) concentrations below the ADEC cleanup levels found in 18 AAC 75.341, Tables B1 and B2. The soil sample collected from petroleum stained soil in the excavation sidewall beneath the building foundation contained 3,410 mg/kg of DRO. This soil cannot be removed without jeopardizing the structural integrity of the building foundation or the septic tank identified in the north sidewall of the excavation. An estimated 7 to 45 cubic yards of petroleum contaminated soil, exceeding the ADEC cleanup standards, was left in place beneath the building foundation. PCC constructed a passive ventilation system in the excavation.

Groundwater was not encountered during the site excavation. Groundwater at the facility is located approximately 300 feet below the ground surface.

The stockpiled soil was landspread in a gravel pit at the facility in 2007 by PCC personnel. The June 2007, *Soil Characterization Activities, Palmer Correctional Center, Sutton, Alaska* by Shannon & Wilson demonstrated that the landspread stockpiles were below ADEC cleanup levels with a single exception. One sample slightly exceeded ADEC cleanup levels for DRO. Natural attenuation will reduce this residual contamination to below DRO soil cleanup levels.

Contaminants of Concern
The contaminants of concern remaining in soil are associated with diesel fuel and include:

- Diesel range organics (DRO)
- Benzene, toluene, ethylbenzene, xylene (BTEX)

Pathway Evaluation
The human exposure pathways evaluated include: inhalation, ingestion of soil and water and dermal contact. The migration pathways considered include: migration to groundwater and/or surface water. Impacts to ecological receptors were also evaluated.

With the exception of the area adjacent to the foundation and beneath the building, the contaminated soil exceeding ADEC cleanup criteria has been removed. The exposure pathways to humans are currently limited because the residual contaminated soil is subsurface beneath a building and inaccessible. As long as the building remains in place, the soil is largely inaccessible to humans. In addition, response actions have reduced the soil contaminant levels to

below ADEC soil inhalation and ingestion cleanup levels, so these two exposures (should they occur), should not pose an unacceptable risk to human health.

Groundwater was not encountered during assessment or excavation at this facility. There are no wells located near the release site. Groundwater is approximately 300 feet below the ground surface. The migration to groundwater pathway is incomplete, so the human exposure pathway to groundwater is also incomplete.

The migration to surface water pathway is also incomplete, so the human exposure pathway to surface water is also incomplete.

The above exposure pathway analysis was supported by the most recent ADEC Exposure Tracking Model (ETM) ranking. The ETM results showed all pathways to be one of the following: De Minimus Exposure, Exposure Controlled, or Pathway Incomplete.

Cleanup Levels

The soil cleanup levels established for this site are the 18 AAC 75.341 (Tables B1 and B2) levels for Migration to Groundwater (under 40 inch zone). The groundwater cleanup levels for this site are the 18 AAC 75.345 (Table C) levels.

ADEC Decision

ADEC has determined that additional remediation of the diesel fuel oil release is not necessary at this time. The contaminated soil is not accessible to human receptors based on its location and present land use. Contamination, exceeding ADEC cleanup levels, has not been detected in the groundwater at the site. There was no indication of any impacts to surface water (or ecological receptors) from this incident.

There is residual soil contamination remaining at this site. However, with appropriate controls and restrictions, it will not pose an unacceptable risk to human health or the environment. Therefore, no further remedial action is required at this time and this site is approved for conditional closure, subject to the following condition:

1. The soil contamination located under the greenhouse is currently inaccessible due to the buildings and structures located there. When (or if) the building is removed and/or the soil becomes accessible, ADEC shall be contacted for appropriate action. ADEC must approve any excavation, transport, remediation and/or disposal of soil from this site.

In accordance with 18 AAC 75.380(d)(2), ADEC may require additional site assessment, monitoring, remediation, and/or other necessary actions at this facility should new information become available that indicates contamination at this site may pose a threat to human health or the environment.

An institutional control will be established on the ADEC database to document residual soil contamination remaining on site above the most stringent 18 AAC 75.341 soil cleanup levels. Site closure (without conditions) will be considered when soil samples confirm that the soil meets the established ADEC soil cleanup levels for this site.

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 or concerns about this Conditional Closure decision, or the attached condition, please contact me at (907) 262-5210, extension #233.

Sincerely,

Don Seagren
Environmental Program Specialist