

STATE OF ALASKA

SARAH PALIN, GOVERNOR

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

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File: 2332.38.015

August 31, 2007

Alaska Department of Corrections, Facilities
ATTN: Charles Finch, Facilities Manager
550 W. 7th Ave, Ste 601
Anchorage, AK 99501

Re: Spring Creek Correctional Center, Seward, Alaska
Spring Creek House No. 2, ADEC Spill #1994230111702
Conditional Closure Determination

Dear Mr. Finch:

In 2005 and 2006, the Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC), hired a contractor to perform assessment of contaminated soil stockpiled at the above referenced facility, oversee the proper disposal of these contaminated soils, and conduct groundwater quality assessment work. In 2007, ADEC's contractor oversaw the proper decommissioning of all remaining groundwater test wells associated with the Spring Creek House No. 2 diesel fuel spills. Based upon the completion of this work and upon review of our administrative file for this site, ADEC has determined that hazardous substance contamination to the soil and groundwater may remain at the site, but that it does not pose an unacceptable risk to human health or the environment. Please note that this determination is subject to site specific conditions which must be complied with in order to validate this conditional closure decision.

This letter summarizes the information considered in making this decision regarding the environmental status of this site.

Introduction

Site name and location:

Spring Creek House No. 2 at the Spring Creek Correctional Center in Seward, Alaska

Legal Description:

SW0840012, Section 18, T1S, R1E, Spring Creek Correctional Facility
Kenai Peninsula Borough Parcel Number 14532008, consisting of 262 acres.

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 facility manager:

Alaska Department of Corrections
Charles Finch, Facilities Manager
550 W. 7th Ave, Ste 601
Anchorage, AK 99501

Land Owner:

City of Seward
PO Box 167
Seward, AK 99664-0167

Background

The Spring Creek Correctional Center (SCCC) is a maximum security prison constructed on 262 acres of land located east of Seward, Alaska across Resurrection Bay. Access to the facility is via Nash Road which connects with the Seward Highway near the northern edge of Seward. The facility is located between the Chugach Mountains (to the east) and Resurrection Bay (to the west). Fourth of July Creek is located south of the facility and flows in a southwesterly direction from the Chugach Mountains to Resurrection Bay.

An undetermined amount of diesel fuel was released onto the roof of House #2 in the fall of 2003. The release was not identified and reported to ADEC until April, 2004. The fuel was discharged to the ground surface along the southern edge of House #2. A second release of diesel fuel occurred in July of 1994. Both releases occurred as a result of faulty control mechanisms in a diesel day tank at the facility, allowing fuel to overflow vent piping onto the roof of House #2, and then subsequently discharge to the ground surface through a roof drain.

In September 1994, approximately 550 tons of diesel contaminated soil was excavated from the site and transported to Alaska Soil Recycling in Anchorage for treatment and disposal. Contaminated soil was excavated to the maximum extent possible without jeopardizing the structural integrity of the building footing and buried utilities. An estimated 45-72 cubic yards of soil exceeding ADEC cleanup levels remains in place near and under buried utilities and the building footings.

Groundwater at the House #2 site was encountered nine to 11 feet below the ground surface in 1994. Two water supply wells that provide water to the SCCC are located approximately 1000 feet up and cross-gradient from this site. They are not at risk from this site. Five groundwater monitoring wells were installed and sampled at this site to assess for impacts to groundwater quality. Diesel range organics (DRO) were detected in MW-4 at a concentration of 155 mg/L. MW-4 was installed near the location of the release, in the midst of underground utilities and adjacent to two electrical transformers. Contaminated soil could not be removed in the vicinity of MW-4 due to these existing above ground and buried utilities. Contaminated soil removal

was also restricted between MW-4 and House #2. This area near the electrical transformers is the primary area of residual soil and groundwater contamination. Contamination was not detected in any other monitoring wells at concentrations exceeding ADEC groundwater cleanup levels. Groundwater contamination didn't appear to have migrated any significant distance from the release area. Efforts to sample these monitoring wells in 2005 were unsuccessful because the groundwater level had dropped below the depth of the monitoring wells.

All groundwater monitoring wells and boreholes that could be located at this site were decommissioned in May, 2007.

Contaminants of Concern

The potential contaminants of concern at this site are constituents of diesel fuel and include:

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

DRO has been the only contaminant of concern detected in soil and groundwater in concentrations exceeding applicable ADEC cleanup levels. DRO was detected in MW-4 at a concentration of 155 mg/L in May of 1996. DRO was detected in soil at a maximum concentration of 10,000 mg/kg in September of 1994.

Pathway Evaluation

The human exposure pathways evaluated include: indoor and outdoor inhalation of vapors, ingestion of soil and water, and dermal contact. The migration pathways considered include: migration to groundwater and/or surface water, and migration to indoor air.

The maximum residual concentration of DRO in soil did not exceed ADEC inhalation soil cleanup levels, so the remaining soil contamination should not pose an unacceptable risk to outdoor air exposure.

The residual concentrations of DRO in soil did exceed ADEC ingestion and dermal contact soil cleanup levels at one sample location in September 1994. Contaminated soils that could be accessed were excavated so that very little contaminated soil remained at the ground surface; however it is estimated that 45-72 cubic yards of DRO contaminated soil remain near the release site. This site is located within the semi-secured area of the prison, where inmates are not allowed access. Due to existing underground and above ground utilities that prevented removal of these remaining contaminated soils, human exposure to these soils is likely to be of short-term duration and limited to utility/maintenance workers. The remote potential for human exposure combined with the expected short-term durations of exposure pose a low soil ingestion and dermal contact human health risk.

The migration to groundwater pathway is complete since DRO has been detected in the shallow, 9-11 foot deep aquifer; however the contamination is not migrating away from the release site in groundwater, and the water supply wells are not endangered. New water well installations will be prohibited without prior ADEC approval.

The surface water migration and exposure pathway are considered incomplete, since no surface water contamination has been identified. Although ecological receptors are present on and near the property boundaries, these ecological receptors have not been impacted.

Lastly, the DRO contamination remaining in soil and groundwater at the site isn't expected to pose unacceptable risks to indoor air quality because of the limited volatility of DRO constituents, and the low concentration of benzene present in diesel fuel.

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' (above 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 release is not necessary at this time. The remaining contaminated soil met the ADEC soil cleanup levels for outdoor inhalation, but exceeded the soil cleanup levels for ingestion when sampled in 1994. The shallow groundwater impacted at the site is not utilized as a drinking water source. Water supply wells are located approximately 1000 feet up and cross-gradient from this site. The groundwater contaminant plume was limited to the immediate area of the fuel releases, and is not migrating.

There is residual soil and groundwater contamination remaining at this site. However, with appropriate controls and restrictions, it should 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 conditions:

1. The installation of groundwater wells is prohibited on this property without the prior approval of ADEC. Any exception to this prohibition must be reviewed and approved by ADEC.
2. Should future excavation work be planned at this release site, or should site work expose residual soil or groundwater contamination, the Alaska Department of Corrections must contact ADEC and additional site assessment and/or remedial activities may be required and undertaken at that time.

Failure to comply with these conditions could invalidate this decision.

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.

This status of this site will be noted as "Conditional Closure" on the ADEC database. An institutional control will be established on the ADEC database to document residual soil and groundwater contamination remaining on site above the most stringent 18 AAC 75.341 soil 'Ingestion' and 'Migration to Groundwater' cleanup levels and the 18 AAC 75.345 (Table C) groundwater cleanup levels. Site closure (without conditions) will be considered when soil and

groundwater samples confirm that all soil and groundwater meet the established ADEC soil and groundwater 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 decision, or any of the attached conditions, please contact me at (907) 262-5210, extension #250.

Sincerely,



Paul Horwath, P.E.
Environmental Engineer

C: Spring Creek Correctional Center
Attn: Craig Turnbull, Superintendent
P.O. Box 2109
Seward, AK 99644-2109

Spring Creek Correctional Center
Attn: Jolund Luther, Admin Manager
P.O. Box 2109
Seward, AK 99664-2109

Phillip Oates, City Manager
City of Seward
Administration
410 Adams St.
Seward, AK 99664

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