

STATE OF ALASKA

SEAN PARNELL, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

555 Cordova Street
Anchorage, AK 99501
PHONE (907) 269-7551
FAX (907) 269-7649
www.dec.state.ak.us

DIVISION OF SPILL PREVENTION AND RESPONSE CONTAMINATED SITES PROGRAM

File No: 2100.38.405
Return Receipt Requested
Article No: 7009 2820 0001 7169 6996

December 22, 2010

Edie Knapp
Facilities/Maintenance Department
Anchorage School District (ASD)
1301 Labar Street
Anchorage, Alaska 99515-3517

Re: Decision Document; ASD Creekside Park Elementary School
Cleanup Complete with Institutional Controls (ICs) Determination

Dear Ms. Knapp:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with ASD Creekside Park Elementary School site located in Anchorage, Alaska. 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 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 with Institutional Controls (ICs) Determination.

Introduction

Site Name and Location:

ASD Creekside Park Elementary School
7500 East 6th Avenue
Anchorage, Alaska 99504



Name and Mailing Address of Contact Party:

Edie Knapp
 Facilities/Maintenance Department
 Anchorage School District (ASD)
 1301 Labar Street
 Anchorage, Alaska 99515-3517

ADEC Site Identifiers:

ADEC Reckey: 1999210116201
 File: 2100.38.405 Hazard ID: 4661
 Source Area ID: 78648 – Tank #1, 6,000-gallon Bunker C Tank
 Source Area ID: 75728 – Tank #2, 550-gallon Diesel Tank

Regulatory authority under which the site is being cleaned up:

18 AAC 75 and 18AAC 78

Background

Petroleum impacted soil and groundwater were detected above cleanup levels after the removal of two underground storage tanks in 1999.

Contaminants of Concern

During the investigations at this site, soil and groundwater samples were analyzed for diesel range organics (DRO); gasoline range organics (GRO); residual range organics (RRO); and benzene, toluene, ethylbenzene, and xylenes (BTEX). Based on these analyses and knowledge of the source area, the following Contaminant of Concern was identified:

- Diesel Range Organics (DRO)

Cleanup Levels

The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Tables B1 and B2, Migration to Groundwater (MTG).

<u>Contaminant</u>	<u>MTG Site Cleanup Level (mg/kg)</u>
DRO	250

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

<u>Contaminant</u>	<u>Site Cleanup Level (mg/L)</u>
DRO	1.5

Site Characterization and Cleanup Activities

Prior to removing an underground 6,000-gallon Bunker C fuel tank in 1999, soil samples were collected from beneath the piping run that connected the

tanks to the building. DRO was found up to 11,400 mg/kg and RRO was found up to 23,700 mg/kg below the piping run. The piping was bedded in a black sandy material determined to be coal, which biased the DRO and RRO results.

During the removal of this tank, further excavation was completed. Field screening did not indicate the presence of contamination, so it is likely that DRO and RRO contamination noted above was removed during this effort. However a water line rupture prevented the collection of confirmation samples from the bottom of the excavation 12 feet below ground surface (bgs), so this cannot be confirmed.

During removal of a 550-gallon diesel tank, DRO was detected up to 285 mg/kg in confirmation soil samples from the sidewall of the excavation. GRO, BTEX and RRO were not detected. Approximately 60 cubic yards of contaminated soil were excavated and treated at Alaska Soil Recycling (ASR). The former tank locations and piping run were excavated to twelve feet bgs, and clean fill was used to restore grade. The whole area is currently under a paved parking lot and a sidewalk.

To evaluate the potential impact to groundwater from releases at the site, a groundwater investigation was conducted in 2000 which included the installation and sampling of three monitoring wells. The monitoring wells were installed at eighteen feet bgs with 0.02 inch slotted PVC piping up to eight feet bgs. Soil samples collected during installation of MW-1 at the former location of the Bunker C tank contained DRO up to 1,170 mg/kg between 12 and 13.5 feet bgs. Soil samples collected during installation of the other monitoring wells did not contain contaminants above migration to groundwater cleanup levels.

During the 2000 groundwater monitoring event, samples were analyzed for DRO and RRO only. DRO was detected at 2.12 mg/L in MW-1; however, DRO was not detected in MW-2 or MW-3. RRO was not detected in any of the three monitoring wells in 2000. Groundwater samples were collected again in 2010 and analyzed for DRO, GRO, BTEX and RRO. MW-1 showed DRO up to 1.3 mg/L, which is below the groundwater cleanup level. GRO, BTEX and RRO were not detected in MW-1 in 2010. Groundwater samples were not collected from MW-2 or MW-3 in 2010.

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 for Tank #1, source area ID: 78648, is

included in Table 1. A summary of this pathway evaluation for Tank #2, source area ID: 75728, is included in Table 2.

Table 1 – Exposure Pathway Evaluation – Tank #1 (6,000-gallon Bunker C); Source Area ID 78648

Pathway	Result	Explanation
Surface Soil Contact	De-Minimis Exposure	The contaminated surface soil has been excavated and transported to Alaska Soil Recycling (ASR) for thermal treatment and disposal; clean fill was used to restore grade.
Sub-Surface Soil Contact	De-Minimis Exposure	The majority of the contaminated sub-surface soil has been excavated and transported to ASR for thermal treatment and disposal. Remaining contamination is below the ingestion cleanup criteria and de-minimis in volume. Therefore risk via this pathway is considered insignificant.
Inhalation – Outdoor Air	De-Minimis Exposure	The remaining contamination is non-volatile, covered with clean fill, and de-minimis in volume. Therefore risk via this pathway is considered insignificant.
Inhalation – Indoor Air (vapor intrusion)	De-Minimis Exposure	The remaining contamination is non-volatile, covered with clean fill, and de-minimis in volume. Therefore risk via this pathway is considered insignificant.
Groundwater Ingestion	De-Minimis Exposure	Contamination in the groundwater is below cleanup criteria. Groundwater is not used as a source for drinking water in this area.
Surface Water Ingestion	Pathway Incomplete	There is no surface water located within ¼ mile of the site.
Wild Foods Ingestion	Pathway Incomplete	This site is in a well developed urban area and not a source for wild foods collection.
Exposure to Ecological Receptors	Pathway Incomplete	The contaminated soil has been removed so there is no exposure pathway to ecological receptors.

Table 2 – Exposure Pathway Evaluation – Tank #2 (550-gallon Diesel Tank); Source Area ID 75728

Pathway	Result	Explanation
Surface Soil Contact	De-Minimis Exposure	The contaminated surface soil has been excavated and transported to ASR for thermal treatment and disposal; clean fill was used to restore grade.
Sub-Surface Soil Contact	De-Minimis Exposure	The contaminated sub-surface soil has been excavated and transported to ASR for thermal treatment and disposal. Remaining contamination near this tank is below the migration to groundwater (MTG) cleanup criteria.
Inhalation – Outdoor Air	De-Minimis Exposure	The remaining contamination is non-volatile and de-minimis in volume. Therefore risk via this pathway is considered insignificant.
Inhalation – Indoor Air (vapor intrusion)	De-Minimis Exposure	The remaining contamination is non-volatile, covered with clean fill, and de-minimis in volume. Therefore risk via this pathway is considered insignificant.
Groundwater Ingestion	De-Minimis Exposure	Contamination in the groundwater is below cleanup criteria. Groundwater is not used as a source for drinking water in this area.
Surface Water Ingestion	Pathway Incomplete	There is no surface water located within ¼ mile of the site.
Wild Foods Ingestion	Pathway Incomplete	This site is in a well developed urban area and not a source for wild foods collection.
Exposure to Ecological Receptors	Pathway Incomplete	The contaminated soil has been removed so there is no exposure pathway to ecological receptors.

Notes to Table 1 and Table 2: “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

Contamination remains on site above established default cleanup levels; however ADEC has determined there is no unacceptable risk to human health

or the environment. Therefore this site will be issued a Cleanup Complete- ICs 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 ICs may not be protective and ADEC may require additional remediation and/or ICs. Therefore the Anchorage School District shall report to ADEC every five years to document land use, or report as soon as the Anchorage School District becomes aware of any change in land ownership and/or use, if earlier. **The report can be sent to the local ADEC office or electronically to DEC.ICUnit@alaska.gov.**
2. Installation of groundwater wells will require approval from ADEC.
3. Any monitoring wells that can be located must be decommissioned in accordance with ADEC guidance by September 30, 2011. Attempts to find any missing monitoring well(s) must be documented.
4. 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 attached site figure.)
5. Soil contamination may be remaining under the former Bunker C tank. When the soil becomes accessible, the soil must be evaluated and contamination addressed in accordance with an ADEC approved workplan, and/or to the satisfaction of ADEC.
6. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.

The ADEC Contaminated Sites Database will be updated to reflect the change in site status as detailed above, and will include a description of the contamination remaining at the site. When the site meets the requirements for a Cleanup Complete determination, Institutional Controls will be terminated.

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

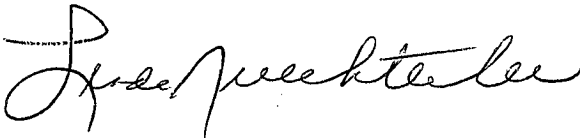
Any person who disagrees with this decision may request an adjudicatory hearing in accordance with 18 AAC 15.195 -18 AAC 15.340 or an informal review by the Division Director in accordance with 18 AAC 15.185. Informal

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.

Please sign and return *Attachment A* to ADEC within 30 days of receipt of this letter. If you have questions about this closure decision, please contact the ADEC project manager, Pam Clemens at 907-269-7551.

Approved By,

Recommended By



Linda Nuechterlein
Environmental Manager



Pam Clemens
Environmental Program Specialist

Attachment A: Cleanup Complete-ICs Agreement Signature Page
Attachment B: Site Figure

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

The Anchorage School District (ASD) agrees to the terms of this Cleanup Complete with ICs determination as stated in this Closure Decision Document dated **December 22, 2010** for the ASD Creekside Park Elementary School. 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)

Eddie Knapp, Project Manager

Signature of Authorized Representative, Title
Anchorage School District

Eddie Knapp Project Manager

Printed Name of Authorized Representative, Title
Anchorage School District

RECEIVED

DEC 30 2010

DEPT. OF ENVIRONMENTAL
CONSERVATION

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 No. 2100.38.405
Hazard ID: 4661
ADEC Project Manager: Pam Clemens

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.

Attachment B: Site Figure

