



THE STATE
of **ALASKA**
GOVERNOR SEAN PARNELL

Department of
Environmental Conservation

DIVISION OF SPILL PREVENTION & RESPONSE
Contaminated Sites Program

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March 8, 2013

Ms. Jessica Wolfe
Kodiak Island Borough
Engineering and Facilities Department
720 Egan Way
Kodiak, AK 99615

Re: Decision Document; Kodiak High School Heating Oil Tank (HOT)
Cleanup Complete Determination

Dear Ms. Wolfe:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Kodiak High School Heating Oil Tank (HOT) site located at 722 Mill Bay Road in Kodiak, Alaska. Based on the information provided to date, it has been 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 Kodiak High School HOT, 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

Kodiak High School HOT
722 Mill Bay Road
Kodiak, AK

Name and Mailing Address of Contact Party:

Ms. Jessica Wolfe
Kodiak Island Borough
Engineering and Facilities Department
720 Egan Way
Kodiak, AK 99615

ADEC Site Identifiers:

Hazard ID #4635

CS file # 2601.38.106

Regulatory authority under which the site is being cleaned up:

18 AAC 75

Background

Two 5,000-gallon heating oil underground storage tanks were removed from a common excavation at this site in 2007. The tanks were located in a hollowed out section of bedrock, which was encountered at depths ranging from 6 to 16 feet below ground surface (bgs). Hydrocarbon contamination in soil at the site is attributed to leaks and overfills at the tanks, which were replaced with an aboveground storage tank upon completion of the project.

The site is in a residential area that is served by the Kodiak Public Drinking Water System and there are no known drinking water wells in the vicinity of the site.

Contaminants of Concern

During the various investigations at this site, soil samples were analyzed for diesel range organics (DRO), residual range organics (RRO), gasoline range organics (GRO), and benzene, toluene, ethylbenzene, and xylenes (BTEX). Based on the results of these investigations, the following contaminant of concern was identified:

- DRO

Cleanup Levels

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

<u>Contaminant</u>	<u>Site Cleanup Level (mg/kg)</u>
• DRO	230

Site Characterization and Cleanup

Excavation of the tanks was conducted in June 2007. Surface soil to a depth of approximately 3 feet bgs did not appear contaminated and was stockpiled for potential reuse. Contaminated soil was encountered from 3 feet bgs to approximately 16 feet bgs at the bedrock interface. The tanks were placed into a hollowed out area of bedrock that was 6-10 feet deeper than the surroundings bedrock elevation.

Based on field screening, visual, and olfactory evidence, approximately 1,587 cubic yards of contaminated material was excavated and placed into 5 stockpiles at the high school. Analytical samples collected from the stockpiled soil contained DRO up to 9,090 mg/kg. The 100 cy stockpile of suspected clean soil was also sampled, did not contain detectable concentrations of contaminants, and was used as backfill in the excavation, along with imported clean fill.

Confirmation soil samples collected from the bottom of the excavation at the bedrock interface did not contain detectable concentrations of contaminants. In an effort to delineate the extent of contamination remaining, two test pits were excavated to bedrock downgradient of the former tanks. The soil sample from test pit #1 did not contain detectable concentrations of contaminants, and the sample from test pit #2 contained DRO up to 794 mg/kg. Additional delineation was not conducted due to the presence of a

sidewalk and roadway downgradient of the test pits and the shallow nature of bedrock in the area which forms an outcrop just downgradient of the test pits.

The stockpiles of contaminated soil were transported to a landfarm area for treatment in 2010. The oversized material was screened out and set aside for use in constructing berms around the landfarm. The contaminated soil was placed in lined, covered stockpiles until Spring 2011 at which point the landfarm was constructed. Berms were constructed around the landfarm and soil was spread to a depth of approximately 18-24 inches and tilled on two occasions in 2010 and 2011.

Landfarm confirmation soil sampling was conducted in September 2012. A grid was set up at the landfarm area and 81 soil samples were collected for field screening using a photoionization detector (PID). The ten samples with the highest PID readings were analyzed for DRO and RRO. The two samples with the highest PID readings were also analyzed for GRO and BTEX. GRO, RRO, and BTEX were not detected; however, DRO was detected from 668 mg/kg to 1,690 mg/kg. Following the sampling of the landfarm, soil was transported and disposed of at the Kodiak Island Borough landfill.

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
Direct Contact with Surface Soil	Pathway Incomplete	Contaminated soil has been removed from the surface
Direct Contact with Sub-Surface Soil	De Minimis Exposure	The remaining contaminated soil is de minimis in volume and covered by clean fill.
Inhalation-Outdoor Air	De Minimis Exposure	The remaining contamination is below inhalation cleanup levels and de minimis in volume
Inhalation-Indoor Air	Pathway Incomplete	Volatile compounds are not present in soil at the site.
Groundwater Ingestion	Pathway Incomplete	Groundwater is not utilized as a drinking water source in this area.
Surface Water Ingestion	Pathway Incomplete	Surface water is not utilized as a drinking water source in this area
Wild Foods Ingestion	Pathway Incomplete	Wild foods are not collected in this area.
Exposure to Ecological Receptors	Pathway Incomplete	There are no complete exposure pathways to ecological receptors at the site.

Notes 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

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 this site will be designated as closed 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.

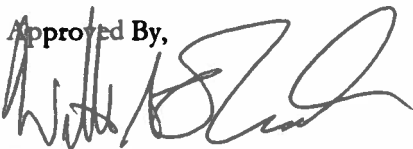
This determination is in accordance with 18 AAC 75.380(d) and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that this site may pose an unacceptable risk to human health or the environment.

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 ADEC Project Manager William O'Connell at (907) 269-3057.

Approved By,



William O'Connell
Environmental Program Specialist