



THE STATE
of **ALASKA**
GOVERNOR SEAN PARNELL

Department of
Environmental Conservation

DIVISION OF SPILL PREVENTION & RESPONSE
Contaminated Sites Program

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File No: 2245.26.038

February 7, 2014

Ms. Katherine Bishop
Nugget Aviation Inc.
PO Box 3074
Palmer, AK 99645

Re: Decision Document: Nugget Aviation UST #4
Corrective Action Complete Determination

Dear Ms. Bishop:

The Alaska Department of Environmental Conservation (ADEC) has reviewed the environmental records for the Nugget Aviation UST #4 site, located in Palmer, Alaska. This decision letter memorializes the site history, cleanup actions, and standard conditions for long-term site management. No further remedial action is required.

Introduction

Site Name and Location:

Nugget Aviation UST #4
801 Airport Road, Suite B
Palmer, AK 99645

Name and Mailing Address of Contact Party:

Ms. Katherine Bishop
Nugget Aviation, Inc.
PO Box 3074
Palmer, AK 99645

DEC Site Identifiers:

File No: 2245.26.038
Hazard ID: 26198

Regulatory Authority for Determination:

18 AAC 75 and 18 AAC 78

Site Description, Background, and Cleanup Activities

A 10,000-gallon underground storage tank (UST) and its associated piping, utilized for the storage and dispensing of aviation gasoline, was removed from 801 Airport Road on June 6, 2013. During the UST removal activities, the excavated soils were field screened and temporarily stockpiled near the excavation. Groundwater was not encountered in the excavation that extended to 17 feet below ground surface (bgs). After the UST and its associated piping were removed from the ground they were transported offsite for disposal. The five confirmation soil samples collected from the excavation and four confirmation samples collected from the excavated stockpiled soil were submitted for laboratory analysis. The confirmation samples were analyzed for gasoline range organics (GRO), diesel range organics (DRO), benzene, toluene, ethylbenzene, and total xylenes (BTEX), total lead, and polynuclear aromatic hydrocarbons (PAHs). Phenanthrene (a PAH), and toluene were present in one of the soil samples; however, at concentrations several orders of magnitude below the approved cleanup levels. Lead was detected in all of the soil samples, but at concentrations (2.44 mg/kg to 6.08 mg/kg) several orders of magnitude below the approved cleanup level (400 mg/kg), and are consistent with naturally occurring background levels for lead in soils. Based on sampling results, stockpiled soils were returned to the excavation.

Contaminants of Concern

The following contaminants of concern were identified during the course of the site investigations and are summarized in the Site Description section of this decision letter:

- Phenanthrene
- Toluene

Cleanup Levels

Phenanthrene and toluene were detected in soil below the approved Method 2 migration to groundwater level for the under 40-inch precipitation zone, established in 18 AAC 75.341(c), Table B1.

Table 1 – Approved Cleanup Levels

Contaminant	Direct Contact/ Ingestion (mg/kg)	Migration to Groundwater (mg/kg)	Maximum Concentrations of Analytes Remaining Onsite (mg/kg)
Phenanthrene	20,600	3,000	0.0232
Toluene	8,100	6.5	0.0184

mg/kg = milligrams per kilogram

Cumulative Risk Evaluation

Pursuant to 18 AAC 78.600(d), when detectable contamination remains on-site following a cleanup, a cumulative risk determination must be made that the risk from hazardous substances does not exceed a cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways and does not exceed a cumulative noncarcinogenic risk standard at a hazard index of one across all exposure pathways.

Based on a review of the environmental record, ADEC has determined that residual contaminant concentrations do not pose a cumulative human health risk.

Exposure 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 or Pathway Incomplete. A summary of this pathway evaluation is included in Table 2.

Table 2 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	Contamination is not present in surface soil (0 to 2 feet below ground surface).
Sub-Surface Soil Contact	De-Minimis Exposure	Contaminants remain in the sub-surface, but at concentrations below the most stringent cleanup levels.
Inhalation – Outdoor Air	De-Minimis Exposure	Contaminants remain in the sub-surface, but at concentrations below the most stringent cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De-Minimis Exposure	Contaminants remain in the sub-surface, but at concentrations below the most stringent cleanup levels.
Groundwater Ingestion	Pathway Incomplete	Groundwater contamination is not present.
Surface Water Ingestion	Pathway Incomplete	Site data shows that surface water is not contaminated and is not used as a drinking water source in the vicinity of the site. The commercial buildings in the area are served by city water.
Wild and Farmed Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	Site is in an area that would not affect aquatic or terrestrial life.

Notes to Table 2: “De-Minimis Exposure” means that in ADEC’s judgment receptors are unlikely to be affected by the minimal volume or concentration of remaining contamination. “Pathway Incomplete” means that in ADEC’s judgment contamination has no potential to contact receptors.

ADEC Decision

Remaining petroleum contamination in soil is below approved cleanup levels. This site will receive a “Closed” designation on the Contaminated Sites Database, subject to the following standard conditions.

Standard Conditions

1. Any proposal to transport soil or groundwater off-site requires ADEC approval in accordance with 18 AAC 78.600(h). 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.

2. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.
3. Groundwater in the state of Alaska is protected for aquaculture use. In the event that an aquaculture facility uses groundwater from this site in the future, additional testing may be required to ensure that aquatic life criteria under 18 AAC 70 are not exceeded

This determination is in accordance with 18 AAC 78.276(f) 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 feel free to contact me at (907) 269-7525.

Sincerely,



Robert Weimer
Environmental Engineering Associate