THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

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DEC File No: 300.38.318

September 9, 2024

Mr. Rogan Parker
Pathfinder Aviation
1936 Merrill Field Dr.
Anchorage, AK 99501

Electronic Delivery Only

Re: Decision Document: ADOT&PF Deadhorse Airport Block 304 Lot 2A
Cleanup Complete Determination

Dear Mr. Parker

The Alaska Department of Environmental Conservation, Contaminated Sites Program (DEC) has completed a review of the environmental records associated with the ADOT&PF Deadhorse Airport Block 304 Lot 2A contaminated site located at in Deadhorse, 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 no further remedial action will be required unless information becomes available that indicates residual contaminants may pose an unacceptable risk.

This Cleanup Complete determination is based on the administrative record for the ADOT&PF Deadhorse Airport Block 304 Lot 2A site maintained by DEC. This decision letter summarizes the site history, cleanup actions and levels, and site closure conditions that apply.

Site Name and Location:
ADOT&PF Deadhorse Airport
Block 304 Lot 2A
Deadhorse Alaska

Name and Mailing Address of Contact Party:
Mr. Rogan Parker
Pathfinder Aviation
1936 Merrill Field Dr
Anchorage, AK 99501

DEC Site Identifiers:
File No. 300.38.318
Hazard ID.: 26413

Regulatory Authority for Determination:
18 Alaska Administrative Code (AAC) 75

Site Description and Background
A petroleum release was identified during a Phase II environmental site assessment in 2015. The release was attributed to an above ground storage tank that was removed from the site in 2009.

Contaminants of Concern
During the site investigation and cleanup activities at this site, samples were collected from soil and surface water and analyzed for polyaromatic hydrocarbons (PAHs), gasoline range organics (GRO), diesel range organics (DRO), residual range organics (RRO), benzene, toluene, ethylbenzene, and xylenes (BTEX). Based on these analyses, the following contaminants were detected above the applicable cleanup levels and are considered Contaminants of Concern (COCs) at this site:

- DRO

Cleanup Levels
Soil cleanup levels applicable to the site are the Method One, Table A2 cleanup levels and Method 2 cleanup levels for the Arctic Zone found in 18 AAC 75.341(c), Table B1 and 18 AAC 75.341(d), Table B2.

Table 1 – Approved Cleanup Levels

Contaminant	Soil (mg/kg)	Soil (mg/kg)
DRO	500*	12,500**

Notes:
1. mg/kg = milligrams per kilogram
2. µg/L = micrograms per liter
3. * Table A2 cleanup level for man-made roads and pads
4. ** Table B1 Arctic Zone cleanup level

Characterization and Cleanup Activities
Site cleanup was conducted in 2015. To delineate the area proposed for excavation, test pits and hand borings were advanced, and soil screened in the field using a photoionization detector (PID). Once the excavation area was delineated, approximately 35 cubic yards of contaminated soil was excavated and disposed of at the Oxbow Landfill. The depth of the excavation was 2-3 feet below ground surface (bgs) where saturated conditions were encountered, however there were no observations of sheen on water at the bottom of the excavation. The extent of excavation was further limited by the presence of a high voltage power line. Confirmation soil samples contained DRO at 1,350 mg/kg in a floor sample from 3 feet bgs, however a sample from 3.9 feet bgs contained DRO at 740 mg/kg. One sidewall sample contained DRO at 1,020 mg/kg. No other samples contained contaminants above cleanup levels.

To evaluate potential migration from the source area to nearby surface water, a surface water sample was collected from an area near the excavation and analyzed for PAHs and BTEX to calculate total aromatic hydrocarbons (TAH) and total aqueaous hydrocarbons (TAqH) for comparison to surface water quality criteria in 18 AAC 70. Contaminants in surface water were below these criteria in the primary sample; contaminants were not detected in the duplicate sample.

Cumulative Risk Evaluation
Pursuant to 18 AAC 75.325(g) 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 (HI) of 1 across all exposure pathways.

Based on a review of the environmental record, DEC has determined that residual contaminant concentrations meet the human health cumulative risk criteria for residential land use.

Exposure Pathway Evaluation

Following investigation and cleanup at the site, exposure to the remaining contaminants was evaluated using DEC'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 2.

Table 2 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	De Minimis Exposure	Contamination remains in the surface below human health (inclusive of direct contact) and ingestion levels in 18 AAC 75.341, Tables B1 and B2.
Subsurface Soil Contact	De Minimis Exposure	Contamination remains in the subsurface below human health (inclusive of direct contact) and ingestion levels in 18 AAC 75.341, Tables B1 and B2.
Inhalation – Outdoor Air	Pathway Incomplete	Contamination remains in the subsurface below human health and inhalation levels in 18 AAC 75.341, Tables B1 and B2.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	The remaining contamination is not considered a risk via this pathway
Groundwater Ingestion	Pathway Incomplete	Groundwater is not used as a drinking water source at the site.
Surface Water Ingestion	Pathway Incomplete	Surface water is not used as a drinking water source in the vicinity of the site.
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	There are no complete exposure pathways to ecological receptors at the site.

Notes:

1. "De Minimis Exposure" means that, in DEC's judgment, the receptors are unlikely to be adversely affected by the minimal volume or concentration of remaining contamination.
2. "Pathway Incomplete" means that, in DEC's judgment, the contamination has no potential to contact receptors.
3. "Exposure Controlled" means there is an IC in place limiting land or groundwater use and there may be a physical barrier in place that prevents contact with residual contamination.

DEC Decision

Soil contamination at the site has been cleaned up to concentrations below cleanup levels suitable for residential land use and there is no indication of the migration of contamination to nearby surface water. This site will receive a "Cleanup Complete" designation on the Contaminated Sites Database.

DEC approval is required for movement and disposal of soil and/or groundwater subject to the Site Cleanup Rules, in accordance with 18 AAC 75.325(i). Please contact DEC for information about applicable regulations and requirements. A "site", as defined by 18 AAC 75.990, means an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership.

Movement or use of contaminated material in an ecologically sensitive area or in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited. Furthermore, groundwater throughout Alaska is protected for use as a water supply for drinking, culinary and food processing, agriculture including irrigation and stock watering, aquaculture, and industrial use. Contaminated site cleanup complete determinations are based on groundwater being considered a potential drinking water source. If, in the future, groundwater from this site is to be used for other purposes, additional testing and treatment may be required to ensure the water is suitable for its intended use.

This determination is in accordance with 18 AAC 75.380 and does not preclude DEC from requiring additional assessment and/or cleanup action if information indicates that contaminants at this site may pose an unacceptable risk to human health, safety, or welfare or to the environment.

Informal Reviews and Adjudicatory Hearings
A person authorized under a provision of 18 AAC 15 may request an informal review of a contested decision by the Division Director in accordance with 18 AAC 15.185 and/or an adjudicatory hearing in accordance with 18 AAC 15.195 – 18 AAC 15.340. See DEC's "Appeal a DEC Decision" web page https://dec.alaska.gov/commish/review-guidance/ for access to the required forms and guidance on the appeal process. Please provide a courtesy copy of the adjudicatory hearing request in an electronic format to the parties required to be served under 18 AAC 15.200. Requests must be submitted no later than the deadline specified in 18 AAC 15.

If you have questions about this closure decision, please feel free to contact me at (907) 269-3057 or email at bill.oconnell@alaska.gov.

Sincerely,

William A. O'Connell

Bill O'Connell
Project Manager

CC: SPAR Cost Recovery