

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE

Contaminated Sites Program

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File: 2320.38.016

October 29, 2020

Sent via Electronic Delivery Only
Kelley Nixon, Remediation and Restoration Specialist
Hilcorp Alaska, LLC
3800 Centerpoint Drive, Suite 1400
Anchorage, AK 99503
knixon@hilcorp.com

Re: Avgas Tank F-3 (ADEC Hazard ID: 981 | ADEC File Number: 2320.38.016 | ADEC Status: Active) Soil and Groundwater Investigations Summary, dated September 14, 2020 Cleanup Complete Determination

Dear Ms. Nixon:

The Alaska Department of Environmental Conservation (ADEC) has reviewed the Gas Tank F-3 (ADEC Hazard ID: 981 | ADEC File Number: 2320.38.016 | ADEC Status: Active) Soil and Groundwater Investigations Summary, dated September 14, 2020 f the environmental records associated with the Drift River Facility Avgas Tank F-3 located at the Mouth of Drift River Drift River, AK. 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 new information becomes available that indicates residual contaminants may pose an unacceptable risk.

This Cleanup Complete determination is based on the administrative record for the Homer Chevron USTs 1 & 2, which is located in the ADEC office in Homer, Alaska. This decision letter summarizes the site history, cleanup actions and levels, and standard site closure conditions that apply.

Site Name and Location:

Drift River Facility Avgas Tank F-3 Mouth of Drift River Drift River, AK 99611

DEC Site Identifiers:

File No.: 2320.38.016 Hazard ID: 9 Drift River Facility Avgas Tank F-3

Name and Mailing Address of Contact Party:

Hilcorp Alaska, LLC Attn: Kelley Nixon Remediation and Restoration Specialist 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503

Regulatory Authority for Determination:

18 AAC 75

Kelley Nixon 2 October 29, 2020

Site Description and Background

In March 1990, 640 gallons of jet fuel leaked from an above ground storage tank (F-3) near the runway, which is located 50 feet east of the helipad on the site. Groundwater monitoring wells were installed in 1991 and an air sparging system was installed in 1992. The air sparging system operated through 1996. Long-term, annual groundwater monitoring was implemented thereafter. In October 2003, benzene and diesel range organics (DRO) levels measured in the groundwater samples were less than ADEC groundwater cleanup levels. As a result, the sampling frequency was reduced to biennial on the odd-numbered calendar years. Remaining contamination in the soil is below human health cleanup levels. This site will receive a "Cleanup Complete" designation on the Contaminated Sites Database, subject to standard conditions.

Contaminants of Concern

Laboratory analysis of confirmation samples from the excavation indicated the presence of Diesel Range Organics (DRO), Gasoline Range Organics (GRO), Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX), and Naphthalene was found in the soils and the presence of DRO, GRO, and BTEX in groundwater. Soils detections were below ADEC Human Health cleanup levels, with some exceedances of Migration Groundwater cleanup levels, and groundwater detections were below ADEC groundwater cleanup levels.

- DRO
- GRO
- Benzene
- Ethylbenzene
- Toluene
- Xylenes
- Naphthalene

Cleanup Levels

Cleanup levels are based on residential land use for the under 40 inch zone. The most restrictive cleanup level is established in 18 AAC75.341 (d), Table B2.

Table 1 – Approved Cleanup Levels

Contaminant	Soil, Migration to Groundwater (mg/kg)	Soil, Human Health (mg/kg)	Groundwater (ug/L)
DRO	250	10,250	1,500
GRO	300	14,000	2,200
Benzene ₁	0.022	11	4.6
Ethylbenzene ₁	0.13	49	15
Naphthalene	0.038	29	1.7
Toluene	6.7	200	1,100
Xylenes	1.5	57	190

mg/kg = milligrams per kilogram

mg/L = milligrams per liter

ug/L = micrograms per liter

Characterization and Cleanup Activities Analytical soil and groundwater data was not collected as part of the initial site assessment in 1990, but field screening and visual and olfactory evidence

indicated that contamination on site was located immediately west of Tank F-3, where free product was discovered on the water table. The spill was in the vicinity of the fill lines for the ASTs that run north-south along the west side of the tank farm, but the exact release location is unknown.

Analytical soil data collected in 2000, exceeded current ADEC migration to groundwater cleanup levels, but were below Human Health cleanup levels for DRO, GRO, Ethylbenzene, and Xylenes, and Naphthalene. No analytical soil data was collected upgradient or crossgradient from the location where free product was previously discovered. Analytical soil data has not been collected since 2000. Groundwater was monitored and characterized on the site the following years 2001, 2003, 2005, 2007, 2009, 2011, and lastly in 2017. A sampling event in 2017 no longer detected GRO, Benzene, Ethylbenzene, Toluene, or Xylenes. DRO was detected, but was below the current groundwater cleanup levels.

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 non-carcinogenic 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 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 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	De-Minimis Exposure	Contamination remains in the surface soil but is below human health ADEC cleanup levels.
Sub-Surface Soil Contact	De-Minimis Exposure	Contamination remains in the sub-surface soil, but is below human health ADEC cleanup levels.
Inhalation – Outdoor Air	Pathway Incomplete	Outdoor Air water was not impacted by contamination.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	Indoor Air water was not impacted by contamination.
Groundwater Ingestion	De-Minimis Exposure	Contamination remains in the groundwater, but is below Groundwater ADEC cleanup levels.
Surface Water Ingestion	Pathway Incomplete	Surface water was not impacted by contamination.
Wild and Farmed Foods Ingestion	Pathway Incomplete	Wild and farmed foods are not collected at the site as it is an onshore crude oil bulk storage facility that receives and stores crude oil with an airstrip.

Exposure to Ecological	Pathway	No ecological receptors are present on the site as it is
Receptors	Incomplete	an onshore crude oil bulk storage facility that receives
		and stores crude oil with an airstrip.

Notes to Table 2: "De-Minimis Exposure" means that in ADEC's judgment receptors are unlikely to be adversely 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 contamination in the soil is below human health cleanup levels in 18 AAC 75.341, Tables B1 and B2, but some contaminants are above migration to groundwater cleanup levels. ADEC has determined that sufficient site characterization has been completed and contaminants in soil have achieved steady-state equilibrium and will not migrate to groundwater. Groundwater meets cleanup levels. This site will receive a "Cleanup Complete" designation in the Contaminated Sites Database, subject to the following standard conditions.

Standard Conditions:

- 1. Any proposal to transport soil or groundwater from a site that is subject to the site cleanup rules or for which a written determination from the department has been made under 18 AAC 75.380(d)(1) that allows contamination to remain at the site above method two soil cleanup levels or groundwater cleanup levels listed in Table C requires DEC approval in accordance with 18 AAC 78.600(h). A "site" as defined by 18 AAC 78.995(134) means an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership.
- 1. Movement or use of contaminated material in a manner that results in violation of 18 AAC 70 Water Quality Standards is prohibited.
- 2. 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. In the event that groundwater from this site is to be used for other purposes in the future, such as aquaculture, 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 78.276(f) and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that contaminants at this site may pose an unacceptable risk to human health, safety, or welfare or to 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 99811-1800, 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, 555 Cordova Street, Anchorage, AK 99501, 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.

Kelley Nixon 5 October 29, 2020

If you have questions about this closure decision, please feel free to contact me at (907) 269-7553 or <u>Jessica.hall@alaska.gov</u>.

Sincerely,

Jessica Hall

Project Manager

Jessia Hall

cc: ADEC Spill Prevention and Response (SPAR), Cost Recovery Unit (electronic copy)