

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE Contaminated Sites Program

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File No: 320.38.004

January 22, 2015

Lori Roy 18291 Tarabrooke Drive Gulfport, MS 39503

Re: Decision Document: Lonely AFS Dewline - AOC 1, 2, &3 Cleanup Complete Determination

Dear Ms. Ms. Roy:

The Alaska Department of Environmental Conservation (ADEC) has reviewed the environmental records for the referenced Areas of Concern. This decision letter memorializes the site history, cleanup actions, and standard conditions for long-term site management. No further remedial action is required.

Site Name and Location:

Lonely AFS Dewline - AOC 1, 2, &3 Point Lonely Dewline Nuigsut, AK 99789

Name and Mailing Address of Contact Party:

Lori Roy U.S. Air Force, AFCEC/CZOP 18291 Tarabrooke Drive Gulfport, MS 39503

DEC Site Identifiers:

File No: 320.38.004 Hazard ID: 4223

Regulatory Authority for Determination:

18 AAC 75

Site Description and Background

The Aircraft Fuel Stand 1 (AOC01) is located on the main gravel pad near the central portion of the installation directly east of Aircraft Fuel Stand 2 (AOC02) (see enclosed Figure). The fuel stand appears to have been used to refuel aircraft or possibly vehicles. It has been inactive since at least 1989 when the DEW Line Station closed.

The Aircraft Fuel Stand 2 (AOC02) is located on the main gravel pad near the central portion of the installation. It is located west of Aircraft Fuel Stand 1 (AOC01) (see enclosed Figure). This fuel stand appears to have been used to refuel aircraft or possibly vehicles. It has been inactive since at least 1989, when the DEW Line Station closed.

The Central Tank Farm (AOC03) is located on the southern edge of the main gravel pad near the central portion of the installation (see enclosed Figure). It contains an inactive aboveground storage tank (AST) located within a lined, gravel containment berm. A pumphouse associated with the tank is located directly east of the bermed area. The tanks have been inactive since at least 1989, when the DEW Line Station closed.

Contaminants of Concern

The following petroleum contaminant of concern, was identified during the course of the site investigations summarized in the Characterization Activities section of this decision letter.

Diesel Range Organics (DRO)

Cleanup Levels

The more restrictive of either the inhalation or ingestion cleanup levels for the Arctic Zone apply to this site. Migration to groundwater soil cleanup levels are not as the site is in the Arctic Zone and the suprapermafrost groundwater is not acting as a transport mechanism for contamination.

Approved Cleanup Levels

DRO, 12500 mg/kg in soil

Characterization Activities

Characterization activities conducted under the regulatory authority of the Contaminated Sites Program began in 2005 and data gaps were resolved in 2006 and reported in the Point Lonely SRRS 2006 Supplemental Site and Remedial Investigations for Eight Sites, Final June 2007. These activities are described below.

AOC 1

The soil samples were collected in both 2005 and 2006. The highest detection of DRO was 3540 mg/kg. The samples contained very low or non-detectable results for GRO/BTEX, DRO/RRO, and PAHs. None of the samples collected at AOC01 exceeded the ADEC Method Two soil cleanup levels. The surface water sample contained very low or non-detectable concentrations of BTEX and PAH compounds. No compounds exceeded the screening criteria (AWQS or NOAA SQuiRTs). This indicates that the petroleum contamination next to the fuel stand is localized and not impacting surface water.

AOC 2

The soil samples were collected in both 2005 and 2006. The highest detection of DRO was 1640 mg/kg. The samples contained very low or non-detectable results for GRO/BTEX, DRO/RRO, and PAHs. None of the samples collected at AOC02 exceeded the ADEC Method Two soil cleanup levels. The maximum concentration of petroleum hydrocarbons is located in the subsurface just above permafrost. The potential for further migration or significant impacts to surface water is considered low. Surface water down gradient of the site does not exceed AWQS.

AOC 3

DRO was the only compound to exceed Method One cleanup levels. The maximum concentration of DRO detected in the soil was 4,380 mg/Kg. The surface water next to the pad did not contain detectable concentration of BTEX or PAH compounds, except for a trace level of naphthalene. These results indicate that the petroleum hydrocarbons in the soil at the site is not adversely impacting surface water quality.

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 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.

Pathway	Result	Explanation
Surface Soil Contact	De-Minimis	Contamination is not present in surface soil (0 to 2 feet
	Exposure	below ground surface) above ingestions levels
Sub-Surface Soil Contact	De-Minimis	Contamination remains in the sub-surface, but is below
	Exposure	ingestion cleanup levels.
Inhalation – Outdoor Air	De-Minimis	Contamination remains in the sub-surface, but is below
	Exposure	inhalation cleanup levels.
Inhalation – Indoor Air (vapor	Pathway	No structures are present, nor likely to be built.
intrusion)	Incomplete	
Groundwater Ingestion	Pathway	Groundwater is not present.
	Incomplete	
Surface Water Ingestion	Pathway	Surface water is not impacted.
	Incomplete	
Wild and Farmed Foods	Pathway	Contaminants of concern do not have the potential to
Ingestion	Incomplete	bioaccumulate in plants or animals.
Exposure to Ecological	Pathway	This is a gravel pad and not a significant habitat.
Receptors	Incomplete	

Table 2 – Exposure Pathway Evaluation

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 Arctic Zone cleanup levels and the location is not expected to erode in the near future. The site characterization shows the AOCs are eligible for a cleanup complete decision.

Standard Conditions

1. Any proposal to transport soil or groundwater off-site requires ADEC approval in accordance with 18 AAC 75.325. 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.)

2. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.

This determination is in accordance with 18 AAC 75.380 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 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, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99811-1800, 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) 269-0298.

Sincerely,

Deb Caillouet

Environmental Program Specialist

Attachment: Site Figure 8-1, 2006 Investigation

