

STATE OF ALASKA

**DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES PROGRAM**

SEAN PARNELL, GOVERNOR
610 University Avenue
Fairbanks, AK 99709-3643
PHONE: (907) 451-2702
FAX: (907) 451-5105
www.dec.state.ak.us

File: 1507.38.012

October 31, 2011

Dave Hanneman
FAA Alaska Region
222 W. 7th Avenue, Box 14
Anchorage, AK 99513-7587

Re: Approval of *Pleasant Island Fan Marker Decommissioning* (January 2010) and Record of Decision for Federal Aviation Administration Pleasant Island Fan Marker, Gustavus, Alaska

Mr. Hanneman:

Thank you for submitting the above referenced report describing the decommissioning project executed on Pleasant Island. The Alaska Department of Environmental Conservation (ADEC) received this report on January 27, 2010. This work report meets the requirements of 18 AAC 75.335 and is therefore approved.

ADEC has conducted a review of the environmental records associated with the FAA Pleasant Island station. Based on the information provided to date, ADEC has determined the site status of each of the areas of concern. The current status of the sites is listed below, and the body of this document summarizes the history of the site and explains the site status determination for each area of concern.

Summary of Site Status

Cleanup Complete

- Engine Generator Pad
- Aboveground Storage Tank (AST) Tie Down Block
- Former Drum Storage Area
- Fuel Pipeline

Introduction

These site status decisions are based on the administrative record for the FAA Pleasant Island Former Fan Marker site, which is located in the offices of ADEC in Fairbanks, Alaska. This decision document summarizes the decision process used

to determine the environmental status of the areas of concern at the site and provides a summary of the regulatory issues considered in the determination.

Regulatory authority under which the site is being cleaned up:

18 AAC 75

Background

The Pleasant Island Former Fan Marker Site is located on the North side of Pleasant Island, approximately 3 miles south of Gustavus. The FAA previously used the facility as a Fan Marker. The area has been abandoned since the mid-1960s. Pleasant Island is owned by the U.S. Forest Service and is managed as a Wilderness Area.

Site Characterization and Cleanup Activities

An initial site visit was conducted in 2005. Site characterization and cleanup were conducted in August 2009. Work at this site included decommissioning of a fuel pipeline, excavation and burying of an engine generator pad, excavation and removal of several drums and creosote treated timbers, and excavation and removal of contaminated soil.

At the engine generator pad, a pit was dug to create a hole and bury the generator pad. Contaminated soils were discovered beneath the pad and approximately 1.5 cubic yards of soil was removed. Two confirmation samples were taken at the limits of excavation prior to burial of the engine generator pad. Samples were analyzed for GRO, DRO, RRO, BTEX, and PAHs. One sample identified Diesel Range Organics at a concentration of 345 mg/kg, above Migration to Groundwater cleanup levels but below Ingestion and Inhalation cleanup levels.

The apparent remains of an AST tie-down block was observed approximately 30 feet southeast of the former engine generator pad. Two samples were collected at this location and tested for GRO, DRO, RRO, BTEX, and PAH. Both samples indicated that contamination was not present above cleanup levels.

Forty eight rusted drums were gathered from the Drum Storage area for removal from the island. The area was inspected and there was no indication that a release had occurred. Two drums contained an unknown fluid. A sample was collected from beneath one drum containing fluid and analyzed for GRO, DRO, RRO, and BTEX. The sample indicated that contamination was not present above cleanup levels.

Prior to decommissioning of a 3 inch buried pipeline, 13 field screening samples were taken from beneath threaded connections and pipe ends. Approximately 14 gallons of fuel was drained from the pipeline and containerized for removal from the island. The pipeline was disassembled and approximately 10 cubic yards of contaminated soil were removed based on field screening. 6 analytical samples taken at the limits of excavation were analyzed for GRO, DRO, RRO, and BTEX.

One sample taken from the northern limit of the pipeline identified DRO at a concentration of 940 mg/kg, above Migration to Groundwater cleanup levels but below Ingestion and Inhalation cleanup levels.

Contaminants of Concern

During investigations at this site, soil was analyzed for DRO, RRO, and BTEX. Based on these analyses and knowledge of the source area, the following Contaminants of Concern were identified:

- Diesel Range Organics

Cleanup Levels

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

<u>Contaminant</u>	<u>Site Cleanup Level (mg/kg)</u>
• Diesel Range Organics	230

When migration to groundwater is not expected, the cleanup level for this site is established in 18 AAC 75.341, Method Two, Table B2 Over 40 Inch Zone, Ingestion and Inhalation.

<u>Contaminant</u>	<u>Site Cleanup Level (mg/kg)</u>
• Diesel Range Organics, Ingestion	1400
• Diesel Range Organics, Inhalation	1400

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.

At the Engine Generator Pad, DRO was detected at the limits of excavation up to 345 mg/kg. The concentration of contamination exceeds Migration to Groundwater cleanup levels. 1.5 cubic yards of contaminated soil was removed during cleanup activities in 2009, reducing the total volume of contaminated soil. Although the concentration of contaminants in this soil suggests a migration to groundwater risk, ADEC has determined that the small volume of contaminated soil is unlikely to result in groundwater contamination. The concentration of contamination presents a *De minimis* risk of ingestion and inhalation.

At the AST Tie-Down Block, concentrations of contaminants were below migration to groundwater cleanup levels. Any risk of ingestion or inhalation of contaminants is considered *De minimis*.

At the Drum Storage Area, concentrations of contaminants were below migration to groundwater cleanup levels. Any risk of ingestion or inhalation of contaminants is considered *De minimis*.

At the Fuel Pipeline, DRO was detected at the limits of excavation up to 940 mg/kg. The concentration of contamination exceeds Migration to Groundwater cleanup levels. Approximately 2 cubic yards of contaminated soil was removed during cleanup activities in 2009, reducing the total volume of contaminated soil. Although the concentration of contamination in this soil suggests a migration to groundwater risk, ADEC has determined that the small volume of remaining contaminated soil is unlikely to result in groundwater contamination. The concentration of contamination presents a *De minimis* risk of ingestion and inhalation.

ADEC Decision

Contamination at each of the FAA sites on Pleasant Island has been adequately characterized and present a *De minimis* risk. Based on the information available, ADEC has determined that no further assessment or cleanup action is required. There is no longer a risk to human health or the environment from the FAA sites on Pleasant Island and these sites will be designated as "Cleanup Complete" in the ADEC Contaminated Sites Database.

This determination is in accordance with 18 AAC 75380(d) (1) 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. ADEC approval is required for off-site soil disposal.

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 the ADEC project manager, Fred Vreeman, at (907) 451-2181.

Approved by



Fred Vreeman
Environmental Program Manager I

Recommended by



James Ward
College Intern III

cc: Tim Chittenden, US Forest Service
Michael R. Wilcox, US Forest Service

Dave Hanneman

6

October 31, 2011

Tim Chittenden
USDA Forest Service
PO Box 309
Petersburg, AK 99833

Michael R. Wilcox
USDA Forest Service
PO Box 21628
Juneau, AK 99802-1628