

# Department of Environmental Conservation

DIVISION OF SPILL PREVENTION & RESPONSE Contaminated Sites Program

555 Cordova Street Anchorage, Alaska 99501 Phone: 907.269.7503 Fax: 907.269.7649

File No: 2435.38.001

May 31, 2013

LT Jennifer Nutt Alaska Army National Guard Construction Facilities Management Office PO Box 5800 JBER, AK 99505-0800

Re:

Final Nightmute Federal Scout Readiness Center, Data Gap Investigation Report December 2012 and Cleanup Complete Determination

# Dear LT Nutt;

The Alaska Department of Environmental Conservation received the final Nightmute report referenced on May 23, 2013. The report contains acceptable response to previously supplied comment and is approved. The data presented supports a Cleanup Complete Determination for the site as outlined below.

# Name and Mailing Address of Contact Party:

AKARNG Nightmute FSA Nightmute, Alaska 99690

LT Jennifer Nutt Alaska Army National Guard Construction Facilities Management Office PO Box 5800 JBER, Alaska 99505-0800

### **DEC Site Identifiers:**

ADEC Reckey: 1999250102501

File: 2435.38.001 Hazard ID: 3199

Regulatory Authority for Determination: 18 AAC 75

## **Background**

The earliest reported fuel spill at the Nightmute FSA occurred in August 1993 when an estimated volume of 5 gallons was spilled from the former 1,500-gallon, single-walled aboveground storage tank (AST), likely resulting from overfilling. Released product was absorbed with sorbent pads, and the fuel reportedly infiltrated into the ground to 2 feet bgs. An additional spill occurred at the FSA in June 1994, when approximately 2 gallons was released from the current 1,500-gallon, double-walled AST. The spill stain covered an estimated area of 14 square inches under each end of the tank. Bethel Battalion personnel used sorbent pads to collect most of the released product. During a 1994 site visit, it was found that the older AST contained 500 to 800 gallons of heating fuel but had been disconnected.

#### **Characterization Activities and Removal Actions**

The Site Investigation conducted in September 1998 consisted of a site reconnaissance, including mapping of major site features and drainage patterns, collecting 16 near-surface and subsurface soil samples, and installing one temporary well point. Soil samples were concentrated near the current and former ASTs and a former drum storage area. Subsurface soil samples were collected from the maximum depth of the hand-augered boreholes, which typically ranged from 0.7 to 2.8 feet bgs where bedrock was encountered. No permafrost or groundwater was encountered in any of the soil borings. All soil samples were submitted for laboratory analysis of diesel-range organics (DRO) by Alaska Method AK102. In addition, select soil samples were submitted for analysis for gasoline-range organics (GRO) by Alaska Method AK101; for residual-range organics (RRO) by Alaska Method AK103; for benzene, toluene, ethylbenzene, and xylene (BTEX) compounds by U.S. Environmental Protection Agency (EPA) Method SW8021; and for polycyclic aromatic hydrocarbons (PAHs) by EPA Method SW8270.

An Alternative Cleanup Level demonstration conducted in 2004 consisted of soil and groundwater sampling to develop and present potentially applicable cleanup levels. At the time of the fieldwork, the site surface was dry, and no permafrost was encountered during sampling activities. A total of 11 soil samples were collected near the AST and around the FSRC building. All soil samples were analyzed for DRO by Alaska Method AK102. Selected samples were analyzed for total organic compounds by EPA Method SW9060; for GRO by Alaska Method AK101; and for BTEX by EPA Method SW8260B. DRO was detected in a single location north of the existing 1,500-gallon AST, at a concentration of 2,030 mg/kg. GRO and BTEX compounds were detected at concentrations lower than cleanup levels. An attempt was made to collect samples of groundwater at two well point locations. Because of bedrock, the well-point screens were set at refusal at approximately 2 to 3 feet bgs. No groundwater was encountered in either well point after the groundwater sampling points had been left in the ground for 1.5 to 2 hours.

The 2005 Interim Removal Action (IRA) excavated contaminated soil from an area adjacent to the existing AST at the northeastern corner of the FSRC where contaminated soil exceeded the ADEC Method 2 maximum contaminant level for DRO (12,500 mg/kg). The maximum depth of the excavation was limited to 46 inches because of bedrock. Soil was removed to the extent practicable without endangering existing structures. The total surface area of the excavation was approximately 100 square feet and was limited to the west by the armory building and to the south by the existing AST. Some soil was excavated from underneath the AST to a maximum depth of 24 inches bgs. The IRA removed approximately 9.78 tons of petroleum-contaminated soil from the Nightmute FSRC site. Confirmation soil samples were collected from the side walls and bottom of the completed excavation. Soil samples were submitted for laboratory analysis for DRO by Alaska Method AK102,

for GRO by Alaska Method AK101, and for BTEX by EPA Method SW8021B. Results from the confirmation samples suggested that contamination remains at the site under the existing AST.

The 2011 Data Gap Investigation collected soil samples from 0 to 1 foot bgs and from 2 feet bgs to bedrock interface, approximately 2.5 to 2.75 feet bgs, in locations under and around the existing AST.

#### Contaminants of Concern

During the IRA and the investigations at this site, the maximum detected contamination was DRO at 6840 mg/kg.

**Cleanup Levels** 

The Cleanup level for this site based on the Ingestion pathway for the under 40" Zone is 10,250 mg/kg.

### **ADEC Decision**

The cleanup actions to date have served to excavate and adequately remove contaminated soil from the site. Based on the information available, ADEC has determined no further assessment or cleanup action is required. There is no longer a risk to human health or the environment, and this site will be designated as closed on the Department's database.

Although a Cleanup Complete determination has been granted, ADEC approval is required for off-site soil disposal in accordance with 18 AAC 75.325(i). However, since this site has low levels of DRO and minimal extent, this letter will serve as your approval for future off-site movement and disposal of soil associated with this release.

This determination is in accordance with 18 AAC 75.380(d) 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)269-0298.

Sincerely,

Deb Caillouet

Environmental Program Specialist