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DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES PROGRAM

May 12, 2003

Mr. Jim Udelhoven
Udelhoven Oilfield System Services, Inc.
184 East 53rd Avenue
Anchorage, AK 99518

Re: No Further Remedial Action Planned
Udelhoven Mile One Repair Shop
Database ID No. 1997360135701.

The Alaska Department of Environmental Conservation (ADEC) has reviewed the April 2003 Cleanup Action Final report and request for closure at the referenced site received from AMEC Earth and Environmental, Inc. The site was accepted into the Voluntary Cleanup Program on December 30, 1997.

Background

The approximately 3-acre site is comprised of a gravel pad and is surrounded by tundra. Udelhoven Oilfield System Services, Inc. operated an equipment maintenance facility at the site from 1970 to 1993 under an Alaska Department of Natural Resources lease. The site was idle until 1997 when Arctic Fabricators began operating under a new lease.

Two buildings were used by Udelhoven. The main building consisted of a vehicle work area, several part rooms, office space, water and sewage tanks, a solid waste burner and a diesel tank. The shop was used for equipment maintenance and repair. It housed a used oil day tank and burner, solid waste burner and vehicle parts cleaner.

An approximately 3,000-gallon diesel heating oil tank was located east of the main building's shop bay. A release of unknown volume occurred from this above ground tank in approximately 1992. Contaminated soil was excavated and removed from the site.

Other tanks at the site include a 300-gallon used oil tank, 1,500-gallon diesel heating oil above ground tank and a 1,000-gallon gasoline above ground tank. A vehicle parts cleaner located in the shop used Stoddard solvent as a cleaning agent.

AMEC conducted a baseline assessment in September 1997. Various petroleum compounds were detected in several soil borings. In-situ, enhanced bioremediation was conducted between 1998 through 2000. Soil and surface water sampling continued through 2002.

Approved Cleanup Levels

The approved soil cleanup levels are the most stringent levels for Arctic Zone. These cleanup levels, found at 18 AAC 75.341 Tables B1 and B2, are as follows for detected contaminants.

Contaminant	Cleanup Level (mg/kg)
Gasoline Range Hydrocarbons	1,400
Diesel Range Hydrocarbons	12,500
Benzene	13
Toluene	180
Ethylbenzene	89
Total Xylenes	81
Arsenic	8
Barium	9,600
Cadmium	140

Remaining Contamination

Xylenes were documented above the 81 mg/kg cleanup level in one soil sample collected during the 2001 sampling event.

Cumulative Human Health Risk

For contamination that remains on-site above cleanup levels, a chemical that is detected at one-tenth or more of the Table B1 inhalation or ingestion values set out in 18 AAC 75.341(c), the Table B2 values set out in 18 AAC 75.341(d) or the Table C values set out in 18 AAC 75.345 must be included when calculating cumulative risk under 18 AAC 75.325(g). A number of indicator chemicals are used to determine cumulative risk from petroleum contamination. Petroleum fractions (gasoline-, diesel- and residual range hydrocarbons) are not taken into account.

Petroleum compounds present at the Udelhoven site and detected in soil at concentrations greater than one-tenth the risk-based inhalation levels include ethylbenzene and total xylenes.[1] Arsenic was detected at a concentration greater than one-tenth the risk-based ingestion level. These concentrations do not exceed the acceptable cancer and non-cancer risk thresholds.

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1 The inhalation levels for ethylbenzene and total xylenes are based on the soil saturation level (C_{sat})

Ecological Receptors

The nearest waterbody is a channel of the Sagavanirktok River, approximately ¼-mile southeast of the site. Three surface water samples collected around the perimeter of the gravel pad met surface water quality standards.

Institutional Controls

1. A record will be entered into the ADEC's Contaminated Sites Database indicating that total xylenes may be present at the site above cleanup levels.

Determination

The investigation and cleanup of the Udelhoven Mile One Repair Shop has met all requirements specified in 18 Alaska Administrative Code (AAC) 75 Article 3 - Discharge, Reporting, Cleanup, and Disposal of Oil and Other Hazardous Substances. Based on the information from the Cleanup Action Final Report, ADEC has determined that an issuance of **No Further Remedial Action Planned** is appropriate for this site.

In accordance with 18 AAC 75.380(d)(1) and 18 AAC 78.276, additional investigation and cleanup may be required if new information is discovered which leads ADEC to make a determination that the cleanup described in this decision is not protective of human health, safety, and welfare or the environment.

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 99801within 15 days of the decision date. 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 of the decision date. The right to appeal is waived if a hearing is not requested within 30 days.

William Janes
Environmental Specialist