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

RECORD OF DECISION
Alamo Rent-A-Car
Lot 18a, Block 6
Anchorage International Airport

December 2005

SITE INFORMATION SUMMARY

Site name and location
Alamo Rent-A-Car Facility is located at the Anchorage International Airport (AIA). The legal description of the site is: Lot 18a, Block 6, NW¼ Section 34, Township 13 North, Range 4 West, Seward Meridian.

Name and mailing address of responsible person
The Alaska Department of Transportation and Public Facilities (ADOT&PF) manages the AIA and had leased the subject property to Alamo Rent-A-Car Facility. However, Alamo filed bankruptcy protection and is unwilling or unable to perform the necessary investigative and/or cleanup work.
ADOT&PF has indicated their willingness to assume the responsibility for this site. Tom Johnston is the point of contact for ADOT&PF and can be reached at PO Box 196960 Anchorage, Alaska. Phone number: (907) 266-2546

ADEC Database Record key: 1993210026303
CS file number: 2100.26.156 (formerly L55.179)
UST Fac ID#: 1893
Event ID#: 376

Regulatory authority
18 AAC 75.325 – 18 AAC 75.390

Background
The subject property is owned and managed by the ADOT&PF at the Anchorage International Airport as a commercial lease lot. It is approximately 48,994 square feet in size and was first developed in the 1970s. There is a commercial office building; automobile maintenance areas; paved parking; and a vehicle fuel dispenser system to the west of the building. A 12,000 gallon underground storage tank (UST) was formerly located east of the commercial building from 1975 until 1988 but has since been replaced by a 10,000 gallon UST.

In September 1993, Alamo Rent-A-Car personnel reported that the fuel dispenser was not working properly and a fuel pipeline connected to the 10,000-gallon unleaded gasoline underground storage tank (UST) had been repaired. During the repair activities, contaminated soil was reported beneath the pump island, which was above the 10,000 gallon UST.

In December 1993, Mactec Inc. (formerly Harding Lawson Associates) conducted a site investigation where they drilled six soil borings within 60 feet of the fuel dispenser. Soil samples were collected from each boring and the sample results are provided in the table below.

Contaminant of Concern	**Range of concentrations (mg/kg)**	**ADEC Cleanup Levels (mg/kg)**
Volatile Petroleum Hydrocarbons	Nondetect to 20.9	Not Applicable
Benzene	Nondetect to 0.416	0.02
Toluene	Nondetect to 1.26	5.4
Ethylbenzene	Nondetect to 0.324	5.5
Xylenes	Nondetect to 2.161	78

Benzene exceeded the 18 AAC 75.341 migration to groundwater cleanup levels in 4 of the 6 borings. One of the soil borings was advanced to a depth of 50 feet where a groundwater sample was collected. Benzene was the only contaminant detected at a level (0.0091 mg/L) that exceeded 18 AAC 75.345 Table C level of 0.005 mg/L.

In 1995, the 10,000 gallon UST was removed , refurbished and relocated to the western edge of the property. Approximately 140 cubic yards of contaminated soil was excavated and transported off site for treatment. Eight soil samples were collected from the excavation pit in order to determine the extent of fuel contamination. The following table provides the sample results.

Contaminant of Concern	**Range of concentrations (mg/kg)**	**ADEC Cleanup Levels (mg/kg)**
Volatile Petroleum Hydrocarbons	Nondetect to 3,030	Not Applicable
Benzene	Nondetect to 0.449	0.02
Toluene	Nondetect to 115	5.4
Ethylbenzene	Nondetect to 43	5.5
Xylenes	Nondetect to 1,140	78

Elevated levels of contaminants of concern were discovered on the eastern edge of the excavation. A groundwater monitor well (MW-1) was installed near the former fuel dispenser to 49.5 feet below ground surface (bgs). Benzene was the only contaminant detected at 0.201 mg/L.

In August and September 1997, three additional groundwater monitor wells (MW-2, MW-3, and MW-4) were installed throughout the subject property. The levels of benzene, toluene, ethylbenzene, and xylenes detected in soil samples collected from bore holes did not exceed 18 AAC 75.341 migration to groundwater cleanup levels.

In 1998, monitor well (MW-5) was installed south of monitor well MW-1 to further assess the soil contamination in the area of the former UST. Soil samples were collected at five foot intervals and evaluated for volatile organic hydrocarbons with a photo ionizing detector (PID). The soil sample with the highest PID reading (approximately 20 feet bgs) was submitted for laboratory analysis. The sample results are provided in the following table.

Contaminant of Concern	Measured Concentration (mg/kg)	ADEC Cleanup Levels (mg/kg)
GRO	7,700	300
Benzene	48.7	0.02
Toluene	951	5.4
Ethylbenzene	350	5.5
Xylenes	2,152	78

In May 1999, a site assessment was conducted and concluded the former UST impacted soil and groundwater on the eastern portion of lot 18a. In addition, the report indicated that petroleum contamination from the former bulk fuel tank farm (Lots 2, 3, 4, and 5, Block 6) may have impacted the groundwater on Lot 18. A soil vapor extraction system (SVES) was installed in June near the eastern edge of the excavation and operated until June 2003. It was estimated to have removed approximately 17,564 lbs. of gasoline.

In 2005, a site investigation was conducted to evaluate current soil and groundwater levels. Groundwater samples from existing monitor wells were analyzed for GRO and BTEX. Six soil samples from two soil boring locations were collected. One soil boring was drilled near the former dispenser island and another one near the former UST excavation. The following table specifies the contaminants detected and the concentrations.

Contaminant of Concern	Range of concentrations (mg/kg)	ADEC Cleanup Levels (mg/kg)
GRO	Nondetect to 56.8	300
Benzene	Nondetect to 0.417	0.02
Toluene	Nondetect to 6.12	5.4
Ethylbenzene	Nondetect to 0.969	5.5
Xylenes	Nondetect to 5.69	78

The results indicated benzene above the 18 AAC 75.341 cleanup level (0.02 mg/kg) in 3 of the 6 samples. Toluene exceeded the AAC 75.341 cleanup level (5.4 mg/kg) in one of the 6 samples. The report also identified naturally occurring coal in one of the soil samples which may contribute to elevated levels of benzene.

From 1997 through 2005, groundwater samples have been collected from monitor wells MW-1, MW-3, MW-4, and MW-5. The results are provided in the following table.

Monitoring Well & Year(s) of Sampling	Range of Benzene Concentrations (mg/L)	Range of GRO Concentrations (mg/L)
MW1 (1997-2005)	Nondetect to Nondetect	Nondetect to 0.0012
MW2 (1997-2005)	Nondetect to Nondetect	Nondetect to Nondetect
MW3 (1997-2005)	Nondetect to Nondetect	Nondetect to Nondetect
MW4 (2001-2005)	Nondetect to Nondetect	Nondetect to Nondetect
MW5 (1998-1999)	Nondetect to 0.368	Nondetect to 4.3
MW5 (2000-2001)	0.0011 to 0.472	Nondetect to 1.00
MW5 (2002-2005)	Nondetect to 0.0408	Nondetect to 0.240

The levels of contamination in MW-1 through MW-4 have never exceeded 18 AAC 75.345 Table C values. MW-5 had exceeded 18 AAC 75.345 Table C values in the past but the last four monitoring events indicated compliance with the groundwater standards.

Contaminants of Concern
Gasoline range organics (GRO), benzene, ethylbenzene, toluene, and xylenes (BTEX) have been detected in soil and groundwater.

Exposure Pathways
The human health exposure pathways that were evaluated at this site include: ingestion and inhalation. There are also the possible migration pathways of contamination to ground and/or surface water and the vapor migration to indoor structures that were considered.

Ingestion
Soil contamination was identified from the surface to 15 feet bgs and ingestion is considered a complete pathway. Groundwater at the site is not a current source for drinking water nor is it expected to be in the future. An 18 AAC 75.350 determination related to the shallow (unconfined) aquifer was conducted for portions of the airport facility and concluded it was not a drinking water source.

Dermal Absorption
There are no known contaminants at this site that permeate skin; therefore, this pathway is incomplete.

Migration to Groundwater
The migration to groundwater is considered a complete pathway and impacts to groundwater and/or the possible migration of contamination from the site would have to be evaluated and monitored.

Migration to Surface Water
Groundwater contaminants have not been detected in groundwater the last four monitoring events and therefore, contaminants are not expected to migrate to surface water.

Inhalation
Soil contamination was identified from the surface to 15 feet bgs and inhalation is considered a complete pathway.

Migration to Indoor Air
There is an occupied building at the subject site that is less than 30 horizontal feet from soil with elevated levels of volatile contaminants. The possible migration of volatile substances into the building should be evaluated.

ADEC CLEANUP LEVELS

Soil
ADEC has evaluated the contaminant concentrations in the soil in accordance with 18 AAC 75.341 Tables B1 and B2 migration to groundwater cleanup levels. The various pathways evaluated were ingestion and inhalation and possible migration. In order to be protective of all possible exposure pathways and ensure contamination does not migrate - the most stringent cleanup levels protective of all the exposure pathways will be considered applicable at this site. The following soil cleanup levels are established for this site:

- Benzene 0.02 mg/kg
- Toluene 5.4 mg/kg
- Ethylbenzene 5.5 mg/kg
- Xylenes 78 mg/kg
- Gasoline Range Organics 300 mg/kg
- Diesel Range Organics 250 mg/kg

Groundwater
ADEC evaluated the contaminant concentrations in the groundwater (shallow unconfined aquifer) at this site. Even though the groundwater is not considered a drinking water source (as determined by the March 27, 2001 groundwater use determination for the AIA) cleanup levels should be established that will ensure contamination does not migrate. The cleanup levels for the shallow groundwater at this site are the 18 AAC 75.345 Table C levels unless future information is provided that requests alternative levels be established. The groundwater cleanup levels must be protective of surface water; indoor air; and/or concentrations that would not result in migration off site.

ADEC DECISION
The data presented to date indicates that the soil and groundwater at the former Alamo Rent-A-Car facility UST has been impacted by petroleum hydrocarbons from past releases of gasoline fuel. The levels of contamination in soil exceed the most stringent cleanup levels protective of migration to groundwater. However, they do not exceed the levels established for ingestion and inhalation of soil.
The groundwater impacts have not exceeded the 18 AAC 75.345 Table C cleanup levels in the past 4 monitoring events – even though a groundwater use determination allows for alternative groundwater levels to be considered.

Based on this information, ADEC has determined that no further remedial action is required at Alamo Rent-A-Car Facility. This determination recognizes that areas of soil contamination remain above 18 AAC 75.341 Table B1 and B2 soil cleanup levels established for the site but it does not pose a risk to human health or the environment. In order to identify the environmental issues that remain at this site, the following conditions shall be attached to the property to ensure protection of human health and the environment:

1. An institutional control will be recorded on the ADEC database to document that there is hazardous substance contamination remaining above the most stringent ADEC cleanup levels;

2. Any proposal to transport soil off site requires ADEC approval in accordance with 18 AAC 78.274(b).

This determination is based on information presented to date but does not preclude the Department from requiring additional assessment and/or cleanup action in accordance with 18 AAC 78.276(f)(2) if future information indicates that this site may pose an unacceptable risk to human health or the environment.

Site closure (without conditions) can be achieved when soil sampling confirms that all soil meets the most stringent 18 AAC 75.341 Method Two migration to groundwater cleanup levels.

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. 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.

ADEC Project Manager Approval:

_____ _____

Todd Blessing, Environmental Specialist Date

ADEC Section Manager Approval:

_____ _____

Jim Frechione, Environmental Conservation Manager Date