

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

RECORD OF DECISION

**Ride N' Shine
1341 Bragaw Street
Anchorage, Alaska**

August 9, 2004

SITE INFORMATION SUMMARY

Site name and location

Ride N' Shine Facility is located about three miles southeast of downtown, Anchorage, Alaska. The legal description of the site is: NW¼ Section 22, Township 13 North, Range 3 West, Seward Meridian, in the Anchorage (A-8) NW USGS quadrangle.

Name and mailing address of responsible person

Mike Gerik is the current owner and manager of Ride N' Shine facility, at 1341 Bragaw Street, Anchorage AK 99508.

Database Record key

1994210022301

CS file number

File Number: 2100.26.236 (formerly L55.190)

Regulatory authority

18 AAC 75.325 – 18 AAC 75.390

Physical characteristics of site

The subject site consists of a fuel station and car wash. The southern boundary of the Ride N' Shine Facility is adjacent to the Holiday fuel station #5001, located at 1405 South Bragaw Street. The Ride N' Shine's UST system consists of one 10,000 gallon unleaded gasoline tank and a separate UST containing a compartment for diesel (5,000 gallon) and a compartment for premium octane gasoline (5,000 gallon). The site is generally underlain by gravelly sand with surficial deposits in the project area believed to be alluvium in abandoned stream channels among glacially deposited elongated hills. Groundwater is encountered approximately 12 feet below ground surface (bgs) with a flow direction south to southwest.

Description of contaminants and media impacted

Gasoline range organics (GRO), diesel range organics (DRO), and volatile organic compounds (VOCs) have been detected in both soil and groundwater.

Prior cleanup actions taken

A passive vapor extraction system was installed along the north side of the southern fuel dispenser island in August 2004 to remediate gasoline impacted soils.

Current and expected future land use

Ride N' Shine Facility is currently operated as a gas station and car wash. It is expected that this use will continue in the future.

Determination of current and expected future use of groundwater

A drinking water well search was conducted by Shannon and Wilson in 1992. There were no water wells located within ¼ of mile of the Ride N' Shine facility. Groundwater at the Ride N' Shine facility is not a current source for drinking water nor is it expected to be in the future. The site is served by the municipal water system.

Completed Exposure Pathways

The exposure pathways evaluated under this decision include ingestion, inhalation, and migration to groundwater pathways.

SITE INVESTIGATION HISTORY

Underground Storage Tank (UST) Closure Assessment - September 1994

Shannon & Wilson, Inc. conducted a closure assessment during the removal of four USTs at the Ride N' Shine facility. The assessment report noted the following items:

- Four USTs (two 10,000 gallon gasoline tanks, one 5,000 gallon gasoline tank and a 500 gallon used oil tank), pump dispensers and associated piping were removed in August 1994.
- Approximately 150 cubic yards of soil was excavated during the removal of the gasoline tanks. Excavated soil was screened and sampled. Benzene was detected at levels that exceeded established cleanup values but the soil was placed back into the excavation pit.
- Approximately 45 cubic yards of soil was excavated during the removal of the used oil tank. The stockpiled soil was sampled and found to exceed the established cleanup value for tetrachloroethylene (PCE). This soil was also placed back into the excavation pit.
- A passive vapor extraction system was installed along the north side of the southern pump island of the station in order to passively remediate soil with elevated levels of VOCs.

Site Characterization Report – January 2003

Restoration Science and Engineering conducted a site investigation to:

- determine the source of the gasoline constituents found in groundwater near the southern property boundary of the Ride N' Shine facility;
- collect soil samples near the location of the former used oil tank; and
- collect soil samples from the vicinity of the south east dispenser island.

A total of 5 soil samples were collected and analyzed for VOC's. The sample results from boring SB-1, located at the southern property boundary of Ride N' Shine facility exceeded 18 AAC 75.341 Table B1 (migration to groundwater) value for benzene. In addition, the sample results from boring SB-4, located at the former location of the used oil tank, exceeded 18 AAC 75.341 Table B1 (migration to groundwater) value for PCE.

The groundwater samples collected from newly installed monitoring wells detected GRO and DRO at levels that exceeded 18 AAC 75.345 Table C values. No other analytes exceeded cleanup levels.

Site Characterization Report – November 2003

Restoration Science and Engineering conducted an additional site investigation for the following purposes:

- Install two soil borings (SB-8 and SB-9) and two monitoring wells (MW-4 and MW-7) in the area around the former used oil tank and analyze soil and groundwater samples for VOCs.
- Install three monitoring wells MW-3, MW-5, and MW-6 at the southern boundary of the site, in the vicinity of the Holiday store #5001 gasoline UST array, and analyze soil and groundwater samples for DRO, GRO, and BTEX (benzene, toluene, ethylbenzene, and xylenes).

Soil and groundwater samples collected at the southern property boundary revealed concentrations of GRO and benzene above 18 AAC 75.341 Tables B1 and B2 soil cleanup levels and 18 AAC 75.345 Table C groundwater values.

The soil and groundwater results from samples collected near the location of the former used oil tank were below the established cleanup levels.

Groundwater Monitoring Reports – August and November 2003

Restoration Science and Engineering monitored eight wells quarterly during 2003 and the results were:

- The levels of DRO, GRO, and VOCs measured in groundwater samples near the former used oil tank were consistently below 18 AAC 75.345 Table C values.
- The levels of GRO and BTEX measured in groundwater samples near the southern property boundary of Ride N' Shine were consistently above 18 AAC 75.345 Table C values.

CONTAMINANTS OF CONCERN

The chemicals of concern at this site include GRO, benzene, and PCE.

EXTENT OF CONTAMINATION

Soil Contamination

Former Location of Gasoline UST Array and Dispensers

During the decommissioning of the former gasoline UST s and dispensers in 1994, the maximum levels of GRO and benzene measured in soil left in place were 46 mg/kg and 0.437 mg/kg; respectively. The highest levels of soil contamination were found near the south fuel island where the passive vapor extraction pipe was installed. Stockpiled soil with benzene levels up to 0.050 mg/kg were placed back in the excavation pit following the UST removal and replacement. The

current 18 AAC 75.341 migration to groundwater cleanup level for GRO is 300 mg/kg and the benzene cleanup level is 0.02 mg/kg.

During the 2003 investigations, benzene was consistently detected above 18 AAC 75.341 Table B1 (migration to groundwater) value of 0.02 mg/kg in an area south of the southern fuel island near the southern property line. There were 13 soil samples collected in, and around, the fuel islands and former location of gasoline tanks with nine of the samples, measured above the 18 AAC 75.341 Table B1 value of 0.02 mg/Kg for benzene.

Benzene ranged from nondetect to 0.18 mg/kg in the 13 soil samples.

Former Location of Used Oil UST

In 1994, low levels of petroleum hydrocarbons were measured in soil samples collected during the used oil tank excavation and removal. GRO was not detected and DRO was detected at a maximum concentration of 61.3 mg/kg. However, PCE was consistently measured at levels above the 18 AAC 75.341 Table B1 (migration to groundwater) value of 0.03 mg/kg. The levels of PCE measured in excavated soil ranged from 0.036 to 0.45 mg/kg.

In 2003, 8 soil samples were collected near the former location of the used oil tank with only one of the 8 samples (0.87 mg/kg) above the 18 AAC 75.341 Table B1 migration to groundwater value.

Groundwater Contamination

Groundwater samples were collected from onsite monitoring wells in December 2002 and May, August, and November 2003. GRO levels ranged from nondetect to 11 mg/l; DRO levels ranged from nondetect to 3.1 mg/l; and benzene ranged from nondetect to 0.061 mg/l.

In general, the GRO levels have declined over the last two years but the benzene in wells along the southern property line (MW-1, MW-2, MW-3, MW-5, and MW-13) continue to exceed the 18 AAC 75.345 Table C value of 0.005 mg/l.

PCE has been detected in monitoring wells during the monitoring events. In August 2003, PCE was detected at levels of 0.012 mg/l and 0.0028 mg/l from monitoring wells MW-5 and MW-13; respectively. The 18 AAC 75.345 Table C level for PCE is 0.005 mg/L.

ADEC CLEANUP LEVELS

Soil

ADEC has evaluated the contaminant concentrations in the soil in accordance with 18 AAC 75.341 Tables B1 and B2 cleanup levels. The various pathways considered were migration to groundwater; ingestion and inhalation. Since the migration to groundwater pathway is considered complete and those cleanup levels are the most stringent of the various pathways, the following soil cleanup levels are considered applicable at 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
- Tetrachloroethylene 0.03 mg/Kg

Groundwater

ADEC has evaluated the hydrogeology at this site and contaminant concentrations in the groundwater in accordance with 18 AAC 75.345 Table C cleanup levels. The groundwater in this area generally consists of a shallow unconfined aquifer underlain by a thick confining layer of silt (i.e. Bootlegger Cove formation). Then there is a deeper (confined) aquifer generally considered as the drinking water aquifer. Even though the shallow unconfined aquifer is not normally used for drinking water (a qualitative decision and not a 18 AAC 75.350 determination), the cleanup levels established for all groundwater are:

- Benzene 0.005 mg/L
- Toluene 1.0 mg/L
- Ethylbenzene 0.7 mg/L
- Xylenes 10 mg/L
- Gasoline Range Organics 1.3 mg/L
- Diesel Range Organics 1.5 mg/L
- Tetrachloroethylene 0.005 mg/L

ADEC DECISION

The data presented to date indicates that the soil and groundwater contaminant levels (GRO, DRO, benzene, and PCE compounds) remain elevated above established cleanup levels but the trend in concentrations are decreasing over time. There is evidence that petroleum hydrocarbon contamination may be migrating off site but the fuel station (Holiday Station # 5001) adjacent to the Ride N' Shine facility has an Air Sparge/ Soil Vapor Extraction system that serves to treat contamination at that site. There is no evidence that PCE contamination has migrated beyond the Ride N' Shine property line.

Based on this information, ADEC has determined that no further remedial action is required at this site. This determination recognizes that areas of soil and groundwater contamination remain on site above the most stringent cleanup levels but they do not pose a risk to human health or the environment. This decision is subject to the following conditions:

1. any proposal to transport soil and/or groundwater off site requires ADEC approval in accordance with 18 AAC 75.325(i);
2. a groundwater monitor plan will be required that provides periodic monitoring to ensure contamination is declining and not migrating beyond the Ride N' Shine and Holiday Station #5001 properties;
3. an institutional control will be required that identifies the nature and extent of the contamination remaining on the site. It will also notify future owners/operators of the property of the environmental status of the site and any conditions that apply to future

management of the contamination; The attached "Notice of Environmental Contamination" will need to be recorded (in the State of Alaska's Recorders Office) as an institution control measure in accordance to 18 AAC 75.375(b)(3). In addition, a statement will be included in the DEC database regarding the environmental status of the site.

4. This determination is based on current information. Additional investigation and/or cleanup action may be necessary in the future if new information indicates there is hazardous substance contamination at this site that may pose a risk to human health and 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. 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.

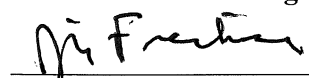
ADEC Project Manager Approval:



Todd Blessing, Environmental Specialist

8-9-04
Date

ADEC Section Manager Approval:



Jim Frechione, Environmental Conservation Manager

8-9-04
Date