# STATE OF ALASKA

DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF SPILL PREVENTION AND RESPONSE CONTAMINATED SITES PROGRAM SARAH PALIN, GOVERNOR

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File: 102.26.043

December 20, 2006

Mr. Richard Gregory Sourdough Express P.O. Box 73398 Fairbanks, AK 99707

Re: Sourdough Express

Driveway Street, Fairbanks, Alaska

Event ID 1017

Dear Mr. Gregory:

The Alaska Department of Environmental Conservation, Contaminated Sites Program, (ADEC) reviewed the Travis/Peterson Environmental Consulting, Inc. *Groundwater Monitoring – Sourdough Express* report dated November 10, 2006. Based upon this review and the administrative record for this site, ADEC has determined that soil contamination remains above the most stringent 18 AAC 75.341 soil cleanup levels but the nature and extent of the contamination does not pose an unacceptable risk to human health or the environment. This determination is subject to site specific conditions and, if complied with, will require no further remedial action at this time.

Please note the following information that was considered in making the determination on the environmental status of the site.

### **Background**

Sourdough Express is a trucking and transportation company that has operated on Driveway Street in Fairbanks since the 1970's. The site is located in an industrial area of Fairbanks with a history of area-wide contamination. There are several upgradient properties that are known to be contaminated with petroleum and/or solvents and contamination with the possibility of migration on to the Sourdough Express property.

In August 1990, a phase II environmental investigation for the Illinois Street and Minnie Street road project detected petroleum hydrocarbon contamination. A soil boring and groundwater monitoring well (near the southeast corner of the maintenance building) identified total petroleum hydrocarbon (TPH) concentrations from 8,570 to 15,600 parts per million (ppm). The water sample (from GW-101) detected benzene at 880 parts per billion (ppb).

There were also five groundwater monitoring wells installed in the area - three wells (MW-3, MW-4, MW-5) upgradient of the site and two (MW-1 and MW-2) downgradient from several buried tanks. MW-1 was located near the southwest corner of the shop building downgradient from the septic system and the tanks. The groundwater was encountered 14.5 to 16.5 feet below ground surface (bgs) and flowed northwest. The groundwater data from all monitor wells detected benzene above ADEC cleanup levels. Two of the wells (MW-3 and MW-4) which are upgradient also contained 1,2-dichloroethane and five of the wells contained tetrachloroethylene (PCE).

Several potential contaminant sources were identified on site that included:

floor drains inside the maintenance shop connected to a septic tank system;

two underground storage tanks (UST) - a 5,000 and 2,000-gallon diesel tank;

- a 1,000-gallon gasoline UST;
- a 1,000-gallon waste oil UST; and
- a UST that reportedly stored wastewater from steam cleaned fuel tanker trailers.

In July 1991, the four USTs that stored fuel and waste oil were removed along with 160 cubic yards of contaminated soil. The excavated soil was spread on site; tilled and fertilized over several years and then re-used on site. There were elevated concentrations of diesel range petroleum remaining in the ground following the excavation of the diesel USTs; however, the two soil samples collected at 12 feet bgs from the waste oil tank excavation were below ADEC cleanup levels.

The following table provides soil sample data from the UST excavation.

Table 1: Confirmation soil samples from gasoline and diesel USTs

Tank	Depth (feet)	DRPH	GRPH	Benzene	
5,000-gallon diesel	11	<10	NS	NS	
	11	24	NS	NS	
	11	22,000	NS	NS	
2,000-gallon diesel	10.5	64,000	NS	NS	
	10.5	42,000	NS	NS	
1,000-gallon gasoline	10.5	NS	<40	<0.4	
	10.5	NS	<100	<1	
ADEC Cleanup Levels		250	300	0.02	

All sample results are in milligrams per kilogram (mg/Kg)

DRPH: diesel range petroleum hydrocarbons GRPH: gasoline range petroleum hydrocarbons

NS: not samples

The following table provides groundwater data from the monitor wells:

Table 2: Groundwater data at the site.

Well	Date	Benzene	Ethylbenzene	Toluene	Xylenes	DRO	PCE	TCE
MW-1	5/9/91	16	0.2	7	0.9	NS	2.5	ND
	8/30/93	ND	ND	ND	ND	NS	NS	NS
	4/5/94	ND	ND	ND	ND	NS	NS	NS
	7/28/94	ND	ND	ND	ND	NS	NS	NS
	9/21/94	0.3	ND	ND	0.3	NS	NS	NS
	4/11/95	ND	ND	0.3	ND	NS	NS	NS
	4/19/96	76	ND	ND	ND	NS	NS	NS
	4/11/97	15	ND	ND	ND	988	NS	NS
	4/16/98	ND _	ND	ND	ND	342	NS	NS
	4/12/99	6.71	ND	ND	ND	580	NS	NS
MW-2	5/9/91	140	0.4	0.5	0.9	NS	2	0.5
MW-3	5/9/91	180	5.3	1.8	20	NS	0.3	0.3
MW-4	5/9/91	220	2.1	1.3	6.5	NS	0.4	0.4
	10/17/06	ND	ND	ND	ND	1,640	ND _	1.02
MW-5	5/9/91	110	0.3	0.5	0.6	NS	0.4	ND
GW-	8/7/90	880	5,000	8,100	59,000	NS	ND	ND
101								
	5/9/91	210	ND	ND	ND	NS	ND	ND
NW-1	10/17/06	ND	ND	ND	ND	693	7.81	2.69
ADEC Cleanup		5	700	1,000	10,000	1,500	5	5
Le	evels							

All data is in parts per billion (ppb).

ND: non-detect

DRO: diesel range organics

NS: not sampled

# **Pathways Evaluated**

The exposure pathways evaluated at the site include inhalation; ingestion; and dermal contact.

There was soil contamination remaining on site above ADEC health risk based levels for inhalation/ingestion. However, the source(s) of contamination have been removed and the contamination remaining is located 10 feet bgs and does not pose an unacceptable risk provided the owners/operators comply with site specific conditions established in this document.

The migration to groundwater pathway is complete and groundwater has been impacted. However, the groundwater is not used as a drinking water source and the contamination will be monitored to ensure it does not migrate and/or pose a risk.

The migration of vapors to indoor air may pose a risk at this site but this pathway has not been evaluated. There are physical methods (eg. depressurization systems; radon mitigation systems) to minimize any risk from the migration of vapors and these options should be considered.

# **Cleanup Levels**

The soil cleanup levels established for the site are the 18 AAC 75.341 Tables B1 and B2 under 40 inch zone migration to groundwater levels for soil.

The groundwater cleanup levels are: 18 AAC 75.345 Table C

# **ADEC Decision**

Based on the information provided to date, ADEC has determined that cleanup efforts have been effective in reducing the contamination at the site. There is residual soil and groundwater contamination remaining on site in the area of the former diesel tanks. However, the site specific conditions established in this decision document (if complied with) will ensure the remaining contamination does not pose an unacceptable risk to human health or the environment.

ADEC will require no further remedial action at this site provided the following site-specific conditions are attached to the property:

- 1. A Notice of Environmental Contamination shall be recorded with the State of Alaska Recorder's Office that identifies the nature and extent of the contamination remaining on site and any site specific conditions attached to the property.
- 2. An institutional control will be listed on the ADEC database identifying the nature and extent of the contamination remaining on site and any site specific conditions.
- 3. In accordance with 18 AAC 78.274(b), ADEC approval must be obtained prior to any proposed transport and/or disposal of soil or groundwater from this site.
- 4. No groundwater wells shall be installed on the property without the prior review and approval of ADEC.
- 5. Any proposed excavation in the former diesel tank excavation area requires the owner and/or operator of the site submit a plan to ADEC for review and approval before soil is excavated.

If any floor drains have not been closed by the Environmental Protection Agency (EPA), they must be inventoried with the EPA and closed in accordance with EPA requirements.

In accordance with 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.

ADEC will consider a Site Closure (and removal of institutional controls) only after the soil and/or groundwater achieves the established cleanup levels for the site.

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 may be delivered to the Division Director, P.O. Box 111800, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99811-1800, within 15 days of the

decision. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, P.O. Box 111800, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99811-1800, within 30 days of the decision. If a hearing is not requested within 30 days, the right to appeal is waived.

Sincerely, Obborah William

Deborah Williams

**Environmental Program Specialist** 

Sincerely,

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Jim Frechione

Environmental Program Manager

cc: Chris Bellovary, EPA (via e-mail)

Susan Schrader, Alaska Railroad Corporation