SEAN PARNELL, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES PROGRAM

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File: 2601.26.042

July 22, 2011

Union Oil Company of California
Chevron Environmental Management
Amy C. Gilpin
6101 Bollinger Canyon Road, #5374C
San Ramon, CA 94583

Re: Decision Document; Union Tire and Brake - Kodiak
Corrective Action Complete Determination

Dear Ms. Gilpin:

The Alaska Department of Environmental Conservation (ADEC), Contaminated Sites Program, has completed a review of the environmental records associated with the Union Tire and Brake - Kodiak site, located at 202 Rezenof Drive, in Kodiak, Alaska. Based on the information provided to date, it has been determined that the contaminant concentrations remaining on site do not pose an unacceptable risk to human health or the environment. No further remedial action is required at this time, and this site will be closed.

This decision is based on the administrative record for this site, which is located in the offices of the ADEC in Soldotna, Alaska. This letter summarizes the decision process used to determine the environmental status of this site and provides a summary of the regulatory issues considered in this Corrective Action Complete determination.

Introduction

Site Name and Location:
Union Tire and Brake - Kodiak
202 Rezenof Drive
Kodiak, Alaska

Name and Mailing Address of Land Owner:
Walter Donat
P.O. Box 1973
Kodiak, Alaska 99615

ADEC Site Identifiers
Reckey: 1993250026351
File: 2601.26.042
Hazard ID: 22941

Regulatory authority under which the site is being cleaned up:
18 AAC 75 and 18 AAC 78

Background
This site is the location of an active retail fuels sales station, which was initially impacted by gasoline and diesel from leaks and/or spills associated with one 150-gallon waste oil, one 600-gallon heating oil, two 4,000-gallon gasoline, and one 10,000-gallon gasoline underground storage tanks (USTs) and associated piping that were removed and upgraded in 1994. During site assessment and cleanup response measures, soil and groundwater samples collected at this site were tested for: gasoline range organics (GRO), diesel range organics (DRO), benzene, toluene, ethylbenzene, and xylenes (BTEX), polynuclear aromatic hydrocarbons (PAHs), total volatile chlorinated solvents, polychlorinated biphenyls (PCBs), and metals. The site and immediately adjacent properties are served by City of Kodiak public water and sewer systems. A more detailed history of this site is contained within ADEC's project file for this site, which is available for public review.

Site Characterization and Cleanup Actions
In 1989, while conducting environmental assessment work preparatory to a Kodiak "Y" Intersection road improvements project, the Alaska Department of Transportation and Public Facilities identified benzene soil contamination from 5 to 16 feet below ground surface (bgs) at concentrations of 0.045 mg/kg to 17.7 mg/kg in the vicinity of the waste oil UST, the heating oil UST, the two 4,000-gallon USTs, and the dispenser pump islands and associated piping.

Prior to a property transaction in 1994, one 150-gallon waste oil, one 600-gallon heating oil, two 4,000 gallon gasoline and one 10,000-gallon gasoline USTs and associated piping were removed and upgraded with a new 20,000-gallon UST. Free product was encountered in the excavations and approximately 450-gallons were removed using a floating skimmer pump and stored in 55-gallon drums and disposed off-site. Approximately 325 cubic yards of impacted soil was excavated, with 262 cubic yards acceptable for disposal at the Kodiak Island Borough Landfill. An additional 63 cubic yards was transported off-site for thermal remediation and disposal. Following the completion of cleanup excavation work, confirmation soil samples were collected for laboratory analysis. This resulted in the detection of 335 mg/kg GRO at 5 feet bgs at the location of the former 10,000-gallon UST; 11,000 mg/kg DRO at 5 feet bgs at the location of the former 150-gallon waste oil UST; 5,100 mg/kg GRO at 8.2 feet bgs at the location of the former 4,000-gallon gasoline USTs; 6,300 mg/kg GRO at 9 feet bgs on the south side of the station property; and 740 to 9,100 mg/kg GRO, 3.2 mg/kg benzene, 140 mg/kg toluene, 340 mg/kg ethylbenzene, 2,100 mg/kg xylenes and 1,100 mg/kg DRO at depths from 2 to 9.5 feet bgs below three pipe joints. Free-phase petroleum product was encountered on the water table surface in all three UST excavation pits. In addition, groundwater contamination was encountered at two more locations; below one fuel piping joint, and in one investigative excavation pit on the southwest side of the gas station building.

In July of 1996, additional release investigation work was conducted at the site with the installation of seven monitoring wells and a soil vapor extraction treatment system. The results of the soil vapor extraction pilot test concluded that vapor extraction was an ineffective method for remediation of petroleum contaminated soil at the site.

In June of 1998, further release investigation work was performed at the site in the effort to define the nature and extent of the petroleum contamination in the soil and groundwater. Seven additional monitoring wells were installed off-site, along the southern property boundary and down-gradient of the facility. DRO soil contamination of 413 mg/kg was encountered at 5 feet bgs while drilling and installing one well located off-site, within the Rezanof Drive right-of-way. Groundwater contamination was not detected in any of these off-site monitoring wells.

On February 3, 2003 ADEC issued a Record of Decision approving alternative soil and groundwater cleanup levels for the site based on the determination that the shallow groundwater aquifer is not a drinking water source, in accordance with 18 AAC 75.350, and that the City of Kodiak Ordinance 13.04.010 requires connection to its public drinking water system.

Following six years of groundwater quality monitoring, the seven off-site monitoring wells were decommissioned in October of 2004 due to the continued absence of contamination within the wells. One additional down-gradient monitoring well was installed to further characterize the groundwater. No contamination was detected in this monitoring well.

In 2010, a supplemental release investigation was conducted at the site to determine the existing site conditions. Seven soil borings were advanced in areas of known residual soil contamination. Four of these areas, located along the east, south and west sides of the service station building detected residual soil contamination. Residual soil contamination still remained in the area of the former 150-gallon waste oil UST at 1,600 mg/kg DRO and 0.4 mg/kg benzene at 5.5 feet bgs; near the southeast corner of the service station building at 0.04 mg/kg benzene at 5.5 feet bgs and 0.4 mg/kg benzene at 8.5 feet bgs; at the location of the former 4,000-gallon USTs at 2.1 mg/kg benzene at 8.5 feet bgs; and on the west side of the service station building at 700 mg/kg GRO and 8.7 mg/kg benzene at 8.5 feet bgs. The groundwater samples detected benzene at 0.020 mg/L in one monitoring well.

Maximum historical soil contaminant concentrations reported to ADEC during the history of this project were:

DRO	11,000 mg/kg
GRO	9,100 mg/kg
Benzene	17.7 mg/kg
Ethylbenzene	340 mg/kg
Toluene	140 mg/kg
Xylenes	2,100 mg/kg

Following corrective action efforts, the soil sample data for benzene still exceeded the alternative soil cleanup level. GRO, DRO, ethylbenzene, and xylenes met the alternative soil

cleanup levels, but remained at levels exceeding the ADEC Method 2 soil cleanup levels around the southern end of the service station building.

Fuel product was present on the shallow groundwater in all three UST excavation pits at the time that the UST systems were removed in 1994. Following corrective action efforts, the groundwater sample data for benzene met the alternative groundwater cleanup level, but still exceeded the ADEC 18 AAC 75.345 Table C groundwater cleanup level in one monitoring well, located in the area of the former 10,000-gallon UST.

Contaminants of Concern
During the release investigations and corrective action/cleanup work performed at this site, soil and water samples were collected and analyzed for GRO, DRO, BTEX, PAHs, total volatile chlorinated solvents, PCBs, and metals.

After completion of the cleanup measures implemented at this site, the following Contaminants of Concern were reported to remain in soil at concentrations exceeding the alternative ADEC soil cleanup levels:

- Benzene

Following the completion of the cleanup measures employed at this site, no Contaminants of Concern were reported to remain in groundwater at concentrations exceeding the alternative ADEC groundwater cleanup levels.

Soil Cleanup Levels
The alternative soil cleanup levels applicable for this site were established in the February 3, 2003, ADEC Record of Decision.

Contaminant	Site Cleanup Level (mg/kg)
DRO	2,500
GRO	3,000
Benzene	0.2

Groundwater Cleanup Levels
The alternative groundwater cleanup levels applicable for this site were also established in the February 3, 2003, ADEC Record of Decision.

Contaminant	Site Cleanup Level (mg/L)
DRO	15
GRO	13
Benzene	0.05
Ethylbenzene	7
Toluene	10

Pathway Evaluation
Following investigation and cleanup at the site, the potential for exposure to any remaining contamination was evaluated using ADEC's Exposure Tracking Model (ETM). Exposure pathways are the conduits by which contamination may reach human or ecological receptors.

ETM results show all current pathways to be: De Minimis Exposure or Pathway Incomplete. A summary of this pathway evaluation is included in Table 1.

Table 1 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	De Minimis Exposure	Surface soil no longer exceeds ADEC's default 'ingestion' and 'direct contact' soil cleanup levels.
Sub-Surface Soil Contact	De Minimis Exposure	Sub-surface soil no longer exceeds ADEC's default 'ingestion' and 'direct contact' soil cleanup levels.
Inhalation – Outdoor Air	De Minimis Exposure	Residual soil contaminant concentrations no longer exceed ADEC's default outdoor inhalation soil cleanup level.
Inhalation – Indoor Air (vapor intrusion)	De Minimis Exposure	Indoor air quality is unlikely to be affected by the residual concentrations of soil or groundwater contamination.
Groundwater Ingestion	Pathway Incomplete	Drinking water is supplied by the City of Kodiak public water system.
Surface Water Ingestion	Pathway Incomplete	Residual contamination has no potential to contact surface water, and drinking water is supplied by the City of Kodiak public water system.
Wild Foods Ingestion	Pathway Incomplete	Contaminants of concern are not bioaccumulative in plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	There is no potential for residual contamination to contact ecological receptors.

Notes to Table 1: "De Minimis Exposure" means that, in ADEC's judgment, receptors are unlikely to be affected by the minimal concentration of remaining contamination. "Pathway Incomplete" means that, in ADEC's judgment, contamination has no potential to contact receptors.

ADEC Decision

The cleanup actions to date have served to reduce soil and groundwater contaminant concentrations to acceptable levels. Based on the information available, ADEC has determined no further assessment or cleanup action is required. There is no longer an unacceptable risk to human health or the environment. Therefore this site is being issued a Corrective Action Complete determination. The ADEC Contaminated Sites Database will be updated to reflect the change in site status as 'Cleanup Complete'.

Although a Corrective Action Complete determination has been granted, residual petroleum contamination remains in sub-surface soil (primarily around the southern end of the service station building), and ADEC approval is still required for off-site transport or disposal of any soil with residual concentrations of petroleum contamination, in accordance with the requirements of 18 AAC 78.274(b), and 18 AAC 78.600(h).

It should also be noted that movement or use of potentially contaminated soil in a manner that results in a violation of 18 AAC 70 water quality standards is unlawful.

All remaining groundwater monitoring wells must now be properly decommissioned in accordance with ADEC's February 2009 Monitoring Well Guidance. A work plan which identifies proposed decommissioning procedures must be prepared and provided for ADEC review and approval prior to implementation of those procedures. The decommissioning of these monitoring wells should occur before October 31, 2011, and must be documented in a written report submitted to ADEC by December 31, 2011. This decommissioning work must be performed, or directly supervised by, a 'qualified person', as defined in 18 AAC 75.990(100).

This determination is in accordance with 18 AAC 78.276(f) 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 Corrective Action Complete decision, or any other aspect of this project, you may phone me at (907) 262-3422, or contact me via e-mail at paul.horwath@alaska.gov

Sincerely,

Paul Horwath

Paul Horwath, PE
Environmental Engineer

Cc: John Riggi, P.G., Conestoga-Rovers & Associates
Walter Donat, Landowner, Kodiak