

SEAN PARNELL, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

**DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES PROGRAM**

43335 Kalifornsky Beach Rd. Suite 11
Soldotna, AK 99669
PHONE: (907) 262-5210
FAX: (907) 262-2294
www.dec.state.ak.us

File: 2320.38.003

October 26, 2011

Ms. Marlene Geordge
P.O. Box 56
Salmon, ID 83467-0056

FILE COPY

Re: ADEC Decision Document; Alaska Oil Sales Kenai Bulk Plant
Cleanup Complete Determination

Dear Ms. Geordge:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Alaska Oil Sales Kenai Bulk Plant site located at 608 Bridge Access Road, Kenai, 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, and no further remedial action will be required at this time.

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 Cleanup Complete Determination.

Introduction

Site Name and Location:

Alaska Oil Sales Kenai Bulk Plant
608 Bridge Access Road
Kenai, Alaska 99611

Property Legal Description:

Amended Tract B, US Survey 104, T5N, R1W, Section 4, Seward Meridian, KN 0840002

Name and Mailing Address of Responsible Party:

Mr. Daniel L. Carrier
Chevron Environmental Management Company
145 South State College Blvd., Room 4086
Brea, CA 92821

Landowner:

Marlene George

ADEC Site Identifiers

ADEC Reckey: 2001230125501

ADEC File Number: 2320.38.003

Hazard ID: 3763

Regulatory authority under which the site is being cleaned up:

18 AAC 75

Background

This site was developed in the 1960's as a bulk fuel storage and sales facility and operated until 2001 when the facility was decommissioned. The site currently consists of one large vacant steel-frame warehouse structure that includes a garage shop addition and a perimeter fence around the property line. In 2001, eight above ground storage tanks with concrete foundations, a concrete containment wall with an over soil liner, a pump house with concrete slab and foundation, a tank truck loading rack with concrete slab with perimeter drain and sump, a below ground oil-water separator and dry well, as well as above and below ground fuel piping and valves, and sump drains were all removed.

Site Characterization and Cleanup Actions

During decommissioning of the bulk fuel storage tank systems in 2001, petroleum contaminated soil was encountered in several surface and subsurface areas with most of the contamination located 2 to 7 feet below ground surface (bgs). The volume of contaminated soil was estimated at 800 to 1,200 cubic yards, with 30 to 40 percent of this below the water table. Groundwater is encountered at approximately 8 feet below ground surface. All soils excavated during the 2001 decommissioning were placed back into their excavation pits. Diesel range organics (DRO) up to 6,610 mg/kg, gasoline range organics (GRO) up to 895 mg/kg, and benzene up to 12 mg/kg was encountered in the soil at depths from 5.2 to 12 feet bgs.

On September 8, 2004 four piezometers were installed around the southern portion of the property in the area where petroleum soil contamination was encountered in order to further evaluate the environmental conditions and determine the groundwater flow direction. Based on the results of water level measurements obtained from this survey, groundwater flow direction was determined to be southwesterly, toward the Kenai River. Petroleum hydrocarbon contamination odor was detected from 2 to 6 feet below ground surface along the southeast property line.

In May of 2005, 25 onsite soil borings were advanced with ten of the soil borings being made into groundwater monitoring wells. The four piezometers were decommissioned. Soil contamination consisting of 260 to 7,800 mg/kg DRO from 2.2 to 4.2 feet bgs, 310 to 2,200 mg/kg GRO from 2.2 to 4.0 ft bgs, and 0.6 mg/kg benzene from 2.6 to 3.0 ft bgs was detected during this site assessment work. Petroleum contaminated groundwater was encountered in eight of the ten monitoring wells. Concentrations from 2.3 to 21.0 mg/L DRO, 3.0 to 38.0 mg/L

GRO, 0.033 to 0.20 mg/L benzene, 10 mg/L toluene, and 1.6 to 38.0 mg/L residual range organics (RRO) were detected.

In 2006 fifteen additional soil borings were installed to further evaluate the petroleum impacted soil, and two additional monitoring wells were installed to further assess the full extent of the petroleum contamination at the site and the potential migration of dissolved-phase constituents towards the Kenai River. GRO, DRO, and benzene soil contamination was encountered at depths from 1 to 8 ft. bgs with GRO concentrations ranging from 1,000 to 7,300 mg/kg, DRO from 1,500 to 6,600 mg/kg, and benzene from 1.3 mg/kg to 7 mg/kg. Groundwater contamination was also encountered with detections of GRO at 31 mg/L, DRO at 13 mg/L, benzene at 0.086 mg/L, toluene at 8.8 mg/L, and Polynuclear Aromatic Hydrocarbons (PAHs) above the groundwater cleanup levels was encountered in one of the off-site monitoring wells.

In 2007 a corrective action plan was implemented to address three areas of concern: the former above ground storage tanks and oil/water separator area, the former pump area, and the former tank truck loading area. Two areas were excavated; one was in the southern portion of the property in the area of the former above ground storage tanks and oil/water separator, and former pump area. The other was at the former tank truck loading area. Approximately 2,291 tons of contaminated soil was removed from these two excavation areas. These excavated soils were transported to the former Chevron Nikiski Facility for thermal treatment. DRO soil contamination remained along the southeastern property line at concentrations of 1,080 and 2,370 mg/kg at 2.5 ft bgs.

The latest soil and groundwater sampling was conducted in June of 2010. Groundwater contamination was detected at the following concentrations: DRO at 3.5 mg/L, GRO at 4.3 mg/L, and benzene at 0.085 mg/L. Soil contamination was detected at the following concentrations: DRO at 2,700 mg/kg, and benzene at 0.04 and 0.1 mg/kg at depths of 4 to 6.5 ft bgs.

Contaminants of Concern

During the investigations at this site, soil and water samples were analyzed for DRO, GRO, RRO, volatile organic compounds (VOCs) including benzene, toluene, ethylbenzene, and xylenes (BTEX), and PAHs. Following the completion of the cleanup measures employed at this site, residual concentrations of the following Contaminants of Concern remained at this site in soil and/or groundwater, in excess of the ADEC Cleanup Levels:

- Diesel Range Organics (DRO)
- Gasoline Range Organics (GRO)
- Benzene

Cleanup Levels

The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Table B1 and Table B2, Under 40 inch Zone, 'Migration to Groundwater' or 'Ingestion', whichever is lesser.

<u>Contaminant</u>	<u>Site Cleanup Level (mg/kg)</u>
• Diesel Range Organics	250
• Benzene	0.025

The default groundwater cleanup levels for this site are established in 18 AAC 75.345 Table C, Groundwater Cleanup Levels.

<u>Contaminant</u>	<u>Site Cleanup Level (mg/L)</u>
• Diesel Range Organics	1.5
• Gasoline Range Organics	2.2
• Benzene	0.005

Pathway Evaluation

Following investigation and cleanup at the site, 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	Pathway Incomplete	Impacted surface soils were removed during the 2007 cleanup excavation work.
Sub-Surface Soil Contact	De minimus Exposure	Residual sub-surface soil concentrations meet the applicable ADEC direct contact soil cleanup levels.
Inhalation – Outdoor Air	De minimus Exposure	Residual soil concentrations meet the applicable ADEC outdoor air inhalation soil cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De minimus Exposure	The existing building is 30 or more feet away from residual contaminants, and indoor air is unlikely to be affected by the minimal mass of remaining contamination.
Groundwater Ingestion	Pathway Incomplete	Site is serviced by the City of Kenai public water system.
Surface Water Ingestion	Pathway Incomplete	Residual contamination has no potential to impact the nearby Kenai River. The river is subject to salt water intrusion in this area and is unsuitable as a drinking water source.
Wild Foods Ingestion	Pathway Incomplete	Residual contamination has no potential to impact the nearby Kenai River. Contaminants of concern are not bio-accumulative in plants or animals
Exposure to Ecological Receptors	Pathway Incomplete	Residual contamination has no potential to impact terrestrial or aquatic receptors.

Notes to Table 1: “De minimis Exposure” means that in ADEC’s judgment, receptors are unlikely to be affected by the minimal mass of remaining contamination. “Pathway Incomplete” means that in ADEC’s judgment, contamination has no potential to contact receptors.

ADEC Decision

Based on the most recent soil and groundwater samples collected at this site, soil and groundwater contamination remains on site above established default cleanup levels. However, ADEC has determined that this site does not pose an unacceptable risk to human health or the environment, subject to the below stipulated conditions. Therefore, we are issuing this ‘Cleanup Complete’ decision, subject to the following conditions:

1. City of Kenai public water service is provided to this property. Water wells may not be installed on this property without the prior review and approval of ADEC.
2. In accordance with 18 AAC 75.325(i), contaminated soil or water may not be moved or disposed without ADEC’s prior written approval. The excavation of soil on this property in the vicinity of the former above ground storage tanks, former containment dike, former pump house, former tank truck loading rack, former below ground oil-water separator and dry well, and the former above ground fuel piping valves, and sump drains may expose contaminated soil or water requiring proper safety, management, and disposal practices. Chevron is responsible for any residual contamination. Any person(s) excavating soil or moving soil or water from the vicinity of the former cleanup excavation areas shall contact ADEC and should coordinate with Chevron. Chevron shall provide the services of a qualified impartial third party, as required in 18 AAC 75, in order to properly monitor, assess, manage, treat, and dispose of any contaminated media. Chevron shall provide for the proper handling, treatment, and disposal of any contaminated soils or groundwater encountered in accordance with all applicable ADEC regulations at that time.

The ADEC Contaminated Sites Database will be updated to reflect the change in site status to ‘Cleanup Complete’, and will include a description of the contamination remaining at the site.

This determination is in accordance with 18 AAC 75.380(d) 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.

It should 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.

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 closure decision, please contact the ADEC project manager, currently Paul Horwath, at (907) 262-3422 or via e-mail at paul.horwath@alaska.gov

Sincerely,

A handwritten signature in black ink that reads "Paul Horwath". The signature is written in a cursive style with a large initial "P".

Paul Horwath, PE
Environmental Engineer

Cc: Mr. Daniel L. Carrier, Chevron
Nicholas Greco, Conestoga-Rovers & Associates