

STATE OF ALASKA

1513.26.050

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DEPT. OF ENVIRONMENTAL CONSERVATION DIVISION OF SPILL PREVENTION AND RESPONSE CONTAMINATED SITES REMEDIATION PROGRAM

August 22, 2002

Mr. Ken Gaylord
Regional Supervisor
Environmental Affairs & Engineering
Tesoro Alaska
3450 South 344th Way, Suite 100
Auburn, WA 98001

Re: No Further Remedial Action Planned
Former Unocal Station # 6431, Juneau
Database ID No. 98110033501

The Alaska Department of Environmental Conservation (DEC) has reviewed the Gilfilian Engineering and Environmental Testing closure report and request for no further action at the referenced facility, currently known as Capital Service. The site was closed by DEC in 1999 but reopened in 2001 based on new information.

Site History

The underground fuel storage system was replaced in June 1995. During the course of the upgrades contaminated soil was encountered. The soil was excavated and thermally treated, however, a small amount of Diesel Range Organics (DRO) contamination was left in place 13 feet below ground surface. Based on information provided by your consultant, DEC agreed that the remaining soil was *de-minimus* and no further action was required.

In December 1998 a 520-gallon waste oil tank was removed. The tank, installed during the 1995 upgrades, had never been used. Gilfilian detected a small amount of contaminated soil at the bottom of the excavation, which was attributed to the residual contamination left in place in 1995. No further action was required by DEC.

A Phase II Environmental Site Assessment was completed in March 2001 in conjunction with Tesoro's sale of the property to Paul McCormack. The assessment confirmed the presence of DRO and benzene in the vicinity of the fuel dispenser. Petroleum compounds were not detected in ground water.

Additional assessment occurred during the summer of 2001. Soil sampling confirmed that lead and benzene were present from the surface to a depth of 5 feet near the western dispenser station. Lead was also detected in ground water above the regulatory cleanup level of 0.015 parts per million.

A second ground water monitoring event in September 2001 confirmed the presence of lead above the regulatory cleanup level. Due to the presence of fine sediment particles in the previous ground water samples, the sample collected in December 2001 was filtered. Laboratory results did not detect dissolved lead in the ground water above the practical quantitation limit. Dissolved lead was not detected during the March 2002 ground water monitoring event.

In October 2001 DEC approved disposal of seven drums of contaminated drill cuttings associated with the summer 2001 assessment. The drill cuttings were taken to Alaska Soil Recycling in Anchorage.

Remaining On-Site Soil Contamination

DRO and benzene are present above cleanup levels near the northwestern fuel dispenser. The contamination appears to be limited to a 10' x 15' area and within five feet of the ground surface. No downward contaminant migration was noted in the soil borings. Contaminant migration to the ground water table is unlikely since the surface is well drained and covered with asphalt and concrete.

Approved Cleanup Levels

The approved soil cleanup levels are the most stringent levels for the over 40-inch precipitation zone. These cleanup levels, found at 18 AAC 75.341 Tables B1 and B2, are as follows for the detected contaminants.

<u>Contaminant</u>	<u>Cleanup Level (mg/kg)</u>
Gasoline Range Hydrocarbons	260
Diesel Range Hydrocarbons	230
Benzene	0.02
Toluene	4.8
Ethylbenzene	5
Total Xylenes	69
Lead	1000 ¹

Lead was the only contaminant detected in ground water above the 18 AAC 75.345, Table C cleanup level of 0.015 mg/kg. However, groundwater impacts do not appear to extend off the site, and groundwater is not:

- currently used for a private or public drinking water source;
- within the zone of contribution of an active private or public drinking water system;
- within a recharge area for a private or public drinking water well, a wellhead protection area, or a sole source aquifer;
- a reasonably expected future source of drinking water considering its proximity to low quality, tidally-influenced water (Gilfilian, April 2002) and the availability of a municipal water supply; and
- will not be transported to any ground water source that is a current or reasonably expected potential future source of drinking water.

¹ The lead cleanup level of 1,000 mg/kg is for a commercial or industrial land-use scenario. The site is zoned light commercial.

Cumulative Human Health Risk

For contamination that remains on-site following a cleanup, a chemical that is detected at one-tenth or more of the Table B1 inhalation or ingestion values set out in 18 AAC 75.341(c) or the Table B2 values set out in 18 AAC 75.341(d) must be included when calculating cumulative risk under 18 AAC 75.325(g). No contaminants included in petroleum cumulative risk calculations were detected at concentrations equal to or greater than one-tenth the risk-based ingestion or inhalation levels. Lead contamination in soil or ground water is not included in cumulative risk calculations.²

Long Term Ground Water Monitoring

Annual ground water monitoring shall be conducted at MW-4 for two years following the date of this determination to ensure that site conditions remain stable. Sampling shall occur at both high and low tidal stages. Both filtered and unfiltered samples will be collected and analyzed for lead. Petroleum constituents shall include benzene, toluene, ethylbenzene, total xylenes, Gasoline Range Organics (GRO) and DRO.

Ecological Receptors

Ecological receptors are not present at the site. No potential migration pathways are present to transport contaminants to off-site ecological receptors.

Determination

The investigation and cleanup of Former Unocal # 6431 has met all requirements specified in 18 Alaska Administrative Code (AAC) 75 Article 3 - Discharge, Reporting, Cleanup, and Disposal of Oil and Other Hazardous Substances and 18 AAC 78, Underground Storage Tanks. Based on the information provided by your consultant regarding the accessibility of the remaining contaminated material, groundwater use at the site and in the area, and human health and ecological risks, DEC agrees that an issuance of **No further Remedial Action Planned** is appropriate for this site. This determination is subject to the following Institutional Controls.

Institutional Controls

The following Institutional Controls are established for this property until such time that contaminant concentrations in soil and groundwater are shown to meet the most stringent cleanup criteria.

1. A database record will be entered into the DEC's Contaminated Sites Database that will include information pertaining to the location and estimated quantity of contaminated soil that remains onsite.
2. The long term monitoring requirements will be maintained and evaluated after the two-year monitoring period to determine if additional groundwater monitoring is warranted.

² Lead contamination in soil or groundwater is not included in cumulative risk calculations. EPA found it inappropriate to apply a reference dose or cancer slope factor to lead (IRIS, 1988). The residential lead soil cleanup level in Tables B1 is based on the Integrated Exposure Uptake Biokinetic (IEUBK) model.

3. Additional contaminated material shall be investigated and appropriately managed or removed in accordance with DEC cleanup requirements at such time if and when it becomes accessible through major structural modifications or demolition of current structures on the property.
4. Groundwater supply wells will not be installed on this property.

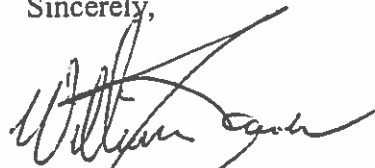
These Institutional Controls were verbally reviewed with the current property owner, Paul McCormack, on August 22, 2002. Mr. McCormack agrees with the controls.

Closure

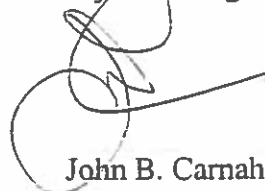
In accordance with 18 AAC 75.380(d)(1) and 18 AAC 78.276, additional investigation and cleanup may be required if new information is discovered which leads DEC to make a determination that the cleanup described in this decision is not protective of human health, safety, and welfare or the environment.

If you are in disagreement with this decision you may seek an adjudicatory hearing under 18 AAC 15.200 – 18 AAC 15.920 within 30 days of the mailing of this decision. Please call me at (907) 465-5208 if you have any questions.

Sincerely,



William James
Project Manager



John B. Carnahan
Section Manager

cc: Kris Ivarson – Gilfilian Engineering
Paul McCormack – Capital Service
CBJ Community Development