# STATE OF ALASKA

**DEPT. OF ENVIRONMENTAL CONSERVATION**

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

***SEAN PARNELL, GOVERNOR***

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File: 2100.26.096
Return Receipt Requested
Article No: 7010 2780 0000 2178 4988

October 5, 2011

Ms. Amy Gilpin
Project Manager
Chevron EMC
611 Bollinger Canyon Road
San Ramon, CA 94583

Re: Closure Decision Document; Former Texaco Service Station 21-1075,
901 C Street 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 Former Texaco Service Station 21-1075, 901 C Street site. Based on the information provided to date, the ADEC has determined that the contaminant concentrations remaining on site do not pose an unacceptable risk to human health or the environment, and this site will be closed.

This decision is based on the administrative record which is located in the offices of the Alaska Department of Environmental Conservation in Anchorage, 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:
Former Texaco Service Station 21-1075
901 C Street
Anchorage, AK 99501
Original Block 103 Lots 11 & 12

Name and Mailing Address of Contact Party:
Ms. Amy Gilpin
Project Manager
Chevron EMC
611 Bollinger Canyon Road
San Ramon, CA 94583

ADEC Site Identifiers
File#: 2100.26.096
Hazard ID: 23824

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

**Background**
A gas station has existed on the property from 1963 to 1983. Four gasoline underground storage tanks (USTs), one used oil UST and a heating oil UST were removed in 1984. The site was then used as an automotive repair garage until 1990. Site closure was initially granted by ADEC in August of 1991, but was reopened after contaminated soil was discovered in 1992 during site excavation work near a former dispenser island. The site currently consists of a commercial building which is connected to Anchorage's public and sanitary sewer systems. The site is within a commercial area. The closest downgradient water well that has been indentified is a city irrigation well that is located across the street from the site.

In 1992, petroleum impacted soil was found during the assessment of the location of a former dispenser island at the site. Monitoring wells installed in 1992 also identified petroleum impacted groundwater. In 1993, three additional monitoring wells were installed and sampled. In 1994, an air sparge/soil vapor extraction system (AS/SVE) was installed to remediate contaminated soil and groundwater. Approximately 5,100 pounds of gasoline range organics (GRO) and 22 pounds of benzene were removed by the AS/SVE system before it was decommissioned in 2005. Confirmation soil samples collected in 2005 identified benzene and methylene chloride contamination remaining in the soil at the site above default cleanup levels. Confirmation soil samples collected in 2009 and 2010 demonstrated that the benzene soil contamination had remediated to default 18 AAC 75 cleanup levels. Groundwater samples collected in 2009 demonstrated that the groundwater now meets default cleanup levels.

On June 27, 2011 ADEC received documentation that the remaining site monitoring well had been decommissioned in accordance with their approved plan.

**Characterization Activities**
During a soil and groundwater assessment conducted in 1992, benzene and GRO contaminated soil and groundwater were identified that were over 18 AAC 75.341 and 18 AAC 75.345, respectively, cleanup levels. Up to 19,400 mg/kg GRO in the soil and up to 1.0 mg/l GRO in the groundwater was detected. Some floating gasoline product was encountered in one monitoring well for a one month period in

1992. This product was removed with a bailer and did not return after the one month timeframe.

In 1993, three additional monitoring wells were installed off property and sampled. These monitoring wells identified that groundwater contamination had extended off property.

In 1994, an air sparge/soil vapor extraction system (AS/SVE) was installed to remediate contaminated soil and groundwater. Approximately 5,100 pounds of GRO and 22 pounds of benzene were removed by the AS/SVE system before it was decommissioned in 2005.

In 2005, confirmation soil samples collected identified benzene up to 0.05 mg/kg and methylene chloride up to 0.099 mg/kg remaining in the soil on the property above the most stringent (migration to groundwater) 18 AAC 75.341 cleanup levels.

In 2009 confirmation soil samples collected to assess if the benzene and methylene chloride contamination had remediated to default 18 AAC 75.341 cleanup levels. While the benzene soil samples met default cleanup levels (a maximum concentration was detected at 0.0165 mg/kg), some of the soil samples had methylene chloride (up to 0.085 mg/kg) over default cleanup levels (0.016 mg/kg).

In 2010 additional confirmation soil samples collected to assess if the methylene chloride contamination had remediated to default 18 AAC 75.341 cleanup levels. All of the 2010 samples met default cleanup levels (0.016 mg/kg) for methylene chloride with the maximum concentration detected at 0.006 mg/kg.

Groundwater monitoring events occurred between 1992 and 2009. Groundwater sampling showed a continued decline in contaminant concentrations and by 2009, it was demonstrated that the groundwater consistently met 18 AAC 75.345 cleanup levels for benzene and methylene chloride.

**Contaminants of Concern**

During the investigation at this site, soil samples were analyzed for the following: volatile chlorinated solvents (VCSs); gasoline range organics (GRO); and benzene, toluene, ethylbenzene, and xylenes (BTEX). Based on these analyses and knowledge of the source area, the following Contaminants of Concern (COCs) were identified:

- GRO
- Benzene
- Methylene Chloride

However, no COCs remain on site above ADEC's most stringent soil cleanup levels established in 18 AAC 75.341, Method Two, Tables B1 and B2, Migration to Groundwater (MTG) *Under 40 Inch Zone* except for possibly a de minimis amount of methylene chloride contaminated soil (<0.061 mg/kg) located at 5 feet below ground surface at one location (CB-1).

**Cleanup**
The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Tables B1 and B2, Migration to Groundwater.

| Contaminant | Site Cleanup Level (mg/kg) |
|---|---|
| Benzene | 0.025 |
| GRO | 300 |
| Methylene chloride | 0.016 |

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

| Contaminant | Site Cleanup Level (mg/L) |
|---|---|
| Benzene | 0.005 |
| GRO | 2.2 |
| Methylene chloride | 0.005 |

**Pathway Evaluation**
Following investigation and cleanup at the site, exposure to the remaining contaminants were 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 pathways to be one of the following: De Minimis Exposure, Exposure Controlled, or Pathway Incomplete. A summary of this pathway evaluation is included in Table 1.

**Table 1 – Exposure Tracking Model Results**

| Pathway | Result | Explanation |
|---|---|---|
| Surface Soil Contact | Pathway Incomplete | The contaminated surface soil was removed during the initial excavation. |
| Sub-Surface Soil Contact | De-Minimis Exposure | Sub-surface soil confirmation samples collected were below direct contact cleanup levels and are considered De-Minimis in volume. Therefore risk via this pathway is considered insignificant. |
| Inhalation – Outdoor Air | De-Minimis Exposure | The volatile organic compounds were non-detect in the confirmation samples but one location had a detection limit above the most stringent cleanup levels. The possible contamination at this one location is considered De-Minimis in volume. Therefore risk via this pathway is considered insignificant. |

| | | |
|---|---|---|
| Inhalation – Indoor Air (vapor intrusion) | De-Minimis Exposure | The volatile organic compounds were non-detect in the confirmation samples but one location had a detection limit above the most stringent cleanup levels. The possible contamination at this one location is considered De-Minimis in volume. Therefore risk via this pathway is considered insignificant. |
| Groundwater Ingestion | De-Minimis Exposure | Groundwater samples were analyzed for BTEX, VCS, and GRO and are now below default cleanup levels and are considered De-Minimis in volume. Therefore risk via this pathway is considered insignificant. |
| Surface Water Ingestion | Pathway Incomplete | Surface water is not used as a drinking water source in this area. |
| Wild Foods Ingestion | Pathway Incomplete | This area is not used for harvesting wild foods. |
| Exposure to Ecological Receptors | Pathway Incomplete | This area does not have ecological receptors. |

**Notes to Table 1:** "De-Minimis exposure" means that in ADEC's judgment receptors are unlikely to be affected by the minimal volume of remaining contamination. "Pathway incomplete" means that in ADEC's judgment contamination has no potential to contact receptors. "Exposure controlled" means there is an administrative mechanism in place limiting land or groundwater use, or a physical barrier in place that deters contact with residual contamination.

**ADEC Decision**

The cleanup actions to date have served to adequately address petroleum contaminated soil from the site. Based on the information available, ADEC has determined no further assessment and/or cleanup action is required. There is no unacceptable risk to human health or the environment, and this site will be designated as Corrective Action Complete on the Department's database

Although a Corrective Action Complete determination has been granted, ADEC approval is required for off-site soil disposal in accordance with 18 AAC 78.600(h) and 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.

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 decision document, please contact the ADEC Project Manager, Robert Weimer at (907) 269-7525.

Approved By,

Rich Sundet
Environmental Manager

Recommended By,

Robert Weimer
Environmental Specialist

cc: Andy Ellsmore, Conestoga-Rovers & Associates