

SEAN PARNELL, GOVERNOR

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

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File: 2333.26.037

April 7, 2011

Mr. Peter Ribbens
Tesoro Alaska Company
P.O. Box 3369
Kenai, AK 99611

Re: Decision Document; Soldotna Texaco - Tesoro Northstore #207
Corrective Action Complete Determination

Dear Mr. Ribbens:

The Alaska Department of Environmental Conservation (ADEC), Contaminated Sites Program has completed a review of the environmental records associated with the Soldotna Texaco - Tesoro Northstore #207 site, located in Soldotna, 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 Corrective Action Complete determination.

Introduction

Site Name and Location:

Soldotna Texaco - Tesoro Northstore #207
44263 Sterling Highway
Soldotna, Alaska

Name and Mailing Address of Land Owner:

Gambucci Properties LLC
4520 Peacock Gap Drive
San Jose, CA 95127

ADEC Site Identifiers

Reckey: 1989230034202
File: 2333.26.037
Hazard ID: 23440

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 four underground fuel storage tanks (USTs) and associated piping and dispenser systems that were removed and upgraded in 1988. The four USTs contained gasoline and diesel product during their history of use. 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 xylene (BTEX); and lead. The site and immediately adjacent properties are served by City of Soldotna public water and sewer systems. A more detailed history of this site is contained within the ADEC's project file for this site, and this file is available for public review.

Site Assessment and Cleanup Actions

The UST's were upgraded in June of 1988, at which time the four USTs were removed and replaced with four new UST's. Approximately 150 cubic yards of contaminated soil was excavated and placed in two areas near the former Texaco bulk fuel plant adjacent to the former Texaco service station, and allowed to aerate. Later in the summer of 1988 these soils were placed on a liner located at the site. To characterize the stockpiled soils and the surface soils surrounding the location of stockpiled soils, soil samples were collected and analyzed for Total Petroleum Hydrocarbon (TPH) in May of 1990, with concentrations up to 14,000 mg/kg TPH detected in the soils surrounding the location of the stockpiled soils.

An evaluation of the subsurface conditions was conducted on May 24, 1991 with total BTEX being detected up to 15.19 mg/kg, and TPH being detected as high as 19,600 mg/kg, at depths ranging from 5 to 18 feet below ground surface. In June of 1992, in an effort to characterize the groundwater quality and to determine if contamination was migrating off-site, groundwater monitoring wells were installed and benzene groundwater contamination was encountered in one of the wells. In March and June of 1994, to further characterize the extent of the groundwater contamination migration, additional monitoring wells were installed and sampled. Free product was observed on the groundwater table down-gradient of the dispenser island, indicating that the source of the petroleum contamination was from the fuel dispenser island. Gasoline, diesel and BTEX groundwater contamination were encountered (maximum concentrations in mg/L) of GRO at 155, DRO at 98.8, benzene at 12.3, toluene at 53.6, ethylbenzene at 6.13, and xylenes at 31.04.

From January to June of 1995 the service station building was demolished. Additional site assessment activities were conducted and Soil Vapor Extraction wells and Air Injection wells were installed. Sample data confirmed that source(s) of contamination was/were from one or more locations along the fuel delivery piping extending west from the retail fuel dispenser

island. Soil contamination was encountered (maximum concentrations in mg/kg) with GRO at 4,020, DRO at 403, benzene at 16.3, toluene at 626, ethylbenzene at 208, and xylenes at 1,103. Groundwater contamination was encountered (maximum concentrations in mg/L) with GRO at 326, DRO at 22.2, benzene at 29.9, toluene at 107, ethylbenzene at 9.47, and xylenes at 56.

From August of 1995 to March of 1996 the four existing USTs (one 12,000-gallon supreme gasoline, one 12,000-gallon regular gasoline, and two 5,000-gallon diesel) were upgraded. Six new fuel dispenser islands and a new convenience store were constructed, including a heated concrete slab with a large overhead canopy. Additional assessment and cleanup activities were performed before the construction of the new fueling station that included the excavation of 8 cubic yards of contaminated soil removed from the area of the former dispenser islands, and 275 cubic yards of contaminated soil removed from the area of the former loading dock. These soils as well as the 150 cubic yards of stockpiled soils from previous site investigations and 75 cubic yards of previously landspread soil were all transported off-site for remediation and final disposal.

Some additional areas of concern were assessed from August to March of 1996. These included a former loading dock, an abandoned on-site septic tank and log crib, a former floor drain, and the location of a former above-ground waste oil tank. Maximum soil sample concentrations (units of mg/kg) of 1,960 DRO, 500 GRO, and 0.53 benzene were encountered in the area of the former loading dock; 9,680 TPH and 1,290 extractable petroleum hydrocarbons (EPH) were encountered in the area of the log crib system; and 10,300 TPH and 9,420 EPH were encountered in the area of the floor drain seepage pit. These soil contaminant concentrations were encountered at depths ranging between 8 to 12 feet below ground surface.

Soil vapor extraction and air sparging treatment systems were operated to treat the subsurface soil and groundwater contamination remaining at the site from 1996 until 2008, until groundwater contaminant concentrations dropped to meet the applicable ADEC groundwater cleanup levels.

In September of 2001 the existing four USTs were removed and replaced with one 20,000-gallon regular gasoline and one 15,000-gallon double compartment (8,000-gallon unleaded gasoline and 7,000-gallon diesel) USTs. Approximately 71.30 tons of petroleum impacted soil was excavated and transported off-site for remediation and final disposal. Confirmation soil samples confirmed that contaminated soil associated with these removed USTs was successfully removed from the tank site.

In October of 2010, one confirmation soil boring was advanced in the area of the former fuel dispenser island and benzene and ethylbenzene soil contamination was detected from 4 to 12 feet below ground surface, demonstrating that residual soil contamination remained at this location above the applicable ADEC soil cleanup levels (Method 2 soil 'migration to groundwater').

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

Total Petroleum Hydrocarbons	19,600 mg/kg
Extractable Petroleum Hydrocarbons	1,290 mg/kg
DRO	403 mg/kg
GRO	4,020 mg/kg
Benzene	16.3 mg/kg
Toluene	626 mg/kg
Ethylbenzene	208 mg/kg
Xylenes	1,103 mg/kg

Following the completion of all corrective action efforts, some residual soil contamination remains at concentrations exceeding the applicable ADEC Method 2 soil cleanup levels.

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

DRO	67.10 mg/L
GRO	326 mg/L
Benzene	29.9 mg/L
Toluene	107 mg/L
Ethylbenzene	9.47 mg/L
Xylenes	56 mg/L

Following corrective action efforts, the groundwater quality met the applicable ADEC Table C groundwater cleanup levels.

Contaminants of Concern

During the investigations and corrective action/cleanup work performed at this site, soil and water samples were collected and analyzed for gasoline range organics (GRO), diesel range organics (DRO), and volatile organic compounds (VOCs) including benzene, toluene, ethylbenzene, and xylenes (BTEX). Following the completion of the cleanup measures implemented at this site, the following Contaminants of Concern were reported to remain in subsurface soil at concentrations exceeding the applicable ADEC soil cleanup levels:

- Benzene
- Ethylbenzene

Soil Cleanup Levels

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

Groundwater Cleanup Levels

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

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	De Minimis Exposure	Surface soil meets ADEC's default 'ingestion' and 'direct contact' soil cleanup levels.
Sub-Surface Soil Contact	De Minimis Exposure	Sub-surface soil meets ADEC's default 'ingestion and 'direct contact' soil cleanup levels.
Inhalation – Outdoor Air	De Minimis Exposure	Sub-surface soil meets ADEC's default outdoor inhalation soil cleanup level.
Inhalation – Indoor Air (vapor intrusion)	De Minimis Exposure	Sub-surface soil meets ADEC's default outdoor inhalation soil cleanup level. Indoor fuel vapors are inevitable due to the repetitive outdoor fueling of motor vehicles.
Groundwater Ingestion	Pathway Incomplete	Drinking water is supplied by the City of Soldotna public water system.
Surface Water Ingestion	Pathway Incomplete	There is surface water located within ¼ mile of the site; however, this site meets applicable ADEC groundwater cleanup levels, and will not impact surface waters.
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 exposure to ecological receptors since residual soil contamination is restricted to within the boundaries of this property.

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

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. This site no longer poses an unacceptable risk to human health or the environment. Therefore this site is being issued a Corrective Action Complete determination, and will be designated as 'Cleanup Complete' on the department's database.

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.

Although a Corrective Action Complete determination has been granted, ADEC approval is still required for off-site soil disposal in accordance with 18 AAC 78.600(h). 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 Corrective Action Complete decision, or any other aspect of this project, you may phone me at (907) 262-5210 extension 250, or contact me via e-mail at paul.horwath@alaska.gov

Sincerely,



Paul Horwath, PE
Environmental Engineer

Cc: Sue Kent, Kent & Sullivan, Inc., Soldotna, AK

Pdh.Soldotna Texaco - Tesoro Northstore #207 _ Corrective Action Complete_4-6-11