THE STATE of ALASKA
GOVERNOR BILL WALKER

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

555 Cordova Street
Anchorage, AK 99501
Phone: 907-269-7503
Fax: 907-269-7687
www.dec.alaska.gov

File: 2100.26.111

September 25, 2017

Mr. Marc C. Oler
Shell Oil Products US
20945 South Wilmington Avenue
Carson, CA 90810

Re: **Decision Document: Texaco - #10**
Cleanup Complete Determination

Dear Mr. Oler:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (DEC) has completed a review of the environmental records associated with Texaco - #10 located at 1501 West Northern Lights Boulevard in Anchorage, 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 unless new information becomes available that indicates residual contaminants may pose an unacceptable risk.

This Cleanup Complete determination is based on the administrative record for Texaco - #10, which is located in the DEC office in Anchorage, Alaska. This decision letter summarizes the site history, cleanup actions and levels, and standard site closure conditions that apply.

Site Name and Location:
Texaco - #10
1501 West Northern Lights Boulevard
Anchorage, AK 99515

Name and Mailing Address of Contact Party:
Mr. Marc C. Oler
Shell Oil Products US
20945 South Wilmington Avenue
Carson, CA 90810

DEC Site Identifiers:
File No.: 2100.26.111
Hazard ID.: 23759

Regulatory Authority for Determination:
18 AAC 78 and 18 AAC 75

Site Description and Background

In September 1996 soil samples were collected during the closure of a used oil underground storage tank (UST) system and the upgrade of the existing diesel and gasoline UST systems. The site assessment identified contamination in soil associated with the used oil tank, and the diesel and gasoline piping and dispenser locations. The soil samples identified detectable concentrations of volatile organic compounds

(VOCs) including benzene, toluene, ethylbenzene, and xylenes (BTEX), gasoline range organics (GRO), diesel range organics (DRO), and residual range organics (RRO) at the property.

Contaminants of Concern

During the various investigation and cleanup activities at the site, soil and/or groundwater samples were collected and analyzed for DRO, GRO, RRO, volatile organic compounds including BTEX, polynuclear aromatic hydrocarbons (PAHs), metals, and polychlorinated biphenyls (PCBs). The results of these analyses indicated the following contaminants were present in soil and/or groundwater at concentrations that exceed DEC cleanup levels and are therefore considered contaminants of concern at the site:

- GRO
- DRO
- RRO
- benzene
- ethylbenzene
- toluene
- xylenes

Cleanup Levels

Soil cleanup levels applicable to the site are found in 18 AAC 75.341(c), Table B1, and 18 AAC 75.341 (d), Table B2 for the migration to groundwater pathway. Groundwater cleanup levels are found in 18 AAC 75.345 Table C. Approved cleanup levels for contaminants of concern are listed below in Table 1.

Table 1 – Approved Cleanup Levels

Contaminant	Soil (mg/kg)	Groundwater (ug/L)
GRO	300	2,200
DRO	250	1,500
RRO	11,000	1,100
benzene	0.022	4.6
ethylbenzene	0.13	15
toluene	6.7	1,000
xylenes	1.5	190

mg/L = milligrams per liter
ug/L = micrograms per liter

Characterization and Cleanup Activities

In September 1996 the UST site assessment identified contamination associated with the used oil tank, and the diesel and gasoline piping and dispenser locations. The soil samples contained up to 5,000 mg/kg GRO, 18.6 mg/kg toluene, 11.0 mg/kg ethylbenzene, 1,320 mg/kg xylenes at the piping/dispenser locations and up to 6,880 mg/kg DRO at the former used oil tank location. In October 1996 twenty five cubic yards of contaminated soil generated during the site assessment was transported to Alaska Soil Recycling for thermal treatment.

Between 1997 and 2010, 15 soil borings were advanced and nine monitoring wells were installed to delineate the nature and extent of contamination. These investigations indicated that the contamination had reached the shallow groundwater located at 13 feet below ground surface and that the contamination appeared to be confined to the service station property.

In September 2012, 18 soil samples were collected from 5 soil borings to evaluate current contaminant concentrations at the site. Up to 17 mg/kg GRO, 1,200 mg/kg DRO, 5,900 mg/kg RRO, and 0.021 mg/kg benzene were detected. Contaminants exceeding migration to groundwater cleanup levels were only found at the former used oil UST that was located to the west of the service station building.

Over the course of the investigation at the site, nine groundwater monitoring wells were installed and the groundwater was sampled periodically between 1997 and 2016. Initial groundwater samples contained RRO up to 2,800 ug/l and benzene up to 18.0 ug/l. By September, 2016, all contaminants in groundwater were below cleanup levels. On August 9, 2017 the nine site monitoring wells were decommissioned.

Cumulative Risk Evaluation

Pursuant to 18 AAC 78.600(d), when detectable contamination remains on-site following a cleanup, a cumulative risk determination must be made that the risk from hazardous substances does not exceed a cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways and does not exceed a cumulative noncarcinogenic risk standard at a hazard index of one across all exposure pathways.

Based on a review of the environmental record, DEC has determined that residual contaminant concentrations meet the human health cumulative risk criteria for residential land use.

Exposure Pathway Evaluation

Following investigation and cleanup at the site, exposure to the remaining contaminants was evaluated using DEC'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 or Pathway Incomplete. A summary of this pathway evaluation is included in Table 2.

Table 2 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	De-Minimis Exposure	Contamination remains in surface soil (0 to 2 feet below ground surface), but is below direct contact cleanup levels.
Sub-Surface Soil Contact	De-Minimis Exposure	Contamination remains in the sub-surface, but is below direct contact cleanup levels.
Inhalation – Outdoor Air	De-Minimis Exposure	Contamination remains in the sub-surface, but is below inhalation cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	Groundwater concentrations are below residential vapor intrusion target levels.
Groundwater Ingestion	De-Minimis Exposure	Contaminants are not present in groundwater at concentrations above cleanup levels

Surface Water Ingestion	Pathway Incomplete	Surface water is not used as a drinking water source in the vicinity of the site.
Wild and Farmed Foods Ingestion	Pathway Incomplete	Wild or farmed foods are not collected at the site.
Exposure to Ecological Receptors	Pathway Incomplete	There are no nearby ecological receptors.

Notes to Table 2: "De-Minimis Exposure" means that in DEC's judgment receptors are unlikely to be adversely affected by the minimal volume or concentration of remaining contamination. "Pathway Incomplete" means that in DEC's judgment contamination has no potential to contact receptors. "Exposure Controlled" means there is an institutional control in place limiting land or groundwater use and there may be a physical barrier in place that prevents contact with residual contamination.

DEC Decision

Soil and groundwater contamination at the site have been cleaned up to concentrations below the approved cleanup levels suitable for residential land use. This site will receive a "Cleanup Complete" designation on the Contaminated Sites Database, subject to the following standard conditions:

Standard Conditions

1. Any proposal to transport soil or groundwater off-site requires DEC approval in accordance with 18 AAC 78.600(h). A "site" as defined by 18 AAC 78.995(134) means an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership.

2. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.

3. Groundwater throughout Alaska is protected for use as a water supply for drinking, culinary and food processing, agriculture including irrigation and stock watering, aquaculture, and industrial use. Contaminated site cleanup complete determinations are based on groundwater being considered a potential drinking water source. In the event that groundwater from this site is to be used for other purposes in the future, such as aquaculture, additional testing and treatment may be required to ensure the water is suitable for its intended use.

This determination is in accordance with 18 AAC 78.276(f) and does not preclude DEC from requiring additional assessment and/or cleanup action if future information indicates that contaminants at this site may pose an unacceptable risk to human health, safety, or welfare or to 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, 555 Cordova Street, Anchorage, Alaska 99501-2617, 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, P.O. Box 111800, Juneau, Alaska 99811-1800, 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 feel free to contact me at (907) 269-7525, or email at robert.weimer@alaska.gov.

Sincerely,

Robert Weimer
Project Manager

Cc: Mark Flaker, Big Corner LLC
Mark Peterson, Groundwater & Environmental Service, Inc.