



THE STATE
of **ALASKA**

GOVERNOR MICHAEL J. DUNLEAVY

**Department of
Environmental Conservation**

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

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File: 2100.26.012

June 10, 2019

Chevron Environmental Management Company
ATTN: Eric G. Hetrick, Team Lead – 76 Products
Downstream Business Unit
6001 Bollinger Canyon Road
San Ramon, CA 94583

Re: **Decision Document: Chevron - #4115
Cleanup Complete Determination**

Dear Mr. Hetrick:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Chevron - #4115 site located at 11460 Old Seward Highway 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 the Chevron - #4115 site, which is located in the ADEC 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:

Chevron - #4115
11460 Old Seward Highway
Anchorage, Alaska 99515

Name and Mailing Address of Contact Party:

Eric G. Hetrick, Team Lead – 76 Products
Chevron Environmental Management Company
Downstream Business Unit
6001 Bollinger Canyon Road
San Ramon, CA 94583

DEC Site Identifiers:

File No.: 2100.26.012
Hazard ID.: 24094

Regulatory Authority for Determination:

18 AAC 78 and 18 AAC 75

Site Description and Background

A Chevron branded gas station operated at this location from 1963 until January 2008 when the service station building was demolished and its associated underground storage tank system was removed. In 1991 during the repair of a broken drain line petroleum contamination was encountered near the service station building and its underground storage tank system. During subsequent site characterization activities soil and groundwater samples confirmed petroleum contamination at this site.

Contaminants of Concern

During site characterization and cleanup activities at this site, samples were collected from soil and groundwater and analyzed for residual range organics (RRO), gasoline range organics (GRO), diesel range organics (DRO), benzene, toluene, ethylbenzene, xylenes (BTEX), volatile organic compounds (VOCs), RCRA metals, polychlorinated biphenyls (PCBs), and polycyclic aromatic hydrocarbons (PAHs). Based on these analyses, the following contaminants were detected above the applicable cleanup levels and are considered Contaminants of Concern at this site:

- RRO
- GRO
- DRO
- benzene
- 1,2-dibromoethane (ethylene dibromide)

Cleanup Levels

The approved soil cleanup levels are the most stringent of the method 2 soil cleanup levels for the under 40-inch precipitation zone established in 18 AAC 75.341(c) Table B1 and 18 AAC 75.341(d) Table B2. For this site the approved soil cleanup levels are based on the migration to groundwater pathway, except for RRO which is based on the human health pathway. The groundwater cleanup levels found in 18 AAC 75.345 Table C apply at this site.

Table 1 – Approved Cleanup Levels

| Contaminant | Soil (mg/kg) | Groundwater (ug/L) |
|--|-------------------------|-------------------------------|
| RRO | 10,000 | 1,100 |
| GRO | 300 | 2,200 |
| DRO | 250 | 1,500 |
| benzene | 0.022 | 4.6 |
| 1,2-dibromoethane (ethylene dibromide) | 0.00024 | 0.075 |

mg/kg = milligrams per kilogram

ug/L = micrograms per liter

Characterization and Cleanup Activities

In 1991 after petroleum contamination was encountered near the service station building and its underground storage tank system eight monitoring wells were installed to help characterize the nature and extent of the soil and groundwater contamination at this site. In 1992 six additional monitoring wells were installed and 500 cubic yards of contaminated soil was excavated and thermally treated.

In 1995 a soil vapor extraction system was installed and recovery of petroleum product began in the one monitoring well with measurable product. The soil vapor extraction system operated until 2005.

In 1998 a 1,000 gallon used oil tank was removed. In 2008 the service station building was demolished, several of the site monitoring wells were decommissioned, all of its remaining underground storage tanks and their associated piping were removed, and 200 cubic yards of contaminated soil was excavated and thermally treated.

In 2008 additional site characterization was conducted to help check remaining soil contaminant concentrations and to install four replacement monitoring wells. The soil samples collected met site cleanup levels.

In 2009 surface stained areas on the western portion of the property were excavated and confirmation samples were collected demonstrating that those areas met site cleanup levels. Also in 2009 soil sampling was conducted at five other locations to help check remaining soil contaminant concentrations. All of those soil samples collected met site cleanup levels except for one location (SB09-1) that had benzene at 0.03 mg/kg at the soil/water interface located at 45 feet below ground surface.

In 2015 two downgradient monitoring wells were installed near the property boundary to help assess current soil and groundwater concentrations in that area. All soil samples collected from those borings met site cleanup levels.

Some of the properties in the area are served by on-site water wells. Sampling of the nearby drinking water wells was conducted between 1992 and 2017. This sampling included analysis for RRO, DRO, GRO, VOCs, BTEX, and PAHs. All of the sample results from these drinking water wells were either non-detect or below drinking water maximum contaminant levels (MCLs).

Soil samples were collected during numerous release investigation and site assessments between 1991 and 2015. This sampling included analysis for RRO, DRO, GRO, VOCs, BTEX, and PAHs. Based on the sampling results, ADEC has determined that sufficient site characterization has been completed and residual contamination does not remain in the soil at sufficient concentrations to impact unrestricted use.

Groundwater monitoring was conducted at this site from 1991 to 2017. This sampling included analysis for RRO, DRO, GRO, VOCs, BTEX, and PAHs. Based on the 2016 and 2017 groundwater results, ADEC has determined that sufficient site characterization has been completed and residual contamination does not remain in the groundwater at sufficient concentrations to impact unrestricted use.

In 2018 the remaining eight monitoring wells were decommissioned in accordance with an approved work plan.

Cumulative Risk Evaluation

Pursuant to 18 AAC 78.600(d), when 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 non-carcinogenic risk standard at a hazard index of one across all exposure pathways.

Based on a review of the environmental record, ADEC 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 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 2.

Table 2 – Exposure Pathway Evaluation

| Pathway | Result | Explanation |
|---|---------------------|--|
| Surface Soil Contact | De-Minimis Exposure | Contamination was not found in surface soils (0-2 ft. bgs). |
| Sub-Surface Soil Contact | De-Minimis Exposure | Contamination remaining in subsurface (2-15 ft. bgs) is below soil cleanup levels protective of human exposure. |
| Inhalation – Outdoor Air | De-Minimis Exposure | Contamination remaining on site is below soil cleanup levels protective of human exposure. |
| Inhalation – Indoor Air (vapor intrusion) | De-Minimis Exposure | Remaining contamination in soil and groundwater is below the most stringent cleanup levels and is not expected to impact indoor air quality. |
| Groundwater Ingestion | De-Minimis Exposure | Groundwater contamination is below the groundwater cleanup levels. |
| Surface Water Ingestion | Pathway Incomplete | The nearest surface water, the Cook Inlet, is more than 1 mile away and contamination is not expected to migrate. |
| Wild and Farmed Foods Ingestion | Pathway Incomplete | The site is not located in an area where wild or farmed food could be impacted. |
| Exposure to Ecological Receptors | Pathway Incomplete | The site is not located in an area where ecological receptors could be impacted. |

Notes to Table 2: “De-Minimis Exposure” means that in ADEC’s judgment receptors are unlikely to be adversely affected by the minimal volume or concentration of remaining contamination. “Pathway Incomplete” means that in ADEC’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.

ADEC 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. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.
2. 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 ADEC 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 20 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, 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 via email at robert.weimer@alaska.gov.

Sincerely,



Robert Weimer
Project Manager

Note: This letter is being transmitted to you in electronic format only. If you require a paper copy, let us know and we will be happy to provide one to you. In the interest of reducing file space, the Division of SPAR/Contaminated Sites Program is transitioning to electronic transmission of project correspondence.

cc: Spill Prevention and Response, Cost Recovery Unit