



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: 907-269-2021
Fax: 907-269-7687
www.dec.alaska.gov

File: 2100.38.555

August 1, 2017

Joseph M. Slattery
Slattery Properties
4039 21st Avenue West, Suite 306
Seattle, WA 98199

Re: Decision Document: Commercial Property – 600 West Potter Drive
Cleanup Complete Determination

Dear Mr. Slattery:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Commercial Property – 600 West Potter Drive located 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 Commercial Property – 600 West Potter Drive, 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:

Commercial Property – 600 West Potter Drive
600 West Potter Drive
Anchorage, AK 99518

Name and Mailing Address of Contact Party:

Joseph M. Slattery
Slattery Properties
4039 21st Avenue West, Suite 306
Seattle, WA 98199

DEC Site Identifiers:

File No.: 2100.38.555
Hazard ID.: 26417

Regulatory Authority for Determination:

18 AAC 75

Site Description and Background

In the summer of 2015, petroleum contamination was identified in soil on the property while excavating to prepare for construction of a new commercial building. Contact was made with ADEC immediately and the responsible parties worked with ADEC to address the contamination while minimizing construction delays. The site now contains a commercial building structure and parking lot, which the landowner intends to pave once the site has received a cleanup complete designation.

Contaminants of Concern

During the various activities conducted at the site, soil samples were collected and analyzed for gasoline range organics (GRO) by method AK 101, diesel range organics (DRO) by AK 102, residual range organics (RRO) by AK 103, benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8021B, and polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270 SIM. It should be noted that new ADEC cleanup levels were promulgated in November 2016, which changed whether some contaminants were above or below applicable cleanup levels, from when site investigation began in summer 2015. For simplicity, this document refers to contaminants that were above the November 2016 cleanup levels. Based on these analyses, the following contaminants were detected above the applicable cleanup levels and are considered contaminants of concern at this site:

- DRO
- GRO
- Benzene
- Ethylbenzene
- Xylenes
- 1-methylnaphthalene
- 2-methylnaphthalene
- Naphthalene

Cleanup Levels

Soil cleanup levels applicable to the site are the most stringent levels found in 18 AAC 75.341(c), Table B1, and 18 AAC 75.341 (d), Table B2. Groundwater cleanup levels are found in 18 AAC 75.345 Table C. Contaminants detected above their respective cleanup levels in soil or groundwater are considered contaminants of concern at the site and are listed below in Table 1.

Table 1 – Approved Cleanup Levels

Contaminant	Soil (mg/kg)
DRO	250
GRO	300
Benzene	0.022
Ethylbenzene	0.13
Xylenes	1.5
1-methylnaphthalene	0.41
2-methylnaphthalene	1.3
Naphthalene	0.038

mg/kg = milligrams per kilogram

Characterization and Cleanup Activities

Evidence of contamination was discovered in 2015 while excavation was being completed in anticipation of building construction. Excavated soils were found to contain DRO (up to 1,270 mg/kg), benzene (up to 0.0809 mg/kg) and ethylbenzene (up to 0.150 mg/kg) in soils from the southeast corner of the building footer. 14 tons of soil were removed from the site and thermally treated at Alaska Soil Recycling (ASR). Sampling of soils in the center of the building footprint found RRO in one sample at 90.6 mg/kg, below ADEC migration to groundwater cleanup levels. Samples taken from the stockpiles excavated from the

building footer found one sample with DRO at 453 mg/kg from the southern stockpile, above ADEC migration to groundwater cleanup levels, but all other contaminants non-detect. These soils were used under the building foot print, with four feet of clean material placed between it and the building itself with ADEC approval.

Site characterization was conducted in May 2016 in an effort to delineate the extent of contamination and included the installation and sampling of ten soil borings. Soil samples contained DRO (up to 1,530 mg/kg), benzene (up to 0.0396 mg/kg), 1-methylnaphthalene (0.922 mg/kg), and naphthalene (up to 0.224 mg/kg), all above ADEC migration to groundwater cleanup levels, but below human health or ingestion/inhalation levels. This site characterization was considered incomplete, and further characterization was completed in December 2016.

The additional site characterization included the installation and sampling of an additional fifteen soil borings. Contaminants detected above the cleanup level include: GRO at 561 J mg/kg, DRO at 6,550 J mg/kg, benzene up to 2.35 J mg/kg, ethylbenzene up to 37.6 J mg/kg, and xylenes up to 190.2 J mg/kg. All contaminants except xylenes exceeded migration to groundwater cleanup levels, but were below human health or ingestion/inhalation cleanup levels. Because xylenes were detected above human health criteria around soil boring 22 (SB-22), 33 cubic yards of soil were excavated from this location and disposed of at Alaska Soil Recycling in April 2017 in accordance with a remediation work plan. A confirmation sample collected from the excavation contained xylenes up to 19.83 mg/kg, below the human health criteria but above migration to groundwater cleanup levels. During the additional site characterization SB-22 indicated that xylenes dropped to below migration to groundwater cleanup levels at 10-12 feet below ground surface (bgs).

To complete the site characterization effort and investigate a potential source area, a single test pit was excavated along the western edge of the property as part of the remediation work plan. DRO was detected in this test pit up to 782 mg/kg, with all other contaminants non-detect or detected below ADEC migration to groundwater cleanup levels.

Site characterization and remediation activities indicate that the following contaminants remain in subsurface soil at the concentrations and depths noted below.

Contaminant	Soil (mg/kg)	Depth (feet)	Location
DRO	6,550 J mg/kg	5-8	SB-21-5
GRO	74.6 J mg/kg	5-8	SB-21-5
RRO	8,470 J mg/kg	5-6.5	SB-15-5
Benzene	0.0396 mg/kg	5-7.5	SB5-2
Toluene	0.233 J mg/kg	4-6	SB-11
Ethylbenzene	4.03 mg/kg	2	Remediation Excavation W Sidewall
Xylenes	19.83 mg/kg	2	Remediation Excavation W Sidewall
1-methylnaphthalene	27.7 mg/kg	5-8	SB-21-5
2-methylnaphthalene	36 mg/kg	5-8	SB-21-25
Naphthalene	17.7 J mg/kg	5-8	SB-21

BOLD: exceeds November 2016 migration to groundwater cleanup levels

While shallow subsurface soil in discrete areas on the site contain residual petroleum based contaminants at concentrations above the migration to groundwater cleanup levels, the overall site characterization results

demonstrate that these residual contaminants do not pose a migration to groundwater concern. Contaminant concentrations drop below the migration to groundwater cleanup levels at depths between ten and fifteen feet below the ground surface and groundwater was not encountered within 41 feet below ground. Residual contaminants do not exceed the applicable human health risk-based cleanup levels.

Cumulative Risk Evaluation

Pursuant to 18 AAC 75.325(g) 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 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	DRO was only contaminant encountered and at levels below ingestion or inhalation cleanup levels.
Sub-Surface Soil Contact	De-Minimis Exposure	Contaminant concentrations in subsurface soil are below human health cleanup levels
Inhalation – Outdoor Air	De-Minimis Exposure	Contaminant concentrations are below human health cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	Exposure Controlled	There is at least four feet of clean soil between the soil with residual contamination and the building
Groundwater Ingestion	Pathway Incomplete	Groundwater was not encountered during site characterization activities; and a 2014 geotechnical report indicates that groundwater was not encountered down to 41.5 feet below ground surface
Surface Water Ingestion	Pathway Incomplete	Surface water is not used as a drinking water source in this area
Wild and Farmed Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	No evidence of contamination exposure to ecological receptors.

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 contamination remains onsite at concentrations above the default migration to groundwater cleanup levels, however sufficient characterization has been completed and ADEC has made a determination that the remaining contaminants in soil have achieved steady-state equilibrium will not migrate to groundwater. The contaminants do not pose an unacceptable risk to people or ecological receptors. 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 ADEC approval in accordance with 18 AAC 75.325(i). A "site" as defined by 18 AAC 75.990 (115) means an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership. (See attached site figure)
2. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.

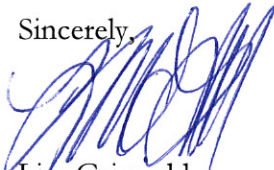
This determination is in accordance with 18 AAC 75.380 and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that contaminants at this site may pose an unacceptable risk to human health, safety, or welfare or to the environment.

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 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, PO 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) 269-2021, or email at lisa.griswold@alaska.gov.

Sincerely,



Lisa Griswold
Project Manager

Electronic cc: Spill Prevention and Response, Cost Recovery Unit
Randy Bell, Bell Tech
Lisa Ebbs