

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE Contaminated Sites Program

> 555 Cordova St Anchorage, AK 99501 Main: 907-269-7691 Fax: 907-269-7687 www.dec.alaska.gov

File No: 2107.26.009

April 27, 2015

Steve Warnke Dimond Center Holding, LLC 800 East Dimond Boulevard, Suite 3-500 Anchorage, AK 99515

Re: Decision Document: Spring Brook Vacant Property Corrective Action Complete Determination

Dear Mr. Warnke:

The Alaska Department of Environmental Conservation (ADEC) has reviewed the environmental records for the Spring Brook Vacant Property site. This decision letter memorializes the site history, cleanup actions, and standard conditions for long-term site management. No further remedial action is required.

Site Name and Location:

Spring Brook Vacant Property 17227 North Eagle River Loop Road Eagle River, AK 99577

DEC Site Identifiers:

File No: 2107.26.009 Hazard ID: 23192

Name and Mailing Address of Contact Party:

Steve Warnke Dimond Center Holding, LLC 800 East Dimond Boulevard, Suite 3-500 Anchorage, AK 99515

Regulatory Authority for Determination:

18 AAC 75 and 18 AAC 78

Site Description and Background

The Spring Brook Vacant Property site is located on the northeast side of the North Eagle River Loop Road and Spring Brook Drive interaction in Eagle River. The site topography consists of sloped hills, and large piles of soil. No buildings are currently present on the site. The area surrounding the site is mixed commercial and residential, and properties in the area are connected to private drinking water wells. There are no drinking water wells onsite.

Prior to the 1970s, the site was used for mining gravel and soils, and other construction related activities. An investigation in 1988 identified several drums containing batteries and other non-hazardous construction related material. The drums were reportedly disposed of in 1989. A Phase I Environmental Site Assessment (ESA), along with a geophysical investigation was completed in 1999. A non-registered

Mr. Steve Warnke April 27, 2015

underground storage tank (UST) was identified during the investigation. The top of the UST was uncovered, and the fluid inside was tested. Results indicated that diesel range organics (DRO), gasoline range organics (GRO), and benzene, toluene, ethylbenzene, and xylenes (BTEX) were all present. It was recommended that the UST be pumped of fluids, removed, and disposed offsite.

Contaminants of Concern

The following petroleum contaminants of concern, those above ADEC cleanup levels, were identified during the course of the site investigations summarized in the Characterization and Cleanup Activities section of this decision letter.

- Gasoline Range Organics (GRO)
- Diesel Range Organics (DRO)
- Benzene

Cleanup Levels

Benzene, GRO, and DRO were identified in soil above the ADEC migration-to-groundwater (MTG) cleanup level for the under 40-inch precipitation zone, established in 18 AAC 75.341(c)(d), Tables B1 and B2.

Table 1 - ADEC Soil Cleanup Levels

Contaminant	Soil – Ingestion (mg/kg)	Soil – Inhalation (mg/kg)	Soil – MTG (mg/kg)	Maximum Remaining Concentration (mg/kg)
GRO	1,400	1,400	300	400
DRO	10,250	12,500	250	360
Benzene	150	- 11	0.025	0.57

MTG = migration to groundwater mg/kg = milligrams per kilogram

bold = exceeds ADEC MTG cleanup level

Characterization and Cleanup Activities

In September 1999, the 2,000-gallon UST was pumped of fluids and removed from the ground. Excavation commenced to remove all contaminated soil, and proceeded vertically to the maximum extent practical until a confining layer (possibly bedrock) was encountered. During excavation, an additional buried tank was discovered north of the UST. This tank was also removed and disposed offsite. In total, an estimated 4,300 cubic yards (cy) of contaminated soil were removed and stockpiled in various locations onsite. Confirmation soil samples were collected from the base and sidewalls of the excavation. Results revealed that GRO, DRO, and benzene remained in the subsurface soils above ADEC MTG cleanup levels (maximum remaining concentrations are shown in Table 1, above).

In October 2002, one groundwater monitoring well was installed at the location of the former UST to determine if groundwater was impacted. Water was not present in the well immediately after installation. After several return visits to measure groundwater, it was determined that the well was dry.

Two groundwater monitoring wells were installed in February 2015 to further evaluate potential impacts to groundwater. Groundwater samples were collected from both wells and were analyzed for GRO,

Mr. Steve Warnke April 27, 2015

DRO, residual range organics (RRO), BTEX, and polynuclear aromatic hydrocarbons (PAHs). None of the sample results exceeded ADEC groundwater cleanup levels. In addition to the groundwater sampling, numerous soil samples were collected from the existing onsite stockpiles. None of the stockpile results exceeded ADEC MTG cleanup levels.

All three groundwater monitoring wells were decommissioned on April 14, 2015.

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, ADEC has determined that residual contaminant concentrations do not pose a cumulative human health risk.

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	Pathway	Contamination is not present in surface soil (0 to 2	
Sub-Surface Soil Contact	Incomplete De-Minimis Exposure	feet below ground surface). Contamination remains in the sub-surface, but is well below ingestion cleanup levels.	
Inhalation – Outdoor Air	De-Minimis Exposure	Contamination remains in the sub-surface, but is well below inhalation cleanup levels.	
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	No occupied building are present or expected in the future. Remaining contamination is over 10 feet bgs, and is limited in volume and extent.	
Groundwater Ingestion	De-Minimis Exposure	Groundwater contamination is present, but <u>below</u> ADEC groundwater cleanup levels. Benzene contamination is not present.	
Surface Water Ingestion	Pathway Incomplete	No surface water bodies are present.	
Wild and Farmed Foods Ingestion	Pathway Incomplete	De-Minimis contamination remains 10 feet bgs, and is limited in volume and extent.	
Exposure to Ecological Receptors	Pathway Incomplete	No aquatic or terrestrial routes are present.	

Notes to Table 2: "De-Minimis Exposure" means that in ADEC's judgment receptors are unlikely to be 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 administrative mechanism in place limiting land or groundwater use, or a physical barrier in place that deters contact with residual contamination.

Mr. Steve Warnke April 27, 2015

ADEC Decision

This site will receive a "Closed" 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 78.600(h). 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 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 99811-1800, 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 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) 269-7691.

Sincerely.

Joshua Barsis Project Manager

cc: RFA via email at dec.spar.cr@alaska.gov