THE STATE of ALASKA
GOVERNOR SEAN PARNELL

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION & RESPONSE
Contaminated Sites Program

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Return Receipt Requested
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August 14, 2014

Lindsay Parson
Legacy LLC
3760 Piper Street, Suite 3029
Anchorage, AK 99508

Re: Decision Document: Vacant Land 110 Bartel Avenue
Cleanup Complete Determination

Dear Ms. Parson:

The Alaska Department of Environmental Conservation (ADEC) has reviewed the environmental records for the referenced 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:
Vacant Land 110 Bartel Avenue
110 Bartel Avenue
Kodiak, AK 615

Name and Mailing Address of Contact Party:
Lindsay Parson
Legacy LLC
3760 Piper Street, Suite 3029
Anchorage, AK 99508

DEC Site Identifiers:
File No: 2601.38.108
Hazard ID: 25442

Regulatory Authority for Determination:
18 AAC 75

Site Description and Background
Shannon & Wilson, Incorporated (S&W) performed a Limited Phase II Environmental Site Assessment (ESA) in July of 2009 to characterize fill from an unknown source that was placed on the property. Current and former property owners were contacted to determine the origin of the fill; however, at the time of this letter, no source area was identified.

Contaminants of Concern

One petroleum related contaminant of concern, diesel range organics (DRO) was identified above the migration to groundwater (MTG) cleanup level during the Phase II ESA activities summarized below in the "Characterization and Cleanup Activities" section of this decision letter.

Cleanup Levels

The more restrictive of the inhalation, direct contact, or MTG cleanup levels apply to this site. DRO, arsenic, and chromium were detected in soil above the ADEC Method Two MTG cleanup level for the over 40-inch precipitation zone established in 18 AAC 75.341, Tables B1 and B2. Arsenic and chromium were present above cleanup levels; however, at concentrations typically seen in Alaskan soils, and as such, are considered background. Benzene was not detected in the laboratory samples; however, the laboratory's limit of quantitation (LOQ) for benzene exceeded the ADEC cleanup level, and is therefore presented in the table below.

Table 1 – Approved Cleanup Levels

Contaminant	Ingestion (mg/Kg)	Inhalation (mg/Kg)	MTG (mg/Kg)	Concentration Remaining Onsite (mg/Kg)
DRO	8,250	12,500	230	268
Benzene	120	8.5	0.025	<0.114
Arsenic	3.7	NA	3.9	12.1
Chromium	250	NA	25	30.4

mg/kg = milligrams per kilogram
NA = not applicable
< = Analyte was not detected above the laboratory's Limit of Quantitation (LOQ); however, the LOQ exceeded the ADEC Cleanup Criterion.

Characterization and Cleanup Activities

During S&W's Phase II ESA, four test pits (TP1 through TP4) were advanced to groundwater, which was encountered between 4.5 and 9.5 feet below ground surface (bgs). Soil samples were collected in two-foot intervals within each test pit, and were screened for volatile organic compounds (VOCs) using a photoionization detector (PID). One soil sample was selected for laboratory analysis from each test pit, and submitted for one or more of the following analyses: gasoline range organics (GRO), DRO, residual range organics (RRO), benzene, toluene, ethylbenzene, and xylenes (BTEX), VOCs, polychlorinated biphenols (PCBs), and Resource Conservation and Recovery Act (RCRA) metals.

Analytical results indicated that low level petroleum contamination, DRO and RRO, were present in the subsurface soil at this site below ADEC most stringent "migration to groundwater" (MTG) cleanup levels. DRO was present in Sample TP3 (collected from Test Pit TP3) at 268 milligrams per kilogram (mg/kg), which slightly exceeds the ADEC MTG cleanup level of 230 mg/kg. Arsenic and chromium were also present above cleanup levels; however, at concentrations typically seen in Alaskan soils, and as such, are considered background. VOCs, PCBs, and BTEX constituents were not present above MTG cleanup levels in any project samples; however, the LOQ for benzene exceeded the MTG cleanup level of 0.025 mg/kg in Samples TP3 and TP4. All other analytes from the other soil samples were not detected above the most stringent ADEC "migration to groundwater" (MTG) 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 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	De-Minimis Exposure	Contamination remains in surface soil, but is below ingestion cleanup levels.
Sub-Surface Soil Contact	De-Minimis Exposure	Contamination remains in the sub-surface soil, but is below ingestion 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	No buildings are presently on the property and are not expected in the near future. Contamination is not volatile.
Groundwater Ingestion	Pathway Incomplete	Groundwater contamination is not present.
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	Contaminants of concern do not have the potential to bioaccumulate in plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	No terrestrial or aquatic 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.

ADEC Decision

Remaining petroleum contamination in soil is below approved cleanup levels. 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 75.325. 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.

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 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
Environmental Program Specialist