



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

**Department of
Environmental Conservation**

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

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File: 2319.38.008

June 14, 2018

Jacob Gondek
Alaska Department of Natural Resources (ADNR)
Division of Parks & Outdoor Recreation
550 West 7th Avenue, Suite 1380
Anchorage, AK 99501

Re: **Decision Document: ADNR Coal Creek Country Estates Trujillo Addn Lot 4B
Cleanup Complete Determination**

Dear Mr. Gondek:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the ADNR Coal Creek Country Estates Trujillo Addn Lot 4B in Kasilof, 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 ADNR Coal Creek Country Estates Trujillo Addn Lot 4B, which is located in the ADEC office in Anchorage, Alaska. This decision letter summarizes the site history, cleanup actions and standard site closure conditions that apply.

Site Name and Location:

ADNR Coal Creek Country Estates Trujillo
Addn Lot 4B
26035 Williamson Lane
Kasilof, AK 99610

Name and Mailing Address of Contact Party:

Jacob Gondek
Alaska Dept. of Natural Resources (ADNR) - Parks
Division of Parks & Outdoor Recreation
550 West 7th Avenue, Suite 1380
Anchorage, AK 99501

DEC Site Identifiers:

File No.: 2319.38.008
Hazard ID.: 26681

Regulatory Authority for Determination:

18 AAC 75

Site Description and Background

The Coal Creek Country Estates Trujillo Addition Lot 4B is located on the eastern shore of the Kasilof River. A fox farm was operated on property and surrounding parcels until the 1930s. Later uses include a

steam ship landing, post office and general store, residence, and since the 1970s, seafood processing and a fee-based boat launch. In 2009 an oversized warehouse was built with a seafood processing facility.

As part of site inspections conducted in 2015 and 2016, potential source areas of contamination were identified. These included the cabin's 500-gallon underground heating oil tank (HOT) and lead-based paint area, the warehouse's 300 gallon aboveground ground HOT and floor drains, a burn area located adjacent to the boat launch, and petroleum surface stains located throughout the property. In 2017, both the cabin's 500-gallon underground HOT and the warehouse's 300 gallon aboveground ground HOT were removed and the floor drains were decommissioned. Current structures on the property include the warehouse (with the processing facility and associated structures removed) and the cabin.

Contaminants of Concern

During the investigations at the site, soil and groundwater samples were analyzed for gasoline range organics (GRO), diesel range organics (DRO), residual range organics (RRO), polycyclic aromatic hydrocarbons (PAHs), metals, dioxins and volatile organic compounds (VOCs). Based on these analyses and knowledge of the source area, the following contaminant of concern (COC) were identified in soil:

- DRO
- Lead

ADEC Cleanup Levels

The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Table B1 and B2, *Under 40 Inch Zone* for the Migration to Groundwater (MTG) pathway. The default groundwater cleanup levels for this site are established in 18 AAC 75.345 Table C Groundwater Cleanup Levels,

Table 1- Approved Cleanup Levels

Contaminants	Soil (mg/kg)	Groundwater (mg/L)
DRO	250	1.5
Lead	n/a	0.015

mg/kg = milligrams per kilogram
mg/L = milligrams per liter

Characterization and Cleanup Activities

In 2015, four surface soil samples were collected and five soil borings were advanced with one completed as a temporary monitoring well to investigate potential areas of contamination. None of the samples collected contained contaminant concentrations above ADEC method two cleanup levels.

In 2017, further investigation was conducted at the cabin's 500-gallon former underground HOT and lead based paint area and at the warehouse's 300-gallon former aboveground ground HOT and floor drains. Cleanup activities at these source areas are discussed below.

At the **warehouse floor drains**, two drainage systems were evaluated: the eastern and the western. The western system was used for the discharge of fish waste. The drain inlets and conveyance piping for the

western system were removed and plugged at the point it extends under the warehouse. The discharge point was not located, but is assumed to be at least partially underneath the warehouse. The eastern drainage system routed stormwater away from the building. All the subsurface piping, drain inlets, and a geotechnical liner were removed. A soil sample collected 7 feet below ground surface (bgs) from the storm water drain field contained DRO at 4,900 mg/kg. Based off this a total of 11 cubic yards (cy) of assumed petroleum contaminated soil was excavated and transported to Alaska Soil Recycling (ASR). A total of eight confirmation soil samples collected after the soil removal were below ADEC method two cleanup levels. Drain rock and clean overburden were used as backfill.

At the **warehouse former 300 gallon above ground HOT**, 49.75 cy of impacted soil was removed to a depth of 12.9 feet bgs and thermally remediated at ASR. A total of 17 confirmation soil samples collected from the excavation base and sidewalls did not contain contaminant concentrations above ADEC method two cleanup levels. The excavation was then backfilled with clean soils derived from the northern portion of the property.

At the **cabin perimeter**, one of two surface soil samples collected contained lead up to 1,160 mg/kg. However, this soil is not considered a hazardous waste based on the results from the Environmental Protection Agency (EPA) toxic characteristic leaching procedure analysis. A total of 40 cy of soil containing lead-based paint chips were then excavated within a five foot perimeter of the cabin at a depth of 1 foot bgs and transported to the Central Peninsula Landfill. A total of 15 soil samples collected from the excavation base and sidewalls did not contain contaminant concentrations above ADEC method two cleanup levels. The shallow excavation was smoothed out to prevent tripping hazards.

At the **cabin former 500 gallon underground HOT**, the excavation was 7 feet long by 7.5 feet wide by 5.2 feet bgs. A total of 0.25 cy of contaminated soil excavated from directly above the underground HOT was thermally remediated at ASR. Nine soil samples collected from the along the piping, excavation bottom and sidewalls did not contain contaminant concentrations above ADEC method two cleanup levels. A perforated liner was placed into the bottom of the excavation and it was capped with clean fill. The former HOT piping leading to the cabin was crimped and left in place.

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 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	Remaining surface soil contamination is below human health and ingestion cleanup levels
Sub-Surface Soil Contact	De-Minimis Exposure	Remaining soil contamination is below human health and ingestion cleanup levels
Inhalation – Outdoor Air	De-Minimis Exposure	Remaining soil contamination is below human health and inhalation cleanup levels
Inhalation – Indoor Air (vapor intrusion)	De-Minimis Exposure	Remaining contamination is below ADEC’s most stringent cleanup levels and no further vapor intrusion investigation is needed.
Groundwater Ingestion	De-Minimis Exposure	Remaining soil contamination is below migration to groundwater cleanup levels and groundwater samples collected at the site were below Table C cleanup levels.
Surface Water Ingestion	De-Minimis Exposure	Remaining soil contamination is below migration to groundwater cleanup levels and groundwater samples collected at the site were below Table C cleanup levels.
Wild and Farmed Foods Ingestion	De-Minimis Exposure	Remaining soil contamination is below migration to groundwater cleanup levels and groundwater samples collected at the site were below Table C cleanup levels.
Exposure to Ecological Receptors	De-Minimis Exposure	Remaining contamination is below ADEC’s most stringent cleanup levels and is not expected to affect 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

Contaminated soil above cleanup levels has been removed from the site. Any remaining soil contamination is below migration to groundwater cleanup levels and groundwater samples collected at the site were below Table C cleanup levels. 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.
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 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, 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) 269-8685 or email at grant.lidren@alaska.gov.

Sincerely,



Grant Lidren
Project Manager

cc: Spill Prevention and Response, Cost Recovery Unit