Department of Environmental Conservation





DIVISION OF SPILL PREVENTION AND RESPONSE

Contaminated Sites Program

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File # 2265.38.038

October 3, 2023

Jay C. Duke 6701 N. En Dove Road Wasilla, Alaska 99654

Re: Decision Document: Site record known as Residence – 6701 North En Dove Road Cleanup Complete Determination – institutional control requirements removed

The Alaska Department of Environmental Conservation, Contaminated Sites Program (DEC) has completed a review of the environmental record for the site called Residence – 6701 N. En Dove Road located in Wasilla.

In December 2010, BGES Inc. (BGES) conducted a *Phase I and II Environmental Site Assessment* of the subject site. Based on their findings, they conducted a site assessment to evaluate potential contamination associated with a trash pit and the auto repair shop. Floor drains were found in the auto repair shop and BGES concluded that the soil near the drains had not been impacted from past spills. In the garbage pit area tetrachloroethylene (PCE) contamination was discovered at this site resulting from trash disposal. After the completion of the garbage pit area investigation, it was determined that leaving PCE contaminated subsurface soil (15 - 20') below the ground surface) at concentrations greater than the most stringent cleanup level caused no unacceptable risk provided the institutional control requirements were complied with. In 2011 a Cleanup Complete Determination – Institutional Controls was applied to this property record and a letter documented the details.

A regulation update occurred which changed the cleanup level for PCE making it less stringent. In 2011, the highest detected concentration for remaining PCE in the soil on this property was 0.048 milligrams per kilogram (mg/kg) and the cleanup level was 0.005 mg/kg. In 2016, due to updated toxicity information, the migration to groundwater cleanup level for PCE in soil was changed to 0.19 mg/kg. This means the remaining PCE contamination in the soil on this property is less than the current cleanup level, therefore IC requirements for this site can be removed. The site status in our records is hereby changed from *Cleanup Complete with Institutional Controls* to *Cleanup Complete*.

Site Name and Location:IResidence - 6701 North En Dove RoadI6701 North En Dove RoadIWasilla, Alaska 99654I

Name and Mailing Address of Contact Party: Jay C. Duke 6701 North En Dove Road Wasilla, Alaska 99654

DEC Site Identifiers:

File No.: 2265.38.038 Hazard ID.: 25648 **Regulatory Authority for Determination:**

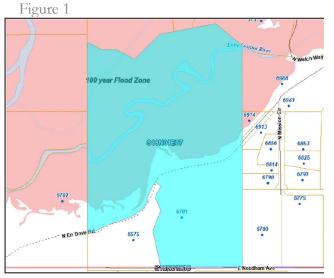
18 Alaska Administrative Code (AAC) 75

Site Description and Background

The main 5-acres of the property (6701 N. En Dove Road) is still used as a primary residence for an individual family. On the property is a single-unit home, a vacant barn, and a shop building which is currently rented to an auto mechanic.

Since 2011, the original property has been subdivided which created the address 6575 N. En Dove Road which is now owned by a separate landowner. In Figure 1 below, both parcels which are south of En Dove Road are shown. Most of the former garbage pit area is located on the 6575 N. En Dove Road property. The landowner for this property is copied on this document.

For additional historical details, refer to the enclosed 2011 Cleanup Complete Determination – Institutional Controls letter.



Contaminants of Concern

During the 2011 investigation at this site, soil samples were analyzed for gasoline range organics (GRO), diesel range organics (DRO), volatile organic compounds (VOCs), metals, and polynuclear aromatic hydrocarbons (PAHs). Based on these analyses and knowledge of the source area, the following Contaminants of Concern were identified:

• PCE

Arsenic and chromium concentrations were found to be present above the default cleanup levels but within the range of metal background levels for the region and, thus, are not considered to be COCs at the site.

Cleanup Levels

The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Table B2 Under 40-inch Zone, Migration to Groundwater exposure pathway.

Table 1 – Approved Cleanup Levels				
	Contaminant	Soil (mg/kg)		
	PCE	0.19		

Notes:

1. mg/kg = milligrams per kilogram

There are no soil sample results exceeding the most stringent Method Two cleanup levels for the over 40inches of precipitation climate zone established 18 AAC 75.341(c), Table B1 and 18 AAC 75.341(d), Table B2.

Characterization and Cleanup Activities

At the time of closure, the highest detected concentration for remaining PCE in the soil was 0.048 mg/kg and the cleanup level was 0.005 mg/kg. In 2016, regulatory cleanup levels for PCE were updated and the cleanup level for PCE in soil was changed to 0.19 mg/kg. This means the remaining PCE contamination in the soil on this property now meets the current cleanup levels.

The 2011 Cleanup Complete Determination with Institutional Controls (ICs) included details about two floor drains classified as Class V Wells under the Environmental Protection Agency's (EPA) Underground Injection Control Program. The ICs included a requirement that the floor drains needed to be properly decommissioned to eliminate their ability to serve as a conduit for contaminant migration to the subsurface. DEC and EPA received documentation confirming that floor drains were properly decommissioned in November 2011.

Groundwater is not believed to be impacted from past activities at the site including from the two floor drains in the shop and from the disposal of household waste into the garbage pit. A groundwater investigation was attempted in 2011. A soil boring was advanced to 52 feet bgs and was intended to be installed as a groundwater monitoring well; however, this effort was abandoned when groundwater was not encountered.

For more details, see the enclosed 2011 Cleanup Complete Determination - Institutional Controls letter.

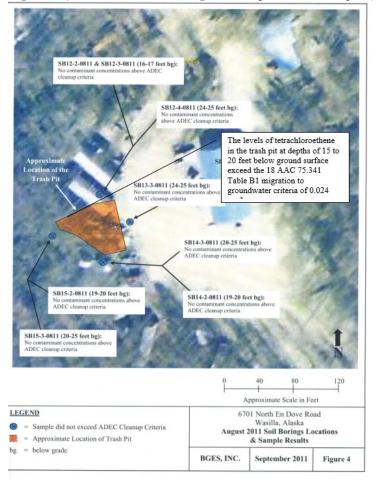
Remaining Contamination

The maximum concentrations of contaminants remaining at the site are shown in Tables 2a. The highest PCE concentration is below approved migration to groundwater cleanup levels. Sample locations referred to in Tables 2a are shown in the attached site figure.

Contaminant	Soil (mg/kg)	Sample Location	Date Sampled
PCE	0.048	Former disposal pit – at least 15' below ground surface	2011

Table 2a - Maximum Contaminant Concentrations Remaining in Soil

Figure 2 (from 2011 Soil Borings & Sample Results Report)



Cumulative Risk Evaluation

Based on a review of the environmental record, DEC 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 DEC'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.

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	PCE was not detected in surface soil. Measured arsenic and chromium concentrations are within the range of metal background levels for the region.
Sub-Surface Soil Contact	De Minimis Exposure	PCE was not detected in subsurface soil above 18 AAC 75.341 Table B1 Migration to Groundwater Cleanup Levels. Measured arsenic and chromium concentrations are within the range of metal background levels for the region.
Inhalation – Outdoor Air	De Minimis Exposure	Contaminants were not detected in soil above 18 AAC 75.341 Table B1 or B2 Outdoor Inhalation Levels.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	PCE was not detected in subsurface soil above 18 AAC 75.341 Table B1 Migration to Groundwater Cleanup Levels so should not impact construction of new buildings on the property.
Groundwater Ingestion	Pathway Incomplete	Contaminants have not been detected below 25 feet bgs and groundwater is deeper than 50 feet bgs. The on-site drinking water well serving the residential house is located more than 400 feet northeast of the garbage pit and is screened at depths greater than 300 feet deep.
Surface Water Ingestion	Pathway Incomplete	It is unlikely that surface water is impacted because the nearest surface water body is more that ¹ / ₄ mile away and groundwater is not believed to be contaminated
Wild 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 exposure routes are present.

 Table 2 – Exposure Pathway Evaluation (based on 2011 data)

Notes:

- 1. "De Minimis Exposure" means that, in DEC's judgment, the receptors are unlikely to be adversely affected by the minimal volume or concentration of remaining contamination.
- 2. "Pathway Incomplete" means that, in DEC's judgment, the contamination has no potential to contact receptors.

3. "Exposure Controlled" means there is an IC in place limiting land or groundwater use and there may be a physical barrier in place that prevents contact with residual contamination.

DEC Decision

Soil and groundwater contamination at the site have been cleaned up to concentrations below the approved cleanup levels suitable for residential land use. The previously identified ICs which included a reporting requirement, floor drains decommissioned, and a restriction on the movement of soil or groundwater from the site no longer apply to this site record. This site will receive a "Cleanup Complete" designation on the Contaminated Sites Database.

DEC approval is required for movement and disposal of soil and/or groundwater subject to the Site Cleanup Rules, in accordance with 18 AAC 75.325(i). Since the cleanup at this site met the most stringent cleanup levels of 18 AAC 75.341, Tables B1 and B2 and 18 AAC 75.345, Table C, this letter will serve as your approval for future movement and disposal of soil associated with this release.

Movement or use of contaminated material in an ecologically sensitive area or in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited. Furthermore, 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. If, in the future, groundwater from this site is to be used for other purposes, 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 DEC from requiring additional assessment and/or cleanup action if information indicates that contaminants at this site may pose an unacceptable risk to human health, safety, or welfare or to the environment.

Informal Reviews and Adjudicatory Hearings

A person authorized under a provision of 18 AAC 15 may request an informal review of a contested decision by the Division Director in accordance with 18 AAC 15.185 and/or an adjudicatory hearing in accordance with 18 AAC 15.195 – 18 AAC 15.340. See DEC's "Appeal a DEC Decision" web page <u>https://dec.alaska.gov/commish/review-guidance/</u> for access to the required forms and guidance on the appeal process. Please provide a courtesy copy of the adjudicatory hearing request in an electronic format to the parties required to be served under 18 AAC 15.200. Requests must be submitted no later than the deadline specified in 18 AAC 15.

If you have questions about this IC removal/closure decision, please feel free to contact me at (907) 465-5229 or evonne.reese@alaska.gov.

Sincerely,

Dinne Reese

Evonne Reese Project Manager

cc: Great Land Trust Inc. In-Line Investments, LLC