

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION & RESPONSE Contaminated Sites Program

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File: 2258.26.012 Certified Mail, Return Receipt Requested Article No. (7013 1090 0000 7617 5797)

May 9, 2014

Grubstake Auction Company, Inc. Attn.: Ron Alleva P.O. Box 201667 Anchorage, Alaska 99520

Re: Closure Decision Document; K&K Service and Repair Cleanup Complete Determination

Dear Mr. Alleva:

The Alaska Department of Environmental Conservation (ADEC) has reviewed the environmental records associated with the K&K Service and Repair (K&K) 2012 removal of one diesel and one gasoline underground storage tank (UST) at 37110 South Talkeetna Spur Road in Talkeetna, Alaska. All contaminants of concern meet ADEC cleanup levels at the site. This decision letter memorializes the site history, assessment and cleanup actions, and standard conditions for long-term site management. No further remedial action is required.

Site Name and Location:

K&K Service and Repair 37110 South Talkeetna Spur Road Talkeetna, Alaska 99676

ADEC Site Identifiers:

File: 2258.26.012 Hazard ID: 25947 ADEC UST Facility ID: 3238

Name and Mailing Address of Contact Party:

Grubstake Auction Company, Inc. Attn.: Ron Alleva P.O. 201667 Anchorage, Alaska 99520

Regulatory Authority for Determination:

18 AAC 75 18 AAC 78

Background

Two 1,000-gallon USTs (one diesel and one gasoline) and their associated piping were removed on August 15, 2012 at the abovementioned site, owned by Grubstake Auction Company, Inc. (Grubstake Auction Company). Shannon & Wilson, Inc. (Shannon & Wilson) were retained to conduct the closure assessment. Approximately 45 cubic yards of soil were stockpiled, field screened, sampled and returned to the excavation pit. Six soil samples from the excavation pit and two stockpile soil samples were analyzed for gasoline range organics (GRO), diesel range organics (DRO), benzene, toluene, ethylbenzene, and xylenes (BTEX). All laboratory results returned below ADEC cleanup levels. Mr. Alleva confirmed that the property was unpaved and unoccupied in 2012 and remains this way in 2014 during an April 29, 2014 phone conversation with ADEC.

Contaminants of Concern

During the site investigations, soil samples were collected and analyzed for the following contaminants of concern (COC): DRO; GRO; and BTEX. Based on these analyses and knowledge of the source area, the following Contaminants of Concern (COCs) were identified:

- GRO
- DRO
- Benzene
- Toluene
- Ethylbenzene
- Xylenes (total)

All COC's that remain on the site are below ADEC's most stringent soil cleanup levels (18 AAC 75.341, Method Two, Tables B1 and B2, *Over 40 Inch Zone*, Mitigation to Groundwater).

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*, MTG.

Contaminant	Site Cleanup Level (mg/kg)
• GRO	300
• DRO	250
• Benzene	0.025
• Toluene	6.5
• Ethylbenzene	6.9
• Xylenes (Total)	63.0

Characterization Activities

On August 15, 2012, one 1,000-gallon regulated diesel UST, one 1,000-gallon gasoline UST and their associated piping were removed from the eastern side of the site, near South Talkeetna Spur Road. Both USTs were double-walled, steel STI-P3® tanks. The fuel dispensers associated with the USTs were removed prior to this site activity. Prior to UST removal activities, 220-gallons of water/product mixture

was removed from the two USTs and placed in multiple 55-gallon drums. Flammable vapors in the USTs were displaced with dry ice. Seventeen excavation soil samples and nine stockpile were field-screened with the photoionization detector (PID). Six (including one duplicate) confirmation soil samples collected from below both USTs and the former dispenser area were analyzed for DRO, GRO and BTEX (see Table 1). Results from all six soil samples returned with concentrations below ADEC cleanup levels. The final excavation dimension measured approximately 16 feet by 22 feet and approximately 45 cubic yards of soil were stockpiled temporarily adjacent to the exvacation pit on a plastic liner. Stockpiled soil was field screened, sampled for laboratory analysis, then returned to the excavation pit following decommissioning activity. Subsurface geology encountered during site activity consisted of fill material and pea gravel. The final excavation depth was 14 feet below ground surface (bgs) and groundwater was not encountered.

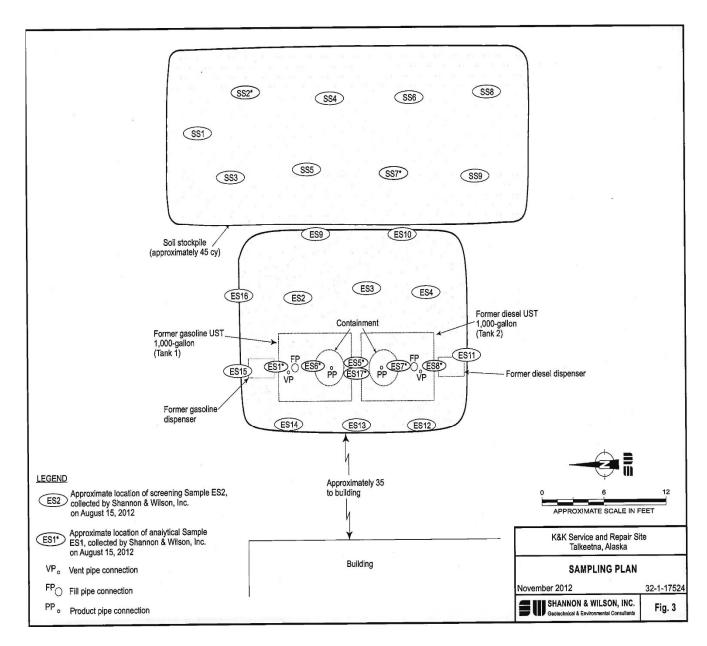


Figure 1: Excavation and stockpile soil sample locations from August 2012 UST decommissioning. Image from Shannon & Wilson's *Underground Storage Tank Closure Assessment* report, November 2012.

Sample #	Sample Depth (ft. bgs)	GRO (mg/kg)	DRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)
ES1	9	<1.88	-	< 0.0100	0.0125 J	< 0.0195	< 0.0571
ES5	9.5	<2.04	<13.0	< 0.0109	0.0112 J	< 0.0212	< 0.0620
ES17 ~	9.5	<1.88	<12.7	< 0.0100	0.0160 J	< 0.0196	0.0198 J
ES6	9	<2.36	-	< 0.0126	< 0.0246	< 0.0246	< 0.0718
ES7	9.5	5.64	55.2	< 0.00932	0.0157 J	< 0.0182	0.0512 J
ES8	9	0.942 J	42.1	< 0.00996	< 0.0194	< 0.0194	< 0.0568
ADEC Clea	anup Level	300	250	0.025	6.5	6.9	63
Analysis M	ethod	AK 101	AK 102	EPA 8021B	EPA 8021B	EPA 8021B	EPA 8021B
 field duplicate of preceding sample 1.88 = analyte not detected, laboratory limit of detection is 1.88 mg/kg J = estimated concentration detected at less than the limit of quantitation parameter not analyzed 							

Table 1: Soil sample results from August 2012 UST decommissioning. Soil sample locations are shown on Figure 1. Data from Shannon & Wilson's *Underground Storage Tank Closure Assessment* report, November 2012



Figure 2: Satellite map of property. The red triangle marks the former location of both USTs. BING Image courtesy of Microsoft Corporation © 2014.

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 such 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.

Pathway Evaluation

Following investigation of 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 or Pathway Incomplete. A summary of this pathway evaluation is included in Table 2.

Pathway	Result	Explanation
Direct Contact with Surface Soil	De Minimis Exposure	Soil sample analysis results indicate that petroleum hydrocarbon concentrations in surface soil surface are either undetectable or at concentrations below ingestion cleanup levels.
Direct Contact with Subsurface Soil	De Minimis Exposure	Soil sample analysis results indicate that petroleum hydrocarbon concentrations in subsurface soil surface are either undetectable or at concentrations below ingestion cleanup levels.
Inhalation-Outdoor Air	Pathway Incomplete	Soil sample analysis results indicate that petroleum hydrocarbon concentrations in soil are either undetectable or at concentrations below ingestion cleanup levels.
Inhalation-Indoor Air	Pathway Incomplete	Soil sample analysis results indicate that petroleum hydrocarbon concentrations in soil are either undetectable or at concentrations below ingestion cleanup levels. The former UST location is approximately 35 feet from the nearest building on site.
Groundwater Ingestion	Pathway Incomplete	Groundwater was not encountered during decommission field activity. Soil sample analysis results indicate that petroleum hydrocarbon concentrations in surface soil surface are either undetectable or at concentrations below ingestion cleanup levels.

Surface Water Ingestion	Pathway Incomplete	Soil sample analysis results indicate that petroleum hydrocarbon concentrations in soil are either undetectable or at concentrations below ingestion cleanup levels. Site is unpaved and surface water is not an issue.
Wild Foods Ingestion	Pathway Incomplete	Wild and farmed foods are not gathered in this area.
Exposure to Ecological Receptors	Pathway Incomplete	Soil sample analysis results indicate that petroleum hydrocarbon concentrations in soil are either undetectable or at concentrations below ingestion cleanup levels.

Table 2: Exposure Pathway Evaluation

<u>Notes to Table 1:</u> "De Minimis exposure" means that in ADEC's judgment receptors are unlikely to be affected by the minimal volume of remaining contamination. "Pathway incomplete" means that in ADEC's judgment contamination has no potential to contact receptors.

ADEC Decision

Soil sample results indicated all confirmation samples were below the Migration to Groundwater cleanup level for DRO, GRO and BTEX. Groundwater was not encountered at a depth of 14 feet bgs and the nearest building is approximately 35 feet from the excavation area. 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.
- 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 in the state of Alaska is protected for aquaculture use. In the event that an aquaculture facility uses groundwater from this site in the future, additional testing may be required to ensure that aquatic life criteria under 18 AAC 70 are not exceeded.

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 99801, 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 99801, 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 465-5368 or via email at amy.dieffenbacher@alaska.gov.

Sincerely,

Amy Dieffenbacher

Environmental Program Specialist

cc: Sally Schlichting, ADEC Unit Manager, Contaminated Sites Program via email DEC SPAR Cost Recovery Unit via email