



DIVISION OF SPILL PREVENTION AND RESPONSE Contaminated Sites Program

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File: 2100.38.539

May 22, 2020

Fairweather, LLC 301 Calista Court Anchorage, Alaska 99518

Re: Decision Document: Commercial Property - 151 West 100th Avenue Cleanup Complete Determination

Dear Mr. Guy Miyagishima:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Commercial Property - 151 West 100th Avenue in Anchorage. 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 Commercial Property – 151 West 100th Avenue, which is located in the ADEC office in Anchorage, Alaska. This decision letter summarizes the site history, cleanup actions and levels, and standard site closure conditions that apply.

Site Name and Location: Commercial Property – 151 West 100th Avenue 151 West 100th Avenue Anchorage, Alaska 99515 Name and Mailing Address of Contact Party: Guy Miyagishima Fairweather, LLC 301 Calista Court Anchorage, Alaska 99515

ADEC Site Identifiers: File No.: 2100.38.539 Hazard ID.: 25985 **Regulatory Authority for Determination:** 18 AAC 75

Site Description and Background

During a geotechnical investigation at 151 West 100th Avenue in November 2012, strong petroleum odors were noticed from soil near the groundwater interface. A single soil boring was installed and

sampled in December, which confirmed the presence of contaminants above ADEC cleanup levels. Groundwater at this location is found at 7 to 14 feet below ground surface (ft bgs).

Contaminants of Concern

During the site characterization and cleanup activities at this site, samples were collected from soil and groundwater, and analyzed for volatile organic compounds (VOCs), gasoline range organics (GRO), and diesel range organics (DRO), residual range organics (RRO), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals. Based on these analyses, the following contaminants were detected above the applicable cleanup levels and are considered Contaminants of Concern at this site:

- Benzene
- Ethylbenzene
- Xylenes
- Naphthalene
- GRO
- DRO

Cleanup Levels

The soil cleanup levels that apply to this site include the most stringent established for the under 40 inch zone in 18 AAC 75.341(c), Table B1 and 18 AAC 75.341(d), Table B2. Groundwater cleanup levels are established in 18 AAC 75.345(b), Table C.

Contaminant	Soil (mg/kg)	Groundwater (µg/L)
Benzene	0.022	4.6
Ethylbenzene	0.013	15
Xylenes	1.5	190
Naphthalene	0.038	1.7
GRO	1,400	2,200
DRO	10,250	1,500

Table 1 – Approved Cleanup Levels

mg/kg = milligrams per kilogram

 $\mu g/L =$ micrograms per liter

Characterization and Cleanup Activities

Following discovery of the contamination, eight additional soil borings were installed and completed as temporary monitoring wells in March 2013. Benzene and DRO were found in soil at levels up to 1.12 mg/kg and 1,060 mg/kg, respectively. Ethylbenzene, xylenes, and naphthalene were also present at estimated concentrations exceeding current cleanup levels. Groundwater samples exceeded cleanup levels in 6 of 8 monitoring wells sampled and contained benzene and GRO up to 1,400 μ g/L and 4,820 μ g/L, respectively. DRO was not analyzed in groundwater samples collected in 2013.

In 2014, 1,320 cubic yards (cy) of contaminated soil was excavated and placed in a bermed landfarm constructed on the property. The excavation extended to approximately 16 ft bgs. Groundwater seeps with a petroleum sheen were observed at 14 ft bgs. Only one soil sample, collected from the south wall of the excavation, exceeded cleanup levels. This sample contained 0.0705 mg/kg of benzene and was collected at 11 to 12 ft bgs in the south sidewall. Oxygen Release Compound (ORC) Advanced® was place in the excavation to enhance biodegradation of any remaining contamination. In September 2015 the landfarm soil was sampled and all sample results were below cleanup levels. The treated land farm soils were used as backfill in the former excavation.

In April and May 2016, 32 geotechnical soil borings were drilled around the property. While analytical samples were not collected, field screening levels and observations were noted. Soil boring TB-3 had elevated field screening levels from the ground surface to the base of the boring at 9 ft bgs. However, a soil boring (PB1) was later drilled 1 foot away from TB-3 and soil samples from that boring all met cleanup levels.

In May 2016, three monitoring wells (MW30, MW31, and MW32) were installed near the excavation. Five groundwater monitoring events were conducted from these wells between May 2016 and February 2018. Benzene exceeded the cleanup level in MW30 during three sampling events. Two additional monitoring events were conducted in monitoring well MW30 in August 2019 and February 2020. No contaminants were found above the cleanup levels in the last two monitoring events. The wells were decommissioned in May 2020.

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.

Pathway	Result	Explanation
Surface Soil Contact	Pathway	Contamination is not present in surface soil (0 to 2
	Incomplete	feet below ground surface).
Sub-Surface Soil Contact	De Minimis	Contamination may remain in the sub-surface, but
	Exposure	is below ingestion cleanup levels.
Inhalation – Outdoor Air	De Minimis	Contamination may remain in the sub-surface, but
	Exposure	is below inhalation cleanup levels.

Table 2 – Exposure Pathway Evaluation

Inhalation – Indoor Air (vapor	De Minimis	Residual contamination that could result in vapor
intrusion)	Exposure	intrusion is not expected to remain at this site.
Groundwater Ingestion	De Minimis	Groundwater contamination is below groundwater
	Exposure	cleanup levels.
Surface Water Ingestion	Pathway	Surface water is not used as a drinking water source
	Incomplete	in the vicinity of the site.
Wild and Farmed Foods	Pathway	Contaminants of concern do not have the potential
Ingestion	Incomplete	to bioaccumulate in plants or animals.
Exposure to Ecological	Pathway	If any contamination remains, it is sub-surface and
Receptors	Incomplete	not likely to affect ecological receptors.

<u>Notes to Table 2</u>: "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

Soil and groundwater contamination at the site have been cleaned up to concentrations below the approved cleanup levels suitable for residential land use. This site will receive a "Cleanup Complete" designation on the Contaminated Sites Database, subject to the following standard conditions.

Standard Conditions

- 1. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.
- 2. 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 20 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 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) 451-2127, or email at janice.wiegers@alaska.gov.

Sincerely,

James Wir

Janice Wiegers Project Manager

cc: Spill Prevention and Response, Cost Recovery Unit