Department of Environmental Conservation





DIVISION OF SPILL PREVENTION AND RESPONSE Contaminated Sites Program

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DEC File No.: 2100.26.204

June 27, 2024

Tony Kim Former Hanna Car Care 601 W. Parks Highway Wasilla, AK 99654

Re: Decision Document: Hanna Car Wash (former Super Suds) Cleanup Complete Determination

Dear Mr. Kim:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (DEC) has completed a review of the environmental records associated with the Hanna Car Wash (former Super Suds) located at 180 Muldoon Road 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 information becomes available that indicates residual contamination poses an unacceptable risk.

This Cleanup Complete determination is based on the administrative record for the Hanna Car Wash (former Super Suds) maintained by DEC. This decision letter summarizes the site history, cleanup actions, regulatory decisions, and specific conditions required to effectively manage remaining contamination at this site.

Site Name and Location:

Hanna Car Wash (former Super Suds) 180 Muldoon Road Anchorage, Alaska 99504

DEC Site Identifiers: File No.: 2100.26.204 Hazard ID.: 23821 Site Description and Background Name and Mailing Address of Contact Party: Tony Kim Former Hanna Car Care Center 601 W. Parks Highway Wasilla, AK 99654

Regulatory Authority for Determination: 18 AAC 78 and 18 AAC 75

The Hanna Car Wash (former Super Suds) site is located at the northwest corner of the intersection of Peck Avenue and Muldoon Road, in the northeastern portion of Anchorage, Alaska. A single-story commercial building is present on the property and housed an auto repair shop, a car wash, and a coin-operated laundry facility. A convenience store and gasoline service station were formerly located on the east side of the car wash building and operated from 1967 to 1999.

In 1989, four underground storage tanks (USTs) were overfilled with petroleum, contaminating nearby soil and groundwater. A release investigation was conducted which found petroleum contamination in soil borings and groundwater monitoring wells. During removal of the USTs in 1999, five additional USTs were found and removed. Groundwater at this property has been observed between 12 and 15 feet below ground surface (ft bgs).

Contaminants of Concern

During the site investigation and cleanup activities at this site, samples were collected from soil and groundwater and analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), gasoline range organics (GRO), diesel range organics (DRO), residual range organics (RRO), volatile organic compounds (VOCs), and polyaromatic hydrocarbons (PAHs). Based on these analyses, the following contaminants were detected above the applicable cleanup levels and are considered Contaminants of Concern (COCs) at this site:

- Benzene
- Toluene
- Ethylbenzene
- Xylenes
- DRO
- GRO
- Naphthalene
- 2-Methylnaphthalene

Cleanup Levels

Soil cleanup levels applicable to the site are the most stringent Method 2 cleanup levels for the under 40inches of precipitation climate zone, established in 18 AAC 75.341(c), Table B1 and 18 AAC 75.341(d), Table B2. Groundwater cleanup levels applicable to this site are found in 18 AAC 75.345, Table C.

Contaminant	Soil (mg/kg)	Groundwater (µg/L)
Benzene	0.022	4.6
Toluene	6.7	1,100
Ethylbenzene	0.13	15
Xylenes	1.5	190
GRO	300	2,200
DRO	230	1,500
Naphthalene	0.038	1.7
1-Methylnaphthalene	0.041	11
2-Methylnaphthalene	1.3	36

Table 1 – Approved Cleanup Levels

mg/kg = milligrams per kilogram

 $\mu g/L = micrograms per liter$

Characterization and Cleanup Activities

During the 1989 release investigation, five soil borings and three long-term monitoring wells were sampled to assess soil and groundwater contamination. Groundwater contained benzene up to 401 μ g/L and ethylbenzene up to 64 μ g/L. Two additional soil borings and two long-term monitoring wells were installed in 1991. In 1999, cleanup was initiated with the removal of nine USTs and their associated piping and dispensers. During the removal, 144 cubic yards of contaminated soil was excavated and transported to a local treatment facility and thermally treated. Soil contamination remained at the western tank excavation from 10 to 22 ft bgs, the central tank and dispenser area from 15 to 24 ft bgs, and near the northern property boundary from 20 to 24 ft bgs.

Between 2001 and 2003, 12 soil borings and 6 additional monitoring wells were installed. Based on the results, long-term groundwater monitoring was focused on 4 monitoring wells and continued through 2019. Only one well, MW-7, consistently contained concentrations of benzene, ethylbenzene, GRO, and DRO exceeding groundwater cleanup levels. Monitoring events between 2014 and 2019 indicated contaminant concentrations for all COC's had fallen below the respective ADEC cleanup levels.

In 2015, seven soil boring were installed to a depth of 25 ft bgs to investigate remaining soil contamination. Contamination was present in four borings in saturated soil between 17.5 and 20 ft bgs. One boring (SB11C) was contaminated at the shallower depth of 5 to 10 ft bgs. This boring is located about 30 feet south of MW-7.

The potential for vapor intrusion from soil gas into the facility was investigated in 2019 by collecting three subslab soil gas samples and one indoor air sample. The results indicated many compounds were present in both soil gas and indoor air; however, the site COCs did not exceed DEC's vapor intrusion target levels.

Remaining Contamination

The maximum concentrations of contaminants remaining at the site above DEC cleanup levels are shown in Table 2. The data is associated with soil sample SB7C-5-1202, which was collected at 17.5 to 20 ft bgs from a boring installed in 2015. Recent groundwater sampling results are below the approved cleanup levels. The sample location referred to in Table 2 is shown in the attached site figure.

Contaminant	Maximum Soil Concentration Remaining	
	(mg/kg)	
Benzene	2.37	
Ethylbenzene	3.67	
Xylenes	7.67	
GRO	545	
DRO	619	
Naphthalene	2.15	
1-Methylnaphthalene	4.86	
2-Methylnaphthalene	7.34	

 Table 2 – Maximum Soil Concentrations Remaining (SB7C-5-1202)

Cumulative Risk Evaluation

Pursuant to 18 AAC 78.600(d), when detectable contamination remains onsite 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 (HI) of 1 across all exposure pathways.

Based on a review of the environmental record, DEC has determined that residual contaminant concentrations meet the cumulative risk criteria for human health. The risk associated with vapor intrusion was calculated based on subslab soil gas levels. DEC determined that subslab soil gas data was a better representation of the site COCs than indoor air data, which contained many chemicals that are likely to be associated with the car wash.

DEC noted that at least one compound, acrolein, was present at concentrations that exceed both residential and commercial risk levels according to the U.S. Environmental Protection Agency's Vapor Intrusion Screening Level calculator. This compound is not associated with the site COCs.

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 3.

Pathway	Result	Explanation	
Direct Contact with Surface Soil	Pathway	Contamination in surface soil (0 to 2 feet below	
	Incomplete	ground surface) was removed during excavation of	
		the USTs in 1999.	
Direct Contact with Subsurface	De Minimis	Contamination remains in the subsurface between 10	
Soil	Exposure	and 20 ft bgs below human health and ingestion	
		levels in 18 AAC 75.341, Tables B1 and B2.	
Inhalation – Outdoor Air	De Minimis	Contamination remains in the subsurface below	
	Exposure	human health and inhalation levels in 18 AAC 75.341,	
		Tables B1 and B2.	
Inhalation – Indoor Air (vapor	De Minimis	Subslab soil gas did not exceed DEC vapor intrusion	
intrusion)	Exposure	target levels. DEC noted higher levels of acrolein in	
		indoor air that are not likely to be associated with the	
		site.	
Groundwater Ingestion	De Minimis	Contamination remains in the groundwater below the	
	Exposure	18 AAC 75.345, Table C cleanup levels.	
Surface Water Ingestion	Pathway	Contamination is not expected to migrate to surface	
	Incomplete	water.	
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	Contamination is not expected to affect aquatic or	
Receptors	Incomplete	terrestrial receptors.	
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Table 3 – Ex	cposure	Pathway	Evaluation
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Notes:

1. "De-Minimis Exposure" means that, in DEC's judgment, the receptors are unlikely to be 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

Petroleum contamination remains in the subsurface soil at depth greater than 5 ft bgs (see Attachment 1); however, 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.

DEC approval is required for movement and disposal of soil and/or groundwater subject to the Site Cleanup Rules, in accordance with 18 AAC 78.600(h). Please contact DEC for information about applicable regulations and requirements. A "site", as defined by 18 AAC 78.995, means an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership.

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 78.276(f) and does not preclude DEC from requiring additional assessment and/or cleanup action if the institutional controls are determined to be ineffective or if information indicates that contaminants at this site may pose an unacceptable risk to human health or 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 https://dec.alaska.gov/commish/review-guidance/ 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 any questions about this closure decision, please contact me at (907) 451-2127, or by email at janice.wiegers@alaska.gov.

Sincerely,

Janie Wisagers

Janice Wiegers Project Manager

cc: DEC, Division of Spill Prevention and Response, Cost Recovery Unit



Attachment 1 (modified by DEC, 4/9/2024)



Attachment 2