

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE Contaminated Sites Program

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DEC File No: 2612.38.002

May 28, 2024

Ben Magnuson GTE / BJ's Fuel PO Box 209 McGrath, AK 99627

Re: Decision Document: GTE / BJ's Fuel

Cleanup Complete Determination

Dear Mr. Magnuson:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (DEC) has completed a review of the environmental records associated with the GTE / BJ's Fuel site located at 252 McGuires Drive in McGrath. 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 contaminants may pose an unacceptable risk.

This Cleanup Complete determination is based on the administrative record for GTE / BJ's Fuel maintained by DEC. This decision letter summarizes the site history, cleanup actions and levels, and site closure conditions that apply.

Site Name and Location:

GTE / BJ's Fuel Lots 1, 2, and 7, D.W. Sprague Subdivision McGrath, Alaska 99627

DEC Site Identifiers:

File No.: 2612.38.002 Hazard ID.: 3207

Name and Mailing Address of Contact Party:

Ben Magnuson PO Box 209 McGrath, Alaska 99627

Regulatory Authority for Determination:

18 Alaska Administrative Code (AAC) 75

Site Description and Background

The GTE / BJ's Fuel site was opened in 1999 when petroleum contamination was encountered near General Telephone and Electronics Corporation's (GTE's) McGrath Central Office used for communication equipment. Petroleum odors and contaminated soil was observed during installation of a subsurface grounding system in a trench along the eastern GTE property boundary (Lot 1). The contamination appeared to be associated with a fueling system at the adjacent property to the west, BJ's Fuel (Lot 2). At that time, BJ's Fuel operated a 2,500 gallon aboveground storage tank (AST) and fuel line with a a quick connect fitting. The AST and fueling line were located in the northwestern portion of Lot 2 beneath the former pole barn. Based on information in DEC's file, leaded gasoline was stored in the AST and distributed as aviation gasoline. This site is located near the east-west runway of the McGrath Airport. Soils consist of silty and silty loam materials and groundwater is expected to be about 13 feet below ground surface (ft bgs). Drinking water is generally provided by a public well located upgradient from the site; however, private wells are present in McGrath.

Contaminants of Concern

During the site investigation and cleanup activities at this site, samples were collected from soil and analyzed for organic compounds (VOCs), semi-volatile organic compounds (SVOCs), gasoline range organics (GRO), and diesel range organics (DRO), and metals. 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
- n-Butylbenzene
- n-Propylbenzene
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- GRO
- DRO

Cleanup Levels

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

Table 1 – Approved Cleanup Levels

Contaminant	Soil (mg/kg)
Benzene	0.022
Toluene	6.7
Ethylbenzene	0.13
Xylenes	1.5
n-Butylbenzene	20
n-Propylbenzene	52

1,2,4-Trimethylbenzene	43
1,3,5-Trimethylbenzene	37
GRO	300
DRO	250

Notes: mg/kg = milligrams per kilogram

Characterization and Cleanup Activities

In 1999, AGI Technologies sampled soil from 3 test pits and 5 hand dug surface samples at the assumed northeast corner of GTE's Lot 1 and near the BJ Fuels pole barn. Benzene, toluene, ethylbenzene, xylenes, GRO, and DRO exceeded soil cleanup levels along the property boundary and in surface samples collected in the GTE storage building. Contamination was observed at 4.5 feet below ground surface in the test pit near the northeast corner of Lot 1 and next to fuel supply lines running from the airport and beneath McGuires Road.

While AGI Technologies was completing this investigation, they observed an AST on Lot 7, located south of Lot 1, which they mistakenly identified as the source of the spill. AGI Technologies' report identifies this tank as an 11,000-gallon unleaded gasoline tank, which they suggest was owned by Mr. Magnuson. According to Mr. Magnuson, this tank was actually one of two 5,000-gallon tanks that were empty and temporarily staged on Lot 7 to be used as generator fuel storage for the radio station on Lot 6. To Mr. Magnuson's knowledge, this tank was never connected to fuel lines or used to store fuel at this location. Photo-7 in the 1999 AGI Technologies report shows a tank shaped depression behind the tank on Lot 7 that appears to have been the location of the second tank.

In 2000, Mr. Magnuson excavated approximatlye 35 cubic yards of suspected contaminated soil from the northwest corner of Lot 2 in the area associated with spills from his 2,500 gallon tank. The excavated soil was spread on a 20-mil liner at the south end of the property. In 2002, MTNT Development, Inc. conducted additional investigation by field screening and collecting samples at depths up to 3 ft bgs in suspect areas, including the excavation base and sidewalls, and the excavated soil spread on the liner. Petroleum compounds were found in soil above cleanup levels in one sample in the north wall of the excavation, and in three other samples north and west of the excavation area. The contaminated soil samples were confined to a small area near a utility pole that is no longer present at the site. Samples collected in the stockpile indicated the excavated soil was no longer contaminated above DEC cleanup levels.

Uncertainty in property boundary locations, confusion regarding the AST on Lot 7, and changing building configurations in the older reports left the location and status of the contamination unclear. In 2023, 3-Tier Alaska (3TA) worked with Mr. Magnuson to identify the area where spills from the 2,500 gallon gasoline tank occurred. This included the area that was excavated in 2000 and sampled by MTNT in 2002. 3TA dug test trenches to depths of 3 ft, screened soil, and sampled at 0.5 and 2.0 ft bgs throughout the area to look for remaining contamination. Samples were analyzed for GRO, DRO, and VOCs. Alhtough some DRO and lead were detected, no contaminants were found above soil cleanup levels.

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 (HI) of 1 across all exposure pathways.

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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.

Table 2 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	De Minimis Exposure	COCs were not found in soil above DEC cleanup
		levels in the 2023 investigation.
Subsurface Soil Contact	De Minimis Exposure	COCs were not found in soil above DEC cleanup
		levels in the 2023 investigation.
Inhalation – Outdoor Air	De Minimis Exposure	COCs were not found soil above DEC cleanup
		levels in the 2023 investigation.
Inhalation – Indoor Air	De Minimis Exposure	COCs were not found in soil above DEC cleanup
(vapor intrusion)		levels in the 2023 investigation.
Groundwater Ingestion	De Minimis Exposure	COCs were not found in soil above DEC cleanup
		levels in the 2023 investigation. Groundwater
		samples were not collected.
Surface Water Ingestion	Pathway Incomplete	The nearest surface water, the Kuskokwim River,
		is located about 500 ft from the site and is not
		likely to be affected by the contamination.
Wild and Farmed Foods	Pathway Incomplete	Contaminants of concern do not have the
Ingestion		potential to bioaccumulate in plants or animals.
Exposure to Ecological	Pathway Incomplete	COCs were not found in soil above DEC cleanup
Receptors		levels in the 2023 investigation and ecological
		receptors are not likely to be affected in this area.

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 contamination at the site has 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 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.

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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 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 questions about this closure decision, please feel free to contact me at (907) 451-2127, or email at <u>janice.wiegers@alaska.gov</u>.

Sincerely,

Janice Wiegers Project Manager

cc: DEC, Division of Spill Prevention and Response, Cost Recovery Unit, dec.spar.cr@alaska.gov Charlie Hampton, 3-Tier Alaska, charlie@3tieralaska.com



