



THE STATE
of **ALASKA**
GOVERNOR MICHAEL J. DUNLEAVY

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

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File No. 102.38.156

April 16, 2019

William Barstow
VC Sellers Reserve
200 West 34th Avenue, Box 905
Anchorage, AK 99503

Re: **Decision Document: NORCON Braddock Street
Cleanup Complete Determination – Institutional Controls**

Dear Mr. Barstow:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the NORCON Braddock Street Site located at 3725 Braddock Street, Fairbanks. 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 as long as the institutional controls are maintained and effective and no new information becomes available that indicates residual contamination poses an unacceptable risk.

This Cleanup Complete with Institutional Controls (ICs) determination is based on the administrative record for the Site NORCON Braddock Street which is located in the offices of the ADEC in Anchorage, Alaska. 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:

NORCON Braddock Street
3725 Braddock Street
Fairbanks, Alaska 99701

Name and Mailing Address of Contact Party:

William Barstow
VC Sellers Reserve
200 West 34th Avenue, Box 905
Anchorage, Alaska 99503

ADEC Site Identifiers:

File No.: 102.38.156
Hazard ID.: 25417

Regulatory Authority for Determination:

18 AAC 75

Site Description and Background

The Site is located in a light industrial area consisting of warehouse buildings, shops/garages, and equipment storage yards. The property was formerly a construction yard used for equipment and supply storage. It houses a 6,000 square foot building that was used as a maintenance shop. Sources of potential contamination at this Site have included a former injection well consisting of a floor drain and log-crib style leach field, a heating oil underground storage tank (UST), a waste oil above ground storage tank (AST), and new and used electrical equipment (e.g., transformers) that were stored on site.

The injection well was determined to be a Class V motor vehicle waste disposal well. Closure of these wells is regulated by the U.S. Environmental Protection Agency's Underground Injection Control (EPA's UIC) program.

Contaminants of Concern

During investigation and cleanup activities at this site, samples were collected from soil and groundwater and analyzed for gasoline range organics (GRO), diesel range organics (DRO), residual range organics (RRO), volatile organic compounds (VOC) to include benzene, toluene, ethylbenzene, and total xylene (BTEX), polycyclic aromatic hydrocarbons (PAH), polychlorinated biphenyls (PCB), and total metals (arsenic, cadmium, chromium, lead, nickel, vanadium, and zinc).

Based on these analyses, the following contaminants have been detected above current applicable cleanup levels and are considered Contaminants of Concern (COCs) at this site in soil:

- GRO
- DRO
- RRO
- benzene
- ethylbenzene
- toluene
- total xylene
- naphthalene
- 1-methylnaphthalene
- 2-methylnaphthalene
- 1,2,4-trimethylbenzene
- 1,3,5-trimethylbenzene
- tert-butylbenzene
- vinyl chloride

The following contaminants have been detected above the applicable cleanup levels and are considered COCs at this site in groundwater:

- Benzene
- DRO
- RRO

Cleanup Levels

The most stringent applicable soil cleanup levels are Method 2 migration to groundwater (MTGW) cleanup levels for the under 40-inch precipitation zone, established in 18 AAC 75.341(c), Table B1, and 18 AAC 75.341 (d), Table B2. GRO, DRO, RRO, BTEX, naphthalene, 1-methylnaphthalene, 2-methylnaphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, tert-butylbenzene, and vinyl chloride have been detected at the Site above these levels. Benzene, DRO, and RRO were detected in groundwater above the approved cleanup levels established in 18 AAC 75.345 Table C. Table 1 summarizes applicable cleanup levels for COCs.

Table 1 – Approved Cleanup Levels

Contaminant	MTGW Soil ¹ (mg/kg)	Human Health Soil ² (mg/kg)	ADEC Table C Groundwater (µg/L)
GRO	300	1,400	N/A
DRO	250	10,250	1.5
RRO	11,000	10,000	1.1
benzene	0.022	11	4.6
ethylbenzene	0.13	49	N/A
toluene	6.7	200	N/A
total xylene	1.5	57	N/A
naphthalene	0.038	29	N/A
1-methylnaphthalene	0.41	68	N/A
2-methylnaphthalene	1.3	310	N/A
1,2,4-trimethylbenzene	0.61	43	N/A
1,3,5-trimethylbenzene	0.66	37	N/A
tert-butylbenzene	11	35	N/A
vinyl chloride	0.00080	0.65	N/A

Notes to Table 1:

mg/kg = milligrams per kilogram

N/A = not applicable; contaminant not a COC in this matrix.

µg/L = micrograms per liter

¹ – Method 2 MTGW pathway for the under 40-inch zone, representing the most stringent approved cleanup levels for soil.

² – Method 2 Human Health (Table B1) or most stringent of ingestion or inhalation (Table B2) for the under 40-inch zone, applicable and shown for reference.

Characterization and Cleanup Activities

The following sections summarize site characterization and cleanup activities conducted at the Site. Contamination was first identified in 2007 during a Phase I Environmental Site Assessment (ESA).

2007 Phase I ESA:

A Phase I ESA identified the following recognized environmental conditions (RECs) associated with the property.

- Maintenance Shop Building – Surface staining near to the Maintenance Shop Building with drum and equipment storage noted to be present
- AST Area – Heavy staining in the vicinity of a waste oil AST located on the north end of the Maintenance Shop Building
- Transformer Area – Staining in an area used for transformer storage
- UST – A UST located on the south end of the Maintenance Shop Building containing diesel fuel.
- UIC Class V Well – A septic system tied to the Maintenance Shop Building service bays.

2008 Phase II ESA:

A Phase II was conducted in 2008 to address RECs identified during the 2007 Phase I ESA.

Site-wide Investigation – Twenty-one soil borings were installed on the property at depths between 14 and 18 feet below ground surface (bgs) to identify potential site-wide contamination. Fifty-four soil samples were collected and analyzed for GRO, DRO, RRO, BTEX and lead. Select samples were also analyzed for VOC, PAH, PCB, and total metals. Results indicated contamination above cleanup levels at two areas.

- East of the Maintenance Shop Building - A boring located on the east side of the Maintenance Shop Building (SB3; Figure 1) contained benzene at 0.061 mg/kg, above the MTGW cleanup level at 2 feet bgs.
- Southeast of the Maintenance Shop Building – Contaminants were detected above MTGW cleanup levels in an area southeast of the Maintenance Shop building, north of a Pole Barn (Figure 1). Maximum concentrations were 3,370 mg/kg GRO, 2,070 mg/kg DRO, 8.89 mg/kg benzene, 40.7 mg/kg toluene, 44.4 mg/kg ethylbenzene, 164.3 mg/kg total xylene, 4.07 mg/kg naphthalene, 5.90 mg/kg 1-methylnaphthalene, 7.06 mg/kg 2-methylnapalene, 3.3 mg/kg 1,3,5-trimethylbenzene, 5.89 mg/kg 1,2,4-trimethylbenzene, 19.2 mg/kg tert-butylbenzene, and 0.0482 mg/kg vinyl chloride. Contamination ranged from 2 to 14 feet bgs.

Eight of the twenty-one soil borings were completed as groundwater monitoring wells. Groundwater samples were collected and analyzed for GRO, DRO, RRO, VOC, PAH, PCB, and total metals. One well (MW-18), located southeast of the Maintenance Shop Building contained benzene above the cleanup level at 388 µg/L. The location of this well corresponded to the soil sample locations southeast of the Maintenance Shop Building with concentrations of GRO, DRO, VOC, and PAH above cleanup levels. MW-18 and two downgradient wells (MW-2 and MW-4) were retained for future sampling. The other five wells were removed. MW-18 was later replaced by MW-29. The locations of MW-2, MW-4 and MW-29 are shown on Figure 1.

AST Area – A surface soil sample was collected from the stained area identified during the Phase I ESA and analyzed for GRO, DRO, RRO, PAH, PCB, VOC, and total metals. The results indicated DRO and RRO above cleanup levels at 11,600 mg/kg and 57,200 mg/kg, respectively. Based on these results, contaminated soil was excavated and the area backfilled with clean pit run material. The excavated area had an approximate surface area of 20 feet by ten feet and depth of 4.5 feet bgs. Six confirmation samples were collected and analyzed for GRO, DRO, RRO, PAH, VOC, PCB, and total metals. All results were below cleanup levels, except for arsenic. The maximum concentration of DRO and RRO were 12.5 J (estimated concentration) mg/kg and 62.5 mg/kg. No BTEX were detected. Arsenic concentrations were considered consistent with background levels in the area. The approximate estimated area is shown on Figure 1.

Transformer Area – A surface sample was collected and analyzed for GRO, DRO, RRO, PAH, VOC, PCB, and total metals. No contaminants were indicated above cleanup levels. Surface stains in the area were removed and soils transported off site for thermal treatment. The approximate estimated area of soil removal is shown on Figure 1. Four confirmation samples were collected and analyzed for GRO, DRO, RRO, VOC, PAH, PCB, and total metals. Results indicated DRO remaining in the southeast corner of the lot at a depth of 1.5 feet bgs with a concentration of 11,400 mg/kg, above the cleanup level for ingestion of soil. A second sample from 3 feet bgs had DRO at 275 mg/kg, slightly above the MTGW cleanup level but below human health. The location of this remaining soil is shown on Figure 1. Monitoring at the Site has indicated that concentrations of DRO in groundwater are below cleanup levels.

UST – This tank was excavated, following removal of 280 gallons of diesel fuel. Five closure samples were collected and analyzed for GRO, DRO, RRO, VOC, PAH, and total metals. Results indicated residual DRO in the northeast corner of the excavation adjacent to the Maintenance Shop Building at 293 mg/kg,

slightly above the MTGW cleanup level. Concentrations of contaminants were otherwise not detected or below cleanup levels. The approximate estimated area is shown on Figure 1.

UIC Class V Well – The UIC Class V injection well (UIC ID# AK090P5-17-13409) identified during the 2007 Phase I ESA was closed. The Maintenance Shop Building was historically used by NORCON (an electrical contractor) for office space, equipment storage, and vehicle maintenance. Personnel routinely used the shop to perform light-duty washing of vehicles and equipment, producing hundreds of gallons of wash water in the process. A single floor drain was used near the south wall. A 6-inch deep by 6-inch wide concrete trench ran down the center of the shop floor and connected to this drain, which was previously connected to the building's sanitary sewer line that led to a wooden crib located approximately 21 feet south of the Maintenance Shop Building. The wood crib was 4-inch by 10-inch timbers. The top of the crib dimensions were observed to be 8 feet by 8 feet and approximately two feet bgs. The bottom of the crib was noted at 10 feet bgs.

During closure, the top of the wood crib was exposed and sludge was pumped out and disposed offsite at a sewer waste management facility in accordance with the ADEC wastewater program approval. Three samples were collected from a soil boring (SB-17) installed directly adjacent to the septic wood crib at depths of five, 11, and 13 feet bgs to represent the system's end point. Samples were analyzed for GRO, DRO, RRO, PAH, VOC, PCB, and total metals. Arsenic was either not detected, or below the cleanup level. Arsenic concentrations, which from 2.05 to 10.6 mg/kg, were considered consistent with background concentrations. The approximate location of this boring (SB-17) is shown on Figure 1, south of the Maintenance Shop Building and UST Area.

The injection well was abandoned and closed. The pre-existing septic system and wood crib were abandoned and the pre-existing pipe at the building was connected to a 1,500-gallon polyethylene holding tank installed along the side of the shop. The holding tank was sealed, equipped with a high level-alarm, and has no outfall such that wastewater must be pumped and hauled offsite. A new ADEC approved septic system was installed by an engineer.

2008 Corrective Action:

Following completion of the Phase II ESA, corrective action was initiated to delineate and remove contamination identified southeast of the Maintenance Shop Building and reduce future impacts to groundwater.

Delineation - Nine additional borings were installed. Generally two soil samples were collected from each boring, one from the highest photoionization (PID) interval and one just above the zone of saturation. All soil samples were analyzed for GRO and BTEX. Select samples were also analyzed for DRO and RRO. Two borings showed concentrations of benzene above cleanup levels between 14 and 19 feet bgs, with a maximum concentration of 0.433 mg/kg.

Removal Action – Following delineation, approximately 1,788 cubic yards of petroleum-impacted soil were excavated from the area. This soil, as well as approximately 60 cubic yards of material generated during the Phase II ESA, were transported to an off-site thermal treatment facility.

Confirmation Sampling – Fifty-one confirmation samples were collected from the excavation limits. Twenty-one samples showed benzene remaining above cleanup levels, with concentrations ranging from 0.0568 to 1.78 mg/kg. Three samples showed DRO and GRO remaining above cleanup levels with a maximum concentration of 2,070 mg/kg for DRO and 749 mg/kg for GRO. Two samples showed ethylbenzene above cleanup levels. Four of the soil samples were sampled for lead. Concentrations ranged

from 4.54 to 5.77 mg/kg, below background for the area. The majority of the source area was removed and the final excavation depth was limited by a shallow semi-confined groundwater aquifer.

Three test pits were installed to help confirm that source surface areas were not missed, one to 4 feet bgs and two to 6.5 feet bgs. One of the three test pits showed benzene slightly above the MTGW cleanup level at 0.033 mg/kg.

2008 and 2009 Groundwater Monitoring:

Five of the nine soil borings installed during the 2008 Corrective Action were completed as groundwater monitoring wells, MW-22, MW-23, MW-24, MW-25, and MW-29 (Figure 1). MW-29 replaced MW-18 installed during the Phase II ESA. Following soil removal, samples were collected twice in 2008 (summer and fall) and three times in 2009 from these five monitoring wells plus downgradient wells MW-2 and MW-4 installed during the Phase II ESA, and analyzed for GRO, DRO, RRO, and BTEX. Three of the monitoring wells (MW-22, MW-23, and MW-29) consistently showed benzene above the cleanup level indicating an existing source of contamination remained. Results for the remaining wells and contaminants were below cleanup levels except for a single occurrence at MW-29 in September 2008 where DRO was reported at 1.54 milligrams per liter (mg/L) and RRO at 1.57 mg/L and a single occurrence at MW-4 in June 2009 where DRO was reported at 3.9 mg/L.

2009-2010 Corrective Action:

In the fall of 2009, thirteen borings were installed through the source area excavated in 2008 to determine hydrocarbon impacts remaining in the peat layer and underlying mineral soils. Benzene concentrations ranged from 0.239 to 3.22 mg/kg in the peat and 0.0721 to 1.56 mg/kg in the underlying saturated silty sand. In 2010, the contaminated materials above the seasonally low groundwater table were excavated. The final 6,400 square foot excavation was constrained by the Maintenance Shop Building to the northwest and Pole Barn to the south. An estimated 415 to 533 cubic yards of peat and 789 to 825 cubic yards of mineral soil were transported off site and thermally treated. Fifty-one confirmation soil samples and six duplicates were collected and analyzed for DRO, RRO, GRO, and BTEX. No samples were analyzed for PAH or additional VOC. Contaminants were either not detected or well below cleanup levels, except for benzene. Twenty-four samples were above the cleanup level for benzene, ranging from 0.0299 to 2.69 mg/kg representing a contaminated layer remaining below the seasonal water table at 13.5 to 15.5 feet bgs (2 feet thick).

2010-2017 Groundwater Monitoring:

2010-2012 - The seven groundwater monitoring wells were sampled between 2010 and 2012 for GRO, DRO, RRO, and BTEX. Contaminants were either not detected or below cleanup levels in wells MW-2, MW-4, MW-24 and MW-25; the wells were decommissioned. Notable reductions were observed at MW-23 and MW-29. By October 2012, MW-29 showed benzene below cleanup levels. Benzene concentrations at MW-22 (downgradient of MW-29) increased from a low of 23.4 µg/L in 2009 to 76.5 µg/L in July of 2012.

2012-2015 – The three remaining monitoring wells, MW-22, MW-23, and MW-29 were sampled annually for GRO, DRO, RRO, and BTEX. During this period MW-23 and MW-29 were consistently below cleanup levels, and MW-23 was decommissioned in 2015. Benzene concentrations at MW-22 (downgradient of MW-29) remained stable through 2013 and then began to decrease showing a concentration of 49.5 in August of 2015.

2016 – Remaining wells MW-22 and MW-29, plus one additional groundwater monitoring well, MW-30X, were sampled for GRO, DRO, RRO, and BTEX. MW-30X was installed downgradient near the property boundary (Figure 1) to assess whether benzene impacted groundwater was migrating offsite. Contaminants were either not detected or below cleanup levels in wells MW-29 and MW-30X, indicating groundwater

contamination does not extend off the property. Benzene concentrations at MW-22 had decreased to 38.7 µg/L.

2017 – The three groundwater wells, MW-22, MW-29, and MW-30X, were sampled three times in 2017 (June, September, and October) for GRO, DRO, RRO, and BTEX. At the request of ADEC, the October sampling event included all fuel related VOCs and PAHs. Results were below cleanup levels, except for benzene at MW-22. Benzene levels at MW-22 remained stable during 2017 (concentrations ranged from 19.0 µg/L to 23.8 µg/L) and continued to show a decreasing trend. Results from MW-30X continued to indicate that contamination is not migrating offsite. MW-22, MW-29, and MW-30X were decommissioned in December of 2018.

Summary of Current Site Conditions

During investigation and cleanup activities surface staining was identified near the Maintenance Shop Building, at the AST Area, and at the Transformer Area. A diesel UST and UIC Class V well were also identified as RECs. The following areas are identified as having remaining contamination:

Maintenance Shop Area – Benzene contaminated soil may remain southeast of the Maintenance Shop Building, and northwest of the Pole Barn. Samples collected in 2010 following the removal of peat and mineral soil indicated concentrations of benzene ranging from 0.0299 to 2.69 mg/kg were present below the seasonal water table at 13.5 to 15.5 feet bgs. Benzene concentrations remain above the groundwater cleanup level in one well in the source area (MW-22). However, groundwater monitoring has shown a decreasing trend. A Notice of Environmental Contamination (NEC) has been recorded that requires ADEC approval prior to the installation of groundwater wells.

In addition, benzene was detected at soil boring SB3, east of the Maintenance Shop Building, at 0.61 mg/kg above the MTGW cleanup level. The approximate location is shown on Figure 1. Groundwater in the vicinity of the boring was tested for GRO, DRO, RRO, and VOC in 2016 and 2017. Contaminants were not detected above cleanup levels.

Transformer Area – Stained soils in this area were removed in 2008. Analytical results for two of the confirmation samples indicated residual DRO above the MTGW cleanup level in two locations, one with DRO at 275 mg/kg and the other at 11,400 mg/kg (above the ingestion cleanup level of 10,250 mg/kg). Groundwater sampling has occurred at this site since 2008. A well placed to the northwest and sampled in 2008 did not indicate contaminants above cleanup levels. The MTGW pathway is further protected by institutional controls. The aforementioned NEC requires ADEC approval prior to the installation of groundwater wells. The NEC also requires an ADEC approved soil management plan prior to any ground disturbing activities. The approximate location of the DRO above the ingestion cleanup level is shown on Figure 1.

UST – Analytical data collected in 2008 indicated residual DRO in the northeast corner of the excavation adjacent to the Maintenance Shop Building at 293 mg/kg. The approximate location of this residual DRO above the MTGW cleanup level is shown on Figure 1. Groundwater monitoring at the Site has indicated that concentrations of DRO are below cleanup levels.

The following table presents the maximum concentration of COCs remaining onsite above the applicable MTGW cleanup level, based on existing analytical data.

Table 2 –Maximum Concentrations of COCs Remaining

Contaminant	Soil	Water
	Maximum Concentration (mg/kg)	Maximum Concentration (µg/L)
DRO	11,400¹	N/A
Benzene	<i>2.69²</i>	<i>23.8²</i>
Napthalene ³	<i>4.07</i>	N/A
1-methylnapthalene ³	5.90	N/A
2-methylnapthalene ³	7.06	N/A
1,2,4-trimethylbenzene ³	<i>5.89</i>	N/A
1,3,5-trimethylbenzene ³	3.30	N/A
tert-butylbenzene ³	<i>19.2</i>	N/A
Vinyl chloride ⁴	0.0482	N/A

Notes to Table 2:

mg/kg = milligrams per kilogram

N/A = the contaminant was not identified as a COC in this matrix or concentrations do not remain above current cleanup levels for 18 AAC 75.341(c) Table B1 constituents.

µg/L = micrograms per liter

BOLD = above applicable cleanup level, MTGW

shaded, and *Italics* = the concentration is above one-tenth of the human health cleanup level for soils or groundwater cleanup level. These chemicals and associated concentrations were included in the calculation of cumulative risk.

¹ – This contamination was identified at the Transformer Area.

² – The benzene in both soil (13.5 feet bgs) and groundwater were located southeast of the Maintenance Shop Building.

³ – This contaminant was detected in one sample southeast of the Maintenance Shop Building at 2 feet bgs in 2008 and the concentration was above the current MTGW cleanup level. The concentration presented is considered conservative because soils in the area have been removed to approximately 12.5 feet bgs. The chemical was not identified as a COC at the time of cleanup. Sampling did not include analysis of PAH and VOC other than BTEX. It is expected that these chemicals would have been removed congruently along with benzene.

⁴ – Vinyl chloride was detected in one sample in 2008 at 12 feet bgs in the area east of the Maintenance Shop Building above the current MTGW cleanup level. For other samples, the laboratory reporting limit was above the cleanup level. Similar to PAH and other VOC, vinyl chloride was not identified as a COC at the time of cleanup.

A drinking water well remains on site that provides water for bathroom facilities within the Maintenance Shop Building. Reportedly the water is not considered potable and is not used for drinking. A well log could not be found. A water softener system is in place. The water was tested in 2008 using drinking water methodologies for alkalinity, conductivity, hardness, metals, nitrate/nitrite, total dissolved solids, and VOC. No VOCs were detected. Lead (32.5 µg/L) and Manganese (1,420 µg/L) were above 18 AAC 75 Table C cleanup levels. At the time, the well was measured to be 70 feet deep, with the well pump set at 40 feet and a static water level of 12 feet below top of casing.

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. Cumulative risk at this site was calculated assuming a residential land use and using the highest detected concentrations of contaminants in all of the samples collected that could conservatively represent current concentrations of contaminants remaining in soil and groundwater onsite.

Based on a review of the environmental record, ADEC has determined that for soil residual contaminant concentrations meet the cumulative risk criteria for human health for a residential land use scenario.

For groundwater, the results indicate a cumulative carcinogenic cancer risk of 5 in 100,000 and a non-carcinogenic hazard index of 1. The potential cumulative risk is via a combination of the inhalation, ingestion, and dermal contact pathways. The complete exposure pathways are controlled as institutional controls are in place to prevent exposure to contaminated soil and groundwater.

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 3.

Table 3 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	Exposure Controlled	Contamination in the surface soil (0 to 2 feet below ground surface) is below human health and ingestion cleanup levels, except for a limited volume 1.5 feet bgs at the former Transformer Area in the southeast corner of Lot 8, where a stained soils were removed and replaced with clean material. An NEC has been recorded requiring an ADEC-approved soil management plan prior to ground disturbance.
Sub-Surface Soil Contact	De-Minimis Exposure	Contamination remains in the sub-surface at concentrations above MTGW cleanup levels. The concentrations are below human health and ingestion cleanup levels.
Inhalation – Outdoor Air	De-Minimis Exposure	Contamination remains in the sub-surface, but is below inhalation cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De-Minimis Exposure	Contaminated soil with residual benzene remains approximately 40 feet from the building and source material has been removed to a depth of 12.5 to 15 feet bgs, and below the static water level. Concentrations remaining are below the inhalation cleanup level. Benzene remains in one well located 30 feet from the building at a concentration below the target level for vapor intrusion based on commercial use with monitoring data showing a decreasing trend. Land use is not expected to change in the foreseeable future.
Groundwater Ingestion	Exposure Controlled	Contamination remains in soil at the site above MTGW levels. Groundwater monitoring has not indicated contaminants remain above cleanup levels, except for benzene. Benzene remains in one well at a concentration above the cleanup level; however, groundwater monitoring has shown that a decreasing concentration trend is evident and the plume is limited and not migrating off the property. An NEC has been

		recorded prohibiting the installation of water wells without prior ADEC approval. One water well remains on site within the Maintenance Shop Building. The water is reportedly not potable and not used for drinking.
Surface Water Ingestion	Pathway Incomplete	Surface water is not used as a drinking water source in the vicinity of the site.
Wild and Farmed Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals. In addition, this site is located in an industrial area that is not reasonably likely to be used for hunting, fishing, or harvesting of wild or farmed foods.
Exposure to Ecological Receptors	Pathway Incomplete	Terrestrial or aquatic exposure routes are not evident at this site.

Notes to Table 3: “De-Minimis Exposure” means that in ADEC’s judgment receptors are unlikely to be 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

Petroleum contamination remains in soil and groundwater above levels suitable for unrestricted future use; however ADEC has approved the use of institutional controls to limit potential future exposure and risk to human health or the environment. A NEC and ICs (NEC-IC) has been recorded in the land records maintained by the Alaska Department of Natural Resources and a copy is attached to this letter.

Groundwater meets the applicable cleanup levels at the property boundary, shown in the figure included in the attached NEC-IC Agreement, the groundwater contaminant plume has been demonstrated to be shrinking and the contaminant concentrations are decreasing. ADEC has determined the residual soil contamination does not pose an unacceptable MTGW concern.

Institutional controls necessary to support this closure determination include:

1. The Landowner agrees to notify ADEC prior to any sale or transfer of the property and shall report to ADEC every 2 years to document the status of compliance with the institutional controls described in this notice. Such notice and the reports should be sent to the ADEC at:
Alaska Department of Environmental Conservation
Division of Spill Prevention and Response
Contaminated Sites Program
Attention: IC Unit
P.O. Box 111800
Juneau, AK 99811-1800
or be submitted electronically to CS.Submittals@alaska.gov.
2. No groundwater wells shall be installed in the area covered by the institutional controls without prior DEC approval.
3. No ground disturbing activities shall take place in the area covered by the institutional controls without an ADEC-approved soil management plan.

Standard site closure conditions that apply to all sites include:

1. ADEC approval is required prior to moving any soil or groundwater off any site that is, or has been, subject to the site cleanup rules [see 18 AAC 75.325(i)]. 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. In the future, if soil will be excavated (or groundwater will be brought to the surface (for example to dewater in support of construction) it must be characterized and managed following regulations applicable at that time and ADEC approval must be obtained before moving the soil or water off the property.
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 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 characterization and treatment may be required to ensure the water is suitable for its intended use.

ADEC has determined the cleanup is complete as long as the institutional controls are properly implemented and no new information becomes available that indicates residual contamination may pose an unacceptable risk. The onsite water well should be tested on a regular basis if it is intended to be used for drinking.

The ADEC Contaminated Sites Database will be updated to reflect the change in site status to “Cleanup Complete with Institutional Controls” and will include a description of the contamination remaining at the site.

The institutional controls will be removed in the future if documentation is provided that shows concentrations of all residual hazardous substances remaining at the site are below the levels that allow for unrestricted exposure to, and use of, the contaminated media and that the site does not pose a potential unacceptable risk to human health, safety or welfare, or to the environment. The standard conditions listed above will remain in effect after ICs are removed.

This determination is in accordance with 18 AAC 75.380 and does not preclude ADEC from requiring additional assessment and/or cleanup action if the institutional controls are determined to be ineffective or if new information indicates that contaminants at 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, 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 issues a final decision under 18 AAC 15.185. If a hearing is not requested within 30 days, the right to appeal is waived.

Mr. Barstow
VC Sellers Reserve

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April 16, 2019

If you have questions about this closure decision, please feel free to contact me at (907) 269-3059 or email at wendy.hansen@alaska.gov.

Sincerely,



Wendy Hansen
Project Manager

Note: This letter is being transmitted to you in electronic format only. If you require a paper copy, let us know and we will be happy to provide one to you. In the interest of reducing file space, the Division of SPAR/Contaminated Sites Program is transitioning to electronic transmission of project correspondence.

Enclosures: Recorded NEC-IC Agreement which includes site figure(s) showing the extent of residual soil/groundwater contamination and boundaries of areas covered by ICs.

cc: ADEC Spill Prevention and Response, Cost Recovery Unit
Mr. Dennis Wilfer, MIRAE – B2, LLC



Notice of Environmental Contamination and Institutional Controls

Grantor: MIRAE – B2 LLC
VC Sellers Reserve
NORCON Braddock Street

Legal Description: LOT 7 and 8 BLOCK 1, WISE INDUSTRIAL PARK SECOND
ADDITION OUT OF LOT 1 WISE INDUSTRIAL PARK FIRST ADDITION; FAIRBANKS
MERIDIAN

Recording District: Fairbanks Recording District, Fourth Judicial District, State of Alaska

Return to: Alaska Department of Environmental Conservation
ATTN: Wendy Hansen
Division of Spill Prevention and Response
Contaminated Sites Program
555 Cordova Street
Anchorage, Alaska, 99501

State Business - No Charge

NOTICE OF ENVIRONMENTAL CONTAMINATION AND INSTITUTIONAL CONTROLS

As required by the Alaska Department of Environmental Conservation, pursuant to 18 AAC 75.375 MIRAE – B2 LLC, the Landowner(s) of the subject property, hereby provides public notice that the property located at: 3725 Braddock Street Fairbanks, Alaska, 99701, and more particularly described as follows:

LOTS 7 & 8 BLOCK 1 WISE INDUSTRIAL PARK SECOND ADDITION OUT OF LOT 1 WISE INDUSTRIAL PARK FIRST ADDITION, according to plat filed February 21, 1984 as Plat No. 84-20; Records of the Fairbanks Recording District, Fourth Judicial District, State of Alaska

has been subject to a discharge or release and subsequent cleanup of oil or other hazardous substances, regulated under 18 AAC 75, Article 3. This release and cleanup are documented in the Alaska Department of Environmental Conservation (ADEC) contaminated sites database at http://www.dec.state.ak.us/spar/csp/db_search.htm under the site name NORCON Braddock Street and Hazard ID number 25417.

By signing this notice, ADEC and the Landowner have agreed that the institutional controls described below are necessary and appropriate, and shall be maintained and be binding on the Landowner and its agents, successors and assigns. If the Landowner transfers, sells, assigns, leases or subleases the property or any portion of the property covered by the institutional controls, the Landowner shall incorporate a copy of this notice into the documents of transfer, sale, assignment, lease or sublease.

ADEC has reviewed and approved, subject to the institutional controls described below, the cleanup as protective of human health, safety, welfare, and the environment. No further cleanup is necessary at this site as long as the institutional controls remain in place and effective and no new information becomes available that indicates to ADEC that the site may pose an unacceptable risk to human health, safety, welfare, or the environment.

ADEC determined, in accordance with 18 AAC 75.325 – .390 site cleanup rules, that cleanup has been performed to the maximum extent necessary even though residual soil and groundwater contamination remains on-site. Further cleanup was determined to be unnecessary because ADEC has determined that the remaining concentrations of contaminants in soil and groundwater do not pose a risk to human health provided the institutional controls and standard conditions provided herein are maintained. Although benzene remains in the groundwater above the 18 AAC 75.345 Table C cleanup level, results of long-term groundwater monitoring show a stable/declining trend in concentrations and that offsite migration is not occurring. Institutional controls will restrict the use of groundwater so that drinking water is not and will not be an exposure pathway. Concentrations of contaminants remain in the soil above 18 AAC 75.345 Tables B1 and B2 Migration to Groundwater cleanup levels, but below Human Health cleanup levels. In the future, if soil will be excavated (or groundwater will be brought to the surface [for example to dewater in support of construction]) it must be characterized and managed following



regulations applicable at that time and ADEC approval must be obtained before moving soil or water off the property.

The following institutional controls and standard conditions shall be maintained:

Institutional Controls

1. The Landowner agrees to notify ADEC prior to any sale or transfer of the property and shall report to ADEC every 2 years to document the status of compliance with the institutional controls described in this notice. Such notice and the reports should be sent to the ADEC at:
Alaska Department of Environmental Conservation
Division of Spill Prevention and Response
Contaminated Sites Program
Attention: IC Unit
P.O. Box 111800
Juneau, AK 99811-1800
or be submitted electronically to CS.Submittals@alaska.gov.
2. No groundwater wells shall be installed in the area covered by the institutional controls without prior ADEC approval.
3. No ground disturbing activities shall take place in the area covered by the institutional controls without an ADEC-approved soil management plan.

Standard Conditions

4. ADEC approval is required prior to moving any soil or groundwater off any site that is, or has been, subject to the site cleanup rules [see 18 AAC 75.325(i)]. 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. In the future, if soil will be excavated (or groundwater will be brought to the surface (for example to dewater in support of construction) it must be characterized and managed following regulations applicable at that time and ADEC approval must be obtained before moving the soil or water off the property.
5. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.
6. 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 characterization and treatment may be required to ensure the water is suitable for its intended use.

The attached figure (Figure 1) shows the approximate property boundaries, locations of existing structures, areas that have been cleaned up, and the location and extent of remaining soil and/or groundwater contamination on the property at 3725 Braddock Street which is subject to the institutional controls described in this notice.

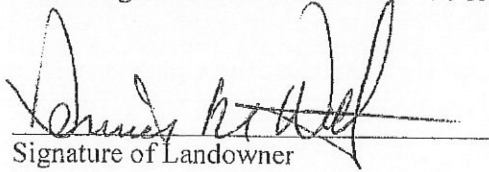


Failure to comply with the institutional controls described herein may result in ADEC reopening the site and requiring additional site characterization and cleanup.

In the event that new information becomes available which indicates that the site may pose an unacceptable risk to human health, safety, welfare or the environment, further site characterization and cleanup may be necessary under 18 AAC 75.325-.390.

This notice and the institutional controls remain in effect until a written determination from ADEC is recorded that documents contaminants remaining at the site have been shown to meet the residential use soil cleanup levels defined in 18 AAC 75.340 and groundwater cleanup levels in Table C within 18 AAC 75.345 and that off-site transportation of soil and/or groundwater are no longer a potential concern.

For more information on the contaminated site in this notice, please see ADEC Contaminated Sites Program file number 102.38.156 for the site named NORCON Braddock Street.


Signature of Landowner

11/11/17
Date

PENNIS
Printed Name of Landowner


Signature of Authorized ADEC Representative

1/3/2018
Date

Wendy Hansen
Printed Name of Authorized ADEC Representative



