



GOVERNOR SEAN PARNELL

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION & RESPONSE Contaminated Sites Program

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File: 400.26.005 Certified Mail, Return Receipt Requested Article No. (7013 1090 0000 7617 5827)

May 22, 2014

Mr. Charles Reader Q Trucking Company P.O. Box 991 Nome, Alaska 99762

Re: Closure Decision Document; Q Trucking Company Cleanup Complete Determination

Dear Mr. Reader:

The Alaska Department of Environmental Conservation (ADEC) has completed a review of the environmental records associated with the Q Trucking Company (Q Trucking) 1998 two underground storage tanks (UST), one aboveground storage tank (AST) and associated piping at the referenced site in Nome, Alaska. Based on the information provided to date, the department has determined that the contaminant concentrations remaining on site do not pose an unacceptable risk to human health or the environment.

This decision is based on the administrative record, located at ADEC's office in Juneau, Alaska. This letter summarizes the decision process used to determine the environmental status of the site and provides a summary of the regulatory issues considered in this Corrective Action Complete Determination.

Site Name and Location:

Q Trucking Company 331 & 367 W. Seppala Drive Nome, Alaska 99762

ADEC Site Identifiers:

File: 400.26.005 Hazard ID: 25027 ADEC UST Facility ID: 1100

Name and Mailing Address of Contact Party:

Q Trucking Company Attn.: Charles Reader P.O. 991 Nome, Alaska 99762-0991

Regulatory Authority for Determination: 18 AAC 75 18 AAC 78

Background

On March 25, 1980, two 3,000-gallon USTs (one diesel and one leaded gasoline) were installed at the abovementioned site, owned by Q Trucking Company (Q Trucking) in Nome, Alaska. Field tests conducted by ADEC staff on the UST system in 1983 indicated a sound system with no leaks. On December 23, 1993, this site was added to the ADEC Contaminated Sites and Leaking Underground Storage Tank (LUST) database based on a report of a release from the owner. In August 1998, the two partially-buried 3,000-gallon USTs, one 2,000-gallon AST (unleaded gasoline) and a fuel dispenser were removed from behind the Q Trucking warehouse building. The piping system was capped and left inplace. ADEC conducted a site visit in 2007 and no visual or olfactory evidence of a release was observed. The need for a site assessment was then documented. In 2008, ADEC conducted a site visit and no sheen was observed on Dry Creek, approximately 200 feet northwest of site. In July 2012, ADEC mailed a compliance letter to Q Trucking requesting a site assessment and release investigation for the site. On October 1, 2013, under contract to Q Trucking, Montauk Environmental Engineering (Montauk) conducted a site assessment and release investigation.

Contaminants of Concern

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

- GRO •
- DRO •
- Benzene •
- Lead •

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, Migration to Groundwater (MTG). However, Table B1 and B2 direct contact, ingestion and inhalation cleanup levels also apply. Below are the cleanup levels for the site:

Contaminant	MTG (mg/kg)	Ingestion (mg/kg)	Direct Contact (mg/kg)	Inhalation (mg/kg)
GRO	300	1,400		1,400
DRO	250	10,250		12,500
Benzene	0.025		150	11
Lead			400	

Table 1: Method Two soil cleanup levels from Table B1 and B2 per 18 AAC 75.341.

Characterization Activities

On October 1, 2013, a site assessment and release investigation was conducted. No releases or odors were detected during the 2013 field work in the area of the former tanks or around the piping system or former dispenser area. Approximately three cubic yards of suspected contamination was encountered at a depth of six inches to 3.5 feet bgs during excavation, but did not have a strong fuel odor. This contamination is suspected to be from a surface diesel fuel spill. This soil was segregated from the main stockpile soil. The final excavation dimension measured about 17 feet by 19 feet to a depth of seven feet. A discontinuous layer of poorly-graded silty soil extended from approximately four and a half feet bgs to the maximum

excavation depth. Subsurface geology encountered during site activity consisted of silty and sandy gravel fill. The final excavation depth was seven feet below ground surface (bgs) and groundwater seepage was encountered at several inches below the maximum vertical excavation limit. No sheen or odor was observed during groundwater seepage.

Based on field screening, seven confirmation soil samples were collected from the UST excavation, along with one sample from the piping run and one sample from the former dispenser area. In addition, three samples were collected from stockpiled soil, also based on field screening. The laboratory analytical results are summarized in Table 2. All excavated soil was returned to its source area following field work, including the suspected contaminated soil.

Two confirmation samples, 05 and its duplicate X-02, were collected from the excavation sidewall (3.5 feet bgs) and contained DRO above the 250 mg/kg MTG cleanup level. Sample X-01, a duplicate of sample 01, also collected from the excavation base (7 feet bgs) contained benzene above the 0.025 mg/kg MTG cleanup level. Benzene, however, was not detected in sample 01, the parent sample. Lead was detected in all samples, but concentrations were all below the ADEC direct contact cleanup level of 400 mg/kg.

One of three samples collected from the suspected contaminated stockpile for analysis had a DRO concentration above the 250 mg/kg MTG cleanup level (see Table 2, below). Three samples for three cubic yards exceeds the frequency required. Because this material was returned to the excavation prior to receipt of the sample results, the maximum concentration of DRO that remains at the site is 609 mg/kg. The maximum concentration of benzene that remains on site is 0.069 mg/kg, at 7 feet bgs.

Sample #	Location	Depth (ft. bgs)	DRO (mg/kg)	GRO (mg/kg)	Benzene (mg/kg)	Lead (mg/kg)
01	Exc. Pit Base	7	75.6	<3.4	<pql< td=""><td>35.3</td></pql<>	35.3
X-01	01 duplicate	7	74.2	<2.8	0.069	63.6
02	Exc. Pit Base	7	59.5	<2.5	<pql< td=""><td>25.6</td></pql<>	25.6
03	Exc. Pit Base	7	53.7	<2.5	<pql< td=""><td>22</td></pql<>	22
04	Exc. Sidewall	6	23.6	<2.5	<pql< td=""><td>23.1</td></pql<>	23.1
05	Exc. Sidewall	3.5	251	<2.6	<pql< td=""><td>22.8</td></pql<>	22.8
X-02	05 duplicate	3.5	287	5.6	<pql< td=""><td>28.3</td></pql<>	28.3
06	Exc. Sidewall	5	<15.6	<2.5	<pql< td=""><td>20</td></pql<>	20
07	Exc. Sidewall	5	<15.5	<2.0	<pql< td=""><td>20</td></pql<>	20
08	Stockpile		72.3	<2.7	<pql< td=""><td>11</td></pql<>	11
09	Stockpile		68.6	<3.0	<pql< td=""><td>34.2</td></pql<>	34.2
10	Stockpile		609	<2.2	<pql< td=""><td>34</td></pql<>	34
11	System Piping	2	32.6	<2.1	<pql< td=""><td>15.1</td></pql<>	15.1
12	Dispenser	1	58.7	<2.0	<pql< td=""><td>23.1</td></pql<>	23.1
X-03	Trip Blank			*	*	
	·		•	•	•	
ADEC Cleanup Level			250	300	0.025	400

Analysis Method	AK 102	AK 101	EPA 8260B	EPA 6010	
BOLD = Exceeds ADEC cleanup limit					
<pql 0.014="" =="" below="" kg<="" limit="" mg="" of="" practical="" quantitation="" td=""></pql>					
* = Analysis ordered, but not performed					
Blank = Analysis not ordered					

Table 2: Soil sample results from October 2013 field work. Data from Montauk's Site Assessment & Release Investigation report, February 2014.

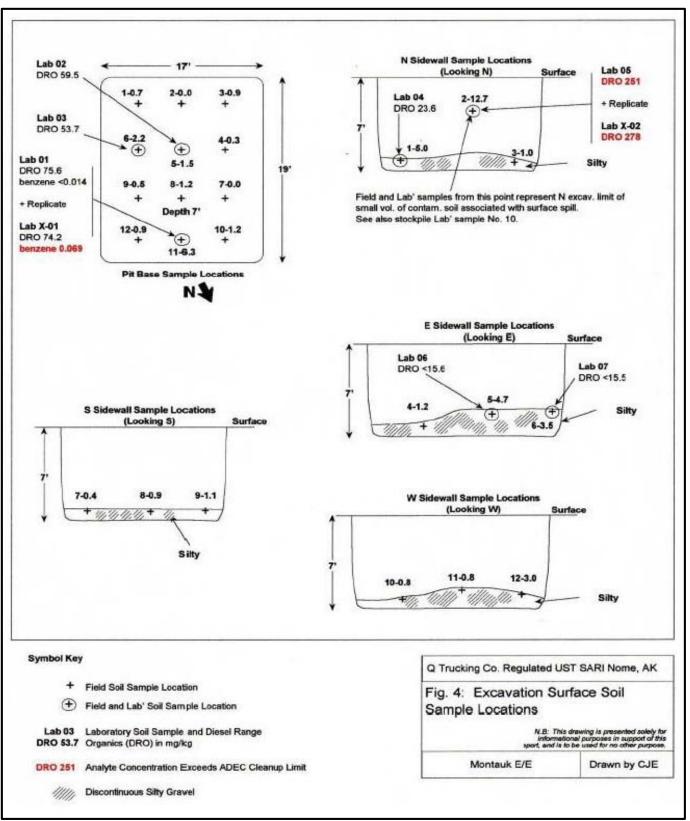


Figure 1: Excavation soil sample locations from October 2013 field work. Image from Montauk's Site Assessment & Release Investigation report, February 2014.

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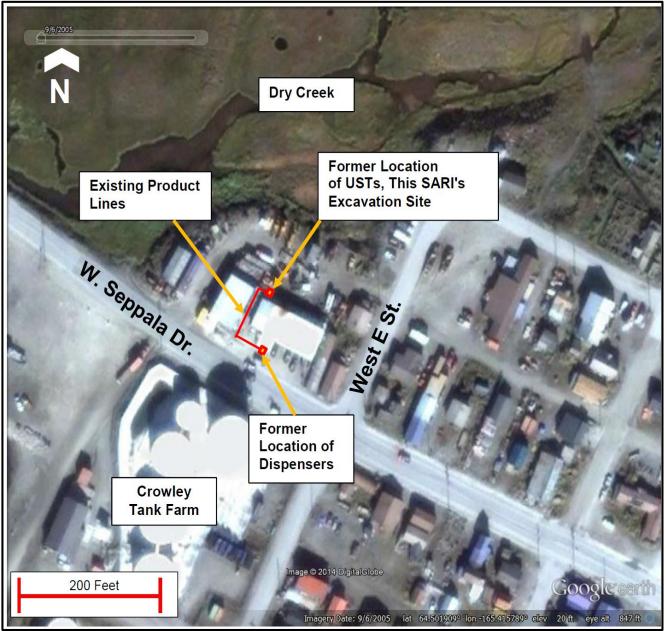


Figure 2: Satellite image of property and 2013 site work from Montauk's Site Assessment & Release Investigation report, February 2014. Image courtesy of Google Earth.

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.

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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: Exposure Controlled or Pathway Incomplete. A summary of this pathway evaluation is included in Table 3.

Pathway	Result	Explanation
Direct Contact with Surface Soil	De Minimis	Hydrocarbon contamination in surface soil is above Method Two Table B2 Migration to Groundwater at a de Minimis extent based on soil sample analysis results. Remaining hydrocarbon contamination is below Method Two Table B2 ingestion and Table B1 direct contact cleanup levels.
Direct Contact with Subsurface Soil	De Minimis	 Hydrocarbon contamination remains in the subsurface soil above Method Two Table B2 Migration to Groundwater at a de Minimis extent based on soil sample analysis results. Remaining hydrocarbon contamination is below Method Two Table B2 ingestion and Table B1 direct contact cleanup levels.
Inhalation-Outdoor Air	Pathway Incomplete	Soil sample analysis results indicate that petroleum hydrocarbon concentrations in soil are below Method Two Table B2 outdoor inhalation cleanup levels.
Inhalation-Indoor Air	De Minimis	Volatile soil contamination that remains 7' below ground surface is de Minimis in extent and below outdoor inhalation cleanup levels.
Groundwater Ingestion	De Minimis	Soil contamination remains between Method Two Migration to Groundwater and ingestion cleanup levels at de Minimis extent on site. Groundwater is likely affected by saltwater intrusion and not a current or future drinking water source. The site and surrounding properties are connected to city drinking water.
Surface Water Ingestion	Pathway Incomplete	No surface water bodies exist on site. Dry Creek, an estuary, is approximately 200 feet NW of the site. There are no drainage pathways from the site to Dry Creek.
Wild Foods Ingestion	Pathway Incomplete	Wild and farmed foods are not gathered on site or on surrounding properties.
Exposure to Ecological Receptors	Pathway Incomplete	Site is in an industrial setting and is approximately 200 feet SE of nearest creek. Remaining soil contamination is located in a heavy equipment storage area and does not bioaccumulate in flora or fauna. Surrounding properties are industrial and commercial in nature.

Table 3: Exposure Pathway Evaluation

<u>Notes to Table 3:</u> "De minimis Exposure" means that in ADEC's judgment receptors are unlikely to be affected by the minimal volume or concentration of remaining contamination. "Exposure Controlled" means DEC-approved institutional controls are in place to prevent exposure. "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 MTG cleanup level for GRO and lead. DRO contamination was documented in one excavation pit sample (and duplicate) at an averaged concentration of 269 mg/kg, slightly above the 250 mg/kg cleanup level, remains in a limited area of shallow subsurface soil at a depth of 3.5 feet below ground surface. Given the depth, the contamination is determined to originate from a past surface spill of diesel fuel, not from a previous UST release. The stockpiled soil was inadvertently returned to the excavation pit prior to receipt of sample results. However, the highest concentration of DRO from this material was 609 mg/kg, below the Method Two ingestion and outdoor inhalation cleanup levels. When averaged with the two other stockpile characterization sample results, the level for this material is 250 mg/kg, demonstrating that the overall DRO concentration of the excavated material is low. Likewise, a duplicate of a soil sample collected at seven feet bgs contained the only reportable benzene concentration at 0.069 mg/kg. The parent sample for this duplicate was non-detect (PQL of 0.014 mg/kg). When averaged, the combined result is 0.042 mg/kg, above the MTG cleanup level of 0.025 mg/kg, but de minimis in extent.

Based on all the sample results and an analysis of averaged concentrations, the extent of contamination encountered is likely from incidental surface spills and de minimis in extent. Exposure pathways for contaminants remaining on site are either de minimis or incomplete due to inaccessibility and overall concentration of contaminant. All potential sources of contamination from this site's UST system were well-characterized in October 2013. 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 75.325. 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. **This is a standard condition.**
- 2. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited. **This is a standard condition.**
- 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 treatment may be required to meet aquatic life criteria under 18 AAC 70. **This is a standard condition.**

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 99811-1800, 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 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.

If you have questions about this closure decision, please feel free to contact me at 465-5368 or via email at <u>amy.dieffenbacher@alaska.gov</u>.

Sincerely, C.

Amy Dieffenbacher Environmental Program Specialist

cc: Cliff Elsmann, Senior Environmental Scientist, Montauk Environmental Engineering via email