



THE STATE  
of **ALASKA**  
GOVERNOR SEAN PARNELL

Department of  
Environmental Conservation

DIVISION OF SPILL PREVENTION & RESPONSE  
Contaminated Sites Program

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File No: 2100.26.578

January 21, 2014

Jon Clark  
MOA Maintenance and Operations  
P.O. Box 196650  
Anchorage, AK 99519-6650

Re: Decision Document; MOA-Transit Maintenance Facility Tank 585-3  
Corrective Action Complete

Dear Mr. Clark;

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Municipality of Anchorage (MOA)-Transit Maintenance Facility located at 3701 Dr. Martin Luther King Jr. 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.

This decision is based on the administrative record for the MOA Transit Maintenance Facility which is located in the offices of the ADEC in Anchorage, Alaska. This letter summarizes the decision process used to determine the environmental status of this site and provides a summary of the regulatory issues considered in the Corrective Action Complete.

**Site Name and Location:**  
(MOA)-Transit Maintenance Facility  
3701 Martin Luther King Jr. Ave  
Anchorage, AK 99507  
Anchorage, AK 99501

**Name and Mailing Address of Contact Party:**  
Municipality of Anchorage  
Jon Clark  
MOA Maintenance and Operations  
P.O. Box 196650  
Anchorage, AK 99519

**DEC Site Identifiers:**  
File: 2100.26.578  
Hazard ID: 26127

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

## Background

The subject property is a vehicle maintenance facility for the MOA People Mover public buses. In 1986, on the north side of the maintenance facility the MOA installed a 2,000 gallon diesel underground storage tank (UST) and associated piping to fuel an emergency generator.

In 2013, the UST and associated piping were removed and replaced with a 2,500 gallon UST. Contamination was not detected during the removal of the UST; however, a groundwater sample collected from the excavation contained residual range organics (RRO) above the cleanup level. The source of the RRO contamination is from a second contaminated site associated with this location. The site can be found on the Contaminated Sites Program database under site name MOA- Public Works Transit Facility, file number 2100.38.327.

## Contaminants of Concern

During the investigations at this site, groundwater samples were analyzed for the following constituents: RRO; gasoline range organics (GRO); diesel range organics (DRO) benzene, toluene, ethylbenzene, and xylene (BTEX); and volatile organic compounds (VOCs). Based on these analyses and knowledge of the source area, the following Contaminants of Concern were identified in soil and/or groundwater:

- RRO
- DRO

## Cleanup Levels

The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Table B2, Migration to Groundwater Pathway for the Under 40 inch Zone.

<u>Contaminant</u>	<u>Site Cleanup Level (mg/kg)</u>
• RRO	11,000
• DRO	250

The default groundwater cleanup levels for this site are established in 18 AAC 75.345 Table C Groundwater Cleanup Levels.

<u>Contaminant</u>	<u>Site Cleanup Level (mg/L)</u>
• RRO	1.1
• DRO	1.5

## Site Characterization and Cleanup Actions

In October 2013, the 2,500 gallon diesel UST and associated piping were removed from the site. Approximately 35 cubic yards of soil were excavated and stockpiled on site. Two analytical soil samples were collected from the stockpiled soil. DRO and xylenes were detected below ADEC cleanup levels. DRO was detected up to 32.7 mg/kg and xylenes were detected up to 0.0451 mg/kg.

Four soil samples and one duplicate were collected from the excavation pit and submitted for laboratory analysis. DRO and xylenes were detected below ADEC cleanup levels. DRO was detected up to 12.4 mg/kg and xylenes were detected up to 0.0521 mg/kg.

Two water samples were collected from the site and submitted for laboratory analysis. One water sample was collected from the standing water in the excavation and the other sample was collected from the 1,000 gallon- septic holding tank where groundwater that was pumped from the excavation was stored. DRO and RRO were detected in the standing water in the excavation, DRO was detected up to 1.25 mg/L which is below the cleanup level. RRO was detected up to 3.98, which exceeds ADECs cleanup level. The water sample collected from the septic water tank had a DRO concentration up to 0.239 mg/L and RRO up to 0.197, both below cleanup levels.

### Cumulative Risk Calculation

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 do not pose a cumulative human health risk.

### 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 1.

**Table 1 – Exposure Pathway Evaluation**

<b>Pathway</b>	<b>Result</b>	<b>Explanation</b>
Surface Soil Contact	Pathway Incomplete	Contamination is not present in surface soil (0 to 2 feet below ground surface).
Sub-Surface Soil Contact	De Minimis Exposure	Contamination remains in the sub-surface, however, it is below the most stringent cleanup levels.
Inhalation – Outdoor Air	Pathway Incomplete	Contaminants are not present above the most stringent cleanup levels, therefore this pathway is considered incomplete.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	Volatile contaminants capable of causing risk via this pathway are not present at the site.
Groundwater Ingestion	De Minimis Exposure	Petroleum contamination remains in the groundwater; however, the source is not from the 2,500 gallon diesel UST that was removed. There are no drinking water wells within ¼ mile of the site and potable water is provided by the Municipal water system.
Surface Water Ingestion	Pathway Incomplete	Surface water is not used as a drinking water source in this area.
Wild Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals.

Exposure to Ecological Receptors	Pathway Incomplete	There are no complete exposure pathways to ecological receptors at the site.
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**Notes to Table 1:** "De-minimis exposure" means that in ADEC's judgment receptors are unlikely to be affected by the minimal volume of remaining contamination. "Pathway incomplete" means that in ADEC's judgment contamination has no potential to contact receptors. "Exposure controlled" means there is an administrative mechanism in place limiting land or groundwater use, or a physical barrier in place that deters contact with residual contamination.

### ADEC Decision

Remaining petroleum contamination in soil is below approved cleanup levels. 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 78.600(h). 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. (See attached site figure.)
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 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 99801, 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 99801, 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.

Sincerely,



Katrina Chambon  
Environmental Program Specialist

Cc: Tim Terry, S&W, Anchorage