STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION DIVISION OF SPILL PREVENTION AND RESPONSE CONTAMINATED SITES PROGRAM

SARAH PALIN. GOVERNOR

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File: 2100.26.045

June 15, 2009

Mr. Jon Clark Municipality of Anchorage Department of Maintenance and Operations PO Box 196650 Anchorage, Alaska 99519-6650

Subject:

Record of Decision (ROD); MOA - Bus Transit Facility 2 Former

10,000 Gallon Diesel USTs; Corrective Action Complete Determination

Dear Mr. Clark:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with MOA - Bus Transit Facility 2 Former 10,000 Gallon Diesel USTs located at 3650 C East Tudor Road. Based on the information provided to date, the ADEC has determined that the contaminant concentrations remaining on site do not pose an unacceptable risk to human health or the environment, and this site will be closed.

This decision is based on the administrative record for MOA - Bus Transit Facility 2 Former 10,000 Gallon Diesel USTs, 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 Determination.

Introduction

Site Name and Location:

MOA - Bus Transit Facility 2 Former 10,000 Gallon Diesel USTs 3625 A Dr. Martin Luther King Jr. Avenue Anchorage, Alaska 99507

Legal Description

Municipal Tudor Road Complex, Tract 1 (MOA Parcel ID 00805212)

Printed on Recycled Paper

Name and Mailing Address of Contact Party:

Jon Clark
Municipality of Anchorage
Department of Maintenance and Operations
P.O. Box 196650
Anchorage AK 99519-6650

Database Record Key and File Number:

ADEC Reckey: 1992210016103

File: 2100.26.045 Hazard ID: 23950

Regulatory authority under which the site is being cleaned up:

18 AAC 75 and 18 AAC 78

Background

The Bus Transit Facility is located on a 35.88 acre parcel of land owned by the Municipality of Anchorage (MOA). The Facility stores various transportation vehicles such as buses used for public transportation, and houses numerous enclosed buildings including buildings where maintenance is performed on those vehicles by employees of the MOA. The Facility has been in operation for decades, and is connected to the MOA's public drinking water supply system and sewer system. Underground storage tanks were installed at the site in June 1, 1976 and stored diesel fuel.

Petroleum impacted soil was encountered during the 1992 removal of two 10,000-gallon diesel underground storage tanks (USTs) and associated piping. Soil samples collected at this site have been tested for extractable petroleum hydrocarbons (EPH) (diesel range organics (DRO)).

In 2008, a Paratransit Addition to the Facility was recently built over the area where the two USTs were formerly located.

Characterization Activities

During the tank removal in 1992, approximately 250 cubic yards (cy) of soil was excavated during removal of UST A (northern UST). Thirteen screening samples were taken from the resulting Stockpile A and six were submitted for laboratory analysis. The analytical results indicated diesel-range organics (DRO) concentrations were 750 milligrams per kilogram (mg/kg) or below and subsequently the stockpile was eligible for disposal at the Anchorage Regional Landfill. Six screening samples were collected from the excavation floor or sidewalls and samples from two of those locations with the highest and third highest screening measurements were submitted for laboratory analysis. One sample was taken at 11 feet below the ground surface (bgs) at the UST fill pipe end of the UST and the second sample taken at 12 feet bgs below the vent end of the UST. Confirmation soil samples taken in the excavation were below the ADEC cleanup levels with DRO at 15 mg/kg and 14 mg/kg, respectively.

Approximately 200 cy of additional soil was excavated during the removal of UST B in 1992. Five screening samples were taken from the resulting Stockpile B and samples from two of those locations with the highest screening measurements were submitted for laboratory analysis.

The analytical results indicated DRO concentrations of 40 mg/kg and 82 mg/kg. Because of the low DRO concentrations, the stockpile was used to backfill the UST B (southern UST) excavation. Six screening samples were collected from the excavation and samples from two of those locations with the highest and third highest screening measurements were submitted for laboratory analysis. One excavation sample was taken approximately two feet bgs near the UST fill pipe entrance and the second sample taken from 11 feet bgs below the vent end of the UST. The two confirmation soil samples taken in the excavation were non-detectable or below the ADEC cleanup levels with DRO detected up to 10 mg/kg.

DRO was the only contaminant that laboratory analysis was requested for.

Groundwater was encountered in both excavations between 12 and 13 feet bgs. No odor or sheen was observed in the groundwater and insufficient groundwater was present for sample collection.

As a precursor to construction of the Paratransit Addition in the area of the former USTs, in September 2005, an investigation was performed which included two soil borings and a groundwater monitoring well. Boring 1 was north of the former northern tank location and Boring 2 and the monitoring well (MW-1) were located approximately 24 feet west-southwest of the former southern tank location. Soil and groundwater samples were submitted for laboratory analysis of gasoline-range organics (GRO), DRO, residual-range organics (RRO), and volatile organic compounds (VOCs). DRO contamination was detected in soil samples at 289 mg/kg, just above the 250 mg/kg cleanup level, in Boring 1, and tetrachloroethylene (PCE) was detected at 0.039 mg/kg, just above the 0.03 mg/kg cleanup level, in Boring 2. Both of these samples were taken at 11 feet bgs in Borings 1 and 2, respectively. Target analytes were not detected in the groundwater sample from monitoring well MW-1. Static water level was measured at approximately 11 feet bgs in MW-1. The groundwater flow direction is predominantly to the northwest but with variation.

The CSP considers the contamination encountered during the 2005 investigation as unlikely to have originated from the two 10,000 gallon USTs but probably originated from up-gradient sources. A former 500-gallon waste oil UST that was removed in 1997 was formerly located approximately 50 feet south of the location of the southernmost of the two former USTs. The 1997 investigation of that waste oil UST had detected PCE, GRO, and DRO contamination above cleanup levels in soil remaining after the 500 gallon UST was removed. Further excavation at the site of the 500 gallon UST was prohibitive due to the presence of utilities. Nearby the former 10,000 gallon USTs and on the same property, another UST was removed and contamination has been identified but not in association with the site from the 10,000 gallon USTs.

Contaminants of Concern

• Diesel Range Organics (DRO)

¹ Another 500 gallon waste oil UST was removed in 1997 that was approximately 100 feet east of the former 10,000 gallon USTs. All contaminants of concern at this site were either non-detectable or below cleanup levels. Other documented sources of contamination are present east and south of these sites.

Cleanup Levels

The <u>soil</u> cleanup levels for this site are established in 18 AAC 75.341, Method Two, Tables B1 and B2, Migration to Groundwater.

Contaminant	Site Cleanup Level (mg/kg)
DRO	250

The groundwater cleanup levels for this site are established in 18 AAC 75.345 Table C Groundwater Cleanup Levels. However, no groundwater samples were collected during any site investigations directly attributable to this site.²

Pathway Evaluation

The exposure pathways for human health that were evaluated for the site of the former 10,000 gallon USTs include the following: ingestion of soil; dermal/direct contact with soil; inhalation; and ingestion of groundwater. These pathways may be complete but the remaining contaminant concentrations do not exceed the most conservative Method Two "Migration to Groundwater" cleanup levels in Tables B1 and B2 established in 18 AAC 75.341. No groundwater sampling was performed at the immediate site but the likelihood that groundwater would exceed the 18 AAC 75.345 Table C cleanup levels based on the documented site soil contamination levels and nearby groundwater monitoring results is highly unlikely.

The exposure pathway analysis above was supported by the most recent ADEC Exposure Tracking Model (ETM) ranking. The ETM results showed all pathways to be De Minimis Exposure, Exposure Controlled, or Pathway Incomplete.

ADEC Decision

The cleanup actions to date have served to excavate and adequately remove contaminated soil from the site of the former 10,000 gallon USTs. Based on the information available, the ADEC has determined no further assessment or cleanup action is required. There is no longer a risk to human health or the environment, and this site will be designated as closed on the Department's database.

Although a Corrective Action Complete determination has been granted, ADEC approval is required for off-site soil or groundwater disposal in accordance with 18 AAC 78.600(h). It should be noted that movement or use of potentially contaminated soil in a manner that results in a violation of 18 AAC 70 water quality standards is unlawful.

This determination is in accordance with 18 AAC 78.276(f) and does not preclude the 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.

This determination also has no bearing on what actions ADEC will require as the result of the contamination identified on other areas of the property, e.g., from the former 500 gallon waste oil UST.

² As noted earlier in this document, groundwater samples were collected in the area but the findings were related to a release that was not attributable to the 10,000 gallon USTs or associated piping.

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.

If you have questions about this closure decision, please contact the ADEC Project Manager, Bill Petrik at (907) 269-7546.

Sincerely,

Rich Sunder

Environmental Manager

Rich Sunder

CC: Bill Petrik, CSP, Anchorage

Kelly Eng, HartCrowser, Edmonds, WA

Andrew Lee, Shannon & Wilson, Inc., Anchorage