

# STATE OF ALASKA

SEAN PARNELL, GOVERNOR

## DEPT. OF ENVIRONMENTAL CONSERVATION

### DIVISION OF SPILL PREVENTION AND RESPONSE CONTAMINATED SITES PROGRAM

555 Cordova Street  
Anchorage, AK 99501  
PHONE: (907) 269-3057  
FAX: (907) 269-7649  
www.dec.state.ak.us

File: # 2100.26.301  
Return Receipt Requested  
Article No: 7008 1830 0002 6349 4821

August 20, 2010

Ms. Yelena Saville  
Anchorage Municipal Light and Power  
1200 East 1st Ave  
Anchorage, AK 99501

Re: Decision Document; Municipal Light & Power Maintenance Facility  
Corrective Action Complete Determination

Dear Ms. Saville:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Municipal Light & Power Maintenance Facility located at 1121 East First Avenue in Anchorage, Alaska. 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 this site will be closed.

This decision is based on the administrative record 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

Municipal Light & Power Maintenance Facility  
1121 East First Avenue  
Anchorage, Alaska

##### Name and Mailing Address of Contact Party:

Ms. Yelena Saville  
Anchorage Municipal Light and Power  
1200 East 1st Ave  
Anchorage, AK 99501



ADEC Site Identifiers:

Hazard ID #23606

CS file # 2100.26.301

Regulatory authority under which the site is being cleaned up:

18 AAC 78 and 18 AAC 75

**Background**

Contaminated soil and groundwater were found in association with 3 underground storage tanks (USTs) removed from the site in 1989 and 1990. The USTs included one 4,000-gallon diesel tank, one 4,000 -gallon gasoline tank, and one 1,000-gallon used oil tank. It should be noted that this site is not to be confused with an adjacent *Municipal Light & Power Operations* site located at 1201 East 1st Avenue, Hazard ID 25453.

**Contaminants of Concern**

During the various investigations at this site, soil samples were analyzed for diesel range organics (DRO), residual range organics (RRO), gasoline range organics (GRO), metals, and volatile organic compounds (VOCs) including benzene, toluene, ethylbenzene, and xylenes (BTEX). Based on the results of these investigations, the following contaminants of concern were identified:

- Benzene
- Trichloroethylene (TCE)
- Tetrachloroethylene (PCE)

**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.

<u>Contaminant</u>	<u>Site Cleanup Level (mg/kg)</u>
• Benzene	0.005
• TCE	0.020
• PCE	0.024

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>
• Benzene	0.025
• TCE	0.005
• PCE	0.005

**Site Characterization and Cleanup**

The gasoline and diesel tanks were removed from a common excavation in 1989. The gasoline tank had apparently leaked whereas the diesel tank was reportedly intact. Approximately 400

cubic yards (cyst) of impacted soil and 586 gallons of fuel were removed from the excavation. Excavated soil was transported to Alaska Soil Recycling for thermal treatment.

Confirmation soil samples contained benzene up to 3.5 mg/kg. Groundwater samples collected from monitoring wells installed at the site contained benzene up to 41.9 mg/l in monitoring well 2A-1. To address the remaining soil and groundwater contamination at the site, a soil vapor extraction system and groundwater pump and treat system were installed at the site and operated from 1990 until 1996. Groundwater monitoring wells were sampled to document trends in groundwater contaminant levels. Contaminant concentrations in groundwater steadily decreased and groundwater monitoring at this source area was discontinued in 2002, when benzene was detected in monitoring well 2A-1 at 0.00145 mg/l.

The used oil tank was removed in 1990. Soil samples collected during removal of the tank found petroleum hydrocarbons indicative of a release and also the chlorinated solvents trichloroethylene (TCE) and tetrachloroethylene (PCE). The presence of chlorinated solvents was confirmed in 1993. Soil and groundwater samples were collected from boreholes near the source area, after which three groundwater monitoring wells were installed at the site to delineate the extent of groundwater impacts. TCE and PCE were found in soil samples during monitoring well installation and in groundwater samples collected from the wells designated B-1, B-2, and B-3. The highest concentrations were detected in well B-2, which was installed within the source area at the former tank location. Samples results contained TCE and PCE in soil at 0.06 mg/kg and 0.11 mg/kg, respectively, and TCE and PCE in groundwater at 0.043 mg/l and 0.025 mg/l, respectively.

Monitoring wells B-1, B-2, and B-3 were sampled again in 2002. TCE and PCE exceeded groundwater cleanup levels only in well B-2, so sampling was discontinued at wells B-1 and B-3. Sampling continued on a regular basis at monitoring well B-2 until 2010 when TCE was detected at 0.0132 mg/l and PCE was detected at 0.0311 mg/l.

The presence of TCE and PCE at monitoring well B-2 may be associated with releases from the waste oil tank. However area wide investigations conducted in the Ship Creek area from 2002 to 2010 have documented the presence of TCE and PCE at similar concentrations in groundwater monitoring wells both upgradient and downgradient from the site.

### 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**

Pathway	Result	Explanation
Direct Contact with Surface Soil	Pathway Incomplete	Contaminated soil is not located in surface soil and the surface is paved

Direct Contact with Sub-Surface Soil	De Minimis Exposure	The remaining contaminant concentrations are below direct contact cleanup levels
Inhalation of Outdoor Air	De Minimis Exposure	The remaining contaminant concentrations are below inhalation cleanup levels and the presence of clean overburden mitigates exposure via this pathway
Inhalation of Indoor	De Minimis Exposure	The remaining contaminant concentrations are below inhalation cleanup levels and the presence of clean overburden mitigates exposure via this pathway
Groundwater Ingestion	De Minimis Exposure	Groundwater is not used as a drinking water source in this area
Surface Water Ingestion	Pathway Incomplete	Surface water in the area is not used for drinking water purposes.
Wild Foods Ingestion	Pathway Incomplete	Contaminants at the this site do not bioaccumulate and have not been detected in Ship Creek
Exposure to Ecological Receptors	Pathway Incomplete	No complete pathways to ecological receptors are present at the site

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**

The cleanup actions to date have served to excavate and adequately remove contaminated soil from the site. Based on the information available, 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 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.

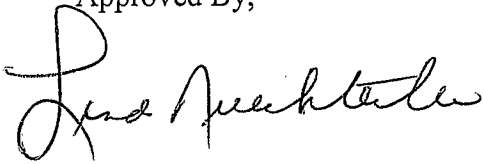
This determination is in accordance with 18 AAC 78.276(f) and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that this site may pose an unacceptable risk to human health or the environment. It should also be noted that this site should not be confused with an adjacent *Municipal Light & Power Operations* site located at 1201 East 1st Avenue, Hazard ID 25453.

**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.

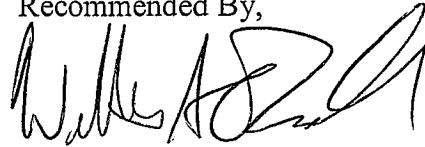
If you have questions about this closure decision, please contact ADEC Project Manager William O'Connell at (907) 269-3057.

Approved By,



Linda Nuechterlein  
Environmental Manager

Recommended By,



William O'Connell  
Environmental Program Specialist

**Attachment A- Soil Stockpile Disposal Location**

