

STATE OF ALASKA

FRANK H. MURKOWSKI, GOVERNOR

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

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October 27, 2003

Lena Saville
Municipal Light & Power
1200 East First Avenue
Anchorage, Alaska 99501-1685

RE: ML&P Plant No. 2 – Spill Incident 1
8670 Glenn Highway Anchorage 99504
ADEC File No: CS 69.28 -1; 1970210118201

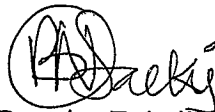
Dear Ms. Saville:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC), reviewed the *September 2003 Groundwater Monitoring report* prepared by ML&P. The information in that report provides the current groundwater quality data to allow ADEC to make a determination regarding the environmental status of the site.

The attached Record of Decision document establishes cleanup levels and is the basis for a "no further remedial action" determination regarding the Spill Incident 1 release at the ML&P Plant No. 2. It is subject to conditions and/or requirements in order for it to be effective.

Please review the decision document regarding the environmental status of this property. If you have any questions regarding this decision, please call me at (907) 269-7556 or e-mail Beatrice_egbejimba@dec.state.ak.us.

Sincerely,



Beatrice Egbejimba
Environmental Specialist

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES PROGRAM

RECORD OF DECISION
October 27, 2003

Municipal Light & Power Plant No. 2
Spill Incident 1

SITE INFORMATION SUMMARY

Site name and location

Spill Incident 1 consists of two releases: Transformer No. 5 spill (1970) and Unit No. 8 pipeline closure (1985).

Name and mailing address of responsible person

The responsible party for this site is: Municipal Light & Power, 1200 East 1st Avenue, Anchorage, AK 99501-1658. Yelina Saville is the current contact person.

Database Record key

1970210118201

CS file number

File Number: CS69.28-1

Regulatory authority

Site Cleanup Rules under 18 AAC 75.325 – 18 AAC 75.390

Site Map

A copy of a Site Plan (figure 1) dated October 2003 *ML&P Plant No. 2, Transformer No.5 & Unit.8* is provided as reference.

Physical characteristics of site

Soil at the site consists of moist, brown to gray, silty, gravelly sand. Based on the water table elevation measurements, the local groundwater flow direction is southwesterly but may change due to seasonal water fluctuations. Ship Creek is the nearest surface water located approximately 1 mile north/northwest of the site. There are no drinking water wells identified within ½ mile of the site.

Description of contaminants and media impacted

The chemical of concern in soil is diesel-range organics (DRO). There was also both DRO and residual-range organics (RRO) in the groundwater.

Current and expected future land use

The property is located on municipal land designated as a public lands and institutions (PLI) area. The PLI district is intended to include areas of significant public open space, major public and quasi-public institutional uses and land reserves for which a specific use or activity is not yet identified. Plant No. 2 is ML&P's main power plant and future land use is not expected to change.

Determination of current and expected future use of groundwater

The property is connected to the public water system and use of the groundwater for drinking water purposes is not anticipated. An 18.AAC 75.350 determination might be considered that would designate the groundwater as a "non-drinking" water source.

Completed Exposure Pathways

The exposure pathways evaluated under this decision are ingestion, inhalation, and migration to groundwater. These pathways may be considered complete and will be evaluated when making decisions related to cleanup levels and possible risk to human health and the environment.

SITE INVESTIGATION HISTORY

In 1970, Transformer No.5 was shot by vandals releasing unknown quantities of oil. The response and/or cleanup actions were not clearly documented and the impacts were not investigated until an assessment by Shannon & Wilson in 2001. Three soil borings, T1, T2, and T3 were advanced south and east of the transformer to a maximum depth of 9.5 feet. There was no contamination detected above the applicable cleanup level.

In 2002, Shannon & Wilson prepared a report entitled *Environmental Site Characterization for Transformer Upgrade*. It described the investigation of a secondary containment basin for Transformer No. 5. There were approximately 170 cubic yards of contaminated soil excavated after the transformer was temporarily relocated. The excavated soil was transported to Alaska Soil Recycling (ASR) for thermal treatment. The confirmation samples from the excavation area identified 5,550 mg/kg DRO was still present at the site.

In May 2003, ML&P provided an *Additional Environmental Assessment* report based on a monitoring well (MW1) that was installed north of the transformer site. Soil samples collected during the installation reported no contaminants above the applicable cleanup level. However groundwater samples collected from MW1 detected DRO (2.48; 3.80 and 9.40 mg/L) and RRO (1.95; 2.62 and 6.18 mg/kg).

Two additional wells were installed to further investigate soil and groundwater impacts. MW2 was located east (upgradient) of the transformer site and MW3 was placed westerly (downgradient) near the Unit No. 8 fuel skid area.

The Unit No. 8 spill occurred in 1985 due to a missing flange on the end of the pipeline near the Unit. No. 8 Fuel Skid area.

In July 2003, the pipeline was decommissioned after an investigation by Shannon & Wilson identified 1,330 mg/kg DRO in the area of the suspected leak. MW3 was installed adjacent to this location but did not detect contaminants above the applicable cleanup levels.

In September 2003, ML&P collected groundwater from MW1, MW2 and MW3. There were no contaminants detected above the applicable cleanup levels in MW2 and MW3. However MW1 contained 3.83 mg/L DRO and 2.17 mg/L RRO.

DISCUSSION OF ISSUES

Soil

The chemical of concern identified at the ML&P Plant No. 2 - Spill 1 site is DRO. It exceeds the migration to groundwater cleanup levels established in 18 AAC 75.341 Tables B1 & B2. The maximum concentration (5,500 mg/kg) of DRO) was detected in soil after conducting interim removal actions. Additional removal was not considered practicable because of the proximity to the transformer and building.

Table 1: Maximum reported concentration in soil and method two soil cleanup levels for under 40 inch precipitation Zone after removal actions.

Chemical name	Soil Cleanup Level (Migration to Groundwater) (mg/kg)	Soil Cleanup Level (Ingestion) (mg/kg)	Soil Cleanup Level (Inhalation) (mg/kg)	Maximum concentration (mg/kg) (After removal action)
Diesel Range Organics	250	10,250	12,500	5,500

Groundwater

Groundwater monitoring events were conducted in April, July and September 2003. Only MW1 reported contaminant concentrations above the applicable cleanup levels as presented in Table 2 below.

Table 2: Groundwater Monitoring Results

Monitoring Well	Date	DRO (mg/L)	RRO (mg/L)
MW1	4/9/2003	2.48	1.95
MW1	4/23/2003	3.80	2.62
MW1	7/17/2003	9.40	6.18
MW1	9/3/2003	3.83	2.17
DEC Cleanup Level		1.5	1.1

ADEC DECISION

There is soil contamination remaining on site above the migration to groundwater cleanup level – but below the ingestion and inhalation levels. There are groundwater impacts detected in MW1 but the plume appears to be stable and not migrating based on monitoring data. Based on the information presented above, it is the Department’s determination that no further remedial action is required at this site. This determination is based on the following conditions:

1. The DRO impacted soil above the 18 AAC 75.341 Table B2 migration to groundwater cleanup level has been removed except for one area beneath the Transformer No. 5 and Unit No. 8 building foundation. A maximum concentration of 5,500 mg/kg DRO remains on site but is considered impracticable to remove because of its location. It does not exceed the ingestion and inhalation standards for this area and the groundwater will continue to be monitored.

2. ML&P is requested to continue groundwater monitoring but at a reduced frequency (twice a year in July and January). If the monitoring indicates an increasing trend in contaminant levels, ADEC may require continued monitoring and assess the need for additional cleanup. However, a stable or increasing trend may allow the monitoring frequency and/or locations to be reduced or discontinued.
3. An institutional control (established on the ADEC database) will identify the nature and extent of contamination remaining on site. This information is intended to inform any future owners/operators of the environmental status of the property so they are aware of environmental and/or safety requirements.
4. If future information indicates that contamination is present at levels that may pose a risk to human health or the environment, then additional investigative and/or cleanup action may be required.
5. The transport of soil or groundwater from this site requires prior ADEC approval in accordance with 18 AAC 75.325(i).

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. 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.

ADEC Project Manager Approval:



Beatrice Egbejimba, Environmental Specialist

10/28/03

Date

ADEC DECISION



Jim Frechione, Environmental Manager

10/28/03

Date

