STATE OF ALASKA

SEAN PARNELL, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES PROGRAM

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File: 1516.38.031

June 29, 2012

Mr. Al Clough
Regional Director
Alaska Dept of Transportation & Public Facilities
PO Box 112506
Juneau, Alaska 99811-2506

Re: Decision Document; ADOT&PF DPS Ketchikan Shop
Cleanup Complete Determination

Dear Mr. Clough,

The Alaska Department of Environmental Conservation, Contaminated Sites Program (DEC) has completed a review of the environmental records associated with ADOT&PF DPS Ketchikan Shop located at 5148 North Tongass Highway in Ketchikan. Based on the information provided to date, the DEC 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 ADOT&PF DPS Ketchikan Shop Contaminated Site administrative record, which is located in the offices of the DEC in Juneau, 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 Cleanup Complete Determination.

Site Name and Location
ADOT&PF DPS Ketchikan Shop
5148 North Tongass Highway
Ketchikan, Alaska 99901
USS 2270 Block B

Address of Contact Party
Mr. Al Clough
Dept. Transportation & Public Facilities
PO Box 112506
Juneau, Alaska 99811-2506

Mr. Al Clough
re: ADOT&PF DPS Ketchikan Shop

June 29, 2012

DEC Site Identifiers
Hazard ID: 3991
File: 1516.38.031
Reckey: 2003130123701

Regulatory Authority for Determination
Title 18 Alaska Administrative Code 75

Site Background
The facility on the property at Mile 4.5 North Tongass Highway was formerly shared between the Department of Public Safety and the Department of Transportation and Public Facilities as offices and a vehicle maintenance shop. Small year-round drainage streams border the property to the northwest and southeast and the shoreline of Tongass Narrows is a few hundred feet from the end of the driveway. Local groundwater in a few areas in Ketchikan may be of sufficient quality and volume to use as a drinking water source but the predominant supply of drinking water is provided either by the City of Ketchikan or by individual household rain catchment systems.

A 1,100 gallon, non-regulated underground storage tank (UST) used to supply heating oil to the facility boiler was formerly located at the main door to the offices of the Department of Public Safety (DPS). During the change-in-service site assessment of the tank and associated piping in August 2003, fuel contaminated soil was observed in the excavation.

Soil samples at the site have been analyzed for benzene, ethylbenzene, toluene, total xylenes (BTEX) and polycyclic aromatic hydrocarbon (PAH) semi-volatile organic compounds; gasoline (GRO), diesel (DRO) and residual (RRO) range petroleum hydrocarbons.

Site Characterization and Remedial Activities
As the tank and piping were removed and decommissioned, contaminated soil was separated by field screening and stored in a lined and covered stockpile at the site. Utility structures were encountered on the north wall of the excavation. As a result, a minor volume of soil contaminated by fuel leaks from the UST system was left in place. The rest of the excavation was widened to accommodate a new, double-walled UST to replace the decommissioned tank.

A minor amount of water was encountered in the excavation between three and four feet below the surface and was removed with the contaminated soil and moved to the lined stockpile. Bedrock was encountered at the floor of the excavation. Groundwater was not observed entering the excavation during the sampling activity.

Confirmation samples were collected from remaining soil in each of the four walls and the floor of the excavation. BTEX compounds were not detected above

laboratory reporting limits. PAH compounds were detected above laboratory reporting limits in only one sample. PAHs in sample NWALL-6 were all reported at levels below their respective Method Two Migration to Groundwater cleanup criteria in 18 AAC 75.341 Table B1.

The following table displays the highest levels detected in soil remaining at the site, the depth below the surface that the sample was taken, and the Method Two Migration to Groundwater (M2 MTG) soil cleanup levels in 18 AAC 75.341 Table B1 and Table B2 that are applicable to this site. Those levels in bold are above the applicable cleanup levels and represent the contaminant(s) of concern for the site.

Hydrocarbon range and compounds of concern	Greatest level in soil mg/kg	Sample name and depth below the surface	M2 MTG Cleanup Levels mg/kg
GRO	26	NWALL at 6 feet	260
DRO	**960**	NWALL at 6 feet	230
RRO	53	NWALL at 6 feet	8300
Benzene	<0.05	All samples	0.025
Toluene	<0.05	All samples	6.5
Ethylbenzene	<0.05	All samples	6.9
Total Xylenes	<0.10	All samples	63

During the 2003 site activities, soil from the UST excavation was stored in two stockpiles based on field screening, observation and position in the UST excavation. One consisted of presumed clean overburden and the other was known contaminated. A soil sample was collected from each stockpile to obtain laboratory analysis for GRO, DRO, RRO, PAHs and BTEX. The clean soil (estimated at ten cubic yard volume) stockpile sample analysis detected DRO level of 51 mg/kg and RRO of 300 mg/kg; each of the other analytes (GRO, PAHs and BTEX) were reported at levels below instrument detection. A soil sample from the contaminated stockpile (estimated at 25 cubic yard volume) had levels of GRO at 44 mg/kg, DRO at 1,100 mg/kg and RRO at 110 mg/kg; each of the PAH and BTEX compounds were reported at levels below instrument detection.

In October 2007 two samples and a field duplicate were collected from the contaminated soil stockpile to obtain laboratory analysis for DRO, the only contaminant of concern for the site. DRO results were below the cleanup criteria for unrestricted use of the soil.

Pathway Evaluation

Following investigation and cleanup at the site, exposure to the remaining contaminants was evaluated using DEC'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 either De Minimis

Exposure or Pathway Incomplete. A summary of this pathway evaluation is included in Table 1 as Attachment A to this letter.

Cumulative Health Risk Calculation
Pursuant to 18 AAC 75.325 (g), when detectable contamination remains on-site following a cleanup, a cumulative risk determination must be calculated. With data currently available, the DEC has determined that petroleum compounds remaining at the referenced site following cleanup are in concentrations that do not present a cumulative risk to human health.

DEC Decision
The cleanup actions to date have served to excavate and adequately remove contaminated soil from the site. Based on the information available, DEC 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 Cleanup Complete has been granted, DEC approval is required for off-site soil disposal in accordance with 18 ACC 75.325(i). 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 ACC 75.380 and does not preclude DEC 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.

If you have questions about this closure decision, please contact the DEC project manager, Bruce Wanstall at (907) 465-5210.

Approved By,

Sally Schlichting
Environmental Manager

Recommended By

Bruce Wanstall
Environmental Program Specialist

Attachment A: Exposure Pathway Evaluation

Table 1 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	There is no soil contamination remaining at the site above the direct contact cleanup levels.
Sub-Surface Soil Contact	De-minimis exposure	Any remaining contamination is de minimis in volume and is below direct contact levels.
Inhalation – Outdoor Air	Pathway Incomplete	No volatile hydrocarbons have been detected in samples from soil remaining in the excavation.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	Buildings are present and no volatile hydrocarbons have been detected in samples from soil remaining in the excavation.
Groundwater Ingestion	Pathway Incomplete	Groundwater was not encountered during the tank assessment and any remaining contamination is de minimis in volume and is below direct contact levels.
Surface Water Ingestion	Pathway Incomplete	There is no surface water influenced by the site hydrology being currently used as or with any potential to become a future drinking water source.
Wild Foods Ingestion	Pathway Incomplete	There are no contaminants of concern with the potential to bioaccumulate in plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	There are no threatened or high value species at the site or in the area.

Notes to Table 1: "De-minimis exposure" means that in DEC's judgment receptors are unlikely to be affected by the minimal volume of remaining contamination. "Pathway incomplete" means that in DEC'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.