# TATE OF ALASK

# DEPT. OF ENVIRONMENTAL CONSERVATION

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

SEAN PARNELL. GOVERNOR

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File No: 2269.26.002 Return Receipt Requested

Article No: 7009 2820 0001 7169 7009

January 5, 2011

Randy Vanderwood Maintenance & Operations Chief Alaska Department of Transportation and Public Facilities 4111 Aviation Avenue P.O. Box 196900 Anchorage, AK 99519-6900

ADOTPF Chulitna Maintenance Re:

Corrective Action Complete Determination-Institutional Controls

Dear Mr. Vanderwood:

The Alaska Department of Environmental Conservation (ADEC), Contaminated Sites Program (CSP) reviewed the environmental records associated with the ADOTPF Chulitna Maintenance located at Mile 121 Parks Highway near Trapper Creek, 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. No further remedial action will be required as long as the site is in compliance with established institutional controls (ICs).

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 ADEC determination.

#### Introduction

Site Name and Location ADOTPF Chulitna Maintenance Mile 121 Parks Highway Near Trapper Creek, AK

## Name and Mailing Address of Contact Party:

Randy Vanderwood Alaska Department of Transportation and Public Facilities 4111 Aviation Avenue P.O. Box 196900 Anchorage, AK 99519-6900

# Database Record Key and CS file number:

Hazard ID # 23604 CS file # 2269.26.002

# Regulatory authority under which the site is being cleaned up: 18 AAC 75 and 18 AAC 78

Background

This site is the location of a three former underground storage tanks (USTs) and a concrete dispenser island which were used by Alaska Department of Transportation until 1997 when they were removed. This area is the current location of above ground storage tanks (ASTs).

#### Contaminants of Concern

During the investigations at the site, soil samples were analyzed for the following contaminants: benzene, toluene, ethylbenzene, and xylenes (BTEX), gasoline range organics (GRO); diesel range organics (DRO); and lead.

Groundwater was sampled for GRO, DRO, and volatile organic carbons (VOCs). Based on these analyses and knowledge of the source area, the following Contaminants of Concern were identified:

- Diesel Range Organics (DRO)
- Gasoline Range Organics (GRO)

Cleanup Levels

The default soil cleanup levels for this site are established in 18 AAC 75.341 Tables B1 and B2, Under 40 inch Zone for Migration to Groundwater (MTG).

Contaminant	MTG Site Cleanup Level (mg/kg)
Diesel Range Organics (DRO)	250
Gasoline Range Organics (GRO)	300

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

Contaminant	Site Cleanup Level (mg/L)
Diesel Range Organics	1.5
Gasoline Range Organics	1.3

# Site Characterization and Cleanup Actions

During tank removal in1997, approximately 50 cubic yards of contaminated soil were removed and stockpiled. Four confirmation soil samples were collected from the tank excavation and analyzed for contaminants listed above. DRO and GRO results exceeded the Method Two Migration to Groundwater cleanup level at 10,000 mg/kg and 520 mg/kg respectively.

A sample was collected from the onsite well by ADOT staff in August of 2008 and analyzed for DRO and GRO. The well was also sampled in October 2010 by ADEC staff and analyzed for DRO, GRO, and VOCs. All results were below Table C levels.

**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 Tracking Model Results

Pathway	Result	Explanation
Surface Soil Contact	De minimis exposure	The removal action is presumed to have removed contaminated surface soil; therefore, the extent of contamination remaining in the surface soil is considered de minimis, and does not pose a significant exposure risk.

Sub-Surface Soil	De minimis	The extent of contamination
1		remaining in the subsurface
Contact	exposure	soils is considered de minimis
		in volume and below direct
		contact cleanup levels;
·		therefore, does not pose a
		significant exposure risk.
Inhalation – Outdoor	De minimis	The remaining soil
Air	exposure	contaminant concentrations
:		are below inhalation cleanup
		levels for DRO and GRO and no
	•	other volatile compounds are
		present above most
		conservative criteria.
	,	Therefore, exposure via this
,		pathway is considered de
		minimis.
Inhalation – Indoor Air	De minimis	Remaining soil contamination
(vapor intrusion)	exposure	is overlain with backfill;
(vapor intrasion)	Chpobaro	concentrations are below
	,	inhalation cleanup levels for
		DRO and GRO; and no other
		volatile compounds are present
_		above the most conservative
		criteria. Therefore, exposure
!		via this pathway is considered
		de minimis.
	D initial	
Groundwater Ingestion	De minimis	The DW well was sampled in
	exposure	2008 and 2010 with results
		1
		· · · · · · · · · · · · · · · · · · ·
,		=
Surface Water Ingestion	Pathway	
	Incomplete	1
		therefore, this pathway is
•		considered incomplete.
Wild Foods Ingestion	Pathway	Compounds do not have the
,	Incomplete	potential to bioaccumulate in
	_	plants or animals; therefore,
		this pathway is considered
		incomplete.
Surface Water Ingestion  Wild Foods Ingestion	Incomplete Pathway	considered incomplete.  Compounds do not have the potential to bioaccumulate in plants or animals; therefore, this pathway is considered

Exposure to Ecological Receptors Incor	Site is a gravel parking lot and there is no evidence of off-site migration; therefore, this pathway is considered incomplete.
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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

There is contamination remaining above established cleanup levels at the ADOTPF Chulitna Maintenance but ADEC has determined there is no unacceptable risk to human health or the environment, and this site will be granted a Corrective Action Complete- ICs determination subject to the following.

- 1. Any future change in land use may impact the exposure assumptions cited in this document. If land use and/or ownership changes, current ICs may not be protective and ADEC may require additional remediation and/or ICs. Therefore the Alaska Department of Transportation and Public Facilities (ADOTPF) shall report to ADEC every five years to document land use, or report as soon as ADOT becomes aware of any change in land ownership and/or use, if earlier. The report can be sent to the local ADEC office or electronically to DEC.ICUnit@alaska.gov.
- 2. Installation of groundwater wells will require approval from ADEC.
- 3. 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.)
- 4. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.
- 5. Soil contamination is located in the area of the former USTS and current ASTs (see attachment B). When the soil in this area becomes accessible, the soil must be evaluated and contamination addressed in accordance with an ADEC approved work plan and/or to the satisfaction of ADEC.
- 6. ADOT should post and maintain signage at each water tap directing staff

and visitors to use bottled water for drinking water.

The ADEC Contaminated Sites Database will be updated to reflect the change in site status as detailed above, and will include a description of the contamination remaining at the site. When the site meets the requirements for a Corrective Action Complete determination, then the Institutional Controls will be terminated.

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.

Please sign and return Attachment A to ADEC within 30 days of receipt of this letter. If you have questions about this closure decision, please contact the ADEC project manager, Keather McLoone at (907) 269-7526.

Approved By,

Linda Nuechterlein

Environmental Manager

Recommended By,

Keather McLoone

Environmental Specialist

Attachment A:

Corrective Action Complete-ICs Agreement Signature Page

Attachment B:

Site Figure

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Cc:

Martin Bee, ADOT&PF

# Attachment A: Corrective Action Complete-ICs Agreement and Signature Page\*

Alaska Department of Transportation and Public Facilities (ADOTPF) agree to the terms of this Corrective Action Complete with Institutional Controls determination as stated in this Closure Decision Document for ADOTPF Chulitna Maintenance dated January 5, 2011. Failure to comply with the terms of this agreement may result in ADEC reopening this site and requiring further remedial action in accordance with 18 AAC 78.276(f).

Signature of Authorized Representative, Title

Randy Vanderwood/ ADOTPF

Printed Name of Authorized Representative.

Randy Vanderwood/ ADOTPF

RECEIVED

JAN **18** 2011

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Note to Responsible Person (RP):

After making a copy for your records, please return a signed copy of this form to the ADEC project manager at the address on this correspondence within 30 days of receipt of this letter.

ADEC File No.: 2269.26.002

Hazard ID: 23604

ADEC Project Manager: Keather McLoone

#### For Internal Use Only

\*Attention ADEC Administration Staff: Please follow the procedure below after Attachment A is signed/returned to ADEC.

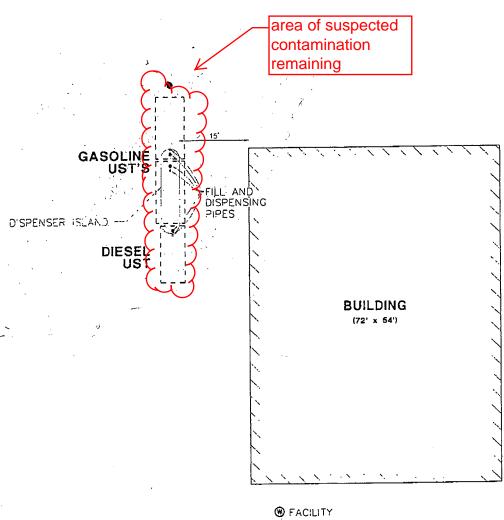
1. Log-in and Date Stamp Attachment A

Scan and Save to the appropriate electronic folder on the network Drive

 Scan and Save to the appropriate electronic folder on the network Drive
 File the hard copy in the appropriate project/site file Correspondence Folder (blue in Anchorage).
 Provide the Correspondence folder (with the filed Attachment A hard copy) to the ADEC Project Manager so that the PM can update the CS database.

# Attachment B: Site Figure





PARKS HIGHWAY (mile 127)

Scale: 1"=20"