

# Department of Environmental Conservation

DIVISION OF SPILL PREVENTION & RESPONSE Contaminated Sites Program

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File No: 1513.26.076

March 21, 2014

Mr. Gareth Jones, Facilities Manager Department of Administration Division of General Services PO Box 110210 State Office Blg Juneau, AK 99811-0210

RE:

Decision Document: Alaska Department of Public Safety – Juneau (Site)

Corrective Action Complete Determination

Dear Mr. Jones,

The Alaska Department of Environmental Conservation, Contaminated Sites Program (DEC) has reviewed the environmental records for the referenced Site. This decision letter explains the Site history, cleanup activity and specific conditions required to effectively manage any remaining contamination. No additional remedial action is required as long as compliance with these conditions is maintained.

#### Site Name and Location

Alaska Department of Public Safety - Juneau Juneau Public Safety Building 450 Whittier Street Juneau, Alaska 99801 Lot 14 Juneau Townsite

#### **DEC Site Identifiers**

Hazard ID: 25487 File: 1513.26.076 Facility ID 3004

### **Address of Contact Party**

Mr. Gareth Jones Alaska Department of Administration Division of Administrative Services P.O. Box 110210 Juneau, AK 99811-0210

# Regulatory Authority for Determination

Title 18 Alaska Administrative Code 78

Site Description and Background

In January 2009, the heating system at the referenced facility stopped working and maintenance personnel found water in the fuel filter at the boiler. The Division of General Services (DGS) contacted

Delta Western (DW) to inspect the 1,000-gallon fiberglass underground storage tank (UST) that provided fuel to the boiler. DW found water in the UST and determined from fuel delivery records that the UST system may have leaked fuel. DW installed a temporary above ground tank to restore fuel supply to the boiler and then drained the UST of the water/oil mixture. DGS and DW determined that the missing fuel had actually been delivered to another State facility and that a faulty surface mount cap was how surface water had entered the UST.

After DGS determined it was unlikely the UST would pass tightness testing requirements for regulated tanks they submitted a UST Taken Out-of-Service or Temporary Closure form and Empty Tank Affidavit to the DEC Storage Tank Program. DGS then contacted Carson Dorn (CDI) Inc. to perform a regulated UST site assessment in conjunction with the tank closure-by-removal excavation scheduled to take place in June 2009.

Geological makeup of the property and surrounding area is unconsolidated fill over former intertidal lands. Groundwater wells are not present and groundwater was not encountered during Site activity. The only water body in the area that has potential for use as a potable drinking water source is Gold Creek located approximately one fifth of a mile from the property at about the same elevation above sea level. The nearest municipal drinking water source is the Gold Creek well field located approximately one mile in distance and several hundred feet higher in elevation above sea level than the referenced property.

#### **Contaminants of Concern**

During the course of investigation at this site, soil confirmation analytical samples were analyzed using DEC approved methods for benzene, toluene, ethylbenzene and total xylenes (BTEX) volatile organic compounds and gasoline (GRO), diesel (DRO) and residual (RRO) range petroleum hydrocarbons. Groundwater and surface water were not encountered during site investigation and so were not characterized for contamination. The following petroleum contaminant of concern was detected in soil above laboratory reporting limits as described under the Characterization and Cleanup Activities heading to follow in this decision letter.

Diesel Range Hydrocarbons (DRO)

#### Cleanup Levels

The cleanup level requirements for hazardous substances in soil at the Site are those established in 18 AAC 75.341(b)(2) Method Two for soil are the petroleum hydrocarbon ranges listed on 18 AAC 75.341(d) Table B2 for the over 40 inch rainfall zone. The following table displays the contaminant of concern cleanup levels for the migration to groundwater pathway at the Site:

**Table 1 – Approved Cleanup Levels** 

Contaminant	Soil (mg/kg)
DRO	230

mg/kg = milligrams per kilogram

# Site Characterization and Cleanup Activities

Release investigation and corrective action activities conducted under the regulatory authority of the Contaminated Sites Program began in 2009. These activities are described below.

In conjunction with the UST closure-by-removal excavation, CDI performed field screening testing of soil samples from various depths and locations in the excavation with a photo-ionization detector (PID). In accordance with 18 AAC 78.090(d)(1), CDI determined that the UST and piping were in good condition with no indication of a release, the soil consisted of D1 fill and groundwater was not present. In accordance with 18 AAC 78.090(2)(B), CDI collected soil confirmation analytical samples PSB-1 and PSB-3 at depths below ground surface (BGS) of seven and one half feet at the north and south ends of the tank respectively. Directed using PID readings, CDI then collected sample PSB-2 at depths BGS of seven and one half feet near the midsection of the tank on its east side, and sample PSB-4 at a depth BGS of two and a half feet beneath the piping from the remote fill port. The only soil sample that exceeded a laboratory reporting limit was PSB-3 and the result was a DRO concentration of 72.3 milligrams per kilogram (mg/kg). This is the highest level of petroleum detected in soil remaining at the Site.

CDI did not collect PID readings and a confirmation sample from the soil that was excavated to access the UST for removal. Since all excavated soil was returned to the excavation, a confirmation sample of this soil is required in the Storage Tank Procedures Manual adopted by reference in 18 AAC 78. The fill port normally positioned above the UST, however was plumbed remotely to the UST system and sample PSB-4 assessed this piping run. With knowledge of the Site and with no indication of containment failure by the UST system, DEC concludes the release is attributed to fuel handling in a location that is covered in asphalt. Since the site is once again covered with asphalt, DEC has determined that no additional sampling is necessary to conclude that any remaining contamination is a de minimis extent.

# **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. Based on the available laboratory data on soil remaining at the Site, DEC has determined that residual contaminant concentrations do not pose a cumulative human health risk.

#### **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 one of the following: De Minimis Exposure, Exposure Controlled, or Pathway Incomplete. A summary of this pathway evaluation is included in Table 1 as Attachment A to this letter.

#### **DEC Decision**

With information currently available, DEC has determined there is no unacceptable risk to human health or the environment as long as any remaining contamination is properly managed. The two standard conditions listed below are necessary for this site closure determination and must be closely adhered to.

#### **Standard Conditions**

1. If disturbance is planned in any of the areas of the property described in this letter as having residual contamination, a work plan must be submitted for DEC approval prior to any such site activity begins. Any proposal to transport soil or groundwater off-Site requires DEC 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.

2. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.

This determination is in accordance with 18 AAC 78.276(f) and does not preclude DEC from requiring additional assessment and/or cleanup action if future information indicates that conditions at the 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.

Sincerely,

Bruce Wanstall

Remedial Project Manager

State & Private Contaminated Sites Program

Bruce Warstoll

Attachment A: Table 1 – Exposure Pathway Evaluation

cc: Sally Schlichting, DEC Unit Manager, by electronic mail

# Attachment A: Exposure Pathway Evaluation

Table 1 - Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	De minimis exposure	The results for PSB-4 remote fill indicate there is no soil contamination remaining at the surface above the direct contact cleanup levels.
Sub-Surface Soil Contact	De minimis exposure	Soil contamination remains not accessible in the subsurface at levels below Method Two Table B2 Migration to Groundwater levels and future excavation is not planned.
Inhalation – Outdoor Air	Pathway Incomplete	Contamination remains in the subsurface and volatile compounds are not present in soil at levels above outdoor inhalation screening levels
Inhalation – Indoor Air (vapor intrusion)	De minimis exposure	Buildings are present but any remaining volatile petroleum levels are either below laboratory reporting limits or migration to groundwater screening levels.
Groundwater Ingestion	De minimis exposure	Groundwater was not encountered and petroleum concentrations in soil are below Method Two migration to groundwater cleanup levels. The City and Borough of Juneau provides potable water to the Site and the area; no potable water wells are present on-Site or in the area.
Surface Water Ingestion	Pathway Incomplete	Surface water hydraulically connected to the Site is not of sufficient quality or quantity for a potable water source.
Wild Foods Ingestion	Pathway Incomplete	The Site and the urban area are not a wild foods harvest area and none of the contaminants have potential to bioaccumulate in flora or fauna.
Exposure to Ecological Receptors	Pathway Incomplete	Ecological receptors are not present and BTEX indicator compounds in soil are below Method Two migration to groundwater cleanup levels.

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.

