

STATE OF ALASKA

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

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July 30, 2002

Mr. Paul Morina
Cascade Convenience
2035 Halibut Point Road
Sitka, AK 99835

Re: No Further Remedial Action Planned
Cascade Convenience Center
Database ID No. 99120025401

The Alaska Department of Environmental Conservation (DEC) has reviewed the D.G. Jones/Associates closure report and request for no further action at the referenced facility. The report demonstrates that cleanup levels have been successfully met.

Site History

In the fall of 1991 Randy Bayliss, P.E. was hired by Marcel Prato, owner of the facility at the time, to conduct a site assessment during the installation of a new underground tank. Contamination was discovered at a depth of 6 feet and was later confirmed to be diesel. About 30 cubic yards of soil contaminated with gasoline and diesel were removed. This material was hauled to property owned by the excavation contractor, Connor Nelson. Since no diesel tanks existed at the site the contamination was assumed to be either heating oil from a trailer court that was once located at the site, or contaminated fill that was brought in at a later date. DEC approved the request to cease continued excavation of this material until it could be analyzed.

Mr. Bayliss proposed an interim corrective action for the stockpiled soil in November 1991. The corrective action consisted of a combination of aeration and bioremediation, with the addition of fertilizer and active tilling throughout the summer. The proposed location was the City's overburden site located on a portion of USS 36.70 (the Granite Creek site). The interim corrective action plan was approved by DEC in January 1992.

In August 1992 DEC's Sitka District Office received notification that the stockpiled soil met cleanup standards (100 parts per million gasoline and 200 parts per million diesel). DEC agreed that the soil was acceptable as landfill cover material. We have no documentation that the soil was ever used for this purpose.

In May 1994 Richard Smith, P.E. proposed in-situ treatment for the remaining contamination. The proposed treatment consisted of placing urea in a shallow excavation and installing two monitoring wells. DEC's Sitka District Office approved the proposal but we have no documentation that the treatment was implemented.

In 1996 Dick Farnell of DEC's Storage Tank Program notified Scott Gill of Cascade that further work was necessary before a "no further action" determination could be issued. Mr. Farnell noted two sets of regulations, 18 AAC 75 and 18 AAC 78, were to be considered due to the non-underground storage tank (UST) origin of part of the contamination.

It does not appear that additional action occurred until December 2000, when samples were collected at various locations to determine the extent of remaining contamination. Brad Dennison collected 22 field-screening samples from 13 test borings. Based on the screening results, Mr. Dennison estimated that two areas of

contamination remained to the north and south of the fueling pad. Confirmation samples were taken from holes 3 and 9 to quantify concentrations at these locations and to assist in correlating the field screening data.

D.G. Jones submitted a workplan to DEC in March 2001 to complete the cleanup. A revised workplan was submitted in September 2001 to address issues raised by Paul Horwath, interim DEC project manager. The site was transferred permanently to the Juneau DEC office in October 2001. The workplan was approved in December 2001.

Applicable Cleanup Levels

The applicable soil cleanup levels are the most stringent levels for the over 40-inch precipitation zone. These cleanup levels, found at 18 AAC 75.341 tables B1 and B2, are as follows for the primary contaminants.

<u>Contaminant</u>	<u>Cleanup Level (mg/kg)</u>
Gasoline Range Hydrocarbons	260
Diesel Range Hydrocarbons	230
Residual Range Hydrocarbons	8,300
Benzene	0.02
Toluene	4.8
Ethylbenzene	5
Total Xylenes	69
Fluorene	240
Naphthalene	38
Phenanthrene	3,900 ¹

Cleanup Results

Excavation occurred in March 2002 in conjunction with an upgrade of the facility. An estimated 2,800 tons (approximately 1,800 cubic yards) of soil and rock were transported to the S&S rock quarry and stockpiled for later use as asphalt aggregate. The primary contaminant was diesel, with lower concentrations of gasoline also present. It is assumed that benzene, toluene, ethylbenzene and xylenes (collectively known as BTEX) and polycyclic aromatic hydrocarbons (PAHs) are present in the stockpiled material at low levels. Stockpile sampling is being conducted to confirm the presence and concentrations of these various contaminants.

Field screening and sampling for laboratory analysis in the excavated area confirmed that cleanup goals have been met. D.G. Jones/Associates has determined that contamination remains beneath the foundation of the building along the northwest side of the site. This soil could not be removed without destabilizing the building.

Remaining On-Site Concentrations

<u>Contaminant</u>	<u>Maximum Detected Concentration (mg/kg)</u>
Gasoline Range Hydrocarbons	570
Diesel Range Hydrocarbons	2,300
Residual Range Hydrocarbons	non-detect
Benzene	non-detect
Toluene	non-detect
Ethylbenzene	non-detect
Total Xylenes	non-detect
Fluorene	0.814
Naphthalene	2.14
Phenanthrene	0.277

¹ Phenanthrene is not listed in Table B1. Appropriate risk-based cleanup levels for this and a number of other contaminants were calculated after the regulations were implemented in 1999.

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Groundwater and Surface Water Exposure Routes and Contaminant Migration Pathways

Groundwater - Neither shallow groundwater nor deeper groundwater that may potentially exist below bedrock underlying the site is used for drinking water. The City and Borough of Sitka operates a drinking water distribution system in the area. The source of the water is Blue Lake, located several miles away from the site.

Surface Water - Petroleum may have entered near-surface bedrock fissures in the past. Although Cascade Creek is located approximately 75' - 100' cross-gradient from the site, the potential for contaminant migration toward the creek is low considering bedrock slopes directly toward Sitka Sound. During DEC's June 19, 2002 site visit there was no visual or olfactory evidence that petroleum had leached through the base of the rip-rap material bordering the Sitka Sound intertidal zone.

Cumulative Risk

A chemical that is detected at one-tenth or more of the Table B1 value set out in 18 AAC 75.341(c) or the Table B2 value set out in 18 AAC 75.341(d) must be included when calculating cumulative risk under 18 AAC 75.325(g). The BTEX and PAH indicator contaminants included in petroleum cumulative risk calculations were not detected on-site at concentrations equal to or greater than one-tenth the risk-based ingestion or inhalation levels in Table B1. Cumulative risk calculations were therefore not required for residual on-site contamination.

Determination

The investigation and cleanup of Cascade Convenience has met all requirements specified in 18 Alaska Administrative Code (AAC) 75 Article 3 - Discharge, Reporting, Cleanup, and Disposal of Oil and Other Hazardous Substances and 18 AAC 78, Underground Storage Tanks. **No further remedial action is planned.**

In accordance with 18 AAC 75.380(d)(1) and 18 AAC 78.276, additional investigation and cleanup may be required if new information is discovered which leads DEC to make a determination that the cleanup described in this decision is not protective of human health, safety, and welfare or the environment. This includes investigation and possible excavation of contaminated soil that may be present beneath the building foundation should building demolition or major structural modifications occur at some point in the future.

Please note that the excavated material stockpiled at S&S Contractors remains an issue. We are currently working with D.G. Jones/Associates and S&S to evaluate contaminant levels and ensure that the contaminated soil is suitable as a source of asphalt aggregate. You may be required to consider other alternatives if this is not a viable treatment option.

If you are in disagreement with this decision you may seek an adjudicatory hearing under 18 AAC 15.200 - 18 AAC 15.920 within 30 days of the mailing of this decision. Please call me at (907) 465-5208 if you have any questions.

Sincerely,



William Jones
Project Manager

cc: Peter Gorman - D.G. Jones/Associates
John Carnahan (Electronic)