

STATE OF ALASKA

SARAH PALIN, GOVERNOR

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

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ADEC File: 2569.38.011

December 10, 2008

Mr. Ernie Duncan
Duncan Enterprises – K.L., Incorporated
326 W Katella Ave #4-M
Orange County, CA 92867

Re: Record of Decision (ROD)
Katmai Lodge, ADEC Spill #2004250117301
Cleanup Complete Determination with Institutional Controls (ICs)

Dear Mr. Duncan:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Katmai Lodge. 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, subject to the specific institutional controls (ICs) established in this ROD, and no further remedial action is currently required as long as the site remains in compliance with these ICs.

This decision is based on our administrative records for the Katmai Lodge which are located in the Soldotna office of the ADEC. 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 with ICs determination.

Introduction

Site name and location:

Katmai Lodge; located within Section 35, T12S, R43W, Seward Meridian
Katmai Lodge is located on the eastern bank of the Alagnak River, approximately 20 air miles northwest of King Salmon, AK.

Name and mailing address of current contact and/or responsible person:

Mr. Ernie Duncan
Duncan Enterprises – K.L., Incorporated
326 W Katella Ave #4-M
Orange County, CA 92867

Database Record Key and File Number:

ADEC Reckey: 2004250117301
ADEC File: 2569.38.011
ADEC Hazard ID: 4231

Regulatory authority under which the site has been cleaned up:

This project was reviewed under the applicable regulatory authority in 18 AAC 75, Article 3, revised as of October 9, 2008.

Background

The Katmai Lodge provides guided fishing trips along the Alagnak River and other rivers in the area. The property was first developed approximately 20 years ago. Operations are seasonal, with the Lodge opening in June and closing at the end of August. The current development is located on the eastern bank of the Alagnak River and is comprised of several main buildings, guest cabins, support buildings, and associated infrastructure.

In June 2004, a petroleum sheen was observed below the dock adjacent to the Alagnak River. It was determined that the site was impacted by diesel fuel caused by leaks and spills from an electrical power generation fuel storage and supply system, consisting of two 1000-gallon above ground diesel fuel tanks, and associated piping. It was estimated that approximately 150 gallons of fuel was lost adjacent to the secondary generator building, due to a broken fuel line. The power generation system remains in place to provide electrical power for the lodge business. Soil and groundwater samples collected at this site have been tested for: gasoline range organics (GRO), diesel range organics (DRO); and benzene, toluene, ethylbenzene, and xylene (BTEX).

Site Characterization and Cleanup Actions

All site characterization and cleanup actions performed at this site were supervised and reported by DOWL Engineers.

On August 10, 2005, approximately 20 cubic yards of contaminated soil was excavated and placed in a soil stockpile located in an upland area near the airstrip. Soil and groundwater sampling was performed following the completion of excavation efforts and confirmed that petroleum contaminated soil and groundwater remained at the spill site. Groundwater has been observed at the site from near the ground surface in the spring, to 2-2.5 feet below ground surface in late summer when the river level is lower.

In August of 2006, additional contaminated soil was excavated from locations where 2005 soil and groundwater sampling detected residual diesel fuel contamination. Excavated soils were placed in two new treatment cells constructed adjacent to the original soil stockpile that was constructed following the 2005 contaminated soil removal effort. Approximately 39 additional cubic yards of soil were removed from the site. Following excavation, soil samples were collected and analyzed for DRO and BTEX. These soil sample results detected contaminated soil in excess of ADEC soil cleanup levels remaining onsite in the following three locations:

- 1) Underneath and on the western edge of the secondary generator building, with DRO concentrations below 700 mg/kg and BTEX concentrations below 0.06 mg/kg;

- 2) Underneath the dock, to the north of the spill site, with DRO concentrations below 1,100 mg/kg and BTEX concentrations below 0.07 mg/kg; and
- 3) Underneath and on the western edge of the primary generator building, with concentrations below 1,600 mg/kg and BTEX concentrations below 0.3 mg/kg.

In August of 2007, the contaminated soil stockpiles were sampled under an ADEC approved Katmai Lodge Treatment Cell Sampling 2008 Work Plan, which employed a multi-incremental soil sampling technique. DRO was the only laboratory test method run on the multi-incremental soil samples, as BTEX and GRO concentrations had already been demonstrated to have substantially met ADEC soil cleanup levels. The results of this sampling effort resulted in a 95% upper confidence level of 597 mg/kg for DRO. The highest individual multi-incremental sample result for DRO was 625 mg/kg. Based on these soil sample results, these contaminated soils were approved for landspreading in an upland area in the vicinity of the Lodge's airstrip.

Contaminants of Concern

- Diesel Range Organics (DRO)
- Benzene, toluene, ethylbenzene, and xylenes (BTEX)

Cleanup Levels

The pertinent soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Table B2 Under 40 inch Zone, Migration to Groundwater.

<u>Contaminant</u>	<u>Site Cleanup Level (mg/kg)</u>
• Diesel Range Organics	250
• Benzene	0.025

Pathway Evaluation

The exposure pathways for human health that were evaluated include the following: ingestion of, and direct contact with, soil and groundwater; indoor and outdoor inhalation of vapors; and dermal contact with soil. Impacts to ecological receptors were also evaluated.

The outdoor inhalation, ingestion, and dermal contact exposure risk is acceptable since the remaining contaminant concentrations are below ADEC Method Two inhalation and ingestion soil cleanup levels and groundwater at the site is not used as a drinking water source. The two generator buildings overlying residual soil contamination are inhabited solely for purposes of maintaining and operating the power generation systems, so indoor inhalation is not considered an exposure pathway of concern.

Concerning ecological receptors, groundwater contamination likely remains in the three areas of residual soil contamination, and the groundwater may be present at the ground surface when the river level is high; however the mass of residual contamination in these three areas is very small, and any potential impact to surface waters will be minimal in both areal extent and magnitude.

The above exposure pathway analysis was supported by the most recent ADEC Exposure Tracking Model (ETM) ranking. The ETM results showed all pathways to be one of the following: *De Minimus Exposure* for human health and *Low Potential Exposure* for ecological impacts.

ADEC Decision & Established Institutional Controls (ICs)

The ADEC has determined that there is currently no unacceptable risk to human health or the environment, and this site will be granted a Cleanup Complete with ICs determination subject to the following ICs:

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 ***Duncan Enterprises – K.L., Incorporated*** shall report to ADEC every five years to document land use, or report as soon as ***Duncan Enterprises – K.L., Incorporated*** becomes aware of any change in land ownership and/or use, if earlier. **The report can be sent to our ADEC office or electronically to DEC.ICUnit@alaska.gov.**
2. The soil contamination remaining under the two generator buildings and the dock is currently inaccessible. When (or if) any of these improvements are removed and/or the soil becomes accessible, ADEC shall be contacted in order to determine an appropriate course of action.
3. Prior ADEC approval must be obtained for any excavation, transport, movement, remediation, and/or disposal of the landspread soils, and for the contaminated soil remaining under the two generator buildings and the dock. This IC is consistent with the requirements of 18 AAC 75.325 (i), 18 AAC 75.360, and 18 AAC 75.370 (b).

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 soil contamination remaining at the site. A Cleanup Complete determination without ICs could be considered should future soil samples confirm that the soil contaminant concentrations at the three remaining impacted locations at the spill site, as well as for the landspread soils, meet the applicable soil cleanup levels. When the site meets the requirements for a Cleanup Complete determination without the need for ICs, then these Institutional Controls will be terminated.


This determination is consistent with 18 AAC 75.380(d) 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 our office within 30 days of receipt of this letter. If you have questions about this Cleanup Complete with ICs determination, you may contact the ADEC project manager, Paul Horwath, at (907) 262-5210 x250.

Sincerely,


Paul Horwath
Environmental Engineer

Attachment A: Cleanup Complete-ICs Agreement and Signature Page

C: DOWL Engineers, Anchorage, AK

Pdh.Katmai Lodge Cleanup Completed with ICs_12-10-08