STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF SPILL PREVENTION AND RESPONSE CONTAMINATED SITES PROGRAM

SEAN PARNELL, GOVERNOR

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File: 2571.38.002

Certified Mail Return Receipt Article No. 7007 3020 0000 1948 2801

October 14, 2009

Steve Caldwell Ugashik, LLC, Colorado Engineering 220 West 27th Street Cheyenne, WY 82001

Re:

Ugashik River Lodge

Cleanup Complete Determination- Institutional Controls

Dear Mr. Caldwell:

The Alaska Department of Environmental Conservation (ADEC), Contaminated Sites Program, has reviewed the environmental records associated with the Ugashik River Lodge. Based on the information provided to date, the ADEC has determined that the contaminant concentrations remaining on site do not pose an unacceptable risk to human health or the environment, and no further remedial action will be required as long as the site is in compliance with established institutional controls.

This decision is based on the administrative record for the Ugashik River Lodge, 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 Cleanup Complete with Institutional Controls Determination.

Introduction

Site Name and Location
Ugashik River Lodge
Lot 6 of the Grayling Subdivision, Plat 79-1, Kvichak Recording District.
Ugashik, AK

Name and Mailing Address of Contact Party: Steve Caldwell Ugashik, LLC, Colorado Engineering 220 West 27th Street Cheyenne, WY 82001

ADEC Site Identifiers:

ADEC Reckey: 1996250120401

File #: 2571.38.002 Hazard ID: 2607

Regulatory authority under which the site is being cleaned up:

18 AAC 75

Background

On September 19, 1996 petroleum contamination was discovered during an ADEC site inspection along the river bank from boat fueling practices. During the investigation, the generator building and the caretaker cabin on the property were also found to contain petroleum contamination from bulk fuel storage tanks. This site is located on the Ugashik River downstream of the Lower Ugashik Lake. The Ugashik River Lodge has historically been used as a seasonal hunting and fishing lodge.

Contaminants of Concern

During the investigation at this site soil samples were analyzed for gasoline range organics (GRO), diesel range organics (DRO), residual range organics (RRO), and volatile organic compounds (VOCs) including benzene, toluene, ethylbenzene, and xylene (BTEX). Based on these analyses and knowledge of the source area, the following Contaminants of Concern was identified:

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

Cleanup Levels

The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Tables B1 and B2, *Under 40 Inch Zone*.

Contaminant	Site Cleanup Level (mg/kg)
Diesel Range Organics	250
Gasoline Range Organics	300
Benzene	0.025

Site Characterization and Cleanup Actions

On September 19, 1996, ADEC conducted a site inspection after the reporting of a spill from a 500-gallon aboveground storage tank. Soil samples that were collected at the riverbank approximately 50 feet downgradient of the 500 gallon tank, contained DRO up to 514 mg/kg. In addition a sheen was noted on the surface of the river. Upon further site inspection, surface soil staining was noted beneath the above ground storage tanks located at the caretaker cabin

and the generator shed. Soil samples collected at the caretaker cabin contained DRO up to 13,000 mg/kg.

On August 8, 1997, further soil evaluation occurred at the shoreline, generator shed, and caretaker cabin., Nine surface soil samples were collected along the riverbank, four soil samples were collected near the generator shed from the surface to 7 feet below ground surface (bgs) and five soil samples were collected from the caretaker cabin from the surface to 4.5 feet bgs.

Soil samples collected along the riverbank did not contain contaminants above ADEC cleanup levels. Soil samples collected near the generator shed contained DRO up to 26,000 mg/kg and GRO up to 1,200 mg/kg, and soil samples collected at the caretaker cabin contained DRO up to 14,000 mg/kg. After sampling at the caretaker cabin and generator shed, the soil was excavated and two passive remediation systems were installed at 4 feet bgs. The soil was also fertilized, aerated, and backfilled into the excavation.

On September 1, 2001, six soil borings were advanced at the site, with two of the borings completed as monitoring wells. Three soil samples from the generator shed area, collected between 1 and 10 feet bgs, contained DRO up to 11,800 mg/kg and GRO up to 462 mg/kg. Three soil samples from the caretaker cabin, collected from 1 to 7 feet bgs, contained DRO up to 11,100 mg/kg. Groundwater samples collected from the newly installed wells at the generator shed and the caretaker cabin monitoring wells did not contain detectable levels of contaminants.

On August 26, 2005, soil samples were collected from six soil borings in areas with known contamination. Four soil samples collected from the generator building at 2 to 10 feet bgs, contained benzene up to 0.0706 mg/kg; and two soil samples collected from the caretaker cabin at 2 to 10 feet bgs, contained DRO concentrations below cleanup levels. Groundwater samples collected from the generator shed and the caretaker cabin monitoring wells did not contain detectable levels of contaminants. The monitoring wells were decommissioned in accordance with ADEC guidance on August 30, 2009.

Pathway Evaluation

The exposure pathways for human health that were evaluated include the following: ingestion of soil and groundwater; indoor and outdoor inhalation of vapors; and direct contact with soil. The ingestion of groundwater pathway is incomplete as groundwater sampling results did not contain contaminants above ADEC cleanup levels and no drinking water wells exist on site.

The inhalation, ingestion and direct contact exposure risk is acceptable, as remaining concentrations are considered to be De Minimis. It is assumed that the passive remediation system and fertilized soil have promoted bioremediation and volatilization of remaining contamination below cleanup levels. Furthermore, any exposure from the inhalation pathway is considered De Minimis, because the lodge is only used seasonally a few months of the year due to its remote location.

The exposure pathway analysis above was supported by the most recent ADEC Exposure Tracking Model (ETM) ranking. The ETM results showed all pathways to be De Minimis, or Incomplete.

ADEC Decision

There is contamination remaining above established cleanup levels at the Ugashik River Lodge, but ADEC has determined there is no unacceptable risk to human health or the environment, and this site will be granted a Cleanup Complete – Institutional Controls 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 institutional controls may not be protective and ADEC may require additional remediation and/or institutional controls. Therefore, Ugashik, LLC will report to ADEC every five years to document land use, or as soon as Ugashik, LLC becomes aware of any change in land ownership and/or use. The report can be sent to the local ADEC office or electronically to DEC.ICUnit@alaska.gov.
- 2. A Notice of Residual Contamination will be recorded on the ADEC database to document that there is residual contamination remaining on site above the most stringent ADEC cleanup levels.
- 3. A Notice of Environmental Contamination (NEC) has been recorded at the State Recorder's Office that identifies the nature and extent of contamination at the property and any conditions that the owners and operators are subject to in accordance with this decision document.
- 4. Soil contamination is located at the caretaker cabin and the generator shed (see attachment B). When the buildings are removed and/or the soil becomes accessible, the soil must be evaluated and contamination addressed in accordance with an ADEC approved work plan.
- 5. Any proposal to transport soil or groundwater off site requires ADEC approval in accordance with 18 AAC 75.325(i). 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 B)
- 6. Movement or use of potentially contaminated soil in a manner that results in a violation of 18 AAC 70 water quality standards is unlawful.

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 ADEC Project Manager Grant Lidren at (907) 269-8685.

Approved By,

Linda Nuechterlein Environmental Manager Recommended By,

Grant Lidren

Environmental Specialist

Attachment A: Cleanup Complete-ICs Agreement Signature Page

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Attachment B: Site Figure

Attachment A: Cleanup Complete-ICs Agreement and Signature Page*

Ugashik, LLC, agrees to the terms of this Cleanup Complete with Institutional Controls determination as stated in this Record of Decision (ROD) document dated <u>October 14, 2009</u> for the Ugashik River Lodge, Hazard ID: 2607. 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

Ugashik, LLC

Printed Name of Authorized Representative, Title

Ugashik, LLC

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, Grant Lidren at the address on this correspondence within 30 days of receipt of this letter.

Attachment B: Site Figure

