# STATE OF ALASKA

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

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File: 1508.38.010

November 6, 2008

Mr. Craig Hagwood PO Box 1463 Haines, AK, 99827

RE: Cleanup Complete Determination Hagwood HOT Oil Spill, 376 Allen Road, Haines, Alaska Department ID no. 2002110100901, File no. 1508.38.248

Dear Mr. Hagwood,

The Alaska Department of Environmental Conservation Contaminated Sites Program (ADEC) has reviewed the site assessment and cleanup information regarding the heating oil spill that occurred in 2002 at 376 Allen Road in Haines, Alaska. The most recent activity has been field testing and sampling for laboratory analysis of soil and water in 2008 that is presented as a Final Report. Based on the information provided to date, ADEC has determined that the hazardous substance contamination remaining on site does not pose an unacceptable risk to human health or the environment and this site shall be closed in accordance with the conditions outlined in this letter.

Please note the following information that was evaluated in determining the environmental status of this property.

### Background

In 2002, heating oil leaked from a broken fuel line between an above ground storage tank and the Hagwood residence at 376 Allen Road in Haines. During freezing temperatures in January, diesel oil flowed downhill from the tank migrating first under the Hagwood residence and then over frozen ground and finally into the crawlspace under the neighboring Brown residence. Sorbent pads lining an interception trench on the Hagwood side of the shared property line captured an undetermined volume of the heating oil.

In 2003, 24 tons of contaminated soil was excavated from the surface of the Brown property, placed in containers and shipped off-site for remediation. After the removal action, confirmation soil sample laboratory tests determined that concentrations of diesel range hydrocarbons (DRO) in soil remaining on the Brown property were less than the Method Two migration to groundwater Table B2 screening levels. Field screening indicated residual oil contamination remained in crawlspace soil beneath both residences and surface soil in the migration path on the Hagwood property. These areas were enriched with soil nutrients to enhance natural breakdown of the oil and a layer of visqueen was added to the crawlspace as a vapor barrier. The artesian drinking water well on the Brown property-was-sampled for laboratory-analysis and test results were-below instrument detection and regulatory screening concentrations for DRO.

In 2004, Mr. Hagwood installed a series of five shallow wells (three feet below the surface) along his property line to track the stability of residual contamination on his property. Sampling and analysis of water from these wells by Mr. Hagwood's environmental consultant in 2003, 2004 and 2005 found that DRO concentrations had declined below the regulatory benchmark of 1.5 mg/L. In fall 2007, however, sampling and analysis of water in MW-2 detected DRO at 17.4 mg/L. This anomalous result prompted ADEC to request an immediate test of the artesian drinking water well (Brown's) for possible impacts and recommended that a current assessment of conditions on the upgradient source area be performed with development of a conceptual site model to more closely examine the exposure pathways at the site.

# **Contaminants of Concern**

Benzene, toluene, ethylbenzene, total xylenes (BTEX) and diesel range hydrocarbons (DRO)

### Cleanup Levels

The soil cleanup levels established for this site are 18 AAC 75.341, Tables B1 and B2. The groundwater cleanup levels established for this site are 18 AAC 75.345, Table C. In the Over 40-Inch Zone, the migration to ground water pathway is evaluated as the primary migration pathway for human health exposure risk.

## **Pathway Evaluation**

The pathways evaluated at this site included human health exposure pathways of inhalation, direct contact and the migration to groundwater pathway. Based on data available to the ADEC, none of these exposure pathways present an unacceptable risk to human health at this site. Exposure pathways to ecological receptors are not present at the site.

#### Site Assessment

In 2008, field screening and laboratory analysis soil data from the site were compared to the 2003 data and human health exposure risk concentrations for the direct contact and migration to groundwater pathways. DRO contamination at the surface on the Hagwood property is reduced to levels slightly above the human health regulatory screening level of 230 mg/L for the migration to groundwater exposure pathway and far below the regulatory screening level of 8,300 mg/L for the direct contact exposure pathway.

Analytical tests results for petroleum (DRO) in artesian well water from the 360 Allen Road residence were non-detect in 2003, 2004 and 2005 and tests for benzene, toluene, ethylbenzene and total xylenes in 2008 were below instrument detection. Available test data over a period of five years indicates that the minor petroleum contamination of shallow groundwater near the source area on the Hagwood property does not pose an unacceptable risk of exposure to this water well.

#### **ADEC Decision**

The cleanup actions to date have removed the source of contamination to the extent practicable. The contaminant concentrations remaining on the 376 Allen Road property were evaluated for potential exposure pathways and ADEC determined they do not pose an unacceptable risk to human health or the environment.

Based on the information provided to date, ADEC has determined that no further remedial action is required at the site and a cleanup closure determination is appropriate, subject to the following site specific conditions:

- 1 A Notice of Environmental Contamination will be recorded on the ADEC Contaminated Sites Program database to document that there is residual contamination remaining on site above human health exposure based soil and groundwater screening levels.
- 2 In accordance with 18 AAC 75.325 ADEC must approve any proposal to disturb contaminated media on the 376 Allen Road property. A work plan describing how the soil or water will be managed and/or disposed must be submitted for review and approval prior to excavation.
- 3 In accordance with 18 AAC 75.325(i) ADEC approval must be obtained for any proposal to transport soil or subsurface water from the property to an off-site location.

This determination is in accordance with 18 AAC 75.380(d)(2) 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 - .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, PO Box 111800, Juneau, Alaska 99801-1800, 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, PO Box 111800, Juneau, Alaska 99801-1800, 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 Bruce Wanstall at 907-465-5210 or email at <a href="mailto:bruce.wanstall@alaska.gov">bruce.wanstall@alaska.gov</a>.

Sincerely,

Bruce Wanstall Project Manager

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State & Private Sites Cleanup Program

cc: Patty Brown, by regular mail
Sharon Resnick, via email
Elijah Donat, Chilkat Environmental, via email
Pamela Post, Alaska Department of Law, via email