



SEAN PARNELL, GOVERNOR

**DEPT. OF ENVIRONMENTAL CONSERVATION**

**DIVISION OF SPILL PREVENTION AND RESPONSE  
CONTAMINATED SITES PROGRAM**

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File: 2601.38.093

February 13, 2012

Craig H. Johnson  
Trust Company of America  
P.O. Box 207  
Kodiak, Alaska 99615

Re: ADEC Decision Document; Residence Zentner Street HHOT  
Cleanup Complete Determination

Dear Mr. Johnson:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Residence Zentner Street HHOT site located in Kodiak, Alaska. 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, and no further remedial action will be required at this time.

This decision is based on the administrative record for this site, which is located in the offices of the ADEC in Soldotna, 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 this Cleanup Complete Determination.

**Introduction**

Site Name and Location:

Residence Zentner Street HHOT  
1416 Zentner Street  
Kodiak, Alaska 99615

Property Legal Description:

Lot Twelve, Block Forty-Seven, East Addition to the Kodiak Townsite according to Plat 71-13 located in the Kodiak Recording District, Third Judicial District, State of Alaska.

Landowner:

Trust Company of America

**ADEC Site Identifiers**

ADEC Reckey: 1989250134501  
ADEC File Number: 2601.38.093  
Hazard ID: 684

Regulatory authority under which the site is being cleaned up:  
18 AAC 75

**Background**

The site is currently a private residence consisting of a three bedroom home with an attached garage. In December of 1989, a heating fuel release was identified following two deliveries of heating fuel to the underground heating oil storage tank (UST), yet the residence was found unheated due to the loss of heating fuel. Diesel fuel oil was released under the house where the fuel lines entered the crawl space. In March of 1990, the UST was removed and replaced with an above ground heating fuel tank. Field investigation found evidence that the diesel fuel was released from a fuel line that was disconnected from the boiler that had not been properly sealed. Diesel Range Organics (DRO) soil contamination was encountered within the crawl space, the UST removal excavation, and along the residence foundation.

**Site Characterization and Cleanup Actions**

In March of 1990 the UST fuel tank was removed with approximately 36 cubic yards of contaminated soil excavated and stockpiled on the residence driveway. It was estimated that approximately 7 cubic yards of contaminated soil was left between the house and the excavation to protect the structural integrity of the house foundation. Soil samples collected at the bottom of the excavation pit detected DRO at 1,480 to 11,800 mg/kg at approximately 4 feet below ground surface (bgs), where the excavation was terminated due to the presence of bedrock. The crawl space was found to have a strong fuel odor and it was estimated that two-thirds of the area of the crawl space was also impacted from the heating fuel release, with the majority located in the area where the fuel lines entered the crawl space.

In 1991 the excavated soils that had been stored in the front yard were moved to the back yard and placed on a liner. It was reported in 1996 that fertilizer was added to this soil stockpile, and that these soils were then placed back into the excavation.

In April of 2011 in an effort to characterize the current DRO soil concentrations, soil samples were collected within the former UST excavation and crawl space. DRO was detected at 242 to 1,920 mg/kg at 12 to 30 inches bgs within the UST excavation at bedrock, and at 265 to 603 mg/kg within the crawl space at 6 to 8 inches below grade, at the interface with weathered bedrock.

**Contaminants of Concern**

During the investigations at this site, soil samples were analyzed for DRO, residual range organics (RRO), benzene, ethylbenzene, toluene and xylenes (BTEX). Following the completion of the assessment and response measures employed at this site, residual concentrations of the following Contaminants of Concern remains in soil in excess of the ADEC Cleanup Levels:

- Diesel Range Organics (DRO)

### Soil Cleanup Levels

The default soil cleanup level for DRO at this site is established in 18 AAC 75.341, Method Two, Table B2, Over 40 inch Zone, 'Migration to Groundwater'.

<u>Contaminant</u>	<u>Soil Cleanup Level (mg/kg)</u>
• Diesel Range Organics	230

### Pathway Evaluation

Following investigation and cleanup work at the site, exposure to any remaining contamination was evaluated using ADEC'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, or Pathway Incomplete. A summary of this pathway evaluation is included in Table 1.

**Table 1 – Exposure Pathway Evaluation**

<b>Pathway</b>	<b>Result</b>	<b>Explanation</b>
Surface Soil Contact	De Minimis Exposure	Impacted surface soils are below the ADEC ingestion soil cleanup levels.
Sub-Surface Soil Contact	De Minimis Exposure	Residual sub-surface soil contamination meets the applicable ADEC ingestion soil cleanup levels.
Inhalation – Outdoor Air	De Minimis Exposure	Residual soil concentrations meet the applicable ADEC outdoor air inhalation soil cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De Minimis Exposure	Residual soil contamination within the crawl space is located in the subsurface soil at bedrock, however indoor air is unlikely to be affected by the minimal mass, and reduced concentration, of remaining contamination.
Groundwater Ingestion	Pathway Incomplete	Groundwater was not encountered and the shallow groundwater upon the surface of the shallow bedrock is of insufficient quantity to be used as drinking water. The site and surrounding area is serviced by the City of Kodiak community water system.
Surface Water Ingestion	Pathway Incomplete	Residual contamination has no potential to impact surface water.
Wild Foods Ingestion	Pathway Incomplete	Residual contaminants are not bio-accumulative in plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	Residual contamination has no potential to impact terrestrial or aquatic receptors.

Notes to Table 1: “De Minimis Exposure” means that in ADEC’s judgment, receptors are unlikely to be affected by the minimal mass of remaining contamination. “Pathway Incomplete” means that in ADEC’s judgment, contamination has no potential to contact receptors.

### **ADEC Decision**

Based on the most recent soil samples collected, soil contamination remains at this site above established default soil cleanup levels. However, ADEC has determined that this site does not pose an unacceptable risk to human health or the environment. Therefore, we are issuing this ‘Cleanup Complete’ decision, subject to the following condition:

1. In accordance with 18 AAC 75.325(i), contaminated soil or water may not be moved or disposed without ADEC’s prior written approval. The excavation of soil on this property in the vicinity of the former heating oil UST excavation, crawl space, or residence foundation may expose contaminated soil or water requiring proper safety, management, and disposal practices. The Trust Company of America is responsible for any residual contamination. Any person(s) excavating soil or moving soil or water from the vicinity of the former UST excavation, crawl space, or residence foundation, shall contact ADEC, and shall provide the services of a qualified impartial third party as required in 18 AAC 75 in order to properly monitor, assess, manage, treat, and dispose of any contaminated media. Any contaminated soils or groundwater must be handled in accordance with all applicable ADEC regulations at that time.

The ADEC Contaminated Sites Database will be updated to reflect the change in site status to ‘Cleanup Complete’, and will include a description of the contamination remaining at this site.

This determination is in accordance 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.

It should be noted that 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 Cleanup Complete Determination, please contact the ADEC project manager, currently Paul Horwath, at (907) 262-3422 or via e-mail at [paul.horwath@alaska.gov](mailto:paul.horwath@alaska.gov)

Sincerely,

A handwritten signature in black ink that reads "Paul Horwath". The signature is written in a cursive style with a large initial "P".

Paul Horwath, P.E.  
Environmental Engineer

Cc: Jason Ginter, NORTECH