



THE STATE
of **ALASKA**
GOVERNOR SEAN PARNELL

Department of
Environmental Conservation

DIVISION OF SPILL PREVENTION & RESPONSE
Contaminated Sites Program

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File: 2245.38.041

September 4, 2013

Gifford and Glenda Nafus
P.O. Box 1727
Palmer, Alaska 99645

Re: Decision Document; Lot 1 Rambler Subdivision- Palmer
Cleanup Complete Determination

Dear Mr. and Mrs. Nafus;

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with Lot 1 Rambler Subdivision in Palmer, 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 this site will be closed.

This decision is based on the administrative record for Lot 1 Rambler Subdivision- Palmer, 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 determination.

Introduction

Site Name and Location:

Lot 1 Rambler Subdivision
Palmer, AK

Name and Mailing Address of Contact Party:

Gifford and Glenda Nafus
P.O. Box 1727
Palmer, Alaska 99645

ADEC Site Identifiers

File No: 2245.38.041

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

Background

Sanitary drains including a floor drain present in an automotive repair shop on Lot 2 of the Rambler Subdivision were connected to a log crib septic outfall located on Lot 1. The log crib potentially received wastewater from the mid 1970's to the mid 1980's. A septic tank was reportedly installed between the shop and the log crib in the late 1970's. Investigation of the log crib outfall was conducted in 1992 in conjunction with the investigation of this and other potential source areas at the automotive shop on Lot 2. For more information, see ADEC File #2245.38.009 for Pioneer Service Station.

This property and all adjacent properties are connected to the City of Palmer municipal water and wastewater utilities.

Contaminants of Concern

During the investigations at this site, soil samples were analyzed for diesel range organics (DRO, reported as extractable petroleum hydrocarbons), gasoline range organics (GRO, reported as volatile petroleum hydrocarbons), volatile organic compounds (VOCs) including benzene, toluene, ethylbenzene, and xylenes (BTEX), polychlorinated biphenyls (PCBs) and metals. Based on these analyses and knowledge of the source area, the following Contaminants of Concern were identified in soil:

- Tetrachloroethylene (PCE)

Cleanup Levels

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

<u>Contaminant</u>	<u>Site Cleanup Level (mg/kg)</u>
• Tetrachloroethylene	0.024

Site Characterization Activities

In an effort to locate the log crib outfall, two exploratory trenches were excavated in the approximate location of the suspected location of the log crib in 1991. The trenches were excavated to a depth of 6-7 feet but the log crib was not found. Contamination was not evident in either trench and analytical samples were not collected.

The log crib was located in 1992 after tracing the piping from the automotive shop. A soil sample collected from the material at the bottom of the log crib contained tetrachloroethylene at 0.106 mg/kg.

Cumulative Risk Calculation

Pursuant to 18 AAC 75.325(g), when detectable contamination remains on-site following a cleanup, a cumulative risk determination must be made that the risk from hazardous substances does not exceed a cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways and does not exceed a cumulative noncarcinogenic risk standard at a hazard index of one across all exposure pathways.

Based on a review of the environmental record, ADEC has determined that residual contaminant concentrations do not pose a cumulative human health risk.

Exposure Pathway Evaluation

Following investigation and cleanup at the site, exposure to the remaining contaminants 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, Exposure Controlled, or Pathway Incomplete. A summary of this pathway evaluation is included in Table 1.

Table 1 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	Contaminated surface soil is not present at the site
Sub-Surface Soil Contact	De Minimis Exposure	Contaminant concentrations detected in the 1992 sample are below direct contact cleanup levels and covered by clean fill.
Inhalation – Outdoor Air	De Minimis Exposure	Contaminant concentrations detected in the 1992 sample are below inhalation cleanup levels and covered by clean fill.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	The nearest buildings are approximately 150 feet from the remaining contamination.
Groundwater Ingestion	Pathway Incomplete	Contaminants are not expected to have migrated to groundwater due to the depth of groundwater in this area.
Surface Water Ingestion	Pathway Incomplete	Surface water is not utilized as a drinking water source in this area.
Wild Foods Ingestion	Pathway Incomplete	Wild foods are not collected in this area.
Exposure to Ecological Receptors	Pathway Incomplete	Ecological receptors are not present at this site.

Notes to Table 1: "De minimis exposure" means that in ADEC's judgment receptors are unlikely to be affected by the minimal volume of remaining contamination. "Pathway incomplete" means that in ADEC's judgment contamination has no potential to contact receptors. "Exposure controlled" means there is an administrative mechanism in place limiting land or groundwater use, or a physical barrier in place that deters contact with residual contamination.

ADEC Decision

Based on the information available, ADEC has determined no further assessment or cleanup action is required. There is no longer a risk to human health or the environment, and this site will be designated as closed on the Department's database.

Although a Cleanup Complete determination has been granted, ADEC approval is required for off-site soil disposal in accordance with 18 AAC 75.325(i). 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.

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.

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 ADEC Project Manager William O'Connell at (907) 269-3057.

Approved By,



Bill O'Connell
Environmental Program Manager