



THE STATE
of **ALASKA**
GOVERNOR SEAN PARNELL

Department of Environmental
Conservation

Division of Spill Prevention and Response
Contaminated Sites Program

610 University Ave.
Fairbanks, Alaska 99709-3643
Main: 907.451.2702
Fax: 907.451.5105

File: 100.38.245

April 22, 2014

Joshua M. Martinez
C/O Paul W. Waggoner, Attorney
Richmond & Quinn
360 K Street, Suite 200
Anchorage, Alaska 99501

Re: Decision Document: Residence - 3201 Hurst Road
Cleanup Complete Determination

Dear Mr. Martinez:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the residence at 3201 Hurst Road, located in North Pole, 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..

This decision is based on the administrative record for the Residence - 3201 Hurst Road which is located in the offices of the ADEC in Fairbanks, 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:

Residence - 3201 Hurst Road
3201 Hurst Road
North Pole, AK 99705

Name and Mailing Address of Contact Party:

Joshua M. Martinez
2399 Nelson Rd.
North Pole, AK 99705

ADEC Site Identifiers

File No.: 100.38.245
Hazard ID: 26098

Regulatory Authority for Determination:

18 AAC 75

Background

On November 23, 2011 Mr. Martinez's vehicle drove off Hurst Road and struck the side of the residence at 3201 Hurst Road. The impact moved the structure off of its foundation and caused the fuel line to an aboveground heating oil tank to become severed and release diesel fuel to the ground

surface adjacent to and beneath the building. The approximate amount of fuel released was initially estimated to be approximately 10 gallons but the homeowner subsequently reported that he thought it was approximately 80 gallons. After the accident, vapors were reported inside the residence. There is an older mobile home adjacent to the cabin location that is served by an on-site drinking water well that is used during the summer only. Chena Slough borders the southern end of the property. The spill consisted of arctic grade diesel fuel. According to the owner of 3201 Hurst Road, he also uses a fuel additive known as Arctic Flow Plus and Arctic Shield.

Contaminants of Concern

Investigations at this site included analytical testing for gasoline range organics (GRO), diesel range organics (DRO), residual range organics (RRO), benzene, toluene, ethylbenzene, and xylenes (BTEX), volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs). The following contaminants of concern, were identified during the course of the site investigations which are summarized in the Characterization and Cleanup Activities section of this decision letter.

- Diesel Range Organics (DRO)

Cleanup Levels

The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Table B2 Under 40 inch Zone, Migration to Groundwater. The default groundwater cleanup levels for this site are established in 18 AAC 75.345 Table C Groundwater Cleanup Levels. The approved cleanup levels for contaminants of concern at this site are shown in Table 1.

Table 1 – Approved Cleanup Levels

Contaminant	Soil (mg/kg)	Groundwater (mg/L)
• DRO	250	1.5

mg/kg = milligrams per kilogram
mg/L = milligrams per liter

Site Characterization and Cleanup Activities

On September 16, 2013 one soil sample was collected from underneath the structure in an area that was reportedly impacted by the spill. Contaminants were not detected above cleanup levels; however, field screening indicated that fuel contamination was present in surface soil in the direction of an older mobile home that the owner uses for storage (see attached figure).

The excavation of contaminated soil began on September 27, 2013. The depth of excavation varied from 5 ft. below ground surface (bgs) at the release site to 2 ½ ft. bgs along the down gradient area of travel. Ten excavation confirmation soil samples were collected, and only one soil sample exceeded ADEC cleanup levels with a DRO concentration of 893 m/kg. No other contaminants were detected above ADEC cleanup levels.

On October 7th and 8th, 2013 approximately 50 cubic yards of contaminated soil was transported to OIT, Inc. for thermal remediation.

Cumulative Risk Evaluation

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 or Pathway Incomplete. A summary of this pathway evaluation is included in Table 2.

Table 2 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	De-minimis exposure	Contaminated surface soil was removed and the remaining levels of contamination are below direct contact cleanup levels.
Sub-Surface Soil Contact	De-minimis exposure	Contamination remains in the subsurface, but is below direct contact cleanup levels and is considered de minimis in volume.
Inhalation – Outdoor Air	De-minimis exposure	Contamination remains in the subsurface, but is below inhalation cleanup levels and is considered de minimis in volume.
Inhalation – Indoor Air (vapor intrusion)	De-minimis exposure	The structure used as a residence was removed from the site and soil was excavated in areas where a building may be placed in the future.
Groundwater Ingestion	De-minimis exposure	Groundwater was not encountered during the cleanup and contaminant migration to ground water is unlikely. A sample collected from the seasonal drinking water well did not exceed groundwater cleanup levels for DRO.
Surface Water Ingestion	Pathway Incomplete	Chena Slough is adjacent to this property; however, contamination did not reach the slough.
Wild Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	Contaminated soil has been removed from the site. Any exposure to ecological receptors is not likely.

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

Remaining petroleum contamination from this spill in soil is below approved cleanup levels. This site will receive a “Closed” designation on the Contaminated Sites Database, subject to the following standard conditions.

Standard Conditions

1. Any proposal to transport soil or groundwater off-site requires ADEC approval in accordance with 18 AAC 75.325. 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 site figure.)
2. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.

Although the onsite seasonal drinking water well analytical sample indicated contaminants are below health based cleanup levels the ADEC recommends that if the water is to be used for human consumption the well be sampled occasionally after the spring thaw to determine if the contaminant levels remain below ADEC's groundwater cleanup levels.

This determination is in accordance with 18 AAC 75.380 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.

The ADEC Contaminated Sites Database will be updated to reflect the change in site status as detailed above.

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 99811-1800, 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 feel free to contact me at (907) 451-2370 or willet.boger@alaska.gov.

Sincerely,



Will Boger
Project Manager

Enclosure: Attachment B - Site Figure

cc: Charles Burnett, landowner
Suzan Amundsen, Amundsen Environmental Services (via e-mail)
Katie Johns, Geico Claims

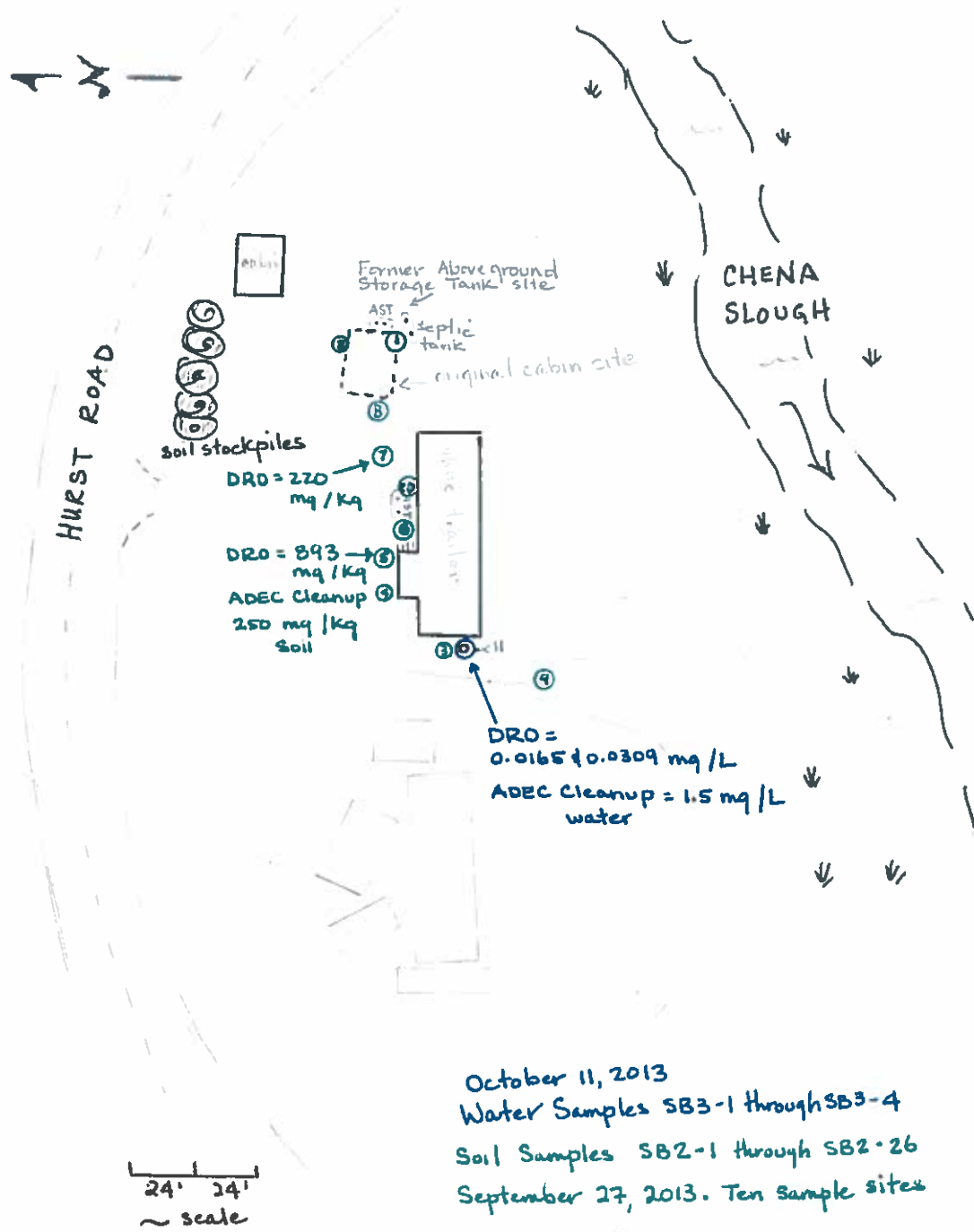


Figure 10. 3201 Hurst Rd soils sampling on 9/27/13 (ten sites) and well water sampling on 10/11/13