



SEAN PARNELL, GOVERNOR

**DEPT. OF ENVIRONMENTAL CONSERVATION**

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

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<http://www.state.ak.us/dec/>

File: 2320.38.072

May 14, 2012

Steve Agni  
Kenai Landing, Inc.  
4786 Homer Spit Road  
Homer, Alaska 99603

Re: ADEC Decision Document; Wards Cove Packing Former Steam Winch Area  
Cleanup Complete Determination

Dear Mr. Agni:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Wards Cove Packing Former Steam Winch Area, located at 2101 Bowpicker Lane, Kenai, 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.

Our determination is based on the administrative record for the Wards Cove Packing Former Steam Winch Area 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:

Wards Cove Packing Former Steam Winch Area  
2101 Bowpicker Lane  
Kenai, Alaska 99611

Name and Mailing Address of Responsible Party Contact:

Steve Agni  
Kenai Landing, Inc.  
4786 Homer Spit Road  
Homer, Alaska 99603

Current Property Owner and Legal Description:

Kenai Landing, Inc.

Tract "A", Kenai Landing Cottages Subdivision, according to Plat No. 2005-29, recorded in the Kenai Recording District, Third Judicial District, State of Alaska.

ADEC Site Identifiers:

File No.: 2320.38.072  
Hazard ID No.: 25872  
Reckey No.: 2004230113501

Regulatory authority under which the site is being cleaned up:

18 AAC 75

**Background**

The former Wards Cove Packing facility at this property originally operated as a salmon saltery as early as 1910. In 1914 it was converted to a salmon cannery which operated until 1991, with fresh and frozen fish processing operations continuing through the fall of 1998. The former steam winch was used to pull boats onto the shore for maintenance and storage, and ceased operation in approximately 1975. Petroleum impacted soil was encountered during the site characterization of the former steam winch location in 2004. Soil and groundwater samples collected at this site have been tested for: diesel range organics (DRO); gasoline range organics (GRO); residual range organics (RRO); benzene, toluene, ethylbenzene and xylenes (BTEX); polynuclear aromatic hydrocarbons (PAH); total aromatic hydrocarbons (TAH); and total aqueous hydrocarbons (TAqH).

The former steam winch area is located northwest of the new warehouse and is currently used as a parking area for the launching and docking of boats on the Kenai River. The parking area is covered with gravel. Groundwater was not encountered during the site characterization and cleanup work. There are active drinking water wells at the facility, which are located approximately 750 feet south of this site. These drinking water wells are screened in a deeper aquifer, beneath substantial depths of low permeability, silty soils.

A more detailed history of this site is contained within ADEC's project file for this site, which is available for public review.

**Site Characterization and Cleanup Activities**

A Phase I site assessment was performed during the period of time from August 2002 until April of 2003. Dark gray stains that were observed on the wood platform surrounding the former engine and steam powered winch were reported to be from grease used to lubricate the winch. Contaminants of concern associated with the operation of the steam winch were reported to be either bunker C fuel oil and/or diesel fuel.

Site characterization sampling of the steam winch area initially began on May 14, 2004, with DRO soil contamination detected at 8,840 mg/kg at 2.8 feet below ground surface (bgs). On June 4, 2004, ponded water was observed within a surface depression at the location of the

former steam winch. A sample of this water was collected and analyzed with RRO detected at a concentration of 4.30 mg/L and DRO at 13.5 mg/L. In addition, a groundwater sample was collected in a down-gradient monitoring well. PAHs were detected at 1.362 mg/L, and acetone was detected at 0.0272 mg/L in.

In July of 2004, approximately 120 cubic yards of contaminated soil was excavated from this site and placed in a petroleum contaminated soil landfarming area located in the west portion of the property. Following cleanup excavation work, soil samples were collected from the remaining excavation pit with DRO detected at 321 to 116,000 mg/kg at depths from 2.8 to 6 feet bgs. An additional groundwater sample was collected to confirm the presence of PAHs and acetone within the down-gradient groundwater monitoring well, however the laboratory did not detect any petroleum in the groundwater sample during this sampling event.

On April 5<sup>th</sup> and 6<sup>th</sup> of 2012, approximately 400 additional cubic yards of hydrocarbon impacted soils were excavated and hauled directly to the soil treatment landfarm. This cleanup excavation encompassed approximately 1,600 square feet of land area. The vertical depth of hydrocarbon migration appeared to be limited by the presence of marine derived clay and silt soils, which impeded the downward migration of petroleum contamination. DRO was detected in the south sidewall at 4,330 mg/kg at 1.75 feet bgs, and benzene was detected in the north sidewall at 0.0485 mg/kg at 5.5 feet bgs. DRO was also detected at the base of the cleanup excavation at 7.5 feet bgs at concentrations of 322, 383, and 863 mg/kg. Benzene was detected at the base of the excavation at 0.0348 mg/kg.

Following the completion of remedial actions performed at this site, residual soil contamination remained in soil exceeding the ADEC Method Two 'Migration to Groundwater' soil cleanup levels.

### Contaminants of Concern

During the characterization work performed at this site, soil and water samples were analyzed for diesel range organics (DRO); gasoline range organics (GRO); residual range organics (RRO); benzene, toluene, ethylbenzene, and xylenes (BTEX); polynuclear aromatic hydrocarbons (PAH); total aromatic hydrocarbons (TAH); and total aqueous hydrocarbons (TAqH). Following the completion of the cleanup measures, residual concentrations of the following Contaminants of Concern remained in soil in excess of the ADEC Cleanup Levels:

- Diesel Range Organics (DRO)
- Benzene

### Cleanup Levels

The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Table B1 and B2 Under 40 inch Zone, Migration to Groundwater.

<u>Contaminant</u>	<u>Soil Cleanup Level (mg/kg)</u>
• Diesel Range Organics	250
• Benzene	0.025

### Pathway Evaluation

Following characterization and cleanup work at this site, exposures to the remaining contaminants were 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**

Pathway	Result	Explanation
Surface Soil Contact	De-minimis Exposure	The contaminated surface soil was predominantly excavated and transported off site.
Sub-Surface Soil Contact	De-minimis Exposure	Contamination remains in the sub-surface soil exceeding the migration to groundwater cleanup levels at depths ranging from 1.75 to 7.5 feet bgs.
Inhalation – Outdoor Air	De-minimis Exposure	Contamination remains in the subsurface, but well below ADEC's ingestion soil cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De-minimis Exposure	Based on the distance from the building to the remaining contaminated soil, indoor air quality is unlikely to be affected.
Groundwater Ingestion	Pathway Incomplete	No groundwater contamination was encountered at the Former Steam Winch location. Groundwater has not been impacted, based on the information reported to ADEC.
Surface Water Ingestion	De-minimis Exposure	There is no surface contamination remaining at the site, and the remaining subsurface contamination is unlikely to affect the adjacent Kenai River.
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	The residual sub-surface contamination has no potential to contact ecological 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

The cleanup actions to date have served to adequately remove contaminated soil from this site, and reduce soil and groundwater contaminant concentrations. Contamination remains on site above established soil cleanup levels; however ADEC has determined there is no unacceptable risk to human health or the environment. Therefore, we are issuing this Cleanup Complete Determination for this site, subject to the following conditions:

1. Following the completion of remedial actions performed at this site, residual DRO and benzene contamination exceeded the applicable soil cleanup levels. This excavation area is identified on the Restoration Science & Engineering, LLC, Figure O - Kenai

Landing, Inc. Former Ward's Cove Packing Plant Steam Winch Excavation (see Attachment). Any proposal to excavate, transport, move, treat, and/or dispose of residual contaminated soil at this "site" requires prior ADEC approval. This is consistent with the requirements of 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.

2. Groundwater monitoring well MW-11, must be properly decommissioned in accordance with ADEC's November 2011 Monitoring Well Guidance. Kenai Landing, Inc. must prepare and provide ADEC with a work plan which identifies proposed decommissioning procedures for ADEC review and approval, prior to implementation of those procedures. Decommissioning work should be completed when frost is not present in the soil. The decommissioning of this well should occur before August 30, 2012, and must be documented in a written report submitted to ADEC by October 31, 2012. This work must be performed or directly supervised by a 'qualified person', as defined in 18 AAC 78.995(118), and both the decommissioning work plan and report must be signed by a qualified person.

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 residual soil 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. Kenai Landing, Inc. remains liable for any additional assessment and/or cleanup action, should ADEC impose such a requirement.

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 does not constitute a cleanup complete determination for the approximately 520 cubic yards of contaminated soil that were excavated from this site and transported to the contaminated soil treatment landfarm located on this property, adjacent to Bowpicker Lane. Kenai Landing, Inc., must now prepare and provide ADEC with a soil treatment work plan for these soils for agency review and approval, prior to soil treatment operations. This work plan must also be prepared and signed by a qualified person.

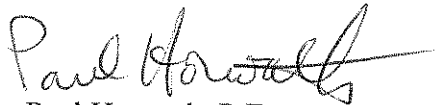
### **Appeal**

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.

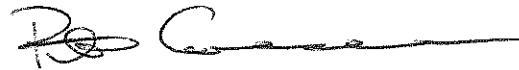
If you have questions about this ADEC Decision Document, or any other aspect of this project, please contact me at (907) 262-3422, or via e-mail at [peter.campbell@alaska.gov](mailto:peter.campbell@alaska.gov)

Approved By,



Paul Horwath, P.E.  
Engineer I, DEC

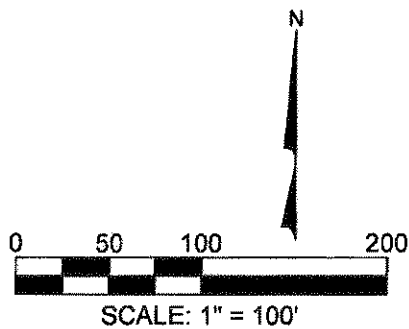
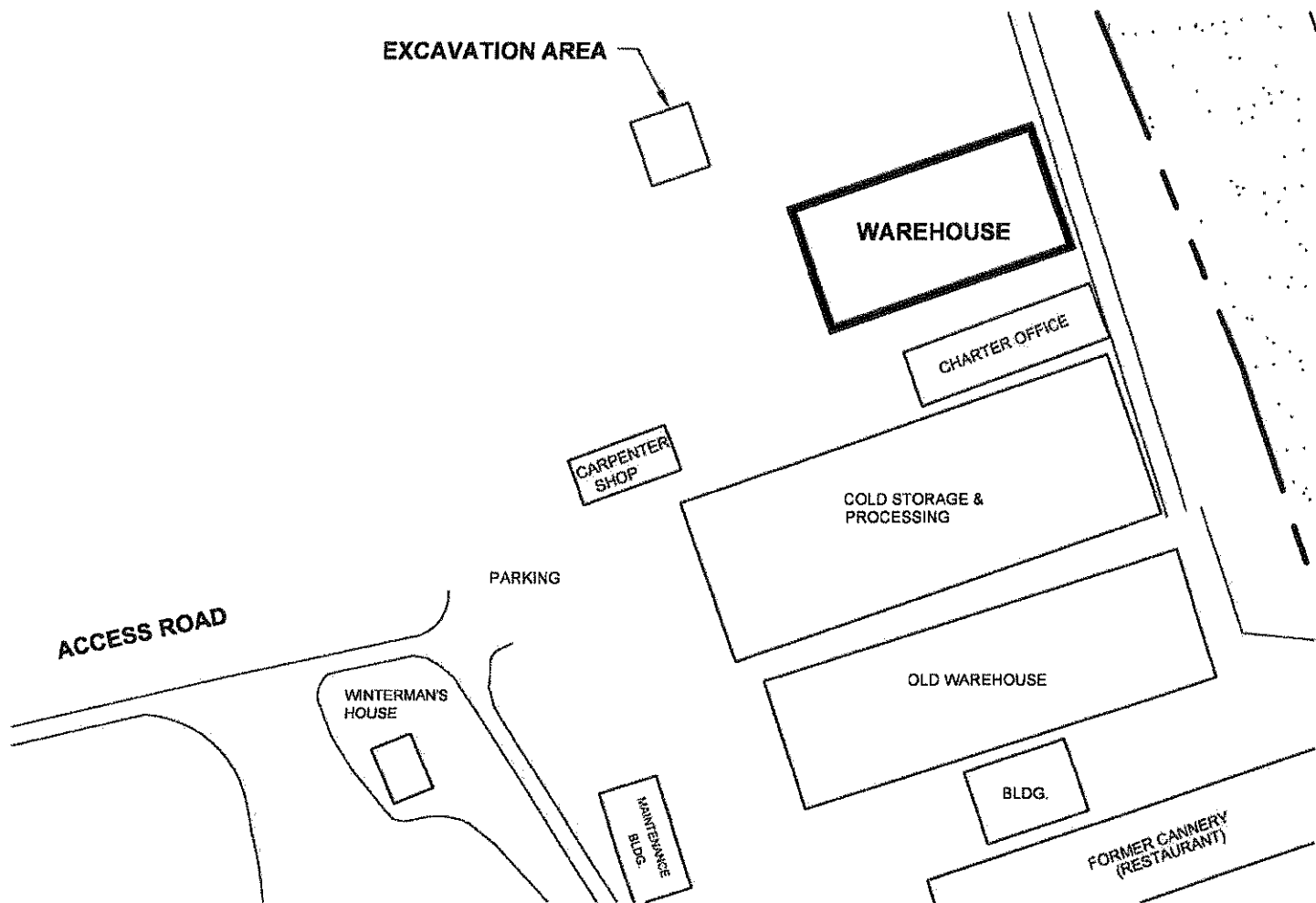
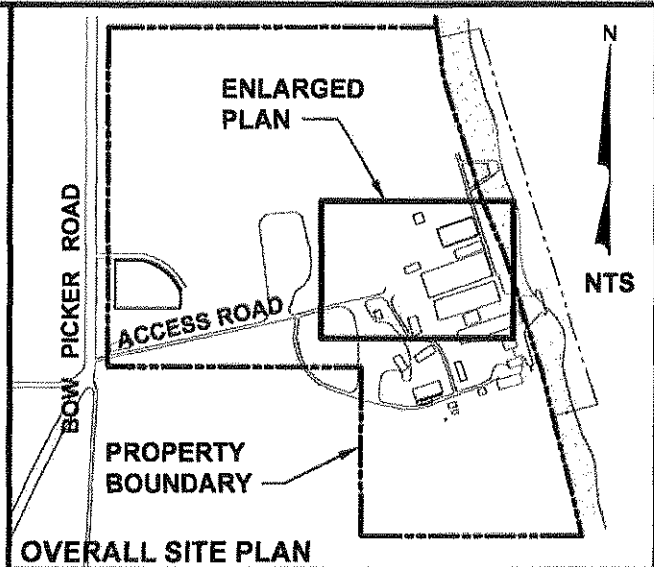
Recommended By,



Peter Campbell  
Environmental Program Specialist

Attachment: Figure O - Kenai Landing, Inc. Former Ward's Cove Packing Plant Steam Winch Excavation

Cc: Lucus E. Gamble, Restoration Science & Engineering



<b>KENAI LANDING, INC. FORMER WARD'S COVE PACKING PLANT STEAM WINCH EXCAVATION</b>	
<b>SITE LOCATION PLAN</b>	
<b>KENAI, ALASKA</b>	
JOB NO: 12-912	DRAWN: DPS
DATE: 4-24-2012	FILE:
<b>RESTORATION</b> Science & Engineering, LLC 911 West 8th Avenue, Suite 100 Anchorage, Alaska 99501 P (907) 278-1023 FAX (907) 277-5718	
<b>FIGURE 0</b>	