



THE STATE  
*of* **ALASKA**  
GOVERNOR SEAN PARNELL

**Department of  
Environmental Conservation**

DIVISION OF SPILL PREVENTION & RESPONSE  
Contaminated Sites Program

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File No: 2215.26.007

December 9, 2013

Bill Fisher  
Cordova Outboard, Inc.  
P.O. Box 960  
Cordova, AK 99574

**Re: Decision Document: Cordova Outboard, Inc. UST #4  
Corrective Action Complete Determination**

Dear Mr. Fisher;

The Alaska Department of Environmental Conservation (ADEC) has reviewed the environmental records for the referenced site. This decision letter memorializes the site history and standard conditions for long-term site management. No further remedial action is required.

**Site Name and Location:**

Cordova Outboard, Inc.  
211 Breakwater Avenue  
Cordova, Alaska 99574  
Cordova, Alaska 99574

**Name and Mailing Address of Contact Party:**

Bill Fisher  
Cordova Outboard, Inc.  
P.O. Box 960

**DEC Site Identifiers:**

File No: 2215.26.007  
Hazard ID: 26151

**Regulatory Authority for Determination:**

18 AAC 75 and 18 AAC 78

**Site Description and Background**

A 5,000-gallon underground storage tank (UST) was installed adjacent to the southern wall at your Cordova Outboard Building in June of 1992. The UST consisted of three separate compartments; two of which had 2,000 gallon capacities and the other with a 1,000 gallon capacity. Gasoline fuel and diesel fuel were stored in the compartments with 2,000 gallon capacities, respectively, and heating oil was stored in the compartment with the 1,000 gallon capacity. Fuel was transported through the UST piping to several dispensers located approximately 86 feet to the south of the UST, at a boat dock.

The UST and its associated piping were excavated from the ground on November 4, 2011. The soils removed from the excavation were temporarily stockpiled onsite. During the removal activities, groundwater flooded the excavation; and as such, no confirmation soil samples were collected from the base of the excavation. Six confirmation soil samples, including a duplicate soil sample, were collected from this site as follows: three from the excavation sidewall at the soil/water interface; one from beneath the product supply lines near the dock; and three from the temporary soil stockpile. Following the excavation activities, and in the absence of visual or olfactory signs of contamination, the temporarily stockpiled soils were replaced in the excavation.

Confirmation soil samples were analyzed for diesel range organics (DRO), residual range organics (RRO), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and polynuclear aromatic hydrocarbons (PAHs). Benzene was detected at a concentration of 0.028 mg/Kg in the sample collected from the supply lines near the dock at four feet below grade (bg); which exceeds the ADEC cleanup criterion of 0.025 mg/Kg. All other analytes from the other soil samples were not detected above the most stringent ADEC method two cleanup levels.

### Contaminants of Concern

One petroleum related contaminant of concern (benzene) was identified slightly above its approved Migration to Groundwater (MTG) cleanup level following the UST removal activities summarized above in the "Site Description and Background" section of this decision letter.

### Cleanup Levels

The more restrictive of the inhalation, direct contact, or migration to groundwater cleanup levels apply to this site. Benzene was detected in soil above the approved Method Two Migration to Groundwater (MTG) cleanup level for the under 40-inch precipitation zone, established in 18 AAC 75.341(c), Table B1.

**Table 1 – Approved Cleanup Levels**

Contaminant	Soil- Method Two, Direct Contact/ Ingestion (mg/Kg)	Soil-Method Two, Inhalation (mg/Kg)	Soil- Method Two, Migration to Groundwater (mg/Kg)	Concentration of Analyte Remaining Onsite (mg/Kg)
Benzene	120	8.5	0.025	0.028

mg/kg = milligrams per kilogram

### Cumulative Risk Evaluation

Pursuant to 18 AAC 78.600(d), 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	Pathway Incomplete	Contamination is not present in surface soil (0 to 2 feet below ground surface).
Sub-Surface Soil Contact	De-Minimis Exposure	Contamination remains in the sub-surface, but is below direct contact and ingestion cleanup levels.
Inhalation – Outdoor Air	De-Minimis Exposure	Contamination remains in the sub-surface, but is below inhalation cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De-Minimis Exposure	No soil gas data were collected; however contamination was present in the subsurface soil slightly above the most stringent cleanup level.
Groundwater Ingestion	De-Minimis Exposure	Groundwater samples were not collected. Contamination remains in the sub-surface soils at a concentration that is slightly above the approved migration to groundwater cleanup levels and does not appear to be migrating.
Surface Water Ingestion	Pathway Incomplete	Surface water is not contaminated and is not used as a drinking water source in the vicinity of the site.
Wild and Farmed Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	Minimal contamination remains in the subsurface soils at this site and it is unlikely that the contamination is affecting Prince William Sound where aquatic or terrestrial life could be affected.

Notes to Table 2: “De-Minimis Exposure” means that in ADEC’s judgment receptors are unlikely to be affected by the minimal volume or concentration of remaining contamination. “Pathway Incomplete” means that in ADEC’s judgment contamination has no potential to contact receptors.

### ADEC Decision

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 78.600(h). 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. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.
3. Groundwater in the state of Alaska is protected for aquaculture use. In the event that an aquaculture facility uses groundwater from this site in the future, additional testing may be required to ensure that aquatic life criteria under 18 AAC 70 are not exceeded

This determination is in accordance with 18 AAC 78.276(f) 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 feel free to contact me at (907) 269-7691.

Sincerely,



Joshua Barsis  
Environmental Program Specialist III