



THE STATE  
of **ALASKA**

GOVERNOR SEAN PARNELL

Department of Environmental  
Conservation

DIVISION OF SPILL PREVENTION & RESPONSE  
Contaminated Sites Program

410 Willoughby Ave Suite 303  
PO Box 11180  
Juneau, Alaska 99811-1800  
Main: 907-465-5210  
Fax: 907-465-5218

File No: 2100.26.025

Date: December 31, 2012

**Via regular and electronic mail**

Scott Wagner  
NSRAA  
1308 Sawmill Creek Road  
Sitka, AK 99835

RE: Decision Document: ADOTPF-Hidden Falls Hatchery, Hazard ID No. 23013  
Corrective Action/ Cleanup Complete Determination

Dear Mr. Wagner:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (DEC) has completed a review of the environmental records associated with Alaska Department of Transportation and Public Facilities (ADOT&PF) Hidden Falls Hatchery located in Kasnyku Bay on Baranof Island on Chatham Strait. Based on the information provided to date, the DEC has determined that the contaminant concentrations remaining onsite 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 ADOT&PF Hidden Falls Hatchery, which is located in the offices of the DEC in Juneau, 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 Corrective Action Cleanup Complete Determination.

**Site Name and Location**  
ADOT&PF Hidden Falls Hatchery  
1308 Sawmill Creek Road  
Sitka, AK 99835

**Address of Contact Party**  
Scott Wagner  
NSRAA  
1308 Sawmill Creek Road  
Sitka, AK 99835

**DEC Site Identifiers**  
Hazard ID: 23013  
File No: 1525.26.025

**Regulatory Authority for Determination**  
Title 18 Alaska Administrative Code 78

## **Background**

The Hidden Falls Hatchery is located remotely on the northeast shore of Baranof Island in Kasnyku Bay, which is about 25 miles NE from Sitka, indicated on the Site Location Map (Figure 1). Hidden Falls Hatchery facility comprises of fishponds, holding pools, hatchery building, maintenance building, a personal dormitory and private residences for onsite personnel. In 1980 a hydroelectric plant was installed, which now provides the primary power to the hatchery while a diesel generator provides standby support when the hydroelectric plant is not operational. AGRA Earth & Environmental decommissioned two underground storage tanks (USTs) in place during November 1998. The two decommissioned USTs were a 1,000-gallon diesel tank and a 150-gallon diesel tank. Hidden Falls Hatchery site is an ADOT&PF state-owned facility. The hatchery building is owned by Alaska Department of Fish & Game (ADF&G); however, it is operated by Northern Southeast Regional Aquaculture Association (NSRAA). NSRAA described the property as within Section 2, Township 54 South, Range 66 East, Copper River Meridian. Petroleum impacted soil was encountered during the decommissioning of both USTs. Soil samples collected at both UST sites were tested for diesel range organics (DRO), and benzene, toluene, ethylbenzene, and xylenes (BTEX). The Hidden Falls Hatchery contains two contaminated sites in the DEC database: this site known as ADOTPF – Hidden Falls Hatchery, Hazard ID No. 23013; and ADFG Hidden Falls Hatchery, Hazard ID 22. This closure letter only pertains to former site (Hazards ID No. 23013) and associated with file number 1525.26.025. The latter site (Hazard ID No. 22) will be addressed separately.

## **Characterization Activities**

### **1,000-Gallon Tank**

In November 1998, a 1,000-gallon, single walled UST was decommissioned in place 2.5 feet below ground surface (bgs). The tank was located adjacent to a concrete slab inside the generator building that once housed the facility's electric generator (Figure 2). The tank appeared to be in good condition with no holes or cracks observed. A partial excavation of 30 square feet by 4 feet in depth was conducted at the time of the decommissioning. Approximately three cubic yards of soil from the excavation was temporarily stockpiled next to the generator room. Field screening of the soil from the excavation and sidewalls produced non-detectable soil vapor concentrations using a photo ionization detector (PID). The excavated stockpiled material included: soil from beneath the fuel lines that ran from the tank to the generator; surface soil; and subsurface soil.

Two soil samples were collected and analyzed for DRO and BTEX. Sample G/S-1 was collected four feet in depth on the west side of the tank sidewall inside the building, and sample G/S-3 was collected from a test pit dug 1.5 feet in depth outside of the building to the south of the tank. A DRO result of 1,100 mg/kg was detected in sample G/S-1, and a result of 310 mg/kg was detected in G/S-3, both exceeding the migration-to-groundwater cleanup value of 230 mg/kg. Sample G/S-1 had a BTEX concentration of 1.54 mg/kg which contained 0.24 mg/kg of ethylbenzene and 1.3 mg/kg of total xylenes. DRO and BTEX results are presented in Table 1. Since the sampling occurred, a new concrete pad has been constructed over the sample sites on two sides of the original concrete slab, doubling the

footprint of the old concrete slab. The only evidence of the decommissioned UST is an old vent pipe, which protrudes through the new concrete slab.

**150-Gallon Tank Area**

A 150-gallon UST was also decommissioned in place during November 1998. This tank served as a fuel source for an incinerator located on the east side of the main hatchery building. The UST was emptied, rinsed and backfilled with sand, and left in place beneath the concrete slab which supported the facility incinerator (Figure 2). Since the tank was located beneath a concrete slab, soil above the surface of the tank did not need to be excavated or sampled. Measurements taken through the fill pipe indicated the top of the tank was situated approximately three feet bgs. A test pit was excavated close to 5 feet west of the tank with two soil samples collected from the bottom of the pit. One sample taken from the test pit contained a DRO concentration of 1,200 mg/kg with a BTEX concentration below applicable cleanup levels. Although the DRO result was above the migration-to-groundwater level of 230 mg/kg, further field screening with a PID yielded non-detectable concentrations of hydrocarbons in the soil with no staining or other evidence of petroleum leakage observed. The concrete slab still supports the actively-used incinerator and also serves as a barrier to surface water infiltration over the former tank site. A new, above-ground storage tank supplies fuel to the incinerator.

DEC personnel conducted a site visit in June 2012 and no petroleum odor or stained soil was detected in or around the area. No sheens have been observed by hatchery personnel in the fourteen years since the decommissioning took place.

**Table 1**  
 DRO and BTEX soil sample results from 1998 tank decommissioning.

Sample Name	Sample Depth (ft)	DRO (mg/kg)	Total BTEX (mg/kg)
1000 gallon G/S-1	4	1,100	1.54
1000 gallon G/S-2	3.5	< 25	Non-detect
1000 gallon G/S-7	1.5	310	Non-detect
1000 gallon G/S-5	Temporary Stockpile	1,900	Non-detect
1000 gallon G/S-6	Temporary Stockpile	2,600	Non-detect
150 gallon Test Pit I/S-3	6.6	1,200	0.30
150 gallon Test Pit I/S-4	5.6	63	Non-detect
Method Two Migration to Groundwater Cleanup Criteria		230	15

Groundwater was not encountered. The facility water supply is pumped from Hidden Falls Lake, which is located about 100 feet up-hill of the facility.

### Contaminants of Concern

During the initial investigation at this site, soil samples were analyzed for volatile organic hydrocarbon compounds including benzene, ethylbenzene, toluene, total xylenes, and diesel petroleum hydrocarbons. Based on the analytical results from samples collected in the source area, the following Contaminant of Concern was identified. Subsequent field screening performed by AGRA along the sidewalls of the excavation indicated minimal contamination remains in the soil at the site and where present is confined beneath concrete pads.

- Diesel Range Organics (DRO)

### Cleanup Levels

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

<u>Contaminant</u>	<u>Migration to Groundwater Cleanup Levels (mg/kg)</u>
DRO	230

Groundwater was not encountered, was not investigated in the cleanup process, and is not anticipated to have been impacted by activities at this site. As a result, groundwater cleanup levels are not applicable for this site.

### Pathway Evaluation

Following investigation and cleanup at the site, exposure to the remaining contaminants was evaluated using DEC'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 as an Attachment in Table 2 for the 1,000-gallon UST and Table 3 for the 150-gallon UST.

### DEC Decision

The cleanup actions to date have served to excavate and adequately remove contaminated soil from the site. Based on the information available, DEC has determined no further assessment or corrective action is required, and there is no longer a significant risk to human health or the environment. This site will be designated as closed on the Department's database.

De minimis petroleum concentrations remain in the soil onsite from the decommissioned USTs in 1998. The areas with these concentrations are currently capped with concrete pads. The concrete slabs serve to prevent infiltration of water from the surface to any contamination that may remain at either former tank location, curtailing the potential for offsite migration to nearby surface waters. Furthermore, these levels of DRO are well below human health standards and have likely reduced in concentration over the past 14 years.

Although a Corrective Action Complete determination has been granted, DEC approval is required for off-site soil disposal in accordance with 18 AAC 78.600(h). 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.

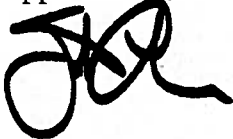
This determination is in accordance with 18 AAC 78.276(f) and does not preclude DEC from requiring additional assessment and/or cleanup action if future information indicates that this site may pose an unacceptable risk to human health or the environment.

### 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.

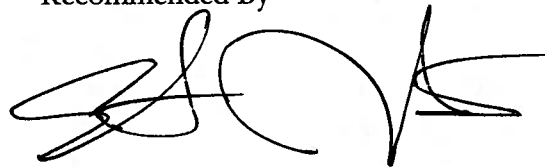
If you have questions about this closure decision, please contact the DEC project manager, Erik Norberg at (907) 465-5368 or erik.norberg@alaska.gov.

Approved By,



-FOR-  
Sally Schlichting  
Unit Manager, SE Field Operations

Recommended By



Erik Norberg  
Environmental Program Specialist

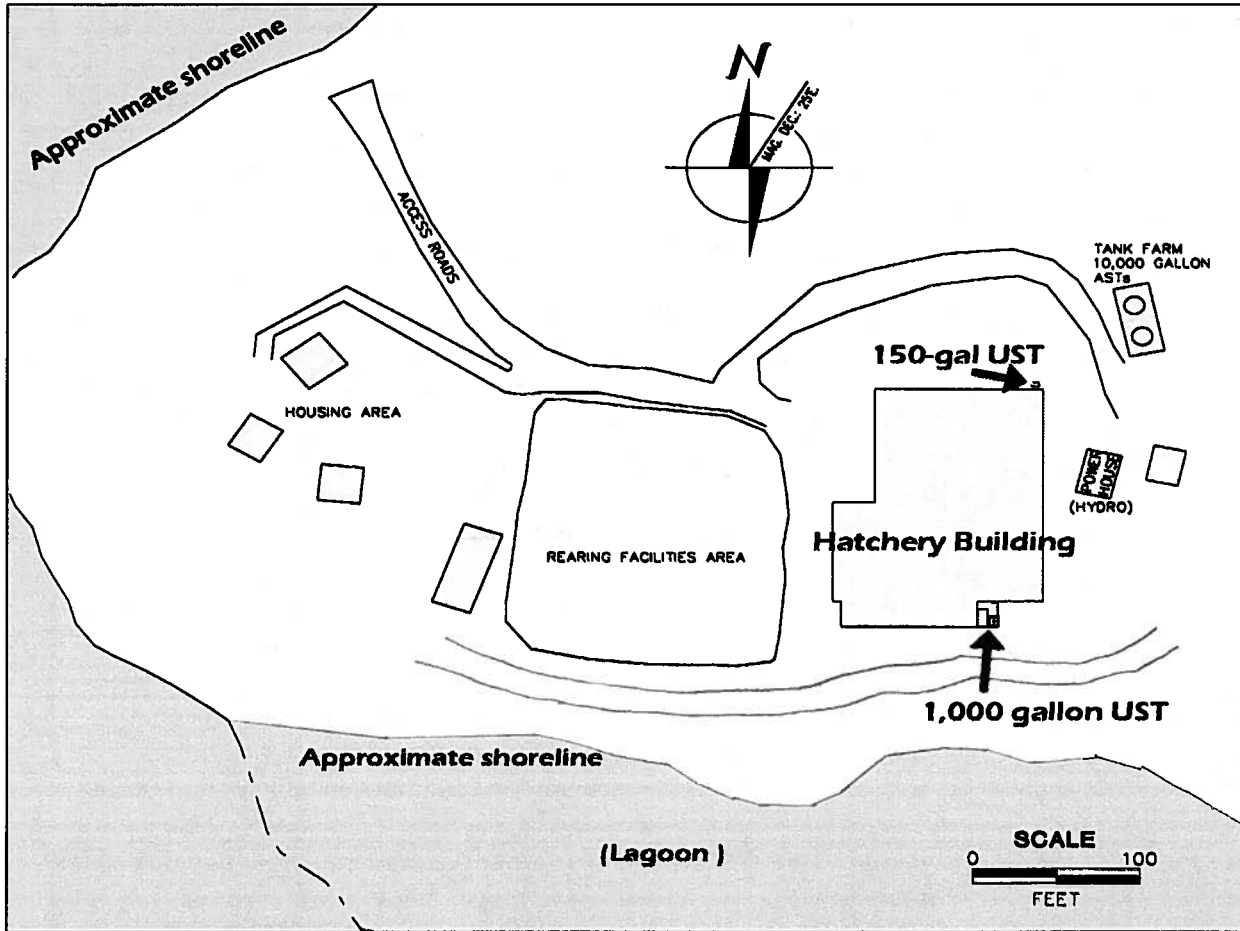
CC w/encl: Michael Lukshin ADOT&PF State Ports and Harbors Engineer  
Bill Brown DNR Land Survey Manager  
Lorraine Vercessi ADF&G Hatchery Program

**Figure 1**  
Site Location Map



**Hidden Falls Terminal Harvest Area**

**Figure 2**  
Site Figure



**Table 2**  
 Exposure Pathway Evaluation 1,000-gallon UST

<b>Pathway</b>	<b>Result</b>	<b>Explanation</b>
Surface Soil Contact	De-Minimis exposure	Contaminants have not been detected in surface soil.
Sub-Surface Soil Contact	De-Minimis exposure	Contamination remains in the sub-surface, but is confined beneath a concrete pad and volumes are de-minimis in volume and not accessible.
Inhalation – Outdoor Air	Exposure Controlled	No volatile hydrocarbons have been detected in samples from soil remaining in the excavation.
Inhalation – Indoor Air (vapor intrusion)	De-Minimis exposure	Buildings are present and no volatile hydrocarbons have been detected in samples from soil remaining in the excavation.
Groundwater Ingestion	Pathway Incomplete	Groundwater was not encountered during the investigations. This is a remote site and the drinking water source comes from the lake about 100 feet above the site.
Surface Water Ingestion	Pathway Incomplete	There is surface water located within ¼ mile of the site, but no contaminants have been detected in surface soil.
Wild Foods Ingestion	Pathway Incomplete	There is no surface soil contamination remaining above migration to groundwater levels. The de-minimis amount of contaminated soil lies underneath a concrete slab.
Exposure to Ecological Receptors	Pathway Incomplete	A de-minimis amount of contamination remains under the concrete pad, but is not present in concentration or volume to reach Hidden Falls Creek.

Notes to Table 2: “De-minimis exposure” means that in DEC’s judgment receptors are unlikely to be affected by the minimal volume of remaining contamination. “Pathway incomplete” means that in DEC’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.



**Table 3**  
 Exposure Pathway Evaluation 150-gallon UST

<b>Pathway</b>	<b>Result</b>	<b>Explanation</b>
Surface Soil Contact	Pathway Incomplete	Contaminants have not been detected in surface soil.
Sub-Surface Soil Contact	De-minimis exposure	Remaining contamination is below human health levels, is de minimis in volume and confined beneath a concrete slab.
Inhalation – Outdoor Air	Pathway Incomplete	No volatile hydrocarbons have been detected in samples from soil remaining in the excavation.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	Buildings are present and no volatile hydrocarbons have been detected in samples from soil remaining in the excavation.
Groundwater Ingestion	Pathway Incomplete	Groundwater was not encountered during the investigations. This is a remote site and the drinking water source comes from the lake about 100 ft above the site.
Surface Water Ingestion	Pathway Incomplete	There is surface water located within ¼ mile of the site, but no contaminants have been detected in surface soil.
Wild Foods Ingestion	Pathway Incomplete	There is no surface soil contamination remaining above MTG levels. The de minimis amount of contaminated soil lies underneath a concrete slab.
Exposure to Ecological Receptors	Pathway Incomplete	A de minimis amount of contamination remains under the concrete pad, but is not present in concentration or volume to reach Hidden Falls Creek.

Notes to Table 2: “De-minimis exposure” means that in DEC’s judgment receptors are unlikely to be affected by the minimal volume of remaining contamination. “Pathway incomplete” means that in DEC’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.

