STATE OF ALASKA

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DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES PROGRAM

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File number 1511.38.175

November 21, 2002

Russ Weller
Haida Oil Products Inc
Haida Corporation
P. O. Box 52, Hydaburg, AK 99929

RE: Corrective Action Final Report (CAFR)
Haida Oil Tank Farm Demolition and Cleanup
Haida Oil Tank Farm, Contaminated Sites identification number 1998110122301

The Department of Environmental Conservation (DEC) Juneau Office has completed a review of the file associated with the Haida Oil Products Tank Farm facility located at the corner of 13th Street and Quarry Loop Road in Hydaburg, Prince of Wales Island, Southeast Alaska. Based on our review of the project file, the information and analytical results provided by your consultant, DEC finds that environmental site investigation accompanying the dismantling of the tank farm, associated piping, and marine header has discovered soils contaminated by petroleum releases in various locations on Haida Oil Products Inc. property.

All hazardous petroleum impacted soil detected by field screening and observation was excavated, placed in containers, and shipped to an off-site landfill in Washington. Laboratory data provided in the CAFR supports a determination by the department that residual soil contamination and in-place closure of fuel piping necessitated by location do not pose a significant threat to human health or safety, or the environment. The CAFR satisfies regulatory requirements under 18 AAC 75.300 – 18 AAC 75.396 Discharge Reporting, Cleanup, and Disposal of Oil and Other Hazardous Substances. The referenced contaminated site has been given a closed status on the Contaminated Sites (CS) Database.

## Facility

The former fuel tank farm (FTF) was composed of seven aboveground storage tanks (ASTs) with a total capacity of approximately 101,000gallons and stored diesel #1, #2 and unleaded gasoline. Fuel piping extended from the FTF for 1100 feet to the marine header at the end of the cannery dock. No buried tanks or piping were present at the FTF. The Environmental Protection Agency determined in a May 1995 inspection that the FTF was out of compliance with federal regulations, including a Spill Prevention, Control and Countermeasures (SPCC) Plan.

The service station located at the corner of Cedar and 13th Street had a trailer, a 1000gallon heating oil AST, and one dispenser pump plumbed directly to piping running along 13th Street and Quarry Loop Road the FTF.

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## Site Characterization and Assessment

The demolition of the Haida Oil Products fuel tank farm, marine header piping, and service station project intended to remove all facility structures in these 3 source areas that stored or conveyed fuel. As the demolition proceeded, environmental site characterization screening was performed on soils where petroleum release was indicated by surface staining, observation, or olfactory indication. Decommission of the unregistered buried piping followed the same site characterization procedure for indications of fuel release. When it became necessary to close buried piping in place due to overlying utility lines, soil samples were collected for laboratory analysis as prescribed for in place assessment under the UST Procedures Manual. As prescribed in 18 AAC 78.090 (d) (2) (A) (v) test pits were placed adjacent to and within 2 feet of the bottom of the piping and soil samples collected for screening and laboratory testing where contamination is likely.

Excavation soils were screened with a photo-ionization-detector (PID) and hot water sheen test for petroleum impacts and stockpiled where contamination was indicated. Confirmation soil samples collected from the limits of excavations were analyzed for gasoline, diesel and residual range hydrocarbons (GRO, DRO,RRO), benzene, toluene, ethylbenzene, and xylenes (BTEX) and lead. Laboratory results showed concentrations of DRO and BTEX in all remaining soils are, with only one exception, below the most conservative applicable risk based standard: Table B2 Method Two- Petroleum Hydrocarbon Soil Cleanup Levels for the Migration to Groundwater pathway. The CAFR states that 460 tons of petroleum impacted soil was excavated and removed from the facility. Contaminated material was removed from the fuel pump piping area at the former filling station and from 2 locations at the former fuel tank farm. The locations and shallow depths of soil contamination in each of the areas suggest that the sources were small piping leaks and minor overfill events.

Four test pits were advanced within the former fuel tank farm site, beginning in the northwest corner where 2 20,000gallon above ground storage tanks (ASTs) were located adjacent to the marine header pipeline along Quarry Loop Road. Investigation of stained surface soil beneath these 2 ASTs resulted in segregating and removal of 375 tons of petroleum contaminated soil. The bedding material beneath the ASTs consisted of imported fill material overlying highly organic native soils. Confirmation sample TFO7 was collected at a depth of 6feet below ground surface, and was the only sample from the excavation that showed elevated concentrations of DRO. The laboratory analyst stated that the chromatogram for this sample was not a pattern match for diesel; the elevated DRO result is perhaps attributable to the presence of organic carbon in the native soils found at that depth. All other soil confirmation samples were collected at a depth of 5 feet or less below grade and test results were non-detect for all petroleum analytes. Contaminated soils removed and shipped had concentrations of DRO ranging from 42 to 42,000ppm and benzene at 0.62ppm. A concentration of lead detected in each of the soil samples is considered to not exceed generally accepted background levels.

Other test pits were located at the FTF pump station and the southwest corner of the property in the natural drainage area where 2 unleaded gasoline ASTs were located. Excavation was advanced to native peat soils between 4 and 6 feet below grade and sampling was limited to field screening. No contamination was indicated in these two areas.

The fourth test pit at the FTF was used to investigate surface staining near the 500gallon lube oil AST and fuel drum storage area. Field screening of these soils produced an estimated 25 tons of soil impacted by concentrations of GRO at 160ppm, DRO at 5,600ppm, and RRO at 3,230ppm. Soil confirmation samples from this excavation were laboratory analyzed for GRO, DRO, RRO, BTEX, and lead. DRO was detected below applicable cleanup levels and a concentration of lead detected in each of the soil samples is considered to not exceed background levels. GRO, RRO, and BTEX results were non-detect.

Soil screening detected gasoline contaminated soil beneath the dispensing pump island as it was removed along with piping at the Haida Oil Products service station. An estimated 60 tons of impacted soil was removed and containerized for shipment. Impacted soil stockpile and excavation confirmation samples were laboratory analyzed for GRO, DRO, RRO, BTEX and lead. DRO and RRO were detected in only one of the 6 confirmation samples at concentrations below applicable cleanup levels and a concentration of lead detected is considered to not exceed background levels. Despite the characterization sample from the soil stockpile showing concentrations of DRO, RRO, and BTEX below applicable cleanup levels, the soils were containerized and shipped with other soils for disposal.

The 1,100foot long pipeline extending from the FTF to the cannery was constructed of 1/4inch welded steel and appeared to be in good condition upon removal. Piping beneath the cannery to the marine header was in worse condition but showed no signs of leaking. All piping was removed as planned except for in 3 places along 13th Street and one at Hyda Street near the cannery. In each of these locations characterization soil samples were collected and analyzed for GRO, DRO, RRO, BTEX and lead. Each of the 5 soil samples collected had DRO and RRO concentrations below applicable soil cleanup levels and a concentration of lead detected in each of the soil samples is considered to not exceed background levels. The piping left in place was purged of all liquids and vapors and the ends were capped with concrete.

*Groundwater and Surface Water*
No sheen was observed on surface or groundwater near the tank farm during either removal of the tanks or during backfilling operations. None of the excavations reached a depth that encountered groundwater.

*Waste*
All soils were containerized for transport and shipped with permission from the department to Rabanco Landfill in Washington for disposal. Sludge from the ASTs was treated and disposed of by Channel Construction. Twenty four drums storing diesel and gasoline were emptied of contents, cleaned and crushed. The tank piping was cut and scrapped with the tanks and drums by Channel Construction.

**Cleanup Levels**

DEC has determined that the migration to groundwater cleanup levels for soil, found in 18 AAC 75.341, Tables B1 and B2, are applicable to this site and are as follows for the over 40 inch precipitation zone. Table C values from 18 AAC 75.345 are applicable for groundwater and surface water cleanup levels.

*Soil*
Table B2 for the Over 40 inch rainfall zone

| Compound | Cleanup Level | Controlling Pathway/Category |
|---|---|---|
| GRO | 260 mg/kg | Migration to groundwater |
| DRO | 230 mg/kg | Migration to groundwater |
| RRO | 8300 mg/kg | Migration to groundwater |
| Benzene | 0.02 mg/kg | Migration to groundwater |
| Toluene | 4.8 mg/kg | Migration to groundwater |
| Ethylbenzene | 5.0 mg/kg | Migration to groundwater |
| Xylenes | 69.0 mg/kg | Migration to groundwater |

*Water*
Table C Groundwater Cleanup Levels

| Compound | Cleanup Level | Controlling Pathway/Category |
|---|---|---|
| DRO | 1.5 | Migration to groundwater |
| RRO | 1.3 | Migration to groundwater |
| Benzene | 0.02 mg/kg | Migration to groundwater |
| Toluene | 1.0 mg/kg | Migration to groundwater |
| Ethylbenzene | 0.7 mg/kg | Migration to groundwater |
| Xylenes (total) | 10.0 mg/kg | Migration to groundwater |

**Determination**

Based on review of the contaminated site project file and evidence provided your consultant, DEC finds that the Haida Oil Products Inc. properties in Hydaburg where petroleum releases were detected at the FTF and service station do not pose a threat to human health or safety, or the environment. Removal of soils affected by the releases was successful and the department has, therefore, determined that no further remedial action is required at these sites.

DEC reserves the right to require additional site assessment, monitoring, remediation, and/or other necessary actions at the site of the former Haida Oil fuel tank farm in Hydaburg. Should new information become available that suggests that contamination at this site may pose a threat to human health or safety, or the environment. Please contact me with any questions or concerns at (907) 465-5210 or by e-mail at bwanstall@envircon.state.ak.us.

Sincerely,

Bruce Wanstall
Environmental Specialist

Cc: Jason Ginter Smith Bayliss LeResche Inc.