STATE OF ALASKA

SARAH PALIN, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION
DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES PROGRAM

410 Willoughby Ave., Suite 303
P.O. Box 111800
Juneau, AK 99811-1800
PHONE: (907) 465-5208
FAX: (907) 465-5218
http://www.state.ak.us/dec/

File Nos: 1525.26.005
1525.38.002
1525.26.024

January 14, 2008

Joe Castro, Director of Public Works
City and Borough of Sitka
100 Lincoln Street
Sitka, AK 99835

Re: Cleanup Complete Determination – Former Municipal Shops Property
- Sitka Public Works Shop Fleet – Database ID #1993120020401
- Sitka Former Public Works – Database ID #2000120935601
- ADOTPF – Sitka Halibut Point Road Maintenance Station – Database ID #2000120009901

Dear Mr. Castro:

The Alaska Department of Environmental Conservation (ADEC) Contaminated Sites Program has reviewed file information for the referenced property, including the July 2007 *Final Cleanup Report* prepared by Carson Dorn, Inc. This letter documents the department's decision regarding site closure under 18 AAC 75 and 18 AAC 78 regulations.

Background

The property is located on Lot 1A Little Critter Subdivision and Tracts 1 and 2 of US Survey 500. Two leaking underground storage tank (LUST) sites known as "Sitka Public Works Shop Fleet" and "ADOTPF Sitka Halibut Point Road Maintenance Station" on these parcels are listed on ADEC's LUST database. The Sitka Public Works property is also listed separately on the Contaminated Sites database as "Sitka Former Public Works" due to low-level PCB contamination.

Public Works Facility

Several buildings were present on the Public Works property, including the Generator Building, the Electric Office, and the City Shop. The Generator Building was demolished in 2003. The City Shop and Electric Office were demolished in April 2006. Still present on the property is a building currently used as a veterinary clinic.

Potential contaminant sources included:

- a 1,000-gallon gasoline underground storage tank (UST);
- a 1,000-gallon diesel UST and two 10,000 gallon diesel USTs;
- a 500-gallon above ground storage tank (AST);
- a 4' x4' x 6' sump beneath a generator;
- a 1.5'x1.5'x 3'deep sump connected to diesel fuel storage tank plumbing;
- two grease pits with lube rack;
- a drum storage area;
- a hazardous materials storage area;
- a parts washing (solvent) barrel; and
- a small asphalt batch plant.

Soil samples were collected in September 2000 and August 2004 as part of Phase II Environmental Assessments. Analytical results documented the presence of PCBs, gasoline range organics (GRO), diesel range organics (DRO), residual range organics (RRO), volatile and semi-volatile compounds, and total chromium. Groundwater was not analyzed but light sheens were observed in test pits.

Former ADOT&PF Facility

Regulated underground storage tanks were removed and 120 cubic yards of contaminated soil excavated in 2000. The contaminated soil was taken to the United Soil Recycling facility in Juneau for treatment. Additional petroleum contamination (GRO and DRO) remained following tank removal. The property was mothballed by the State of Alaska and transferred to the City and Borough of Sitka (CBS) in 2005.

A Phase Two Environmental Assessment was conducted in July 2004 as the CBS considered taking ownership of the property. DRO was detected above 18 AAC 75.341 method 2 cleanup levels.

Cleanup Levels

Based on an evaluation of Phase II sampling results by Carson Dorn Inc., contaminants of concern were narrowed to DRO, RRO, PCBs, and isomers of dichlorobenzene, trichlorobenzene, and methylene chloride.

Carson Dorn's October 2004 *Cleanup Action Plan for the Municipal Shops Project* proposed method 2 cleanup levels for these contaminants. Site specific soil cleanup levels under 18 AAC 75.340 (method 3) were approved on March 9, 2007 as follows for the three petroleum fractions:

Contaminant	Soil Cleanup Level (mg/kg)
GRO	1,400*
DRO	3,800
RRO	12,500 (revised to 8,300)

The cleanup level for RRO was subsequently revised to 8,300 mg/kg, the most restrictive human health level (incidental ingestion) in 18 AAC 75.341, Table B2.

These cleanup levels were applied to both the site and the Granite Creek quarry bioremediation stockpile.

All other contaminants were required to meet 18 AAC 75.341 Tables B1 and B2 migration to groundwater cleanup levels for soil (over 40-inch zone).

Residual groundwater contamination, if present, was subject to 18 AAC 75.345, Table C cleanup levels.

Cleanup Summary

December 2006 Mobilization

Former ADOT&PF Shop

- One hundred forty cubic yards of petroleum-contaminated soil excavated from one location and transferred to the Granite Creek stockpile
- Soil confirmation samples collected – total chromium method 2 cleanup level exceeded but within the range of normal background
- Groundwater monitoring well installed in the excavation prior to backfilling

City Shop

- A total of 20 cubic yards of petroleum contaminated soil excavated at four locations and transferred to the Granite Creek stockpile
- Soil confirmation samples collected – arsenic and total chromium method 2 cleanup levels exceeded but within the range of normal background for the area
- Groundwater monitoring well installed in the excavation near the Halibut Point Road ditch prior to backfilling

* Although a method 3 cleanup level was established GRO was not encountered at the site above method 2 levels.

Generator Building

- Ten cubic yards excavated and transferred to the Granite Creek stockpile
- Confirmation sample collected (but failed to show up on the chain of custody or at the laboratory)
- Groundwater monitoring well installed in the excavation prior to backfilling
- Additional excavation in the area of the former building postponed until a second mobilization due to time constraints

Electric Office

- One hundred eighty cubic yards of suspected PCB- and petroleum contaminated soil excavated and stockpiled temporarily on-site
- Confirmation samples collected from the excavation – chromium slightly above the 23 mg/kg standard but within the range of normal background for the area
- Three composite samples consisting of 50 or more teaspoons of soil each collected from the excavator bucket and analyzed for PCBs, petroleum, volatiles, and semi-volatiles – one composite sample exceeded the DRO method 2 cleanup level and the 180 cubic yard stockpile was subsequently transferred to the Granite Creek stockpile in February 2007 for future bio-treatment

April 2007 Mobilization

The scope of work for the second mobilization included on-site work to complete the excavation of diesel contaminated soil at the Generator Building, installation of two additional groundwater monitoring wells at the Generator Building and the Electric Office, sampling of the Granite Creek stockpile to characterize the soil and prepare a bioremediation plan, and sampling the three groundwater monitoring wells installed in December 2006.

Generator Building

- Ninety five cubic yards of petroleum contaminated soil excavated from the upper end of the site in the vicinity of the former 10,000-gallon USTs and transferred to the Granite Creek stockpile
- Five confirmation samples collected from the excavation – one sample was between the method two and approved method 3 cleanup levels for DRO and RRO
- Three additional test pits excavated along the south end of the former building; no additional contaminated soil encountered based on field instrument readings and visual and olfactory evidence

Groundwater Monitoring Results

Five pre-pack monitoring wells were sampled during the April mobilization to determine if groundwater potentially contaminated with petroleum compounds during soil excavation had stabilized below cleanup levels. No analytical results were above Table C cleanup levels.

Granite Creek Bioremediation Stockpile

The Granite Creek bioremediation stockpile consists of about 450 cubic yards of petroleum contaminated soil. The cell is lined with a 10-mil liner and bermed on all sides.

During construction, nitrogen fertilizer (500 pounds) was applied to stimulate bacterial activity and the soil was spread to a depth of less than two feet. Aeration was conducted by periodically tilling the soil with an excavator. To date, the soil has been aerated three times.

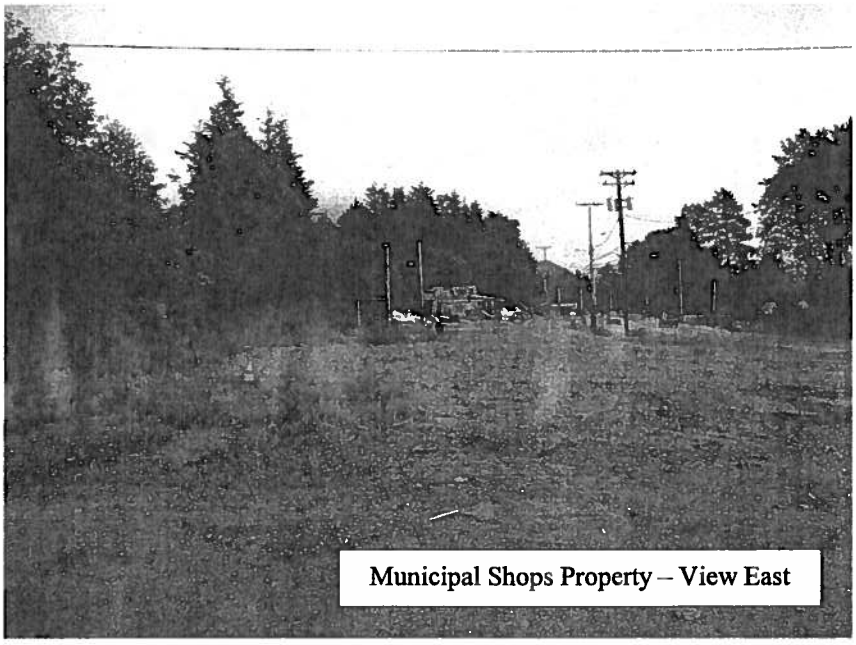
At this time there are no definitive plans to move the soil once it has reached applicable cleanup levels. However, it may be used in the future as cover material at the nearby permitted CBS waste water treatment sludge area.

Contaminant Exposure Pathway Evaluation

The property was evaluated using ADEC's *Exposure Tracking Model* following the April 2007 cleanup. Results are as follows:

- Direct Contact with Surface Soil – De Minimis Exposure
- Direct Contact with Subsurface Soil – De Minimis Exposure
- Outdoor Air Inhalation – De Minimis Exposure
- Groundwater Ingestion – Pathway Incomplete
- Surface Water Ingestion – Pathway Incomplete
- Wild or Farmed Foods Ingestion – Pathway Incomplete
- Indoor Air Inhalation – Pathway Incomplete
- Other Human Health – Pathway Incomplete
- Ecological – Pathway Incomplete

These results document that further exposure to humans or ecological receptors is not expected.



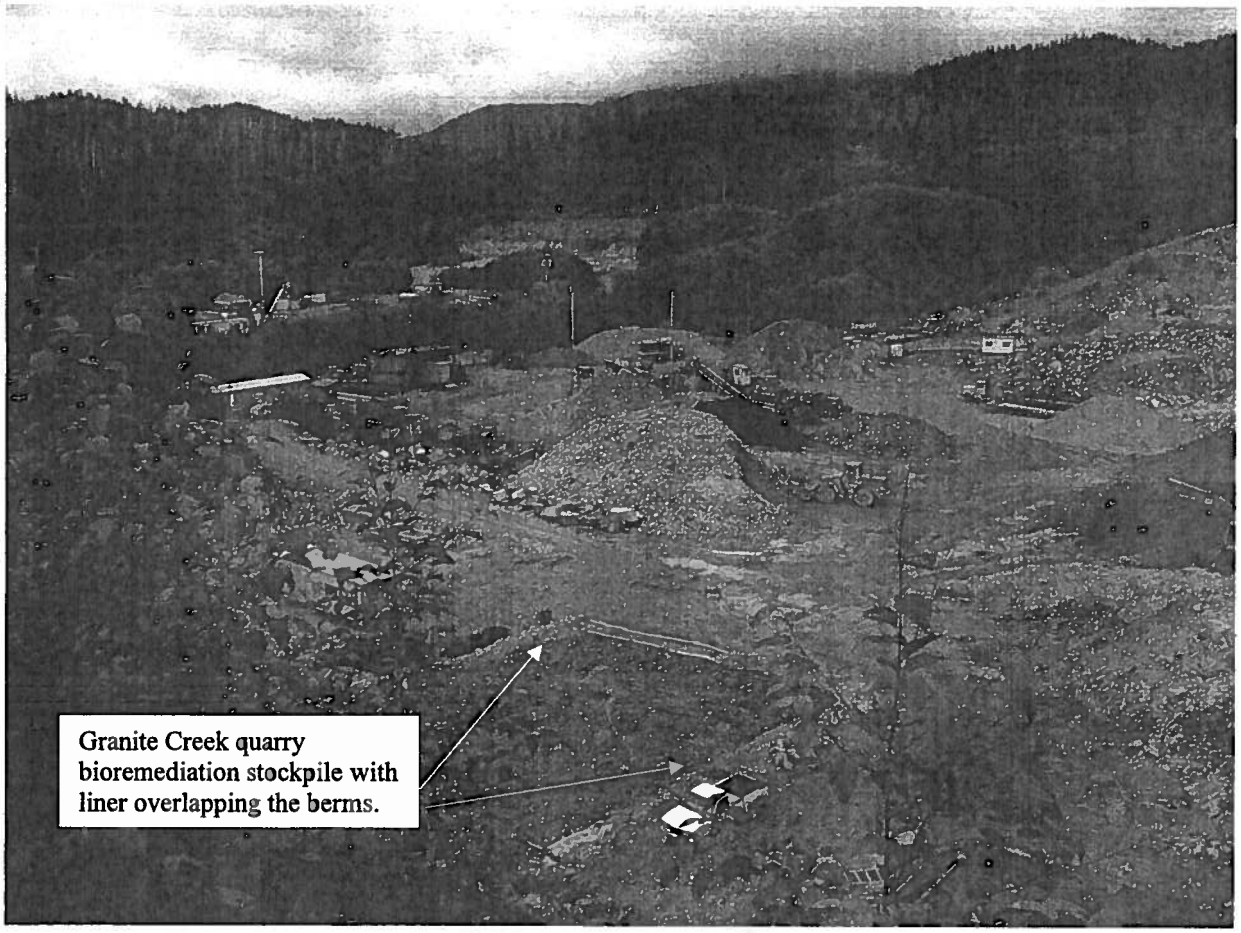
Municipal Shops Property – View East

Final Site Inspection

I conducted a final site inspection with CBS employee Mark Buggins on August 1, 2007. All structures have been

removed and the site has been leveled. Runoff water from the hillside has been diverted around the property through a drainage ditch where it then enters the storm drain system and flows though a culvert beneath Halibut Point Road. Surface water then flows into a small freshwater wetland and discharges into marine water. No leachate or petroleum sheen was observed in ditch water or the wetland during the inspection.

No leachate, odors, or visible signs of contamination were observed at the Granite Creek quarry biocell.



Determination

The investigation and cleanup of the Former Municipal Shops Property has met the substantive requirements specified in 18 Alaska Administrative Code (AAC) 75, Article 3 - Discharge, Reporting, Cleanup, and Disposal of Oil and Other Hazardous Substances and 18 AAC 78, Underground Storage Tanks. No further remedial action is required and the property is cleared for redevelopment.

The three sites referenced on the ADEC databases will remain in "open" status until the Granite Creek quarry stockpile remediation is complete. A plan must be submitted to ADEC for review and approval by the end of May 2008 for sampling during the upcoming summer field season. If cleanup levels are not met, additional aeration and sampling will be required until the average contaminant concentrations are documented to be below applicable levels.

Under 18 AAC 75.325 and 18 AAC 78.274 department approval must be obtained before moving or disposing of residually contaminated soil that may be encountered during the course of future site development. Pre-approval is hereby granted for use of soil undergoing treatment at the Granite Creek quarry as cover material for the nearby waste water sludge disposal area once applicable petroleum cleanup levels have been met. Deviations from this plan require ADEC notification and approval.

In accordance with 18 AAC 75.380 and 18 AAC 78.276, additional investigation and cleanup may be required if new information is discovered which leads ADEC to make a determination that the cleanup described in this decision is not protective of human health, safety, and welfare or the environment.

If you are in disagreement with this decision you may seek an adjudicatory hearing under 18 AAC 15.200 – .920 within 30 days of the mailing of this decision. Please call me at (907) 465-5208 if you have any questions.

Sincerely,

William James
Project Manager