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DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES REMEDIATION PROGRAM

June 28, 2002

Mr. Ken Brewer
Mountain Aviation, Inc.
C/O SEARHC
3245 Hospital Drive,
Juneau AK 99801

RE: Mountain Aviation Cleanup – Sitka, Alaska
No Further Remedial Action Planned
Reckey # 1995120124201

Mr. Brewer:

The Mountain Aviation site is located approximately 1000 feet to the northwest of the main terminal building at Sitka International Airport. This land parcel is owned by the State of Alaska Department of Transportation (DOT) and is adjacent to land owned by the federal government at the US Coast Guard Airbase. The current lessee, Mountain Aviation, Inc. leased the onsite operation in 1995 from DOT.

Area Land Use

In brief, the site occupies the far northwest end of an aircraft-parking ramp at Sitka International Airport, and includes DOT airport facilities buildings adjacent to the US Coast Guard aviation hangar. Onsite DOT buildings are used to store fire response and runway maintenance equipment. After closure, the DOT intends to expand their runway maintenance facility and will construct a airport chemical storage building over the current leasehold area.

Historically, small fixed-base aircraft operations dealing with aircraft fueling and charters existed onsite. Apparently two underground aviation gasoline tanks were used until 1992 and two mobile fuel trucks used until 1995. The current Mountain Aviation, Inc. has operated the facility since 1995, after the former tanks were excavated and closed in 1992. Under agreement with DOT, the current landowner will ensure contamination within the DOT leaseholding is remediated to DEC standards prior to complete transfer back to DOT ownership.

Onsite Soils

The Sitka Airport complex was constructed initially in the early 1940's as an air support facility during the Second World War. Land mass was created from rock fill placed between smaller bedrock islands. "Soils" onsite are generally characterized by rock fill placed on bedrock. At times the soil profiles may include layers of volcanic ash attributed to historical volcanic activity in the area. Of

note, natural background for metals is high, as is typical of many rock fill locations in mineral-rich Southeast Alaska.

Previous environmental investigations identified soil contamination associated with petroleum hydrocarbons onsite. Excavation of soils in October 1999 and April 2001 resulted in the removal of approximately 477 cubic yards of soil. 320 yards of soil were thermally treated at United Soil Recycling in Juneau, and 157 yards of soil removed to the RABANCO solid waste landfill in Washington. Confirmation sampling at all test pits achieved the Method Two, Migration to Groundwater cleanup levels. A table of the highest remaining petroleum levels in the main excavations is shown in Table 1.

Table 1 – Petroleum Hydrocarbon Detections

Contaminant	Applicable ADEC Method 2 Cleanup Level (ppm)	Highest Detection (ppm)	Remaining Level (ppm)
Gasoline Range Organics (GRO)	260	7500	Non-Detect
Diesel Range Organics (DRO)	230	5600	120
Residual Range Organics (RRO)	8300	11000	380
Benzene	0.02	1.2	0.023
Ethylbenzene	5	1.4	Non-Detect
Toluene	4.8	7.2	Non-Detect
Xylenes	69	9.4	0.011

A limited amount of soil contamination above the cleanup levels for gasoline and diesel range organics remains off the leasehold boundary bordering a power line. According to DOT, excavation will necessitate pavement removal, disconnecting power and possibly shutting down airport operation. Investigation beyond this area shows total volume of problem soils appears to be limited to a few yards. Since closure of the airport would be an exceptional measure for such a small area, the Department will allow this soil to remain onsite. At this time, pavement on this site prevents access to the soil and infiltration of rainwater into the soils. Since the original source of contamination has been removed, in-situ bioremediation of remaining contamination will probably occur. The Department concludes onsite soil contamination to be resolved to the most practicable extent at this site. Rather than requiring a deed notation, an entry into the Contaminated Sites database will be made to note a limited amount of contamination remains adjacent to the powerline.

Onsite Metals

Some metals were detected during sampling, with the highest remaining levels shown in Table 2.

Table 2 – Metals Detections

Contaminant	ADEC Method Two Cleanup Level (ppm)	Highest Detection (ppm)	Remaining Level (ppm)
Arsenic	1.8	30	30
Cadmium	4.5	112	Non-Detect
Chromium	23	467	37
Lead	1000 (industrial)	468	Non-Detect

Of onsite metal sampling, only arsenic and chromium are remaining above Method Two, Table B1, cleanup levels. Due to natural background conditions in Southeast Alaska, it is not unusual to find detections above Method Two cleanup levels. Historical knowledge of this site does not support the premise these elements are from anthropogenic sources, therefore the Department finds these levels satisfactory. The future paving and construction of a building over this site will only make these soils more inaccessible and prevent any future problems for human health or the environment. Evaluating the above factors, the Department concludes metals contamination has been resolved on this site.

Onsite Polyaromatic Hydrocarbons and Semivolatiles

Table 3 – Polyaromatic Hydrocarbon and Semivolatile Detections

Contaminant	Applicable ADEC Method 2 Cleanup Level (ppm)	Highest Detection (ppm)	Remaining Level (ppm)
Methylene Chloride	0.01	0.023	0.055
Benzo (a) pyrene	2.4	Not Sampled	0.25
Bis (2-Ethylhexyl) Phthalate	1100	0.88	0.88
Butylbenzylphthalate	5000	Not Sampled	0.91
Di-n-Butylphthalate	1500	Not Sampled	0.83

Of the 162 compounds analyzed by EPA Methods 8260 and 8270, only the above five compounds had detections. All were below the applicable Method 2, Table B1 cleanup values with the exception of methylene chloride, detected at 0.055 and 0.05 ppm in sampling after cleanup. Unfortunately the migration to groundwater detection limit of 0.01 ppm required by the Department is small enough that commonly detected cross-contamination can exceed this limit. Methylene chloride is identified by the laboratory as present in the method blank, indicating potential laboratory contamination of the samples. Further support that these detections are not resulting from onsite contamination is the fact 157 of the 162 analyzed compounds were non-detect. Solvent use onsite would give stronger detections in a wider range of compounds.

Groundwater and Surfacewater

Depth to groundwater on this site is fairly shallow, averaging 4 to 5 feet below ground surface. Volume of water is limited due to drainage, seasonal variation and proximity to saltwater. The preceding characteristics make groundwater highly unlikely to be used as drinking water, and corresponds to historical water use at the site. Currently, all potable water in the surrounding area is supplied by the city water system.

Groundwater samples from the immediate excavation (Westside Pit) show results for gasoline and residual range (GRO, RRO) hydrocarbons to be non-detect. Diesel range hydrocarbons (DRO) were detected at 0.31 ppm, well below the regulatory limit of 1.5 ppm. Volatile organic compound results for water samples also show non-detection.

A monitoring well (MW-1) was positioned downgradient of the central excavation. The preliminary sample taken soon after excavation showed non-detect for gasoline, but with a detection of diesel range product at 1.6 ppm, slightly above the DEC action level of 1.5 ppm. Sampling at a later date again gave non-detection for gasoline and 0.26 ppm for diesel range product, well below action levels. Since the former onsite leaseholders of Mountain Aviation distributed high-end aviation gasoline, detections of lower range product may be due to historical contamination.

A surfacewater drainage ditch was also identified offsite on federal property, with sampling results for water in this ditch of non-detect for Total Aromatic and Aqueous Hydrocarbons (TAH, TAqH) in water runoff. It should also be noted that Polyaromatic Hydrocarbons (PAH) results were also non-detect.

The Department considers the matter of groundwater and surfacewater at the Mountain Aviation site to meet cleanup requirements. The fact that Mountain Aviation has excavated impacted soils will serve to mitigate any future problems.

Cumulative Risk

An evaluation of cumulative risk using the online Method Three calculator shows no cumulative risk problems with the remaining compounds onsite. In consultation with our risk assessor, metals were excluded from this calculation due to their higher natural background levels.

Conclusions

The Department has determined that no further remedial action is required at the Mountain Aviation site. This conclusion is subject to a future Department determination that the cleanup is not protective of human health, safety, and welfare, or of the environment. If, in the future, additional contamination attributable to this site is found to be present that was not addressed in these actions, it must be reported and additional cleanup may be required. If you are in disagreement with this decision, you may seek an adjudicatory hearing under 18 AAC 15.200 - 18 AAC 15.920 within 30 days of the mailing of this decision document.

If you have any questions about this site, please do not hesitate to contact me at 465-5206.

Sincerely,

John Carnahan
Fairbanks/Juneau Operations Manager

Michael Jaynes

Michael Jaynes
Environmental Specialist

Cc: James Gorski, Hughes Thorsness Powell Huddleston & Bauman LLC
Reuben Yost, Regional Environmental Coordinator, DOT
Mark Ridgeway, US Coast Guard, Juneau