

MEMORANDUM

State of Alaska

TO: Bill Oelklaus, KGCMC
Tom Crafford, ADNR
Sarah Shoemaker, USFS
Steve Hohensee, USFS

FROM: **Kenwyn George**
ADEC, Water Quality Section

DATE: May 16, 2006

SUBJECT: Kennecott Greens Creek Site
Visit, May 11, 2006

Attendees:

Kenwyn George, ADEC-AWQ
Sarah Shoemaker, USFS
Bill Oelklaus, KGCMC
Ted Morales, KGCMC

This site visit was conducted at the invitation of the USFS in order to observe the location of the mine dewatering pipe spill. Sarah Shoemaker (USFS) and I flew out at 8:00 AM on the USFS plane and returned at 12:30 PM.

Tailing Site

The SRMP units were being worked on (data collected) by the University technicians. The far cell had a depression, most probably from a cavity between the cell fabric and the native tailings, and the tails in the cell settled. This cavity will be filled in so that it does not form a sump for surface runoff.



University of Waterloo technicians



Sinkhole in southernmost cell

Pond 7

This pond is complete; it had approximately 3-feet of water in it.

Site 1350

Material from this site had been taken underground. This will continue when feasible during the summer months. A new road had been constructed to a proposed pad that will be used to bore a hole for a ventilation shaft.



Area at Site 1350 where material removed.



Road to ventilation shaft drill site.

Mine dewatering pipe break

We hiked down the slope from the break to Greens Creek. Sediment was visible in the pipe. The majority of the sediment had been removed from the ground; however there was a small patch of gray solids near the river that Greens Creek will be removing. The sampling technique and protocol for sediments in the river was discussed. Sediment testing is required under the NOV for the spill. Because of the gravel and coarse sediments in the river, it was agreed that the sampling technique specified in the NOV should be modified in order to capture fine sediments. An updated sampling protocol was subsequently sent to KGCMC after the site visit.



The dewatering pipeline that broke.



Sediment (which looked like natural sediment) and rocks in the creek.

Pit 7

This pit is on the “A” road. Organics such as muskeg have been placed in the pit for storage purposes. It could be seen that a lot of iron and manganese were being released from the organics.



Pit 7 – organics & runoff.



Aerial view of Pit 7.