



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

Department of Natural Resources

DIVISION OF MINING, LAND & WATER
Mining Resources Section
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Inspection Date: May 18, 2016 and June 8, 2016
Weather: Cloudy
Time of Inspection: 8:00 am to 3:00 pm
Operator Contact: Kevin Eppers – Coeur Alaska
Agency Personnel: David Wilfong – ADNR; Richard Dudek, Edward Gazzetti, Matthew Reece and Curtis Caton - USFS
Inspection Objectives: General Inspection

This report covers two separate inspections at the Kensington Gold Mine located about 45 miles north of Juneau, Alaska. The first inspection was conducted on May 18, 2016 and the second was on June 8, 2016. Transportation for both inspection was provided by a United State Forest Service (USFS) chartered Ward Air operated DeHavilland Beaver or Cessna 206 Floatplane. The inspection team (team) was accompanied by Kevin Eppers from Coeur Alaska for the entire duration of both inspections.

Comet Waste Rock Pile

Various mine equipment was stored on top of the pile during both inspections. The double berms atop the west side of the pile remained intact and have worked well to inhibit waste rock from being dumped over the west side and into Ophir Creek. The pile was originally built by end-dumping waste over the edge from the top of the pile, but has been built in lifts from the bottom up for the past year. The southwestern toe of the pile was quite close to the outdoor clarifier for Water Treatment Plant (WTP) 1, and very little room is left for the pile to move westward. As the pile sits now, the WTP may need to be moved or removed for the slopes of the pile to be reclaimed to 2.5H:1V as required in the Reclamation Plan.

Comet Water Treatment Plant

Flows from the mine during both inspections were very low at about 1500 gallons per minute (gpm). Typical flows during the spring break-up run around 2500 gpm, but the very warm winter of 2015-16 and lack of rainfall contributed to low flows all spring. Most of the turbid water from the mine was flowing into Pond One, with the remainder dumping into Pond Two during the first inspection, but Pond Two was inactive during the second inspection. During the May inspection, a dredge was actively removing sediment from Pond One. The sediment is pumped into a porous bag to dewater, and is ultimately disposed of in the Comet Waste Rock Pile. A silt fence was installed in Pond One during the time between the first and second inspection, but it was too early to estimate its effectiveness.

Sherman Creek

A semi-rigid hose leading from the outfall manifold was leaking during the May inspection, and was spilling treated water onto the forest floor. The hose had been replaced by the June Inspection. Some of the other hoses

had leaked in the past, and had been shut off at the manifold ball valve. To compensate, a larger lay-flat hose had been added as an overflow, and was working well.

During the first inspection, the white precipitate was barely noticeable. The strong flows due to the spring runoff had likely scoured the rock clean. With bentonite no longer being used in the mine, it was hoped that the precipitate attributable to the water treatment process would not return. However, when the inspection team returned to Sherman Creek during the June Inspection, the white substance had returned. The rocks were coated from the outfall as far downstream as the first corner (about 100 yards), and while the team did not follow the streams path, it likely persisted beyond the corner. Kevin stated that Pete Strow had been at the stream three days prior, and had not seen the precipitate. Kevin was going to investigate into the mine's operations during those previous days to look for any abnormalities that may be causing the white stuff.

Comet Beach

The team traveled to Comet Beach during the May 18 inspection, but not during the June 8 trip. The bridges leading to the beach are in disrepair and need to be replaced. The USFS engineering department is reviewing possible bridge designs. The team checked the Comet Warehouse, where a torn bag of WTP filter media was found. The filter granules had spilled onto the floor, but were localized near the torn bag, and there was no danger of migration. The front of the Warehouse is open, and a bear may have ripped the bag while looking for food. The inspectors walked a short distance down the beach to the mouth of Sherman Creek where nothing of interest was noted, and then returned to the pickup for the trip back to the Kensington side of the mine.