



June 13, 2013

Weather: Clear  
Temperature: 68°F-72°F  
Precipitation: None  
Wind: None

Inspection Team  
Jessica Lopez Pearce - USFS  
Myra Gilliam - USFS  
Ben Wagner - ADNR  
David Wilfong - ADNR

## June 11 Inspection of the Kensington Gold Mine

The purpose of this trip was a general inspection with an emphasis on the potential surface exploration sites, and Tailings Treatment Facility dam. The inspection team met at the Ward Air hangar, and flew to the Slate Creek Cove marine dock on a DeHavilland Beaver floatplane. The team was met by Kevin Eppers (Coeur Environmental Superintendent), who shuttled us to the main camp for a pre-inspection briefing.

After watching two short videos, the team split into two groups. Kevin Eppers and Ben Wagner went to the Tailings Treatment Facility, while Jessica Lopez Pearce, Myra Gilliam, and David Wilfong were escorted by Will Robinson to look at the possible exploration drill pad sites. Will carried a 12 gauge shotgun loaded with slugs for protection as a bear had been seen in the area earlier in the day. Because the area has been mined and prospected for the past 100+ years, the drill sites located on Forest Service managed lands must be inspected and approved by an archaeologist (Myra) to ensure that any artifacts or effects to historic properties are surveyed before drilling operations that may disturb them commence.



Two of the prospective drill pad sites were located on the existing Pipeline Road, and were marked by rock piles and pink ribbons (Figure 1). The Pipeline Road sites are attractive to Coeur because they are located on a prepared flat surface, and easy access for the drill rig and crews is already available. In addition, Will stated that there is historic data available from previous operations that had drilled from these same locations. After documenting that there were no

Figure 1 Rock pile and flag marking a potential drilling site on the Pipeline Road

heritage concerns near the two proposed drill sites, the team climbed the hill, and walked into the forest.

There are no established trails in the area, and moving through the brush was tedious. The ground was saturated in many areas due to the recent spring break up, and snow was encountered in several areas. It was noted that the mosquito population had seen a recent explosion in growth, and the vicious little insects were very hungry. The team accommodated their



Figure 2 Stake and flag in the forest above the Mill Bench

hunger with donated blood through any exposed skin, but more than one bug died for their cause. We visited several more potential drill sites, and all were marked with pink ribbon tied to a tree, or a stake (Figure 2). One of the stakes was hard to locate as it had been knocked over, presumably by a bear. No archaeological sites were found. However, evidence of previous drilling operations, such as empty 5 gallons buckets of drill mud and cement sacks were found scattered around the area. After inspecting all of the potential drill sites, the group scrambled out of the forest, and headed back to the Kitchen and Dining Room facilities to break for lunch. Ben and Kevin met up with the rest of the team after finishing their inspection of the Tailings Treatment Facility (TTF).

Kevin stated that work had commenced on the mitigation and removal of the Acid Rock Drainage at the TTF with the installation of a 60 mil High Density Polyethylene (HDPE) lined containment ditch filled with acid neutralizing diorite waste rock. A full report on the ARD can be found in Kenwyn George's (ADEC) June 5, 2013 inspection report.

After lunch, the full group of inspectors (Ben, Myra, Jessica, Dave), and Coeur employee Kevin traveled to the Mill Bench and donned the required gear (headlight, self rescuer, "brass" (a small unique tag that is used to identify who is underground)) to travel through the underground tunnel to the Comet side. It was noted that the brass in/brass out board had been moved to the first floor of the Mill Building for ease of access by the miners. Once on the Comet side of the Mine, the team stopped at the top of the waste rock pile where a double berm and signage had been installed on the west side to deter dumping of material over that edge. The toe of the waste rock pile has encroached on Ophir Creek so that any material dumped over the west edge of the pile runs the risk of rolling into the Creek. Since the double berm was installed, no incidents of dumping have occurred.

The team traveled down the Comet Road toward Comet Beach. A log stringer bridge over No Name Creek has deteriorated through the years and erosion of the bridge surface, and a subsequent inspection of the structure has caused Coeur to close the bridge to heavy loads and non-essential traffic. Access to the mine from the Comet Beach landing will be unavailable until

the bridge can be replaced, and Coeur is working with Forest Service engineers to repair the bridge. No disruption to operations is expected because of the road closure due to the low usage of the Comet Beach landing. The team took a short walk down the beach toward the outfall of Sherman Creek with the intent of locating any artifacts, and spotted some historic narrow gauge rail that had been left after the abandonment of the town of Comet, Alaska.

After leaving the beach proper, the team walked through the Comet Beach Warehouse. A granular zeolite was spilled onto the warehouse floor through a tear in its containment bag. This same substance had been noted to be spilled from the same containment bag during a USFS inspection on May 16, 2013. While there was no danger of a release of the inert substance to the environment, the warehouse was in need of a thorough general cleaning.

After leaving the warehouse, the team visited the Comet Water Treatment Plant (WTP). The treatment plant was processing about 2,000 gallons per minute of sediment laden mine water at the time of the visit. There was evidence that Pond One had



overtopped slightly during the peak flows of the spring runoff previous to this inspection. The ponds are designed so that if Pond One nears its capacity, the water will flow through an HDPE lined spillway into Pond Two. At the time of the inspection, the rate of snowmelt had subsided, and the water level in the pond lowered enough so that the cause of the overtopping was apparent.

**Figure 3** Bulged liner in the spillway

The HDPE liner had bulged in the spillway near the rim of Pond One, effectively raising the inlet to the channel by about one foot (Figure 3). The bulged liner caused the water level in Pond One to rise higher than expected, and the turbid water flowed over the rim in at least one area. Sandbags had been placed at the point of the overtopping to hold the water back (Figure 4). There was no evidence that the small flow of water caused any erosion or structural instability to the



**Figure 4** Sandbags at the rim of Pond One



Figure 5 Diesel dripping from the fuel tank's filler neck

rock fill embankment. Kevin was notified of the problem.

Before leaving the water treatment area, a leak was found at a fueling station (Figure 5). The tank had been topped off with diesel fuel earlier in the day, and when the sun began shining on the tank, the fuel may have expanded enough

to flow out the filler neck. Kevin was alerted, and oil absorbent pads were placed on the tank to soak up the dripping fuel in the interim until the fuel level could be lowered. The leaking fuel was confined in the secondary containment, and none was released into the environment. A worker at the Water Treatment Plant was asked to top off the fuel in his pickup so the level in the tank would be lowered enough to stop the leak.

After leaving the WTP, the team gathered their brass, and returned to the Jualin side of the mine where any borrowed safety gear was dropped off. The team was then driven to the Slate Creek Cove marine facility to meet the Beaver for the return trip to Juneau.

The ADNR Mining Section would like to thank Kevin Eppers, Will Robinson, and Coeur Alaska for accommodating the inspection team, and ensuring a safe visit. Also, thanks to the United States Forest Service for providing the quick and safe transportation to and from the mine site.

#### Action Items –

- Address the bridges in poor condition on the Comet Road.
- Address the blockage in the spillway running between Pond 1 and Pond 2 to ensure that water does not overtop the liner in Pond 1 during a high water event.
- Lower the level of diesel in the tank at the Comet water treatment plant, and make sure the tank does not get overfilled in the future.
- Continue to implement the approved removal plan for the acid generating material in the Tailings Treatment Facility.

David Wilfong  
Alaska Department of Natural Resources  
Division of Mining, Land and Water – Mining Section