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Continuity No.: V5-0903

August 31, 2005

Mr. Ron Martel  
Mount Polley Mining Corporation  
Box 12  
Likely, BC V0L 1N0

Dear Ron,

**Re: History of Tailings Line Leaks for Mount Polley Project**

The first leak in the tailings line occurred at the top of the long, straight stretch of road above the T2-drop box, immediately after the corner across from the cap mag. The leak was at the bottom of the pipe. To repair the hole temporarily, the line was lifted using an excavator and crane with slings, so that linatex and huggers could be clamped around the hole. Both pieces of equipment were used to repair the pipe, so that a longer section of pipe could be raised, decreasing the chance of pipe breakage, as this work was being conducted while the mill continued to operate and discharge tailings.

When the mill went down for regular maintenance, the line was cut at the leak to determine its cause. The consensus was that the tailings were running over the beads at each of the section fuses and causing the line to wear much faster at these points. Eventually, the tailings wore through the entire thickness of the line, at which point the leak became apparent. MPMC asked KP to look into a tool that could be run up the length of the tailings line, so that the beads could be cut off, decreasing the chance of this wearing pattern. Unfortunately, the only tool available would only extend the length of one section of pipe (or less), so the idea of cutting the beads in this manner was discarded.

The final solution arrived at by MPMC was to fuse flanges onto the ends of each section of pipe, taking care to cut the beads off the pipe prior to buckling the sections together. This was done for several additional leaks that occurred along this stretch of pipe whenever the mill was shutdown for maintenance. Whenever new leaks appeared, they would be repaired using the method described previously, until the next mill maintenance period.

At one point, the section of tailings line that was sleeved in a culvert immediately upslope of the T2 drop box, and feeding into the T2 drop box, acquired a significant leak (a much greater flow than any other leaks seen previously). The tailings were carried into the T2 drop box via the culvert, and they were then carried to the TSF via the bypass pipe at the base of the T2 drop box, so there was lesser urgency to repair this leak. Prior to a mill shutdown, a section of line was fused together and readied, so that it could replace this leaking section. It was unbolted within the T2 drop box and then cut slightly upslope of where it enters the culvert. The section that was removed was cut open to see the extent of the wear and surprisingly, it was several metres in length. We believed that the more extensive wear was due to the length of time that the leak was allowed to continue and also due to the speed at which the tailings were flowing at this point in the line, because of the long run down the hill prior to the T2 drop box.

One other maintenance technique employed to maximize the life of the pipe in this section of the line was to rotate the line during mill maintenance periods. The line was picked up and rotated for the section from the corner to the T2 drop box. I am unsure how many times this was done (perhaps only once).

Not long before the mine stopped operating in 2001, an effort was made to replace the entire section of line from the culvert upslope of the T2 drop box, all the way around the corner (across from the entrance to the cap mag). The tailings line that was used to replace this was the thick-walled (red-stripped pipe) that was surplus from the retreating reclaim water line. This pipe was fused together with as many flanges as needed prior to being put in place to replace the existing line. The worn tailings line that was taken out was pulled down to the TSF and used at the end of the line for discharge, as the expectation was that the holes would be sanded off, keeping the line usable for a longer period of time.

I am unsure of the timeline for the start of the first leaks. I believe it was summer 1999. Steve Cook and Dave Clem often looked after the repairs on the lines, as well as the fusing of the flanges during the mill shutdown periods. They should have other details to add to the story. Eric LeNeve also has some good history on the leaks in the tailings line.

I spoke with Ken Brouwer and he confirmed that KP was only asked to comment on the potential cause of the leaks and to look into tools that could be used to cut the beads. All solutions were internal MPMC generated. Highland Valley Copper was contacted by MPMC to see if they had similar problems and they mentioned that they did. Furthermore, they repaired them frequently with the linatex/hugger combination.

Ken also mentioned that the original design of the tailings line was for 16,000 tpd, running for 8 to 10 years. Since the start of the mine, the tonnage has been closer to 18,000 tpd (average), there has been unexpected wear along the line above the T2 drop box, multiple changes in the tailings line specifications have occurred over the five-year operating period and the TSF continues to rise, making the head required to push the tailings all the way around that much greater. In the near future, it may be prudent to conduct a detailed review of the tailings line needs for both the short-term and long-term.

If you have any further questions or require clarification, please do not hesitate to contact me.

Yours sincerely,

**KNIGHT PIESOLD LTD.**

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Environmental Scientist

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