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MOUNT POLLEY MINING CORPORATION
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
REPORT ON 2005 ANNUAL INSPECTION
(REF. NO. VA101-01/11-1)

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EXECUTIVE SUMMARY

The Mount Polley gold and copper mine is owned by Mount Polley Mining Corporation (MPMC). It is located 56 kilometres northeast of Williams Lake, in central British Columbia. Mount Polley mine re-opened in the March 2005 after managing the facilities for Care and Maintenance activities since October 2001. The average throughput for 2005 was approximately 15,000 tpd. Approximately 8.7 million tonnes of tailings has been deposited in the TSF since the mine commenced operations again in 2005 (as of February 2006).

The Stage 4 construction program, which involved raising the TSF embankments to the currently permitted elevation of 948 m, was in process at the time of the inspection.

The TSF has a "HIGH" hazard classification (or consequence category).

The TSF is required to have sufficient live storage capacity for containment of runoff from the 24-hour PMP volume of 679,000 m^3 at all times, plus 1 meter of freeboard for wave run-up. MPMC operated the tailings pond within these tolerances over the past year.

The water balance for the TSF is updated regularly by MPMC with periodic reviews by Knight Piésold. The water balance was updated in 2004 to reflect updated site hydrometeorological data.

No piezometer data had been collected from Sept 22, 2005 to April 30 2006 due to a malfunctioning readout box connecter cable and the accidental destruction or burying of piezometer cables during the Stage 4 construction program. MPMC will update the piezometer records as the damaged cables are repaired and the piezometer data will be further reviewed as part of the Stage 4 Construction Report. There were no concerns with the piezometer collected prior to September 22, 2005.

The two slope inclinometers installed at the toe of the Main Embankment in July 2001 were read in March 2006. The results show that there have been no significant deviations in the inclinometers as compared to the installation readings of 2001 and the readings from October 2004.

The TSF embankments were observed to be in good condition. No seepage or slumping was observed. The Southeast Sediment Pond, Millsite Sump, and South Bootjack Dam were

observed to be in a good condition with no geotechnical issues outstanding. However the Millsite Sump spillway was showing signs of erosion and should be repaired.

No major unexpected or uncontrolled seepage was observed from the embankments. The small amount of seepage observed at the base of the Perimeter Embankment between chainages 29+00 to 32+00 is being routed to the Perimeter Embankment Seepage Collection Pond.

The Tailings Pond is adjacent to the Main Embankment (app. chainage 16+00 to 19+00). This was the result of prolonged discharge of tailings from the Perimeter Embankment and from the knife gate valve.

Flows from the five Foundation Drains and the Upstream Toe Drain at the Main Embankment were monitored in December 2005. The flows from the upstream toe have increased slightly due to the close proximity of the tailings pond at the Main Embankment. The flows from the drains were reported to be clear.

The Operations, Maintenance and Surveillance Manual (OMS Manual) and the Emergency Preparedness and Response Plan (EPP document) for the TSF were revised on December 22, 2004.

A Dam Safety Review is scheduled for the summer of 2006.

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SECTION 1.0 - INTRODUCTION

1.1 PROJECT DESCRIPTION

The Mount Polley gold and copper mine is owned by Mount Polley Mining Corporation (MPMC). It is located 56 kilometres northeast of Williams Lake, in central British Columbia. Mount Polley Mine started production in 1997 and had milled approximately 27.5 million tonnes of ore prior to stopping production in October 2001. Mount Polley mine re-opened in March 2005 after managing the facilities for Care and Maintenance activities since October 2001. MPMC is currently mining and milling ore from the Bell Pit and the Northeast Zone with the tailings material being deposited as slurry into the Tailings Storage Facility (TSF). Process water is collected and recycled back to the mill for recycle in the milling process. The average throughput for 2005 was approximately 15,000 tpd. Approximately 8.7 million tonnes of tailings have been deposited in the TSF since the mine commenced operations in 2005 (as of February 2006).

The Stage 4 construction program, which involved raising the TSF embankments to the currently permitted elevation of 948 m, was in process at the time of the inspection. Knight Piésold provided the design, technical specification, and QA/QC for the Stage 4 construction program of the TSF. Aerial photographs of Mount Polley Mine from October 2005 are shown on Figures 1.1 and 1.2. The overall site plan showing the Stage 4 design of the Tailings Storage Facility is shown on Drawing 101-1/11-100. The Stage 4 Embankment General Arrangement is shown on Drawing 101-1/11-102. Selected photographs taken during the site inspection are included in Appendix D.

1.2 SCOPE OF REPORT

Mount Polley Mining Corporation requested that Knight Piésold complete an annual inspection of the Tailings Storage Facility and prepare an Annual Inspection Report that meets the guidelines outlined by the Ministry of Energy and Mines (MEM). These guidelines are provided in Appendix A. Mr. Les Galbraith, P. Eng., conducted the 2005 annual inspection on September 21 and 22, 2005 in the company of Ron Martel of MPMC. This report presents the results of the annual inspection. The inspection involved making visual observations of the Tailings Storage Facility and includes a review of the TSF instrumentation records. This report also includes a review of the ancillary works, which includes the tailings and reclaim pipelines, the millsite sump, and the Southeast Sediment Pond.

Regular on-going inspections of the Tailings Storage Facility (TSF) and Ancillary Works have been completed by Knight Piésold to ensure the safety and security of the system and to meet the guidelines of the Ministry of Energy and Mines. Recent annual inspections of the TSF by Knight Piésold were completed in 2001 (KP Ref. 11162/14-2), 2002 (KP Ref. VA101-00001/3-1), and 2004 (KP Ref. VA101-00001/7-1).

A Dam Safety Review is scheduled for the summer of 2006. The Dam Safety Review will be carried out as per the Dam Safety Guidelines. The DRAFT Dam Safety Guidelines (October 2005) are included in Appendix E. The Dam Safety Review and subsequent report will be carried out by a third party Knight Piésold Professional Engineer, who has had no input into the design and operation requirements of the TSF, to ensure that the findings and recommendations are independent.

SECTION 2.0 - TAILINGS STORAGE FACILITY AND ANCILLARY WORKS

2.1 GENERAL

The mineral extraction process at Mount Polley Mine uses a selective flotation process to produce a copper-gold concentrate. Tailings material from the mill is piped and discharged as slurry into the Tailings Storage Facility (TSF), where the solids settled out of the slurry. Process water is collected and recycled back to the mill for recycle in the milling process.

2.2 TAILINGS STORAGE FACILITY

The principal objectives of the TSF are to provide secure containment for tailings solids and to ensure that the regional groundwater and surface water flows are not adversely affected during or after mining operations. The design and operation of the TSF is integrated with the overall water management objectives for the entire mine development, in that surface runoff from disturbed catchment areas is controlled, collected and contained on site. An additional requirement for the TSF is to allow for effective reclamation of the tailings impoundment and associated disturbed areas at closure.

The TSF has a "HIGH" hazard classification (or consequence category). Therefore, the embankment has been designed to accommodate a maximum design earthquake (MDE) corresponding to 50% of the maximum credible earthquake (MCE) and the impoundment is sized to contain the probable maximum precipitation (PMP) storm event.

The TSF at Mount Polley includes the Perimeter, Main, and South Embankments. The Stage 4 construction program involved raising the TSF embankments to an elevation of 948 m. The heights of the TSF embankments corresponding to a crest elevation of 948 m will be approximately 17 m, 35 m, and 7 m for the Perimeter Embankment, Main Embankment and the South Embankment respectively. The TSF Stage 4 plan and section drawings for the Main, Perimeter, and South Embankments are shown on the following drawings:

- VA101-1/10-210 rev 0 Stage 4 Main Embankment Plan.
- VA101-1/10-215 Rev 0 Stage 4 Main Embankment – Sections and Details.
- VA101-1/10-220 Rev 0 Stage 4 Perimeter Embankment – Plan.
- VA101-1/10-225 Rev 0 Stage 4 Perimeter Embankment – Sections.
- VA101-1/10-230 Rev 0 Stage 4 South Embankment – Plan.
- VA101-1/10-235 Rev 0 Stage 4 South Embankment – Sections.

An aerial photograph of the TSF that was flown in the summer 2004 is shown on Figure 2.1.

The main components of the TSF are as follows:

- The TSF embankments incorporate the following zones and materials:
  - Zone S – core zone - fine grained glacial till.
  - Zone U – upstream shell – select fill or spigotted tailings sand.

  - Zone B – embankment shell zones - fine grained glacial till.
  - Zone F – filter, drainage zones, and chimney drain - processed gravel and sand.
  - Zone T – transition filter zone - select well-graded fine grained rockfill.
  - Zone C – downstream shell zone – rockfill.
- A low permeability basin liner (natural and constructed), which covers the base of the entire facility, with a nominal depth of at least 2 m.
- A foundation drain and pressure relief well system, located downstream of the Stage 1B Main Embankment. The foundation drain and pressure relief well system prevents the build-up of excess pore pressure in the foundation, and transfers groundwater and/or seepage to the collection ponds.
- Seepage collection ponds located downstream of the Main and Perimeter Embankments. These ponds were excavated in low permeability soils and store water collected from the embankment drains and from local runoff. Water from the Seepage Collection Ponds is pumped back into the TSF during operations.
- Instrumentation in the tailings, earth fill embankments and embankment foundations. This includes vibrating wire piezometers, survey monuments, and slope inclinometers. The embankment drain flows are also monitored, along with the level of the tailings supernatant water pond.
- A system of groundwater quality monitoring wells installed around the TSF.

2.3 TSF CONSTRUCTION ACTIVITIES DURING PAST YEAR

The Stage 4 expansion of the Tailings Storage Facility involved placing an upstream cap on the embankments to an elevation of 948.0 m. This increase in the crest elevation will provide storage for tailings and water for approximately 1 year of operation. The Stage 4 cap consists of a Zone S core with a coarse aggregate material (Zone U) placed upstream of the core on the tailings beach. The placement of the downstream shell zone and filter materials has been deferred to Stage 5. Future expansion programs of the TSF will incorporate the Modified Centreline Construction method for the embankments.

2.4 ANCILLARY WORKS

Ancillary works that are key to the operation of the TSF include the following:

- Tailings Pipeline. The Tailings Pipeline conveys tailings slurry via gravity from the Millsite to the TSF. This pipeline consists of movable discharge sections with multiple spigots to distribute the tailings along the embankment crests.
- Millsite Sump. Runoff from the millsite is routed and stored in the millsite sump. Excess water from the sump is routed into the tailings line near the mill for storage in the TSF.
- Southeast Sediment Pond. Runoff from the Southeast Rock Disposal Site and the dewatering from the Northeast Zone and associated waste dumps is directed to the Southeast Sediment Pond. Water from the Southeast Sediment Pond is routed to the reclaim pipeline at the reclaim booster pump station.
- Reclaim Water System. The reclaim water system consists of a reclaim barge, a booster pump station, and associated pipeworks to allow for continuous recycle of process water and site runoff from the TSF to the mill processing circuit during operations.

SECTION 3.0 - 2005 ANNUAL INSPECTION

3.1 WATER MANAGEMENT

3.1.1 GENERAL

MPMC mine personnel complete on going surface water monitoring and water management activities to ensure compliance with the current mine permits. The Annual Inspection evaluated the physical aspects of the water management program at the TSF. Knight Piésold has not reviewed the geochemical characteristics of the water management operations. This report focuses on those aspects of the water management plan that are significant from a dam safety perspective.

3.1.2 Water Balance Review

The water balance for the TSF is updated regularly by MPMC with periodic reviews by Knight Piésold. The site climatic conditions were reviewed by Knight Piésold in 2004 and the water balance input parameters were adjusted accordingly to better reflect site conditions. The TSF is currently operating with a water budget surplus, as total inflows from precipitation and surface runoff exceed losses from evaporation and seepage removal. The Mount Polley Mine has undergone significant development in the last couple of years and it is very important that the Water Management Plan and site water balance be reviewed and updated as required to ensure that they stay current with the Mine Development Plan and that there is sufficient capacity in the TSF to store the increased site runoff associated with the expansion of the mine footprint. The water balance was reviewed by Knight Piésold in February 2006 and MPMC appears to be up to date with the Mine Development Plan.

3.1.3 Surface Water Control

Surface water control at the mine site comprises the interception of runoff from the disturbed (and some undisturbed) catchment areas for diversion into the TSF. Surface water control structures include the following:

- The Bell and Cariboo Pits, and the Mill Site Area - Surface water from the Bell and Cariboo Pits and Mill Site Area is routed into the mill-site sump where it is transferred to the TSF via the tailings pipeline.
- Southeast Rock Disposal Site - Surface water is intercepted by runoff collection ditches and transferred to the Southeast Sediment Pond for transfer to the mill via the reclaim water pipeline.
- North East Zone Pit and Waste Dumps – Surface and groundwater from the North East Zone and Waste Dumps is directed to the Southeast Sediment Pond via a series of pipelines and diversion ditches.
- Tailings Storage Facility Area - Clean surface water runoff from the undisturbed catchment area above the impoundment is currently routed around the TSF to reduce the accumulation of water within the impoundment. The diversion ditches were unobstructed and those that were flowing had clear water. This diversion

ditch on the west side of the TSF will need to be relocated to higher ground in the next year or two as the tailings pond expands.

3.1.4 Impoundment Freeboard Requirements

The TSF is required to have sufficient live storage capacity for containment of runoff from the 24-hour PMP volume of 679,000 m^3 at all times, which would result in an incremental rise in the tailings pond level of approximately 0.39 m. The 24-hour PMP allowance is in addition to regular inflows from other precipitation runoff, including the spring freshet. The TSF design also incorporates an additional allowance of 1 meter of freeboard for wave run-up. MPMC operated the tailings pond within these tolerances over the past year. The supernatant pond was at elevation 942.30 m at the time of Mr. Galbraith's inspection on September 22, 2005. The current Stage 4 construction program will provide sufficient storage capacity to contain the 2006 freshet and the 24-hour PMP, while maintaining the 1-meter freeboard requirement.

The tailings pond water level is currently measured at the reclaim barge. The single point discharging of tailings from the knife gate valve located on the West side of the Perimeter Embankment results in a higher tailings beach at this location, which, if not managed properly, may result in tailings and runoff butting up against the dam inside the minimum freeboard requirement. The discharging of tailings from the knife gate should be monitored on a regular basis to ensure that the freeboard requirements are maintained at all locations in the TSF.

3.1.5 Drain Flow Data

Flows from the five Foundation Drains and the Upstream Toe Drain at the Main Embankment were monitored in December 2005. The flow rates for the Foundation Drains and Upstream Toe Drains are shown on Tables 3.1 and 3.2 respectively. The flow rates from the drains were not monitored during the Care and Maintenance Period as the drain outlets were submerged within the sump. This condition was anticipated during the Care and Maintenance Period, as flow monitoring is only possible during operations when the seepage pond level has been pumped down. The seepage pond was pumped down in December 2005 and flow measurements were taken. The monitored flows are consistent with the flows measured in 2000. The flows from the upstream toe drain have increased slightly due to the close proximity of the tailings pond at the Main Embankment. The monitoring of the Foundation Drains and Upstream Toe Drains should continue on a weekly basis during operations as outlined in the Operations and Maintenance Manual (KP Ref. No. VA101-00001/9-1). The flows from the drains were reported to be clear.

Samples from the Foundation Drains and the Upstream Toe Drain were also collected by MPMC for water quality testing. The results are available from MPMC and are reported in the Annual Environmental Reports.

3.1.6 Seepage Collection Ponds

The Main Embankment Seepage Collection Pond, located immediately downstream of the Main Embankment, was completed at the start of the Stage 1a construction program in 1997. The Perimeter Embankment Seepage Collection Pond was excavated during Stage 1b construction in 1997. These ponds were excavated in low permeability glacial till materials. The seepage collection ponds were observed to be in good condition with no observed erosion activity.

The seepage collection ponds collect water from the embankment drain systems and from local runoff. Water from the Seepage Collection Ponds is of good quality and MPMC were permitted to discharge water during the Care and Maintenance Period. MPMC are actively monitoring water quality and regularly report this information to the relevant regulatory authorities. MPMC is also developing Site Specific Water Quality Objectives, and are investigating options to release larger volumes of water from the overall site to reduce or prevent the accumulation of excess supernatant water in the TSF.

The South Embankment currently does not have a seepage collection and recycle system, as there is no seepage. An assessment on the requirement for the future South Embankment seepage recycle requirements will be undertaken as part of the annual construction and annual inspection reports. It is anticipated that the South Embankment will require at least a sump for the foundation, upstream toe, and filter drains. The installation of the sump at the South embankment is scheduled for the Stage 5 construction program in 2006.

3.1.7 External Water

MPMC staff carries out water quality monitoring of external water regularly. Monitoring includes surface water quality from ditches, streams, creeks and lakes, as well as groundwater quality from monitoring wells. The results of the site water quality monitoring are reported by Mount Polley in Annual Environmental and Reclamation Report. This report is submitted to the appropriate Agencies (Ministry of Water, Land and Air Protection and Ministry of Energy and Mines).

3.2 TAILINGS STORAGE FACILITY

Pertinent observations regarding the operating condition of the TSF were as follows:

- No signs of instability were observed in the embankment fill slopes.

- The Tailings Pond was against the west end of the Main Embankment (app. chainage 16+00 to 19+00). This was the result of prolonged discharge of tailings from the Perimeter Embankment and from the knife gate valve. The most efficient use of the TSF is made when tailings can be evenly distributed from around the perimeter of the facility. Evenly discharging the tailings from around the facility optimizes the development of

tailings beaches and keeps the supernatant pond clear of the embankments, thereby increasing seepage paths and limiting seepage loss from the facility. Beached tailings, when left to drain and consolidate, form the competent foundation needed for the modified centreline construction of embankment raises.

- The knoll between the Main and South Embankment should be investigated to ensure that the thickness of the low permeability basin liner is sufficient in this area prior to it being inundated with tailings.

- No major unexpected or uncontrolled seepage was observed from the embankments, including fill slope and foundations. However, a small amount of seepage was observed at the base of the Perimeter Embankment between chainages 29+00 to 32+00. The seepage is likely coming from the internal embankment drain as it exits the TSF within this area. The seepage should be directed to a drainage ditch outside of the ultimate toe of the embankments and routed to the Perimeter Embankment Seepage Collection Pond. This was completed in February 2006.

The TSF was observed to be in a good condition with no geotechnical issues outstanding. Selected photographs of the TSF are presented in Appendix D. The Operations, Maintenance and Surveillance Manual (OMS Manual) and the Emergency Preparedness and Response Plan (EPP document) for the TSF were revised on December 22, 2004.

3.3 ANCILLARY WORKS

3.3.1 Tailings and Reclaim Pipelines

The tailings and reclaim pipelines comprise 7 km of HDPE pipe of varying diameters and pressure ratings to convey tailings from the mill site to the TSF and reclaim water in the reverse direction. The tailings pipeline was in operation at the time of the inspection with tailings being end dumped at the knife gate valve located at the West end of the Perimeter Embankment. Tailings material was also being used during the Stage 4 construction program as Zone U material, which is located upstream of the core zone on the tailings beaches. There have been no reported problems with the tailings pipeline other than the pressures being insufficient to route the tailings around the entire TSF. The design and condition of the entire tailings pipeline should be reviewed to ensure that the tailings pipeline has the required pressure rating to transport and discharge tailings around the entire TSF to optimize the development of tailings beaches.

The reclaim pipeline was recycling supernatant water back to the mill for use in the process. There have been no reported problems with the reclaim pipeline and the pipeline was observed to be in sound condition.

3.3.2 Millsite Sump

Surface water from the Bell and Cariboo Pits and Mill Site Area is routed into the mill-site sump where it is transferred to the TSF via the tailings pipeline. The embankments at the Millsite Sump were observed to be in good shape, and no cracks, seepage or slumping was noted. The emergency overflow culvert was clear of obstructions, however the spillway showed signs of erosion and should be repaired. The erosion occurred during an extensive clean-up program at the mill site in 2004 prior to start-up and is unlikely to happen again. The repair of the millsite spillway is an outstanding recommendation from the 2004 Annual Inspection Report.

Photos of the Mill Site Sump and the Millsite Sump spillway are included in Appendix D.

3.3.3 Southeast Sediment Pond

The Southeast Sediment Pond collects runoff from the Southeast Rock Disposal Site via the Southeast Rock Disposal Site runoff ditch. The Southeast Sediment Pond will also collect water from the dewatering of the Wight Pit and associated waste dumps as this area is developed. Water from the pond is routed to the reclaim water pipeline for transfer back to the mill process.

Observations made at the Southeast Sediment Pond and Southeast Rock Disposal Site runoff ditch are:

- No seepage was observed for the embankments.
- Water flowing in the ditch was clear.
- The overflow culvert for the pond was clear of obstructions.
- The embankment fill slopes (inside and outside) were in very good shape, with no signs of instability. No cracks were observed on the crest. No seepage or slumping of the slopes was observed.
- Grassy re-vegetation has become well established on the downstream embankment slopes.

MPMC staff conducts monthly inspections of the Southeast Sediment Pond. Observations are recorded on an inspection sheet. The pond is inspected weekly during the spring freshet or after heavy rainfall.

The design basis for the Southeast Sediment Pond should be reviewed to ensure that it has sufficient capacity to contain the increased surface and groundwater flows (including flows from the design storm event) associated with dewatering the North East Zone and associated waste dumps.

A photo of the Southeast Sediment Pond is included in Appendix D.

3.3.4 South Bootjack Dam

The South Bootjack Dam was observed to be in good condition at the time of the inspection. Observations include the following:

- The water level was low.
- Both upstream and downstream fill slopes were in good condition, with no evidence of seepage or slumping.
- No cracks were observed on the dam crest.
- The spillway contained some minor vegetation, but was generally unobstructed.

A photo of the South Bootjack Dam is included in Appendix D.

SECTION 4.0 - INSTRUMENTATION

4.1 PIEZOMETER DATA

4.1.1 General

A total of 57 vibrating wire piezometers have been installed at the TSF along eight planes designated as Monitoring Plans A to H. The monitoring planes for the Main Embankment, the Perimeter Embankment, and the South embankment are shown on Drawings VA 101-1/8-236, 238, and 240 respectively. The piezometer locations for the monitoring planes are shown in section on Drawings VA101-1/8 242, and 244. The piezometers are grouped into tailings, foundation, embankment fill and drain piezometers. The results from each group are discussed below. The timeline plots for the piezometers are included in Appendix B.

There is thirteen months of data missing, from July 30, 2003 to September 2, 2004, and no piezometer data has been collected from Sept 22, 2005 to April 30 2006. The current gap in missing piezometer data had been due to a malfunctioning readout box connecter cable and the accidental destruction or burying of piezometer cables during the Stage 4 construction program. The connecter cable has been replaced and MPMC is in the process of splicing the damaged piezometer cables and relocating the readout boxes downstream of the ultimate toe of the embankments. MPMC will update the piezometer records as the damaged cables are repaired. A further review of the piezometer data will be included in the Stage 4 Construction Report.

4.1.2 Tailings Piezometers

A total of nine piezometers have been installed in the tailings mass at the Main Embankment, seven of which remain in operation. Timeline plots of the tailings piezometer data are included in Appendix B1.

The pore pressures measured in the four tailings piezometers located below the elevation of the upstream toe drain show a slight increasing trend as the pond and tailings elevation increases; however the pore pressures are below the pond level in the TSF. The pore pressures measured in the three tailings piezometers located above the elevation of the upstream toe drain are negative, indicating that the upstream toe drain is effective in draining the sandy tailings adjacent to the embankment.

4.1.3 Embankment Foundation Piezometers

A total of 20 piezometers have been installed in the embankment foundations, 18 of which remain in operation. Artesian conditions are present in the 7 of the 16 foundation piezometers installed under the Main Embankment. The piezometers in this area are used to monitor the pore pressures and to confirm that they remain below the threshold level of 6 metres above ground level (KP Ref. No. 1162/7-2). No unexpected high pore

pressure increases were noted during the reporting period. The artesian head values (above ground surface level) measured in September 2005 are summarized in Table 5.1.

Artesian pressures have remained relatively constant in all the piezometers during the reporting period. Piezometers B2-PE2-01 and B2-PE2-02 are showing a slight increasing trend but are still well below the 6 metres above ground threshold level. No artesian conditions have been encountered at Plane E, where coarser glaciofluvial material is present.

Timeline plots of the embankment foundation piezometers are included in Appendix B2. There are no concerns with the embankment foundation piezometers.

4.1.4 Embankment Fill Piezometers

A total of 15 piezometers have been installed in the embankment fill materials, 13 of which remain in operation. Timeline plots of the embankment fill piezometer data are included in Appendix B3.

There have been no significant changes in the trends for most of the embankment fill piezometers. Five of the embankment fill piezometers located on the Main Embankment (A2-PE1-O2, A2-PE2-O3, B2-PE2-O3, B2-PE1-O2, C2-PE1-O2) are showing recent increases in pore pressures corresponding to the placement of fill during the Stage 4 construction program. These piezometers have shown similar increases during previous expansion programs of the TSF and it is anticipated that the elevated pore pressures will dissipate as they have previously following the construction programs. There are no concerns with the embankment fill piezometers, however, the embankment fill piezometers that have shown construction related increases in pore pressures should be monitored by MPMC to ensure that the pore pressures are dissipating following the Stage 4 construction program.

4.1.5 Drain Piezometers

A total of 13 piezometers have been installed in the embankment drains including foundation drains, chimney drain and outlet drains. Eleven of the drain piezometers were functioning at the time of inspection. Timeline plots for the drain piezometers are shown in Appendix B4.

All drain piezometers showed near-zero pore pressures, indicating that the drains are functioning as intended. There are no concerns with the drain piezometers.

4.2 SLOPE INCLINOMETERS

Two slope inclinometers were installed at the toe of the Main Embankment in July 2001 to measure potential deformation of the embankment materials. The inclinometers were read in

March 2006 and the data was compared to the initial readings taken in 2001 and the readings taken in October 2004. The results of the readings are shown in Appendix C.

The results show that there have been no significant deviations in the inclinometers as compared to the installation readings of 2001 and the readings from October 2004.

Regular monitoring should be undertaken in order to utilize this installation fully. Monitoring with the inclinometer probe should be undertaken on an annual basis with the results reported to Knight Piésold. The 'poor-boy' monitoring rod should be used monthly (twice a month during construction programs) to ensure that any soil movement associated with settlement or instability has not deformed the inclinometer casing. Should resistance or blockage be encountered it is imperative that the inclinometer probe be utilized at the earliest opportunity to confirm the magnitude of displacements and to assess any potential instability.

4.3 SURVEY MONUMENT DATA

The survey monuments installed on the Stage 3B embankment crest following the 2001 construction were removed during the Stage 3C construction program and have not been replaced as the Stage 3C construction program blended into the Stage 4 construction program. New survey monuments may be installed on the embankment crests during the Stage 4 construction program depending on its completion date, otherwise, survey monuments will be installed following the Stage 5 construction program, which is scheduled for the summer and fall of 2006.

SECTION 5.0 - SUMMARY AND RECOMMENDATIONS

Mount Polley Mine started production in 1997 and had milled approximately 27.5 million tonnes of ore prior to stopping production in October 2001. Mount Polley mine re-opened in the March 2005 and is currently mining the Bell Pit and the Northeast Zone. The average throughput for 2005 was approximately 15,000 tpd. Approximately 8.7 million tonnes of tailings has been deposited in the TSF since the mine commenced operations again in 2005 (as of February 2006).

Les Galbraith, P. Eng., of Knight Piésold completed an annual inspection of the Tailings Storage Inspection and associated works on September 21 and 22 in the company of Ron Martel. Significant observations from the annual inspection are as follows:

- The TSF has a "HIGH" hazard classification (or consequence category). Therefore, the embankment has been designed to accommodate a maximum design earthquake (MDE) corresponding to 50% of the maximum credible earthquake (MCE) and the impoundment is sized to contain the probable maximum precipitation (PMP) storm event.
- The water balance for the TSF is updated regularly by MPMC. The water balance was reviewed by Knight Piésold in February 2006 and MPMC appears to be up-to-date with the Mine Development Plan.
- The two slope inclinometers installed at the toe of the Main Embankment in July 2001 were read in March 2006. The results show that there have been no significant deviations in the inclinometers as compared to the installation readings of 2001 and the readings from October 2004.
- No piezometer data had been collected from Sept 22, 2005 to April 30 2006 due to a malfunctioning readout box connecter cable and the accidental destruction or burying of piezometer cables during the Stage 4 construction program. The connecter cable has been replaced and MPMC is in the process of splicing the damaged piezometer cables and relocating the readout boxes downstream of the ultimate toe of the embankments. MPMC will update the piezometer records as the damaged cables are repaired and the piezometer data will be further reviewed as part of the Stage 4 Construction Report. There were no concerns with the piezometer collected prior to September 22, 2005.
- A Dam Safety Review is scheduled for the summer of 2006.
- The Operations, Maintenance and Surveillance Manual (OMS Manual) and the Emergency Preparedness and Response Plan (EPP document) for the TSF were revised on December 22, 2004.
- The Stage 4 construction program, which involved raising the TSF embankments to the currently permitted elevation of 948 m, was in process at the time of the inspection. The Stage 4 cap consists of a Zone S core with a coarse aggregate material (Zone U) placed upstream of the core on the tailings beach. Future expansion programs of the TSF will continue to incorporate the Modified Centreline Construction method for the embankments.
- The TSF embankments were observed to be in good condition. No seepage or slumping was observed and no signs of instability were observed in the embankment fill slopes.
- No major unexpected or uncontrolled seepage was observed from the embankments. The small amount of seepage observed at the base of the Perimeter Embankment

between chainages 29+00 to 32+00 is being routed to the Perimeter Embankment Seepage Collection Pond.

- The Tailings Pond was up against the west end of the Main Embankment (app. chainage 16+00 to 19+00). This was the result of prolonged discharge of tailings from the Perimeter Embankment and from the knife gate valve.
- The TSF is required to have sufficient live storage capacity for containment of runoff from the 24-hour PMP volume of 679,000 m^3 at all times, plus 1 meter of freeboard for wave run-up. MPMC operated the tailings pond within these tolerances over the past year.
- Flows from the five Foundation Drains and the Upstream Toe Drain at the Main Embankment were monitored in December 2005. The flows from the upstream toe drain have increased slightly due to the close proximity of the tailings pond at the Main Embankment. The flows from the drains were reported to be clear.
- The Southeast Sediment Pond, Millsite Sump, and South Bootjack Dam were observed to be in a good condition with no geotechnical issues outstanding. However the Millsite Sump spillway was showing signs of erosion and should be repaired.

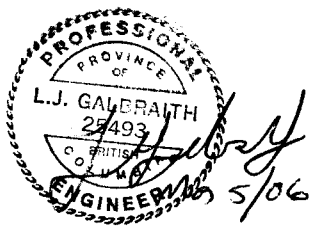
Recommendations for on-going operations of the TSF are summarized below:

- Ensure that the instrumentation is being monitored at the required frequency, as reported in the Operations, Maintenance and Surveillance Manual, (KP Ref. No. 101-1/9-1). This includes reading the piezometers and inclinometers. A 'poor-boy' monitoring rod should be used for the inclinometers during the construction programs as outlined in the OM&S Manual.
- Develop a tailings deposition plan that involves discharging tailings form the Perimeter, Main, and South Embankments. Discharging tailings from around the facility will facilitate the development of tailings beaches and help in the management and location of the tailings pond. The tailings pipeline should be extended to the South Embankment in 2006 to allow for beach development at the South Embankment.
- Repair the spillway at the Millsite Sump.
- Lower the water level in the Main Embankment Drain Monitoring Sump so that the flows from the Foundation and Upstream Toe Drains can be monitored at the required frequency. This has been completed and the flows read as of December 21, 2005.
- Repair the damaged piezometers.
- Relocate the piezometer readout boxes downstream of the ultimate toe and extend the existing piezometers to the new readout box location.
- Continue regular monitoring of the water quality and levels in the surrounding groundwater wells.
- Continue regular monitoring of the tailings pond elevation. The TSF is required to have sufficient live storage capacity for containment of runoff from the 24-hour PMP, in addition to regular inflows from other precipitation runoff, including the spring freshet, while maintaining the minimum freeboard requirements. The freeboard should also be measured at the West end of the Perimeter Embankment if the tailings is being discharged from the knife gate as the tailings beach development at this location will be higher than around the remainder of the TSF.

- Review the condition of the tailings pipeline. A complete design review of the tailings pipeline should be conducted and appropriate modifications completed to ensure that it will transport and discharge tailings around the entire TSF.
- Confirm the thickness of the in-situ low permeability basin liner between the Main Embankment and the South Embankment. This should be completed as soon as possible to confirm that there is the minimum required thickness of 2 m prior to this area being submerged with tailings or the supernatant pond. This was completed in April 2006.
- The seepage observed between chainages 29+00 to 32+00 should be directed to a drainage ditch outside of the ultimate toe of the embankments and routed to the Perimeter Embankment Seepage Collection Pond. This was completed in February 2006.
- The Southeast ditch located on the West side of the TSF will need to be relocated to higher ground.
- Review the Water Management Plan and site water balance on a regular basis to ensure they are current with the planned development of the mine site. The surface water control measures should also be reviewed to ensure that there is sufficient capacity to route and store the direct precipitation and runoff from a significant storm event.

SECTION 6.0 - CERTIFICATION

This report was prepared and approved by the undersigned.



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