

## **Mount Polley Mining Corporation**

A DIVISION OF IMPERIAL METALS CORPORATION

September 11, 2014

VIA EMAIL TO Hubert.Bunce@gov.bc.ca

Ministry of Environment Mining Operations Environmental Protection Division 2080A Labieux Road Nanaimo, BC V9T 6J9

Attention: Mr. Hubert Bunce, A/Director Mining Operations,

**Environmental Protection** 

Dear Sirs/Mesdames:

RE: Non-compliance Advisory Letter, Order 107461

We write in response to your letter of September 9, 2014. In our view, the following facts bear on your allegation that Mount Polley Mining Corporation ("MPMC") is not in compliance with Section 1 of Pollution Abatement Order 107461 ("Order 107461"):

1. Section 1 of Order 107461 states:

Immediately take action, under the direction of a suitably qualified professional to abate the discharge of mine-affected materials and sediments from the impoundment facility and specifically into Polley Lake, Hazeltine Creek and Quesnel Lake. A written summary of actions taken must be submitted to the Director on August 13, 2014.

2. Since August 5, 2014, we have been working hard on sediment and water discharge control at MPMC's tailings storage facility ("TSF") breach site. On the following day, we mobilized our mining crew to operate our fleet of trucks and bulldozers to begin construction of access to the repair area. However, we could not allow trucks and bulldozers to move into the discharge area in order to build berms until the area was stabilized and made secure from significant safety risk. As soon as it was possible to do so safely, the equipment was moved in and MPMC and its contractors began building a temporary field engineered upstream rock fill berm and an upper rock fill berm, and we continue to deposit berm material as quickly as is safely and logistically possible.

- 3. On August 10, 2014, we received a letter from the Ministry of Environment ("MOE"), confirming that you were generally satisfied with our action plan required by Section 6 of Order 107461, and acknowledging our compliance with Section 2 of Order 107461.
- 4. On August 11, 2014, MPMC representatives met with MOE and Ministry of Energy and Mines ("MEM") staff as well as Emergency Management BC and this discussion included an update of MPMC's discharge abatement efforts.
- 5. On August 13, 2014, in response to Order 107461, in our Memorandum re: Preliminary Response to Pollution Abatement Order File: 107461, dated August 13, 2014 ("Response Memorandum") we informed you of the actions we had taken by that point to abate discharges from our TSF, including:
  - (a) Log debris and removal in Quesnel Lake;
  - (b) Construction of temporary upstream dyke to control upstream tailings within the impoundment;
  - (c) Water level reduction in Polley Lake to reduce the potential for mobilization of deposit of a tailings "plug" at the south end of Polley Lake into Hazeltine Creek; and
  - (d) Design and implementation of the preliminary Environmental Impact Assessment.

Details regarding each of the above items relating to abatement of discharge of materials from the TSF were provided in the Response Memorandum. A notice of proposed works for the temporary upstream dyke to control upstream tailings within the impoundment was provided to MEM on August 11, 2014 and the notice and design drawings were provided to MOE on August 13, 2014.

- 6. In our Response Memorandum, we also described the Polley Lake Pumping which was intended to reduce the risk of remobilization of material in the Tailings Plug and to enable safe access for remediation planning, site investigations for the environmental impact assessment and remediation works.
- 7. As identified in our Response Memorandum, we had by August 13, 2014 already assembled a team of qualified persons to assist us with abatement of the discharge of materials from the TSF as well as to lead various aspects of the Environmental Impact Assessment. In addition, we now have added to the team an Archaeology Specialist, a Geophysics and Physical Limnology crew with two research vessels and specialized equipment, a Senior Geotechnical Engineer and a Senior Environmental Scientist. Each of these specialists are supported by a significant team from their respective organization.
- 8. On August 15, 2014, we submitted a Comprehensive Environmental Impact Assessment ("CEIA") to which you responded on August 21, 2014. An updated

- CEIA which addresses all matters brought forward by you will be submitted on or before the stipulated due date.
- 9. On August 18, 2014, clearing began at the location of a new sump to be installed downstream of the TSF breach. By August 18, 2014 we had constructed a new power line across the area of the breach and installed piping and pumping infrastructure that allowed all water from the associated TSF collection systems to be collected and ceased discharge to the environment from those ponds. Our consultants continued to undertake a risk assessment regarding access to Hazeltine Creek channel below the breach sediment plug.
- 10. On August 20, 2014, we began to excavate for the new sump downstream of the TSF breach. On August 21, 2014, we began excavating for a temporary sump downstream of the TSF breach, in order to direct water draining from the TSF into this temporary sump until the permanent sump could be installed.
- 11. On August 21, 2014, we scouted the proposed routing of a second Polley Lake diversion pipe along the right side of the breach run-out zone.
- 12. Also on August 21, 2014, we provided you with a Conceptual Interim Sediment and Erosion Control Plan ("Interim Plan") to mitigate ongoing erosion and sediment transport within impacted areas downstream of the TSF breach. The specific objectives of the Interim Plan include:
  - (a) Reduce the suspended sediment loading of water flowing into Quesnel Lake;
  - (b) Reduce the potential for re-mobilization of tailings and sediments that were deposited or exposed by the TSF breach;
  - (c) Continue controlling flows from the TSF and re-direct these flows to the Springer Pit; and
  - (d) Ensure safety of all workers conducting the mitigation works.
- 13. On August 23, 2014, we completed the temporary sump downstream of the TSF breach and began to collect water from the breach in this sump, from which it was then pumped to the Perimeter Dam till borrow. We also excavated a channel to partially direct flow away from the Polley Lake sediment plug.
- 14. On August 24, 2014, additional riprap was placed at the Polley Lake diversion pipe outlet to ensure no erosion at the outlet.
- 15. On August 26, 2014, in response to a request from MOE, MPMC considered and assessed options for addressing the following additional issues related to the Interim Plan:
  - (a) Water management options for Hazeltine Creek and the advantages and disadvantages associated with directing water either into or away from the

- Creek while the impact assessment and creek rehabilitation program is occurring;
- (b) Accommodating returning spawning fish to Hazeltine Creek and Edney Creek;
- (c) Preferred season and timing for rehabilitation of Hazeltine Creek; and
- (d) Characterizing and assessing potential risk associated with the deep turbidity plume in Quesnel Lake, including options for mitigating potential impacts on drinking water intakes.

Work plans were updated to accommodate for these concerns.

- 16. On August 26, 2014, we provided MOE with a memorandum dated August 24, 2014 that explained our Gavin Lake/Horsefly Forest Service Road temporary access plan for initiation of interim mitigation works to support the sediment and erosion control measures described in the Interim Plan.
- 17. Also on August 26, 2014, we provided you with a draft of the Critical Task Workflow Schedule as part of the CEIA work plan and a draft Mt. Polley project schedule that covers:
  - (a) Erosion and sediment mitigation;
  - (b) Hazeltine Creek rehabilitation; and
  - (c) CEIA and monitoring.
- 18. On August 27 and 28, 2014, the technical lead consultants we have retained for the CEIA met with us at the TSF breach site to formulate updated plans for moving forward.
- 19. On August 29, 2014, we provided MOE with the "Mount Polley Comprehensive Environmental Impact Assessment Work Plan".
- 20. We have also provided weekly written and daily oral updates to MOE on our actions to abate the discharge from the TSF since August 6, 2014. Our weekly written updates provide information on the water quality monitoring we have undertaken.
- 21. On August 25, 2014, seed mix to provide vegetative cover for exposed seeds were ordered. On September 4, 2014 900 20kg bags arrived on site. We understood from MOE that it had to consult a special committee that the MOE created before any seeding would be carried out. On September 10, 2014, we advised the MOE that all seeds were in place and that the specialized helicopter that would carry out the seeding would arrive on site to seed the following day (September 11, 2014). We were advised on September 10, 2014 by MOE that the committee had expressed concerns. The MOE was unable to advise us whether they wanted us to proceed with the seeding or not. This matter remained unresolved until 10 AM on

- the morning of September 11, 2014 when MOE provided authorization to initiate aerial seeding. The helicopter was mobilized and seeding began that afternoon.
- 22. On September 4, 2014, MOE staff inspected the work we had completed to abate discharge from the TSF breach on site. It was discussed that the breach discharge had been intercepted as of August 23, 2014 but this system experienced technical difficulties thereafter compounded by access restraints imposed by safe work procedures, which fettered our efforts. It was further discussed that the system had been updated and re-commissioning was imminent. Since this time, interception of the discharge has been consistent. We continue to make capacity improvements to address potential for increased discharge related to rain events.
- 23. Since September 4, 2014 the sump has been continuously operational.
- 24. As of September 11, 2014 the clearing of woody debris from the mouth of Hazeltine Creek is still underway and it is expected that this work will continue until September 13 or September 14, 2014. The removal of this debris was necessary prior to the deployment of the silt curtain in order for the silt curtain to be effective as well as to ensure that it remained intact. It is anticipated that we will install a silt curtain at the outlet of Hazeltine Creek prior to September 15, 2014.
- 25. Our consultants have been working diligently on preparing the Erosion and Sediment Control Plan since August 6, 2014 and the preliminary version was submitted on August 13, 2014. The Final Plan will be provided to you on or before September 15, 2014. Further to the foregoing, this Plan addresses the specific activities mentioned in your September 9, 2014 Advisory Letter.

## Alleged non-compliance with Section 1

As is clear from the foregoing list of relevant facts, we have as far as reasonably possible abated the discharge from the TSF and continue to do so. We have assembled a large team of qualified and experienced professionals to assist us with this work and we have resourced and implemented their recommendations.

With respect to the installation of sediment control measures as is described above, since the TSF breach, we have been working diligently on sediment and water discharge control, but have had substantial safety and logistical challenges, and we have been cooperating with the ongoing investigations underway by MOE, MEM, the Department of Fisheries and Oceans and other regulatory agencies who are conducting formal investigations of MPMC.

We hope that the information above assists you in understanding the seriousness of our regard for what has occurred and for ensuring that we are taking appropriate action to abate discharges from the TSF into the receiving environment. We are and remain dedicated to prompt and appropriate compliance measures, and we have devoted and continue to devote all necessary resources to this effort. We do so with a strong regard

for human health and safety and to prevent further incidents that would pose cause for concern.

All of our actions have been taken with the knowledge of, and input from, MOE throughout. In light of the foregoing, if you have details of further action that you believe could be taken or could have been taken thus far to provide a greater and effective degree of environmental protection in a more timely manner, we respectfully request that you immediately provide us with this information.

Sincerely,

## MOUNT POLLEY MINING CORPORATION

Dale Reimer General Manager

cc: Al Hoffman, Chief Inspector of Mines, Ministry of Energy and Mines Dr. Trevor Corneil, Interior Health Authority Janis Bell, Chief Administrative Officer, Cariboo Regional District Kelly Dahl, Detective Sergeant, Conservation Officer Service