

DEVELOPING THE HOLLINGER OPEN PIT MINE – LEAVING A POSITIVE LEGACY

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Introduction

The Porcupine Camp, otherwise referred to as Timmins, Ontario, has a long prosperous history of gold mining. Of all the mines that came and went, the Hollinger Mine was arguably the greatest. Founded in 1909 by Benny Hollinger and his partner Alex Gillies, the mine operated until 1968 producing nearly 20 million ounces of gold. Even when the doors closed, the mine that generated so much prosperity would continue to shine in the eyes of the local community.

In the years that followed however, the site degraded. Other mine operators pillaged any remaining value leaving the property in a state of partial abandonment. As the water levels within the mine rose, subsidence of near surface mine workings occurred creating dangerous public hazards. The property was eventually fenced, locking up 100ha in central Timmins.

Project Sandy

The concept of mining the residual gold left by underground mines is not new within Timmins as it has been done at the Dome Mine and Pamour Mine. Given that the Hollinger Mine was the most prolific mine in Timmins, it was a natural target.

Exploration drilling began as early as 2004 in secret to prevent speculation within the community. Positive results continued to build excitement and, now under the ownership of Goldcorp Canada Ltd. Porcupine Gold Mines (PGM), a pre-feasibility

study was launched to look at a potential mining scenario as well as social, environmental, and economic aspects of the project.

PGM began to host a series of open houses and presented different options including keeping the property fenced (current condition), partial remediation to allow some land use, and an open pit mine. Mining would not only “remediate” the hazards within the fence line but also benefit the workforce and the community.

Given the proximity to the community, public engagement became critical to ensure information remained open and transparent. The Hollinger Community Advisory Committee was created and consisted of a diverse group of local stakeholders and worked with PGM to develop strategies that would meet the mutual needs of the community and the company. PGM set up an information centre which was staffed by a full time community liaison coordinator to allow anyone from the community the opportunity to ask questions in person. An online forum was also created through the PGM website to properly address community feedback in a timely manner. A real-time noise and dust monitoring system with data managed by a third party was also implemented to ensure transparency and which can be viewed through the PGM website.

Also of importance was the development of an appropriate subsequent land use plan (SLUP). A series of public consultation meetings were held to gather input from the community on what the property could become once the mine closed.

Unorthodox Project Economics

The project was developing as planned up until 2012. Permitting uncertainty, complexity of remediating voids, and a big downturn in the gold industry created significant challenges and put the project at risk of being shelved. This forced PGM to evaluate the project from a different angle.

If a mine would not go ahead, Goldcorp could not in good faith allow the property to remain fenced in perpetuity and so options to remediate the property were considered, which generally consisted of:

1. Fence property (base case) – annual fencing maintenance, mine hazards remain a risk forever, least acceptable by public.
2. Full/Partial void remediation – very complicated, very expensive, and full of uncertainty. No guarantee that all hazards could be remediated. Option would be more acceptable to public than fencing.
3. Operate to rehabilitate – by mining through the mine workings, the hazard would be eliminated once flooded. Only option that could create a revenue stream to offset mining costs. Most acceptable by the public.

In the fall of 2013, the project was given the green light by the Board of Directors as a rehabilitation project. All permits required were received shortly thereafter and planning to begin construction of the 20m high Environmental Control Berm began which included a highly complex process of evaluating and remediating mine workings which would remain under the weight of the berm. Overburden stripped from the pit would be used to cover the exterior of the berm which would be seeded to create a more aesthetically pleasing view.

As of October 2015, the berm was complete to its final design height which allowed PGM to mine twenty-four hours per day, seven days per week. The regrading, sloping, and seeding of the berm continues throughout the spring of 2016. A final SLUP was presented to the City of Timmins at the end of 2015 and Phase 1 of this plan will also commence in 2016. Based on the current schedule, it is expected that the mine will reach a depth below the predicted flood elevation by mid-2017. The mine is currently scheduled to be in operation until 2019. PGM continues to work with the City of Timmins and the Hollinger Project Community Advisory Committee to work through all phases of the project from concept to reclamation ensuring that this project is successful and meets the long-term needs of the community.

41st CLRA National Annual General Meeting and Conference

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PROCEEDINGS



Canadian Land Reclamation Association
Association canadienne de réhabilitation des sites dégradés