

FROM GOLDFIELDS TO GREENFIELDS: THE LEGACY OF THE HOLLINGER

GOLD MINE

Cindy Welsh
City of Timmins, Timmins, Ontario, P4N 1B3

Don Burke
Goldcorp – Porcupine Gold Mines, South Porcupine, Ontario, P0N 1H0

Bryan Neeley
Goldcorp – Porcupine Gold Mines, South Porcupine, Ontario, P0N 1H0

Introduction

The Hollinger Gold Mine was one of the richest producing mines in the western hemisphere and operated between 1910 and 1968 as an underground operation within the City of Timmins. With the closure of the mine in 1968, numerous mine hazards began to plague the property and were public and safety liabilities located within the City of Timmins, particularly the urban area. In 2007, Goldcorp's Porcupine Gold Mines began to investigate the revitalization of the former Hollinger Gold Mine through the open pit mining process. The question arose of how to develop a best management approach for this resource development using economic development and land use planning principles, for an industry that is located within an urban area of a major City located within Northern Ontario.

This paper will explore the best management approach that was developed to bring this project to fruition. The first section will provide a background and overview of the project. The second section will focus on the process and detail used in the best management approach and plan in terms of economic development and land use planning to permit a traditional resource based “mining” activity to develop within the context of an urban setting. The third section will explore how the land use planning process can be used as an economic development tool to guide the transformation of a historical mining liability into productive public lands that will celebrate the legacy of mining within the City of Timmins. The fourth section concentrates on the lessons learned as part of the development of this best practice approach and plan.

Background

The Hollinger Gold Mine was one of the three original major gold mines developed in Timmins and operated from 1910 to 1968.¹ It yielded 19.5 million ounces of gold which would be equivalent to \$2.34 billion at today's gold price of \$1,200.² The underground workings at the site were developed to a depth of 1,662 metres (5,450 feet) and included almost 600 kilometres (373 miles) of shafts and tunnels.³ The City of Timmins

developed as a result of mining settlements being built to house the influx of people needed to work in the mines, including the Hollinger. Timmins is now one of the largest cities in Northern Ontario with a population of approximately 42,435 as per the 2011 Census and functions as the regional service centre for Northeastern Ontario.

The City of Timmins was built up around the mine with the subsequent central business district being less than one kilometre from the site. A number of commercial enterprises bordering the site also developed with many still located on the boundary of the mine lands. With the closure of the Hollinger mine, the land surface was left in an unproductive and dangerous state with a variety of near surface mine related hazards that plagued the property. Over time a number of subsidence occurrences, referred to as "sink holes" occurred, some of which swallowed parking lots, buildings and even City buses. As a result, fencing was erected around the perimeter of the property to keep the public from entering the site as an interim measure. It was clear, however, that a longer term solution was required for the site and the City of Timmins.

Economic Conditions

In 2007, Goldcorp Canada Ltd., the owner of the former Hollinger Mine property, began to study the feasibility of redeveloping 101 hectares (250 acres) of the site into an open pit gold mine. This was due in part to the site historically being economically unviable due to the lower price of gold. With the increase in the commodity over the past ten years, Goldcorp determined, through a series of studies, that the site could now be developed as a viable open pit gold mine. With Goldcorp's Dome Mine underground operations located within the City of Timmins, approximately five kilometres from the Hollinger Property, the investment needed to bring the Hollinger Open Pit gold mine to fruition would not be on the scale if the development was to be located in an area that was to be considered "remote".

The Hollinger Mine site is located within the urban area of the City of Timmins. As such, much of the necessary infrastructure to develop this mine is in place. An extensive road network is in place along with the electrical supply of power needed for this project. Facilities such as the mine dry and mill are already in existence at the existing Dome Mine owned and operated by Goldcorp, located approximately five kilometres from the Hollinger Property. Ore from the Hollinger Mine is to be hauled and processed at the existing Dome Mine Mill. The tailings and ore processing will be discharged to existing Dome Mine tailing ponds. The project will also include the construction of an Environmental Control Berm around the Hollinger Project Site. The purpose of this berm will be to manage noise and other negative externalities the project may produce, which may, in turn, cause issues on the surrounding urban area. Employees of the Hollinger Mine will not be housed on-site as there are a number of private residential accommodations available within the City of Timmins to rent or purchase. No new company housing is proposed as part of this project.

The Hollinger Gold Mine will create over 200 direct jobs and 400 indirect jobs to support the operation of the mine. Through considerable capital investment and operating costs

over the life of the project, the economic benefits and value of the project are significant to the City of Timmins. From an environmental and social benefit perspective, post mining would result in an elimination of hazard lands with a rehabilitated parcel of land that will be 100 hectares in size. The parcel will be returned to the City of Timmins in the form of a lake, parkland and trail system available for the public to use.

In a recent study (commissioned by the Ontario Mining Association with assistance from the Ontario Ministry of Northern Development and Mines) entitled *An Authentic Opportunity: The Economic Impacts of a New Gold Mine in Ontario*, October 2014, Dungan and Murphy of the University of Toronto, outline the benefits of opening both a new open pit gold mine and a new underground gold mine in a remote location of Northern Ontario. The study did not define the definition of "remote" but for this paper it is considered to be an area not close to an urban centre. Key findings of the study include the following.

The construction of a new open pit gold mine, located in a remote area of the province would take approximately three years to construct with a total capital investment of \$750 million, with \$300 million of that spent on construction of a new mill and \$80 million connecting to existing infrastructure.⁴ The study also stated that 996 jobs would be directly created by the construction of an open pit gold mine, including the infrastructure to service it, construction of the mill and site development.⁵ Another 440 jobs would be created with regards to production, including the milling of the mine ore.⁶

The scope of this study did not account for developing an open pit gold mine in an urban area of the province. If a comparison was to be made with the Hollinger Project, the following may very well have been reported. The total capital investment over a three-year period could be assumed to be \$370 million, taking into account the existing mill and infrastructure to service the mine. With regards to jobs, only 200 direct and 400 sustained indirect jobs in support areas are to be created. These figures do not compare with the above-noted study but still represent a substantial investment by Goldcorp to bring this open pit mine to fruition. As such, a recent report by the Conference Board of Canada (2015) reported that the City of Timmins' economy is forecasted to grow by 2.4% in 2015 and another 2.3% in 2016⁷. This is in part due to the redevelopment of the Hollinger Open Pit Mine. The value of this project to the economy cannot be understated.

Economic Development and Planning Approach

In order to move forward with the redevelopment of this project and begin production, a number of approvals and studies were required. The following section outlines the economic development and planning approach taken.

Resource development, including mining activities, typically occur well outside of settlement boundary areas in the rural areas of the municipality. In this case, the open pit mine is located within the urban area of the City, less than one kilometre from the central business district, residential areas and a major commercial corridor. The key

challenge for municipal staff was how to develop and implement a process that would effectively permit the re-opening of a historic mining property in close proximity to sensitive land uses in an urbanized area of the community. The mine would not only create jobs, eventually clean-up a hazardous site and bring it back into a productive land use but would also have a range of potential negative externalities on the surrounding built-up area during its operations.

At the same time as Goldcorp began their pre-feasibility review of this former mining site, the City of Timmins was in the process of developing a new Official Plan (OP). Municipalities need to address mine hazards as per the *Provincial Policy Statement* (PPS) in their Official Plan. Consultations were held with the Ministry of Municipal Affairs and Housing (MMAH) as part of the Timmins OP development process. It was clear that a unique policy approach was required in order to address Goldcorp's project. A "Goldfield Area" official plan designation with related policies was derived and references back to the gold mines in Northern Ontario that helped establish many resource development communities in the Province, including Timmins.

As part of this process, consultations were also held with Goldcorp as they continued their open pit mining study. The Ministry concurred and the designation "Goldfield Area" was introduced into the new City of Timmins Official Plan, approved in 2010 by MMAH.

The intent of the "Goldfield Area" is to recognize the potential for a renewed mineral mining operation and the longer term closure and permanent rehabilitation of the subject lands in accordance with the *Mining Act* and broader municipal requirements. Given the proximity of the "Goldfield Area" to the urban centre, there was a strong need to ensure that land use activities are compatible with nearby sensitive land uses, closure and rehabilitation is properly undertaken and consideration is given to subsequent land uses within the designation. The Official Plan also states that mining operations in this designation are subject to a development agreement with the City.

In 2011, the City of Timmins approved a new Zoning By-law which rezoned a portion of the "Goldfield Area" as Mining (EA-IM) and recognized Goldcorp's proposed new open pit mine as a permitted use. In addition to the requirements set out by both the Federal and Provincial Governments in permitting the mine, Goldcorp needed to meet the requirements of the development agreement including: the completion of a best management plan to outline how they intend to manage air, noise, vibration, fly-rock and other nuisances related to mining activity as well as a complaint resolution protocol; phasing of the mine development; buffering and berm placement; fencing; garbage removal; ingress and egress from the site; mine rock stockpiles management; monitoring instruments; rehabilitation; and the completion of a subsequent land use plan. A letter of credit in the amount of \$10 million was also required to be submitted to the City, as security, to help ensure that the works required as part of the subsequent land use plan are to be completed.

A key component to bring this project to fruition was the extensive public consultation and community engagement that was undertaken. Goldcorp undertook more than thirty

supportive studies and required twelve governmental approvals to move forward with the project. The City of Timmins required the completion of third party reviews of some of the studies to ensure that the recommended mitigative measures were appropriate in light of nearby sensitive land uses. The City and Goldcorp also held more than twenty-one workshops, presentations and key stakeholder meetings (including aboriginal groups). The focus was to address the potential impact of negative externalities of the mine, such as dust, noise and vibration as outlined in the best management plan, as well as introduce the complaint resolution process developed for the project and the subsequent land use plan for the property once mining ceases. Surveys were also used as a way to garner feedback. The result was input from over 500 community members.

Goldcorp also hired a Community Liaison Coordinator to aid in the public consultation process and presently maintains this position. A website dedicated to the project and information centre were also established where the public could view the status of the work. In 2010, the Hollinger Project Community Advisory Committee was established with a mandate to be a liaison between Goldcorp and community members with regards to vetting any concerns, recommendations and future land uses associated with the project. Goldcorp further developed an on-line complaint form and internal resolution process to deal with public comments and concerns. There is also a web enabled live monitoring program instituted for noise, vibration and dust and is available during the life of the project for public review. In addition the company provides quarterly updates to the City of Timmins Council on project status and all complaints received.

In February 2014, the Hollinger Project officially began with construction of the berm which will act as a buffer between the reclamation activity occurring in the former mining areas and the commercial and residential areas. This feature will be progressively rehabilitated and once completed it will be seeded and greened. Based on a wide range of suggestions from the municipality and the public, a vision for the final land use plan was developed. A new trail system will be provided within two years of the berm construction to connect to the City's extensive trail network. The new trail system will follow the landscape of the berm, providing opportunities for residents to walk, jog and cycle as well as providing rest areas, with seating and picnic facilities. In selected areas, the trail will also be paved and lit for evening use. Storyboards will be located along the trail providing information on points of interest and history of the Hollinger Mine.

Upon closure of the mine, the open pit area will be eventually flooded and a portion of the berm will be sloped down to meet the water and allow for safe access to the waterfront. A sand covered beach will be developed. The area adjacent to the beach will become a large park area enhanced with an urban forest, shrubs, hedges and other landscape features including picnic tables and benches. On top of the berm, a public viewing area will be established providing a lookout area of the lake and the City of Timmins. Paved public parking will also be provided.

Lessons Learned

This case study from the City of Timmins has lessons that resonate across much of Northern Ontario wherever mining activity can be found. Cities, towns and villages that rely on this important economic activity need to positively address some of the related issues. This unique project could not have proceeded with the application of traditional economic development and planning approaches. The rejuvenation of a historic mining property within a highly urbanized area of the City has demanded new and innovative approaches to effectively balance economic needs with that of environmental, economic and social expectations.

These can be considered as a best management approach to follow for other similar “urban” mining projects, whether it is an open pit mine or an underground mine. This best management approach is made up of four key elements that have contributed to the success of this project and include pre-consultation, developing an innovative economic development and planning framework, ongoing public consultation and engagement, and importance of visions.

1. In terms of pre-consultation, early consultation with approval authorities, municipal staff, Goldcorp and the public was key in developing an acceptable approach to allow this complex development to occur while effectively balancing competing public interests.
2. The development of an innovative economic development and planning framework helped to demonstrate the important role that municipal staff, including land use planners and economic development practitioners, can play in order to guide a development through an approvals process that could not be achieved through traditional approaches.
3. Ongoing public consultation and engagement at the onset is significant. The importance of early, innovative and ongoing public involvement and engagement in the success of this project cannot be understated and has no doubt resulted in improved public acceptance and support. The consultation process could best be described as a partnership approach between the mining company, approval authorities and the public. The true test of this is the minimal number of complaints received throughout this process.
4. The importance of having a vision with regards to the project. This is perhaps the most significant element of this project from a public perspective. It includes the end vision for the site following the eventual mine closure. During the planning process, stakeholders offered a wide range of elements that they would like to see included in the final land use plan. These were considered and evaluated and many have found their way into the plan. The development of a subsequent land use plan based on accepted and realistic elements for the site and enhanced with progressive rehabilitation, certainly helps to promote trust and buy-in from the community for these types of developments. Continued open and transparent dialogue with the

community during the operational phase of the project remains the focus for the City of Timmins, Goldcorp and the community to ensure that appropriate elements are included in the final land use plan.

In conclusion, the Hollinger Open Pit Mine project will add to the economy of the City of Timmins by offering investment and employment over an eight to ten year life span of the project. It will also leave a portion of the City of Timmins, which was left with numerous mine hazards that were public safety liabilities, with restored lands in the form of an urban park for all citizens to enjoy. Of utmost importance is the best management process that has been developed as part of this project and that can be utilized worldwide in developing similar projects. It is anticipated that this process will be called upon in similar, future projects.

End Notes

¹ Planning Alliance. 2008. Hollinger Baseline Studies Socio-economic Report.
<http://www.porcupinegoldmines.ca/en/ouroperations/resources/AppendixJ.pdf>, p. 5.

² Goldcorp Porcupine Gold Mines. 2015. Hollinger Project.
<https://www.porcupinegoldmines.ca/en/ouroperations/hollinger.asp>.

³Ibid.

⁴Dungan, P., & Murphy, S. (2014). An Authentic Opportunity: The Economic Impacts of a New Gold Mine in Ontario. Toronto, Ontario: University of Toronto, Rotman School of Management, p.7.

⁵ Ibid. p. 8.

⁶ Ibid. p. 13.

⁷ The Conference Board of Canada. 2015. Economic Insights Into Seven Canadian Mid-sized Cities. Canada, p.14.

Literature Cited

AMEC Earth & Environmental. 2010. Goldcorp Canada Ltd. Hollinger Mine – Mine Closure Plan Amendment.
<http://www.porcupinegoldmines.ca/en/ouoperations/resources/HollingerClosurePlanMay2011FinalA.pdf>.

AMEC Earth & Environmental. 2010. Goldcorp Canada Ltd. Hollinger Mine – Pre-feasibility Environmental Baseline Studies: Surface Water Hydrology.
<http://www.porcupinegoldmines.ca/en/ouoperations/resources/AppendixE.pdf>.

City of Timmins. 2010. City of Timmins Official Plan.
<http://www.timmins.ca/residents/building-planning/planning-responsibilities/official-plan>.

City of Timmins. 2011. City of Timmins Zoning By-law.
<http://www.timmins.ca/residents/building-planning/planning-responsibilities/zoning-by-law>.

City of Timmins. 2015. Our Heritage. <http://www.timmins.ca/visitors/explore-timmins/our-heritage>.

City of Timmins. 2015. Our History. <http://www.timmins.ca/visitors/explore-timmins/our-history>.

Dungan, P., & Murphy, S. 2014. An Au-thentic Opportunity: The Economic Impacts of a New Gold Mine in Ontario. Toronto, Ontario: Univesity of Toronto, Rotman School of Management.

Goldcorp Porcupine Gold Mines. 2012. Hollinger Project Best Management Plan.
<https://www.porcupinegoldmines.ca/en/ouoperations/resources/HollingerBestManagementPlan.pdf>.

Goldcorp Porcupine Gold Mines. 2015. Hollinger Project.
<https://www.porcupinegoldmines.ca/en/ouoperations/hollinger.asp>.

Government of Ontario. 2014. Provincial Policy Statement.
<http://www.mah.gov.on.ca/AssetFactory.aspx?did=10463>.

Mining Act 1990 (Ontario) (Canada).
<http://guides.library.vu.edu.au/content.php?pid=270421&sid=2230821>.

PR Associates. 2012. Goldcorp Canada Ltd. Hollinger Project Perception Audit.
<http://www.porcupinegoldmines.ca/en/resourcesGeneral/HollingerProjectPerceptionAudit.pdf>.

Planning Alliance. 2008. Hollinger Baseline Studies Socio-economic Report.
<http://www.porcupinegoldmines.ca/en/ouroperations/resources/AppendixJ.pdf>.

Statistics Canada. 2015. NHS Focus on Geography Series – Timmins.
<http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/fogs-spg/Pages/FOG.cfm?lang=E&level=4&GeoCode=3556027>.

The Conference Board of Canada. 2015. Economic Insights Into Seven Canadian Mid-sized Cities. Canada.

Timmins Economic Development Corporation. 2015. City of Timmins 2011 Economic Report. <http://www.timminsedc.com/en/resources/2011%20Economic%20Forecast.pdf>.

Timmins Economic Development Corporation. 2015. Community Profile.
<http://www.timminsedc.com/en/businessclimate/resources/TimminsCommunityProfileEN-May2015.pdf>.

Timmins Economic Development Corporation. 2015. Current State of the Economy.
<http://www.timminsedc.com/en/businessclimate/stateofeconomy.asp>.

Timmins Economic Development Corporation. 2015. Mining.
<http://www.timminsedc.com/en/businessclimate/mining.asp>.

41st CLRA National Annual General Meeting and Conference

McIntyre Arena, Timmins, Ontario

June 26-29, 2016

PROCEEDINGS



Canadian Land Reclamation Association
Association canadienne de réhabilitation des sites dégradés