

HAMMOND REEF GOLD PROJECT AND THE SEINE RIVER FIRST NATION

by

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for

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April 13, 2012

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INTRODUCTION

On May 19, 2010, the Osisko Mining Corporation acquired Brett Resources Inc. and a controlling interest in the Hammond Reef Gold Project located near Atikokan (23 km away). The project lies within the traditional lands of Treaty 3, and there are a number of First Nation communities in vicinity of the project. All First Nations in the Area of Interest are signatories to Treaty #3 (Golder 2011). The Grand Council of Treaty #3 is the historic government representing twenty-eight First Nations of the Anishinaabe Nation. The treaty area includes 26 First Nations in northwestern Ontario and two First Nations in Manitoba and outlines the rights to 55,000 square miles of land (Goldi 2007). The closest Aboriginal community to the project is the Lac Des Mille Lacs First Nation, approximately 41 km to the east; however, this First Nation's Reserve is currently unoccupied because of historical flooding (Golder 2011). The Aboriginal peoples from the area have expressed some concerns about the mining development; however, a good working relation remains between Osisko and the First Nation communities. As part of this project, a focus was placed on the concerns expressed from the Seine River First Nation in a letter to the Canadian Environmental Assessment Agency (CEAA).

HAMMOND REEF GOLD PROJECT

Osisko Hammond Reef Gold Ltd. (OHRG) is currently in the pre-feasibility stage of mine development; nonetheless, exploration continues. The purpose of the project is to extract gold ore for processing at an ore processing facility and to produce gold for sale to manufacturers worldwide. The project consists of the development of an open pit mine, including an ore processing facility and a tailings management area (Golder 2011). Also included is the associated infrastructure at the site, the upgrading of an access road to the site, and the construction of a

new electrical transmission line (Golder 2011). Options assessments are currently being completed to determine the preferred location for the tailings management area. The project is projected to recover 18.25 million tonnes of ore per year; this will amount to an inferred resource of 6.7 million ounces of gold (Golder 2011). In order to access the ore it will be required to drain Mitta Lake within the region for the construction of open pits. The mine is expected to employ approximately 465 persons over a 14 year operating life. Closure and rehabilitation measures for the project will be confirmed once the project description has been finalized (Golder 2011).

PROJECT LOCATION

The Hammond Reef property is located within the Thunder Bay Mining District in northwestern Ontario. The property is approximately 170 km west of Thunder Bay, Ontario and approximately 23km northeast of the town of Atikokan, Ontario. The project will be situated above Marmion Lake, on top of Mitta Lake (Golder 2011).

ABORIGINAL ENGAGEMENT

From 2006 to the present, Brett Resources, now OHRG, has undertaken many engagement activities with Aboriginal groups in the area of the project. The results of engagement with Aboriginal communities thus far include the development of a Memorandum of Understanding (MOU) and the signing of an Impact Benefit Agreement with the Fort Frances Secretariat First Nations and the Lac Des Mille Lacs First Nation (Golder 2011). In addition, offices have been set up in Atikokan for preliminary project work, employing First Nations and Metis community members (Golder 2011).

OHRG'S CONSULTATION WITH ABORIGINAL GROUPS

OHRG recognizes the Crown's duty to consult thus far, regarding potential impact of the project on Aboriginal and treaty rights. Golder (2011), the consultant group that prepared the Project Description for the environmental assessment, explained the company's understanding of the duty to consult, which includes:

- ensuring that Aboriginal people have access to the information, and providing up-to-date information;
- examining opportunities to mitigate the environmental effects of the project on Aboriginal groups;
- describing in the Environmental Impact Statement how the concerns respecting Aboriginal groups will be addressed; and
- providing a summary of the completed, ongoing and future consultation with Aboriginal people and groups.

ABORIGINAL GROUPS WITHIN THE AREA OF INTEREST

The area of interest holds a number of First Nation communities, as shown on the map in Appendix I. The closest Aboriginal group to the proposed project site in the area of interest is the Lac Des Mille Lac First Nation (LDMLFN). The LDMLFN holds two Reserves, one of which is 41 km to the east of the north point of the Project site (Seine River IR #22A2). The other Reserve, Lac Des Millie Lacs #22A1, is located approximately 70 km to the east of the project (Golder 2011). The registered population for Lac Des Mille Lacs is 539, while only 4 residents are recorded living on the Lac Des Millie Lacs Reserve (Golder 2011). The next neighboring Aboriginal groups are (Golder 2011):

- The Seine River First Nation → 715 registered members, 317 live on Reserve
 - Seine River IR #23A (77km)
 - Seine River IR #23B (103km)
 - Sturgeon Falls
- Lac La Croix First Nation → 416 registered, 288 live on Reserve
 - Neguaguon Lake IR #25D (77km)
- Couchiching First Nation → 2090 registered, 642 live on Reserve
- Naicatchewenin First Nation → 394 registered, 270 live on Reserve
- Nigigoonsiminikaaning First Nation → 313 registered, 143 live on Reserve
- Rainy River First Nation → No population information
- Mitaanijigaming First Nation → 140 registered, 97 live on Reserve

SEINE RIVER FIRST NATION CONCERNS

The major environmental concerns for Seine River First Nation are for water quality in the entire Seine River system, impacts on fisheries and impacts on wild rice. The First Nation made the following comments:

1. What will the composition of discharge water be from the tailings facility, which may reach 8500 m³/day? (Klyne 2011).

What the First Nation is concerned with is the concentration of sulphate and other forms of sulphur, and if increased levels can sustain the growth of wild rice. In the past the Ontario Ministry of Natural Resources has granted permission for several hundred ppms of sulphate to be released into water systems from mining industries (Klyne 2011), which would destroy the growth of wild rice. Furthermore, it has also been proven that excessive levels of sulphate can

cause meromictic conditions. A meromictic lake is stratified into two distinct, chemically different layers. The top layer, also known as the epilimnion layer, acts as a normal lake with regular seasonal turnover. This supplies adequate dissolved oxygen which can support aquatic biota (Bannon et al. 2011). The bottom layer (hypolimnion) has elevated levels of dissolved solids, resulting in increased density due to no seasonal turnover. This causes a depletion of oxygen, making it unsuitable for aquatic biota (Bannon et al. 2011).

Although this concern was strongly expressed by the First Nation during meetings between them and Osisko, the potential effects of the discharge water on wild rice were not mentioned in the Golder project description (Klyne 2011). Even more disturbing the federal Department of Fisheries and Oceans made no comment on the potential effects of effluent to the Upper Marmion Lake and the rest of Seine River watershed (Klyne 2011). What the community wanted to see within the document was a potential treatment option or a regulated sulphate standard. Currently Minnesota's adopted water quality standards allows for only 10mg/L of sulphate in concentrated waters, providing protection of wild rice during periods when the rice may be susceptible to damage by high sulphate levels (MPCA 2011). There are a number of treatment processes available when dealing with extensive levels of sulphate, such as those described by the International Network for Acid Prevention (2003):

- Lime and Limestone – Not sufficient for wild rice but can be used as a pre-treatment step
- Barium Salts – Very costly
- SAVMIN – Below 200mg/l
- CESR – Less than 100mg/l (70%)
- SPARRO and Seeded Reverse Osmosis – Generally Uneconomical (80-95% recovery)

The First Nation felt that these options should have been mentioned, due to how much it stressed this issue as important to the local First Nations.

2. Water quality and sediment is being monitored only for upper Marmion Lake; testing should be conducted throughout entire Seine River watershed (Klyne 2011).

This concern is largely due to the First Nation traditional ways of life and the potential effects from drainage from Lake Marmion into the Seine River system. Many plant species used for traditional pursuits are located at the water's edge; these can be affected with even small changes in water quality. Finally, community health related to drinking water is of great concern.

3. Testing of methyl mercury needs to be conducted—potential for bioaccumulation (Klyne 2011).

Iron & gold mining has been present in the Seine River watershed since 1800's. With all mining there is always potential for heavy metals and sediment located near the mine, especially with older sites. Discharge from tailings has occurred before in the area from the previous Steep Rock mine, creating adverse health effects in the community.

4. Will water management from the mine affect the current Seine River Water Management Plan? Water levels affect wild rice production (Klyne 2011).

It states in the Golder Project Description (2011) that agreements are in place with the 2004-2014 Seine River Water Management Plan with small hydro-electric operators downstream to maintain minimum flows; however, the sourcing of process waters is still unclear. Water elevations are directly linked to the successful production of wild rice

CONCLUSION

The concerns brought forth by the Seine River First Nation can still be addressed. This does not reflect negatively on the relationship between the communities and industry at the

current time. Given the current planning status of the project, much more planning, critiquing, management and strategies will be incorporated. The First Nations are not against the development of the mine; however, they are concerned about the impacts on their traditional ways. The nation wants to see jobs created, successful cooperation and understanding, and complete restoration of the site, along with appropriate compensation if any losses are suffered.

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APPENDIX 1. MAP SHOWING FIRST NATIONS IN HAMMOND REEF PROJECT AREA

