AMENDED EIS/EA REPORT
CHAPTER 7: PUBLIC CONSULTATION AND ABORIGINAL
ENGAGEMENT
VERSION 3



# **APPENDIX 7.1**

**Notifications** 





# Submitted as part of the North CE Applied EIS/EA Documentation January 2018 – 1656263

# Commencement of the Environmental Assessment

# Osisko Hammond Reef Gold Project

Osisko Hammond Reef Gold (OHRG) is beginning an environmental assessment under the Environmental Assessment Act to develop and operate the Osisko Hammond Reef Gold Mine approximately 23 km northeast of Atikokan, Ontario. The Project involves the establishment, construction and operation of an open pit gold mine, and any ancillary activities and structures.



### **The Process**

On July 4, 2012, the Minister of the Environment approved the terms of reference for the Hammond Reef Gold Project. A copy of the approved terms of reference is available at:

#### Osisko Hammond Reef Gold

101 Goodwin Street Atikokan, ON POT 1C0 www.osisko.com

The provincial and federal Environmental Assessment (EA) processes are officially underway for the Project. With the approved terms of reference and the federal Environmental Impact Statement (EIS) Guidelines issued by the Canadian Environmental Assessment Agency (CEA Agency), OHRG will prepare and submit a single EA Report

that meet requirements outlined in both documents to the Ministry and the CEA Agency for a review. At that time, the public and other interested persons will be informed when and where the environmental assessment can be reviewed.

#### Consultation

Members of the public, agencies and other interested persons are encouraged to actively participate in the planning of this undertaking by attending consultation opportunities or contacting staff directly with information, comments or questions. Consultation opportunities are planned throughout the planning process including an Open House in Atikokan on August 18, 2012 and will be advertised in the Atikokan Progress, Fort Frances Times and Thunder Bay Chronicle. The Lac des Mille Lacs First Nation, the Wabigoon Lake Ojibway Nation, the Fort Frances Chiefs Secretariat and the Métis Nation of Ontario will also be notified of upcoming consultation opportunities.

If you would like to be added to our project mailing list or have project-related questions, please contact:

Osisko Hammond Reef Gold Ltd. Alexandra Drapack, Manager, Sustainable Development

155 University Avenue Suite 1440.

Toronto, Ontario, M5H 3B7
Tel: 416-363-8653 ext. 110
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## OSISKO HAMMOND REEF GOLD LTD.

Head Office:

1100, av. des Canadiens-de-Montréal Suite 300, P.O. Box 211 Montreal, Qc. H3B 2S2



www.osisko.com



# Notice of Consultation Event

# Osisko Hammond Reef Gold Project

Osisko Hammond Reef Gold Ltd. (OHRG) has initiated a study under the Environmental Assessment Act to develop and operate the Osisko Hammond Reef Gold Mine approximately 23 km northeast of Atikokan, Ontario. The Project involves the construction, operation and closure of an open pit gold mine and any ancillary activities and structures.



## **Progress to Date and Next Steps**

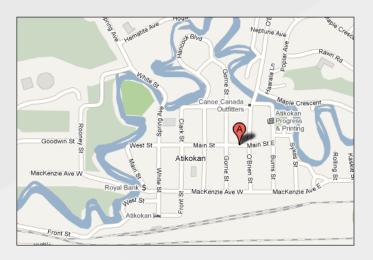
The provincial and federal Environmental Assessment (EA) processes are officially underway for the Project. The Terms of Reference (ToR) are currently pending acceptance by the provincial Minister of Environment. The Canadian Environmental Assessment Agency finalized and posted the federal Environmental Impact Statement (EIS) Guidelines on the Canadian Environmental Assessment Registry. Once the ToR and EIS Guidelines are both finalized, OHRG will prepare and submit a single EA Report that meet requirements outlined in both documents for review.

## **Public Open House**

Members of the public, agencies and other interested persons are encouraged to actively participate in the planning of this undertaking by attending consultation opportunities or contacting staff directly with information, comments or questions. OHRG is planning to host a Public Open House to share the baseline study results and answer your questions about the Project to assist in the preparation of the EIS/EA Report. Representatives from OHRG and their environmental consultant, Golder Associates will be in attendance to discuss the Project and answer your questions.

#### **Location:**

OHRG's Office 105 Main Street Atikokan, ON



Date: August 18, 2012 Time: 10 am to 3 pm

Your feedback is important to us! Please come out and take part in the EA planning process.

#### **Project Contact**

If you would like to be added to our project mailing list or have project-related questions, please contact:

#### Osisko Hammond Reef Gold Ltd. Alexandra Drapack

Manager, Sustainable Development 155 University Avenue, Suite 1440 Toronto. ON M5H 3B7

Tel: (416) 363-8653 ext. 110 Email: adrapack@osisko.com

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#### Ministry of Northern Development and Mines

# Notice of Project Status - Form 1

Personal information collected on this form is obtained under the authority of the *Mining Act*. This information will be used for the purpose of administering the Closure Plan requirements of the *Mining Act*. Questions concerning this collection should be directed to the Director of Mine Rehabilitation.

## Instructions

Please type or print and submit completed form to: Director of Mine Rehabilitation Ministry of Northern Development and Mines 933 Ramsey Lake Road, B6 Sudbury ON P3E 6B5 **Note:** When used for the purposes of clause 140 (1)(a) or 141 (1)(a) of the *Mining Act*, six copies of this Notice and the following supporting information must be supplied:

- 1. Operating Plan, including:
  - (a) description of the project
  - (b) a site plan
  - (c) means and location of access to project site
  - (d) targeted minerals
  - (e) expected term of the project
  - (f) number of workers
  - (g) operating schedule
- 2. Map of project boundaries
- 3. Uses of adjacent land and water
- Owners, occupants and other proponents of project lands
- Owners and occupants of immediately adjacent lands
- 6. Project schedule

Project Name	To report	project status un	der clause 140 (1) (a) or 141 (1) (a							
If more than two proponents or more than one mining rights holder, please list additional names as an appendix.  Proponent #7 Business Name  Unit Suite No.   Street No.   Street Name   PO Box    Unit Suite No.   Street No.   Street Name   PO Box    Unit Suite No.   Street No.   Street Name   PO Box    Unit Suite No.   Street No.   Street Name   PO Box    Unit Suite No.   Street No.   Street Name   PO Box    Unit Suite No.   Street No.   Street Name   PO Box    Fax No. (incl. area code)    416-363-7579    416-363-7579    Fax No. (incl. area code)    416-363-7579    Fax No. (incl. area code)    416-363-7579    Fax No. (incl. area code)    416-363-7579    416-363-7579    Fax No. (incl. area code)    416-363-7579    416-363-7579    416-363-7579    Fax No. (incl. area code)    416-363-7579			ald Project	Location Description						
Proposed ##   Business Name   Street No.   Street Name   PO Box   Postal Code   MSFI 3B7										
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Toronto Ontario M5H 3B7  Telephone No. (incl. area code & ext.)	1440	155	University Avenue							
Telephone No. (incl. area code & ext.) 416-363-8653 416-363-7579  Proponent #2 Business Name  Unit/Suite No.   Street No.   Street Name   Po Box    Telephone No. (incl. area code & ext.)   Fax No. (incl. area code)  (City/Town   Province   Province   Postal Code    Mining Rights Holder   Same as Proponent #1   Same as Proponent #2 Business Name  Unit/Suite No.   Street No.   Street Name   Province   Province   Postal Code    Mining Rights Holder   Province   Province   Postal Code    Mining Lands Description (Township/Area/Municipality, Lot/Concession, Claim, Is this project subject to an accepted   Yes   No    Telephone No. (incl. area code & ext.)   Fax No. (incl. area code)  Mining Lands Description (Township/Area/Municipality, Lot/Concession, Claim, Is this project subject to an order or Notice under   Yes   No    Thunder Bay Mining District. UTM Coordinates:   Is this project subject to an Order or Notice under   Yes   No    Thunder Bay Mining Lands   Advanced Exploration   Project   Advanced Exploration   Temporary Suspension   Inactivity   Closed Out   District   Temporary Suspension   Inactivity   Closed Out   District   Temporary Suspension   Inactivity   Closed Out   District   Mining Feature Rehabilitated to Prescribed Standard   Mine Hazard	City/Town				Province	Postal Cod	e			
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## Ministry of Northern Development and Mines October 2012

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#### 1.0 OPERATING PLAN

# a. Description of the Project

Osisko Hammond Reef Gold Ltd. (OHRG) is proposing the development of the Hammond Reef gold deposit near Atikokan, Ontario into a producing gold mine. The Project consists of the development of an open pit mine, including an ore processing facility, and a Tailings Management Facility (TMF). Also included is the supporting infrastructure (including an administrative building, a garage/mechanical shop and on-site worker's camp) at the site, the upgrading of an access road to the site, and the construction of a new electrical transmission line. Options assessments are currently being completed to determine the preferred location for the TMF. Three on-site options within OHRG's claim area are under consideration. All other facilities will be located close to the mine itself.

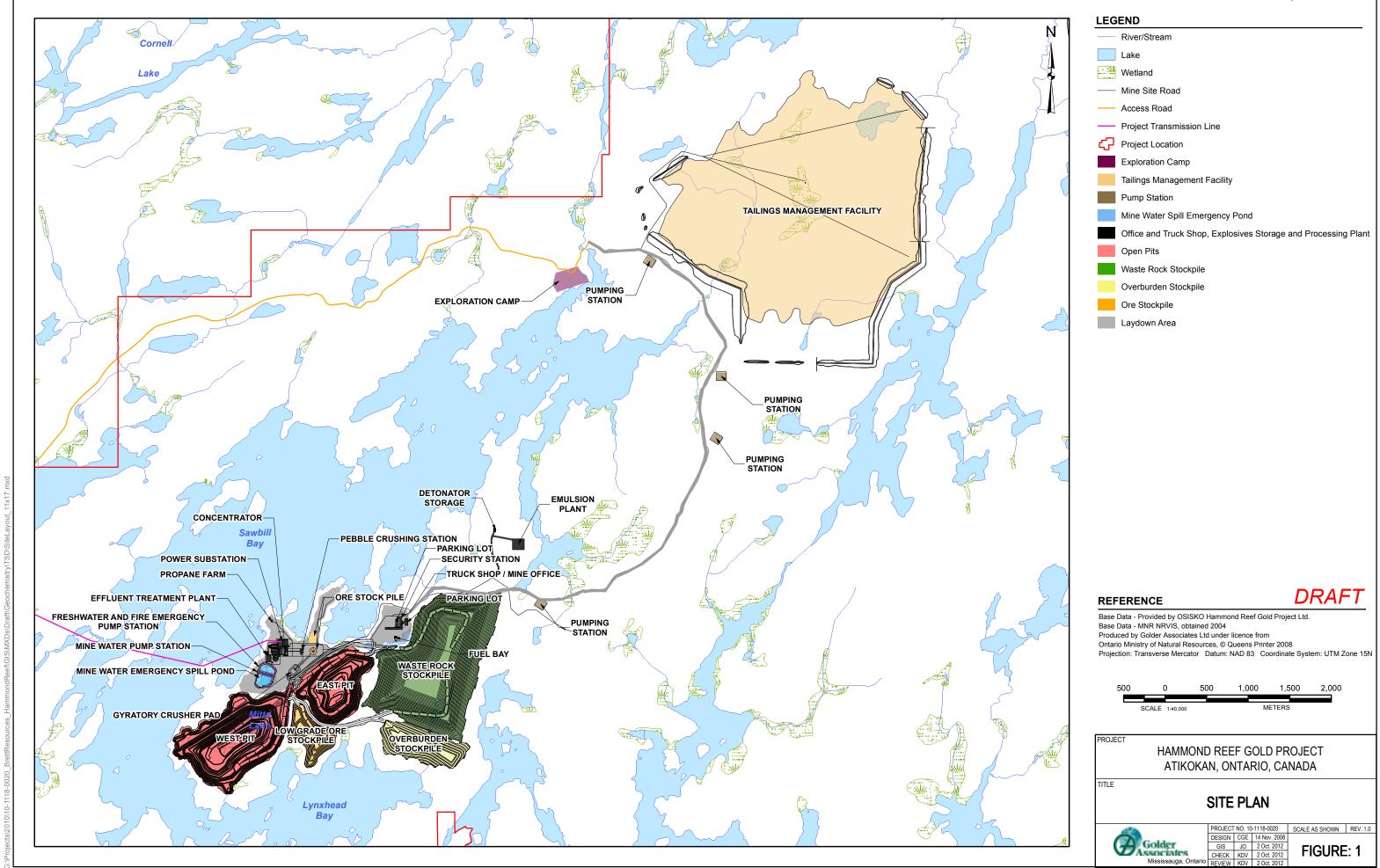
The Project will use open pit mining methods to recover the ore at a projected initial rate of 60,000 tonnes per day. Two open pits will be developed to access the ore that will require the draining of a small lake (Mitta Lake). As mining proceeds, pit dewatering will be necessary to access the ore, which is below the water table. Ramps will be used to move personnel and equipment into and out of the mine, and to move ore and waste rock to the surface.

The ore processing plant will include crushing, grinding, flotation, cyanidation- leaching, carbon-in-pulp gold recovery, gold elution, gold electro-winning, smelting using an induction furnace, cyanide destruction and tailings thickening and pumping. During the Project, about 259 M tonnes of tailings will be produced. The tailings will be managed in a TMF to be constructed on the property..

It is expected the mine will have an average workforce of 465 persons over the projected 11 year operating life. Supplies to support the operation of the site (e.g., fuel, explosives and consumables) will be transported along an access road on an as-required basis. Supporting infrastructure will include: maintenance facilities, warehouses, water supply plant, an explosives plant, sewage treatment plant, and an electrical substation. The on-site workers camp will have a capacity of 1,200 people during the construction period.

As per the requirements of Part VII of the *Ontario Mining Act*, a certified Closure Plan, outlining the method, schedule, cost and financial assurance of all rehabilitation to be conducted on the site once closure commences, is currently under development for the Project. The closure plan is being prepared based on the specific requirements outlined in the Ontario *Mining Act*, Reg. 240/00 (as amended by O.Reg.194/06 and 307/12). The Project's proposed closure concept is to allow the pit(s) to be flooded and rehabilitate disturbed land and watercourses, restoring them to their pre-Project conditions to the extent feasible.

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## c. Means and location of access to the Project site

The Project will require the upgrading of an existing gravel road to facilitate transport of equipment and supplies to the site. As well, on-site access roads will be needed to connect site infrastructure. Access roads are owned by the Ministry of Natural Resources (MNR) and currently used under a Memorandum of Understanding (MOU) between OHRG and MNR. The roads will be used according to the terms of the MOU.

Two alternatives for the access road are currently under consideration; the preferred alternative for access to the site will be via approximately 30 km of road from Atikokan, using an existing series of paved and gravel roads. The gravel roads will be upgraded, with additional stream crossings added as required. Access from Hwy 11 is via Hwy 622 to the Hardtack Road, and from there, north along the existing Sawbill Road to the junction with main site access road (known locally as the Reef Road). A second alternative is following the Raft Lake Road, which would require a bridge over the Raft Lake cut. Premier Lake Road will not be used to access the Project due to its existing quality and the fact that it is a significantly longer route.

As part of the Project, either the Sawbill Road or Raft Lake Road will be upgraded to accommodate heavy vehicles. The selected road will remain public, and it is anticipated that the majority of the road will continue to be maintained after Project closure. A road abandonment plan for the portions of the road that will not be maintained by the public upon closure, will be included in closure planning.

# d. Targeted Minerals

The targeted mineral for the Project is gold. Gold mineralization at the Hammond Reef property occurs in association with quartz veins, stockworks and fractures. These mineralized zones are contained within the discrete brittle-ductile fault segments of the Marmion Fault zone, which are broadly characterized as schistose tonalitic host rock. Mineralization occurs in fairly discrete bodies along a strike length of just over three kilometres, although similar mineralization has been mapped over a strike length of approximately 40 km. The mineralized bodies are roughly tabular in shape, striking east-northeast and dipping at moderate to shallow angles to the southeast. These zones can measure many tens of metres in thickness with strike-length measured in hundreds of metres. The mineralization has been traced from surface to a depth of approximately 450 m.

The property contains an inferred resource of 530.6 million tonnes of ore at a grade of 0.62 grams/tonne gold, and a cut-off grade of 0.3 grams/tonne. This amounts to an inferred resource of 10.52 million ounces of gold. The pit design is based on an inferred resource of 259.4 million tonnes at a grade of 0.8 g/t gold, resulting in 6.7 million ounces of gold.

# e. Expected term of the Project

Table 1: Overview of Project Timelines and General Activities

Schedule	Phase	General Activity
-2.5 to -2	Early Works	Upgrading access road
-2.5 to -1.5	Early Works	Building electrical transmission line
-2.5 to -1.5	Early Works	Building construction camp
-2.5 to 0	Construction	Site preparation
-1.5 to 1	Construction	Draining Mitta Lake
-1.5 to 0	Construction	Building 1 <sup>st</sup> Stage of Tailings Management Facility (TMF)
-2.5 to 0	Construction	Pre-stripping of open pit mining rock for TMF construction, access road, site preparation
-2.5 to 0	Construction	Building site infrastructure, including processing plant
0 to 0.5	Processing plant Commissioning	Start-up of processing plant operations
-1.5 to 11	Operation	Open pit mining
1 to 11	Closure and Reclamation	Progressive reclamation of the TMF
12 to 13	Closure and Reclamation	Closure and removal of most site infrastructure
12 to ~35	Closure and Reclamation	Natural backflooding of the open pit. Management of site runoff.

# f. Number of workers

For the construction phase, an average full time equivalent (FTE) workforce of 200 is anticipated with a peak of approximately 1,200 construction workers over the 30 month construction period. For the operations phase, an average annual FTE workforce of 465 is anticipated over the 11 year operations period.

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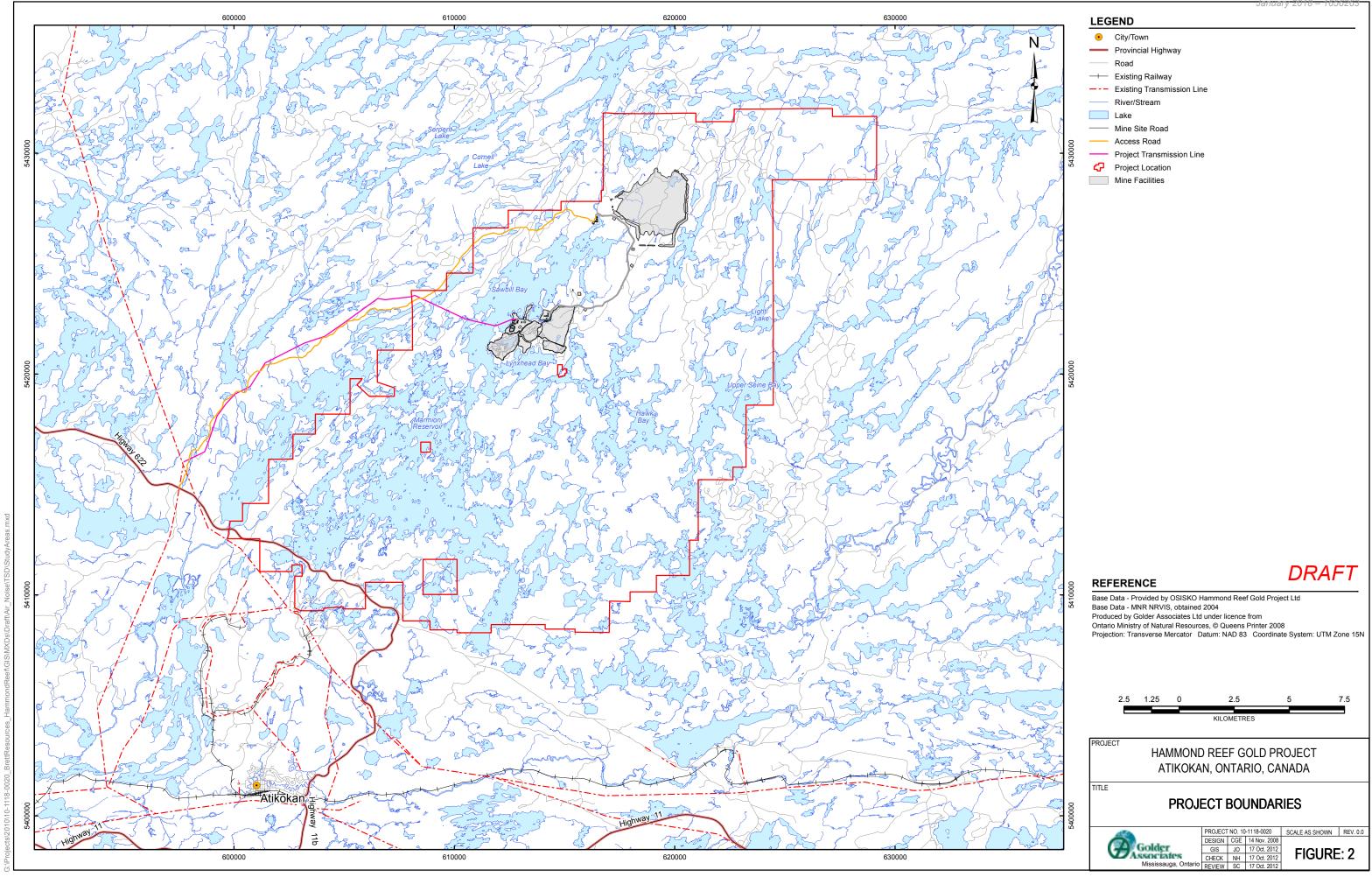
# g. Operating schedule

Operations are anticipated to last for approximately 11 years, during which time ore will be mined and processed. Where possible, progressive reclamation of the TMF will be conducted. Mining will occur through open pit mining methods for the life of the Project. During construction, ore encountered in the pre-stripping phase will be stockpiled and used as plant feed once the plant is commissioned.

# h. Tailings Management

By the end of operations, the Tailings Management Facility (TMF) will contain about 260 M tonnes of tailings. Thickened tailings will be delivered to the TMF through a tailings disposal pipeline and pumping system installed between the process plant and the TMF along the mine access road alignment. The deposition plan for the thickened tailings will result in a flat conical surface with slopes of about 3%. The TMF will include a reclaim water pond impounded along its southern limits. A reclaim water pump and pipeline system will allow water to be pumped from the reclaim pond back to the Process Plant, where it will either be reused or treated and released. Waste Rock Management

Mine development will generate approximately 289 M tonnes of waste rock over the life of mine to be stockpiled east of the East Pit. About 16 M tonnes of waste rock will be deposited in the West Pit in the later stages of mining. This rock will be submerged as the open pits flood. The remaining waste rock will remain in the Waste Rock Stockpile. The Waste Rock Stockpile has been designed with conservative sideslopes (i.e. overall slope ~2.5 (H:V) with 1.5 (H:V) inter-bench slopes and 12.25 m wide benches spaced every 10 m vertically). This slope design should provide for long-term stability of the stockpile slopes.



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#### 3.0 USES OF ADJACENT LAND AND WATER

# a. Mining

Osisko owns the mineral rights for the mine site and collocated ore processing facility; however, some of the surface rights belong to the Crown. Osisko has secured an option to purchase the surface rights of up to three patented mining claims within the property.

Mining claims are prevalent in the area surrounding the Hammond Reef property, reflecting the long history of gold exploration in the area. The core of the Hammond Reef property consists of 239 mineral claims (22,811.6 ha) that are 100% owned by OHRG. An additional 81 claims (14,081.0 ha) are outside the core property and are claims on which OHRG has agreements with others.

# b. Forestry

The Project is located entirely on Crown Land and all forestry activity is managed by the MNR in accordance with the Crown Forest Sustainability Act. The MNR licenses the use of Crown forests through Forest Management Units. The Local Study Area (LSA) is part of two Forest Management Units, specifically the Crossroute Forest Management Unit and the Sapawe Forest Management Unit. Forestry operations in both of the units may be affected by the Project. It should be noted that both forestry operations are substantially larger than the Project area; the Crossroute Forest area includes 1,593,225 hectares while the Sapawe Forest includes 301,500 hectares.

These two Forest Management Units are part of forest operations licensed to two companies, Abitibi-Consolidated and Atikokan Forest Products. Abitibi-Consolidated manages the Crossroute Forest, and Atikokan Forest Products manages the Sapawe Forest. As required by the Crown Forest Sustainability Act, Forest Management Plans have been created for these forests by each company. These plans identify current and potential forest land usage over a 10-year period (2007-2017 for Crossroute Forest and 2010-2020 for the Sapawe Forest). Merchantable timber cleared from the project area will be managed by the company which holds the management plan for the specific part of the site.

#### c. Water Users

There are three waterpower facilities within the Seine River watershed with the following associated power dams:

- Valerie Falls Generating Station, located on the man-made diversion of the river around the site
  of the former Steep Rock Mine, and owned and operated by Valerie Falls Limited Partnership
  (Brookfield Renewable Energy Group);
- Calm Lake Generating Station, located on the Seine River at the outlet of Calm Lake, and owned and operated by H2O Power Limited Partnership;
- **Sturgeon Falls Generating Station**, located about 90 km east of Fort Frances, also owned and operated by H2O Power Limited Partnership.

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#### d. Outdoor Tourism and Recreation

The Marmion Reservoir is designated as a tourism area by the Ministry of Natural Resources. Angling, boating, canoeing and camping by both local residents and non-residents occur throughout the open water season. The lake is a warm water lake and produces excellent angling for bass, walleye and northern pike. Mining activities are recognized as an intended land use provided the recreational qualities of the area are not adversely affected.

The Project is located within Fisheries Management Unit 5. Commercial bait harvesting is licensed separately by Bait Harvesting Areas, each approximately 100 km<sup>2</sup>. There are 10 Bait Harvesting Areas located within the Project area.

Marmion Reservoir is known for its wilderness fishing experience, particularly for small-mouth bass fishing. Sawbill Bay is a particularly well known bass fishing destination. Northern pike and walleye are also commonly caught from Marmion Reservoir. There are a number of access points to the lake from Highway 622. However, due to its size, intricacy and fish population, the lake offers an isolated fishing experience year round. The lake is utilized by several tourism operators to sustain their business activities, and by residents for recreation purposes. The lake is also the site of the Atikokan Bass Classic, which is one of the largest and most important annual events for the Town of Atikokan. Fishers utilize both the waters of Upper Marmion and Lower Marmion during the two day tournament.

The Project area includes part of five trap lines and contains two trapper cabins. These two trapper cabins are located within 2 km of the proposed tailings management facility. A number of other trapper cabins are adjacent to the Project area. The primary species trapped are muskrat, marten and beaver.

The Project area is located in Wildlife Management Unit 12B. Within each WMU there are a number of Bear Management Areas. Non-resident hunting permits for bear hunting are managed through the use of Bear Management Areas. These areas are Crown Land licensed to an operator and managed by the MNR for the purpose of providing bear hunting services specifically to non-resident hunters.

There are archery and gun seasons for moose in WMU 12B that are open to residents and non-residents. The archery season typically opens three weeks before the gun season, which is about five weeks long for non-residents. In 2010, there were an estimated 1,646 active residential moose hunters in this area and 190 moose harvested. White-tailed deer are observed during summer and fall in WMU 12B, but they tend to move south for winter. Game birds such as ruffed and spruce grouse are also hunted in this area.

# e. Traditional Land Use

A Traditional Use Study was carried out with nine First Nations communities. The results of the study are confidential but will be used to inform the Project planning process. Osisko has also provided capacity for a Traditional Knowledge study which is currently underway by the Métis Nation of Ontario (MNO).

# 4.0 OWNERS, OCCUPANTS, AND OTHER PROPONENTS OF PROJECT LANDS

OHRG is the sole proponent of the Hammond Reef Gold Project. All mineral claims within the Project footprint are held by OHRG.

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# 5.0 OWNERS AND OCCUPANTS OF IMMEDIATELY ADJACENT LANDS

#### a. Crown Land

The Hammond Reef property is covered by MNR Crown Land Use Policy areas G2568 (Finlayson) and G2571 (Marmion), which also extend to neighbouring land uses. Existing uses in these areas are listed as logging, mineral exploration, trapping, commercial bait fishing, aggregate extraction, angling, boating, canoeing, hunting, tourism and wild rice harvesting. Both areas cover portions of the Sapawe Forest and the Crossroutes Forest. The site is not on or adjacent to Provincial Parks or any other provincially designated use.

## b. Private Land

There is one private land owner who has mineral claims adjacent to the Project lands. All other adjacent lands are owned by the Crown.

# c. Aboriginal Groups

The Project is not located on or adjacent to a First Nation Indian Reserve. The nearest First Nation Indian Reserve is located approximately 41 km east of the Project site and is currently unoccupied because of historical flooding.

The Project site is located on Treaty 3 lands, the traditional territory of the Anishinaabe people. Osisko's Aboriginal engagement plan for the Project includes active communication with nine identified First Nations: Seine River First Nation, Couchiching First Nation, Naicatchewenin First Nation, Mitaanjigamiing First Nation, Lac des Mille Lacs First Nation, Nigigoonsiminikaaning First Nation, Lac La Croix First Nation, Rainy River First Nation and Wabigoon Lake Ojibway Nation.. Osisko has an agreement with eight of the nine First Nations. Wabigoon Lake Ojibway Nation is not party to the agreement, but was scoped in to the Aboriginal engagement plan due to their initial assertion that they harvest wild rice in the vicinity of the Project. Members of Wabigoon Lake Ojibway Nation have attended several communication events and have since provided a formal letter stating that they do not harvest wild rice in the area.

The site is located in MNO Region 1, within the Rainy Lake/Rainy River Traditional Harvesting Territory. Harvesting Territories are identified by MNO throughout the province as part of their agreement with the Ministry of Natural Resources. Each Harvesting Territory is managed by a Captain of the Hunt who administers Harvesting Certificates within their respective territory. Osisko has an agreement with the MNO including 4 communities: Atikokan and Surrounding Area Métis Council; Kenora Métis Council; Northwest Métis Nation of Ontario Council; and Sunset Country Métis Council.

# d. Designated Environmental or Cultural Sites

There are no national parks or historic sites in the vicinity of the Project.

The Atikokan Lower Basin A wetland is a provincially significant wetland complex made up of seven individual wetlands. The complex is composed of three wetland types: fen (6%), swamp (5%) and marsh (88%). The Atikokan Lower Basin A wetland is located within approximately 2 km of the south boundary of the Hammond Reef claim block and approximately 20 km south of the exploration camp.

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## 6.0 PROJECT SCHEDULE

As indicated by Table 1, the Hammond Reef Gold Project will be completed in four phases: construction, operations, closure and post-closure. Each phase of the Project will be evaluated for a potential interaction with the physical, biological and social environment. Each Project phase has a defined list of activities and a planned schedule for completion.

#### CONSTRUCTION

The construction phase will begin once all relevant permits have been received. The construction phase is expected to last a b o u t 30 months. Upgrading of the access road and construction of the project transmission line will take priority, as overall Project construction and operations depends on having suitable electricity and access to the Project Site. Mitta Lake will be dewatered to allow mining to proceed.

#### **OPERATIONS**

The operations phase is expected to last for approximately 11 years. During the operations phase, the ore will be removed through development of the open pit. The mining process will also generate overburden and waste rock. The ore will be processed in an on-site Processing Plant. Ore processing will generate tailings which will be managed in the on-site TMF.

#### **CLOSURE**

The closure phase includes a list of activities that are designed to ensure that the Project Site is left in a manner that reduces the potential impacts on the social and natural environment. Project infrastructure will be removed and environmental monitoring will take place until it is shown that the site meets all agreed closure conditions.

The TMF closure measures will physically stabilize the tailings surface to prevent erosion and dust generation. Because they are non-acid generating, it should be practicable to re-vegetate the tailings surface directly, without the requirement to place a layer of topsoil. Details of the re-vegetation (i.e., seed mixture, fertilizer, mulch) will be verified prior to closure using test plots on inactive parts of the TMF surface.

The tailings dams will remain in place as permanent impoundment structures. They will be designed and constructed to be stable under long return period floods and seismic events associated with closure. It should not be necessary to further upgrade the stability of the dams at closure.

Water in the five seepage collection ponds will continue to be monitored after closure. The water in these ponds will continue to be pumped back into the TMF until such time as the water quality in the individual ponds becomes acceptable for direct discharge. When that occurs consistently, individual seepage pond dykes will be breached and their pumping systems will be removed.

The water quality in the TMF reclaim pond is expected to improve after closure. Cyanide, ammonia and thiosalts will decay fairly rapidly after processing ceases. Suspended solids will also drop as the surface is re-vegetated. When the water quality in the reclaim pond improves sufficiently, the spillway will be upgraded to allow direct discharge of water from the closed TMF into Sawbill Bay. At that point, pumping and treatment of water from the TMF will cease and the reclaim water pump and pipeline system will be decommissioned.

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At closure, the top surface of the waste rock pile will be graded to help shed runoff and reduce infiltration. Drainage measures (i.e., chute drains and grading of benches) will be put in place to safely convey runoff to the toe of the pile, and suitable erosion protection will be provided. The mine rock is not expected to generate acidic runoff. For this reason, it is not proposed to place a soil cover over the surface of the pile. The pile will be physically stable.

Water in the four seepage collection ponds will continue to be monitored after closure. The water in these ponds will continue to be pumped until such time as the water quality in the individual ponds becomes acceptable for direct discharge. When that occurs consistently, individual seepage pond dykes will be breached and their pumping systems will be removed.

At the end of mining, pumping of water out of the open pits will cease and the open pits will slowly fill with water. Preliminary modelling indicates that it will take between 20 and 30 years for the water level to rise to Elev. 420 m, at which time the flooded open pits will begin to overflow. Rock cuts will be excavated to direct the overflow through the West Pit into Marmion Lake, near the location of the operational water discharge.

Just prior to closure, a rock mechanics evaluation of the open pit slopes will be carried out. If any unstable areas are identified, then "safe lines" will be established. A fence or rock barrier wall will be constructed around the pit perimeter to prevent inadvertent access by the public to any slopes. The fence or wall will be located outside of any safe lines.

The site facilities (e.g. the Processing Plant and equipment, the garage/maintenance shops, the camp, etc.) will be redundant after closure. Portable facilities such as trailers will be removed from the site. Permanent facilities will be decommissioned and demolished. Materials will be salvaged or sold as scrap to the extent possible. Other non-hazardous demolition waste will be disposed of in a solid waste landfill to be licensed within the TMF. Any hazardous materials or liquid wastes will be removed from the site for management and disposal in accordance with applicable legislation. Any soils impacted by hydrocarbons will be either bio-remediated on site or shipped to a licenced facility.

Once the Processing Plant and other site infrastructure are demolished and the mine site is re-vegetated,, the remaining runoff reporting to the process plant collection pond should no longer require treatment. At that time, the process plant collection pond and the Effluent Treatment Plant (ETP) will be decommissioned. Normal runoff flow directions will be restored.

It is expected that there will be a period during which there will no longer be a discharge from the ETP into Marmion Lake. At the same time, reclaim water from the TMF and water pumped from the various seepage collection ponds will report to the open pits and will not discharge to the environment.

#### **POST-CLOSURE**

Activities during the post-closure phase will focus on monitoring programs and maintaining the integrity of the environment and of any retained infrastructure. Post-closure activities will extend 10 years after the closure of the Mine.

About 20 to 30 years after closure, the water in the flooded open pits will begin to overflow, and this overflow will be directed through a ditch into Marmion Lake. After pit flooding is sufficiently advanced and prior to pit overflow, the water quality at the top of the flooded open pits will be evaluated, and a decision will be made regarding post-overflow treatment. It is likely that stratification of water in the flooded open

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pit will result in surficial water quality which is suitable for discharge to Marmion Lake. If further treatment of the open pit water is required, this can be done by either:

- Treating the water in the flooded open pit prior to overflow by chemical or biological means; or
- Treating the overflow water in a Wetland Treatment System prior to discharge into Marmion Lake.

The closure plan will provide details of a post-closure programs for the monitoring of surface water quality, ground water quality and environmental impacts.

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# **PROJECT SCHEDULE**

	2010	2011	2012	2013	2014	2015	2016	•••	2026	2027	2028	2029
Pre-feasibility												
EA and Permitting												
Feasibility												
Construction												
Operations								\$				
Decommissioning and Closure												

Ontario

Ministry of Northern Development and

Mineral Development and Lands Branch

933 Ramsey Lake Road, B6 Sudbury ON P3E 6B5 Tel.: (705) 670-5784 Fax: (705) 670-5803

Toll Free: 1-888-415-9845, Ext 5784

Ministère du Développement du Nord et des

Direction de l'exploitation des minéraux et de la gestion des terrains miniers

933, chemin du lac Ramsey, étage B6

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Sans frais: 1-888-415-9845, poste 5784

November 09, 2012

Sudbury File Number: 005 Thunder Bay File Number: HMR-02

Ms. Alexandra Drapack Director, Sustainable Development Osisko Hammond Reef Gold Ltd. 155 University Avenue, Suite 1440 Toronto ON M5H 3B7

Dear Ms. Drapack:

RE: Notice of Project Status – Mine Production Osisko Hammond Reef Gold Project, 23 km northeast of the Town of Atikokan

Your Notice of Project Status for the Osisko Hammond Reef Gold Project, as required under Section 141.(1)(a) of the Mining Act, R.S.O.1990, Chapter M14 for Mine Production was received on October 30, 2012. Copies will be circulated to the ministries of the Environment, Labour, Transportation and Natural Resources, the Town of Atikokan, and the Canadian Environmental Assessment Agency. It will also be provided to Couchiching First Nation, Lac La Croix First Nation, Mitaanjigamiing First Nation, Naicatchewenin First Nation, Nigigoonsiminikaaning First Nation, Rainy River First Nation, Seine River First Nation, Lac des Mille Lacs First Nation, Wabigoon Lake Ojibway Nation and appropriate representatives of the Métis Nation of Ontario.

This Notice indicates that the Osisko Hammond Reef Gold Project will be changing status from undeveloped mining lands to mine production. A Closure Plan has not been filed for this site.

You are required to give public notice and file a certified Closure Plan prior to commencing Mine Production, pursuant to Section 141.(1)(b) and (c) of the Mining Act, R.S.O.1990; Chapter M14. Financial assurance must be submitted with the Closure Plan.

I am aware that Osisko Hammond Reef Gold Ltd. is currently conducting an environmental assessment (EA) for the project under the Ontario Environmental Assessment Act and the former Canadian Environmental Assessment Act (S.C.1992, c.37). The certified Closure Plan will not be accepted as filed until the completion of the federal and provincial EA processes. This will ensure that the Crown's Duty to Consult with Aboriginal communities is met and this is consistent with the intent of the Canada-Ontario Agreement for Environmental Assessment Cooperation and the One-window Coordination Process for Mineral Development Projects in Ontario.

Ms. Alexandra Drapack November 09, 2012 Page 02

For questions related to the financial assurance, please contact Ed Solonyka at 1-888-415-9845 ext. 5829. For any other questions regarding the Closure Plan, please contact Patrick Barnes, Mineral Exploration and Development Consultant at 807-475-1583.

Sincerely, <Original signed by>

A / Director of Mine Rehabilitation

# **Notice of Public Comment Period**

# DRAFT Environmental Impact Statement / Environmental Assessment Report

#### Osisko Hammond Reef Gold Project

Osisko Hammond Reef Gold (OHRG) has developed a draft Environmental Impact Statement /Environmental Assessment (EIS/EA) Report for the Hammond Reef Gold Project (the Project).

Over the next seven weeks, OHRG will be sharing the details of the draft EIS/EA Report with the Project stakeholders and accepting comments. Planned information sharing includes presentations to government, meetings with Aboriginal groups and an Open House in Atikokan.

The combined draft EIS/EA Report was prepared according to provincial and federal information requirements for the Project. Provincially the requirements include the Terms of Reference approved by the Minister of the Environment on July 4, 2012. Federally, the requirements include the EIS Guidelines prepared by the Canadian Environmental Assessment Agency and posted on the Canadian Environmental Assessment Registry on December 15, 2011.

The Project is a proposed mine located approximately 23 km northeast of Atikokan, Ontario. The Project involves the establishment, construction, operation, and closure of an open pit gold mine, and any ancillary activities and structures.



The draft EIS/EA Report will be available for public review and comment from February 15, 2013 to April 5, 2013. You may review the draft EIS/EA Report on the Osisko website at <a href="http://www.osisko.com/en/properties/hammond-reef/enviromental.html">http://www.osisko.com/en/properties/hammond-reef/enviromental.html</a>

The draft EIS/EA Report is also available for review in hard copy Monday to Friday 8:30 am - 5: 00 pm at the following locations:

Osisko Hammond Reef Gold 101 Goodwin Street Atikokan, ON P0T 1C0 Ministry of the Environment EnvironmentalApprovals Branch St. Clair Avenue West, Floor 12A Toronto, Ontario M4V 1L5 416-314-8001/1-800-461-6290

Anyone wishing to provide comments on the draft EIS/EA Report should submit their comments in writing and/or by email to Osisko Hammond Reef Gold by April 5, 2013. All comments should be submitted to:

Osisko Hammond Reef Gold Ltd. Alexandra Drapack, Director of Sustainable Development 155 University Avenue Suite 1440 Toronto, Ontario, M5H 3B7 email: adrapack@osisko.com

Further details will be provided on the Open House via advertisements in the Atikokan Progress, Fort Frances Times and Thunder Bay Chronicle.

Under the Freedom of Information and Protection of Privacy Act and the Environmental Assessment Act, unless otherwise stated in the submission, any personal information such as name, address, telephone number and property location included in a submission will become part of the public record files for this matter and will be released, if requested, to any person.