

## **1.0 INTRODUCTION**

This Environmental Impact Statement/Environmental Assessment Report (EIS/EA Report) has been prepared for the proposed Hammond Reef Gold Project (Project) with the objective of meeting provincial requirements for an Individual Environmental Assessment and federal requirements for a Comprehensive Environmental Assessment. The EIS/EA Report meets both provincial and federal requirements provided in the Project's Terms of Reference (ToR) approved by the Ontario Minister of the Environment (July 2012) (Appendix 1.I), and with the Environmental Impact Statement Guidelines (EIS Guidelines) issued for the Project by the Canadian Environmental Assessment Agency (CEA Agency) (December 2011) (Appendix 1.II).

Appendix 1.III provides a summary of the conformance of the EIS/EA Report with the ToR and EIS Guidelines.

A Draft version of this EIS/EA Report was published for public comment on February 15, 2013. Osisko Hammond Reef Gold (OHRG) received approximately 700 comments from public, government and Aboriginal stakeholders. The comments were considered, discussed and incorporated into this Final EIS/EA Report as appropriate. The document provided herein is the Final version of the EIS/EA Report. Technical Support Documents (TSDs) were not revised in their entirety; however for each of the TSDs the latest version (Version 2) includes: a summary of any material changes or amendments relevant to the subject matter of the original TSD; supplemental information materials or information to support these material changes or to address specific stakeholder comments; and, the initial TSD as published in February 2013 for reference.

Appendix 1.IV provides a copy of each comment received and OHRG's response to the comment. A detailed description of major revisions undertaken to the EIS/EA Report is included in the Executive Summary, Chapter 7 Consultation and Chapter 12 Conclusions.

## **1.1 Project Location**

The location of the Project is shown on Figure 1-1. The Project is located within the Thunder Bay Mining District in Northwestern Ontario, approximately 170 km west of Thunder Bay and 23 km northeast of the Town of Atikokan. Thunder Bay is the closest major transportation hub. Atikokan is located immediately north of the Trans-Canada Highway.

Access to the Hammond Reef property is presently via two routes: the Premier Lake Road, a gravel road that intersects Highway 623 near Sapawe and the Hardtack-Sawbill Road, a gravel road that intersects Highway 622 northwest of the Town of Atikokan.

The Project is located within Treaty 3 lands. Treaty 3 includes approximately 55,000 square miles in Ontario west of Thunder Bay running along the Canadian/American border to the south, and extending slightly into Manitoba in the west. It includes 28 First Nations communities and the Towns of Atikokan, Fort Frances, Dryden and Kenora. The First Nations group governing these lands is the Grand Council of Treaty 3, the historic government of the Anishinabe Nation of Treaty 3.

The Project is also located within an area recognized by the Métis Nation of Ontario as the Treaty 3/Lake of the Woods/Lac Seul/Rainy River/Rainy Lake traditional harvesting territories, also named Region 1.

### **1.1.1 Project Coordinates**

The location of the Project Site (centred on the open pits) is:

- UTM Coordinates (UTM NAD83 15N):
  - Easting: 612648.06.
  - Northing: 5421549.37.
- Latitude and longitude:
  - Latitude: 48° 56' 11.799" North.
  - Longitude: 97° 27' 42.5124" West.

### **1.1.2 Project Site Address**

The legal description of the Project Site is:

Rainy River District  
Sawbill Bay Township

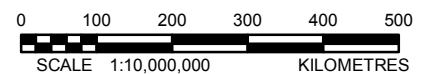
The Project Site address and contact information is:

Osisko Hammond Reef Gold Ltd.  
101 Goodwin Avenue  
Box 2020  
Atikokan, Ontario  
Telephone: 807-597-4481  
Facsimile: 807-597-2254



**REFERENCE**

Base Data - Provided by OSISKO Hammond Reef Gold Project Ltd.;  
 Base Data - MNR NRVIS, obtained 2004. Produced by Golder Associates Ltd  
 under licence from Ontario Ministry of Natural Resources, © Queens Printer 2012  
 Projection: Transverse Mercator Datum: NAD 83 Coordinate System: UTM Zone 15N



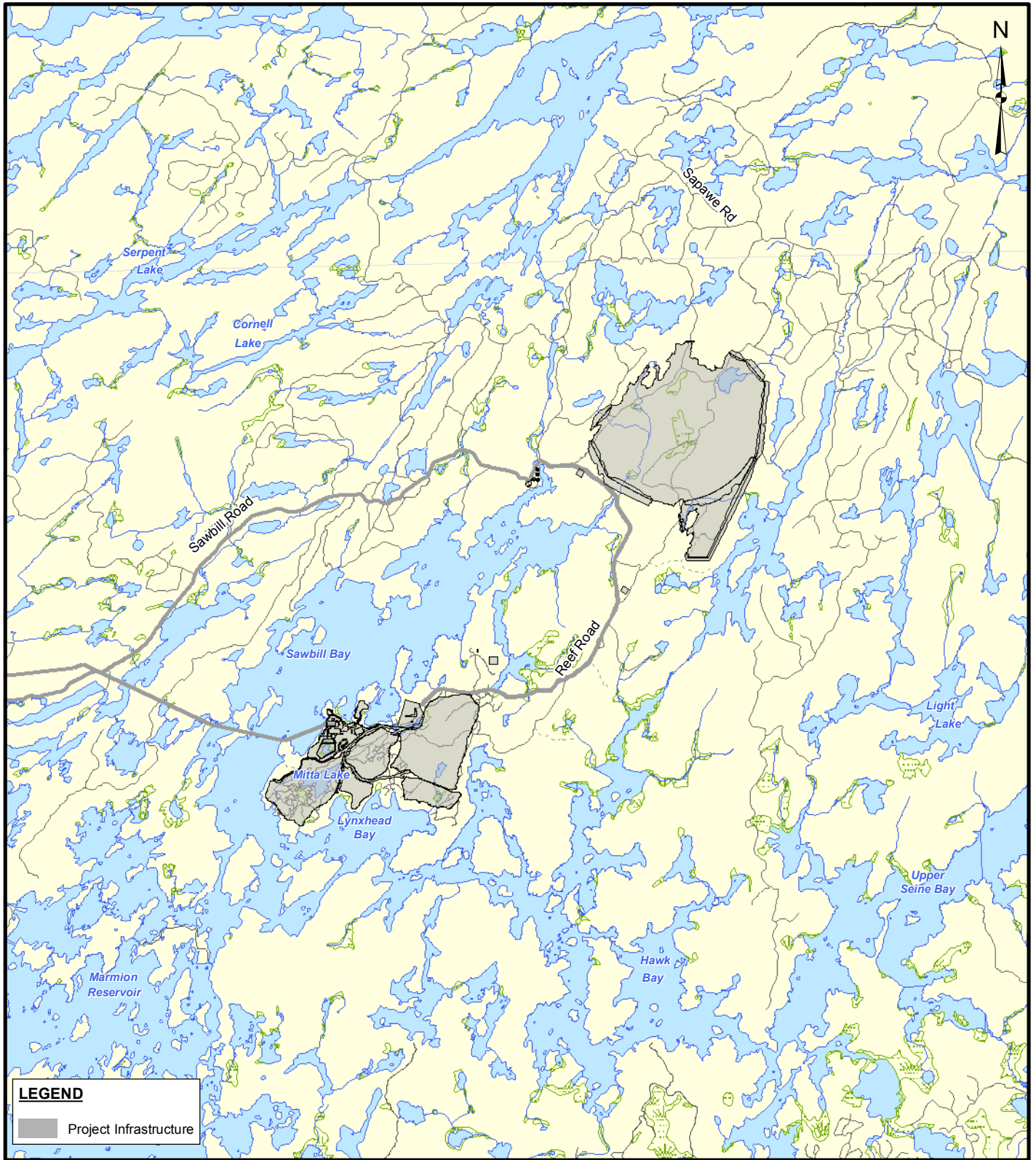
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TITLE	<b>PROJECT LOCATION, SCALE OF 1:10,000,000</b>	
PROJECT	HAMMOND REEF GOLD PROJECT ATIKOKAN, ONTARIO, CANADA	
		<b>FIGURE: 1-1a</b>

PROJECT No. 13-1118-0010

SCALE AS SHOWN

VERSION 2

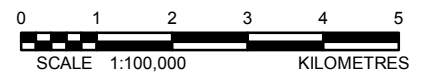


**LEGEND**

Project Infrastructure

**REFERENCE**

Base Data - Provided by OSISKO Hammond Reef Gold Project Ltd.;  
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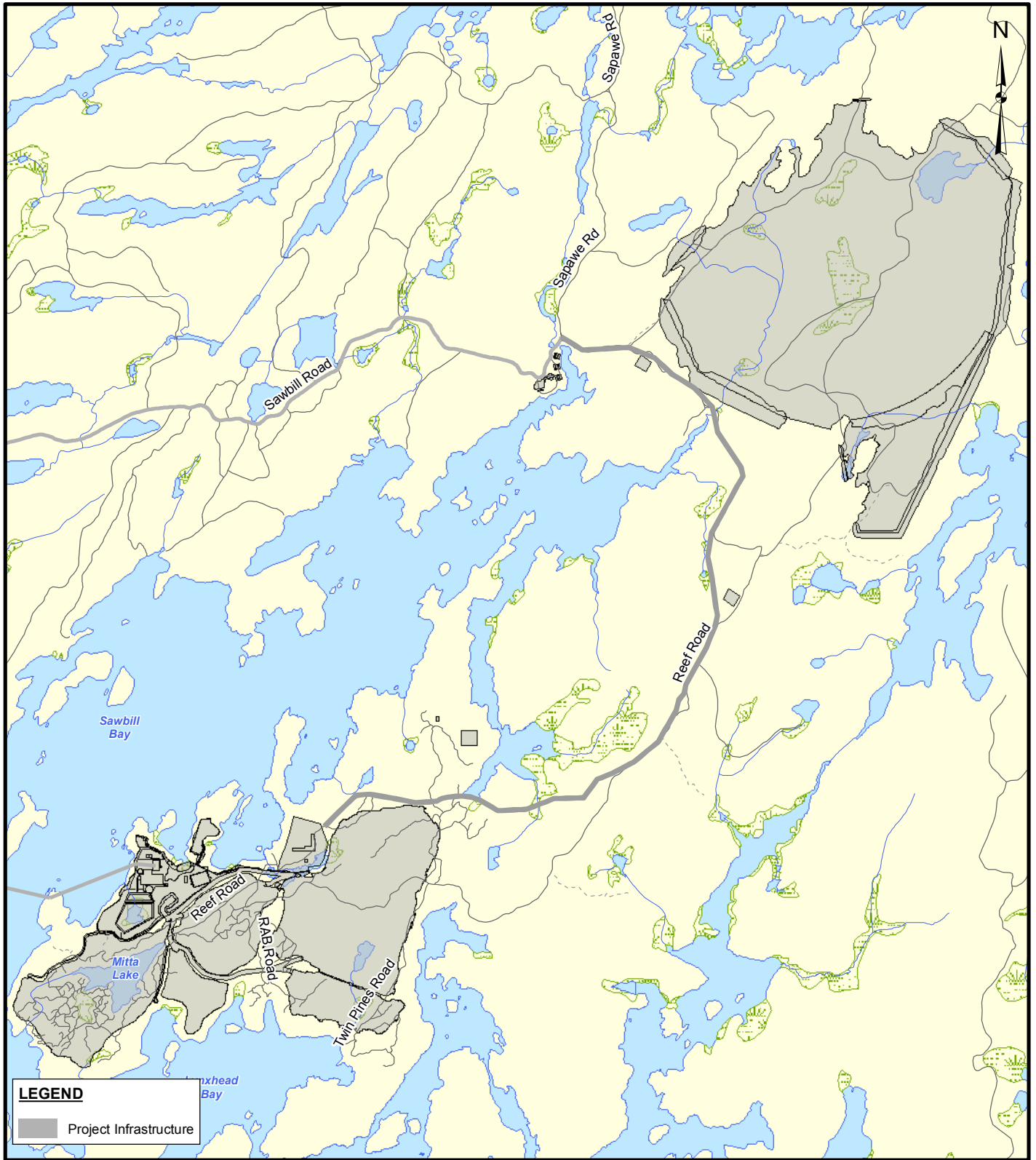
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PROJECT	

PROJECT No. 13-1118-0010

SCALE AS SHOWN

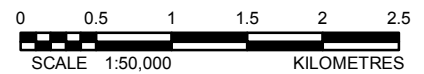
VERSION 2

**FIGURE: 1-1b**



**REFERENCE**

Base Data - Provided by OSISKO Hammond Reef Gold Project Ltd.;  
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 Projection: Transverse Mercator Datum: NAD 83 Coordinate System: UTM Zone 15N



DATE	2 Dec. 2013
DESIGN	CGE
GIS	JO
CHECK	CC
REVIEW	THW

TITLE	<b>PROJECT LOCATION, SCALE OF 1:50,000</b>
PROJECT	
FIGURE: 1-1c	

PROJECT No. 13-1118-0010

SCALE AS SHOWN

VERSION 2



## **1.2 The Proponent**

The proponent for the Project is Hammond Reef Gold Ltd. (OHRG). OHRG is a subsidiary of Osisko Mining Corporation (Osisko) and is 100% owned by Osisko. There are no co-proponents for the Project. Osisko is the Project sponsor, through OHRG.

Osisko's corporate contact information is:

### **Osisko Mining Corporation**

Ruben Wallin, Vice President, Environment and Sustainable Development  
1100 av. des-Canadiens-de-Montreal  
Bureau 300, C.P. 211  
Montréal, Québec, H3B 2S2  
Telephone: 514-735-7131  
Facsimile: 514-933-3290  
E-mail: [rwallin@osisko.com](mailto:rwallin@osisko.com)  
Website: [www.osisko.com](http://www.osisko.com)

The primary OHRG contact for the EIS/EA Report is:

### **Osisko Hammond Reef Gold Ltd.**

Alexandra Drapack, Director of Sustainable Development  
155 University Avenue  
Suite 1440  
Toronto, Ontario, M5H 3B7  
Telephone: 416-363-8653 extension 110  
E-mail: [adrapack@osisko.com](mailto:adrapack@osisko.com)

### **1.2.1 Osisko Mining Corporation**

Osisko Mining Corporation is a mining company based in Montreal, Quebec. The Company is focused on acquiring, exploring, developing and mining gold properties, with the aim of becoming a leading mid-tier gold producer. Its flagship project is the Canadian Malartic gold mine located in the Abitibi mining district of Quebec. Because the Hammond Reef Gold Project has many similarities to the Canadian Malartic Mine, much of the design and planning for the Hammond Reef Gold Project has drawn on the successful planning and implementation of the Canadian Malartic Mine.

Osisko has completed its construction of the Canadian Malartic gold mine in the heart of the Abitibi mining district. The first gold bar was poured on April 13 2011, and commercial production began in May 2011. The Canadian Malartic deposit currently represents one of the biggest gold reserves in production in Canada with Proven and Probable Reserves of 10.1 million ounces of gold (February 2013), and is still growing through ongoing drilling on adjacent mineralized zones.

Osisko has won a number of prestigious awards, including the AEMQ "Prospector of the Year" Award in 2006, the PDAC "Prospector of the Year" Award in 2007, the AEMQ "e3" Award in 2008, the AEMQ "Entrepreneur of

the Year" Award in 2009 and the CIM Syncrude Award for Excellence in Sustainable Development in 2010. Founders of Osisko were also recognized as "Mining Men of the Year" for 2009 by the Northern Miner.

Osisko is listed on the Toronto Stock Exchange with ticker symbol TSE:OSK. Osisko is included on the S&P/TSX Composite Index (including the S&P/TSX Global Gold Index and the S&P Global Mining Index), the leading indicator of market performance based on Canada's major corporations.

### 1.2.2 Corporate Management Structure

The corporate structure of Osisko is shown in Figure 1-2 as it relates to the management responsibilities for the Project. The EIS/EA Report is the responsibility of the Director of Sustainable Development, and was prepared with the help of the EIS/EA Team. This team included Osisko staff and Osisko's environmental consultant, Golder Associates Limited.

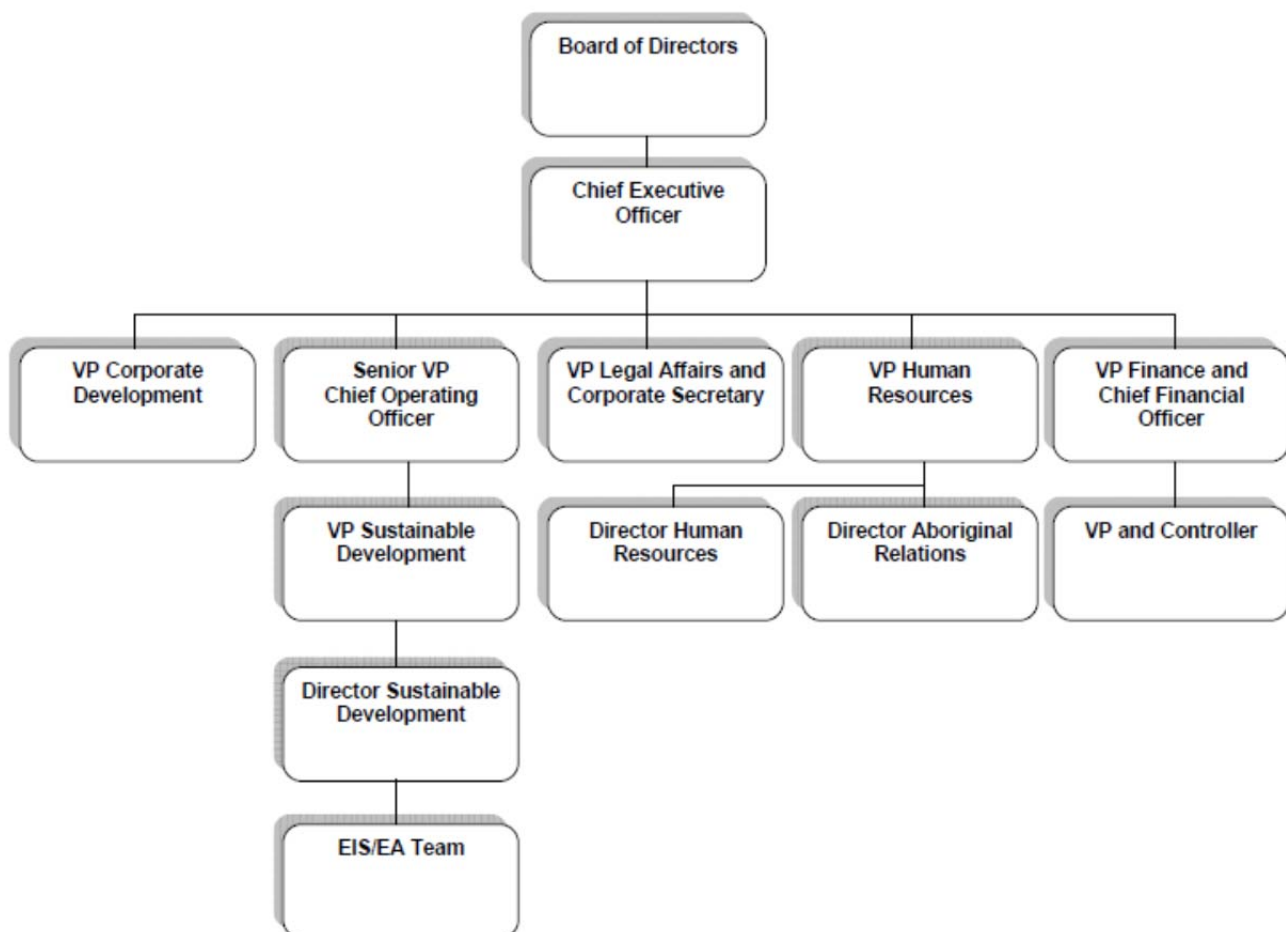


Figure 1-2: Osisko Mining Corporation Corporate Organization and Osisko Hammond Reef Gold Ltd. Responsibilities

### **1.2.3 Insurance and Liability Management**

OHRG currently holds insurance and liability policies which cover all activities that have taken place on the Project Site throughout the OHRG exploration project. Each policy is reviewed annually and updated as required. During Project development, additional insurance will be required based on technical information provided to insurers who will conduct a loss control review. A comprehensive insurance program will be obtained as per industry standards.

### **1.2.4 Environment Health and Safety**

The vice-president of Human Resources has overall responsibility for health and safety.

Osisko's corporate Environmental Health and Safety (EH&S) policy is provided in Appendix 1.V. The EH&S policy commits Osisko to:

- Evaluating each of its activities in terms of the potential impacts and risks for the natural, human and social environments, with the goal of prevention and protection.
- Designing and using its facilities with proven technologies and the most efficient techniques in order to minimize the impact and risk to the environment and to the health and safety of people.
- Putting into place and maintaining emergency action plans to mitigate effects of unforeseen events.

A Health and Safety management system was developed to address activities related to the OHRG exploration project. A similar plan will govern all the phases of the Hammond Reef Gold Project.

The management system was developed with the intent of meeting, as a minimum, the legislative requirements within the Ontario *Occupational Health and Safety Act* and Regulations for Mines and Mining Plants. An Internal Responsibility System is in place at the Project Site which includes provisions for the Health and Safety Responsibilities of all levels of management, employees and contractors.

Additional policies which have been developed for the Project include, but are not limited to:

- Ethics Policy
- Hazard reporting.
- Lockout.
- Drugs and Alcohol.
- Fall Prevention.
- Evacuation.
- Defensive driving.
- Bear encounter.
- All-terrain Vehicle use.
- Violence and Harassment.



- Code of ethics.
- Radio use.
- Recreational boating.

OHRG is focussed on preventative safety measures through training and employee education. All employees are provided with a Health and Safety Orientation Book and given training in site-specific safety considerations. Throughout the OHRG exploration project, OHRG provided employee safety training in the areas of:

- Fuel handling and the Liquid Fuels Handling Code Spill response.
- Workplace Hazardous Material Information System (WHMIS).
- Transportation of dangerous goods.
- Water and wastewater sampling.
- Erosion and sediment control.
- Forest firefighter training.
- Emergency first responder.

A core group of OHRG staff has been trained in the Ontario Ministry of Training Colleges and Universities modules required to work in a surface mining operation, in preparation of the Project moving forward through the various development phases. These included:

- *Occupational Health and Safety Act* and Mining Regulations.
- Mining Safety Programs.
- Mining Incident Investigation.
- Supervisor Due Diligence.
- Mining Planned Inspection and Hazard Observation.
- U5030 – Work safely in the job environment.
- U5031 – Perform general lock and tag out on prime movers.
- U5032 – Operate hand and power tools.

Osisko developed two Health and Safety management plans for the construction of the Canadian Malartic mine to cover construction and operations, respectively (Appendix 1.VI). OHRG will use this operational experience to develop and implement similar health and safety plans for the construction, operations and closure/post-closure phases of the Project.

### 1.2.4.1 *Joint Health and Safety Committee*

Joint Health and Safety Committees (JHSC) were initiated during the OHRG exploration project to facilitate discussion of potential areas of concern and opportunities for improvement with regards to site health and safety.

Following a decision to proceed with the Project, OHRG will initiate a Joint Health and Safety Committee for the Project. The Joint Health and Safety Committee will meet regularly to discuss areas of concern and opportunities for improvement. Members of the committee will in turn report to the larger OHRG workforce through regular updates.

## 1.3 Need for and Purpose of the Project

The purpose of the Project is to extract gold ore for processing at an ore processing facility and to produce gold for sale worldwide. The reader is referred to existing NI 43-101 compliant documents (e.g. December 2011 Technical report) for official valuations of proven and probable resources. It is expected that the deposit valuation will be updated as required, depending on market conditions or in response to updating of resource evaluation work.

The Project will contribute to economic development in Northwest Ontario. The economic benefits to the local communities are much anticipated, bringing strong support from the municipal government. The Town of Atikokan has passed a resolution in support of the Project citing the recent closure of the two major employers, Atikokan Forest Products and Fibra Tech, as creating a great need for economic development in the area. The resolution urged regulators, consultants and OHRG to move forward with the permitting process as quickly as possible for the benefit of the community.

Aboriginal communities have also indicated a strong interest in employment and economic development opportunities for community members and businesses.

Additional discussion of the social and economic benefits of the Project is provided in Chapter 4 and Chapter 11.

## 1.4 Project Overview

Figure 1-3 shows the immediate location of the Project, and identifies the main Project components. The total area of the Project Site is 1,250 ha.

The Hammond Reef deposit is located mainly on a peninsula of land extending into the north end of the Upper Marmion Reservoir. The peninsula containing the ore deposit is surrounded by the Upper Marmion Reservoir on three sides with Sawbill Bay to the northwest and Lynxhead Bay to the southeast. The property also contains a number of smaller lakes. Mitta Lake is a small, steep-sided waterbody located atop mineralized zones of the deposit. Due to its location, the proposed open pits will encompass Mitta Lake.

The main components of the Project are located within the Project Site and include:

- A **Mine** consisting of two open pits (east pit and west pit).
- A **Waste Rock Management Facility** with a waste rock stockpile and transfer areas.

- An **Ore Processing Facility** and associated infrastructure.
- A **Tailings Management Facility** and associated infrastructure.
- A **Water Management System** including ditches, collection ponds, pumping stations, supply of potable water, an effluent treatment plant and other associated infrastructure.
- **Linear Infrastructure**, including an access road (access road [Hardtack/Sawbill]) that allows movement of people and supplies between the Project Site and the existing road network, and transmission and communication lines to provide power to the Project Site and enable communications.
- **Support and Ancillary Infrastructure**, such as on-site roads, warehouses, truck shop, administration offices, and other support facilities.
- An on-site **worker accommodation camp**<sup>1</sup>, to be located at the site of the existing OHRG exploration project camp.
- **Aggregate Sites**, including pits and quarries. Aggregate Sites are subject to specific provincial permitting requirements outside of and parallel to the environmental assessment process and are, therefore, not further addressed in this document.

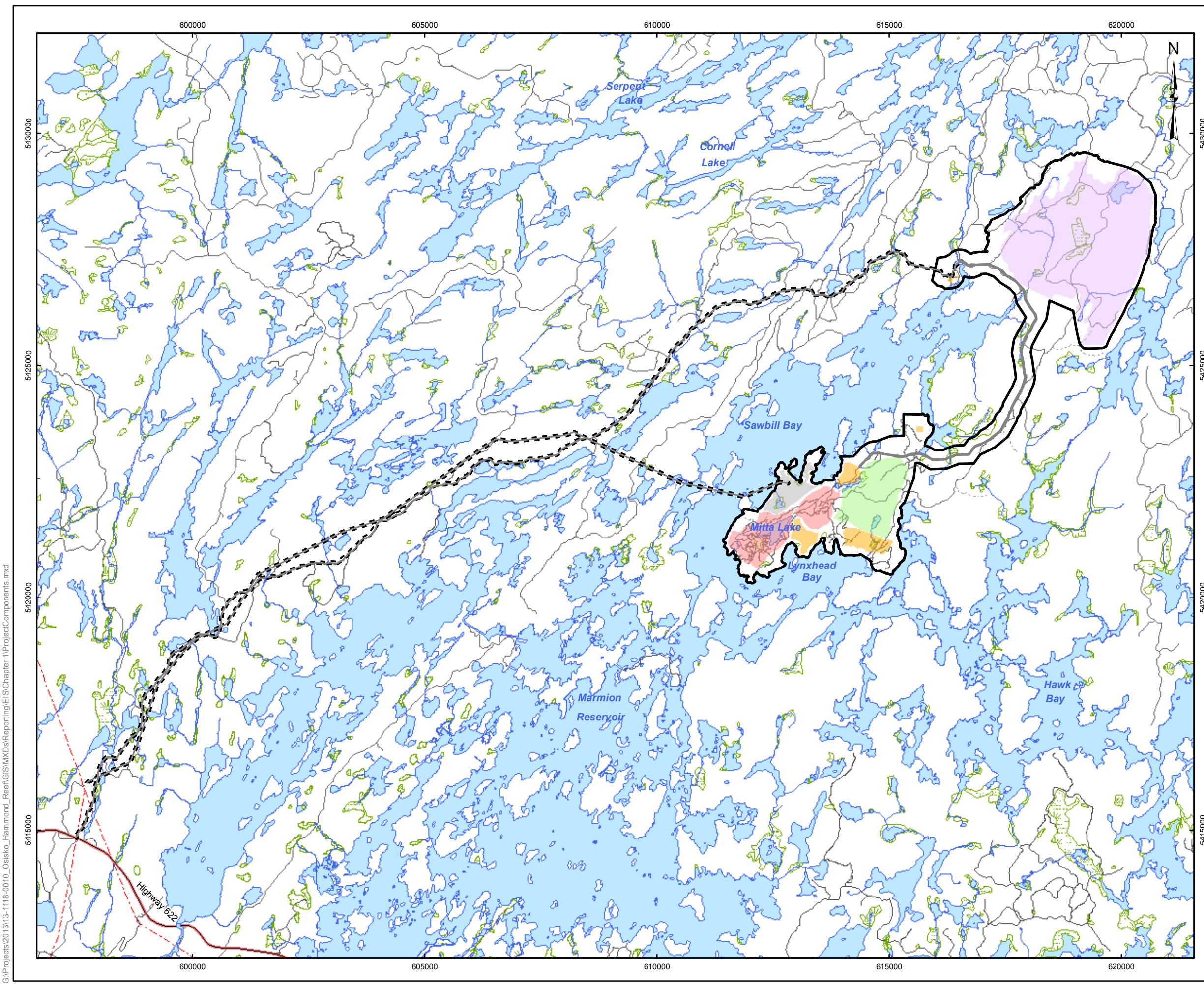
A description of Project components suitable for environmental assessment purposes is provided in Chapter 5. Details contained within the Project Description (Chapter 5) are not expected to change materially; however during the Project's detailed design some changes are expected based on additional engineering information, and on the results of ongoing studies and stakeholder consultation activities.

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<sup>1</sup> Although part of the assessment of alternatives, the worker accommodation camp was not included in the original Project Description in ToR or EIS Guidelines for the Project. The rationale for the inclusion of the worker accommodation camp during conduct of the environmental assessment is provided in Section 4.2.9.



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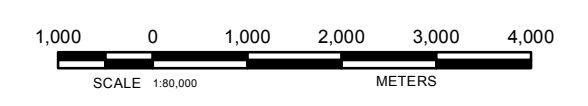


**LEGEND**

- Provincial Highway
- Road
- - - Power Transmission Line
- River/Stream
- █ Lake
- █ Wetland
- Linear Infrastructure
- █ Mine
- █ Waste Rock Management Facility
- █ Ore Processing Facility
- █ Tailings Management Facility
- █ Support and Ancillary Infrastructure
- Linear Infrastructure Study Area
- Mine Study Area

**REFERENCE**

Base Data - Provided by OSISKO Hammond Reef Gold Project Ltd.  
 Base Data - MNR NRVIS, obtained 2004  
 Produced by Golder Associates Ltd under licence from  
 Ontario Ministry of Natural Resources, © Queens Printer 2008  
 Projection: Transverse Mercator Datum: NAD 83 Coordinate System: UTM Zone 15N



<b>PROJECT</b>	HAMMOND REEF GOLD PROJECT ATIKOKAN, ONTARIO, CANADA		
<b>TITLE</b>	<b>MINE STUDY AREA AND LINEAR INFRASTRUCTURE STUDY AREA</b>		
 Golder Associates Mississauga, Ontario	PROJECT NO. 13-1118-0010	SCALE AS SHOWN	VERSION 2
	DESIGN	CGE	14 Nov. 2008
	GIS	JO	2 Dec. 2013
	CHECK	SP	2 Dec. 2013
	REVIEW	SP	2 Dec. 2013
			FIGURE: 1-3

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## **1.5 Project Schedule**

A simplified Project schedule is shown in Figure 1-4 and includes the planning and environmental assessment processes.

The Project comprises four phases: construction, operations, closure and post-closure. For environmental assessment purposes, these phases are assumed to have the following timelines:

- Construction (2.5 years).
- Operations (11 years).
- Closure (2 years).
- Post-closure (10 years).

A summary of these phases is provided in Sections 1.6.1 through 1.6.3. Although the post-closure phase is identified as lasting 10 years, the flooding of the open pits is estimated to take a total of approximately 218 years.

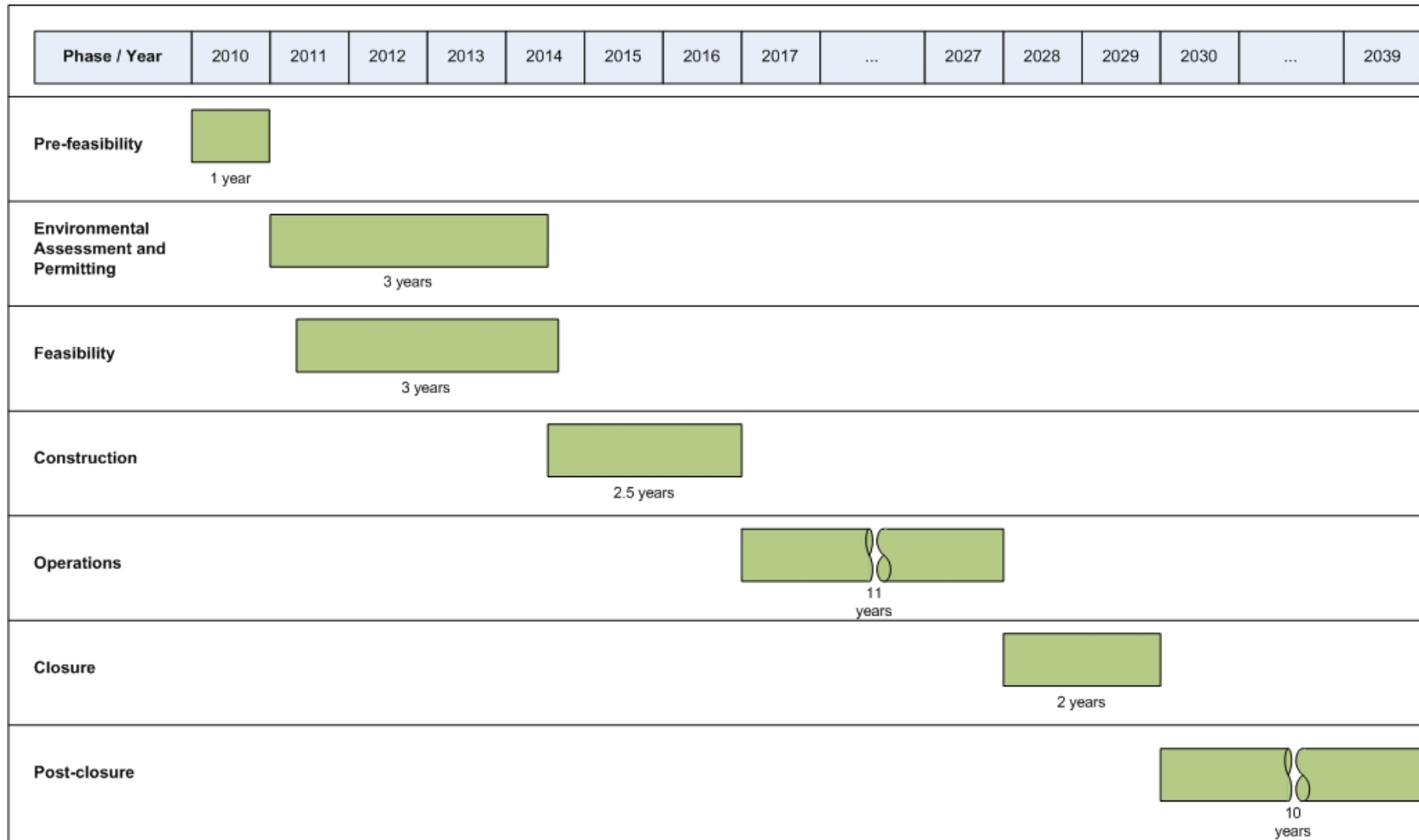


Figure 1-4: Hammond Reef Gold Project Simplified Schedule

## 1.6 Overview of Project Phases

### 1.6.1 Construction Phase

The construction phase consists of all activities leading to the development and construction of an operating gold mine and processing plant. Upgrading of the current access road (Hardtack/Sawbill) and construction of an electrical transmission line will be undertaken at the beginning of the construction phase to facilitate movement of equipment to and from the Project Site, and provide electricity for operations. Also early in the construction phase, Aggregate Sites (i.e., pits and quarries) will be identified and will provide construction materials for the Project. Aggregate Sites will be rehabilitated upon completion, as per the *Aggregate Resources Act*.

Clearing, grubbing, and site levelling will be undertaken where infrastructure is to be located. Site drainage will be constructed in the initial stages, including the draining of Mitta Lake. Because the Hammond Reef deposit is located directly under Mitta Lake, the Lake will be drained with continual pumping to keep the open pits dry. Water and fish from Mitta Lake will be transferred to the adjacent Upper Marmion Reservoir or to another appropriate waterbody.

Project infrastructure, including the worker accommodations camp, a water supply pipeline, storage and maintenance areas, permanent support facilities such as a paramedic station and offices will be constructed. Fuel and chemical storage areas will be constructed to include berming to contain potential spills.

Construction of the Tailings Management Facility (TMF), including a containment area and a tailings disposal pipeline, will begin during this phase. Construction will meet the requirements of the *Canada Fisheries Act*. The tailings disposal pipeline will be constructed above ground, with drainage points and spill containment areas located at naturally occurring low points along the route. The pipeline will follow the existing on-site road alignments or alternate required alignments. The pipeline will be protected on the inward side of the road by a berm. Similarly, on the outward side, the road bed would be bermed to protect the pipeline. Ditching would direct potential spillage to the constructed containment areas. Where the pipeline deviates from existing on-site roads, a construction access road will be constructed that will also be used as a service road for the pipeline (TMF service road) during operations.

The tailings dams will be designed according to Canadian Dam Association (CDA) Guidelines and Ontario MNR Guidelines. The Lakes and Rivers Improvement Act (LRIA) provides the Minister of Natural Resources with the legislative authority to govern the design, construction, operation, maintenance and safety of dams in Ontario. The design of the tailings dams was completed by Golder Associates Ltd. (Golder) and will be peer reviewed by an independent expert in tailings dam construction and operation before being submitted for approval by the MNR.

In addition, the Mining Association of Canada (MAC) provides guidelines for best practices for management of tailings dams. OHRG intends to develop a customized tailings management system that addresses the specific needs of OHRG, and local regulatory and community requirements. The management system will include:

- A framework for tailings management.
- Sample checklists for implementing the framework through the life cycle of a tailings facility.

The framework will offer a foundation for managing tailings in a safe and environmentally responsible manner through the full life cycle of a tailings facility from site selection and design, through construction and operation, to eventual decommissioning and closure.

The tailings management framework will be expanded into checklists that address the various stages of the life cycle of the tailings dams. These checklists will provide a basis for developing a customized management system, operating procedures and manuals, exposing gaps within existing procedures, identifying training requirements, communicating with Communities of Interest, obtaining permits, conducting internal audits, and aiding compliance and due diligence, at any stage of the life cycle of the tailings dams.

### **1.6.2 Operations Phase**

The operations phase consists of mining and processing the ore to produce gold bullion.

During the operations phase, the process of removing the ore through development of the open pits begins. Mine ramps will be advanced progressively through the life of mine using blasting. The mining process will also generate waste rock, which will be brought from the pit and disposed of in the waste rock stockpile.

Uncrushed mined ore will be brought from the pit in trucks and placed directly either into a primary crusher for immediate processing or in a live ore stockpile adjacent to the processing plant for subsequent processing. The live ore stockpile will be protected with berms to control runoff.

Seepage collection systems will be installed at the low points around the perimeter of the waste rock stockpile. Runoff and seepage will be re-used in the process or directed to the water management system for treatment, if required, prior to discharge.

Supplies to support operations (e.g., fuel, explosives, consumables) will be transported to the Project Site by road. Supporting infrastructure will include maintenance facilities, warehouses, water supply plant, an explosives plant, an effluent treatment plant (ETP), and an electrical substation.

The Ore Processing Facility includes a processing plant with a projected average throughput of approximately 60,000 tonnes per day. The production rate may be improved or increased over time. The 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 production.

Tailings will be managed on-site in the TMF. Operation of the TMF will include pumping of thickened tailings from the processing plant to the TMF.

The operations workforce is estimated to include 550 direct full-time jobs. In order to be conservative, a maximum potential workforce was assumed to provide a potential maximum of 1,200 people living at the worker accommodation camp.

Domestic sewage will be treated on-site at the ETP, and discharged from the Project Site. Non-hazardous solid wastes from the worker accommodation camp, offices, and workshops will be disposed of at an off-site municipal landfill.

### **1.6.3 Closure and Post-closure Phases**

Closure and post-closure activities start immediately following the end of operations, with monitoring occurring throughout closure and post-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 water quality at the Project Site meets acceptable levels for direct discharge.

The TMF closure measures will physically stabilize the tailings surface to prevent erosion and dust generation. Because the tailings are non-acid generating, the remediation plan will include direct revegetation of the tailings surface, without the requirement to place a layer of topsoil.

The tailings dams will remain in place as permanent impoundment structures. They will be designed and constructed to be stable under 1 to 100 year floods and seismic events associated with closure. Upgrades to the stability of the tailings dams are not expected to be necessary at closure.

At closure, the top surface of the waste rock stockpile will be graded to help shed runoff and reduce infiltration. The waste rock is not expected to generate acidic runoff and the waste rock stockpile is expected to be physically stable without vegetation, so no active revegetation will be undertaken.

Water in the four seepage collection ponds surrounding the waste rock stockpile will continue to be monitored after closure. The water in these ponds will continue to be pumped and treated 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 life of mine, pumping of water out of the open pits will cease and the open pits will slowly fill with water.

Portable facilities such as trailers will be removed from the Project Site. Permanent facilities will be decommissioned and demolished. Materials will be salvaged to the extent possible. After closure, other non-hazardous demolition waste will be disposed of in a solid waste landfill to be licensed within the TMF. Once the processing plant and other permanent facilities are demolished and the Project Site is revegetated, the remaining runoff reporting to the process plant collection pond (PPCP) should no longer require treatment. At that time, the PPCP and the 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 Upper Marmion Reservoir. At the same time, water from the TMF reclaim pond and water pumped from the various seepage collection ponds will report to the open pits and will not discharge to the environment.

Further detail on closure and post-closure measures is provided in the Project's Conceptual Closure and Rehabilitation Plan.

## **1.7 Current Land Use**

Existing land uses in the area surrounding the Project Site are mineral exploration, forestry, aggregate extraction, trapping, commercial bait fishing, angling, boating, canoeing, hunting and tourism. The Upper Marmion Reservoir is also used to supply flow to downstream electricity producers.

### 1.7.1 Mineral Exploration

Mining claims are prevalent in the area surrounding the Hammond Reef property, reflecting the long history of gold exploration in the area. 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 ha) are outside the property and are claims on which OHRG has agreements with others. A land claims map and table listing OHRG's claims and dispositions is provided in Appendix 1.VII.

### 1.7.2 Forestry

The Project Site is located entirely on Crown Land and all forestry activity is managed by the MNR in accordance with the *Crown Forest Sustainability Act*.

The Project Site includes part of two Forest Management Units, specifically the Resolute Forest Management Unit and the Rainy Lake Tribunal Resource Forest Management Unit. Both forestry operations incorporate an area substantially larger than the Project Site (1,250 ha). The Resolute Forest area occupies 1,593,225 ha while the Rainy Lake Tribunal Resource Forest occupies 301,500 ha. Resolute Forest Products manages the Resolute Forest Management Unit, and Atikokan Forest Products manages the Rainy Lake Tribunal Resource Forest Management Unit. As required by the *Crown Forest Sustainability Act*, Forest Management Plans have been created for the Resolute and Rainy Lake Tribunal Resource forests by each company. These plans identify current and potential forest land usage over a 10-year period (i.e., 2007 to 2017 for Resolute Forest, and 2010 to 2020 for the Rainy Lake Tribunal Resource Forest). Merchantable timber cleared from the Project Site will be managed by the company which holds the management plan for the specific part of the Project Site that is cleared.

### 1.7.3 Aggregate Extraction

There are currently four existing aggregate pits and one exhausted pit located in the vicinity of the Project Site. OHRG holds the aggregate permits for three of these sites that are closest to the mine. Two other pits are located nearby, one of which is exhausted but may have potential for expansion. OHRG does not hold the aggregate permit for these sites.

### 1.7.4 Water Users

There are three waterpower facilities within the Seine River watershed, downstream of the Upper Marmion Reservoir, with the following associated power dams:

- **Valerie Falls Generating Station**, located on the human-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 H<sub>2</sub>O Power Limited Partnership.
- **Sturgeon Falls Generating Station**, located about 90 km east of Fort Frances, also owned and operated by H<sub>2</sub>O Power Limited Partnership.

As discussed in Chapter 6, water levels and water flows are not expected to be significantly affected by the Project. Ongoing discussions with the identified water users are underway to determine if there are any



operational impacts and if any potential mitigation measures are required that will ensure the continued operation of electricity generating facilities are not adversely affected by the Project.

### **1.7.5 Outdoor Tourism and Recreation**

The Project Site is located within MNR Fisheries Management Zone 5. Commercial bait harvesting is licensed separately by Bait Harvesting Areas (BHA), each approximately 100 km<sup>2</sup>. There are two BHAs located within the MSA and these appear to be licensed to one bait fisher. The BHAs are shown on Figure 3-56

The Upper Marmion Reservoir is designated as a tourism area by the Ministry of Natural Resources (MNR). Angling, boating, canoeing and camping by both local residents and non-residents occur throughout the open water season. Upper Marmion Reservoir is a warm water reservoir and produces angling for bass, walleye and northern pike. Mining activities are also recognized as an intended land use in the area.

The Project Site is located in MNR Wildlife Management Unit (WMU) 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.

### **1.7.6 Trapping**

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

### **1.7.7 Designated Environmental or Cultural Sites**

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

There is one environmentally significant site in the vicinity of the Project Site. 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 existing exploration camp.

### **1.7.8 Traditional Land Use**

The Project Site lies within the traditional territory of the Anishinaabe people. A Traditional Use Study was carried out with nine First Nations communities, including the seven member nations of the Fort Frances Chiefs Secretariat, Lac de Mille Lacs First Nation and Wabigoon Ojibway Nation. Wild rice harvesting was not identified as a specific activity in the Project Site.

The Project is also located within an area recognized by the Métis Nation of Ontario (MNO) as the Treaty 3/Lake of the Woods/Lac Seul/Rainy River/Rainy Lake traditional harvesting territories. OHRG has also provided capacity for a Traditional Knowledge Study to be completed by the MNO.

At the request of the participating Aboriginal communities, the results of the traditional use studies are confidential but have been considered by OHRG in assessing the effects of the Project on Aboriginal interests.

## **1.8 Land Tenure**

Land tenure refers to the ownership of the land, including and surrounding the Project Site. Identified owners include OHRG, the Crown and private land owners. In addition, the relationship of the Project Site to Aboriginal lands and communities is provided in the following section.

### **1.8.1 Osisko Hammond Reef Gold Ltd.**

As noted, Osisko Hammond Reef Gold Ltd. (OHRG) is the sole proponent of the Project. All mineral claims within the Project Site are held by OHRG.

### **1.8.2 Crown Land**

The Project Site is not on or adjacent to Provincial Parks or any other provincially designated use area.

The Project Site is covered by MNR Crown Land Use Policy areas G2568 (Finlayson) and G2571 (Marmion), which also extend to neighbouring land uses.

### **1.8.3 Private Land**

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

### **1.8.4 Aboriginal Communities**

The Project is not located within 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. OHRG'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. OHRG has a Resource Sharing Agreement with eight of the nine First Nations. The Wabigoon Lake Ojibway Nation is not party to the agreement, but was included in the Aboriginal engagement plan due to their initial assertion that they harvest wild rice in the vicinity of the Project Site. Members of Wabigoon Lake Ojibway Nation have attended several communication events and have since confirmed that they do not harvest wild rice in the area.

The Project Site is located in Métis Nation of Ontario (MNO) Region 1, within the Treaty 3/Lake of the Woods/Lac Seul/Rainy River/Rainy Lake traditional harvesting territories. Harvesting Territories are identified by MNO throughout the province as part of their agreement with the MNR. Each Harvesting Territory is managed

by a Captain of the Hunt who administers Harvesting Certificates within their respective territory. OHRG has a Memorandum of Understanding with MNO including four communities: Atikokan and Surrounding Area Métis Council; Kenora Métis Council; Northwest Métis Nation of Ontario Council; and Sunset Country Métis Council to provide capacity for community meetings, engagement activities, review of the EIS/EA Report and a traditional knowledge study.

## **1.9 Participants in the Environmental Assessment**

In addition to OHRG, participants in the environmental assessment process are Aboriginal Communities, federal, provincial and municipal governments, Project stakeholders, including interested members of the public and non-governmental organizations.

A summary description of each group of participants is provided below. Details regarding Project consultation activities and stakeholder identification are provided in Chapter 7.

### **1.9.1 Aboriginal Communities**

The following Aboriginal communities have been identified as having an interest in the Project:

- Métis Nation of Ontario:
  - Atikokan Métis Council.
  - Kenora Métis Council.
  - Sunset Country Métis Council.
  - Northwest Métis Nation of Ontario Council.
- First Nations:
  - Lac Des Milles Lacs First Nation.
  - Wabigoon Lake Ojibway Nation.
  - Fort Frances Chiefs Secretariat :
    - 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.

## **1.9.2 Federal Government**

The lead federal agency for the Project's environmental assessment is the CEA Agency.

The CEA Agency has agreed to coordinate all communications with federal departments, including distribution of information materials and compilation of technical comments. The CEA Agency coordinates between federal agencies that have a duty to consult with Aboriginal communities.

A Cooperative Environmental Assessment Committee (CEAC), co-chaired by the CEA Agency and the Ontario Ministry of the Environment (MOE), was formed to coordinate the various federal and provincial agencies through the environmental assessment process for the Hammond Reef Gold Project.

In addition to the CEA Agency, the key federal agencies participating in the environmental assessment include:

- Aboriginal Affairs and Northern Development Canada.
- Environment Canada.
- Fisheries and Oceans Canada.
- Health Canada.
- Major Projects Management Office.
- Natural Resources Canada.
- Transport Canada.

## **1.9.3 Provincial Government**

The lead provincial agency for the environmental assessment is MOE through its Environmental Approvals Branch (EAB). The Ministry of Northern Development and Mines (MNDM) is the lead provincial agency for Closure Planning and also takes an active role in the oversight of Aboriginal consultation activities.

OHRG was responsible for determining the involvement of additional provincial agencies and confirming key contacts. Provincial organizations were e-mailed and phoned to determine if they would like to receive Project notices and if they required hard copies or electronic copies of Project reports. Contacts from the Ontario ministries and organizations listed below have been kept up to date throughout the environmental assessment by e-mail and direct mail meetings and phone calls:

- Ministry of Environment.
- Ministry of Northern Development and Mines.
- Ministry of Natural Resources.
- Ministry of Labour.
- Ministry of Transportation.
- Ontario Parks.
- Ministry of Tourism, Culture and Sport.

#### **1.9.4 Municipal Government**

The key municipal government contacts are the Mayor and the Council of the Town of Atikokan. They have shown great interest in the Project and have attended multiple meetings and workshops. The municipal governments of Fort Frances and Thunder Bay have also expressed interest and continue to be provided Project notices and updates by e-mail.

Municipal service providers are also included on the Project stakeholder list through interviews to inform the socio-economic studies and regular updates on the progress of the Project, including the environmental assessment.

The following municipal government representatives have been consulted:

- Town of Atikokan.
- City of Thunder Bay.
- Town of Fort Frances.
- Rainy River District School Board.
- Rainy River District Social Services Administration Board.
- Northwest Catholic District School Board.
- Atikokan Hospital.

#### **1.9.5 Public and Non-governmental Organizations**

Residents of Atikokan, Fort Frances, Thunder Bay and Ignace are kept informed about the Project and the environmental assessment through regular newspaper publications. Key reports have been made available to residents through public libraries.

The following members of the public and non-governmental organizations who have shown an interest in the Project have been provided with regular updates through e-mail:

- Residents of Atikokan.
- Residents of Fort Frances.
- Residents of Ignace.
- Residents of Thunder Bay.
- Atikokan Economic Development Corporation.
- Atikokan Chamber of Commerce.
- Atikokan Sportsmen's Conservation Club.
- Canadian Boreal Initiative.
- H2O Power LP.

- International Joint Commission.
- Mining Watch.
- North Watch.
- Ontario Federation of Anglers and Hunters.
- Rainy Lake Conservancy.
- Ontario Coalition of Aboriginal People.
- Sierra Club of Canada.

## **1.10 Regulatory Framework and the Role of Government**

### **1.10.1 Environmental Approvals and Legislation**

The Project is subject to both provincial and federal environmental assessment requirements. The environmental assessment process was initiated and the federal EIS Guidelines were issued prior to the amendments to the *Canadian Environmental Assessment Act* in the 2012 Federal Budget. The Project is also subject to the Ontario *Environmental Assessment Act*.

The requirements of the federal and provincial environmental assessment are summarized below.

In addition, a number of federal and provincial permits and authorizations are required. These are identified in Chapter 10.

#### **1.10.1.1 Federal Environmental Assessment Requirements**

An environmental assessment of the Project is being conducted as required by the *Canadian Environmental Assessment Act* (CEAA) (S.C. 1992, c. 37). This Act has recently been significantly revised (CEAA 2012); however the Project is being assessed under the terms and requirements of the former act.

The CEAA (S.C. 1992, c. 37) states that an environmental assessment is required when there is a project, a federal authority and a trigger, and it is not excluded, based on the conditions in the *Exclusion List Regulations*. The CEAA defines a project as the construction, operation, modification, decommissioning or abandonment of a physical work. The Project is not of the type included in the *Exclusion List Regulations*. The federal triggers under CEAA (S.C. 1992, c. 37) relate to funding, statutory duty, land interest and proponent.

An assessment is triggered for the Project since a number of departments have a statutory duty related to the issuance of federal permits and authorizations that may be required for the Project, including:

- Licence under the *Explosives Act* from Natural Resources Canada (NRCan) for the storage and manufacturing of explosives at the Project Site.
- Authorizations under the *Fisheries Act* from Fisheries and Oceans Canada (DFO) for the Harmful Alteration, Disruption or Destruction (HADD) of fish habitat during in-water construction activities required at the Project Site.



- Approvals under the *Navigable Waters Protection Act* by Transport Canada for water crossings as part of the Project Site.

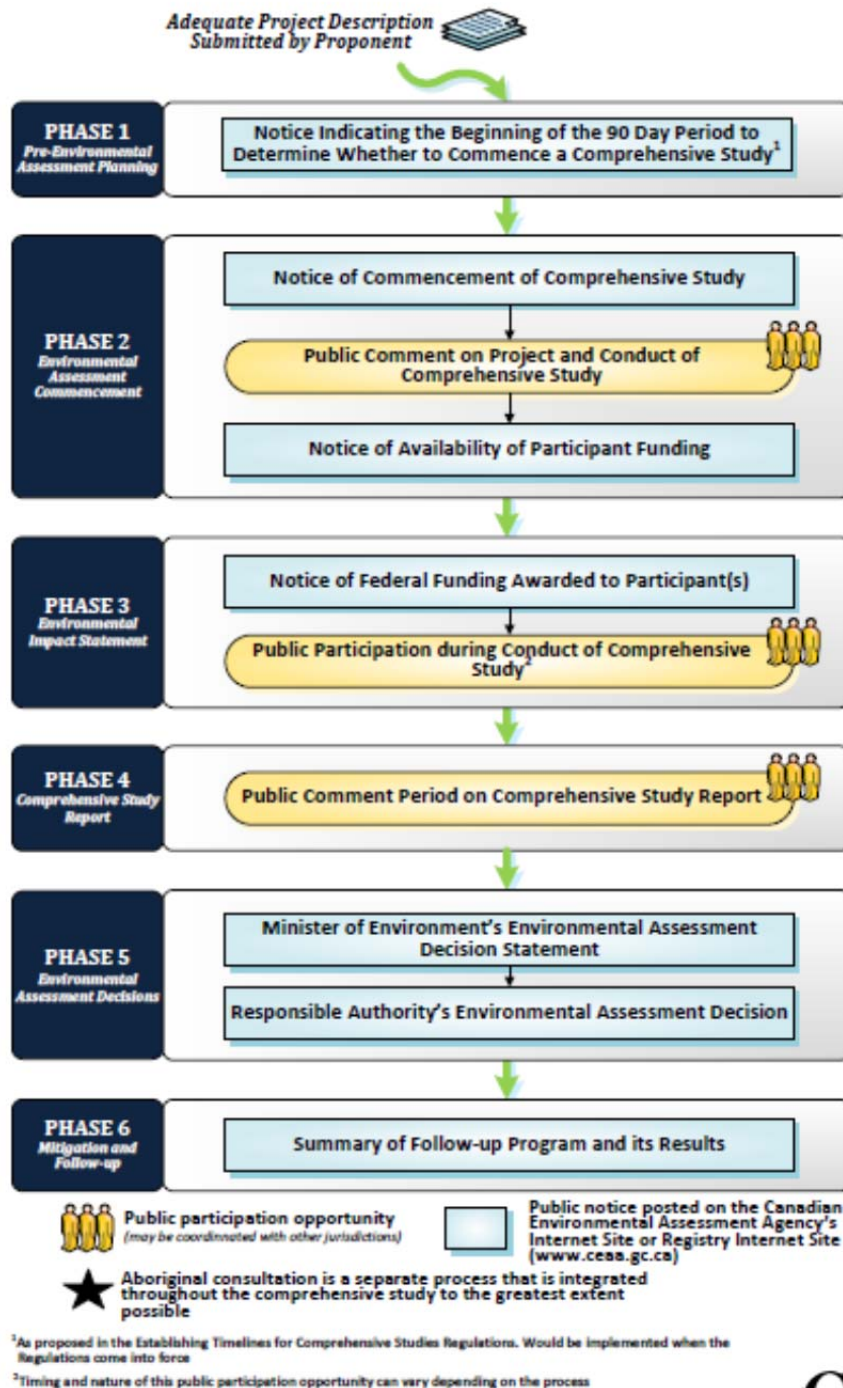
There are no other triggers for the Project since the Project is not located on federal lands, including First Nations Reserve lands and Parks Canada land, and no federal agency or authority is the proponent or is providing funding for the Project.

The CEA Agency has determined that a Comprehensive Study is required for the Project. As defined in Section 16 of CEAA (1994), a Comprehensive Study must consider:

- The environmental effects of the Project, including the environmental effects of malfunctions or accidents that may occur in connection with the Project and cumulative environmental effects that are likely to result from the Project in combination with other projects or activities that have been or will be carried out.
- The significance of the effects referred to above.
- Comments from the public that are received in accordance with this Act and the regulations.
- Measures that are technically and economically feasible and that would mitigate significant adverse environmental effects of the Project.
- The purpose of the Project.
- Alternative methods of carrying out the Project that are technically and economically feasible and the environmental effects of such alternative methods.
- The need for, and the requirements of, a follow-up program in respect of the Project.
- The capacity of renewable resources that are likely to be significantly affected by the Project to meet the needs of the present and those of the future.
- Community knowledge and/or Aboriginal traditional knowledge.
- Any other matter relevant to the Comprehensive Study such as the need for the Project and alternatives to the Project that the Responsible Authorities may require to be considered.

The EIS Guidelines issued for the Project provide further information on each of these requirements.

Figure 1-5 outlines the federal environmental assessment process for a Comprehensive Study. This EIS/EA Report is prepared as part of Phase 3 of the process.



Source: CEA Agency 2011.

Figure 1-5: Canadian Environmental Assessment Agency Comprehensive Study Process

### **1.10.1.2 Provincial Environmental Assessment Requirements**

Environmental assessment legislation in Ontario does not require the assessment of mining projects in their entirety. However, several of the components of a mining project require an assessment under the Ontario *Environmental Assessment Act* (EAA), including:

- Use of Crown Land: requires assessment under the Class Environmental Assessment for MNR Resource Stewardship and Facility Development Projects (2003).
- Construction of transmission line: Ontario Regulation (O. Reg.) 116/01 Electricity Projects Regulation (2001).
- Access road construction or upgrading: Ministry of Transportation (MTO) Class Environmental Assessment for Provincial Transportation Facilities (2000).

Rather than undertaking each of the required provincial environmental assessments separately, OHRG has entered into a Voluntary Agreement with MOE to subject the Project to the Ontario EAA. Accordingly, a single EIS/EA Report will meet all of the above listed requirements.

The provincial individual environmental assessment process is outlined in Figure 1-6.

#### **On-Site Worker Accommodation Camp**

The environmental assessment process was used as a planning tool that enabled OHRG to make informed decisions, identify potential risks to the Project and choose alternative methods of carrying out the Project that would bring the greatest benefits and lowest potential effects. The issuance of a federal Project Description Document and provincial ToR were completed early in the planning process and minor changes to Project details have occurred throughout the planning process.

The only substantive change to the Project, which is not reflected in the Project Description or the ToR, is the inclusion of an on-site worker accommodation camp for workers. This alternative was not initially in the scope of the Project design, however as the Project planning advanced it was necessary to include it as an alternative to ensure the Project remained feasible. A fibre optic line and auxiliary power line were also added at the advanced planning stage, but are not considered substantive changes because they utilize existing rights-of-way or will utilize the same cable support structures as the proposed project transmission line resulting in no additional biophysical or socio-economic impacts.

Accommodation alternatives are described in Chapter 4 and the worker accommodation camp was subject to the same criteria and indicators that were applied to the alternative means originally identified in the approved ToR. Based on the conclusions of the alternatives assessment, an on-site worker accommodation camp is included in the detailed environmental assessment for the Project (as described in Chapter 5).

The location selected for the worker accommodation camp is within the Project Site and did not require additional baseline data collection.

The need to consider an on-site worker accommodation camp as an additional alternative method of carrying out the Project was determined based on detailed planning, consultation, and baseline studies. Detailed planning for the Project clarified the total anticipated workforce, length of the commute and duration of the Project. Consultation activities, including engagement with Aboriginal communities confirmed that employment is

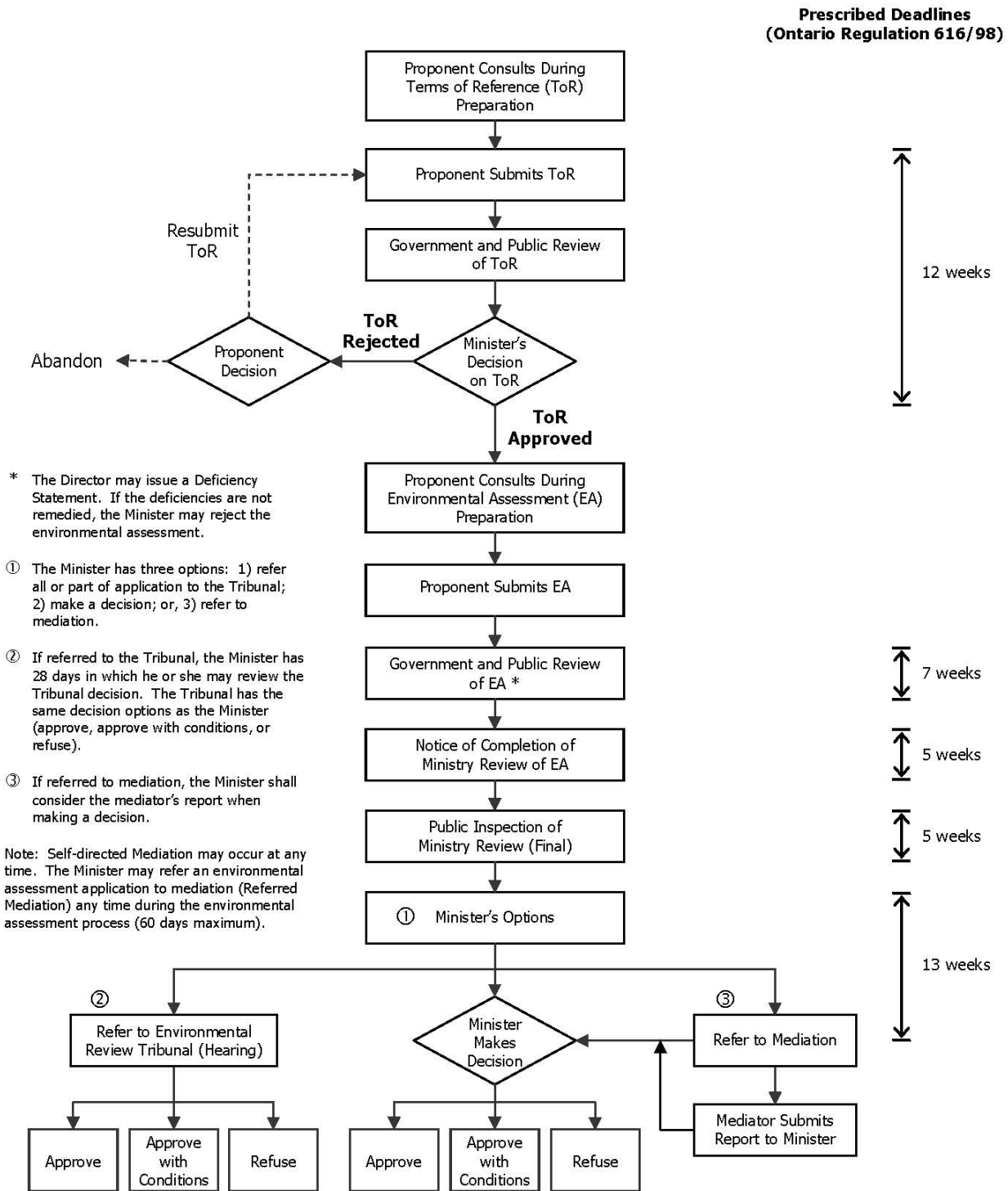
important and that many community members live two or more hours from the Project Site. Socio-economic baseline studies confirmed the demographics of the local population, including age distribution and education levels. The conclusion from the detailed planning, consultation and baseline studies was that an on-site worker accommodation camp would be required to ensure the Project remained feasible.

Upon reaching the decision to include an on-site worker accommodation camp as an alternative means of carrying out the Project, the government, public and Aboriginal stakeholders were informed of this change.

The following provides a summary of consultation activities that included information about the on-site worker accommodation camp:

- Presentation to Atikokan Mayor and Council July 30, 2012
- Presentation to the Metis Nation of Ontario August 3, 2012
- Community News Brief August 13, 2012
- Consultation Update meeting with provincial and federal government leads August 14, 2012
- Community Open House August 18, 2012
- Presentation to Fort Frances Chiefs Secretariat September 17, 2012
- Letter to the CEA Agency September 20, 2012
- Letter to the MOE EAB September 20, 2012
- Letter from CEA Agency to Aboriginal communities October 26, 2012
- Metal Mining Effluent Regulations (MMER) Alternatives Assessment Workshop (provincial and federal government) November 20, 2012

The details of these meetings and presentations, including copies of the presentations and meeting notes, are provided in Chapter 7.



Source: MOE EAB.

Figure 1-6: Ontario Provincial Individual Environmental Assessment Process

### 1.10.2 Environmental Assessment Integration

For the environmental assessment of the Project, federal and provincial environmental assessment requirements have been integrated into a streamlined approach that maximized the use of work completed, minimized duplication of effort, and fostered cooperation between federal and provincial agencies to the extent possible.

Figure 1-7 illustrates the proposed approach to integrating the federal and provincial environmental assessment requirements. This single EIS/EA Report was prepared to address the joint requirements of the federal EIS Guidelines and the provincial ToR.

An administrative framework for environmental assessment coordination is provided in the *Canada-Ontario Agreement on Environmental Assessment Cooperation* (November 2004). Federal department coordination was provided by the CEA Agency. Provincial coordination was provided by the MOE's EAB. These two key agencies facilitate the consultation, discussions and cooperation between all federal and provincial agencies through the scoping and review processes.

In accordance with the agreement signed by the Deputy Ministers of federal authorities involved in the Project, the Major Projects Management Office (MPMO) publicly tracks and monitors timelines of the federal review for the EIS/EA Report in keeping with the *Cabinet Directive on Improving the Performance of the Regulatory System for Major Resource Projects* (MPMO 2010).

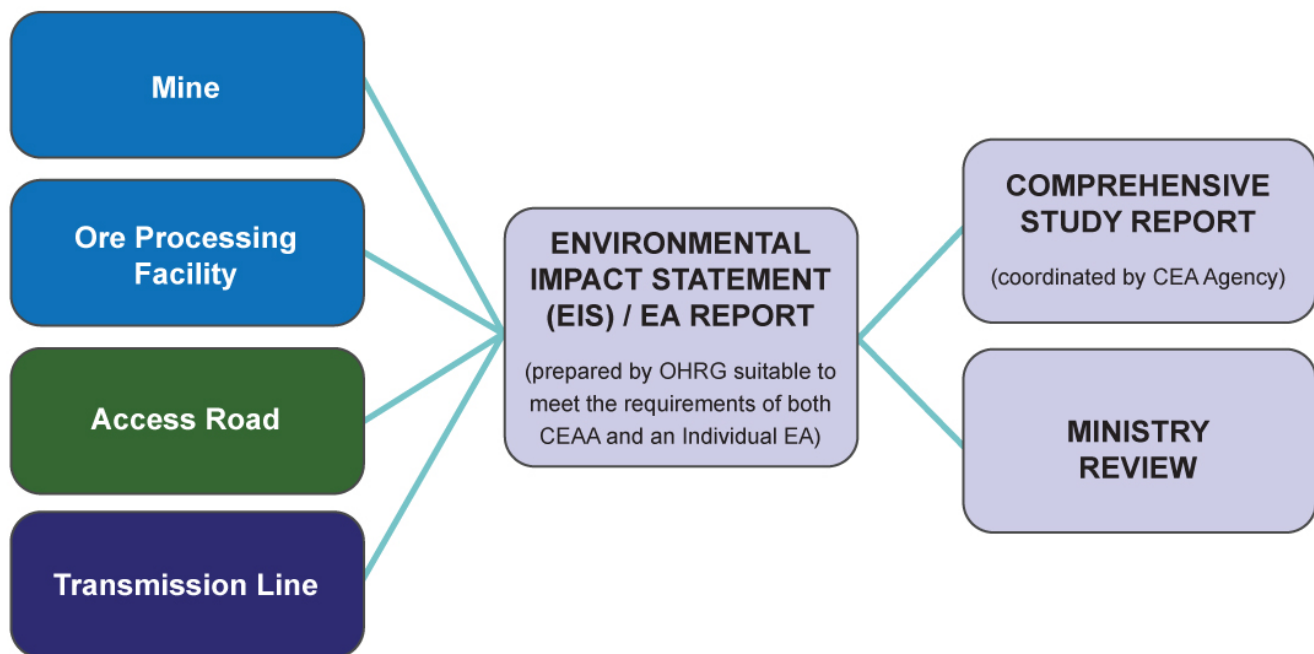


Figure 1-7: Environmental Assessment Integration Approach



### **1.10.3 Pre-Environmental Assessment Planning**

Prior to commencing an environmental assessment, a proponent is required to submit a Project Description report to the CEA Agency. On April 28, 2011 the CEA Agency deemed the OHRG Project Description complete and initiated the 90-day pre-environmental assessment planning period.

Pre-environmental assessment planning activities undertaken included:

- Coordinating and work planning between government agencies.
- Determining the scope of the Project that is the subject of the environmental assessment.
- Determining the environmental assessment track, particularly whether a Comprehensive Study should be undertaken.

Once the federal Project Description was accepted, OHRG met with the MOE EAB and made a request for a Voluntary Agreement. OHRG provided a letter to MOE EAB that included the reasons for the request to complete an Individual Environmental Assessment and the scope of the Project to be assessed. The Agreement was signed by OHRG and the MOE EAB Director on August 26, 2011.

The MPMO has established a Project Tracker which keeps a record of all of the steps that need to be achieved for the federal environmental assessment, links to federal environmental assessment documents, a brief summary of the Project and contact information.

Based on the accepted Project Description, the MPMO developed a Project Agreement between the Deputy Ministers of the federal departments for timing of completion of the environmental assessment and federal permits for the Project. The agreed timelines do not include the time required to amend Schedule 2 of the Metal Mining Effluent Regulation (MMER), if deemed necessary.

The Project Agreement outlines:

- Agencies involved in the environmental assessment for statutory, specialized expertise and administrative reasons.
- Planned milestones, timelines and progress tracking.
- Issue resolution process.

### **1.10.4 Environmental Assessment Commencement**

The CEA Agency initiated the federal environmental assessment process with the issuance of a Notice of Commencement on August 10, 2011.

The CEA Agency has completed the following steps:

- Posted a Notice of Commencement on the Canadian Environmental Assessment Registry.
- Announced the availability of participant funding.
- Prepared the EIS Guidelines.
- Collected public comments on the Project and the conduct of a Comprehensive Study.

The Notice provided a brief overview and identified those federal agencies with a statutory duty related to the Project. The CEA Agency considered feedback from OHRG, the public and Aboriginal communities and finalized the EIS Guidelines on October 21, 2011.

The EIS Guidelines identify the nature and extent of the information that must be prepared for the Comprehensive Study. The CEA Agency will prepare the Comprehensive Study Report including information from this EA/EIS Report.

In parallel with the preparation of the federal scoping documents, OHRG has prepared and consulted on the provincial ToR. The preparation of the ToR was done in consultation with the MOE EAB Special Project Officer and in accordance with the *Code of Practice: Preparing and Reviewing Terms of Reference for Environmental Assessments in Ontario* (MOE 2009).

The key steps in the preparation of the ToR include:

- Posting a Notice of Commencement of the ToR.
- Developing and carrying out a ToR consultation plan.
- Preparing the draft ToR.
- Submitting the final ToR.

The Draft Terms of Reference were submitted on September 19, 2011. They were finalized with input from consultation activities and submitted on January 23, 2012. The MOE EAB requested a number of amendments to the final ToR which were re-submitted on April 4, 2012. Ministerial approval of the amended ToR was received on July 4, 2012.

The preparation of the ToR was carried out in cooperation with the CEA Agency and other government departments so that the EIS Guidelines and ToR can be as closely aligned as possible. A single EIS/EA Report has also be prepared.

### **1.10.5 Environmental Studies and Preparation of the Environmental Assessment Report**

OHRG has prepared the EIS/EA Report and supporting documentation to meet the requirements of both the ToR and EIS Guidelines.

This final EIS/EA Report is being provided to Aboriginal communities and regulatory agencies and is OHRG's formal EIS/EA submission to MOE and the CEA Agency. This final EIS/EA Report, incorporates feedback provided on the Draft Report, provided for broader stakeholder review. The CEA Agency will then produce the required Comprehensive Study Report. The Comprehensive Study Report is subject to a minimum 30-day public review period. After this comment period, the Minister of the Environment will take into consideration the Comprehensive Study Report along with comments received and make public the environmental assessment decision statement.

The timelines for the provincial review of the EIS/EA Report are stipulated in O. Reg. 616/98. Generally, it takes approximately 30 weeks to complete the process if there are no delays, such as may be caused by requests for additional information. The review steps and associated timeline are as follows:

- Inspection/review of the EIS/EA Report by government and public (7 weeks).
- Preparation of Ministry review (5 weeks).
- Issue Notice of Completion of Ministry review (no timeline).
- Public inspection of Ministry review (5 weeks).
- Final Ministry evaluation period (13 weeks).

### **1.10.6 Environmental Assessment Decision**

Following the public review period of the Comprehensive Study Report, and the final Ministry evaluation period, the federal and provincial Ministers of the Environment will each make their decisions on the environmental assessment.

Under the Comprehensive Study process, the federal Minister of the Environment considers the Comprehensive Study Report along with a summary of Aboriginal consultation and public concerns, and will issue an Environmental Assessment Decision Statement. The lead role is then transferred from the CEA Agency to the Responsible Authorities, who will then render their Environmental Assessment Decisions. The Responsible Authorities in this case are the agencies with a statutory duty, namely: NRCan, DFO and Transport Canada.

During the provincial review period, MOE EAB staff will write and publish a review of the EIS/EA Report, called a "Ministry Review." The Ministry Review includes an analysis of all public, Aboriginal community and government department comments submitted during the seven week comment period, as well as the proponent's (OHRG) response to the comments. The Ministry Review will also discuss how the proponent has complied with the ToR and how the proponent has met the requirements of the Ontario EAA. The Minister may then exercise one of three options: refer to an Environmental Review Tribunal, make a decision, or refer to mediation. If making a decision, the Minister may give approval to proceed with the undertaking, with or without conditions, or refuse to give approval to proceed with the undertaking.

If the Ministers make a positive decision on the environmental assessment, the federal authorities may exercise their regulatory authority within the timelines agreed to in the MPMO Project Agreement (assumed to be three months). Provincial permitting approvals would likely follow in a similar timeframe.

### **1.10.7 Relevant Government Policies and Guidelines**

The Project Site is covered by MNR Crown Land Use Policy areas G2568 (Finlayson) and G2571 (Marmion), which also extend to neighbouring land uses. Mining is a permitted use on Crown Land.

The Ministry of Northern Development and Mines (MNDM) has developed a set of policies to aid proponents of mining project on implementation of relevant Mining Act provisions and regulations. MNDM's policy on Aboriginal Consultation provides clarity and guidance to proponents for carrying out consultation requirements with Aboriginal communities and will continue to be followed throughout the Project phases as applicable.

Development of the Project EIS/EA Report follows the CEAA's Operational Policy Statement "Preparing Project Descriptions under the *Canadian Environmental Assessment Act*" (CEAA, 2007), the Major Project Management Office (MPMO) draft guidelines "Guide to Preparing a Project Description for a Major Resource Project"

(MPMO, 2008), and the *Ontario Ministry of Northern Development, Mines and Forestry's Project Definition Template for Advanced Exploration and Mine Development Projects* (MNDMF, Version 1.2).

A number of federal and provincial guidelines were used in carrying out various studies and investigations for the environmental assessment. These are identified in Chapter 3 and Chapter 6 along with a description of how they were applied.

In addition to the regulatory standards and guidelines identified in the ToR, the following standards and guidelines were used in conducting the assessment:

- Health Canada's guidance for conducting human health risk assessment.
- Environment Canada's *Guidelines for the Assessment of Alternatives for Mine Waste Disposal* (September 2011).
- Ontario Aggregate Resources Act.

### **1.10.8 Aboriginal Policies and Guidelines**

The Crown has a legal duty to consult with Aboriginal Groups when it contemplates conduct that may have potential adverse impacts on established or asserted Aboriginal or Treaty rights. The Crown relies on OHRG to provide information about the proposed project to Aboriginal communities as well as to gather information for the purpose of the environmental assessment from the Aboriginal communities. The Ministry of Northern Development and Mines and the Canadian Environmental Assessment Agency act as the Crown Consultation Coordinators who coordinate and facilitate the Crown's consultation activities before and during the environmental assessment. OHRG has met regularly with CEAA, MNDM and MOE staff to review and discuss the approach to Aboriginal consultation for the Project.

The Great Earth Law (Manito Aki Inakonigaawin) is an Aboriginal guideline that outlines a process for consultations with First Nations in Treaty 3. It was brought to the attention of OHRG during engagement activities with Aboriginal communities.

OHRG has reviewed the Great Earth Law and its associated interim regulation, and engaged Aboriginal communities by striving to meet the spirit and intent of the Great Earth Law.

Table 1-1 provides a summary of the common consultation objectives between the Great Earth Law and OHRG.

**Table 1-1: Common Objectives between Great Earth Law and OHRG**

<b>Great Earth Law</b>	<b>OHRG Actions</b>
Understand potential effects of the development on the environment in Treaty 3 territory and on the rights of the Anishinaabe	Carry out an environmental assessment that includes an assessment of potential effects to Aboriginal and treaty rights, as outlined in the EIS Guidelines
Seek a mutually beneficial continuing relationship between the proponents and the Anishinaabe	Carry out meetings, workshops and forums with the Chiefs, Elders and community members of the nine First Nations communities identified as having an interest in the Project. Implement Resource Sharing Committees for regular long term communication with First Nations communities

**Table 1-1: Common Objectives between Great Earth Law and OHRG (Continued)**

<b>Great Earth Law</b>	<b>OHRG Actions</b>
A proponent should consult the Nation in the traditional manner	Provide capacity funding for traditional ceremonies to take place as part of engagement meetings, meet with Elders and facilitate traditional ceremonies at the Mine Site
A proponent should ensure that a development is designed, constructed, operated and decommissioned with respect for the environment in Treaty 3 territory and for rights of the Anishinaabe	Carry out an alternative methods assessment which considers potential effects to Aboriginal and treaty rights, as required in the ToR

### 1.10.9 Aboriginal Treaties

The Project Site is located entirely within the Treaty 3 territory. Treaty 3 is a written treaty between the Saulteaux Tribe of the Ojibway Indians and Her Majesty the Queen of Great Britain and Ireland signed in 1873. Treaty 3 includes an 1875 adhesion (addition to the Treaty) that extends all rights and benefits to the “Half-breeds” (Métis) of Rainy River and Lake of the Woods. The Métis were absorbed into the Little Eagle Band and are now part of the Couchiching First Nation (Daugherty 1986).

Treaty 3 outlined rights and benefits for signatories, in exchange for the cessation of rights, titles and privileges to 55,000 square miles of land, currently understood as the Treaty 3 lands. Hunting and fishing rights, Reserve lands and annual payments were the main benefits to Treaty 3 signatories. In addition, Treaty 3 stated that Reserve lands may be appropriated for public works at any time with proper compensation. Additional information on Treaty 3 is provided in Chapter 3.

### 1.10.10 Land Use Plans and Zoning

Land use planning in Northern Ontario is shared by various authorities, including planning boards, the MNR, the Minister of Municipal Affairs and Housing, and the MNM.

The Rainy River District Planning Board coordinates future growth and land use planning activities in the area of the Project Site and can adopt official plans and pass zoning by-laws in planning areas that may be without municipal jurisdiction.

The MNR manages Crown land and provincial parks (through Ontario Parks) on behalf of the public. As noted, the majority of the Project Site is located on Crown Land with portions been held by Osisko under Mining Leases or on Patent Lands.

The Minister of Municipal Affairs and Housing defines planning areas and initiates zoning controls in some areas without municipal organization or planning boards.

The MNM advocates on behalf of Ontario’s northern region, and delivers programs and services related to economic development in this region.

The Project Site is located in, or in close proximity to, three General Resource Areas: Finlayson, Marmion and Greytrout, as identified by the MNR (2006). Exploration and extraction activities are allowed in these areas. The Mine Study Area is located within the Finlayson and Marmion General Resource Areas. The Linear Infrastructure Study Area is located within the Finlayson and Greytrout Areas.

Existing land uses within the Finlayson and Greytrout Areas include tourism, recreation, trapping, commercial bait fishing, mineral exploration, aggregate extraction and logging. Recreational use by both residents and visitors for angling and hunting is intensive. Future commercial outpost camps are proposed for Finlayson and Lizard Lake (MNR 2006). The Marmion General Resource Area consists of Marmion Reservoir, which has a 120 m modified management area around it. Angling, boating, canoeing and camping by residents and visitors occur throughout the open water season. Other activities include trapping, commercial bait fishing, mineral exploration and logging (MNR 2006).

## **1.11 Report Organization**

The EIS/EA Report was structured based on a standard approved table of contents provided by the MOE's EAB and the CEA Agency. The EIS/EA Report is available in electronic or hardcopy. The content of the EIS/EA Report includes the following:

- **Executive Summary:** A stand-alone document that summarizes the results of the EIS/EA Report in simplified language.
- **Chapters:**
  - Chapter 1: Introduction
  - Chapter 2: Environmental Assessment Methods
  - Chapter 3: Existing Conditions
  - Chapter 4: Assessment of Alternatives
  - Chapter 5: Project Description
  - Chapter 6: Effects Assessment
  - Chapter 7: Public Consultation and Aboriginal Engagement
  - Chapter 8: Environmental and Social Management Plan
  - Chapter 9: Commitments Registry
  - Chapter 10: Other Approvals
  - Chapter 11: Economic and Social Benefits of the Project
  - Chapter 12: Conclusions
  - Chapter 13: List of References
- **Appendices:** Containing the ToR and EIS Guidelines, background technical information, and a record of the public consultation and Aboriginal engagement programs.



In addition, the EIS/EA Report is supported by a number of stand-alone technical support documents that provide detailed information on the specific subject matter identified by their title, as shown in Figure 1-8. In order to minimize printing and paper use the TSDs are available in electronic form.

The following are the 15 Technical Support Documents (TSDs) prepared in support of the EIS/EA Report:

- Atmospheric Environment TSD.
- Geochemistry, Geology and Soil TSD.
- Hydrogeology TSD.
- Hydrology TSD.
- Lake Water Quality TSD.
- Site Water Quality TSD.
- Water and Sediment Quality TSD.
- Aquatic Environment TSD.
- Terrestrial Ecology TSD.
- Aboriginal Interests TSD.
- Cultural Heritage Resources TSD.
- Socio-economic Environment TSD.
- Human Health and Ecological Risk Assessment TSD.
- Alternatives Assessment Report.
- Conceptual Closure and Rehabilitation Plan.

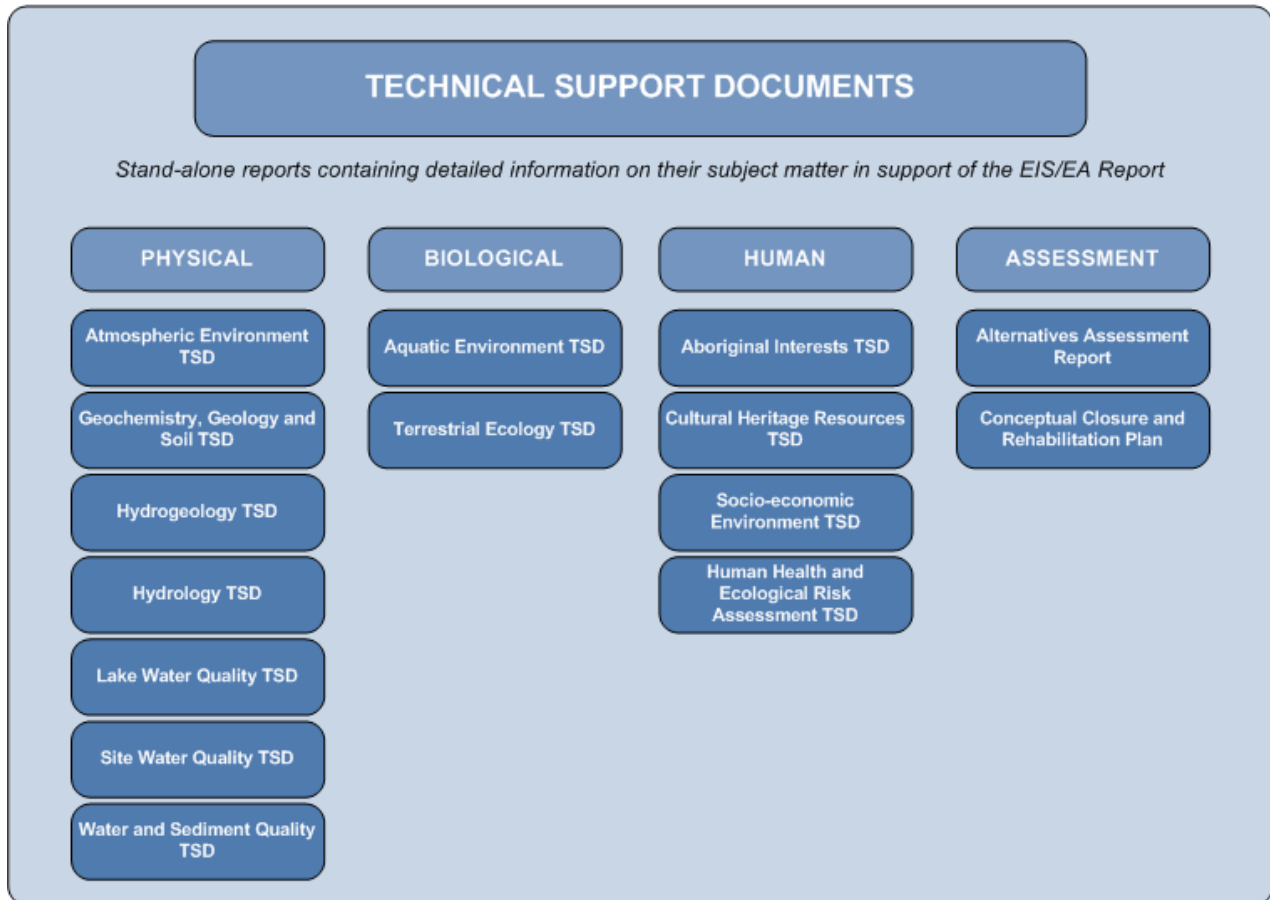
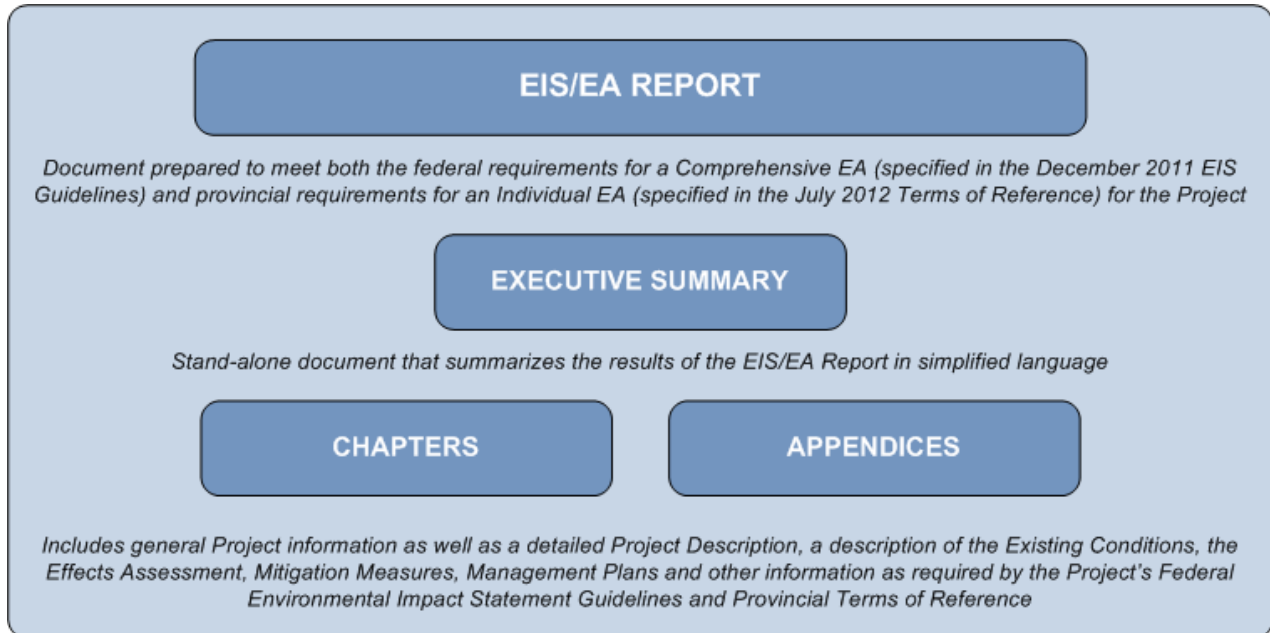


Figure 1-8: Hammond Reef Gold Project Documentation