11.0 ECONOMIC AND SOCIAL BENEFITS OF THE PROJECT

Every industrial project has the potential to result in benefits to the community in which it occurs. These benefits are primarily economic and include employment, economic activity, government revenues and workforce training. This chapter summarizes the benefits of the Hammond Reef Gold Project (Project) based on the prediction of effects identified throughout the environmental assessment, particularly those discussed in Chapter 6.

Conducting an environmental assessment of a project allows the effects of the project to be identified and practicable mitigation measures to be identified to reduce or avoid entirely any adverse effects. The environmental assessment of the Project has been carried out early in the Project planning and enables mitigation to be incorporated into Project design and procedures, thereby limiting likely adverse effects. In addition, the environmental assessment allows the positive effects of the Project to be identified and enhanced. Many of these positive effects are described in Chapter 6, including an economic assessment report carried out as part of the assessment (Socio-economic Environment TSD).

The ongoing activities of Osisko Mining Corporation (Osisko) generate significant economic benefits to the regions where the company operates. As a company, Osisko actively pursues economic development and social benefits by actively seeking local goods and service providers.

Osisko's flagship asset is the Canadian Malartic deposit, located in Malartic, Québec – a town with a rich mining history commencing in the mid-1930s. The Canadian Malartic Mine began production in 2011. There are a number of broad similarities between the Canadian Malartic Mine and the Project. Accordingly, the actual benefits and opportunities provided by the Canadian Malartic Mine provide realistic benchmark against which the predicted results of the Project can be compared and verified.

The Project may be expected to benefit stakeholders over at least 14 years by:

- Creating economic activity within the Town of Atikokan, the Rainy River District, local Aboriginal communities and the province of Ontario.
- Proving employment during the 30-month construction phase.
- Providing direct permanent employment to approximately 550 individuals.
- Providing employment and business opportunities for Aboriginal people.
- Generating tax revenues for provincial and federal governments.
- Providing positive returns to Osisko shareholders and stakeholders.
- Creating a better quality of life for the residents by OHRG involvement in improving education, culture and recreation activities in the community.

An economic assessment was undertaken to quantify the economic benefits that would occur on a local, provincial and national level throughout the construction and operations phases of the Project. The data used in the economic assessment includes estimated total capital cost, the shares of labour, materials and equipment, and labour requirements, wages and salaries, using the Canadian Malartic Mine as a benchmark.

The detailed economic assessment, including methods and assumptions, is provided the Socio-economic Environment TSD.

The economic benefits of the Project will occur within a challenging economic environment. The economy of Northwestern Ontario has been declining over the past decade. For example, the gross domestic product for Northwestern Ontario declined by 6.7% between 2001 and 2006, in contrast with an increase of 13.6% for the rest of Ontario respectively over the same period (Rosehart 2008). This economic environment makes the benefits of the Project even more significant.

This chapter provides a summary of the positive effects, which together contribute to the Project's overall benefit to Canadians. The organization of this chapter is as follows:

- The benefits to Canadians of the EA process (Section 11.1).
- The economic benefits provided by the Canadian Malartic Mine, used as realistic benchmark (Section 11.2).
- Anticipated employment and payroll for the Project (Section 11.3).
- Contributions to government revenues, including income and payroll taxes (Section 11.4).
- Workforce training (Section 11.5).
- Summary of overall benefits to Canadians identified throughout the environmental assessment (Section 11.6).

11.1 Environmental Assessment Process

The environmental assessment process contributed to the sustainable development of the region by providing a structured planning process whereby OHRG considered potential environmental effects of the Project and designed mitigation and management strategies to minimize these effects. The consideration and assessment of potential cumulative effects in the region assured that natural resource development is carried out in a sustainable manner.

The environmental assessment provided for Aboriginal consultation, government and public participation in the Project. Consultation for the Project was carried out at key milestones directly linked to the environmental assessment process. Public comments received as part of the EIS/EA consultation process were directly considered throughout the EIS/EA Report finalization process.

In the two weeks following the submission of the Draft EIS/EA report, during the public comment period, presentations were held with the public (in the Town of Atikokan), Aboriginal groups (the Fort Frances Chiefs Secretariat, LDMLFN and the MNO) and the government review team to provide a fulsome overview of the information contained in the report. Comments on the Draft EIS/EA Report were received from Aboriginal, public and government, totalling more than 700 comments. Responses were prepared for each comment that was received and draft responses were presented to stakeholders by topic and interest group. Chapter 7 details Project Public Consultation and Aboriginal Engagement and provides a full summary of activities, including meeting notes and information materials. A summary of the meetings that took place is as follows:

Public

A Community News Brief has been published on a biweekly basis since 2011. Topics of discussion include EA conclusions, EIS/EA Report revisions and Project plans.

Several written comments were received from the public including the Ontario Federation of Anglers and Hunters, the Atikokan Sportsmen's Club, a local tourist outfitter and a local lease holder. Many letters of support were received from the public including from the Atikokan Economic Development Committee, the Town of Atikokan, local municipalities and several local community members.

A Community Open House was held in Atikokan in April. Forty people attended and provided their support and feedback.

Meetings were held with a bait fish harvester, a group of local tourism outfitters, the OFAH and the Sportsmen's Club to present draft responses to comments received on Draft EIS/EA Report. Discussions were positive and resulted in the commitment to invest in capacity funding for tourism promotion. OHRG has committed to providing capacity support to Seine River First Nation (SRFN) to collect additional fish tissue and benthic samples in the Spring of 2014 in conjunction with an environmental study being undertaken with their community. Data collected will be shared with SRFN, OFAH and the Sportsmen's Club.. Formal written responses have also been provided to these groups.

Government

Meetings with regulatory agencies took place on an ongoing basis throughout the public comment period. The topics of these discussions include the following key points:

- No Net Loss Planning
- Environmental Monitoring
- Water Quality Modelling
- Mine Waste Alternatives
- Groundwater Management
- Closure Planning

Agencies were provided draft responses to their comments and discussions took place regarding required revisions to finalize the EIS/EA Report.

Aboriginal

Written comments were received from the Métis Nation of Ontario, Seine River First Nation and Lac des Mille Lacs First Nation. The majority of written comments related to water quality, aquatic health and Aboriginal rights.

OHRG visited each First Nations community and shared the conclusions presented in the EIS/EA Report. Copies of Community News Brief publications are also provided to each Band Office.

OHRG held meetings with First Nations and Métis to discuss their comments and provide draft responses. A formal written response has been provided to LDMLFN and will be provided to SRFN. Negotiations with MNO are ongoing and OHRG anticipates positive outcome towards a formal partnership agreement in the short term.

Summary of New Work

Some additional work has been undertaken based on the comments received from public, Aboriginal and government on the Draft EIS/EA Report. This work includes new and ongoing field studies, new design and modelling calculations, desktop studies, publication of new reports and revisions to existing reports. The summary of new work undertaken as a result of stakeholder feedback includes:

- Environmental Field Studies
  - Bat surveys
  - Water quality sampling
  - Water level and flows collection
  - Climate data collection
- Environmental Monitoring Plan
  - Revised to clearly meet guidelines
  - Expanded to include more detail and commitments
- Water Quality Modelling
  - Additional definition of mixing zone
  - Conceptual design of effluent diffuser
- Mine Waste Alternatives
  - Alternatives TSD revised substantially to reflect the requirements of the regulatory agencies
- Closure Planning
  - Provided a draft of the Certified Closure Plan to MNDM for review and feedback
  - Revisions to pit filling predictions
  - A memorandum summarizing Closure Alternatives
  - Ongoing discussions about reclamation details

This active and ongoing participation of the Aboriginal, public and government in the project planning process is a significant benefit to Canadians that is provided by the EA Process. Through their contributions more robust consideration and understanding of project concerns is gained, which leads to better designs and mitigations that are more protective of the social and physical environment. OHRG's commitment towards ongoing engagement with Aboriginal communities and the public through information sharing and formation of

committees is directly tied to the environmental assessment process, and our commitments are outlined in Chapter 9 of the EIS/EA Report.

Finally, the environmental assessment provided increased scientific knowledge in the area. The baseline studies conducted by Osisko included two to three years of information collection on the physical and biological environment in the local and regional study areas. This information has been published and is publically available. Osisko also contributed to the collection of traditional land use by First Nations and Métis in the area through either capacity funding or direct participation in information collection.

11.2 Economic Benefits from the Canadian Malartic Project

Osisko's Canadian Malartic Mine has many similarities with the Project, including open pit mining, ore processing technology, number of employees, annual expenditures and operating structure.

The tables in this section provide a summary of the economic benefits experienced through the Canadian Malartic Project, including the salaries and taxes paid by Osisko and its employees.

Table 11-1 summarizes the annual payroll cost at the Canadian Malartic Mine along with the company's contributions to government programs and the taxes paid by employees. The average salary and benefits paid to individuals working at the Canadian Malartic Mine is $100,000 per year.

Table 11-1: Canadian Malartic Project Salaries

Salaries (millions of dollars)	**2012**	**2011**	**2010**
Direct salaries and benefits	97.5	72.3	44.2
Contribution to government programs	10.3	7.5	3.8
Total salary contributions	107.8	79.8	48.0
Tax contributions by employees	28.5	25.3	11.0

Source: Osisko 2008.

Table 11-2 shows the anticipated amounts of taxes and mining royalties related to changing gold prices, based on information from the Canadian Malartic feasibility study (Osisko 2008). The potential financial contributions are provided for three gold prices are shown in Table 11-2, namely: $775, $1,500 and $1,900 per oz. Although Hammond Reef Project will be subject to Ontario royalty and taxes laws that differ from those in Quebec, where the Canadian Malartic mine is located, the values below are considered reasonable estimates for general comparison.

Table 11-2: Canadian Malartic Project Financial Contributions (Life of Mine)

	Feasibility Study		
	$775 per ounce	**$1,500 per ounce**	**$1,900 per ounce**
Taxes and mining royalties	$354.5 M	$3.2 B	$4.6 B
Mining royalties	$67.8 M	$1.4 B	$1.9 B

Source: Osisko 2008.

11.3 Employment and Payroll

The Project is anticipated to provide substantial employment opportunities both through direct employment and expenditures on contracts, goods and services. These benefits are identified and discussed in Chapter 6. This section provides a summary of the total direct, indirect and induced employment. Details of the development of these estimates are summarized in Chapter 6 and provided in the Socio-economic Environment TSD.

Table 11-3 provides estimated employment for the construction and the operations phases of the Project, including direct, indirect and induced employment. Employment is expressed in terms of full time equivalents (FTE). One FTE is equal to one person-year of employment.

Direct Project employment is significantly enhanced by (1) spin-off jobs, comprising indirect and induced employment, and (2) employment by supplier and service industries as a direct result of Project expenditures.

The construction phase will involve a project workforce of 1,040 FTE or person-years of direct employment on the Project, 780 of which will come from Ontario. The supplier/service industry will add 4,044 FTE or person-years of direct employment, 2,335 of which will come from Ontario. Using standard industry multipliers for indirect and induced employment, the total employment during the construction phase is estimated to be 9,557 FTE or person years, 4,287 of which will come from Ontario.

On an annual basis, the operations phase will involve a project workforce of 550 FTE or person-years of direct employment on the Project, 440 of which will come from Ontario. The supplier/service industry will add 642 FTE or person-years of direct employment, 428 of which will come from Ontario. Using standard industry multipliers for indirect and induced employment, the total annual employment during the operations phase is estimated to be 2,289 FTE or person years, 1,182 of which will come from Ontario. Over the 11 year operations phase, the estimated direct, indirect and indirect employment is 25,179 FTE or person-years, 13,002 of which will come from Ontario.

Table 11-3: Employment Opportunities for the Construction and Operations Phases of the Project

Phase	Provincial Direct	National Direct	Provincial direct & indirect	National direct, indirect & induced
Construction Phase				
Project workforce (FTE over 30 months)	780	1,040		
Supplier/service industry employment	2,335	4,004		
Total Employment (Years 1-3)	**3,115**	**5,044**	**4,287**	**9,557**
Operations Phase				
Average annual Project workforce (FTE per year)	440	550		
Average annual supplier/service industry employment	428	642		
Annual Total Employment	**868**	**1,192**	**1,182**	**2,289**
Total Employment over 11 years	**9,548**	**13,112**	**13,002**	**25,179**

The Project is anticipated to provide substantial economic benefits to local community members through direct employment. Estimated wages and salaries are provided at the national, provincial and local levels below. The total combined estimated wages and salaries for the construction and operations phases are $2 billion. Of this, $332 million is expected to be focused locally.

Specific estimates are also provided for the local Aboriginal communities based on OHRG's commitment to work with Aboriginal partners to increase employment opportunities. Throughout 2012, the Hammond Reef exploration project employed 22 people from Aboriginal communities. The total combined estimated wages and salaries paid to Aboriginal community members for the construction and operations phases are $124 million.

Table 11-4 provides a summary of the anticipated payroll expenditures for the construction and operations phases of the Project. Standard industry multipliers were used to estimate the additional indirect and induced payroll.

Table 11-4: Summary of Payroll Expenditures for Construction and Operations Phases of the Project

Phase	Direct	Total Direct, Indirect and Induced
Construction (Years 1 to 3)		
National		
Wages & salaries ($ millions)	$511.50	$719.70
Provincial		
Wages & salaries ($ millions)	$303.40	$365.71
Local		
Wages & salaries ($ millions)	$36.60	
Local Aboriginal Communities		
Wages & salaries ($ millions)	$19.30	
Operations (Years 4 to 14)		
National		
Wages & salaries ($ billions)	$1.57	$2.1
Provincial		
Wages & salaries ($ billions)	$1.17	$1.4
Local in LSA		
Wages & salaries ($ millions)	$295.80	
Local Aboriginal Communities		
Wages & salaries ($ millions)	$105.10	

11.4 Provincial and Federal Taxes

The Project is anticipated to provide substantial economic contributions through provincial and federal revenues from personal income taxes. Taxes considered include those paid by direct labour and by spin-off employment, either indirect or induced.

Table 11-5 provides estimated income tax revenues for the construction and the operations phase. The total combined tax revenue for the Project is $490 million, comprising $175.7 million in provincial taxes and $315.1 million in federal taxes.

Table 11-5: Provincial and Federal Revenues from Personal Income Taxes ($ millions)

Phase	Provincial[(a)]	Federal[(b)]	Total
Construction			
Construction (Total years 1 to 3)	$36.20	$115.50	$151.70
Operations			
Annual	$12.70	$18.10	$30.80
Total years 4 to 14	$139.50	$199.60	$339.10
Total Construction & Operations Phases (Years 1 to 14)	**$175.70**	**$315.10**	**$490.80**

Note:

(a) Provincial taxes on direct and indirect income.

(b) Federal taxes on direct, indirect and induced income.

11.5 Workforce Training

Canadian mining operations use advanced technology and a highly trained workforce. Employment at the Project will require high school graduation and, in many cases, addition technical college or university qualification.

In order to enhance the benefits of training and education that are anticipated as part of the Project, it is Osisko's policy to require a high school diploma of all new hires. Where a mature individual without a high school diploma is retained as part of the Project workforce, OHRG will encourage and support them in their completion of a high school diploma.

The Project is anticipated to provide substantial long term social benefits through workforce training. This includes the enhancement of existing skills and the opportunities that will be provided to train and develop the skills necessary to gain employment on the Project.

Workforce training will occur through a number of pathways, as follows:

- On-job and on-site training programs carried out by OHRG as part of daily operations.
- Focussed off-site training for specific jobs and tasks.
- Community-based training directed towards obtaining employment by OHRG or its suppliers.

Each of these training opportunities is discussed in the following paragraphs.

11.5.1 On-job and On-site Training

This includes the training programs provided by OHRG to ensure employees are equipped to carry out their assigned duties and progress in their careers. The majority of training provided to the Project workforce is anticipated to be provided on-site. This will include upgrading of equipment operating certificates while working on-site.

Another example of on-site training is health and safety training provided to all employees. In recognition of the Mine Site location and the commitment to have an Aboriginal-friendly workplace, employees will also be provided with cultural sensitivity training which will be delivered through the First Nations Cultural Committee.

On the job training during the early stages of the Project should also provide the opportunity for people to improve their skills and obtain permanent employment. For example, the proportion of Aboriginals in the workforce is expected to increase during the operations phase, reflecting the opportunities for skills training during the construction phase of the Project.

11.5.2 Focussed Off-site Training

Some of the jobs on the Project involve unique skills that can only be obtained through specific off-site training. This off-site training might be obtained at Osisko's operating Canadian Malartic Mine or at an off-site location.

Examples include training of Ore Processing Facility operators to supplement the qualification of processing plant operators or training of heavy-equipment operations for Mine operations.

11.5.3 Community-based Training

The Project provides significant employment opportunities for people with the necessary education and training to work in a modern mine. Currently, in Northwestern Ontario, absence of employment opportunities contributes to the cycle of low skills and failure to qualify for those jobs that might become available. The Project should provide an incentive to young people, both in the Aboriginal communities and the broader community, to further their education in order to qualify for employment by the Project.

OHRG is committed to sharing employment information and providing targeted employment opportunities to Aboriginal youth, such as the Summer Experience Program that was carried out on site in 2011 and 2012. Although the Project is not within commuting distance for most of the identified communities, it could offer a good opportunity for workers that are willing to live at site on a rotational basis. This type of work can be beneficial to allow Aboriginal people to continue some of their traditional practices such as hunting and fishing.

11.6 Summary of Benefits

In summary, the Project represents a major private-sector investment in developing an important resource that will provide substantial long-term benefits to the local and regional communities, Aboriginal people, Ontario and Canada as a whole. These substantial benefits occur over approximately 15 years through Project spending, direct, indirect and induced employment and a commitment to develop the resource in an environmentally-responsible manner.

Table 11-6 provides a summary of the overall benefits of the Project to Canadians. The table also specifically identifies the local benefits that may be expected in the Town of Atikokan and nearby Aboriginal communities where the benefits will be most immediately experienced.

Table 11-6: Summary of Benefits of Hammond Reef Gold Project to Canadians

Area of Benefit	Overall Benefit	Local Benefits	Regional, Ontario and Canada Benefits
Development period	■ Economic activity occurs over almost 14 years (30 months construction, 11 years operations)	■ Economic activity occurs over almost 14 years (30 months construction, 11 years operations)	■ Economic activity occurs over almost 14 years (30 months construction, 11 years operations)
Value of gold produced	■ 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.		
Contribution to Government Finances (Corporate taxes, income taxes, payroll taxes, fees for service)	■ The Project would result in substantial federal and provincial revenues, including corporate, personal income, and payroll taxes	■ Municipality would receive fees for building permits and services	■ Total tax revenues: ▪ Ontario – $176 million ▪ Canada – $315 million
Employment (Direct, indirect and induced jobs)	■ The Project would provide major direct and indirect employment in an area of high unemployment	■ 10% of construction employment and 30% of operations employment would be local[1]	■ Construction person-years: ▪ 9,557 (1,040 direct project workforce, 4,004 service/suppliers direct & 4,513 indirect and induced) ■ Operations person-years: ▪ 25,179 (6,050 direct project workforce, 7,062 service/suppliers direct & 12,607 indirect and induced)

[1] Local refers to the percentage of the workforce whose place of residence is anticipated to be within the Socio-economic Local Study Area.

Table 11-6: Summary of Benefits of Hammond Reef Gold Project to Canadians (Continued)

Area of Benefit	Overall Benefit	Local Benefits	Regional, Ontario and Canada Benefits
Scientific knowledge	■ The environmental assessment provided increased scientific knowledge in the area	■ Baseline studies conducted by Osisko included two to three years of information collection on the physical and biological environment in the local and regional study areas. ■ Collection of traditional land use information by First Nations and Métis through either capacity funding or direct participation	■ Most information collection focussed at the local scale
Economic activity (Direct spending on Project equipment, materials and supplies)	■ The Project represents a major input of private-sector capital and development ■ The Project would make a major contribution to economic activity in an area of declining economic activity	■ 5% of construction expenditures and 5% of annual operating expenditures would be local	■ Capital expenditure: $1.4 billion ■ Operating expenditures: $327 million per year
Housing	■ The Project would result in an increase in the housing demand and prices	■ Anticipated additional demand for housing: ▪ 20 during construction ▪ 92 during operations ■ There are currently 1,420 housing units in Atikokan	

Table 11-6: Summary of Benefits of Hammond Reef Gold Project to Canadians (Continued)

Area of Benefit	Overall Benefit	Local Benefits	Regional, Ontario and Canada Benefits
Education and Training	■ The Project would provide opportunities for regional universities and colleges to engage in practical training programs		■ Education and training offered at Confederation College (Fort Frances and Thunder Bay) and Lakehead University (Thunder Bay)
Public services and infrastructure	■ The Project would enhance local public services and infrastructure	■ Increased population and economic activity would lead to more efficient use of currently underutilized local public services and infrastructure	
Community well-being and development	■ The Project represents a mining development in an economically challenged area, thereby reversing a declining trend	■ The Project would be the first new mine in several decades in this former mining area	■ The Project would contribute to the continuing development of Ontario and Canada as a major powerhouse in mineral exploration and mining. There are currently approximately 17 mines producing gold in Ontario and approximately 45 in Canada

Table 11-6: Summary of Benefits of Hammond Reef Gold Project to Canadians (Continued)

Area of Benefit	Overall Benefit	Local Benefits	Regional, Ontario and Canada Benefits
Aboriginal people	■ The Project would provide employment, business opportunities and training for Aboriginal people	■ Osisko has a Resource Sharing Agreement with Lac des Mille Lacs First Nations and the seven member First Nations of the Fort Frances Chiefs Secretariat ■ Members of the surrounding local Aboriginal communities will take priority respecting employment opportunities where they meet the requisite skills, education, experience and other job qualifications of a particular position. ■ Osisko has contributed approximately $23 million to Aboriginal businesses and will continue to seek out opportunities such as contracts and joint ventures ■ The Project provided approximately $22 k in direct investments to Aboriginal communities in 2012 to fund ongoing cultural support throughout Project operations	