12.0 CONCLUSIONS

Osisko Hammond Reef Gold Ltd. intends to develop the Hammond Reef gold deposit into an operating gold mine. This EIS/EA Report has been prepared with the objective of meeting provincial requirements for an Individual Environmental Assessment, and federal requirements for a Comprehensive Environmental Assessment.

An assessment of Project alternatives was completed based on a comparison of environmental, socio-economic, economic and technical criteria and indicators together with engineering requirements. Based on this assessment of alternatives for each of the Project components, the set of preferred alternative means of carrying out the Project was chosen.

Key aspects of the Project that were considered with respect to the environmental assessment include, a Tailings Management Facility, a Mine with two open pits, an Ore Processing Facility, a Tailings Management Facility (TMF), a Waste Rock Management Facility (WRMF), Linear Infrastructure including an access road and a transmission line, a Water Management System, and supporting infrastructure that includes a worker accommodation camp.

Based on the findings of the environmental assessment and planned mitigation measures, as documented in this EIS/EA Report, the Hammond Reef Gold Project can be developed such that there is no significant residual impact to the biophysical environment. Furthermore, it is considered that the Project provides substantial socio-economic benefits to Aboriginal people, the local community and the region and has garnered significant community support through ongoing partnerships and information sharing. There are no predicted significant residual impacts from the Project.

Detailed conclusions regarding the effects assessment, mitigation measures, environmental and social management planning and the economic benefits of the Project area provided in the following sections.

12.1 Effects Assessment

The potential effects of the Project were assessed through an understanding of the Project components, and the ways in which these could interact with the physical, biological and social environments to produce changes.

The predicted changes were then assessed against identified criteria and indicators to determine the significance of these changes to biological and socio-economic features of the environment. The conclusions of the effects assessment is provided by component below.

12.1.1 Physical Effects Assessment

Geology, Geochemistry and Soils

No adverse effects to geology, geochemistry or soils are predicted to occur from the Project. Geochemical testing was conducted to confirm whether the waste rock and tailings deposits could be potentially acid generating and metal leaching. The conclusions of the completed analysis including leach testing and kinetic testing show that the waste rock and tailings will be non-acid generating with excess neutralization potential primarily resulting from carbonate minerals and will not leach metals. Construction of the Project will result in vegetation removal which will expose the soil and increase the risk of erosion. Project activities will also include
the potential for spills, leaks and seepage of substances, which could alter the chemistry of soils and reduce soil capability. The direct loss of soil and alteration of terrain may have implications with respect to wildlife use of the Local Study Area and with respect to the use of the area as a timber resource. Implementation of an Erosion Control Management Plan, a Spill Management Plan and agreements with timber harvesters will mitigate these effects so that the residual effects are not significant.

**Air, Noise and Vibration**

Twenty Points of Reception (POR) were considered in the air quality and noise assessment. The PORs considered include the Town of Atikokan, local tourism establishments, trapper’s cabins and cottages.

The results of air modelling show that the Project can operate in compliance with s.20 of Ontario Regulation 419/05 for the Operations Phase in the peak production year as defined by the worst-case operating conditions. This is considered to be a conservative assessment since not all scenarios comprising worst-case conditions are likely to be active at any given time. The effects of air emissions on human health are assessed in the human health risk assessment.

A noise assessment was carried out for 20 potentially sensitive Points of Reception (PORs), which were identified within the vicinity of the Project. These PORs included tourist establishments, cottages and cabins within the LSA. The modeling results predicted that noise levels associated with the Project would comply with MOE noise guidelines at 19 of these 20 PORs. One tourist operation will exceed noise levels; however, a private agreement is currently in place with the tourist operator that provides for restricted access during the Project’s construction and operations phases. One trapper’s cabin was identified as having potential noise levels that could cause annoyance. A private agreement is currently in place with the trapline holder that provides for restricted access to the trapline and cabin during the Project’s construction and operations phases.

Fish habitat is sensitive to vibration, particularly active spawning beds and nurseries. Vibration during blasting and excavation of open pits could cause blast-induced water overpressure level changes at the shoreline, potentially effecting sensitive fish species during critical life stages. Operational blasting monitoring to assess the intensity of blast vibrations at the receptor locations will be undertaken during operations. During the initial stages of pit development, blast intensities will be monitored and site-specific Peak Particle Velocity (PPV) will be calculated in order to more accurately predict potential vibration intensities in adjacent aquatic habitats. An adaptive management plan will be implemented to ensure that vibration effects on fish habitat are negligible.

**Stream Flow**

The greatest changes to streamflows as a result of Project activities during the Operations phase are expected to occur in Mine Study Area watercourses as a result of changes to their tributary drainage areas. Of the 29 watersheds evaluated, five will be unaffected.

The expected changes in flows in local scale watercourses include a reduction in flows in Lumby Creek of approximately 7% to 8%. Changes to the outflows from the Marmion Reservoir and flows in the Seine River downstream of the Raft Lake Dam may occur due to the Project. Total net reduction in annual mean inflows to the Reservoir is estimated to be 0.190 m³/s in an average year. This represents less than 1% of the average annual outflow at Raft Lake Dam under the 2004 to 2014 Seine River Water Management Plan Changes in monthly mean outflows from Upper Marmion Reservoir are expected to be in the range of -3.10% to -0.21% based on single-year lake water balance modelling. These predicted changes in Upper Marmion Reservoir
outflows are well within the generally accepted accuracy. Thus, in reality, the effects of the Project on reservoir outflows are expected to be small enough that they would not be measurable in the field. Similarly, no measurable changes in flows are predicted to occur in the Seine River downstream of the Reservoir.

**Lake Levels**

Changes to water levels will occur in two lakes, and the Upper Marmion Reservoir. Water levels in Unnamed Lake 5 located to the east of the TMF are expected to be in the range of -2.1 cm to 0.0 cm during the Operations phase. Changes in water levels in Lizard Lake are expected to be in the range of -2.7 cm to 0.0 cm. Changes in water levels in the Upper Marmion Reservoir due to Project activities are expected to be in the range of -9.0 cm to -0.4 cm based on single-year water balance modelling. In an average year, the predicted maximum reduction in water levels of the Upper Marmion Reservoir is 8.1 cm. The predicted changes in monthly water levels in Upper Marmion Reservoir are not considered significant since they represent less than 6% of the average annual range in monthly water levels (1.58 m) recorded in the reservoir since 2004.

**Groundwater Levels**

The Project could result in changes to groundwater levels. No groundwater users were identified in the vicinity of the Project that could potentially be affected by changes in groundwater levels from Project activities. The cone of depression from pit dewatering extends about 700 m from the pit perimeter and underlies a portion of the WRMF and overburden stockpiles. Within the area of the cone of depression, groundwater levels could potentially result in a reduction or even elimination of flows in some local streams should there be a significant connection to the deeper bedrock flow system. However, most groundwater flow occurs in more permeable sediments above the bedrock; thus, there is potential for development of a perched water table, or flow above the de-watered bedrock. Also within this area, seepage losses from the stockpiles could result in flow increases in some local streams. A seepage collection system is included as an in-design mitigation measure.

**Water Quality**

The Project could result in changes to water quality in site, local and regional scale watercourses in all four phases of the Project. The water quality assessment considers the operations phase to be the worst case scenario and the focus is on this phase. The presence of a flooded open pit also will also have an influence on water quality and thus a post-closure assessment was also completed. The water quality models were developed based on the physiography of the area, project description, geochemical test results, process test results and baseline monitoring data and were used to predict and evaluate potential water quality influences from the site and impacts in the receiving waters. For lakebed sediment quality, the potential TSS discharge from the site and air deposition was considered at the end of mine life.

All parameters are below MISA and MMER discharge guidelines at the point of discharge to the Upper Marmion Reservoir (the diffuser ports). Site Specific Water Quality Objectives (SSWQO) for cyanide and copper are predicted to be reached within distances of 29 m and 18 m, respectively, from the diffuser ports. Following initial mixing, (i.e., within 100 m of the diffuser ports), all predicted concentrations during average site discharge conditions during operations are lower than the CWQG, PWQO, MMER and MISA criteria. In general, the predicted results after initial mixing are the same as or marginally greater than baseline concentrations. The sulphate concentrations in the water column during average conditions are predicted to increase marginally from 1.6 mg/L as measured in the baseline studies to 1.8 mg/L.
12.1.2 Biological Effects Assessment

Terrestrial Habitat and Wildlife Species

Development of the Project will result in some loss of habitat in the Project Site that will displace wildlife species to adjacent areas. The total Project footprint will require clearing of approximately 1,200 ha of vegetation. The direct loss of wetlands due to the Project footprint is approximately 380 ha. This is 21% of the wetlands occurring in the Terrestrial Ecology LSA and approximately 0.06% of the wetlands in the Terrestrial Ecology RSA. With implementation of mitigation measures, the residual effect of wetland habitat loss is considered to be of low significance. The direct loss of forest cover due to the Project footprint is approximately 770 ha. The overall forest cover loss is approximately 15% of forest available in the Terrestrial Ecology LSA and 0.21% of the forest occurring in the Terrestrial Ecology RSA.

Species-at-risk (SAR) identified in the Project area include birds, reptiles and mammals. Three bird species; Canada warbler, common nighthawk and bald eagle, were identified as being present in the Local Study Area, however, only the Canada warbler was observed to nest in the Project Site. The preferred habitat of the Canada warbler that would be affected by the Project was estimated as 11% of the habitat in the Project Site. As a result, some individuals may be displaced to adjacent habitats.

The reptile SAR that has been identified as occurring in the area is the snapping turtle. Snapping turtles were considered to be unaffected by a change in water level in Lizard Lake of less than 3 cm.

In January 2013, several species of bats were added to Ontario’s Species-at-risk list and were, therefore, considered in the Final EIS/EA Report. Range maps indicate that six species of bats have known home ranges in the area, all of which were recorded during the 2013 bat field surveys at Hammond Reef. Loss of habitat for maternity roosting and hibernation is considered moderate and will be offset by the creation or enhancement of other habitats for bats. The details of the compensation plan have yet to be determined; however, preliminary concepts include the installation of bat condos and boxes, as well as the improvement of other mine adits for use at hibernation sites.

Potential effects to the terrestrial environment could result mainly through the physical loss and fragmentation of terrestrial habitat, including birds’ nests. Other physical changes include alteration of flows and drainage patterns described by the hydrology component that can affect wildlife habitat or habitat suitability. Changes to surface water and groundwater quality based on the discharge of treated effluent, runoff from WRMF and other mine facilities may also affect vegetation, soils, sediments and wildlife habitat.

Some terrestrial biology effects could occur due to water use and Project emissions to water and air. Changes to water levels in Marmion Reservoir due to planned water taking from Upper Marmion Reservoir for process and potable water supply could affect vegetation in wetlands and wildlife habitat. Air emissions and dust deposition can cause changes to the chemical and physical properties of surface water, soils and vegetation, which in turn affect wildlife health.

Activities during operations that have the potential to effect the biological environment include introduction of invasive plant species, which could out-compete native vegetation, and, as well, accidental spills on the mine site or along the access road can affect soils and vegetation. Sensory disturbance during construction and operations including noise, vibrations and proximity to humans can also cause the disturbance and displacement...
of wildlife. The Project will also result in improved access to the area, which could affect wildlife population sizes through increased hunting activities.

Mitigation measures for potential effects to the terrestrial environment will include in-design measures, planning and management measures, training and education measures, and monitoring strategies.

Development and implementation of management plans will include an Invasive Species Management Plan, an Emergency spill management program, Dust management plan and the implementation of a strict "no hunting, harvesting, trapping or fishing" policy for workers while staying at the onsite worker accommodation.

Workforce training and education measures are also important mitigation measures. Enforcing speed limits on access roads and mine road, proper cleaning and maintenance of equipment and worker education programs focused on Species at Risk are all important measures to reduce potential effects to the terrestrial environment.

**Aquatic Habitats and Species**

The Project will result in the loss of fish habitat. The draining of Mitta Lake and a small waterbody in the footprint of the TMF, as well as the loss of headwater reaches of some small permanent streams, represent the direct loss of habitat that will occur as a result of the Project. Fish habitat losses include 0.8 ha of Sawbill Bay, 4 ha of inlet streams, 0.5 ha of baitfish ponds in the lower reaches, 1.8 ha of headwater streams, 30 ha of lakes and 3.7 ha of baitfish and northern pike ponds in the headwaters. There are also 14 stream crossings or crossing upgrades on the proposed access road that will result in the loss of habitat within the footprint of the culvert/bridge structure. All of these habitat losses will be offset by compensation projects outlined in the NNLP being prepared for the project and, as a result, there will be no residual effects from these losses.

The following is a summary of the fish habitat compensation projects identified as part of No Net Loss Plan:

- Fish salvage and rescue operations during the construction phase.
- Stream restoration works at 15 culvert crossings
- Stocking of four fishless headwater lakes/ponds.
- Constructing berms to create three new headwater ponds.
- Creating northern pike spawning habitat adjacent to the mouth of Sawbill Creek

The loss of fish communities in Lizard Lake and Upper Marmion Reservoir includes loss of indirect fish habitat and genetic diversity. Loss of indirect fish habitat has been included in the No Net Loss Plan. Effects to genetic diversity will be mitigated through fish salvage protocols during which the majority of impacted fish will be released in other waterbodies in the area, including Lizard Lake, API #8 and Upper Marmion Reservoir. In addition, fish salvaged from these operations will be used to stock a number of fishless lakes as part of the NNLP. With mitigation and management measures such as fish compensation, fish relocation and implementation of erosion control measures no significant impacts are predicted on aquatic life in Lizard Lake, Upper Marmion Reservoir or downstream in the Seine River due to the Project. As a result, this residual effect is considered to be negligible.
12.1.3 Social Effects Assessment

**Socio-economic**

The Project will have a positive economic effect through jobs and increased government revenues during the construction and operations phase. On an annual basis, the operations phase will involve a project workforce of 550 people and over the 11 year operations phase, the estimated direct, indirect and induced employment is 25,179 FTE or person-years, 13,002 of which will come from Ontario.

The tax revenues from the Project are a positive effect and they represent a major contribution of approximately $340 million to federal and provincial revenues over the 11-year operations phase. The contribution to the Town of Atikokan, though likely small, is also positive and continues the revenue growth that began during the exploration and permitting phases. The effect on population and demographics is expected to be small during construction and moderate during operations. Overall, population increase is expected to contribute to the net benefits of the Project. An increase in the number of Atikokan residents (workers and their families) should serve to reverse the current population decline in the LSA.

The existing public services and infrastructure in the LSA, including the Town’s plans for a new waste management facility, are capable of accommodating the small additional demand from the Project and increased population as a result of the construction phase. Accordingly, no adverse effects are anticipated on this VEC.

Overall, the effect of the Project on housing and accommodation is positive. The Project is anticipated to result in an increase in the demand and cost of housing in the LSA which should contribute to the stabilization of the local housing market.

The Project is anticipated to result in an increase in traffic, resulting in a Category “C” level of service on Highway 11B, and an increased volume-to-capacity ratio. The increase still provides for service levels well within acceptable ranges and the Project should not result in unacceptable traffic congestion.

The Project could result in effects to hunting because of loss of habitat. The magnitude of the effect is low because the amount of land removed is less than 5% of the wildlife management unit. The frequency and reversibility are both high since the effect occurs continuously and is reversible; therefore, the overall assessment of significance of this effect is assessed as low.

Outdoor tourism and recreation could be affected by the Project because of changes in perception caused by effects to the visual landscape. This is a permanent change that will be mitigated through ongoing consultation with tourism operators and OHRG’s commitment to invest in advertising to promote the local industry.

A Visual Assessment was undertaken and the results were shared with the public and local Tourist Outfitters. Several examples of the visual renderings that were generated are shown below.
Figure 12-1: View 1 Visual Simulation - View of Overburden and Waste Rock Stock Piles from Trap Bay of Upper Marmion

Figure 12-2: View 3 Visual Simulation - View of Process Plant from Sawbill Bay
Figure 12-3: View 6 Visual Simulation - View of Tailings Management Facility from Trapper Cabin

Figure 12-4: View 8 Visual Simulation - View of Tailings Management Facility from Trapper Cabin
Aboriginal Interests

The Aboriginal Interests assessment examined the effects of the Project on Aboriginal Community Characteristics, Aboriginal Heritage Resources and Traditional Use of Land and Resources.

The effects on Aboriginal Community Characteristics, namely those effects on Employment, Business Activity, and Training and Education were assessed as being positive. The Project will contribute to the economic opportunities and development of Aboriginal communities through an estimated 20 jobs during construction, 55 jobs during operations and 25 jobs during closure. OHRG aims to promote the utilization of Aboriginal enterprises whenever possible in supplying goods and/or services required during each phase of the Project. An estimated $22 Million during construction and $7.9 Million during operations are anticipated to be spent on goods and services obtained from Aboriginal businesses. This expenditure depends upon the ability of Aboriginal businesses to meet the requirements of the goods and services needed. Because OHRG will be present in the Aboriginal Interests RSA, will engage with Aboriginal communities on potential job opportunities, and will provide Aboriginal youth opportunities, the level of education attainment is expected to increase.

Most potential effects to Aboriginal Heritage and Resources were identified as being unlikely to occur, since the Project will not result in any physical disturbance of any known sites. Through the use of the RSA committees and the MNO consultation committee, a protocol will be developed to ensure that in the unlikely event a currently unknown site is discovered during construction, appropriate action can be taken.

As part of the research studies for the environmental assessment, Stage 1 and 2 archaeological assessments were conducted on the area likely to be affected by Project physical activities. No Aboriginal archaeological sites or artefacts were found.

The effects on Traditional Use of Land and Resources, specifically loss of fishing opportunities, hunting opportunities and plant harvesting opportunities were assessed as being negligible because any effects would be limited to the Aboriginal Interests Local Study Area (LSA) and would not measurably reduce the overall land use opportunities provided within the Aboriginal Interests Regional Study Area (RSA). The removal of land base within traplines in the Aboriginal Interests LSA will be addressed through agreements between OHRG and trapline holders. The effect on the consumption of country foods is unlikely since neither their source nor safety would be affected.

The Project is located in an area with a healthy and robust fishery, and a strong hunting resource. Hunting and fishing by Aboriginal people occurs within the Aboriginal Interests RSA. Effects on hunting and fishing within the Aboriginal Interests LSA as a result of the Project are small or negligible compared to the overall opportunities and resources in the Aboriginal Interests RSA. Since most Aboriginal people practice hunting and fishing within the Aboriginal Interests RSA, the effects of the Project on the Aboriginal use of fish and game for dietary or commercial purposes is negligible.

The environmental assessment included an Ecological Risk Assessment (ERA) that evaluated the potential for adverse effects to ecological (including wildlife and aquatic life) health associated with changes in environmental quality due to chemical releases from the Project. The ERA did not identify any Contaminants of Potential Concern in soil or surface water for further evaluation. As such, the ERA did not proceed beyond the chemical screening stage of the problem formulation. This indicates that adverse effects to ecological health as
a result of the Project are not expected, and an effect on the safety of country foods is not anticipated as a result of the Project.

**Physical and Cultural Heritage Resources**

As part of the research studies for the environmental assessment, Stage 1 and 2 archaeological assessments were conducted on the area likely to be affected by Project physical activities. Two late 19th century to mid-20th century mine sites were identified, which are likely to be affected by the Project. Two historic mining operations reside within the footprint of the proposed development, the historic Hammond Gold Reef Mine, located on the northern limit of the Mitta Lake Peninsula, and the Sawbill Mine, located north of the east end of the proposed East Pit. In both cases cultural remains exist that illustrate the location of the abandoned mining operations. Potential effects to the two former mine sites are unlikely since they are both located outside of the mine footprint.

**Human Health Risk Assessment**

No Contaminants of Potential Concern (COPCs) were identified following the conservative screening process. Therefore, no adverse health effects are expected as a result of changes in soil and water concentrations.

There are no residual effects from the acute or chronic inhalation assessments. Predictions were below MOE target levels, indicating negligible health effects. In the particulate matter assessment, concentrations of PM$_{2.5}$ and annual concentrations of PM$_{10}$ were also below guidelines and not expected to cause adverse health effects.

Concentrations of Diesel Particulate Matter (DPM) exceeded the screening threshold for carcinogenic effects; therefore, DPM was evaluated following the chronic inhalation assessment method. The calculated levels were less than the target cancer risk of $1 \times 10^{-6}$ for all receptors except for one trapper cabin, which was $1.6 \times 10^{-6}$. These predictions assume that the trapper spends 105 days per year, 8 hours a day for 15.5 years at the trapper cabin. It was also assumed that the maximum annual DPM concentration modelled for the Project exists for the entire life of the Project. These conservative assumptions contribute to potentially overestimating the cancer risk. The magnitude of this risk is considered low.

Risks for carcinogens are based on the Incremental Lifetime Cancer Risk (ILCR), which is the probability of developing cancer as a result of environmental exposure to a carcinogenic substance. Interpretation of these ILCRs was based on comparison of the calculated ILCR values with the “benchmark” of 1 in 1,000,000 (i.e., one extra cancer case in a population of 1,000,000 people).

In the noise assessment, measures prescribed by Health Canada for assessing exposure to noise and potential human health effects were utilized. At receptor locations surrounding the Project, noise levels are within the ranges reported for increased risk of hypertension and sleep disturbance. The magnitude of effect for noise is considered to be low based on comparison to Health Canada targets and considering that predicted levels are in the lower end of ranges for hypertension effects.
12.2 Mitigation and Compensation Measures

The design of the Project includes a number of mitigation measures that will be implemented to minimize the environmental impacts of the Project.

- Re-use of process water, tailings water and stormwater runoff will minimize the taking of water from Upper Marmion Reservoir, minimizing the change in lake water levels. The PPCP has been incorporated into the Project design to store excess water for processing plant use.

- A cyanide destruction circuit has been incorporated into the process to reduce cyanide levels in the tailings. Predicted water quality in the TMF reclaim pond was assessed through an ecological risk assessment and was found to present no risks to wildlife that may consume water from this source.

- An effluent treatment plant will be utilized to reduce TSS or metal concentrations, if necessary.

- A seepage collection system will be implemented to collect seepage from the TMF, WRMF and stockpiles.

- Dust generation along roads will be controlled by dust suppression measures that include watering of roads during dry periods.

- Stream crossings and in-stream work will be conducted during those periods when sensitive fish life stages are not present. Construction methods will minimize in-stream work, and will use and maintain erosion control measures to minimize increases in suspended sediment.

- Construction methods will minimize natural habitat disturbance. Areas to be developed will be clearly marked to minimize incursions of equipment into adjacent undisturbed areas.

- Vehicle accidents with wildlife will be minimized by enforcing speed limits and educating drivers on the importance of avoiding interactions with wildlife.

- Hunting and fishing will be restricted while workers stay at the on-site worker accommodation camp.

The design of the Project includes a number of compensation measures that will be implemented to offset the environmental impacts of the Project, including:

- No Net Loss Plan (fish habitat compensation); and

- Bat habitat offset plans, if necessary.

Management planning and operational processes that will be put into place to mitigate potential effects from the Project include:

- Health and Safety Management Plans

- Erosion Control Management Plan

- Invasive Species Management Plan

- Waste Management Plan

- Spill Management Plan
12.3 Environmental and Social Management Planning

Chapter 8 of the EIS/EA Report represents the Environmental Management Plan (EMP) for the Hammond Reef Gold Project. The EMP was created to reduce the risks to the environment through development of a plan that allows the predicted changes to the environment to be confirmed. The EMP also includes contingency planning should the case arise that the actual monitoring results substantively differ from predictions.

Once construction and operations commence, environmental monitoring will be an integral part of evaluating the effectiveness of the EMP.

The objective of the EMP is to confirm that negative impacts on the physical and biological environments are mitigated; benefits that will arise from the development of the Project are enhanced; and compliance with existing legislation and consistency with provincial guidelines and best practice is achieved.

Conceptual plans to monitor the effectiveness of mitigation measures, and verify the predicted changes to the environment have been developed. These include air quality and vibration, water quantity and quality, groundwater quantity and quality, terrestrial and aquatic biological monitoring plans. Detailed plans will be developed in cooperation with the government, the public and Aboriginal groups.

Both provincial and federal agencies are anticipated to be included in monitoring plan development and in the provision of ongoing advice for the environmental management plan. It is anticipated that a lead agency will be identified to provide direction and review reports.

The Social Management Plan was developed to address the avoidance of, minimization of, and/or compensation for negative socio-economic effects and the enhancement of positive benefits that could result from the Project.

Three separate committees will be engaged and consulted throughout the ongoing Project planning process: First Nations, Métis and Public (Atikokan/OHRG Committee). The First Nations Resource Sharing Committee has already been formed, and consultation with Métis and the public has also been ongoing throughout the exploration and permitting phase of the Project.
First Nations: The First Nations Resource Sharing Committees will provide focussed communications between OHRG and the FN communities, and identify ways that the Project can provide ongoing benefits to identified Aboriginal communities.

Métis: The Métis Consultation Committee has met regularly throughout the Project planning process, and OHRG plans ongoing communications and identification of shared interests to continue through the Committee.

Public: A local monitoring committee will be established which will be modelled after the existing Malartic/Osisko Community Committee. The mandate of the Atikokan/OHRG Committee will be to provide a direct link for communications between community members and OHRG. Information about the Project will be shared with the Committee, and Committee members will disseminate this information to the community at large. In turn, community members can approach the Committee with their concerns, and the Committee can share these community concerns with OHRG.

12.4 Benefits of the Project

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.

The environmental assessment provided increased scientific knowledge in the area. The baseline studies conducted by OHRG 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 publicly available. Osisko also contributed to the collection of traditional land use information by First Nations and Métis in the area through either capacity funding or direct participation in information collection.

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.

Some additional work has been undertaken based on the comments on the Draft EIS/EA Report received from Aboriginal groups, the public and the government review team. 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, development of the Environmental Monitoring Plan, additional water quality modelling, further assessment of alternatives and further definition of mine waste alternatives accounts. Closure planning is still underway and is anticipated to be ongoing until the submission of a Certified Closure Plan subsequent to EA Approval.
The active and ongoing participation of Aboriginal groups, the public and the government review team in the project planning process is a significant benefit to Canadians that is provided by the EA Process. 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.

The Project may be expected to benefit stakeholders by creating economic activity within the local Aboriginal communities, the Town of Atikokan and the Rainy River District and generate tax revenues for provincial and federal governments. The Project will provide short-term employment during the construction phase and is expected to provide long term employment for approximately 550 individuals, including members of local Aboriginal communities.

The economic benefits of the Project include employment, economic activity, government revenues and workforce training. The Project is also expected to create a better quality of life for local community members by OHRG involvement in improving education, culture and recreation activities in the community.

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 mainly through on-job and on-site training programs carried out by OHRG as part of daily operations, but will also include focused off-site training for specific jobs and task and community-based training.

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. This economic environment makes the benefits of the Project even more significant.

### 12.5 Closing Statement

The Project will result in permanent changes to the landscape in the Mine Study Area (MSA), including a permanent WRMF, TMF and Flooded Pit that will remain in Post-Closure.

Based on the findings of the environmental assessment and implementation of planned mitigation measures, as documented in this EIS/EA Report, the Hammond Reef Gold Project can be developed such that there is no significant residual impact to the biophysical environment in the Local Study Area (LSA) or Regional Study Area (RSA).

Fish and wildlife habitat will be compensated for where necessary; and the local and regional lands will be suitable for continued recreational enjoyment with no anticipated Project-related impacts to overall ecological or human health.

The Project will provide substantial socio-economic benefits to Aboriginal people, the local community and the region and has garnered significant community support through ongoing partnerships and information sharing.