



ENVIRONMENTAL ASSESSMENT FOR THE MARATHON PGM-Cu PROJECT AT MARATHON, ONTARIO

MARATHON PGM-Cu PROJECT ENVIRONMENTAL IMPACT STATEMENT – MAIN REPORT

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MARATHON PLATINUM GROUP METALS – COPPER PROJECT

ENVIRONMENTAL IMPACT STATEMENT – MAIN REPORT

Report submitted to:

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Note to Reader

The contents of this report represent Stillwater Canada's best estimate of its plan for developing the Project based on information currently available. This report has not been prepared in accordance with securities regulatory requirements pertaining to disclosure of future-oriented financial information and accordingly may not be relied upon for investment purposes.

PREFACE

This Environmental Impact Statement (EIS) has been prepared in response to formal EIS Guidelines prepared by the Canadian Environmental Assessment Agency and Ontario Ministry of the Environment – Environmental Assessment and Approvals Branch relating to Stillwater Canada Inc.'s (SCI) proposed Marathon PGM-Cu Project (the Project). The proposed Project consists of the development of an open pit platinum group metals, copper and iron mining and milling operation at a site approximately 10 km north of the town of Marathon, Ontario. Ore will be processed at on-site processing facilities. Final concentrates will be transported off-site via road and/or rail to a smelter and refinery for subsequent metal extraction and separation. The total mineral reserve is estimated to be about 91 million tonnes. Mine life (operations) is estimated to be 11.5 years.

The EIS has been developed through the collaborative efforts of Stillwater Canada Inc. (the proponent), the Stillwater Mining Company (the parent company of SCI) and its Project Team (consultants, scientists, experts and legal advisors). SCI has proactively engaged aboriginal peoples, the public-at-large (individuals, communities and stakeholder organizations) and all levels of government (municipal, provincial, federal) during the development of the Project proposal, and will continue to engage these groups should the Project proposal receive approval.

The Project is subject to review by the Government of Canada pursuant to the *Canadian Environmental Assessment Act*, SC 1992, c.37 and by the Government of Ontario pursuant to the Ontario *Environmental Assessment Act*, R.S.O. 1990, c. E.18.

The following parties were involved in developing the EIS:

Name	Affiliation	Role(s)
Stan Emms	Vice President and General Manager, Stillwater Canada Inc.	Overall responsibility for the EIS and development of the Project
Tabatha Leblanc	Environmental Manager, Stillwater Canada Inc.	Responsibility for the environmental aspects of the Project
Kevin McCarthy	Construction Manager, Stillwater Canada Inc.	Mine design and construction related aspects of the Project
Don Emms	Mill Manager, Stillwater Canada Inc.	Mill design related aspects of the Project
Bruce Gilbert	Vice President Environment, Stillwater Mining Company	Parent Company oversight on EIS
Terry Ackerman	Vice President of Projects, Stillwater Mining Company	Parent Company oversight on EIS

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Stillwater Canada Inc. (SCI) acknowledges the following consultants that were involved in the preparation of the EIS:

Name	Role(s)
EcoMetrix Incorporated	EA management, EIS Report preparation, mine waste geochemistry, soils, aquatic resources, soils, water quality modeling, human health risk assessment
True Grit Consulting Limited	EA management, hydrogeology, atmospheric environment, acoustic environment, worker health and safety
Northern BioScience	Terrestrial environment
Engineering Northwest Limited	Traffic
Stantec Consultign Ltd.	Socio-economic impacts, cumulative effects
Ross Archaeological Research Services	Archaeology
gck Consulting	Socio-economics baseline
Calder Engineering	Site hydrology and water balance
Knight Piesold	Mine waste management (mine rock, process solids), water treatment, water balance
Nordmin Engineering	Mine site design
Livio Demateo, Ph.D. Chair, Department of Economics, Lakehead University	Economic impacts

EXECUTIVE SUMMARY

Background Information

This Environmental Impact Statement (EIS), and its supporting documentation, was developed in accordance with the EIS Guidelines issued jointly by the Canadian Environmental Assessment Agency (CEA Agency) and the Ontario Ministry of the Environment (OMOE). The EIS was prepared on behalf of Stillwater Canada Inc. (SCI), the Project component, by EcoMetrix Inc. with assistance from the following contributors: True Grit Consulting Ltd.; Northern Bioscience; Stantec Consulting Ltd., Engineering Northwest Ltd.; gck Consulting; Ross Archaeological Research Associates; Knight Piesold Ltd.; Calder Engineering; and Livio DiMateo (Chair, Department of Economics, Lakehead University).

Project Overview

The Stillwater Canada Inc. (SCI) proposes to develop a platinum group metals (PGMs), copper (Cu) and possibly iron (Fe) open-pit mine and milling operation near Marathon, Ontario (the “Project”).

The proposed mining operation includes the excavation of one primary pit and a satellite pit complex directly to the south. The conceptual plan for pit development is to mine the primary pit and satellite pits simultaneously. By approximately year 6, a number of the satellite pits will be completely mined out to allow for storage of mine rock¹ and process solids².

During the operations phase of the Project, ore will be fed to the mill at an average rate of approximately 22,000 tonnes per day. Ore will be processed (crushed, ground, concentrated) at an on-site processing facility. Final concentrates containing copper and platinum group metals will be transported off-site via road and/or rail to a smelter and refinery for subsequent metal extraction and separation. The total mineral reserve (proven and probable) is estimated to be approximately 91.5 million tonnes. It is possible that an iron concentrate may also be produced, depending upon the results of further metallurgical testing and market conditions at that time.

Open pit development is expected to produce approximately 288 million tonnes of mine rock. The majority of this material (between 85 to 90%) is NAG (non-acid generating or Type 1 material) and will be permanently stored in a purposefully built Mine Rock Storage Area (MRSA) located east of the primary pit. The NAG will also be used in the construction of access roads, dams and other site infrastructure as needed. Drainage from the MRSA will be collected in a series of collection basins and treated, as necessary, to ensure protection of the aquatic

¹ Mine rock is rock that has been excavated from active mining areas but does not have sufficient ore grades to process for mineral extraction

² Process solids are solids generated during the ore milling process following extraction of the ore (minerals) from the host material.

receiving environment into which it will be released (Pic River). It is estimated that approximately, 20 million tonnes PAG (potentially acid generating or Type 2 material) mine rock will be managed on surface during mine operations in temporary stock piles with drainage directed into the open pits. This material will be relocated to the bottom of the primary and satellite pits and covered with water and/or NAG material to prevent potential acid generation.

Process solids will be managed in the Process Solids Management Facility (PSMF), as well as in the satellite pits. The PSMF will be designed to hold approximately 61 million m³ of material, and its creation will require the construction dams. Two streams of process solids will be generated. An estimated 85 to 90% of the total amount of process solids produced will be NAG. The Type 2 process solids will be PAG and will be stored below the water table in the PSMF or in the satellites pits and covered with Type 1 process solids to mitigate potential acid generation. Water collected within in the PSMF, as well as water collected around the mine site other than from the MRSA (e.g., water pumped from the pits, run-off collected around the mill site) will be managed in the PSMF for eventual reclamation in the milling process. Excess water not needed in the mill will be discharged, following treatment as is necessary, to Hare Lake.

Infrastructure facilities associated with the proposed Project will include: ore crushing facilities; a concentrator building; a concentrate storage building; a water (potable and process) supply system; water treatment plants; pipelines; a site road network including a new segment of road to access the site; waste management facilities; 115 kv transmission line and power distribution system; explosives manufacturing and storage facilities; a fuel farm, a bucket shop and heavy repair facility; a concrete batch plant; a hazmat building; an assay lab; a mine services complex; a propane storage area; a 115 kV electrical power transmission line; an employee accommodations complex in the Town of Marathon; and, (possibly) a concentrate rail load-out in the Town of Marathon.

The Project will be undertaken in three phases. The site preparation and construction phase will take 18 to 24 months to complete. The construction workforce will average approximately 400 people. The operations phase of the mine is estimated to be approximately 11.5 years. During operations the work force will comprise an estimated 365 workers. The mine workforce will reside in local and surrounding communities, as well as in an Accommodations Complex that will be constructed in the Town of Marathon. During the decommissioning and closure phase disturbed areas of the Project footprint will be reclaimed in a progressive manner during all Project phases. Natural drainage patterns will be restored as much as possible. The ultimate goal of mine decommissioning will be to reclaim land within the Project footprint to permit future use by resident biota and as determined through consultation with the public, Aboriginal people and government. A certified Closure Plan for the Project will be prepared as required by Ontario Regulation (O.Reg.) 240/00 as amended by O.Reg. 194/06 “Mine Development and Closure under Part VII of the Mining Act” and “Mine Rehabilitation Code of Ontario”.

Regulatory and Planning Context for the Environmental Assessment Process

An environmental assessment (EA) for the Project is required under the Federal *Canadian Environmental Assessment Act* and was voluntarily agreed to by Stillwater under the Ontario *Environmental Assessment Act*. The federal and provincial governments agreed to a harmonized EA process and to this end appointed an independent Joint Review Panel (JRP). This is the first time that Ontario has formed a joint EA review panel with the federal government. The Environmental Impact Statement (EIS) Guidelines and the agreement establishing the JRP were issued in August 2011. The JRP process allows for a single, comprehensive assessment of both the possible effects and benefits of the Project before any decisions are made by the federal and provincial governments.

At the federal level, involvement is focused on requirements of the *Canadian Environmental Assessment Act*, *Fisheries Act*, including the Metal Mining Effluent Regulations, *Navigable Waters Protection Act* and *Explosives Act*. At the provincial level, a number of permits are required, pursuant to the *Ontario Water Resources Act*, Ontario Environmental Protection Act, the *Lakes and Rivers Improvement Act*, *Aggregate Resources Act*, *Public Transportation and Highway Improvement Act*, *Mining Act*, *Technical Standards and Safety Act*, *Building Code Act* and *Occupational Health and Safety Act*. At the municipal level, conformity with zoning provisions and the Official Plan of the Town of Marathon are required.

Scope of the Environmental Assessment

Scoping establishes the boundaries of the EA and focuses the assessment on relevant issues and concerns. By defining the spatial and temporal boundaries, a frame of reference for identifying and assessing the potential environmental effects associated with the Project was established.

For the purposes of this EIS the “Project” includes all components of the Marathon PGM-Cu Project proposed by Stillwater Canada Inc., as described in this EIS and in the accompanying supporting documentation. The assessment has considered the factors listed in subsections 16(1)(a) to (e) and 16(2) of the *Canadian Environmental Assessment Act* and subsection 6.1(2) of the *Ontario Environmental Assessment Act*, as reflected in the EIS Guidelines.

General Setting

The Project is located approximately 10 km north of the Town of Marathon, Ontario. The Town, population approximately 4,000, is situated adjacent to the Trans-Canada Highway No. 17 on the northeast shore of Lake Superior, about 300 km east and 400 km northwest (by highway) of Thunder Bay and Sault Ste-Marie, respectively. The closest First Nation community to the site is the Pic River First Nation (PRFN). The PRFN reserve at Heron Bay is located about 20 km

south of the Project site and the on-reserve population is estimated to be about approximately 500.

The Marathon PGM-Cu claims and lease property (the Project Property) consists of a total surface area of 5,284 Ha, including:

- Land Registry Parcel Numbers 107094, 108581, 107323 and 107112 (comprising 86 mining claims) for which SCI has mining and/or surface rights; and,
- a further 61 mining claims that are contiguous with the lease areas.

The Project site within the Project property consists of a total surface area of approximately 1,700 Ha.

The Project site is in an area characterized by relatively dense vegetation, comprised largely of a birch-dominated mixed wood forest. The terrain is moderate to steep, with frequent bedrock outcrops and prominent east-west oriented valleys. The climate of this area is typical of northern areas within the Canadian Shield, with long winters and short, warm summers.

Regional land-use activities in area in which the Project site is found include hunting, fishing, trapping and snowmobiling, as well as mineral exploration (and mining) and forestry. As it pertains specifically to the Project site, the existing access road, which forms the southern limit of the site before turning north along the Pic River, provides access to the Pic River and can also be used to access the interior of the site, though access to the interior of the Project site has been limited for the last number of years by a security gate.

The Project site is located within the Big Pic Forest Management Area. The Big Pic Forest includes Crown land east and north of Lake Superior and is generally north, south and west of the community of Manitouwadge and includes the communities of Marathon, Caramat and Hillspport. The forest is managed under the authority of a Sustainable Forest License, which is has been vested to the Crown since 2010.

Local wildlife communities are typical of those which inhabit boreal regions. Moose are the dominant ungulate species. Other wildlife species include black bear, wolves, and a variety of furbearers and small mammals. Bird life is characterized by a moderately diverse avian community during the breeding and migratory periods and by a sparse community during the winter. The Project site is within the Lake Superior Coastal Range for woodland caribou, a species designated as “Threatened” under both federal and provincial legislation. Woodland caribou are the focus of a provincial conservation plan. The Project site falls within the boundaries of two registered trap lines, one of which is a registered to the PRFN and is held in trust for the community and the other is registered to an individual who is a member of the PRFN community.

There is no recreational or Aboriginal fishery on the Project site. Local recreational and Aboriginal fishing activity is focused around the Project site on the Pic River, which contains a

variety of coldwater and cool water fish species, in Hare Lake, which contains largely cool water species, Bamooos Lake, which has a resident Lake Trout population and Lake Superior and its tributary streams.

SCI undertook specific consultations with aboriginal groups in relation to current uses of lands and resources for traditional purposes at the Project site. The Project site and surrounding area is used for a variety of traditional pursuits. The PRFN report extensive traditional land uses in the general vicinity of the Project site such as hunting, trapping, fishing and country food gathering.

Project Description

Mining

The Marathon PGM-Cu ore body is hosted within the eastern portion of the Coldwell Complex along a north-south axis over a distance of about 3 km. To access and mine the ore body, SCI proposes to develop one primary open, as well as a satellite pit complex located south of the primary pit.

The pits will be excavated by blasting. Blasted ore and mine rock will be handled in the pits by mining shovels and large wheel loaders in combination with high-capacity rear dump haul trucks. Smaller capacity haul trucks may also be used to support the main fleet. Ore will be directed to the primary crushing unit. Mine rock will be managed in two streams. Type 1 mine rock will be directed to the MRSA for permanent storage, though some will be crushed and used for dam construction and as borrow material (aggregate) for site infrastructure needs. Type 2 mine rock will be temporarily stored on surface during operations and moved subsequently into the primary pit and/or satellite pits for long term storage. Grade control, and the segregation of ore and mine rock, will be managed in the pits. Samples taken from the blast holes will be assayed to determine ore and waste boundaries within blasted material and also to segregate Type 1 and Type 2 mine rock. Water that is pumped from the pits during operations will be directed to the PSMF for management.

The conceptual plan for pit development is to mine the primary pit and satellite pits simultaneously. A majority of the higher grade ore is found in the primary pit, whereas medium to low grade ore is primarily in the satellite pits. Mining the pits together can provide a balanced blend of ore types, which helps to stabilize the processing mill floatation circuit and improves recoveries. By approximately year 6, a number of the satellite pits will be completely mined out to allow for storage of process solids and Type 2 mine rock. When fully excavated the primary pit will cover an area of approximately 78.7 hectares and will be 340 metres deep. As currently envisage the satellite pit complex includes four discrete pits ranging from 120 to 180 metres deep and covering a total surface area of approximately 45.4 hectares.

Ore Processing

Ore-grade material will be hauled from the open pits to the Primary Crusher, located on the eastern side of the Primary Pit. Crushed ore will be transported via a covered conveyor over a distance of about 1 km south and stockpiled adjacent to the Concentrator Building. About 5 days' worth of minus crushed ore (or about 110,000 tonnes) will be stockpiled at any one time. Drainage from the ore stockpile will be directed back to the pit areas and managed through the PSMF. Crushed ore from the stockpile will be transported by a covered conveyor over a distance of about 300 m to the southwest to the secondary crushing facility or directly to the Concentrator Building if semi-autogenous grinding (SAG) equipment is used in the grinding circuit.

SCI will employ a conventional two step (grinding and floatation) process to produce copper and PGM concentrates from the feeds. Should it also prove feasible to produce an iron concentrate, a magnetic separation process will be used to extract it from the process solids component. The conceptual grinding circuit includes a High Pressure Grinding Roll (HPGR) or SAG equipment, a Ball Mill and cyclones. Once the desired level of grinding has been achieved the cyclone overflows feed the floatation circuit. The conceptual floatation circuit comprises two processes, a copper floatation process that generates a primary copper concentrate and a PGM floatation process that generates a primary PGM concentrate. The final stages of the conceptual concentrate production process involve the thickening of the copper cleaner and PGM cleaner (and possibly iron) concentrates and subsequently the de-watering of the concentrates by pressure filter and/or vacuum filtration. The concentrates, which will contain less than 8% moisture, will be stored in stockpiles in the mill, or in the Concentrate Storage Building until they are transported off site for refining.

Process Solids Management

Two streams of process solids will be generated – Type 1 process solids and Type 2 process solids. Eighty-five to ninety percent of the process solids will be Type 1. Process solids will be stored in the PSMF, as well as some of the satellite pits. The PSMF is located to the west of the pit area, and will be created through the construction of rock-fill dams, which will be raised through mine life to provide sufficient storage capacity for process solids and for site water management. The interior of the dams will be lined with HDPE keyed into bedrock via a concrete plinth. Removal of overburden and higher permeability bedrock, placement of slush grout on the prepared bedrock surface and/or injection grouting of deeper permeable bedrock zones will be completed as determined by site conditions to further reduce solute migration out of the facility.

The proposed PSMF includes two cells separated by a lined embankment. Cell 1 is the smaller of the cells and will ultimately store about 5 million m³ of process solids, whereas Cell 2 will ultimately store about 45 M m³ of process solids. The satellite pits will accept approximately 12.1 million m³ of material. In concept, the process solids deposition strategy envisages Type 1

process solids used as cover material for Type 2 process solids to mitigate acid generation potential. Type 2 process solids will also be stored below the water table to provide further assurance that they will not generate acid.

Mine Rock Management

Mine rock will be managed in two streams. Type 1 mine rock that is not crushed and used for dam construction and as borrow material (aggregate) for site infrastructure needs will be directed to the MRSA for permanent storage. During operations Type 2 mine rock will be stockpiled adjacent to the primary and satellite pits so that any run off from the Type 2 material is captured and will drain into the pits. Pit water will be managed (both in terms of quality and quantity) through the PSMF. Type 2 mine rock that is stockpiled on the surface will be relocated to the bottom of the Primary Pit, as well as to the satellite pits once the pits are fully excavated. Type 1 process solids will also provide cover material for the Type 2 mine rock in the satellite pits to prevent potential acid generation.

Water Treatment

Water will be released from the site at two locations - water draining the MRSA will be released periodically to the Pic River and excess water from the PSMF will be released to Hare Lake. The mine design includes the construction of treatment plant at both locations and water will be treated prior to its release to the environment as necessary to ensure it meets the discharge quality limits set in the ECA issued by the OMOE for the mine.

Decommissioning and Closure

Conceptually, the closure phase includes activities that are designed to ensure that the Project site is closed in a manner that reduces the potential impacts on the social and natural environment, and to the extent possible returns the site to an end use that is supported by Aboriginal people, the public and government. The timetable for closure of the site includes contingency for both short-term and long-term activities. The most intense period of decommissioning of site infrastructure will occur immediately following the cessation of operations. At this time as much of the site infrastructure will be removed as is possible, while still providing sufficient resources on the site to engage in ongoing closure and post-closure activities. A certified Closure Plan for the Project will be prepared as required by Ontario Regulation (O.Reg.) 240/00 as amended by O.Reg.194/06 “Mine Development and Closure under Part VII of the Mining Act” and “Mine Rehabilitation Code of Ontario”.

Project Alternatives

The assessment of Project alternatives is used as a decision-making and planning tool in the environmental assessment process. The assessment included an evaluation of *alternatives to*

the Project, as well as an assessment of reasonable *alternative means* by which the Project could be implemented.

SCI determined that there was no reasonable alternative to the Project. A management team was tasked by the Board of Directors of Stillwater Mining Company, the parent company of SCI to seek alternative PGM mining opportunities. Based on the analysis completed by the management team the Board of Directors concluded that the Marathon deposit was the only undeveloped PGM deposit identified that offered a material contribution towards satisfying the Board's mandate of geographic diversification in a politically stable jurisdiction. The Project was also available for purchase. The management team recommended, and the Board concurred, that the SWC should attempt to secure the deposit. This was accomplished in the fourth Quarter of 2010 with the acquisition of Marathon PGM Corporation.

The aspects of the Project that were considered within the *alternative means* assessment were:

- the site access road (a new access road was preferred to use of the existing access road);
- aggregate and construction rock supply (on-site sources were preferred to off-site sources);
- mining methods (mining by open pit was the only feasible alternative identified);
- product or concentrate transport from the mine site to an off-site processing facility (direct truck transport and a combination of truck and rail transport were deemed acceptable pending the final decision on the facility where concentrate will be processed);
- process solids characteristics (a conventional slurry was preferred to a dry or thickened process solids);
- solid non-hazardous waste disposal (on-site co-disposal in the PSMF was preferred to a dedicated on-site disposal location and to off-site disposal);
- reclamation of the mine rock storage facility (pro-active reclamation was preferred to passive reclamation);
- reclamation of the process solids management facility (pro-active reclamation was preferred to passive reclamation), and
- siting of mine infrastructure (true alternatives were limited the practical considerations associated with the location of the ore body and major mine-related infrastructure [e.g., MRSA, PSMF]).

Alternative locations for the locations of the PSMF and MRSA were also considered. This analysis was completed according to guidance provided by Environment Canada and the results of this analysis are reflected in the selection of the PSMF and MRSA configurations described above.

Agency and Public Engagement

During the EA process SCI's engagement strategy was to provide the public, stakeholder organizations and all levels of government with opportunities to provide input on proposed mine-related design features and environmental and social issues to assist the Project team with mine planning. Open and ongoing communication between SCI and the federal, provincial and municipal governments has provided opportunity for government review of Project concepts as they were developed. Project-related communications with key federal, provincial and municipal governments has included:

- Federal agencies – Canadian Environmental Assessment Agency, Department of Fisheries and Oceans, Environment Canada, Natural Resources Canada, Health Canada, Transport Canada
- Provincial agencies – Ministry of the Environment, Ministry of Natural Resources, Ministry of Northern Development and Mines, Ministry of Transportation, Ministry of Tourism, Culture and Sport, Ministry of Labour
- Municipal Agencies – Town of Marathon, Town of Terrace Bay, Town of Manitouwadge, Town of Schreiber

Early consultation was held by SCI (and its predecessor company) and at key Project milestones. SCI utilized a diversity of communication methods and forums including: formal public sessions, newspaper, radio, meetings with stakeholder groups, individual members of the public and government staff, electronic media and email, letters and telephone. SCI held six formal information sessions for local communities and stakeholder organizations between December 2008 and October 2011. Notice of consultation events was made by SCI to the public, stakeholder organizations and the government by: mail, online, public announcements and advertisements, phone calls and e-mails.

A summary of the key issues that arose during engagement efforts with the public, stakeholder organizations and government included:

- process solids quantity, storage and acid generating capacity;
- potential loss of a fish bearing lake (Bamoos Lake);
- potential contamination of watersheds and local fish and wildlife;
- potential Project-related effects on protected species including woodland caribou;
- water management;
- habitat rehabilitation at mine closure and closure plan;
- long-term monitoring and mitigation;
- climate change and the Project;
- ensuring that cumulative effects were assessed within the environmental assessment; and,
- ensuring that the Project would create opportunities for local education, training and employment.

Aboriginal Engagement

Stillwater Canada Inc. and its predecessor Marathon PGM Corp. have been engaged in consultation with a number of Aboriginal stakeholders with respect to the Project since 2004. More recent consultation and engagement activities have focused on First Nations proximate to the Project site (in particular the PRFN as well as PMFN and PPFN as well as the RSIMN. Consultation has also been undertaken with the MNO and the Jackfish Metis/OCAP. The consultation and engagement process has significantly influenced the current conceptual mine design and resulted in a greatly reduced ecological footprint for the Project.

Mitigation measures to further reduce effects have been identified through such consultation and further consultation is planned in this regard. The details of the consultation and engagement process carried out to date are set out in Section 4 of the EIS.

Existing Environment

Extensive studies were conducted to characterize the existing environment relevant to the Project. These studies were used as the baseline upon which potential environmental effects were considered. The baseline characterization focused on those environmental components that were most likely to interact with and be affected by the Project. The baseline environment program included consideration of: local geology and the geochemistry of the ore body host material; the atmospheric environment; the acoustic environment; surface water quality and hydrology; groundwater quality and hydrogeology; terrain and soils; vegetation; wildlife; “species at risk”; social and economic factors; physical and cultural heritage resources; and, Aboriginal considerations such as traditional land and resource use, country foods, the preponderance of traditional dietary habits, heritage resources and Aboriginal archaeology.

The existing environment at the Project site and surrounding the site is well understood. Through well-defined monitoring programs that knowledge is used to determine if any activities in the Project cause effects. Measured effects can then be assessed to determine if any observed changes are within the expected range and are therefore protective of the environment.

Surface Water and Groundwater

The Project site falls entirely within the Lake Superior watershed. A major watershed divide separates the site along a north-south axis, with land to the west of the divide draining to Lake Superior directly and the land to the east of the divide draining to the Pic River (and subsequently to Lake Superior). There are a total of 6 subwatersheds (referred to as the Stream 1 through the Stream 6 subwatersheds) that drain the Project site, four to the Pic River and two to Lake Superior directly:

- Stream 1 subwatershed (4.4 km²) – drains the southeast portion of the site;

- Stream 2 subwatershed (3.5 km²)– drains the middle of the eastern half of the site;
- Stream 3 subwatershed (2.1 km²) – drains the middle of the eastern half of the site;
- Stream 4 subwatershed (3.4 km²) – drains the northeast portion of the site;
- Stream 5 subwatershed (48.3 km²) – drains the northwest portion of the site; and,
- Stream 6 subwatershed (11.0 km²) – drains the southwest portion of the site.

A network of 58 water quality stations was established that includes headwater and downstream areas of all of the subwatersheds that traverse the Project site. Flow has been monitored in downstream areas of all of the subwatersheds over that same period. Sampling of this network began in the spring of 2008. Chemical analysis of surface water showed that Project area waters are generally of high quality, with most parameters meeting Provincial Water Quality Objectives (PWQO) for both the protection of aquatic life. Where exceedances of PWQO standards occur, the exceedances are generally small and typical of regional background conditions.

A total of 36 monitoring wells have been installed up-gradient, down-gradient and cross-gradient on and around the site. Groundwater flow generally mimics the surface topography of the site; that is, groundwater enters the system as recharge from precipitation, runoff, and snow melt and leaves the system at discharge zones such as lakes, rivers, creeks and low lying areas, as well as through evapotranspiration. A groundwater flow model was developed that confirmed that topography strongly controls the water table elevation. Baseline groundwater quality in both the overburden and bedrock was characterized by hardness, turbidity, iron and manganese concentrations that exceeded the Ontario Drinking Water Standards (ODWS), though none of the exceedances were for human health related reasons.

Fisheries

There is no fishery on the Project site. Most of the small head water lakes and ponds and their associated connecting channels are fishless, likely because they are topographically isolated from potential source populations. Where fish are present on the mine site they are limited to forage fish species.

The lower reach of the small streams that drain to the Pic River (Streams 2, 3 and 4) provide habitat for some resident species (e.g., sculpin), as well as some nursery habitat for migratory salmonids. Stream 1 is isolated at most times from the Pic River by a perched culvert. Pic River supports and diverse fish community, including Lake Sturgeon.

The Stream 5 subwatershed includes Bamooos Lake, Hare Lake and Hare Creek. Bamooos Lake is to the north of the Project site and has a resident Lake Trout population. Hare Lake is also to the north of the Project site and contains a diverse warmwater/coolwater fishery, including Northern Pike and Yellow Perch. Hare Creek provides spawning and nursery habitat for migratory salmonids from Lake Superior. Lake-run fish cannot migrate through Hare Creek to Hare Lake because of both man-made (perched culvert) and natural (waterfall) obstructions).

Portions of the upper part of the Stream 6 subwatershed have Threespine Stickleback. The lower reach of Stream 6 supports a minor migratory Steelhead run in the spring from Lake Superior but suitable coldwater fish habitat is limited as the channel cuts through a deep, wide sand/clay lens. Fish from Lake Superior cannot move to the middle or upper reaches of Stream 6 because of a natural falls barrier

Vegetation

Over 90% of the area defined by the Project-related claim block and lease areas is forested. Non-forest communities (including wetlands) cover less than 5% of this area. Birch-dominated mixedwood forest makes up about 79% of the study area. Balsam fir, black spruce and white spruce are the most common secondary tree species, usually with a rich understorey of mountain maple, beaked hazel, and other tall shrubs. White birch-black spruce stands on shallow (less than 30 cm) silty soils are common on slopes and tops of low hills. Upland black spruce dominates stands on silty soils occur mainly on deeper glaciolacustrine deposits and make up about 12% of the study area. These stands almost always include balsam fir, white birch and a tall shrub understorey. Black spruce forest on peat is uncommon (total area less than 2 ha) and is confined to a few small bedrock depressions filled with organic soils. Stands dominated by jack pine and trembling aspen are absent in the study area, although these species are generally common in northwestern Ontario.

Non-forest communities, which are largely represented by rock barren and wetland ecosites, comprise a relatively small proportion of the Project site. No provincially significant wetland areas have been identified at the Project site. Natural resource values information provided by the Ontario Ministry of Natural Resources indicate that there are no known occurrences of habitat or plant species listed as “Endangered”, “Threatened”, or “Special Concern” by the provincial or federal governments within the Big Pic Forest. There were a number of provincially or regional “rare” species identified during baseline fieldwork or that potentially occur on the Project site.

Wildlife

A total of 18 mammal species were observed either during targeted surveys or incidentally as part of other baseline studies completed between 2007 and 2011. An additional 29 species of mammals potentially occur in the study area. The density and distribution of mammals on the Project site is typical of the region. Species of interest include moose, black bear, grey wolf and various furbearers.

The Project study area is located in the Boreal Softwood Shield, Ontario Bird Conservation Region 8. A total of 88 bird species were observed in the study area during the 2008-2010 breeding seasons. The species composition and density is typical of a mature mixed-wood forest bird community, with a diversity of warblers, thrushes, sparrows, and vireos. White-throated Sparrow, Black-throated Green Warbler, and Winter Wren are among the most common. The habitat characteristics of the study area do not suggest that there is significant

overwintering use by birds. Most of the area is boreal forest with no open water most years from November to April. Open fields where wintering raptors congregate are absent. The Project site is not likely a significant migratory corridor for birds or a stopover location

Species at Risk

Species that are listed as species at risk (“Special concern”, “Threatened”, “Endangered”) by the federal or provincial governments and the potential for these species to occur within the Project are as follows:

Species Specifics		Listed By		Potential
Scientific Name	Common Name	Federal	Provincial	
<i>Falco peregrinus</i>	Peregrine falcon	Special Concern	Threatened	Low - Cliffs with "marginal" peregrine falcon habitat have been identified on site but no evidence of nesting.
<i>Haliaeetus leucocephalus</i>	Bald eagle	Not at risk	Special Concern	Low - Bald eagles are known to occur within the Nipigon MNR District but no nests are documented at the Project site.
<i>Chordeiles minor</i>	Common Nighthawk	Threatened	Special Concern	Moderate - Although not observed during baseline surveys they are known to occur within the area.
<i>Caprimulgus vociferus</i>	Whip-poor-will	Threatened	Threatened	Low – Closest record 40 km from site; at edge of species range.
<i>Hirundo rustica</i>	Barn Swallow	Threatened	Not at risk	Moderate - Although not observed during baseline surveys they are known to occur within the area.
<i>Chaetura pelagica</i>	Chimney Swift	Threatened	Threatened	Low. No known breeding records within several hundred km.
<i>Sturnella magna</i>	Eastern Meadowlark	Threatened	Threatened	Low. Potential habitat at Marathon Airport, but no known breeding records within several hundred km.
<i>Dolichonyx oryzivorus</i>	Bobolink	Threatened	Threatened	Low - only suitable nesting habitat occurs at the Marathon Airport.
<i>Melanerpes formicivorus</i>	Red-headed Woodpecker	Threatened	Threatened	Low – No suitable habitat. Closest breeding population 400 km southeast of the site.
<i>Wilsonia canadensis</i>	Canada Warbler	Threatened	Special Concern	Confirmed Observed in 2009
<i>Contopus cooperi</i>	Olive-sided Flycatcher	Threatened	Special Concern	Confirmed Observed in 2009
<i>Euphagus carolinus</i>	Rusty Blackbird	Special Concern	Not at risk	Confirmed Observed in 2009

Of particular interest, is the forest-dwelling woodland caribou as it is the focus of a relatively recent provincial conservation plan. Woodland caribou range and abundance in Ontario have declined, mainly due to anthropogenic disturbance and associated changes in alternate prey

and predator abundance. Across the north shore of Lake Superior, they are now almost entirely restricted to isolated populations in protected areas. The largest populations, approximately 100 and 400 individuals respectively, are found within Slate Islands and Michipicoten Island provincial parks, both of which lack large predators. Pukaskwa National Parks' population has declined from approximately 30 caribou in the 1970s to an estimated four currently, largely due to predation by wolves and possibly black bears. An estimated 8 to 15 caribou still use Pic Island in Neys Provincial Park and adjacent mainland at least part of the year, down from approximately 80 in the 1970s.

The OMNR has designated a 10-km wide strip along the north shore of Lake Superior as the "Lake Superior Coastal Range". The Project site is in this range. North of this 10-km wide coastal strip is an area designated by the MNR as the "Upper Lake Superior Uplands Linkage", where the main conservation intent is to maintain and enhance connectivity between the coastal range and caribou ranges to the north. The Project site has no documented historic or current use by woodland caribou as indicated by OMNR records, surveys conducted during the present study, and traditional ecological knowledge provided to Stillwater for this EIS.

Socio-economic Environment

The Town of Marathon is the closest population centre to the Project site, located 10 km south of the site. The current population of Marathon is approximately 4,000. Other more regional population centres that are within about 100 km of the Project site include Terrace Bay, Schreiber, Manitouwadge and White River. Generally these towns are well serviced by community and emergency services and have adequate infrastructure capacity (e.g., sewage, water) to serve existing populations and accommodate modest growth.

Historically the region was supported economically by the forestry and pulp and paper sectors, as well as the mining industry. The significant downturn in forestry and pulp and paper in the last number of years has negatively impacted local and regional communities, including the Town of Marathon, whose pulp mill closed in 2009. Barrick Gold's Hemlo Gold Camp, which includes two active mines, is the primary natural resource-based employer in the area.

Outdoor activities such as hiking, hunting and fishing are popular in the area. The Project site overlaps Wildlife Management Unit 21A. To manage wildlife resources in a WMU, the MNR issues Outdoors Cards, hunting licences, validation tags and game seals. The Project site falls within Fish Management Zone 7. Fish managed in this zone include: Walleye, Sauger, Largemouth and Smallmouth bass, Northern Pike, Yellow Perch, Sunfish, Brook Trout, Brown Trout, Lake Trout, Splake, Chinook Salmon, Atlantic Salmon, and Lake Whitefish.

There are several national and provincial parks in the vicinity of the Project site: Pukaskwa National Park is located approximately 20 km south of the Project; Neys Provincial Park is located 20 km west of the Project; Red Sucker Point Provincial Park is approximately 10 km west of the Project site; Craig's Pit Provincial Nature Reserve near the southern limit of the Town of Marathon; Steel River Provincial Park is about 55 km northwest of the Project site;

Slate Islands Provincial Park is located in Lake Superior about 50 km west of the Project site. There is a snowmobile trail that extends from Marathon across Hwy 17 along the current site access road and across the Pic River to the northeast.

Aboriginal Considerations

The Project is situated within the geographic territory of the Robinson-Superior Treaty. Fourteen Aboriginal communities, First Nations and Metis, were originally identified as having a potential interest in the Project based on aboriginal and treaty rights. Four of the fourteen expressed an interest in the Project based on traditional and/or current land uses: the Pic River First Nation (PRFN), the Pic Moberg First Nation (PMFN), the Pays Plat First Nation (PPFN) and the Red Sky Métis Independent Nation (RSMIN). PRFN initiated an application before the Ontario Superior Court in 2004 in which it asserts that it has never relinquished title to territory described in the Statement of Claim (including the Project site). That application is before the courts and currently in the discovery stage. Two additional Metis groups have expressed a direct interest in the Project: Jackfish Metis; and, Superior North Shore Metis Council (SNSMC). The remaining ten communities did not express a direct interest in the Project, leaving direct consultation to those communities that are in relative close proximity to the site.

The traditional land and resource information described in this EIS is largely derived from information obtained from the PRFN. The PRFN have compiled detailed land and resource use information for their traditional territory. The information provided to SCI by the other Aboriginal groups was more generic in nature. The PRFN report extensive use of the Project site and surrounding area for hunting, fishing and the collection of country foods. Country food collection in particular has been identified by the PRFN as important because it contributes to many facets (economic, social, cultural, spiritual) of the lives of PRFN community members. The PRFN report that the preponderance of traditional dietary habits within the community is high.

Archaeological assessments of the Project site did not reveal any archaeological sites within the footprint of the proposed mine.

Effects Assessment and Mitigation

Valued Ecosystem Components

A Valued Ecosystem Component or VEC can be defined as:

“an environmental element of an ecosystem that is identified as having scientific, ecological, social, cultural, economic, historical, archaeological or aesthetic importance. The value of an ecosystem component may be determined on the basis of cultural ideals or scientific concern.”

In practical terms a VEC is some component of the environment that has some “value” (where value could be inherent or could be ascribed to it by an individual, community, society, etc...) and can be measured (either quantitatively or qualitatively). VECs are tools that are used to

measure the potential effects of a project on the environment. For the purposes of this EIS VECs were selected based on:

- prior experience with similar projects;
- data that were collected as part of the baseline environmental program;
- information available with regards to species that are afforded protection by legislation;
- guidance from regulatory agencies (e.g., EIS Guidelines); and
- direct consultation with stakeholders and Aboriginal communities

The VECs defined for the purpose of assessing the potential effects of the Project on the environment were representative of a wide measure of the environmental factors including:

- the physical environment (media and habitats);
- vegetation;
- wildlife
- species at risk;
- aquatic resources;
- the social environment;
- the economic environment;
- land and resource uses;
- physical and cultural heritage; and
- Aboriginal considerations.

Potential Effects of the Project on the Environment

Predicted environmental effects are those effects which would occur in the absence of mitigation. Mitigation is employed to eliminate, or otherwise reduce, predicted environmental effects to acceptable levels. Environmental effects remaining after mitigation are referred to as residual effects, and are advanced to the assessment of significance (see Section 7.7). The following discussions summarize predicted, or potential, environmental effects and proposed mitigating measures that will be employed to protect VECs.

Atmospheric Environment

- Project activities may result in occasional short-term exceedances of some air quality guidelines and limits at the Property boundary though air quality meets all criteria at the nearest sensitive receptor locations – mitigation includes source controls to reduce air emissions – the effect is considered a residual effect and advanced to the assessment of significance
- Project activities will likely generate fugitive dust mainly from overburden and mine rock stockpiles, open pit mining activities, and road dust from vehicle transport – the predicted effect will be mitigated through in-design measures to suppress dust which will reduce the likelihood of effect, as well as dust suppression activities (water sprays on unpaved

roads and ore stockpiles), regular road surface maintenance and implementation of speed limits

- Project activities will result in increased light levels on-site which would be potentially visible from off the mine site – the predicted effect will be mitigated via design-related mitigation including directional lighting and mounting lights as low as possible
- GHG emissions from combustion emissions have a negligible contribution to provincial and national CO₂ emissions and the associated phenomenon of climate change – no mitigation is proposed

Acoustic Environment

- some measurable increases to existing noise levels (>5 dB) are predicted at one receptor location along transportation route to a potential rail load-out facility in Marathon but noise levels are below noise limits – mitigation will include source control measures such as mufflers on concentrate transport trucks and scheduling of concentrate delivery trucks to certain times of the day – the effect is considered a residual effect and was advanced to the assessment of significance

Surface Water

- mean, peak, and low flows in Stream 6 will decrease substantially during operations - no mitigation during operations is planned, but natural drainage area of the subwatershed and flows will be restored at closure - the effect is considered a residual effect and was advanced to the assessment of significance
- during operation of the Project, there will be a decrease in mean monthly, peak, and low flows in Streams 2 and 3, as a result in decrease in drainage area and water management; the majority of the water that naturally drains the system will continue to drain to the Pic River - no mitigation during operation is planned, but drainages will be restored at closure - the effect is considered a residual effect and was advanced to the assessment of significance

Groundwater

- groundwater is not used as a resource on or near the mine site; over long-term seepage from PSMF and MRSA will report to surface water features but no effect on surface water is predicted - no mitigation is proposed; groundwater monitoring will assess accuracy of EA predictions and any need for management.
- only minor changes in groundwater flow predicted - no mitigation proposed

Terrain and Soils

- Potential erosion and slide risk of overburden stockpiles and the MRSA – the predicted effect will be mitigated by following design parameters and managing and maintaining slope stability

Vegetation

- approximately 612 ha of forest cover (predominantly white birch 80% ,and black spruce - 15.3%) will be removed for site development – mitigation includes optimizing the mine footprint to minimize forest clearing, selective clearing along transmission corridor and re-vegetation at closure - the effect is considered a residual effect and was advanced to the assessment of significance
- land clearing and general disturbance may increase the potential for the introduction of non-native plant species to previously unaffected areas – the predicted effect will be mitigated by implementing an invasive species awareness and control program
- potential for dusting on remaining forest cover – the predicted effect will be mitigated through in-design measures to suppress dust which will reduce the likelihood of effect, as well as dust suppression activities (water sprays on unpaved roads and ore stockpiles), regular road surface maintenance and implementation of speed limits
- approximately 18 ha of non-forest cover (incl. 16 ha of thicket swamp, 1.4 ha of shore fen and meadow marsh, and 0.6 ha of rock barrens) will be removed for site development - mitigation includes optimizing the mine footprint to minimize land clearing and selective re-vegetation at closure - the predicted effect is considered a residual effect and was advanced to the assessment of significance
- removal of some regionally rare (Algal Pondweed) and provincially rare (Broad-lipped Twayblade, Common Ragweed, Oake’s Pondweed, Northern St. Johnswort and Marsh Speedwall) species for mine infrastructure and transmission line construction - mitigation includes optimizing the mine footprint to minimize land clearing and selective re-vegetation at closure - the predicted effect is considered a residual effect and was advanced to the assessment of significance

Wildlife

- removal of forest cover will alter/remove some wildlife habitat for furbearers (e.g., marten, fisher) - mitigation includes optimizing the mine footprint to minimize land clearing and site reclamation at closure - the predicted effect is considered a residual effect and was advanced to the assessment of significance
- sensory disturbance (noise, dust,) from mine activities - the predicted effect will be mitigated via noise mitigation and dust suppression

- potential for collisions with mine infrastructure and vehicles – the predicted effect will be mitigated by enforcing speed limits on mine roads
- clearing may change moose movement behavior; initial migration out during site preparation and construction, but they will return to site area after period of human, noise, habituation - mitigation includes optimizing the mine footprint to minimize land clearing - the predicted effect is considered a residual effect and was advanced to the assessment of significance
- grey wolf will follow major prey species such as moose and deer; if moose emigrate from the site then grey wolf will follow. At closure increased areas of grassland will create increased white-tailed deer habitat and potentially higher wolf numbers - mitigation includes optimizing the mine footprint to minimize land clearing - the predicted effect is considered a residual effect and was advanced to the assessment of significance
- black bear will likely out-migrate from site initially during site preparation and construction, but return to site area after period of human, noise, habituation - mitigation includes optimizing the mine footprint to minimize land clearing; establish wildlife policy to minimize human interaction with wildlife and decrease potential for habituation - the predicted effect is considered a residual effect and was advanced to the assessment of significance
- removal of forest cover, wetlands, and lake habitat for mine infrastructure, proposed roads and transmission lines will contribute to forest fragmentation and may have negative effects on forest interior bird species (temporary habitat loss for songbirds), and may interact and could cause loss of nests and young due to land clearing with transmission line and mine infrastructure; edge adapted- birds may benefit from the habitat alteration – mitigation includes clearing of vegetation will be avoided during bird nesting season, where practical; if clearing in nesting season occurs pre-clearing surveys to be completed and nest sites plus buffer zone to be marked as exclusion areas; transmission line will be designed to minimize collisions, limit the use of guy wires, and where practical mark the line to increase visibility - the predicted effect is considered a residual effect and was advanced to the assessment of significance

Species at Risk

- Woodland caribou: loss in potential connectivity between declining populations of woodland caribou in the Neys and Pukaskwa protected areas and loss of small lichen-rich areas on bedrock that could potentially serve as caribou winter/refuge habitat (though there are no known records of this use on the site) – mitigation includes establishing mine and infrastructure to minimize ecological footprint; keep intact as much existing forest as possible along the southern portion of the property to maintain potential linkages between landscapes to the east and west of the property; in concert

with OMNR develop further mitigation/monitoring strategies - the predicted effect is considered a residual effect and was advanced to the assessment of significance

- Canada warbler: nesting habitat removal (mature hardwood dominated forest) for Canada Warblers – mitigation includes limiting the footprint of disturbed areas to the extent possible - the predicted effect is considered a residual effect and was advanced to the assessment of significance
- Rusty blackbird: development of the mine will result in the loss of the only known nesting habitat (1.4 ha) of Rusty Blackbird in the study area on a small pond – mitigation includes limiting the footprint of disturbed areas to extent possible - the predicted effect is considered a residual effect and was advanced to the assessment of significance
- Olive-sided flycatcher: none observed on-site (one pair observed in local study area), but potential nesting habitat (1.4 ha) will be removed for mine development – mitigation includes limiting the footprint of disturbed areas - the predicted effect is considered a residual effect and was advanced to the assessment of significance
- Common nighthawk: none observed on-site, but potential habitat (<2 ha) will be removed for mine development – mitigation includes limiting the footprint of disturbed areas to extent possible - the predicted effect is considered a residual effect and was advanced to the assessment of significance

Aquatic Resources

- Fish Habitat: creation of HADD equivalent to 9.4 ha, of which 1.8 ha is fish frequented – the predicted effect will be mitigated through the provision of fish habitat compensation; compensation options provided in EIS equivalent to approximately 10 ha of fish habitat
- Recreational fishery: minor effect regarding convenience for public access to Bamooos Lake during mine life, but lake the can be accessed via other reasonable means – no mitigation proposed
- Recreational fishery: potential temporary loss of limited local Steelhead fishery in Stream 6 – the effect will be mitigated by implementation of the Fish Habitat Compensation Strategy, which includes potential habitat enhancements in Stream 6 at closure
- Commercial fishery: loss of access to Claw Lake during mine life which is used as a bait fish source periodically by a bait fish license holder – predicted effect will be mitigated by providing guided access to Claw Lake
- Aboriginal fishery: potential temporary loss of limited local Steelhead fishery in Stream 6 – the predicted effect will be mitigated by implementation of the Fish Habitat

Compensation Strategy, which includes potential habitat enhancements in Stream 6 at closure

- Aboriginal fishery: loss of access to Bamooos Lake during mine life – the predicted effect will be mitigated by maintaining current access level by developing a guided access protocol for Aboriginal fishers

Social Environment

- Demographics: there will be a population influx into Marathon and possibly some of the surrounding communities resulting from workers moving to the area; increased population in the area can be seen as a positive effect given recent trend of population decreases – the potential negative aspects of predicted effect will be mitigated via facilitating rotational work arrangements, encouraging former residents to return to the area and providing employee accommodations through company owned accommodations and local motels, encouraging operations employees and families to gradually settle in local communities, support commuting from local communities and recruit employees from the existing populations in local communities
- Housing: increase in housing demand and prices during site preparation and construction and operations – the predicted effects will be mitigated by facilitating rotational work arrangements, providing employee accommodations through company owned accommodations and local motels, supporting commuting from local communities and recruiting employees from the existing populations in local communities
- Housing: reduced demand for housing and downward pressure on home prices during mine closure – no mitigation proposed – the predicted effect is considered a residual effect and was advanced to the assessment of significance
- Community Services: increased demand for community services during the site preparation and construction and operations phases of the Project – the predicted effect will be mitigated by SCI providing support to fund key community services or organizations and by providing fitness and recreational programs for workers within the existing facilities
- Community Services: reduced demand at mine closure for community services may see some program cancellation – mitigation includes helping to ease this transition by SCI maintaining ongoing communication with local residents of Project developments and timetables - the predicted effect is considered a residual effect and was advanced to the assessment of significance
- Health and Emergency Services: increased demand for health services during the site preparation and construction and operations phases of the Project – the predicted effect will be mitigated by SCI providing its employees with some level of health services, by

having on-site emergency service infrastructure such as fire-fighting equipment and SCI will co-ordinate its Emergency Preparedness Plan with the Town of Marathon emergency services department

- Health and Emergency Services: reduced demand at mine closure for health services may see some downsizing - mitigation includes helping to ease this transition by SCI maintaining ongoing communication with local residents of Project developments and timetables - the predicted effect is considered a residual effect and was advanced to the assessment of significance
- Traffic: increased traffic volumes associated with the Hwy 17-Peninsula Road intersection and in the Town of Marathon during the site preparation and construction and operations phases of the Project – the predicted effect will be mitigated by SCI encouraging car-pooling by its workers and providing bus transport to the Project site and requiring all project drivers and employees to observe speed limits and take safety precautions; SCI will schedule conduct scheduling shift changes as consultation with the Town of Marathon at off peak traffic hours and schedule concentrate truck transport off the Project site so they do not coincide with school bus pick-up and drop-off times.
- Education and Training: there will be increased training opportunities during the site preparation and construction and operations phases of the Project for youth and Aboriginal peoples, as well as opportunities for skilled workers to further hone and/or diversify their skills to enhance their employability – no mitigation is proposed

Economic Environment

- increased direct, indirect and induced employment opportunities during all Project phases – no mitigation is proposed
- increased labour incomes in local communities - no mitigation is proposed
- increased in economic and business opportunities particularly in the site preparation and construction and operations phases - no mitigation is proposed
- increased absolute government revenues (taxes, royalties) for all levels of government during all Project phases - no mitigation is proposed
- reduction in levels of employment at mine closure – the predicted effect will be mitigated by SCI implementing employment transition programs that enable workers to identify opportunities to use their transferable skills and seek other employment
- reduction in government revenues at mine closure – the predicted effect will be mitigated by SCI maintaining ongoing communication with local governments of Project developments and timetables

Land and Resource Use

- future forestry values and targets identified for the Big Pic Forest Management Unit could be affected, although no harvesting is planned on the Project site through 2017 – the predicted effect will be mitigated as SCI will salvage and market or offer merchantable timber removed during development to local forestry companies, Aboriginal groups and/or local residents so that the forestry resource value is maintained

Navigable Waters

- Several water courses and water bodies that are defined as “navigable” under the *Navigable Waters Protection Act* will be impacted – mitigation includes limiting the footprint of the Project to the extent possible - the predicted effect is considered a residual effect and was advanced to the assessment of significance

Aboriginal Considerations

- Effects on and restrictions on traditional land uses including animal and plant harvesting and country food collection in the Site Study Area, though SCI will continue to provide Aboriginal peoples guided access to some locations in the SSA that are safe to access, as well as access to the LSA – mitigation includes lessening the spatial extent of the mine footprint from a disturbance and access point of view; development of a site access protocol; SCI will seek input from Aboriginal people on mine site closure concepts and reclamation priorities to support traditional land uses; SCI will continue discussions with the PRFN and other Aboriginal peoples on additional mitigation strategies that could be implemented to further reduce the potential effects of the Project - the predicted effect is considered a residual effect and was advanced to the assessment of significance
- the loss of the contribution that the country foods collected in the Site Study Area make to the traditional diet of the PRFN – mitigations include those identified above - the predicted effect is considered a residual effect and was advanced to the assessment of significance
- restricted access to parts of the PRFN community trapline that fall within the Site Study Area – mitigations include those identified above - the predicted effect is considered a residual effect and was advanced to the assessment of significance.

Accidents and Malfunctions

Accidents and malfunctions that have the potential to adversely affect the environment could occur during any phase of the Project. Potential accidents and malfunctions that may occur in connection with the Project were identified from: experience with other, similar projects; Project Team risk assessment exercises; the EIS Guidelines; and, input received from Aboriginal

peoples and the public. Each accident and malfunction scenario was assessed in consideration of its:

- nature, mechanism and magnitude;
- probability (high, medium, low, remote) of occurrence;
- potential environmental consequence(s);
- potential mitigation approaches (i.e., design, management, safeguards, capabilities, resources and equipment available to safely respond to a scenario); and,
- potential emergency response procedures for events.

The following potential accident and malfunction scenarios were assessed in this EIS:

- fuel release during transport to the site;
- fuel release from on-site storage facilities;
- fuel release during on-site dispensing;
- propane handling incident;
- concentrate haul incident;
- concentrate load-out incident;
- chemical incident during transport to the site;
- chemical incident within mine-related facilities;
- controlled release of water to the environment from the PSMF;
- controlled release of water to the environment from the MRSA;
- PSMF pipeline or process water pipeline incident;
- water treatment plant incident;
- unanticipated seepage from the PSMF;
- unanticipated drainage from the MRSA;
- Project-related fires;
- pit slope failure;
- MRSA slope failure;
- PSMF structural failure
- explosives accident; and,
- premature closure of the mine.

Mine design is a key factor related to containment and control of potential accidents and malfunctions that could occur on the mine site. SCI has integrated the concepts of containment and control from the onset of the conceptual mine design process with a view to attempting to ensure that any accidental or incidental release that may occur on the mine site will not result in significant environmental consequences. Generally, where a high or medium probability of an on-site accident or malfunction scenario has been identified such as an accidental release of fuel release during dispensing, the associated release will be contained within an enclosed structure, or alternatively a developed and controlled area of the mine site. Consideration has also been given to containment and control for low probability events such as a chemical release in an on-site facility or a pipeline incident. In these instances, materials that are released will be controlled via the use of sumps and/or drains for example in the case of

enclosed structures, or via the use of natural topography or man-made structures such as berms or collection ponds in the case of the developed area of the mine site. The highest consequence events that have been identified include a PSMF slope failure or an MRSA slope failure. These events are considered to be remote in terms of probability because of the conservative nature of the designs of these facilities.

Overall, and in consideration of the mitigation and response procedures that have been identified no significant adverse environmental effects are predicted to occur as the result of accident and malfunctions that might occur as the result of the implementation of the Project.

Effects of the Environment on the Project

The effects of the environment on the Project were evaluated in terms of climate change, extreme weather conditions, forest fires, and seismic activity.

Climate Change

An initial screening of the schedule for Project phases indicated that the site preparation and construction and operations phases would not likely be affected by climate change in a meaningful way given the relatively short time period over which these phases are planned (i.e., the next 13 to 15 years). However, climate change predictions do suggest that the Marathon area will be potentially warmer and drier in the long term after closure. The future climate of the area will therefore be factored into the decision-making and detailed design processes for site closure and reclamation. The nature of the climate conditions post-closure will factor into the success of the reclamation measures that are implemented. Long term climate change is not expected to result in conditions that are unmanageable.

Extreme Weather

The primary concern related to extreme weather, such as flooding from storms concerns the management of water quantity related run-off. In the case of the PSMF and MRSA the environmental risks associated with having to manage increased run-off volumes over shorter durations have been mitigated by the nature of their designs. The PSMF will at all times have sufficient freeboard to store operational water needs plus volumes derived from natural run-off and snow-melt, the PSMF Environmental Design Storm (Timmins Storm Event, equivalent to a volume of water greater than 1 in 1,000 year 24 hour event). Additional storage will also be provided so as to manage the Inflow Design Flood (1 in 10,000 year 24 hour event); however, this storage is only temporary to allow for the rise in water level while the event is passed to environment in a controlled fashion via a spillway. The MRSA settling ponds will be designed to manage water volumes derived from natural run-off and snow-melt and the MRSA EDS (1 in 25 year, 24 hour event) simultaneously.

Management of higher run-off volumes associated with greater intensity events will also be considered, among various other design factors, within the context of the detailed design

process for water management infrastructure, such as the stormwater collection system and culverts, as well as stream channels and aquatic habitat that will be developed as part of fish habitat compensation measures.

High-velocity winds could damage buildings and/or power lines and/or create large waves in the PSMF. Mitigations for these possible occurrences include:

- designing and constructing buildings and power lines in consideration of appropriate standards in recognition of site conditions; and,
- incorporating storage capacity in the PSMF design to contain wave run-up associated with the 1 in 1,000 year wind event and developing wind breaks on the PSMF surface in areas where the process solids have dried to lessen the likelihood of fugitive dust emissions resulting from string winds.

Forest Fires

The Project site is in an area that is susceptible to forest fires. There are no records of a forest fire on the Project site for at least the last 90 years. A major forest fire at the site could cause property damage and the interruption of operations; however, the site itself may act as a fire-break which will likely limit the extent a large scale fire would have on creating extensive on-site damage. SCI will develop a response procedure within its Emergency Preparedness Plan that considers a large-scale forest fire and there will be fire-fighting capacity on the Project site but this capacity will be geared towards dealing with smaller scale on-site fires.

Seismic Events

The primary concern from seismic events is the potential failure of man-made structures on the Project site. The Project is within a region of relatively low seismicity and all structures such as the PSMF embankments will be designed to the appropriate safety standards as required by the Lakes and Rivers Improvement Act and its associated regulations, and the Canadian Dam Safety Guidelines.

Overall, taking into account the reasonable expectations of the Project design including in-design mitigation measures for site infrastructure according to applicable standards and codes and an Emergency Preparedness Plan, it was concluded that Seismic events are not likely to cause significant effects on the Project.

Capacity of Renewable Resources

The effects of the Project on the capacity of renewable resources were evaluated. Renewable resources that were considered included atmospheric resources, surface water resources, groundwater resources, aquatic resources and terrestrial resources. After consideration of the Project design, management practices that would be employed and Project-specific mitigation

activities where needed, it was determined that the Project will not result in significant adverse effects on renewable resources.

Cumulative Effects Assessment

The cumulative effects assessment builds on the results of the assessment of residual adverse effects. The Project-related residual effects identified were considered to determine if there was potential for them to act cumulatively – in type, space, and time – with the effects of other projects and activities within the study area around the Project. The cumulative effects assessment identified two potential residual cumulative effects that were carried forward for the assessment of significance:

- additional disturbance to coastal woodland caribou habitat from other projects may contribute to decreasing connectivity among the remaining localized populations, which could contribute in a negative manner to the sustainability of the coastal caribou population; and,
- development of the Marathon PGM-Cu Project could in conjunction with other projects negatively affect the ability of Aboriginal peoples to pursue traditional land and resource uses such as animal harvesting and the collection of country foods.

Significance of Effects

Residual effects on VECs were evaluated using several factors derived from the EIS Guidelines - magnitude, spatial extent, duration, frequency/probability, reversibility and ecological/societal value. The significance of the residual effects was characterized for each of the aforementioned factor using the following rating criteria:

- minimal = Potential effect may result in a slight decline in a resource or VEC or indicator in the study area during construction, operation and closure, but the resource should return to baseline levels;
- low = Potential effect may result in a slight decline in a resource or VEC or indicator in the study area during the life of the Project;
- medium = Potential effect could result in a decline in a resource within the study area to lower than baseline, but stable, level in a study area after Project closure and into the foreseeable future; and,
- high = Potential effect could threaten sustainability of the resource or VEC or indicator within the Project study area and should be considered a management concern.

The predicted residual effects associated with the implementation of the Project and the characterization of their potential significance is as follows:

- Project activities may result in occasional short-term exceedances of some ambient air quality at parts of the Property boundary though not at the nearest sensitive receptor

locations, primarily related to vehicle emissions – the predicted effect is limited in spatial extent and magnitude, is short term, and is reversible; the effect is therefore characterized as non-significant adverse effect

- some measurable increases to existing noise levels (>5 dB) are predicted at one receptor location along transportation route to a potential rail load-out facility in Marathon but noise levels are below noise limits – the predicted effect is limited to the Site Study Area and its immediate vicinity, is short term, and is reversible; the effect is therefore characterized as non-significant adverse effect
- mean, peak, and low flows in Stream 6 will decrease substantially during operations - no mitigation during operation is planned, but natural drainage area of the subwatershed and flows will be restored at closure – the predicted effect is limited in spatial extent to Stream 6 and is reversible at closure when drainage will be restored and is reversible; the effect is therefore characterized as non-significant
- during operation of the Project, there will be a decrease in mean monthly, peak, and low flows in Streams 2 and 3, as a result in decrease in drainage area and water management; the majority of the water that naturally drains the system will continue to drain to the Pic River - no mitigation during operation is planned, but drainage will be restored at closure – the predicted effect is limited in spatial extent and is reversible at closure when drainage will be restored; the effect is therefore characterized as non-significant
- approximately 612 ha of forest cover (predominantly white birch) will be removed for site development – the effect is limited in spatial extent (e.g., the forested area of the Project site represents a negligible portion of the Big Pic Forest, is partially reversible at closure through re-vegetation to that the extent that there will be a net loss of 200 ha of forest cover; the effect is therefore characterized as non-significant
- approximately 18 ha of non-forest cover (incl. 16 ha of thicket swamp, 1.4 ha of shore fen and meadow marsh, and 0.6 ha of rock barrens) will be removed for site development - removal of non-forest vegetation is limited to Site Study Area, partially reversible through reclamation, and of low ecological importance since this type feature is common in the Local and Regional Study Areas; the effect is therefore characterized as non-significant
- removal of some regionally rare (Algal Pondweed) and provincially rare (Broad-lipped Twayblade, Common Ragweed, Oake's Pondweed, Northern St. Johnswort and Marsh Speedwall) species for mine infrastructure and transmission line construction - removal of rare plants is limited to Site Study Area and will be selective, is partially reversible through reclamation by utilizing these species; the effect is therefore characterized as non-significant

- removal of forest cover will alter/remove some wildlife habitat for furbearers (e.g., marten, fisher) - loss of habitat and furbearer population will be limited to the Site Study area, furbearers are mobile and will return once the Project ceases and the effect is reversible through reclamation and habitat restoration; the effect is therefore characterized as non-significant
- clearing may change moose movement behavior; initial migration out during site preparation and construction, but they will return to site area after period of human, noise, habituation - loss of habitat and moose population will be limited to the Site Study Area, moose are mobile and will return once Project ceases and the effect is reversible through reclamation and habitat restoration; the effect is therefore characterized as non-significant
- grey wolf will follow major prey species such as moose and deer; if moose emigrate from the site then grey wolf will follow; at closure increased areas of grassland will create increased white-tailed deer habitat and potentially higher wolf numbers - loss of habitat and grey wolf population will be limited to the Site Study Area, grey wolf are mobile and will return once Project ceases and the effect is reversible through reclamation and habitat restoration; the effect is therefore characterized as non-significant
- black bear will likely out-migrate from site initially during site preparation and construction, but return to site area after period of human, noise, habituation - loss of habitat and black bear population will be limited to the Site Study Area, black bear are mobile and will return once Project ceases and the effect is reversible through reclamation and habitat restoration; the effect is therefore characterized as non-significant
- removal of forest cover, wetlands, and lake habitat for mine infrastructure, proposed roads and transmission lines will contribute to forest fragmentation and may have negative effects on forest interior bird species, and may interact and could cause loss of nests and young due to land clearing with transmission line and mine infrastructure; edge adapted-birds may benefit from the habitat alteration – the effect will be limited to the Site Study Area, birds are mobile and will return once Project ceases and the effect is reversible through reclamation and habitat restoration; the effect is therefore characterized as non-significant
- Woodland Caribou: loss in potential connectivity between declining populations of woodland caribou in the Neys and Pukaskwa protected areas and loss of small lichen-rich areas on bedrock that could potentially serve as caribou winter/refuge habitat (though there are no known records of this use on the site) – the abundance of other cervids and predators within the Site Study Area and lack of historic observations makes use of the site as a transportation corridor for woodland caribou unlikely however the possibility cannot be eliminated. There are ample ways for caribou to by-pass or traverse the site, any loss of potential connectivity is reversible at decommissioning and

SCI is committed to working with government to evaluate other potential mitigation and enhancement strategies; the effect is therefore characterized as non-significant

- Canada Warbler: nesting habitat removal (mature hardwood dominated forest) for approximately 20 Canada Warblers – the effects is limited to Site Study Area, habitat loss is partially reversible through reclamation and ample, similar habitat is in close proximity; the effect is therefore characterized as non-significant
- Rusty blackbird: development of the mine will result in the loss of the only known nesting habitat (1.4 ha) of Rusty Blackbird in the study area on a small pond – the effect is limited to Site Study Area, habitat loss is negligible compared to similar habitat in close proximity and is reversible through reclamation; the effect is therefore characterized as non-significant
- Olive-sided Flycatcher: none observed on-site (one pair observed in local study area), but potential nesting habitat (1.4 ha) will be removed for mine development – the effect is limited to the Site Study Area, habitat loss is negligible compared to similar habitat in close proximity and is reversible through reclamation; the effect is therefore characterized as non-significant
- Common nighthawk: none observed on-site, but potential habitat (<2 ha) will be removed for mine development – the effects is limited to Site Study Area, habitat loss reversible through reclamation and ample similar habitat is in close proximity; the effect is therefore characterized as non-significant
- Housing: reduced demand for housing and downward pressure on home prices during mine closure – the effect is low in magnitude and limited in spatial extent; the effect is therefore characterized as non-significant
- Community Services: reduced demand at mine closure for community services may see some program cancellation – the effect is low in magnitude and limited in spatial extent; the effect is therefore characterized as non-significant
- Health and Emergency Services: reduced demand at mine closure for health services may see some downsizing - the effect is low in magnitude and limited in spatial extent; the effect is therefore characterized as non-significant
- Several minor water courses and water bodies that are defined as “navigable” under the *Navigable Waters Protection Act* will be impacted – the effect is limited to the Site Study Area, and of low societal value since it does not impede the navigability of an established water-way or travel route; the effect is therefore characterized as non-significant

- restrictions and effects on traditional land uses including animal and plant harvesting and country food collection in the Site Study Area, though SCI will continue to provide Aboriginal peoples guided access to some locations in the SSA that are safe to access, as well as access to the LSA – the effect is limited to the Site Study Area, should be largely reversible in but and is of high societal (Aboriginal) value. Ongoing discussions are planned on additional possible mitigation measures. SCI is optimistic that it will be able to conclude appropriate benefits arrangements with local First Nations. The residual effect taking into account mitigation has been characterized at this time as non-significant.
- the loss of the contribution that the country foods collected in the Site Study Area make to the traditional diet of the PRFN – the effect is limited to the Site Study Area, should be largely reversible in time but is of high societal (Aboriginal) value. Ongoing discussions are planned on additional possible mitigation measures. SCI is optimistic that it will be able to conclude appropriate benefits arrangements with local First Nations. The residual effect taking into account mitigation has been characterized at this time as non-significant.
- restricted access to parts of the PRFN community trapline that fall within the Site Study Area – the effect is limited to the Site Study Area, is largely reversible in time and is of high societal (Aboriginal) value. Ongoing discussions are planned on additional possible mitigation measures. SCI is optimistic that it will be able to conclude appropriate benefits arrangements with local First Nations. The residual effect taking into account mitigation has been characterized at this time as non-significant.
- Woodland caribou: a potential cumulative effect on Woodland caribou habitat and connectivity is identified in consideration of the Project together with other identified projects – The SCI Project will only add an additional 0.07% of additional disturbance to the coastal range. Onsite and possibly offsite mitigation and enhancement options for woodland caribou in relation to the Project are possible and a strategy for implementing some of these will be developed in conjunction with OMNR. It has been concluded therefore that the cumulative effect of the Project together with other certain and reasonably foreseeable projects in the coastal range is non-significant.
- Aboriginal considerations: a cumulative effect on traditional Aboriginal land uses that may be affected through restricted access or land disruption restricted in consideration of the Project and other existing, planned and reasonably foreseeable projects in the area is possible. Spatially, the total area occupied by existing and reasonably foreseeable projects in the RSA is low in relation to those areas asserted as traditional lands or the area covered by the Robertson Superior Treaty. In consideration of SCI's view that it will be able to accommodate non-mitigable effects through continued engagement the potential cumulative effect is characterized as non-significant.

Based on the evaluation of significance of residual effects, SCI concludes that the Project will not result in any significant non-mitigatable adverse effects.

Environmental Management and Follow-up Programs

SCI is in the process of establishing an EMS that will be consistent with the principles described by the core values expressed in its Environmental Policy (see Section 1.2.2.5) and will comply with legal and other requirements. SCI is committed to implementing the EMS consistent with the contents of this EIS, should the Project proceed. The EMS will be a multi-faceted system comprising various components or programs that deal with different environmental management issues. The contemplated components of the EMS are:

- a Waste and Recycling Material Management Program (WRMMP);
- an Emergency Preparedness Program (EPP); and,
- an Environmental Monitoring and Management Program (EMMP).

The EMP is intended and will be designed to: demonstrate compliance with applicable performance standards any limits and requirements imposed or a result of approval of this EIS and subsequent federal and provincial permits and approval; verify the effects of the project or a comparable to those predicted in the EIS; and, provide a management structure for the implementation of an adaptive management strategy. As part of the EMMP, conceptual follow-up and effects monitoring programs have been proposed for:

- air quality;
- noise;
- groundwater;
- surface water;
- fish and fish habitat;
- terrain and soils;
- vegetation;
- wildlife;
- migratory birds;
- woodland caribou;
- human health; and,
- archaeological and heritage resources.

The specific details related to these various programs will be developed during the EIS review and permitting processes and will consider input from government agencies, Aboriginal peoples and other stakeholders as appropriate. The results of monitoring and follow-up programs will be provided to appropriate government agencies. A framework for reporting monitoring program results to the public, government agencies, and Aboriginal peoples will also be developed.

Conclusions

Based on the detailed environmental assessment of the Marathon PGM-Cu Project, as reflected in this EIS and all its supporting technical studies, and taking into account the various mitigation and compensation measures identified, SCI and its environmental assessment team concludes that:

- the Project will provide significant economic benefit to the local, regional, provincial and national economies, as well as local communities and Aboriginal peoples;
- the Project is not predicted to result in any significant adverse effects on the environment;
- the Project can proceed while remaining protective of the environment and peoples in proximity to the proposed Project;
- accidents and malfunctions that might occur as the result of the implementation of the Project are not predicted to result in significant adverse environmental effects;
- the environment, in consideration of climate change, extreme weather, forest fires and seismic events, is not likely to cause significant effects on the Project;
- the Project will not result in significant adverse effects on renewable resources; and,
- the Project is not predicted to result in any significant adverse cumulative effects on the environment.

ORGANIZATION OF THE ENVIRONMENTAL IMPACT STATEMENT AND SUPPORTING DOCUMENTATION

The Environmental Impact Statement (EIS) is organized in a manner consistent with the Guidelines³ and its content includes the information specifically outlined in Part 2 of the Guidelines. The organization of the EIS is as follows:

- The introductory section (Section 1 – Background and Introduction) provides general background information pertaining to the guiding principles of the development of the EIS, the proponent, the legal framework associated with the environmental assessment (EA) process and the role of government and the Marathon PGM-Cu Project (the Project).
- Section 2 (Project Scoping) outlines the factors considered in the EIS, the scope of the factors, valued ecosystem components (VECs) and the spatial and temporal boundaries within which the Project is considered.
- Section 3 (Project Alternatives) provides the assessment of both the alternatives to the Project and the alternatives means by which the Project could be implemented.
- Section 4 (Aboriginal and Public Consultation) details the process that the proponent undertook to engage aboriginal people and the public (individuals, communities, stakeholder organizations, government) in the Project and the results of these engagement activities.
- Section 5 (Existing Environment) provides a summary of the biophysical and socioeconomic baseline conditions at and around the Project site.
- Section 6 (Assessment of Potential Impacts of the Proposed Marathon PGM-Cu Project) outlines the framework by which the potential effects on the biophysical and socioeconomic environments resulting from the implementation of the Project were assessed, the predicted effects, mitigation measures, compensation measures , cumulative effects and the determination of significance of residual effects. The potential effects resulting from accidents and malfunctions, the effects of the environment on the Project and the capacity of renewable resources to be impacted by the Project are also considered.
- Section 7 (Environmental Management) describes the overall environmental management system (EMS) for the Project, the individual Environmental Management Plans for the various mine life phases that will be developed for the Project should it proceed, the proposed mine closure plan and monitoring and follow-up programs.

³ “Guidelines” refers to the following document, “*Guidelines for the Preparation of an Environmental Impact Statement Pursuant to the Canadian Environmental Assessment Act and Ontario Environmental Assessment Act for the Marathon Platinum Group Metals and Copper Mine Project (August 2011)*”. Prepared by the Canadian Environmental Assessment Agency and Ontario Ministry of the Environment – Environmental Assessment and Approvals Branch.

- Section 8 (Table of Commitments) lists the proponent's key commitments in implementing mitigations, contingency plans, monitoring, taking corrective actions, reclaiming the site and providing offsets for unavoidable Project effects.
- Section 9 (Assessment Summary and Conclusions) summarize the overall findings with emphasis on the main environmental issues identified.
- Section 10 (References) lists the reference material and literature cited in the preparation of the EIS.

The information presented in the main body of the EIS report is largely offered in summary fashion. More detailed information and data are provided as appendices to the main report, or alternatively are provided under separate cover in what are termed Supporting Information Documents [SIDs]. These SIDs generally fit into one of the following categories: environmental baseline studies; technical assessment studies; and engineering and other related studies. A full list of the supporting documents that have been provided along with this EIS is provided in the Table of Contents.

USE OF CONFIDENTIAL INFORMATION

To the best of SCI's knowledge the EIS and associated supporting documentation does not contain:

- information that could cause specific, direct and substantial harm to itself (the Proponent), to a witness, or specific harm to the environment (ecologically or culturally significant sites, species of conservation concern, etc.) by its disclosure;
- information that is confidential (i.e., financial, commercial, scientific, technical, personal or other nature), that is treated consistently as confidential, and the person affected has not consented to the disclosure; or,
- information that is likely to endanger the life, liberty or security of a person through its disclosure.

TABLE OF CONCORDANCE

The “Table of Concordance”, which cross-references the information presented in the EIS (including appendices and supporting documentation) with the information requirements identified in the EIS Guidelines, is provided in Appendix 1 of this report.