Minago Project
Manitoba

Environment Act Proposal

ENVIRONMENTAL IMPACT STATEMENT

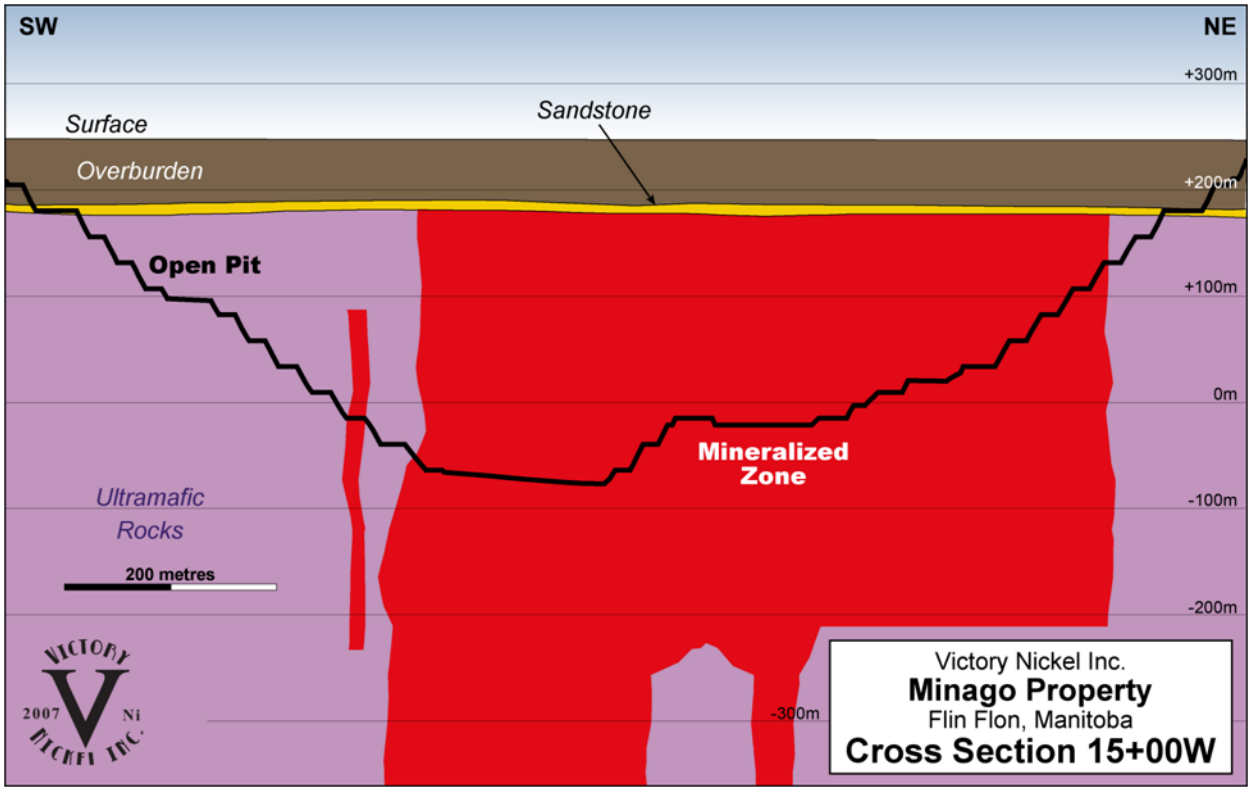
Volume 1 – Part I
Environmental Impact Statement

April 30, 2010

VICTORY NICKEL INC.

MINAGO PROJECT

ENVIRONMENTAL IMPACT STATEMENT



EXECUTIVE SUMMARY

PROJECT OVERVIEW

The proposed Minago Project is an open pit mining project to produce nickel concentrate and frac sand.

The Minago Property (Property) is located in Manitoba's Thompson Nickel belt on Highway 6, approximately 225 km south of Thompson, Manitoba, Canada. The site is located within the Nelson River sub-basin, which drains northeast into the southern end of the Hudson Bay. The basin has two more catchments in the Minago River and the Hargrave River, which enclose the project site. There are two more tributaries, the William River and the Oakley Creek present at the periphery of the project area. The catchments of these two tributaries are within the Lake Winnipeg basin and drain northward into the Nelson River sub-basin

The mine site is situated within a topographically low area of water-saturated peat and forest terrain. The area is almost entirely swampy muskeg with vegetation consisting of sparse black spruce and tamarack set in a topographic relief of less than 3 m. Although this low area extends for significant distances to the north and east, elevated limestone outcrops exist to the south and west at a distance of 7 to 20 km from the site.

The Minago Project is within the Norway House Cree Nation. Traditional use of the project area is within Treaty 5.

Victory Nickel Inc. (VNI) has a 100% interest in the mineral claims that comprise the Minago Project.

The deposit has potential as a large tonnage, low-grade nickel sulphide deposit (25.2 Mt at 0.43% nickel (Ni), 0.20% cut-off grade) and contains 14.8 Mt million tons of marketable frac sand. The potential of the Property is supported by a recent metallurgical test program, where very high grade nickel concentrate was produced. The excellent recoveries for the ore from the open pit mine are substantiated by historical and current metallurgical testing data.

In addition to the nickel ore concentrating plant, the installation of a frac sand processing plant will generate further revenues for the project. The financial analysis assumes that critical revenue streams will be developed from both the nickel and frac sand resources. The proposed production schedule by year, for the waste, the nickel ore and the sand is given below.

Production Schedule by Year and Product

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Dolomite (kt)	42,655	43,179	15,183	1,0015	0	0	0	0	0	0	111,032
Granite (kt)	0	1,744	20,890	20,440	35,711	24,459	9,784	4,944	3,832	199	122,005
Ultramafic (kt)	0	861	7,941	5,524	5,667	5,732	4,382	3,026	2,297	229	35,659
Sand (kt)	0	5,289	2,092	7,466	0	0	0	0	0	0	14,847
Total Ore (kt)	0	112	3,000	3,600	3,600	3,600	3,600	3,600	3,600	453	25,166
% Ni(S), Grade Ore	0.000	0.374	0.419	0.429	0.430	0.413	0.436	0.431	0.447	0.468	0.430
Total Tonnage (kt)	42,655	51,186	49,105	47,045	44,979	33,792	17,766	11,570	9,728	881	

The mine life is estimated to be seven full years and two partial years, with concentrate production mirroring ore production. The frac sand which is to be mined at the start of mining is produced throughout the life of the mine and beyond. The first partial year's ore production (2013) will be stockpiled pending commissioning of the ore processing plant in 2014.

The Project features an open pit bulk tonnage mining method, a 3.6 Mt/a nickel ore processing plant, and 1.5 Mt/a sand processing plant producing various sand products, including 20/40 and 40/70 frac sand, and other finer sized sands. The Project will be built over a three year period at a capital cost of $596.3 million. The nickel ore processing plant is scheduled to come online in the spring of 2014 and the frac sand plant to come online in the spring of 2013.

VNI is committed to the development of an environmentally and socially responsible project, which optimizes benefits to Manitoba and its people. In order to reduce project-related effects, the project has been designed to minimize the geographic extent of disturbance and for eventual permanent, passive closure. The site will be reclaimed in accordance with site-specific criteria in a planned and timely manner.

The Minago mine site is favorably located close to existing infrastructure, including Manitoba Provincial Highway 6, a 230 kV high voltage transmission line running directly beside Highway 6 on the east side of the road, the OmniTRAX Canada Railway Line, and the town of Grand Rapids.

The major components of the proposed Minago Project are as follows. The proposed Project will comprise an open pit mine, an ore concentrating plant, a frac sand plant, and supporting infrastructure. The supporting infrastructure will be comprised of:

- a tailings management facility for the co-deposition of tailings and ultramafic rock;
- waste rock dumps and overburden dump;
- an Explosives Plant and explosives storage;
- water treatment facilities;

- de-watering systems with associated pipelines and pumping stations;
- roads and laydown areas;
- staff accommodations for 300 people and facilities;
- open pit mining equipment, including trucks, shovels, loaders, and drills;
- truck repair and maintenance facilities; and
- associated electrical and mechanical systems.

Construction activities will be completed by 2013. The extraction and processing of ore will begin in 2012. Based on the assumed resource of 25 Mt, nickel processing will occur from 2014 until 2021 with decommissioning and closure shortly after. The extent of the mineable reserves in the Nose deposit is not fully known and an extended mine life is possible. There is potential for going underground in the Nose deposit and also the North Limb.

Process water will be reclaimed from the Polishing Pond and recycled for use in the process plant. The Polishing Pond will operate in a water surplus requiring daily release of effluent into the receiving environment. Based on the water balance and contaminant loading assessment, there will be no Contaminants of Concern (CoC). The effluent meeting MMER Guidelines will be pumped on a controlled basis to the Minago River and to Oakley Creek by gravity. During closure, the pit will be flooded and the effluent from the Polishing Pond will be discharged to Oakley Creek. The water quality downstream the mixing zones for both the Minago River and Oakley Creek will be monitored and assessed using CCME and *Manitoba Tier II Guidelines for the Protection of Aquatic Life*.

This EIS addresses the information requirements laid out in the Environment Act Proposal (EAP) Guidelines prepared by the Manitoba Conservation (2009).

ARCHAELOGICAL AND BIOPHYSICAL ASPECTS

From 2006 to 2008, three consecutive Environmental Baseline Studies (EBS) including archaeological were performed on Victory Nickel's Minago Property. The objective of those EBS was to determine the state of the area prior to the realization of the project and to identify biophysical elements that should be monitored in order to ensure an adequate environmental protection. Field campaigns were therefore performed to:

- Assess background surface water, groundwater, soil and sediment quality;
- Determine the baseline hydrological conditions prevailing within the Oakley Creek and the Minago River;
- Characterize fish and benthic invertebrates communities as well as their habitats;

- Map and describe the main plant communities observed on the Property;
- List and describe the habitat requirements of the wildlife species encountered as part of the field program and those who potentially inhabit the area.

Additional information was gathered using existing databases and a weather station was also installed to provide site-specific data. Moreover, geotechnical and hydrogeological studies were performed. The EBS included water quality assessment, hydrology, hydrogeology, sediments, benthos, fisheries, vegetation, wildlife surveys, soil characterization, geochemical characterization, archaeological impact assessment, geotechnical investigations and social-economic assessment. The results of these studies together with the potential project effects are given in the next sections.

Archeological Impact Assessment

An archaeological impact assessment of the proposed Minago Project development area was conducted in 2007. The area is located at a considerable distance from lakes or navigable rivers and access at any time of the year would be very difficult. Any use of this location that might have occurred would have happened during the winter months and probably would have been related to the fur trade. It would be impossible to predict where such activity would have taken place as traplines are relocated every year to accommodate animal movement. Even if resources from this activity were present, they would be buried deep in the sphagnum moss that covers the area and would be impossible to locate. Comprehensive testing in such conditions would prove nearly impossible and the odds of finding anything using such a technique would be astronomical.

The Historic Resources Branch of the government of Manitoba reviewed the final report under Permit A40-08 – Archaeological Impact Assessment of the Minago Mining site and accepted the report as a fulfillment of the conditions outlined in the permit and have no further concerns or recommendations. The Historic Resources Branch gave clearance to Victory Nickel Inc. to proceed with the project as based on the field investigations; no residual adverse project effects on heritage resources are anticipated. Studies consisting of conventional surificial examination and subsurface testing were completed at VNI identified areas of potential disturbance. Outstanding activities at this time consist of consultation with the Communities of Interest (COI) and input of traditional use information. On the basis of the field investigation the likelihood that there will be no effects on heritage resources is certain.

Overall, the archaeological field investigations determined that archaeological potential of the Minago area is extremely low and it is highly improbable that the area was used by inhabitants prior to the introduction of the fur trade. The possibility of finding any evidence of pre-contact utilization of the area is next to impossible and likelihood of locating any evidence of Fur Trade or later use, other than prospecting and mining activities is extremely minimal. Existing information on First Nations land use, water use, fish and terrestrial wildlife use was reviewed and compiled to

assist in the identification and mitigation of the potential impacts from the project. VNI will not compromise any aspects of traditional knowledge during any project phases.

Climatic Assessments

Based on the data provided by regional weather stations, the average mean annual temperature was -0.4 ºC for the 1950 to 2008 period. The coldest and warmest months are January (-21.5 ºC) and July (17.6 ºC), respectively. Sub-zero temperatures are observed from late October to late April. The estimated mean annual rainfall, snowfall (water equivalent) and total precipitation for the Minago Project Area from 1968 to 2008 are 375, 139 and 514 mm, respectively.

Air Quality Assessment

Based on air quality results compiled by Manitoba Conservation over the entire Province, measurements were respecting all guideline limits, except for ozone, particulate matter and sulphur dioxide. However, recent measurements performed at the Riverside station in Thompson, where a larger nickel mining site exists, proved to all respect guideline limits. It is important to note that the proposed mine development at Minago is smaller than the current residential and mining related development at Thompson, and therefore air quality measured there is expected to be lower than is expected for the Minago Project. Still, in order to minimize the potential effects of the project on the local and regional air quality, dust suppressant will be applied to minimize fugitive dust during periods of heavy activity and/or dry periods, activities that generate large quantities of fugitive dust will be minimized when windy, disturbed areas and topsoil stockpiles will be reseeded to prevent fugitive dust from wind erosion, waste heat from the generators will be recovered to heat the process building, assay lab and camp, low sulphur fuels including diesel fuel with a sulphur content of 15 ppm and propane with negligible sulphur content will be used, prohibited materials (waste oil, tires) as accelerants will not be used, and applicable criteria with respect to emission quality on all combustion-related equipment will be respected and maintenance will be provided according to manufactures specifications.

Terrain and Surficial Assessment

Terrain, surficial materials and soil conditions were compiled, interpreted and supplemented with field geotechnical investigation programs. The stratigraphic column is essentially composed of a Quaternary surface cover over an Ordovician dolomitic limestone. The Quaternary surface cover typically comprises up to 4 m of peat/muskeg that is generally underlain by up to 20 m of low permeability glacial lacustrine clays. On the other hand, the dolomitic limestone is fine grained, massive to stratified and varies in colour from creamy white to tan brown to bluish grey. Dolomite thickness ranges from 42 to 62 m with thickness increasing southward. Approximately 95% of the project area was classified as ‘stable’. The site terrain is low and there are no signs of steep gully side walls and no side wall slumps. Moreover, ninety-five percent (95%) of the project area was rated as having a low erosion potential due to the occurrence of low terrain throughout the project area. To minimize the potential effects of the project on terrain, surficial material and soils, several mitigation measures will be implemented such as an Erosion and Sediment Control Plan

and a Site Water Management Plan. Moreover, among other measures, site clearing will be minimized during all project phases and timed to minimize soil compaction while all cleared sites will be cleaned and progressively revegetated with appropriate plant species when no longer use.

Hydrology

The Minago Project Site is located within the Nelson River sub-basin, which drains northeast into the southern end of the Hudson Bay. The Minago River and Hargrave River catchments, surrounding the Minago Project Site to the north, occur within the Nelson River sub-basin. The William River and Oakley Creek catchments at or surrounding the Minago Project Site to the south, occur within the Lake Winnipeg sub-basin, which flows northward into the Nelson River sub-basin. Along with baseline data collected as part of 2006, 2007 and 2008 EBS, regional hydrometric stations were used to complete the hydrological characterization of the project area. Flows were then calculated for three periods of time, the spring freshet, which occurs in May, the summer period, from June to October, and the winter period, from November to April. Flows in the Minago River were estimated to be 10, 1.9 and 0.8 m^3/s in May, during summer and during winter, respectively. In the Oakley Creek, flows were estimated to be 4, 0.5, and 0 m^3/s (frozen solid) in May, during the summer period and during the winter period, respectively. The main project effect on surface water hydrology is linked with increased flows in Oakley Creek (varying from 0 to 31 %) and Minago River (from 0 to 36 %) due to Polishing Pond discharges. To mitigate that effect, a Site Water Management Plan will be implemented as well as an adaptative monitoring program to monitor the effects of the final effluent on the receiving watercourses.

Water Quality

Overall, the water quality was good in the vicinity of the Minago Project with only some parameters exceeding Manitoba and/or CCME (Canadian Council of Ministers of the Environment) limits for the protection of freshwater aquatic life. The most common exceedances of Manitoba water quality guidelines occurred for aluminum and iron followed by nitrite-N, copper, total dissolved solids and selenium and silver. According to data gathered as part of the 2006, 2007 and 2008, EBS, overall, sediments presented low metal content, exception made of chromium which showed natural moderately high values. Project effects on surface water and sediment quality are associated with Polishing Pond discharges in the Oakley Creek and the Minago River. A Site Water Management Plan and an Erosion and Sediment Control Plan will therefore be implemented to mitigate those effects and MMER, CCME and Manitoba Tier II Guidelines will be respected during all project phases. Adaptative management measures will also be implemented.

Hydrogeology

With the Minago deposit situated under muskeg and under the Ordovician dolomite and Winnipeg Formation sandstones, the open pit will require dewatering to enable mining. Therefore, a hydrogeological study was performed to determine the underground flow regime and hydraulic conductivity of the various geological units that will be affected by mining. Preliminary pumping tests indicated that the peat and clay were water bearing but at very low yields and low hydraulic

conductivity and thus of limited groundwater producing potential. The Ordovician limestone and sandstone, however, were found to have significant groundwater producing potential. The principle stratigraphic units were overburden (peat and clay; OB), shallow limestone (SLS), limestone (LS), sandstone (SS), and granite (GR). Limestone at Minago is 55 m (180 ft) thick and consists of shallow limestone that has an upper zone of water bearing fractures (up to 40 m depth) and deep limestone underlying this zone. Underlying the limestone is approximately 10 m (30 ft) of sandstone, followed by some shale and weathered granite of the Precambrian Shield. Groundwater quality results compiled from 2006 to 2008 showed to respect all guideline limits, except in some few cases (total iron, total aluminum, dissolved zinc, turbidity, dissolved oxygen, iron II and fluoride). The influence of significant hydrogeologic (recharge or zero-flux) boundaries were not identified in the hydraulic response to pumping during the pumping test program. This is likely because of the distance to the nearest surface water body in contact with the limestone aquifer (i.e., the Minago River is approximately 10 km from the dewatering wells) and the limited duration of the pumping test. Oakley Creek, located approximately 1 km south of the dewatering wells is likely not in direct contact with the limestone aquifer (i.e., its bed lies in the overburden); therefore, it was not observed to act as a significant hydrogeologic boundary. Under pre-pumping conditions, the Minago River may be an area of groundwater discharge. Under sustained groundwater pumping conditions, this river could convert to a source of groundwater recharge to the limestone aquifer. Limestone outcrops 2 km northwest and 9 km south of the Site are likely areas where recharge to the limestone aquifer occurs through net infiltration of precipitation. The overburden was not significantly affected by pumping during the pumping test, except in the near vicinity (approximately 30 m) of the North Pit Wall zone (HG-7).

The preliminary hydrogeological program, conducted in 2007, was followed by a comprehensive hydrogeological characterization of the site in the summer of 2008. The comprehensive hydrogeological program involved pumping of four high capacity dewatering wells located along the perimeter of the proposed open pit mine and monitoring the hydrogeologic response in these wells and in 24 observation wells. Long-term pumping tests were conducted to lower the hydraulic heads within the limestone (LS) unit significantly below the limestone-overburden contact (i.e. allow its conversion from a confined to an unconfined aquifer). Results of the long duration pumping test program were used to develop a conceptual hydrogeological model of the Site and a groundwater flow model of the proposed open pit area. The primary focus of the hydrogeological study was to estimate the configuration of the dewatering well system required for the operation of the proposed mine pit; to estimate the total required pumping rate for dewatering; and to estimate the extent of the drawdown cone created during open pit mining. The hydrogeological study concluded that a total of 12 dewatering wells completed in both the limestone and sandstone aquifers, at distances of approximately 300 m to 400 m along the crest of the ultimate pit, will be required to operate simultaneously. The total quantity of groundwater likely to be generated by these wells is 40,000 m^3/day (7,300 USgpm). The average pumping rate for an individual well is estimated to be 3,300 m^3/day (600 USgpm).

Project effects on groundwater are essentially associated with pit dewatering potentially resulting in groundwater table depression and reduced base flows in Oakley Creek. However, since results

have shown that there is no connection between the Oakley Creek and the underlying limestone and sandstone aquifers, no effects are expected. Still, based on follow up studies of effects of reduced low flows on fish habitat, options to reduce groundwater pumping or return more water from the Polishing Pond to Oakley Creek will be evaluated.

Benthic Community Assessment

Analyses showed that benthic invertebrate communities significantly differ from one sampling site to another. However, from 2006 to 2008, the same five phyla were dominating the samples, namely, Sphaeriidae, Chironomidae, Ephemeridae, Tubificidae and Daphniidae. Project effects on benthic communities in Oakley Creek and the Minago River are associated with Polishing Pond discharges (metals, TSS) and increased benthic productivity in Oakley Creek and the Minago River from nitrate and ammonia in effluent discharges. To mitigate those potential effects, a Site Water Management Plan will be implemented and the final effluent will respect MMER, CCME and *Manitoba Tier II Guidelines for the Protection of Aquatic Life*. Along with monitoring programs (surface water and sediment quality), an EEM program will be conducted on a 3-year cycle following EEM methods.

Fisheries

Overall, three rivers and three lakes were fished as part of the 2006, 2007 and 2008 EBS, namely the Minago River, the Oakley Creek, the William River, the Hill Lake, the Cross Lake and the Limestone Bay of Lake Winnipeg. The aim of the fishing and habitat characterization campaigns was to determine if all the water bodies contained fish and could be considered as fish habitat. All of them definitely constitute a fish habitat, mostly for Cyprinidae. Two species of fishing interest for local communities feed and spawn within the area, namely northern pike and walleye, but have not been observed upstream Highway 6 in both the Oakley Creek and the Minago River. Mercury concentration in fish flesh varied from 0.06 mg/kg to 1.6 mg/kg, depending on fish length and type of diet. Four out of twenty (20 %) fishes had mercury concentrations higher than the Canadian Food Inspection Agency's criteria (0.5 mg/kg), with an average concentration under this criterion (0.38 mg/kg). Fish species which showed higher mercury concentrations were essentially large northern pike or walleye fished in Hill Lake. No streams or riparian habitats are located within the boundaries of the mining site and there are no culverts or stream crossing contemplated for the Minago Project. Therefore, project effects on fisheries are essentially associated potential erosion during site clearing and Polishing Pond discharge. Therefore, mitigation measures depicted above with regards to effects on surface water quality will also be used to mitigate effects on fisheries.

Vegetation

Due to a regional gentle relief, large treed bogs are often observed within the Minago Property area, covering up to 30 % of the regional landscape and representing, both spatially and ecologically, one of the most important ecosystems in the area. Black spruce is by far the most

abundant vascular species especially in badly drained environments where it creates the Sphagnum-spruce forest. This species is also abundant on better drained soils with the jack pine, a species which is frequently dominating xeric environments. Sites that are well drained consist mostly of low-elevated plateaus (above 265 m a.s.l.) covered by limestone, tills and fluvio-glacial sands. These plateaus are usually colonized by the open conifer forest. However, none of the areas potentially impacted by the Minago Project are located on such plateaus, but are all covered with Sphagnum-spruce stands sand treed bogs colonizing depressions filled with marine clay and silt, being covered by peat deposit which can be up to 4 m thick. Therefore, overall, the Project area contains vegetation consisting of mostly evergreen trees (primarily black spruce and tamarack) of intermediate (>3-15 m) to dwarf (3 m) heights. There is a relatively low level of vegetative biodiversity and there are not any vegetation types unique to the area or region. No rare, threatened, or endangered plant species were found. Projects effects on vegetation are linked with site clearing (about 1,300 ha) and to mitigate those effects, an Erosion and Sediment Control Plan as well as a progressive Site Reclamation Plan (as areas are abandoned and revegetated) will be implemented.

Wildlife

Among the several wildlife species which are likely to occur in the area, including birds, mammals, reptiles and amphibians, none has a special status under provincial and/or federal legislations, except woodland caribou. A list of species potentially occurring in the Minago project Area was completed and it includes 136 birds, 39 mammals, 6 amphibians and 1 reptile. Among those, 45 birds, 17 mammals, 4 amphibians and 1 reptile were observed during field campaigns. A low density of furbearers was observed on the Project Site even if many beaver dams were observed. The Grand Rapids region is well-known for its caves and bat hibernacula; however, the nearest from the Project Site is located 16 km away. Valued Ecosystem and Cultural Components (VECCs) were determined for the present assessment and include the woodland caribou, the moose, which is the only ungulate to have been observed in the Minago Project Area, the black bear, the beaver, the American Marten, the lynx and the song bird community. Project effects on those VECCs are essentially associated with 1) increased mortality risk from collisions, hunting and poaching, 2) disruption to movement patterns from sensory disturbance, habitat fragmentation or Transportation Corridors, and 3) reduction to seasonal habitat availability from Transportation Corridors. To mitigate those effects, measures such as implementing a Wildlife Protection Plan and a Site Waste Management Plan will be put in force. Moreover, for the entire duration of the project, incidents with problem wildlife and vehicle collisions will be reported and recorded, as well as black bear signs in and around the mining site. Some of the aspects of the wildlife management and mitigation measure include the following:

- Firearms will not be permitted.
- Hunting and fishing will be prohibited at all times on or in the vicinity of the project site. This restriction will apply to all mine employees, managers and contractors. It will be in effect throughout the life of the project from construction through to closure and reclamation. Infringement of this policy is to be reported.

- Maximum speed limit on all access roads will be set at 60 km/hr.
- Any observed wildlife corridors will be signed to alert drivers to potential wildlife crossings.
- Any mortality on the access road will be recorded and reported and any modifications to the mitigation measures will be considered in consultation with Manitoba Conservation, as required.

Based on the effectiveness of these mitigation measures, effects of the access road on wildlife mortality during construction, operations and decommissioning are expected to be of low magnitude and not significant.

SOCIAL-ECONOMIC CONTEXT

As part of the environmental impact assessment of the Minago Project, Victory Nickel Inc. conducted a socio-economic assessment of the neighbouring communities. A series of meetings and interviews were held with a wide range of key stakeholders to identify their views and opinions with respect to the Minago Project. The stakeholders included Norway House Cree Nation (NHCN) and Norway House Community (NHC); Grand Rapids Cree Nation (GRCN) and Grand Rapids Community (GRC); Cross Lake Band of Indians (CLBI) and Cross Lake Community (CLC); Moose Lake Cree Nation (MLCN) and Moose Lake Community (MLC); Snow Lake; Manitoba Métis Federation (MMF); Trapline Owners (TLO); Norway House Resource Management Board (NHRMB) and Government Agencies. Consultations, community engagements, and small group and open house meetings were held in the individual communities. Also, Victory Nickel has signed a Memorandum of Understanding (MoU) with Cross Lake, Moose Lake and Grand Rapids First Nations' Bands. The communities to the Minago Property include Grand Rapids (GR), Moose Lake (ML), Cross Lake (CL), Snow Lake (SL) and Norway House (NH). Each community has its own governing infrastructure usually collectively known as the First Nations in the Northern Region of Manitoba.

The objectives of the Socio-Economic Assessment (SEA) for the Minago Project were to:

- Introduce the major components of the Minago Project to a wide range of key stakeholders.
- Inform communities and stakeholders of potential impacts and their relative magnitude on the communities' social and economic well-being.
- Provide an opportunity for the integration of diverse community values into the decision making process for the mine development.
- To understand the concerns of the communities and stakeholders to develop potential mitigative measures that are practical and cost effective.

- To provide information for addressing the potential impacts of the Minago Project on the socio-economic resources of the communities.

The Socio-Economic Assessment examined how the proposed mining project would change the lives of current and future residents of the surrounding communities socially and economically. The indicators used to measure the potential social-economic impacts include aspects such as demographic composition, social well-being, business and services evaluation, occupational skills availability and capacity gap analysis, public services, and community social structure.

Overall, the issues raised by the Communities of Interest (COI) were positive. However, it should be noted that there is considerable resentment to development in the area due to adverse past experience with some companies. Many stakeholders who were aware of the Minago Project and Victory Nickel Inc. were appreciative of the company's consultation process. The COI were interested in potential employment and business opportunities that the Minago Project might bring to the communities. The other concerns that were brought to Victory Nickel include potential environmental degradation and social problems that the Project might bring to the communities. The Minago Feasibility Study has addressed these concerns by incorporating robust environmental protection measures to minimize exposure.

The various meetings with government agencies, the public, First Nations and Métis consultation and community engagements on various aspects of the Minago Project occurred during the past three years (2007-2009). The issues raised by each of these groups during this process have been documented and are summarized in the Study.

Project Community Engagement and Consultations

The Project is located in the Norway House Resource Management Area. Neighbouring communities to the Minago Property include Grand Rapids (GR), Moose Lake (ML), Cross Lake (CL), Snow Lake (SL) and Norway House (NH). With the exception of Snow Lake the other for communities are members of Treaty 5. The communities outside Treaty 5 have their own community councils and mayors. The First Nations have their own governing infrastructure usually collectively known as the First Nations in the Northern Region of Manitoba. Victory Nickel together with their consultants held a series of meetings and interviews throughout 2007 and 2008 with a wide range of key stakeholders to identify their views and opinions with respect to the Minago Project. The stakeholders included Norway House Cree Nation (NHCN) and Norway House Community (NHC); Grand Rapids Cree Nation (GRCN) and Grand Rapids Community (GRC); Cross Lake Band of Indians (CLBI) and Cross Lake Community (CLC); Moose Lake Cree Nation (MLCN) and Moose Lake Community (MLC); Snow Lake; Manitoba Metis Federation (MMF); Trapline Owners (TLO); Norway House Resource Management Board (NHRMB) and Government Agencies. Issues raised by First Nations together with VNI responses are given in the Table below.

2007-2008 First Nations Consultation Issues and Responses

Issues Raised During Consultations and Community Engagement	Company Response
Wildlife issues: Elders and Band members were very concerned about wildlife.	VN will initiate an animal sightings log as per Wildlife Management Protection Plan in the Draft EIS.
Overuse of access road: People using it to come in and hunt moose.	The access road will be gated and will be private and would not be used by any third party, except in emergency situations.
Concerns over the negative impacts on First Nations.	The issue is covered under the environmental assessment including socio-economic agreement.
Use of chemicals at the mine.	Few chemicals will be used to process ore. Flotation reagents, explosives and fuels and lubricants are the primary chemicals.
Reclamation of the area: There should be a requirement for a reclamation bond from the provincial government.	VNI's policy is to reclaim disturbed areas in a timely manner. The requirements for bonding exists under the *MB Minerals Act*.
There are environmental concerns, which will require more information before the band could support the mine.	The issues will be covered under the environmental impact assessment (EIA).
Fishing, trapping and logging activities may be affected negatively although Minago is located rather far from Grand Rapids.	The project is designed with appropriate control measures not to affect fishing, and logging activities. The measures are detailed in the environmental impact statement. Effect of the project on trapping will be much localized and discussions with the RTL holder from Norway House have been initiated.
The open-pit operations will affect the eco-system: air, water, vegetation, animals, and humans.	All these aspects are taken into consideration when planning and designing the Minago Project. Details pertaining to these environmental attributes are covered in the Environmental Impact Assessment (EIA).
Economic benefits may be outweighed by resulting social problems such as crack and meth abuse.	It will be difficult for VNI to control the use of such substances in the communities. However, VNI will implement a Drug Abuse Policy for its employees, contractors, suppliers and sub contractors. It is important to note that there are existing government programs to deal with substance abuse and the communities of interest can tap into such services when needed.
Spillway from the mine into Minago River will affect trapping and fishing especially in Zone E.	All flows to the Minago River will be controlled discharges. The discharge system design and related monitoring systems are given the EIA.
Currently, drug and alcohol abuse is very serious in the community and the mine may increase the problem.	It will be difficult for VNI to control the use of such substances in the communities. However, VNI will implement a Drug Abuse Policy for its employees, contractors, suppliers and sub contractors. It is important to note that there are existing government programs to deal with substance abuse and the communities of interest can tap into such services.
People have not forgotten the mistreatment by other companies, which did not keep their promises.	VNI will not follow the paths of other companies. VNI should be judged by its own actions and not actions by others. For example, VNI was the first Company to contact the First Nations about the Minago Project and will continue to communicate as the project evolves.

Issues Raised During Consultations and Community Engagement	Company Response
The mine will contaminate herbs that the locals use for medicine and food.	On the basis of the vegetation studies, there are no herbs documented that locals use for medicine and food. The results from archaeological study showed that the project area has no archaeological attributes.
Sudden influx of money in the community may cause crime to go up	VNI will have no control on this matter. However, the company will encourage employees to undertake financial management courses. It is also important to mention that there are government programs available that the communities of interest can use to deal with financial problems if they occur.
Families may be uprooted be relocating to campsite.	First Nations who choose to stay in their communities will have a choice to commute to work. VNI will facilitate reasonable transportation to and from Minago. The employees also can car pool.
Project may affect the trappers and fishers.	The project will not affect fishers. Impacts on trapping will be localized and VNI has initiated discussions with the affected individual trappers.
Potential Environmental degradation of the Lake Winnipeg and Limestone Bay.	There will be no uncontrolled discharges to Lake Winnipeg and Limestone Bay. All discharges will meet regulatory requirements.
Animals and other wildlife will be affected.	There will be no significant impacts on animals and wildlife. Details pertaining to these attributes are covered in the EIA.
Project will interfere with the water table and pollute the air (toxins) and the water.	The water table in Minago's vicinity will not be affected. This has been confirmed from pumping tests undertaken by Golder Associates. Furthermore, VNI will initiate monitoring programs during operations. The details pertaining to groundwater aspects are covered in the EIA.
Economic development comes with its social problems such as drug abuse and alcoholism.	It will be difficult for VNI to control the use of such substances in the communities. However, VNI will implement a Drug Abuse Policy for its employees, contractors, suppliers and sub contractors. It is important to note that there are existing government programs to deal with substance abuse and the communities of interest can tap into such services.

PROJECT ECONOMIC CONDITION

The Minago Project is located in a geographically isolated and sparsely populated area of Manitoba and within the Norway House Resource Management Area (RMA). The communities in the project area include Grand Rapids, Moose Lake, Norway House, Grand Rapids and Snow Lake. They are linked by PTH 6 and its arteries. With the exception of Grand Rapids and Moose Lake are serviced by regularly scheduled and charter air services.

The Minago Project will be under construction between 2011 and 2013, at a capital cost of approximately $596 million. Construction will require more than 600 people that will be housed in the camp, located near the mine. Construction workers will be sourced locally as much as possible.

The direct impact in Manitoba of the construction of the mine will directly increase GDP by $202.6 million. When purchases in Manitoba are accounted for, the province's GDP will be increased to

$268.2 million total. Manitoba's GDP in year 2008 was approximately $51,000,000,000 (Stats Canada). The $268.2 million total (direct + indirect, excluding $51 Billion reported in 2008) impact in Manitoba will therefore, likely account for a 0.5% boost in GDP.

The company will employ 422 workers to operate and maintain the project, in addition to approximately 220 contract truckers and related maintenance workers.

Overall, construction of the project is estimated to yield $6.3 million in personal income taxes to governments in Canada and about $4.3 million in personal income taxes to governments in Manitoba.

CLOSURE PLAN

In keeping with high standards for environmental and social responsibility and the *Manitoba Closure Regulation 67/99*, Victory Nickel will implement an environmentally sound and technically feasible decommissioning and closure plan for the Minago Project. The closure planning and implementation will be undertaken with appropriate environmental care, to meet these Provincial and Federal laws and regulation, satisfy the interests of the public, and achieve the company's environmental standards. In so doing, Victory Nickel will exercise reasonable efforts to plan, design, construct and operate the facilities for closure, with a goal of achieving a walk-away scenario.

In addition to the final closure stage, the decommissioning and closure plan considered "Temporary Suspension (TS)" and "State of Inactivity (SI)" stages. Temporary Suspension means that mining and milling production activities have been suspended, while State of Inactivity means that mine production and mining operations have been suspended indefinitely. The Temporary Suspension may turn into a State of Inactivity, if the suspension period is longer than planned. Similarly, the State of Inactivity may turn into Permanent Closure, if prevailing conditions for resumption of operations are not favorable. For each of these closure stages, the respective decommissioning and closure aspects have been developed.

The determination of mine decommissioning and closure measures involved an assessment of the key site components that may place the public or environment at risk after mine closure.

The plan was developed to meet the environmental, health and safety objectives including:

- Protection of public health and safety;
- Implementation of environmental protection measures that prevent adverse environmental impact;
- Ensuring land use commensurate with surrounding lands;
- Implementation of progressive reclamation measures during mine operations;

- Post-closure monitoring of the Project site to assess effectiveness of closure measures for the long term; and
- Achieving a walk-away post-closure monitoring and management until the mine presents evidence of long-term compliance with closure criteria.

Mitigation measures were designed to address public safety issues and environmental concerns, with post-closure monitoring and inspections planned at the commencement of the project to ensure that closure objectives are met. Once the effectiveness of the mitigation measures is assured, management of the site can be safely reduced to a level that is consistent with the mine closure objectives and related measures. Post-closure monitoring has been designed to ensure that performance objectives are closely monitored and inspected during the initial years following implementation of closure measures. Victory Nickel anticipates that final determination of the effectiveness of closure measures for walkway status of the project will be subject to review and concurrence with regulatory agencies and the public.

Where possible, performance-based criteria have been adopted for the development of the decommissioning and closure plan. The *Metal Mines Effluent Regulations* (MMER) end-of-pipe effluent discharge standards were used as criteria for waters emanating from the final effluent Polishing Pond. *CCME Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life* (CCME, 1999) and Manitoba Tier II water quality guidelines were used to assess effectiveness of closure measures to local downstream receiving waters. These same performance-based criteria will be used to determine the effectiveness of closure measures during the post-closure phase. Post closure monitoring and inspection results will be reviewed to ensure that objectives continue to be met well after decommissioning the project. If these objectives are not met, maintenance or contingency plans will be developed as necessary to address potential areas requiring further mitigation.

The plan calls for progressive reclamation during various project phases. The selection criteria for candidate areas for progressive reclamation initiatives will take into account the redundant nature of site components with respect to inherent risks and impacts on the receiving environment and budgetary constraints. The components that will be required for the ongoing running of the operations will not be subjected to progressive reclamation. Necessary environmental protection measures have been adopted in the development of the overall project plan to ensure that a healthy environment exists after mine closure.

One other aspect that the closure plan considered is reclamation research to develop workable and field proven reclamation programs. As the company continues to operate and manage the site, additional information about the site will be gathered to develop an optimal closure plan that will be cost- effective and environmentally and technologically feasible.

Mill tailings are deemed to be Non Acid Generating (NAG). The ultramafic waste rock is Potentially Acid Generating (PAG) and is expected to be disposed of under the planned closure

scenario with the tailings under a "wet" closure. This is intended to avoid ARD or ML from the ultramafic rock stored in the TWRMF. A permanent water cover is proposed in order to keep the materials saturated. The co-disposal approach has been implemented to seal the ultramafic rock to mitigate Acid Rock Drainage (ARD) within the non reactive tailings.

Going forward, the company will undertake research studies to develop and optimize the proposed co-disposal mitigation measures. The areas of studies will include but not be limited to ARD and Metal Leaching (ML) studies specific to Minago Project mine wastes. This includes ultramafic waste rock; Site-Specific Water Quality Objectives (SSWQO) investigations specific for the Oakley Creek watershed to replace the generic guidelines used at the inception of the project. Typical guidelines are the *CCME Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life* and the Environmental Effects Monitoring (EEM) program. These steps will enable a better understanding of the impacts of the discharges on the receiving environment.

In addition, VNI will undertake vegetative trials using local plant species such as green alder for the reclamation of disturbed areas; undertake hydrological and hydro-geological studies to optimize the site water balance; and fine-tune the Tailings Waste Rock Management Facility (TWRMF) operational phase wet cover option to prepare for the closure phase.

All of the above studies will be undertaken during the operational, temporary closure, and state of inactivity and post-closure phases. If required, Victory Nickel will work with consultants and other technical groups to address the environmental constraints associated with aspects such as ARD and/ or ML and overall site issues of concern.

Overall, the closure plan addresses the long-term physical, chemical and biological stability of the site including reclamation of surface disturbances. A program is presented for site management and monitoring both during implementation of closure and after decommissioning and reclamation measures are completed. Although the plan is based on the best information available at this time, as additional planning information, and/or experience at the site become available, the details of the plan will be updated and/or altered as necessary. Decommissioning cost estimates are provided and the financial security requirements reviewed.

During Temporary Suspension and State of Inactivity, VNI intends to be a responsible steward:

- By demonstrating a commitment to reopening the site.
- By continuing to have the site under the care and maintenance of an on-site caretaker.
- By continuing to maintain the main access road in a manner that heavy equipment can be brought to the site on short notice to deal with any environmental emergency.
- By continuing to adequately monitor and maintain buildings and facilities such as the Tailings and Waste Rock Management Facility (TWRMF) on the site.
- By ensuring that major fixed equipment and buildings remain essentially intact on site.

If closure is deemed to be permanent, then implementation of the Decommissioning and Closure Plan must occur. It is important to note that there may be a need for the development of an updated closure plan to reflect the state of the site at the time.

The mine closure phase at the Minago Project will commence with cessation of open pit mining and the milling of ores and stockpiles. Once all mineable ore reserves have been processed, the mill and concentrator will be flushed out and the buildings and infrastructure will be dismantled, decommissioned and demolished. The pit will be left to flood, tailings and ultramafic rock contained in the TWRMF will be submerged under 1-2 metres of water, and the Polishing Pond will receive discharge from TWRMF and eventually will naturally turn into a wetland.

To identify potential, local and native revegetation species, the established shrub and vascular herb strata were reviewed in light of succession potential. These succession studies reported in the literature have identified pioneer vegetation species and their seed dispersal capability, reproductive capabilities, and timeframes for establishment. The disturbed areas will be revegetated.

Established shrubs and herbs in the dominant tree and shrub units at the Minago Project were identified during the vegetation assessment. Based on the baseline study results, green alder (Alnus crispa), willows (Salix spp.), and potentially paper birch (Betula papyrifera) and/or shrub birch (Betula glandulosa) appear to be candidates for successful revegetation at Minago Project. Victory Nickel intends to use green alder and willows to revegetate disturbed areas with approximate plant density of 0.1 alder per m^2 and willows will be planted in isolated islands amongst the alders to facilitate their establishment and seed dispersal during progressive revegetation. It is anticipated that there will be approximately one Willow Island per hectare consisting of 50 stems.

A custom seed mix will also be developed or obtained for Minago Project to seed small areas prone to erosion or areas for which revegetation with shrubs is not suitable. From the reclamation point of view, the only permanent vegetation losses will be the areas occupied by the waste rock dumps, the TWRMF, the pit area and to some extent the overburden dump. The company will exercise reasonable efforts to revegetate the industrial area, once all buildings have been decommissioned, the waste rock dumps, and all access roads not required during the post closure period.

Monitoring programs have been developed for all phases of the project. Operational monitoring program results will be used to refine the post closure monitoring requirements. The monitoring program is designed to monitor chemical, biological and physical parameters including the following:

- Monitoring of physical parameters for site structures;
- Monitoring of physical water parameters and chemical water quality;
- Monitoring of biological aspects as per MMER for a three year period;

- Permit requirements;
- Analysis of vegetation metal uptake;
- Monitoring plant growth, mortality and diversity for the revegetated areas;
- Monitoring dam stability review as per CDA and permit requirements; and
- Monitoring diversion system's physical integrity.

Monitoring reports will be submitted to the regulatory agencies and communities of interest as required to obtain feedback on the success of the reclamation program.

Costs to decommission, demolish and remove infrastructure; land reclamation and post closure site management and monitoring were developed using market prices for similar work recently completed or quoted on other sites. Using rates for the demolition of buildings solicited from local contractors, typical demolition unit rates were evaluated. Other unit rates for associated work were also solicited from Contractors with experience on similar projects. The demolition costs have been estimated assuming that salvaged material is the property of the contractor after the removal of process equipment. On the basis of the cost estimates, the overall closure cost is estimated to be Cdn$7,260,590.

ENVIRONMENTAL PROTECTION MEASURES

Environment protection has guided project design in several ways:

- The open pit mine has been designed to generate different types of waste streams in order to manage the wastes in an environmentally sound manner.
- Planning and design of all facilities has been undertaken to minimize effects on the Oakley Creek basin.
- No contaminated drainage or effluents will be discharged to surface waters in the Oakley Creek and Minago River drainages.
- In order to minimize discharge to surface waters and to reduce process make up water requirements, the site water balance employs re-circulation of process, mine dewatering wells water and the Tailings and Waste Rock Management Facility.
- Water management system design has been guided by existing surface water quality in the project area and CCME and *Manitoba Tier II Guidelines for Protection of Aquatic Life*.
- The tailings and waste rock management facility has been designed with abundant storage capacity providing flexibility for seasonal discharges and minimizing potential environmental effects.

- The TWRMF is designed to control the potential for ARD and Metal Leaching of the ultramafic rock. The design of the TWRMF includes water covers of 0.5 m and 1.5 m for the operational and closure phases, respectively.

Therefore, tailings and ultramafic waste rock will be permanently stored under water ensuring effective management of ARD during the operational and closure phases.

Testing of Polishing Pond decant water, as required during project decommissioning, will ensure protection of surface waters until stabilization is confirmed.