

EXECUTIVE SUMMARY

Bathurst Inlet Port and Road Project Description

This Project Description describes the construction and operation of the Project and the interactions of the Project with the environment.

The Project consists of a port on Bathurst Inlet connected to the Izok mineral deposit by a 211 km all weather road to Contwoyto Lake, the existing winter ice road and a summer barge system to Lupin Mine, and a 79 km all weather road from Lupin to Izok.

The Project lies entirely within the Kitikmeot region of Nunavut. This Project Description is submitted to the Kitikmeot Inuit Association and the Department of Indian and Northern Affairs, as the landowners in the Project area, for an environmental review under the Nunavut Land Claims Agreement, Article 12 Part 5.

The Project proponents are the Kitikmeot Corporation and Nuna Logistics Limited, both Inuit owned companies, who will form a Joint Venture corporation to build and operate the Project. As a shareholder in Nuna Logistics, the Kitikmeot Corporation will own 62.75% of the Project.

Project Construction

The Project requires the use of Federal Crown Lands and Inuit Owned Lands. The port is located on Crown Land and requires 150 hectares of space and 700,000 cubic meters of quarried materials for construction. The port site will include:

- a wharf to serve 50,000 tonne ice class vessels delivering fuel and bulk cargo and shipping out base metal concentrates from Izok;
- a dock to handle barges serving the Kitikmeot communities of Kugluktuk, Bathurst Inlet, Cambridge Bay, Umingmaktok, Gjoa Haven and Taloyoak;
- a 200 person camp and services;
- a 220 million litre diesel fuel tank farm;
- a truck and trailer maintenance shop;
- a 1, 200 meter airstrip.

Port construction will begin in September 2004 and be completed on September 2006.

The 290 km all-weather road passes over 148 km of Inuit Owned Land and 140 km of Crown Land. Road construction materials will be obtained from quarries adjacent to the roadway. Fifty-one quarries are proposed, 29 on Inuit Owned Land and 22 on Crown Land.

Road construction will occur in three phases; at the port it will begin in October 2004 and work toward Contwoyto Lake, at Contwoyto Lake it will begin in February 2005 and work toward the port. Lupin to Izok road construction will begin in February 2006 from Lupin and work toward the Izok Project. Road construction will be complete in October 2006.

Two barge terminals will be constructed on Contwoyto Lake. The terminal at kilometer 211 on the southeast shore of the lake will include a 20 person camp, a small maintenance shop and a truck parking area. The other terminal will be located at Lupin Mine on the northwest shore of the lake.

Project Operations

The Project's annual operating schedule will reflect the seasons of the arctic environment. Marine shipping will be completed between mid-July and late October. In the period, from six to ten round trips by 50,000 tonne ships will bring in approximately 225,000 tonnes of fuel and supplies for operating mines served by the Project and remove 300,000 to 470,000 tonnes of lead/zinc/copper concentrate from the Izok Project. Ice breaker support may be required as with other arctic projects, however, this shipping schedule can be accomplished without ice breaking to extend the normal open water season. Marine operations will also supply diesel fuel and general cargo to the Kitikmeot communities with three round trips by tug and barge from the port during the summer shipping season.

Road operations will also follow the arctic seasons. Winter road operations will run from January through April and connect with the existing Lupin winter road from Yellowknife to haul 185,000 tonnes of fuel and supplies to Ekati and Diavik Diamond Mines in the NWT. Accommodation and meals for drivers will be provided by the camp at the port. Operating the barge on Contwoyto Lake will permit hauling to Lupin and Izok in winter and summer. Fuel and supplies from the port to Lupin and Izok combined are 45,000 tonnes per year. The concentrate from Izok will range from 300,000–470,000 tonnes per year in the first ten years of Project operations. Summer barge operations will occur for 90 days in the mid-July to mid-October ice-free period. No hauling will occur during spring break-up from the end of April to mid-July and fall freeze-up from the end of October to January.

Project Interactions with the Environment

Project construction will require disturbance to approximately 670 hectares of terrestrial habitat, 2.3 hectares of marine habitat at the port, and 0.3 hectares of lake bottom in Contwoyto Lake for summer barge terminals. The road will cross 119 streambeds; 82 are intermittent streams (with no fish) that will be crossed with arched culverts or single span bridges that will not affect the normal stream channel. Support for the bridges will encroach into the stream channel at only three crossings. The effect of road construction on fish habitat will be negligible. On the land, animals will always have the right of way over traffic on the road. The most common animal in the Project area is caribou of the Bathurst caribou herd. During spring migration almost all of the animals in the herd could move through the Project area. No heavy hauling will be done in May and June so there will not be any significant interaction between traffic on the road and caribou during spring migration. The number of caribou along the road will be much less during the summer and winter hauling seasons. If hauling encounters periods of heavy caribou migration, hauling will be suspended until the migration has passed. Hunting by Project workers along the road or at the port will not be permitted. Recreational fishing by workers will be governed by the terms of the West Kitikmeot Land Use Plan.

The Project will be built and will operate in safe and clean ways that protect the animals and environment. The Project will also develop effective plans to protect the environment and animals from the effects of accidents that might occur at the port and along the road.

Economic Effects of the Project in the Kitikmeot Region

Project construction will occur over a 26 month period and create 3,600 man-months of employment and a payroll of \$34.5 million. Project operations will create 800 man-months of employment every year (300 in summer and 500 in winter) and produce a payroll of approximately \$3.5 million. The services of contracted truck drivers will add an additional payroll of \$9 million per year. Much of the new employment opportunities can go to the workforce resident in the Kitikmeot Region; with aggressive training for the employment needs of the Project, most of the payroll money can stay in the region.

At current world fuel prices, the cost of fuel landed in Cambridge Bay from the port in Bathurst Inlet could be reduced by up to 35% of the 2002 price of fuel from Hay River. The cost of freight from the south by truck to the port on winter road and barge to Cambridge Bay would be competitive with freight costs via Hay River but the goods could arrive in the community three to five weeks earlier. The freight cost of the same goods shipped to Cambridge Bay from eastern Canada or Europe via the port would be less expensive by up to 70%.

These savings show the potential for the Project to reduce the cost of fuel and supplies for any commercial venture in the Kitikmeot communities, especially a mine in the Project area. It is expected that the Project will stimulate new mineral exploration and production in the Kitikmeot Region of Nunavut and so create many new employment and business opportunities for the residents and businesses of the region.

Nainarhimayuuq

Kingaungmi Umianut Tuluktarvihak Apquhiugaharlu

Una unipkarniaqtuq havariyauniaqtumik nappaqtiriyuhut aulaliqqallu Tulaktarvihak Apqullu Atuqtaulikkat kanurlu aktumangmangat avatipitingnut.

Havariyauniaqtuq tuluktarvihak Kingaungmit tavunga Izokmi uyagaqtarviuyumayumit ataniaqtuq apqutikkut 211 km-mik takkiyumik ukiuk tamat angmaniaqtumik Tahiryuamut. Atalunilu ukiumi hikukkut apqunmut auyamilu umiakktut Lupin mut 79 km-lu ukiuq tamallu atuqtauniaqtumi apqunimi Lupin-mit Izokmut.

Havariyauniaqtuq tamat Qitirmiut iluaniittuq Nunavunmi. Hamna havariyauyukhamut titiqqat tuniyauhimayut Qitirmiut Inuit Katimayinut Nunaqaqqaqtuliriyinullu nunaqaqtungmata havarviuyumayumi, avatilirinimut qauyihaiyangini Nunavunmi Nunatarutip Ataagut, Ilulik 12, Ilanga 5.

Havariyauyuhami ilauyut Kitikmeot Kuapurisan Nuna Logistics Limited-lu, tamarmik nanminiriyauyuq Inuinnanit. Panariiklutik kuapurisaliurniaqtuk nappaqtirilutik aulayilutiglu Havagvihami. Nanminiriyauqatauplutik Nuna Logistickuni, Kitikmeot Kuapurisan nanminiqarniaqtut 62.75% Havakhami.

Havarvihami Nappaqtauyukhat

Havariyauyukhaq nunamik aturiaaqtuq nunanik nanminiriyauyunik Gavamatuqanit Inuinnanillu. Tulaktarvihak Gavamatuqat nunaganiinniaqtuq 150 hectares-nguyunik 700,000 cubic metres-niglu uyagaliaqtariaaqtuq nappatirilugumik. Tulaktarvihak imainniaqtut:

- tulaktarvik tulaktarvihak 50,000 tonne-nguyunut umianut hikuhiuqtaqtunut urhuryuanik angiyuniglu tamayanik uhivaktuhanik ahiit uhilutik utimut Izokmit uyagaktaqtauhimayunik;
- umainut uhiyaqtarvihaq Qitirmiunmi nunalingnut agyaqtaqtunik Kugluktumut, Kingaungmut, Ikaluktuttiamut, Umingmaktumut Urhuktumut Taloyuamullu;
- ikluqpaarluni 200-nik inuqtaqtumik
- 220 miliat litre-mik angiyunik urhuryuaqarvihamik
- akhalutinik igluqpanullu havarvihamik
- 1,200 metre-nguyunik milvihamik.

Tulaktarvihaliuliniarhimayut Saptampa 2004 atulihaliqqat iniqtauluni Saptampami 2006-nguqqat.

Tamna apqutihak 290 km ukiuq tamat atuqtauttaqtuq 148-km-nik Inuinnait Nunaqutaitkurniaqtuq 140 km-milu Gavamatuqatkut Nunariyaittigut. Uyagalliaqtarniaqtut apquhiurutihanik apqutikhap hanianit. 51-nguniarnahugiayuyut uyagaliaqtarvihaq, 29 Inuinnait nunaginit 22-ttauq Gavamat nunaginit.

Pingahuniaqtuq apquhiurniq: tulaktarvihamit apquhiulirlutik Aktupa 2004-mi Tahiryuamut. Tahiryuami apquhiulirlutik February 2005-mi tulaktarvihamut. Lupin-mit Izokmut apquhiulirlutik February 2006-mi. Iniqtauluni apqut Aktupami 2006-mi.

Malguuk umiaqarvihaq nappaqtauniaqtuk Tahiryuami. Umiaqarvihaq kilometre 211-mi Tununingani Tahiryuap tangmarviqarniaqtuq 20-nut inungnut, akhalutinik havarviqarluni akhalutinullu nutqarhimavihaqarluni. Aipaa umiaqarvihaq Lupin uyagaqtarvianniinniaqtuq tahiup hivuani.

Havarvihap Aulanikhait

Havarvihap aulanihaa mihigimaniaqtuq tatqihuitingit ukiuktaqtumi maliglut. Taryukkut umiat agyaqtarnialutik Julai qitiqqugaikpat Aktupap ngunuanut. Uvani, 6-nit kulinut utiktartut umiaryuat 50,000 tonne-nguyut agyarniaqtut 225,000 tonnes-nik tamayanik urhuryuaniglu uyagaqtarvinut. Utimuttauq agyarlutik 300,00-nit 470,000-nut tonnes-nik lead-mik/zinc-miglu/kamnguyaniglu Izok-mi uyagaqtatunit. Hikuhitumit umiamit ikayuqtauyariqarniarunarihiut allatut ukiuktaqtumi havaktutut. Kihimi, hamna umiat aulavihat namaktaktuq hikuliqihimaittumik umiakukharnaqtumik Taryukkut aulayut agyaktarnaqtullu urhuryuanik tamayaniglu Kitikmeoni nunalingut pingahiuqturlutik umiat kalillutik tulaktarvingmit auyami.

Apqutikkuktullu malingniaqtut ukiuktami tatqihuitainik. Ukiumi apqutikkuktutik January-mit April-mut angumalutik apqutikkuktutik Lupin-mit Yallunaimut agyarlutik 185,000 tonnes-nik urhuryuanik tamayaniglu uyagaqtarvinut Ekati-mut Diavik-kunullu Nunatiami. Hiniktarvihaqtauniaqtut nirivihaqarlutiglu akhalututit tangmaqtarvingmi tulaktarvingmi. Umiakkutitit Tahiryuami agyaktaruniaqtut Lupin-mit Izok-mut ukiumi auyamilu. Urhuryuat tamayallu tulaktarvingmit agyaqtauyukhat Lupin-mut Izok-mullu attauttimut uqqumaitkutit 45,000 tonnes-nik. Izok-mit uyaqat agyaqtarunarnahit 300,000 – 470,000 tonnes ukiuk tamat hivullini kulini ukiuni aulanirniat. Auyami umiakut agyaqtarniaqtut 90-ni ubluni Julai –kitqanit Aktupap kitqanut hikulirumi. Agyaqtarunaitt upingahami hikuliqitilugu April-nunganit Julai kitqanut ukiakhamilu hikuliqitilugu Aktupap nunganit January-mut.

Havariyauniaqtup Aktumaniit Avatimut

Havariyauniaqtup nappaqtirnia nunamik allanguqtirniaqtuq 670-nguyunarihiyumik hectares-nik, 2.3hectares-nik taryumi tulaktarviami, 0.3-niglu hectares-nik Tahiryuap tattip ataanit auyami umianut uhiyavihanik. Apqutikhak 1190nik imarnik aulayunik ikaktarniaqtuq; 82 nguyut ilaaniinaq kurluapaktut (iqaluitut) ikagaqtarviamiaqtut havigalingnik turhuanik imaq aulahimagiagani. Ikagaqtarviit tungavihait imarniinaqtut pingahuinani kurluagtuni. Nunami, hugatyat an'ngutivaluillu hivulliuginarniaqtut ikagaqtavini apqunmi. Havarviuniaqtumi umayut amigaitqiyauyuq tuktut Kingaup tuktutainit. Upingahami an'ngutit aulaligangata Havakvigiyuniaqtukukpattut. Uqqumaittumik agyaktarunaitt May-mi June-milu aktumanaittumik akhalutit aulayunit apqunmi tuktullu upingahami aulayuni. Tuktuarluarunaittuq apqutikkut auyami ukiumilu agyaqtartilugit. Agyaqtaqtut tuktukukpallaalirumik, agyaqtaruiqhimalangniaqtut ikarhiglutit aulayut an'ngutit. Havaktut anngunahuaqtatayunaitpiaktut apqunmi tulaktarvingmiluuniit. Iqaluhiumayut maligiaqtut atuqyauniaqtunit Ualiniani Kitikmeot Nunap Atuqpauyuthani.

Havariyauniaqtuq nappaqtuniaqtuq aulataulunilu hapiknaittumik halummayumiglu hapummilugit hugatyat an'ngutihallu avatikpullu. Iniqtiriniaqtullu atuqtauyukhanik hapummiyutikhanik avatipitngnik hungatyaniglu an'ngutit huyuqarniqat tulaktarvingmi apqutikkuluuniit.

Pivalliutihauyuq Havariyakhak Kitikmeoni

Havariyauniaqtup nappaqtuniaqtuq tatqihuitini 26-ni havaniktiyuttauluni 3,600-inuit tatqihuitinik-ittutut maniliurutaulunilu 34.5 miliat talanik. Havariyauyukhap aulania 800-nik inungnik tatqihuitinik –ittutut havaktittitutit ukiuq tamat (300 auyami 500-lu ukiumi). Akiliqtutitiglu havaktimngut 3.5 miliat talamik. Kantratigullu akhalutitutit akiliuhangit ilautitugit 9 miliat talauniaqtuq ukiuq tamat. Havakhat angmaniaqtut inungnut Kitikmeoni; ilihauyihimarlutiglu Havarviami, taima akiliuhiakhat Kitikmeoniitangani.

Hadja nunaryuami urhuryuap akiinni, urhuryuq tikittaurumi Ikaluktuttiamut tulaktarvingmit Kingaungmi akikliyumiaktaqtuq 35%-kut hadja 2002-mi urhuryuap akianit Hay River-mit. Akhalutikkut tamayat agyaktayut autsaimit tulaktarvingmut apqutikkut umiakullu Ikaluktuttiamut atyikkutavaginiaqtaa akkita uhityutainit Hay River-mit. Kihimi, tamayat tikinnarilutik nunalingnut pingahuni talimanut santinik. Atauttit

tamayat uhityutait Ikaluktuttiamut kivvatanit Kanatap Europe-miluuniit tulaktarvikkut akikitqiyaunia 70%-nguttaqtuq.

Hapkua akikitqiyauttarniit naunaitkutauyut Havariyauyukhaq akituvallarunaitkutauniaqtuq urhuryuanut tamayakhanullu angiyunik havagumayunik Kitikmeoni nunalingni, uyagaqtarvihamitut humiliqaq Havarvihami. Niuriugutauyuq Havariyauyumayuq nutaanik nalvarhiurumayunik uyagaqtarumatyunigluuniit Kitikmeoni Nunavunmi. Tavanga nutaanik havaakhaqautiluni nanminiqaqtunullu angmaumaluni inungnut nanminiqaqtunullu Kitikmeoni.

የጌታናቸውን (የጌታናቸው) ልዩነትና ልዩነት ለማሳወቅ

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- Kitikmeot Inuit Association
- Indian and Northern Affairs Canada
 - Crown Land
 - Land Use
 - Quarry
 - Tank Farm

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1.0 INTRODUCTION

This Project Description for the Bathurst Inlet Port and Road Project is prepared as prescribed in Appendix B: Nunavut Impact Review Board (NIRB) General Requirements for a Project Description (NIRB, 1997). The format and sequence set out by NIRB has been adjusted to the extent required to avoid repetition. This Project Description along with related applications for land and water use are submitted for the purposes of Project screening by NIRB and also for developing guidelines for the benefit of the Project's proponent when preparing a Project Environmental Impact Statement (EIS) pursuant to the Nunavut Land Claims Agreement (NLCA) Article 12, Parts 4 and 5. A final Project Description will be submitted on completion of the remaining environmental baseline field studies and preparation of the Bathurst Inlet Port and Road Project EIS that meets the requirements of the guidelines issued by NIRB. The final Project Description will reflect any changes in the Project that may result from field conditions discovered in the field studies yet to be completed to meet the requirements of the EIS Guidelines. The scope and scale of the Project however, is not expected to change.

1.1 Background Information

The abundant mineral endowment of the Slave Geological Province (SGP) has been known for several decades. The SGP has produced minerals continuously since the 1930's. However, the full potential of this area has not yet been realized due, for the most part, to the lack of transportation infrastructure. In most cases, when mineral production was initiated in a new region of northern Canada it was associated with or preceded by new energy and /or transportation infrastructure: Con Mine in 1930 required both an airstrip and improved barge services on Great Slave Lake setting the stage for Giant Mine 15 years later; Con Mine also developed Bluefish Hydro and a power line corridor to Yellowknife and Discovery Mine; hydro power on the Taltson River was developed and a railroad was built from Alberta to serve the Pine Point Mine; Tundra Mine developed an airstrip and pioneered winter road development; Echo Bay Mines developed a winter road system and jet strip for Lupin Mine; the MV Arctic, a Canadian ice breaking cargo ship was built by the Canadian Government to service Nanisivik Mine; the Ekati mine, Diavik and Snap Lake diamond projects depend on the Lupin winter road developed by Echo Bay.

Developing new mineral resources in Nunavut could be assisted by developing new transportation routes and infrastructure to known mineral deposits in the Kitikmeot Region. Several studies of different routes in the region have been completed in the past 20 years. Common to all the studies for mineral industry transportation in the region is development of the Izok base metal deposit, 70 km west of Lupin. Unlike gold and diamond mines which can operate on one way overland transportation to resupply fuel needs, a base metal mine requires overland transportation infrastructure for incoming fuel and other cargo, and outgoing base metal concentrate. Because the concentrates must be moved long distances to overseas smelters and markets, the mine requires access to a marine port. In order to avoid the capital cost of bulk storage facilities for the concentrate at both the mine and at a marine terminal, an all season road between the mine and the marine terminal is optimum.

The first comprehensive analyses of transportation needs for the Izok Project were done by Metall Mining Corp. (now Inmet Mining Corp.) in 1993 as part of the Izok Project feasibility study. This study was based on a road to a marine port just east of Kugluktuk. This concept would have been costly and involve very difficult road construction conditions. Nuna Logistics prepared a transportation concept paper in 1998 that included preliminary road routes to a port site on Bathurst Inlet. A separate study by the GNWT Transportation Department in 1998/99 examined road route alternatives through the SGP that identified a route similar to that described by Nuna. In 1999/2000 the Kitikmeot Corporation sponsored a study by Nishi-Khon/SNC Lavalin that completed an economic analysis of the Bathurst Inlet/Izok transportation infrastructure. This analysis indicated commercial potential and recommended a detailed

project feasibility study. In June 2000 the stakeholders in the region, including governments, communities and industry formed a committee to move the Project forward. As part of this work the Government of Nunavut sponsored a scoping study of environmental issues as a complement to the route and economic analyses (Jacques Whitford Environmental Limited, 2001). The environmental scoping study recommended that environmental baseline studies be initiated so that a Project environmental impact statement could be developed for the Project as defined by the proposed feasibility study.

The Project feasibility study has been completed (Nishi-Khon/SNC-Lavalin and Kitikmeot Geosciences, 2002) and the environmental baseline studies are well under way; both are under the supervision of the Project Technical Committee comprising representatives from Kitikmeot Inuit Association, Kitikmeot Corporation, Nuna Logistics, Inmet Mining Corporation, the Hamlet of Kugluktuk, and the Government of Nunavut.

The costs and field support to complete the feasibility study and undertake field work for environmental and engineering studies were provided by cash and "in kind" contributions from: Billiton-BHP, Canadian Coast Guard, Diavik Diamonds, DIAND, Echo Bay Mines, Fednav Limited, Government of Nunavut, Hope Bay Joint Venture, Inmet Mining Corp., Kinross Gold Corp., Northern Transportation Company Limited (NTCL), Nuna Logistics Limited, and Tahera Corporation.

Findings of the feasibility study included:

- diesel fuel and bulk cargo supplied via the Bathurst Inlet Port and Road Project can be landed at the Ekati and Diavik diamond mines in the N.W.T. at the same or lower costs, and potentially on a more reliable schedule than is now possible from Edmonton via Yellowknife on the Lupin winter road;
- fuel supplied via the Port proposed by this Project can land fuel at significantly lower costs at Lupin and Izok than via the current Lupin winter road;
- fuel from the Port in Bathurst Inlet can be landed in Kitikmeot communities at a significantly lower cost than is presently the case via Hay River in the N.W.T.;
- dry goods landed at the Port from southern Canada via the winter road through Yellowknife and Contwoyto Lake can be shipped to Kitikmeot communities for a landed cost that could be competitive to the current network via Hay River and Tuktoyaktuk;
- freight costs for similar supplies for Kitikmeot communities from European suppliers could be landed in Cambridge Bay for less than one third the freight costs via Hay River or the Lupin winter road;
- goods by barge from the port in Bathurst Inlet could be landed in Kitikmeot communities 4 - 6 weeks earlier than is now the case.

The findings of the Project feasibility study have shown that the Project as proposed is much more than a *transport system for the Izok Project*. It is rather, infrastructure that is commonplace in southern Canada as essential public facilities; infrastructure that will facilitate a diversity of economic opportunities for the Kitikmeot communities plus provide improved transportation services to current diamond and gold mines, and prospective gold and base metal mines in the Kitikmeot Region of Nunavut.

This Project Description describes the Project's physical configuration, the environmental setting of the Project area, schedules for the Project's construction and operations, and the Project's interactions with the environment, as examined in the Project feasibility study. Figure 1 shows the locations of the port site and road alignment that were identified during the course of feasibility study field work in the summer of 2001.

1.2 Proponent Identification Information

The proponent for the Bathurst Inlet Port and Road Project is **Bathurst Inlet Port and Road Joint Venture**. Bathurst Inlet Port and Road Joint Venture will be owned (50% each) by Kitikmeot Corporation and Nuna Logistics Limited. Kitikmeot Corporation is wholly owned by the Kitikmeot Inuit Association. Nuna Logistics is an Inuit owned company with 51% owned by Kitikmeot Corporation and Nunasi Corporation (25.5% each) and the balance owned by Nuna Logistics management. By combining its direct and indirect interests in the joint venture, Kitikmeot Corporation will own 62.75% of the Project. The stated purposes of Kitikmeot Corporation follow:

- | | |
|----------------|--|
| Our Vision | A vibrant economic climate in the Kitikmeot Region of Nunavut. |
| Our Mission | To create a strong, viable and stable financial base for our businesses, for Inuit entrepreneurs and for employment opportunities for Kitikmeot beneficiaries of the Nunavut Land Claims Agreement. |
| Our Mandate | To be the Kitikmeot Inuit Association's economic development organization that develops businesses profiting Inuit of the Kitikmeot Region.

Develop a business climate in which Inuit entrepreneurs and employees can benefit economically. |
| Our Objectives | Grow Kitikmeot Corporation's businesses and Joint Ventures to become the largest company in the Kitikmeot Region.

Assist Inuit entrepreneurs start and grow their businesses.

Provide opportunities for Inuit to find rewarding employment.

Provide assistance for Inuit training to take advantage of business and employment opportunities. |

1.3 Approval agencies and required approvals, licences, and permits.

Project construction will develop a marine port, 290 km of all-season road, and two barge terminals on Contwoyto Lake where it will interconnect with the Lupin winter road. Project operations will include:

- annual resupply of Kitikmeot communities with diesel fuel and other bulk cargo;
- annual resupply of fuel and other bulk cargo for Lupin and Izok mines in the west Kitikmeot region of Nunavut;
- annual resupply of diesel fuel to Ekati and Diavik diamond mines in NWT;
- remove base metal concentrate from the Izok Project to the Port for export.

All new development in Nunavut is subject to the review process set out in the NLCA. It is expected that on examination, the Project will be found to pose "...significant impact potential ..." (NLCA 12.4.1) and that an environmental review under the NLCA will be required. The permits, licences, and approvals required by the Project throughout its operating life and for its closure are enumerated below for each of the Projects stages: construction, operations, and abandonment. All the approvals required for each stage of the Project fall within the mandate of the NLCA and federal agencies in Nunavut. The applications to the Kitikmeot Inuit Association (land use), Nunavut Water Board (water use), and DIAND (land use), for

land and water use required for Project construction and operations are included in this Project Description as Appendix 4. It is expected that these regulators will refer this Project Proposal, and in time the Project EIS, to the Nunavut Impact Review Board (NIRB) for review under NLCA Article 12.

The existing Lupin winter road is an essential element to the operations of this Project. However, all new construction and all incremental interactions with the environment proposed by the Project lie entirely within Nunavut and so the environmental review is expected to be conducted by NIRB under NLCA Article 12 Part 5.

**1.3.1 Construction Phase: Project proposal, environmental screening, and Project review
Nunavut Planning Commission ph. 867 983 2730 Robert Lyall, Chair**

- Review Project for compliance with regional land use plan pursuant to NLCA Article 11 and 12.

The West Kitikmeot Regional Land Use Plan is in draft form and has been reviewed by the Project. The Project as proposed is configured to the extent possible to be in compliance with the Draft Plan. In the absence of an approved plan, the Project will not be reviewed by the Nunavut Planning Commission. (NLCA 12.3.5; 13.4.6).

Nunavut Water Board ph. 867 360 6338 Thomas Kudloo, Chair

- Project review and Water Use Licence pursuant to NLCA Article 13.

Water use and waste disposal by Project operations including the camps are subject to terms and conditions of a licence issued by the Nunavut Water Board (NWB) which also reviews civil works such as bridges that may encroach on water and water ways in Nunavut. A Water Use Application for the Project is included in Appendix 1 of this Project Description. NLCA 13.4.6 requires that the application and Project Description be referred to NIRB for screening to “determine whether it has significant impact potential.”

Kitikmeot Inuit Association ph. 867 983 2458 Charlie Evalik, President

- Land use licence pursuant to NLCA Article 21 for commercial access, developing and operating quarries, and building roads on Inuit Owned Land (IOL).
- Surface lease pursuant to NLCA Article 21 for exclusive use of IOL for developing camps and transportation terminals.
- Negotiating an Inuit Impact and Benefit Agreement (IIBA) pursuant to NLCA Article 26.

Significant areas of IOL are affected by the Project as proposed. IOL is needed for pits and quarries, right-of-way for the road, and the camp and barge terminal on Contwoyto Lake. On receipt of the application (please see Appendix 4) to use IOL for Project purposes, it is expected that the application and Project Description will be referred to NIRB for screening. An IIBA between the Proponent and KIA will be required before any of the approvals for Project construction are valid (NLCA Article 26).

DIAND (Iqaluit) ph. 867 979 4501 Wilf Atwood, Reg. Director General

- Land use permit pursuant to Territorial Lands Act (Canada) for access to, and building roads on Federal Crown Land.
- Quarry leases and/or permits to develop and operate quarries on Federal Crown land.
- Surface leases pursuant to Territorial Lands Act (Canada) for exclusive use of Federal Crown lands to develop and operate camps and transportation terminals.

The port and about half of the proposed road alignment is on Federal Crown Land. Permits will be required for pit and quarry development; a lease, or perhaps outright purchase, will be required for the port, and a land use permit is needed for working along the alignment to build the road. The relevant applications are included in Appendix 4. It is expected that DIAND will forward the applications for the permits and leases, and this Project Description to NIRB for screening.

Nunavut Impact Review Board ph. 867 983 2691 Elizabeth Copland, Chair

- Project screening, EIS Guidelines, and Project Certificate pursuant to NLCA Article 12 Part 5.

The Project screening and review by NIRB can be done only at the request of parties such as KIA, DIAND, and the NWB. NIRB would then conduct a screening and report its findings to the Minister of DIAND. Included in those findings will be the NIRB view on the potential impact and the need for a review by NIRB (12.5) or by a Federal Panel (12.6). If NIRB finds that the Project should be reviewed by NIRB under Part 5, and the Minister concurs, NIRB would issue guidelines to the proponent for the preparation of the Project EIS (NLCA 12.5.2).

The proponent will review the Project in the context of completed baseline studies and preparation of the Project EIS. It is expected that the Project Description will be refined to reflect findings in the baseline studies and EIS. On refinement, the Project Description will be resubmitted to NIRB for final review and report of findings to the Minister. The Minister will advise NIRB of his concurrence, or otherwise, of the Project review report. On advice from the Minister, and completion of the process described in the NLCA (12.5.1 to 12.5.11) NIRB will issue a project certificate approving the Project including the terms and conditions that have been accepted or varied by the Minister (12.5.12).

Fisheries and Oceans Canada (Iqaluit) ph. 867 979 8009 Bert Hunt, District Manager

- Authorization for works affecting fish habitat pursuant to the Fisheries Act (Canada).
- Approval to construct water crossings for road route pursuant to the Navigable Waters Protection Act (Canada).
- Approval to construct barge terminals on Contwoyto Lake pursuant to the Navigable Waters Protection Act (Canada).

The primary concern of the Department is expected to be the effects of the Project construction and operations on fish habitat. Interactions between the Project and fish habitat will be at water crossings. A photographic record of each proposed water crossing and the crossing design type will be developed and submitted as supplementary information to this Project description.

**Transport Canada (Winnipeg) ph. 204 984 1624 Peter Timonen Reg. Director
General**

- Certificate of ship safety for the tug and barge proposed for Contwoyto Lake pursuant to the Canada Shipping Act (Canada).

A review of the plan and design for the tug and barge is required prior to building the components that would be mobilized to Contwoyto Lake for final assembly and commissioning.

Echo Bay Mines Ltd. Lupin ph. 780 890 8760 Bill Danyluk, Mine Manager

- Approval to develop and occupy lands currently held by Lupin Mine under crown lease.

One barge terminal and the initial stretch of road from Lupin to Izok are on Lupin Mine lands leased from Canada.

1.3.2 Operations Phase: required operating licences and permits

Kitikmeot Inuit Association **ph. 867 983 2458** **Charlie Evalik, President**

- Land use licence pursuant to NLCA Article 21 for operating roads, quarries, camps, and transportation terminals on IOL.
- Surface leases on Inuit Owned Lands pursuant to NLCA Article 21 for exclusive use to operate camps and transportation terminals.
- Implement IIBA pursuant to NLCA Article 26.

The permits and licences obtained for Project construction will be renewed for long term application to Project operations.

Nunavut Water Board **ph. 867 360 6338** **Thomas Kudloo, Chair**

- Water Use Licence for camp needs and general Project purposes pursuant to NLCA Article 13.

The water use licences obtained for Project construction will be renewed for long term operations.

DIAND (Iqaluit) **ph. 867 979 4501** **Wilf Atwood, Reg. Director General**

- Land use permit pursuant to Territorial Lands Act (Canada) for operating a toll road over Federal Crown Land.
- Surface leases pursuant to Territorial Lands Act (Canada) for exclusive use of crown lands to develop and operate camps and transportation terminals.
- Quarry leases and/or permits to operate quarries on Federal Crown Land.

The licences and permits obtained for construction will be renewed for operations including a mechanism for the long term occupation of crown land for a toll road right-of-way.

Transport Canada (Winnipeg) **ph. 204 984 1624** **Peter Timonen, Reg. Director General**

- Certificate of ship safety for Contwoyto Lake tug and barge pursuant to the Canada Shipping Act (Canada).

Echo Bay Mines Ltd. Lupin **ph. 780 890 8760** **Bill Danyluk, Mine Manager**

- Approval to develop and occupy lands currently held by Lupin Mine under crown lease.

The agreement reached for Project construction will be renewed for long term operations.

1.3.3 Closure and abandonment: approvals

Nunavut Impact Review Board **ph. 867 983 2691** **Elizabeth Copland, Chair**

- approval for closure and abandonment plan as it affects lands and waters in Nunavut.

Nunavut Water Board **ph. 867 360 6338** **Thomas Kudloo, Chair**

- approval for closure and abandonment plan as these affect water in Nunavut.