Bathurst Inlet Port and Road Project

PROJECT DESCRIPTION

SUBMITTED TO: KITIKMEOT INUIT ASSOCIATION
INDIAN AND NORTHERN AFFAIRS CANADA
NUNAVUT WATER BOARD

BY: BATHURST INLET PORT AND ROAD JOINT VENTURE LTD.
MAY 2003

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EXECUTIVE SUMMARY

BATHURST INLET PORT AND ROAD PROJECT DESCRIPTION

This Project Description describes the construction and operation of the proposed Bathurst Inlet Port and Road Project and the interactions of the Project with the environment.

The Project consists of a port on Bathurst Inlet connected to the mines and mineral deposits in Nunavut and Northwest Territories by a new 211 km all-weather road to Contwoyto Lake, and the existing "Tibbitt to Contwoyto" winter road.

The Project proponents are the Kitikmeot Corporation and Nuna Logistics Limited, both Inuit owned companies, who have formed 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. Kitikmeot Corporation is wholly owned by the Kitikmeot Inuit Association, a Designated Inuit Organization as defined in the Nunavut Land Claims Agreement.

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, and the Nunavut Water Board for an environmental review under the Nunavut Land Claims Agreement, Article 12 Part 5.

Background
In April 2002, the Proponent submitted a Project Description for a Project with a larger scope. This larger Project included an all-weather road from the existing Lupin gold mine to the Izok base metal deposit and a summer barge and winter ice road across Contwoyto Lake, connecting the Bathurst-Contwoyto road with the proposed Lupin-Izok road. The former Project also included a larger camp and larger fuel tank farm at the Bathurst Inlet Port Site.

The Nunavut Impact Review Board (NIRB) sent the Project to the Minister of Indian and Northern Affairs, Canada (INAC) on July 8, 2002 for a decision on the review process (Part 5 or Part 6) as required by the Nunavut Land Claims Agreement (NLCA). On November 27, 2002 the Proponent notified NIRB and INAC that the Izok Project had been put on hold, due to low base metal prices. As a result the Proponent reduced the Project scope to that described in this submission. This scope change recognizes the fact that, while metal concentrates from Izok will one day become an important source of revenue for the Project, the capital expense of construction of the Lupin to Izok road should be delayed until the road and related facilities are required.

On April 10, 2003 the Minister of INAC notified NIRB that the Project should be re-submitted with a revised Project Description. On April 14, 2003 NIRB requested the Proponent to re-submit a revised Project Description by May 12, 2003.

It is believed that the Izok Project will be re-activated in the future. Indeed, the construction of a road from Bathurst to Contwoyto will likely provide the catalyst required for it to come to a positive development decision. Thus, the Project described in this Project Description should be considered the first stage of a Bathurst to Izok road link. The second stage connecting this current Project to Izok will be deemed a separate project and will be submitted for approval at a later date.

The Project has received both political and financial support from the Government of Nunavut and from the Federal Government through Indian and Northern Affairs Canada.

Project Construction

The Project requires the use of Federal Crown Lands and Inuit Owned Lands. The port is located on Crown Land and requires 159 hectares and 270,000 cubic metres of quarried materials for construction. The port site will include:

- a wharf to serve large ice class vessels delivering fuel and bulk cargo to the port;
- a dock to handle barges serving the Kitikmeot communities of Kugluktuk, Bathurst Inlet, Cambridge Bay, Umingmaktok, Gjoa Haven and Taloyoak;
- a 150 person camp and services;
- a 180 million litre diesel fuel tank farm;
- a truck and trailer maintenance shop;
- a 1,200 metre airstrip.

As a result of the delays in 2003 the port construction will be delayed by one year. Port construction is now proposed to begin in September 2005 and be completed in January 2007.

The 211 km all-weather road passes over 82 km of Inuit Owned Land and 129 km of Crown Land. Road construction materials will be obtained from quarries adjacent to the roadway; 37 quarries are proposed, 18 on Inuit Owned Land and 19 on Crown Land.

Road construction will occur in two phases; at the port it will begin in January 2006 and work toward Contwoyto Lake. At Contwoyto Lake, road construction can begin in February 2005 and work toward the port. Road construction will be complete in December 2006. A 20-person camp and a truck parking area will be located at kilometre 211 on the southeast shore of the lake (Contwoyto Camp).

This Project will require road operation during the winter only, but the road will be constructed for all-weather use based on future usage for hauling concentrates and supplies.

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. During that period, six to eight round trips by ice class vessels up to 25,000 tonnes will bring in approximately 180,000 tonnes of fuel and supplies for the communities and operating mines served by the Project. Icebreaker support may be required as with other arctic projects, however, this shipping schedule can be accomplished without ice breaking to extend the normal shipping season. Marine barge operations will also supply 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. The road, although designed for all-weather will operate from January to April and connect with the existing Lupin winter road from Yellowknife to haul 161,000 tonnes of fuel and supplies to Ekati and Diavik Diamond Mines in the N.W.T. and Lupin and Jericho in Nunavut. Accommodation and meals for drivers will be provided by the camp at the port. No hauling will occur during the period from the end of April to late December. There will be some road maintenance work from mid-July to early September. This work is essential to carry out maintenance on the roadbed and stream crossings. Sand and gravel required for winter operations will be stockpiled during this summer maintenance period.

Project Interactions with the Environment

Project construction will require disturbance to approximately 512 hectares of terrestrial habitat, and 2.3 hectares of marine habitat at the port. The road alignment crosses111 streams, many of which are intermittent; 21 crossings are bridges that will not affect the normal stream channel; 88 crossings are arched culverts or rock fill fords. Support for the bridges will encroach into the stream channel at only two 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. The road will not operate between May and December so there will not be any interaction between traffic on the road and caribou during spring migration. The number of caribou along the road will be much less during the winter hauling seasons. There will be little or no interaction between caribou and road maintenance equipment from mid-July to early September. Hunting by Project workers along the road or at the port will not be permitted. Recreational fishing by workers will be guided by the recommendations in the West Kitikmeot Land Use Plan.

The Project will be built and will operate in a safe and environmentally sound manner. 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.

Project Financing

The estimated capital construction cost of the Project is $164 million. The Project will be financed and developed as a Public Private Partnership (P3), where the cost and risks of the Project can be shared between the public and private sectors.

The Project is technically practical, economically sustainable and bankable under a P3 arrangement.

Economic Effects of the Project in the Kitikmeot Region

Project construction will occur over a 16-month period and create 2,800 man-months of employment and a payroll of $26.8 million. Project operations will create 31 seasonal jobs every year and produce a payroll of approximately $1.5 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 which currently has an unemployment rate of more than 25%; with aggressive training for the employment needs of the Project, most of the payroll money would 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 at least 30% of the 2003 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 and the goods would arrive in the community four to six weeks earlier; early in the construction season rather than at the end of summer. The freight cost of the same goods shipped to Cambridge Bay from eastern Canada via the port would be at least 30% cheaper than via Hay River. It is estimated that overall savings on fuel alone could be more than $3 million per year in the Kitikmeot region.

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 reduce the cost of living in the region and 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.

In addition, economic studies have shown that any project in northern Canada has considerable spin-off effects in the south, in terms of indirect jobs and supply of materials.

ATANIIT NAITOLIOGAIT

KENGAOKMI UMIAKAKVIKHAK OVALO APKOTIKHAT OYAGAKHIOKVIKNOT

Hamna Oyagakhiokvikhap Onipkanga okaohikaktok nappaktiginiakhotik ovalo hananiaktot aolanialiktomik Kengaokmi Umiakakvikhak ovalo Apkotikhak Oyagakhjiokviknot tigvaoyukhanot ovalo oyagakhiokvik nunamot kanogilitjutiniaktok.

Hamna Hanayaoyukhak pikaktok umianot tolaktakvikha Kilohiktomi ova tahamangga apkohioklotik tigvanot oyagakhiokvikmot Nunavutmi ovalo Nunatiamot apkotiniklotik 211 km aoyak-okiok apkot atoktokhak Tahikyoamot, ovalo taya atoktot ovani "Tibbitt-mit Tahikyoamot" okiomi apkotikhak.

Hamna Havakhak oyagakhioktit apkohiogomayat havakniaktat Kitikmeot Corporatiohn okoalo Nuna Logistics Limited, tamakmik Inuit nanminiotait havakviit havakviit, Pikatigiiklotik Havaaginiaktat umiakakvilioklotik ovalo apkohioklotik ovalo Monagilogo. Okoa pikatigiikkamik pannagiiktot Nuna Logistics, okoalo Kitikmeot Corporation nanminiotiginiaktat 62.75% hamna Havakhak. Kitikmeot Corporation okoa piotigiloaktat okoat Kitikmeot Inuit Katimayiit, ona Piyaohimayut Inuit Katimayiit okaohikakto ovani Nunavut Nunatakvikmi Angigotmi.

Hamna Havakhak Okaohia tonihimayut okononga Kitikmeot Inuit Katimayiit ovalo Kavamatokat Itkilinot Okioktaktolikiot, okoa nunaotikaktot hamani Havakhami nunami, ovalo Nunavutmi Emaliokiot nunami ehivgiokhiniaktot ovani Nunavutmi Nunatakgotini Angigotini Nakatak 12 Elangani 5.

Oinggaiyaotait
Ovani April 2002, okoa Havagomayut tonihivaktot Havakhap Onipkangitnik titigani naonaitkotikhainik. Hamna naonaitkiak Havakhap elakaktot aoyak-okiok atoktokhamik apkotmik okiogalok-aoyak apkotikhamik ovanga Tahikyoamit oyakikivikmit omonga Izok Lake-mot ovalo aoyami umiat agyaktaktokhat tamayanik ova apkotikot tigvaolotik tamayalgiaktakniaktot Tahikyoamot, ema Kilohiktomit-Tahikyoamot apkot atoktokhak Lupin-mit Izok Lake-mot. Ona kanga Havakhak ovalo iglokakvioniaktok ovalo kattakyukakvikakloni ovani Kilohiktomi.

Ona Nunavutmi Nunalikiot Ehivgioktit Katimayiit (NIRB) aolaktihimayu tuyutaoyuk Havakhalikionot omonga Ministakmot Kavamatokani, Kanatami (INAC) ovani Julai 8, 2002 kanok ehomaliogakhat ehivgioklogo (Elanga 5 naliak Elanga 6) ehivgiogiakaktok atoklotik Nunavutmi Nunataagotikot Angigotikok (NLCA). Ovani Novepa 27, 2002 okoa Havagomayut onniotiyait NIRB okoalo INAC tamna Izok Havakhak nutkanganialikmat, havilgat akiit akighikmata. Emailiokmat ona Havagomayut apkohiokvikhat mighivaliktok Izok-mot haviit Izok-mi amogaktakhat kakogo akittokniakmata maniliogotikhakt Havakhat, ovalo apkohiokviha kakogoktaoyuk Lupin-mot ovalo hanavikhait kakogo havaktaoyavut.

Ovani April 10, 2003 ona Ministak ovani INAC onniotiyait NIRB ona Havakhak toniffakniaktok nutangokhoni Havakhak Onipkanga. Ovani April 14, 2003 NIRB-kot toghiktot okonanit Havagomayunit toniffakoiyut nutangoktomik Havakhamik Onipkanganik tikitpat May 12, 2003.

Ona ehomagiyat ona Izok Oyakikivikhak kakogo aolaliffakniaktok kakogo. Taima itpat, apkotmik havalikniktot Kilohiktomit Tahikyoamot ema nakooyumik aolalikniaktok maniliokviolikmiloni angmagomi. Emainiaktok ehomagiyat ona Izok Oyakikivikyhak ehomagilogo Kilohiktomit Izok-mot apkohiogomaktot. Onataok aipa apkot Havakvikmit Izokmot elikokloni havaagiyaoniaktok ovalo toniyaogomi angiktaoyukhak kakogo.

Ona Apkohiokvikhak onipkagiyaoyuk maligalioktinit ovalo manikhalo ekayuktaoniakhoni Nunavut Kavamanit ovalo Kanatap Kavamainit Itkililikionit Okioktaktolikionit.

Havakhak Apkohiolikniaktat
Ona Apkohiokvikhak atoklotik Kavamatokat Kanatami Nunaotait Nunat okoalo Inuit Nunaotaitni havakniaktat. Ona umiat tulaktakvikhat Kanatap Nunaotani Nunakaktok ovalo emakak 159 hectares ovalo 270,000 cubic meters oyagaliakmik apkohiogotikagiakaktok. Ona umiakakvikhak emaitokakniaktok:

- Umiakakvikhak umiat hikkolikiot atokniaktat oghokyoalgiaktokhat tamayalgiaktokhat;
- Umiakakvikhak umianik tamayalgiakniaktot Kitikmeot inukakniknot Kugluktuk, Kengaokmot, Ikaluktutiamot, Umingmaktok, Oghoktok ovalo Taloyoakmot;
- inugiaktiginiaktok150 iglokakvik ovalo havakvikmi;
- ona180 million litre oghokyoanik kattakyukakvikakniaktok;
- aghalutikakvikakloni ovalo makanikakvikakloni iglokpakmik;
- ema 1, 200 metre milvikakloni.

Ovani kakogoktaokmat apkotit 2003-mi umiakakvik hanayaoniaktok kakogo okiok ataohikmi tuleekloni. Umiakakvik hanayaolikniaktok havaktaolikloni aolalihalikak Saptaipa 2005 ovalo eniktaoniaktok Januali 2007.

Ona 211 km okiok-aoyak apkot nunakot 82 km ovani Inuit Nunataitigokniaktok ovalo 129 km Kavamatokat Nunaotaini. Apkot havaktaolikniaktok oyagagaliaktaklotik hanianit nunamit; 37 oyagaliaktakvikhat apikotaoyut, 18 ovani Inuit Nunaotainit ovalo 19 Kavamatokat nunaotanit.

Apkot havaktaoligomi aolalikniakto malgokot; ona umiakakvikhak havaktaolikloni Januali ovalo havaktaolikloni Tahikyoamot. Ovani Tahikyoami, apkot havaktaoniaktok aolalikloni Febyoali 2005 ovalo taononga tagiomot umiakakvikmot. Apkot havaktaolikniaktok eniktaoloni Desaipa 2006. Ema 20-nik inukakloni ovalo aghalutikakvikhat pikakniaktot ovani kilometre 211 talvani hinani hivogani tattip (Tahikyoami).

Ona Havak apkotmi aolaniaktok okionginakmik havaklotik, kihime apkot havaktaoniaktok aoyak-okiok apkotikhak kakogo atoktaoniakat oyagaknik agyaktakvikhak tagiomot tamayaniklo.

Havakhap Aolavikhat
Hamna Havakhak okiogalok aolaniaktok havakvikhait naonaiklotik homi aoyami okiomi aolaloni. Taggiomi umiat enikpakniakto aolayukhat kitkanit Julaimit okiakhak Aktobamot. Talvani aolanikmi, siksit eenmot umiat agyaktakniaktot hikkolikotit umiat atoktaolotik okomiatigiot 25,000 tonnes agyakpakianti okomaitonik 180,000 tonnes oghokyoanik ovalo tamayanik nunanot ovalo oyagakhiokviknotlo agyaklotik Oyagakhiokviknot. Hikkolikotit ekayuniaktot hikkoiyailotik umianot agyaktonot, kihime, okoa umiat aolaniaktot hikkoilaktitlgo aoyak hikkoititlogo. Taggimi umiat tamayalgianiaktot ogholgiaklotik ovalo tamayalgiaklotik Kitikmeonot ema pinggahoiktoklotik umiat tikitpakniaktot aoyami.

Apkot aolaniakntok hila kanogititlogo aghalutitogiami. Ona apkot, aoyak-okiok atokniaktomi aolaniaktok Janualimit April-mot ovalo apkohakniaktok Tahikyoamot okiomi Yelonaimit aghaklotit 161,000 tonnes ogholgiakloti Ekati ovongalo Diavik Diamond Mines N.W.T.mi ovalo ovonga Lupin-mot ovonga Jericho-mot Nunavutmi. Hinniktakvikakniaktot ovalo niggivikakltoik aghaluhikionot talvanga umiakakvikmit taggiop hinani. Aghalutitolimaitot okiomi tongolikat April ovonga nongolikat Desaipa. Talvani havakniaktot kihime apkotinik monagiot poalgikhoktit Julaimit Saptaipamot. Ona havakvikhat atokniaktat mongilogo apkot ovalo kukkani ekaktakviit. Hiogaliatlo oyagaliatko piagiakaktot okiomi atoktokhat ovalo katitiktokhat apkotip haniani aoyami apkotilikotikhat.

Havakhat Olavikhait Nuna Taotoklogo
Apkohioknik havalikniaktok nuna kayagilogo ongahiktligiokhak 512 hectares nuna mikakmik ahigotakniaktok, ovalo 2.3 hectares taggiomilo umiakakvikmi. Tamna apkot kukkani ekaktakvikakniaktok 111 kukani; 21 kugani ekakhaohikvikaklotik haviknik oval ahigotilimaitot halumaigotilotik emakmik; 88 okoa kugakaffoktot ekakviokataklotik ekakhaohikvikakniakata kugakvikaklotik atagot apkotit. Ekakhaohikviit kugani malgonginak pikakniatot. Ona apkot hanayaoyuk aghot ikalukaktonot kuganot ehoikpalalimaitok. Hamani nunami, hogat ekaktitaovakniaktot kugani apkotmi. Tabkoa hogat tahamani tuktut Kengaokmitat ehoilimaitot. Opingami tuktut oigoliaktot tahamoonakniaktot opingami okiokhaliktomilo. Apkot atoktaolimaitok May-mit Desaipamot tuktut oigolialikata homongaoyut; tuktut ekitot tahamaniiniaktot kihime apkotmi agyaktaktoni tamayanik ovalo poalgikhoktoni apkomik monagiot kitkanit-Julai Saptaipamot. Inuit Havakvikmiotat apkotmi naliak umiakakvikmi angoniaktitaolimaitot. Ikalukhioktot havaktit taotoktaoniaktot pitkoyaolotik Oalikmiot Kitikmeot Nunanik Atoktitiot Opalongaiyaktinit. are intermittent streams that will be crossed with arched culverts or rock fill fords.

Ona Apkohiokvikhak havakniaktat ovalo aolalotik kayagivakniaktot ovalo nunalo kayagivaklogo ahigoktiktaililogo. Ona Apkohioknik ehoaktonik opalongaikhimalotik nunanik kayagitjutikhakaklotik umiakakvikmi ovanilo apkotmi.

Apkohiogotip Manikhait
Onak akikakniagahogiyat Apkohioknik akitotigiloni ematot $164 million. Ona Apkohioknik manikhakakniaktok ovalo hanavikha Inuit Nanminikaktotlo Kavamatlo Pannagiklotik (P3), hamna akikha ovalo akiliktogakhaklo Apkohioknik kavamatlo nanminikaktolo akiliktoklogo.

Ona Apkohioknik kanok ehoaktomi, maniktoknaitomik havaktaoniaktok ovalo P3 manikhanik opalongaikhimaniaktot.

Maniliokvikhak ona Apkohioknik ovani Kitikmeot Nunaitni
Apkotikhak havaktaolikniaktok aolalikloni ovani 16 tatkikhiotini ovalo inuknik havaktitilikniaktok 2,800 inuit-havaktitiloni ovalo sakhakvikhak akitotigiok $26.8 miliatdalamik. Apkohioknik aolaniakto havaktitiltoik havaniktitiniaktok 31 aoyami aoyatoagaikpat ovalo maniliokviovakloni aktigiomik $1.5 million. Okoa havaktit kantolaktit aghaluhikiot maniliokniaktot maniktakvikhat $9 miliatdalak okiotoak. Havagiloakniaktait nutat havakvioloni havaktikhat Kitikmeotat Nunalgit inuit havakhailioktot amigaitmata 25%; ovalo elihaktitaoniaktot havakvikhamot ovani Apkohiokvikhami, inuit havaktit maniliogait kitikmeomot hiamayakniaktot.

Taya hamani oghokyoat akiit nunalihimayut Ikaluktutiamot umiakakvikit Kengaokmit akighiniaktot oghot emakak 30% ovani 2003 oghot akit Hayr Rivermit. Ona akiit tamayat hivoganingaktot aghalutiktot umiakakvikmot okiomi apkotikoktot ovalo umiakoktot Ikaluktutiamit akighiniaktot Hay River-mingakot siksinot inukaknikot tikinagikloti; ovalo hanatilogit nongolikat apkohionik Tamaya Ikaluktutiamingaktot akiit ahinit Kanatamit umiakoktot akikitkiyaoniaktotport 30% Hay River-koktot. Emakak ehomagiyat tamaya akikitkiyaoliklotik tikigakpakniakto oghokyoatlo emakak $3 miliatdalak okiotoak Kitikmeonot.

Okoa maniktoknaitot akighigomik ehoakhitiniaktok Apkotimot ema oghot akighigomik ovalo tamayatlo maniliogotikhat akighilotik Kitikmeotanot, ona oyagakhiokviit tamayait akighigomik. Ehomagiyat ona Apkohioknik tamayanik akighitiloni nunami ovalo akighikpata oyagakhioktit nalvakhiolakiniaktot ovalo Kitikmeot Nunait Nunavutmi ovalo havalakotilotik inuknik ovalo nanminikaktonik nunami.

Hamalo, maniliogotit elittogiyaoyut havakhat okioktaktomi Kanatami maniknik hiamayaotiniaktot nunaptingni taonongalo kablonakakniknot, havalakotilotik inuknik voalo tamayaniklo akighiliotilotik.

ᑐᓴᒃᑲᖅ ᓇᐃᓅᖅᓯᒪᔪᖅ

ᕿᓐᖓᐅᒻᒥ ᑐᓚᒃᑕᕓᓐᒥᒃ ᐊᒻᒪᓗ ᐊᖁᑎᒃᓴᒥᒃ ᐱᓕᕆᐊᒃᓴᓕᕆᓂᖅ

ᐅᓇ ᐱᓕᕆᐊᒃᓴᒥᒃ ᐱᔾᔪᑎᓕᒃ ᓴᓇᔭᐅᔾᔪᑎᒃᓴᙱᓄᑦ ᐊᐅᓚᑕᐅᔾᔪᑎᒃᓴᙱᓄᑦᑐ ᑐᒃᓯᕗᑉ ᕿᓐᖓᐅᒻᒥ ᑐᓚᒃᑕᕓᒃᓴᒥᒃ ᐊᒻᒪᓗ ᐊᖁᑎᒃᓴᒥᒃ ᐊᒃᑐᐊᓂᖃᕝᕙᕆᒐᔭᖅᑕᕆᓐᓄᑦ ᐱᓕᕆᐊᒃᓴᐅᑉ ᐊᕙᑎᓕᕆᓂᕐᒧᑦᑐ.

ᐅᓇ ᐱᓕᕆᐊᒃᓴᓕᕆᓂᕐᒧᑦ ᐱᔪᖅ ᑐᓚᒃᑕᕓᒃᓴᒥᒃ ᕿᓐᖓᐅᒻᒥ ᑎᑭᐅᑎᓯᒪᒐᔭᖅᑐᒥᒃ ᐅᔭᖃᒃᓴᓕᕆᕙᓐᒧᑦ ᐊᒻᒪᓗ ᐱᓕᕆᕙᓐᒥᒃ ᐅᔭᖃᒃᓴᐃᑦ ᐲᔭᖅᑕᐅᕙᕆᒐᔭᖅᑕᙱᓂᒃ ᓄᓇᕗᒻᒥ ᐊᒻᒪᓗ ᓄᓇᕕᐊᕐᒥ ᓄᑖᖅ ᐅᓐᒐᓯᓐᓂᓕᒃ 211 ᑭᓕᕖᑕᓂᒃ ᐊᕿᕗᒍᓕᒫᖅ ᐊᖁᑦ ᑲᓐᑐᐊᐃᑑᑉ ᑕᓯᙱᓄᑦ Contwoyto Lake ᐊᒻᒪᓗ ᒦᓐᓇ ᓴᕿᐅᒪᔫᑉ “Tibbitt-ᒥᒃ ᑎᑭᐅᑎᓯᒪᑐᓂ ᑲᓐᑐᐊᑐᒧᑦ” ᐅᑭᐅᒥ ᐊᖁᑎᒃᓴᖅ.

ᐱᓕᕆᐊᒃᓴᒥᒃ ᓇᓐᒥᓂᓖᑦ ᕿᑎᕐᒥᐅᑦ ᑯᐊᐳᓈᓴᒃᑯᑦ ᐊᒻᒪᓗ ᓄᓇ ᓚᔾᔭᔅᑎᒃᑯᑦ ᓕᒥᑎᑦ, ᑕᒪᕐᒥᒃ ᐃᓄᓐᓄᑦ ᓇᓐᒥᓂᕓᒃ ᑲᒻᐸᓂᐅᔫᒃ, ᐋᕿᒃᓯᒪᔫᒃ ᑲᑐᔾᔨᖃᑎᒌᓐᓂᕐᒧᑦ ᑯᐊᐳᕆᓴᐅᔾᔪᑎᒃᑯᑦ ᓴᓇᔭᐅᓕᖅᐸᑦ ᐊᒻᒪᓗ ᐊᐅᓚᑕᐅᓕᖅᐸᑦ ᐱᓕᕆᕙᒃᓴᖅ. ᑲᑐᔾᔫᒃ ᑕᒪᕐᒥᒃ ᓄᓇ ᓚᔾᔭᔅᑎᒃᑯᑦ ᐊᒻᒪᓗ ᕿᑎᕐᒥᐅᑦ ᑯᐊᐳᓈᓴᒃᑯᑦ ᓇᓐᒥᓂᖃᓐᓂᐊᖅᑑᒃ 62.75% ᐱᓕᕆᐊᒃᓴᓕᕆᓂᕐᒧᑦ. ᕿᑎᕐᒥᐅᑦ ᑯᐊᐳᓈᓴᓐᑯᑦ ᓇᓐᒥᓂᕆᔭᐅᓚᕐᒪᑕ ᕿᑎᕐᒥᐅᑦ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᓐᒋᓐᓄᑦ, ᑎᒃᑯᐊᖅᑕᐅᓯᒪᔪᑦ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᑦ ᓇᑐᓇᐃᔭᖅᓯᒪᓪᒪᑦ ᑐᑭᓐᖓ ᓄᓇᕗᒻᒥ ᓄᓇᑖᕈᑕᐅᓯᒪᔪᑦ ᐊᓐᑎᕈᑎᓐᑎᑦᑎᒍᑦ.

ᑕᒪᑐᒪ ᐱᓕᕆᐊᒃᓴᐅᑉ ᑐᑭᓕᐅᖅᓯᒪᒍᑎᓐᖓ ᑐᓂᔭᐅᓯᒪᓪᒪᑦ ᕿᑎᕐᒥᐅᑦ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᓄᑦ ᐊᒻᒪᓗ ᐃᓄᓕᕆᔨᑐᖃᒃᑯᓐᓄᑦ, ᓇᓐᒥᓂᓕᓐᓄᑦ ᓄᓇᒥᒃ ᐱᓕᕆᐊᒃᓴᓕᕆᕓᒃᓵᓐᖓᓂᓐᖓᓄᑦ, ᐊᒻᒪᓗ ᓄᓇᕗᑦ ᐃᒪᓕᕆᔩᑦ ᑲᑎᒪᔨᓐᒋᑦ ᐊᕙᑎᓕᕆᓂᕐᒧᑦ ᕿᒥᕐᕉᔩᑦ ᒪᓕᒃᓯᑎᒃ ᓄᓇᕗᒻᒥ ᓄᓇᑖᕈᑕᐅᓯᒪᔪᑦ ᐊᓐᑎᕈᑎᓐᑎᑦᑎᒍᑦ, ᒪᓕᒐᓕᐊᓐᒍᓯᒪᔪᖅ Article 12 Part 5-ᑯᑦ.

ᖃᓄᖅ ᐱᕆᐊᖅᑕᐅᕆᐊᓐᖓᓂᕕᓂᖓ

ᐅᕙᓂ ᐆᐸᕈ 2002-ᒥ, ᓇᓐᒥᓂᓖᑦ ᑐᓂᓯᓯᒪᓐᒪᑕ ᐱᓕᕆᐊᒃᓴᐅᑉ ᑐᑭᐊᓂᒃ ᐊᑑᑕᐅᔪᒪᓂᐊ ᐱᓕᕆᐊᒃᓴᐅᑉ ᐊᓐᒋᓂᖅᓴᒨᖓᑎᑦᑐᒍ ᐊᑑᑕᐅᔪᒪᓂᐊᓄᑦ. ᐊᓐᒋᓂᖅᓴᖅ ᐱᓕᕆᐊᒃᓴᖅ ᐃᓚᖃᒻᒪᑦ ᖃᓐᖓᓕᒫᖅ ᐊᖁᑎᒃᓴᒥᒃ ᐃᑯᓐᖓᓐᖓᔪᒥᒃ ᓘᐸᓐ ᒍᓗᓕᕆᕕᐊᓄᑦ ᐃᑯᓐᖓ ᐊᐃᔫᒃᒧᑦ ᓴᕗᖃᔭᒃᓴᓕᕆᕙᓐᒧᑦ ᐊᒻᒪᓗ ᐊᐅᔭᒃᑯᑦ ᐅᓯᕕᓄᑦ ᐅᒥᐊᖁᔪᐊᓄᑦ ᐅᓯᖃᑦᑕᐅᑎᓄᑦ ᐊᒻᒪᓗ ᐅᑭᐅᒥ ᐊᖁᑎᒃᑯᑦ ᓯᑯᑯᑦ ᐊᖁᑦ ᐊᑭᐊᓂ ᑲᓐᑐᐊᐃᑐ ᑕᓯᐊᓄᑦ. ᐱᓕᕆᐊᒃᓴᓕᕆᕕᕕᓂᖅ ᐃᓚᒋᔭᐅᓐᒥᓐᒪᑦ ᐊᓐᒋᓂᖅᓴᖅ ᓄᓇᒋᔭᐅᑲᐃᓐᓇᕐᑐᒧᑦ ᐊᒻᒪᓗ ᐊᓐᒋᓂᖅᓴᐃᑦ ᐅᖅᓯᐊᓗᖃᐅᑏᑦ ᐃᑲᓂ ᕿᓐᖓᐅᒻᒥ ᑐᓚᒃᑕᖅᕓᖃᓕᖅᐸᑦ.

ᓄᓇᕗᑦ ᐊᕙᑎᓕᕆᔩᑦ ᑲᑎᒪᔨᓐᒋᑦ ᓇᕐᓯᐅᓯᔨᒪᓐᒪᑕ ᑐᑭᐊᓂᒃ ᐱᓕᕆᐊᒃᓴᐅᑉ ᐃᓄᓕᕆᔨᑐᖃᒃᑯᑦ ᒥᓂᔅᑕᙱᓐᓄᑦ ᑲᓇᑕᒥ ᐅᕙᓂ ᔪᓚᐃ 8, 2002-ᒥ ᖃᓄᖅᑑᕈᑎᒃᓴᖅ ᕿᒥᕐᕈᔭᐅᔾᔪᑎᐊ (ᐃᓚᙱᓅᙱᔪᖅ 5 ᐅᕝᕙᓗᑭᐊᖅ ᐃᓚᙱᓅᙱᔪᖅ 6) ᑕᒪᓐᓇ ᐊᑑᑕᐅᖁᔭᐅᓐᒪᑦ ᓄᓇᕗᒻᒥ ᓄᓇᑖᕈᑕᐅᓯᒪᔪᑦ ᐊᓐᑎᕈᑎᓐᑎᑦᑎᒍᑦ. ᐅᕙᓂ ᓅᕙᐃᕝᕙ 27, 2002-ᒥ ᓇᓐᒥᓂᓖᑦ ᑐᓴᖅᑎᕐᓯᔪᓐᒪᑕ ᓄᓇᕗᑦ ᐊᕙᑎᓕᕆᔩᑦ ᑲᑎᒪᔨᓐᒋᓐᓂᒃ ᐊᒻᒪᓗ ᐃᓄᓕᕆᔨᑐᖃᒃᑯᓐᓂᒃ ᑲᓇᑕᒥ ᐊᒻᒪᓗ ᐊᐃᔫᒃᒥ ᐱᓕᕆᐊᒃᓴᒧᑦ ᕿᑲᖅᑎᑕᐅᓪᒪᑦ ᐅᑕᕿᑎᑕᐅᑦᑐᓂ ᑕᒪᓐᓇ, ᐊᒃᐸᓯᑐᐊᕐᓂᑯᓐᒋᓐᓄᑦ ᓴᕗᖃᔭᒃᓴᑦ ᐊᑭᓐᒋᑦ ᒦᓐᓇ. ᑕᐃᒪᐃᑎᑦᑐᒋᑦ ᓇᓐᒥᓂᓖᑦ ᐊᑭᑭᑦᓕᕆᐊᖅᑎᕐᓯᓯᒪᓐᒪᑕ ᐱᓕᕆᐊᒃᓴᓕᕐᔪᒻᒧᑦ ᐊᑑᑕᐅᔪᒪᔪᒧᑦ ᑕᒪᓐᓇ ᓇᑐᓇᐃᔭᖅᓯᒪᓂᖃᓪᒪᑦ ᐅᖃᓇ ᑐᓂᔭᐅᓯᒪᓂᐊᒍᑦ ᑐᑭᐊᑕ ᐱᓕᕆᐊᒃᓴᐅᑉ. ᐊᑑᑕᐅᔪᒪᓂᖓ ᑕᒪᑐᒧᓐᖓᓐᖓᔪᖅ ᐊᓯᕈᖅᓯᒪᓐᒪᑦ ᐃᓕᑕᕆᔭᐅᔾᔪ-

ᑎᐊᒍᑦ ᐃᒫᒃ, ᒫᓐᓇ ᓴᕙᕋᔭᒃᓴᔭᐃᑦ ᐃᑲᓃᑦᑐᑦ ᐊᐃᕖᒃᒥ ᖃᖓᑐᐃᓐᓇᖅ ᐋᑎᓂᖃᓕᕐᓂᕐᐸᑕ ᐊᑭᖏᑦᑎᒍᑦ ᐚᔭᐃᔾᔪᑎᒃᑯᑦ ᐊᑭᖏᑦ ᐱᓕᕆᐊᒃᓴᐅᓂᖏᑦᑕ, ᐊᑭᑐᔪᓕᕆᔾᔪᑏᑦ ᑐᑭᖏᑦ ᓴᓇᔾᔪᑎᓄᑦ Ꮕᐸᓐᒥ ᑎᑭᐅᑎᓗᒋᑦ ᐊᐃᕖᒃᒧᑦ ᐊᕐᑯᑖ ᑭᖑᓪᓕᐅᑎᓂᐊᕐᑐᖅ ᐊᒻᒪᓗ ᐊᒃᑐᐊᓂᖅᑲᕕᖏᑦ ᐱᓕᕆᕙᒃᓴᐅᑉ ᑖᕝᕙᐅᒋᐊᖅᑳᕐᑐᑦ.

ᐅᕝᕙᓂ ᐋᐳᕈ 10, 2003-ᒥ ᒥᓂᔅᑕ ᑲᓇᑕᒥ ᐃᓄᓕᕆᔨᑐᕐᑲᒃᑯᓐᓄᑦ ᑐᓴᖅᑎᕐᓯᑳᕐᒪᑦ ᓄᓇᕗᑦ ᐊᕙᑎᓕᕆᔩᑦ ᑲᑎᒪᔨᖏᓐᓂᒃ ᑕᒪᓐᓇ ᐱᓕᕆᐊᒃᓴᖅ ᑐᓂᔭᐅᒃᑲᓐᓂᑳᕐᒪᑦ ᐋᕿᒋᐊᕐᑕᐅᓯᒪᓗᓂ ᑐᑭᐊ ᐱᓕᕆᐊᒃᓴᐅᓂᖓᑕ. ᐅᕝᕙᓂ ᐋᐳᕈ 14, 2003-ᒥ ᓄᓇᕗᑦ ᐊᕙᑎᓕᕆᔩᑦ ᑲᑎᒪᔨᖏᑦ ᑐᒃᓯᕋᖅᓯᒪᖕᒪᑕ ᓇᖕᒥᓂᓕᖕᓂᒃ ᑐᓂᓯᒃᑲᓐ-ᓂᕐᑯᔨᓪᓗᑎᒃ ᑐᑭᖏᓐᓂᒃ ᐋᕿᒋᐊᖅᓯᒪᑎᓪᓗᒋᑦ ᐱᓕᕆᐊᒃᓴᓕᕆᓂᕐᒧᑦ ᓇᓗᓇᐃᔭᖅᓯᒪᓂᖏᑦ ᐅᕝᕙᓂ ᒪᐃ 12, 2003-ᒥ.

ᐅᒃᐱᕆᔭᐅᖕᒪᑕ ᐅᑯᐊ ᐊᐃᕖᒃ ᐱᓕᕆᐊᒃᓴᕐᑲᖕᕙᐊ ᐊᐅᓚᔾᔭᑲᓐᓂᑳᕐᒪᑦ ᖃᖓᐅᓕᕐᐸᕐᑦ. ᓲᕐᑲᐃᒻᒪ, ᓴᓇᔭᐅᓂᐊ ᐊᕐᑯᑎᒃᓴᐅᑉ ᕿᖓᐅᒻᒥᒃ ᑲᓐᑐᐊᐃᑐᒧᑦ ᐊᑐᐃᓐᓇᐅᒋᐊᕐᑲᕋᔭᕐᒪᑕ ᐃᓚᒍᑕᒃᓴᔭᑦ ᐋᑎᓇᔭᖅᑐᑦ ᐊᑐᐃᓐᓇᕈᕈᑎᖏᓐᓄᑦ ᓈᒻᒪᓈᕈᑏᑦ ᐱᕙᓪᓕᐊᑎᑦᓯᓂᕐᒧᑦ ᖃᓄᖅᑑᕈᑏᑦ. ᐱᓕᕆᐊᒃᓴᓕᕆᓂᐅᑉ ᑐᑭᖏᑦ ᐅᕝᕙᓂ ᐅᓂᒃᑳᑦ ᐱᓕᕆᐊᒃᓴᓕᕆᔾᔪᑎᓕᕆᓂᕐᔫᖓᔪᓂᒃ ᓯᕗᓪᓕᐅᑎᑕᐅᕐᑲᕆᐊᕐᑲᒻᒪᑦ ᐱᕙᓪᓕᐊᔭᐅᓂᐊᓄᑦ ᕿᖓᐅᒻᒥ ᑎᑭᐅᑎᓯᒪᔪᖅ ᐊᐃᕖᒃᑯᑦ ᐊᕐᑯᑦ. ᐊᐃᑉᐹ ᐱᕙᓪᓗᐊᔭᐅᓂᖓᓅᖓᔪᖅ ᐊᒃᑐᐊᓂᕐᑲᒻᒪᑦ ᐅᕗᖓ ᒫᓐᓇᓯᐅᒻᒧᑦ ᐱᓕᕆᐊᒃᓴᓕᕆᔾᔪᒧᑦ ᐊᐃᕖᒃᑯᑦ ᐃᖕᒥᒃᑰᓕᖓᖓᔭᕐᓯᓂ ᑐᑭᐊ ᐱᓕᕆᐊᒃᓴᐅᓂᖓᑕ ᑐᓂᔭᐅᒋᐊᕐᑲᒻᒪᑦ ᐊᒻᒪᓗ ᐊᖏᖅᑕᐅᒋᐊᕐᑲᓕᖅᐸᑦ ᑭᖑᖓᒍᑦ.

ᐱᓕᕆᐊᒃᓴᓕᕆᓂᕐᒨᖓᔫᒃ ᑕᒪᕐᒥᒃ ᐊᑐᐊᖓᓕᕆᔾᔪᑎᒃᑯᑦ ᐱᕐᑯᔭᕐᑎᒍᑦ ᐊᒻᒪᓗ ᑉᓇᐅᔭᓕᕆᔾᔪᑎᓄᑦ ᓴᐳᑎᒍᑎᑦ ᐱᔪᑦ ᓄᓇᕗᑦ ᖓᕙᒪᒃᑯᖏᓐᓂᒃ ᐊᒻᒪᓗ ᑲᓇᑕᐅᑉ ᖓᕙᒪᒃᑯᖏᓐᓂᒃ ᐊᕐᑯᑎᒋᓪᓗᒋᑦ ᑲᓇᑕᒥ ᐃᓄᓕᕆᔨᑐᕐᑲᒃᑯᑦ.

ᓴᓇᔭᐅᓕᖅᐸᑦ ᐱᓕᕆᐊᒃᓴᖅᑲᖕᕙᒃ

ᐱᓕᕆᐊᒃᓴᓕᕆᓂᖅ ᐋᑦᑕᐅᔭᕆᐊᕐᑲᒻᒪᑦ ᐊᑐᕐᓗᑎᒃ ᖓᕙᒪᒃᑯᑦ ᑲᓇᑕᒥ ᓄᓇᕐᑯᑖᓂᒃ ᐊᒻᒪᓗ ᐃᓄᐃᑦ ᓇᖕᒥᓂᖏᓐᓂᒃ ᓄᓇᓂᒃ. ᑐᓚᒃᑕᕕᒃᓴᖅ ᑲᓇᑕᐅᑉ ᓄᓇᕐᑯᑖᓂᒻᒪᑦ ᐊᒻᒪᓗ ᐊᖏᓂᕐᑲᖅᑳᖅᓯᓂ ᓄᓇ 159 hectares-ᓂᒃ ᐊᒻᒪᓗ 270,000 cubic meters-ᓂᒃ ᖄᖅᑎᑦᓯᕙᕐᑲᕐᑲᑦᑕᕐᑐᓂ ᐅᔭᕐᑲᓂᒃ ᓴᓇᖅᑳᖅᑐᑦ.

- ᑐᓚᒃᑕᖅᕕᒃ ᐃᓂᖓ ᒪᑯᓂᖓ ᐃᓚᖃᑦᑐᓂ:
- ᑐᓚᒃᑕᖅᕕᖕᒥ ᓂᐅᕋᐃᕕᒃ ᐅᓯᔭᓄᑦ ᐅᖅᓱᐊᓗᖕᓄᑦ ᐊᒻᒪᓗ ᐅᓯᔭᓄᑦ ᐊᓯᖏᓐᓄᑦ ᑐᓚᒃᑕᖅᕕᖕᒧᑦ;
- ᑐᓚᒃᑕᖅᕕᒃ ᐅᓯᖃᑦᑕᐅᑎᓄᑦ ᓇᑦᓕᐊᓐᓄᑐᐃᓐᓇᖅ ᕿᑎᕐᒥᐅᓄᑦ ᖁᑦᑐᖅᑑᖅ, ᐃᖃᑦᑑᑦᑎᐊᖅ
- ᕿᖓᐅᑦ, ᐅᒥᖕᒪᒃᑑᖅ, ᐅᕐᓱᖅᑑᖅ, ᑕᓗᕐᔪᐊᒧᑦᑐ;
- ᐃᓄᖃᕈᓐᓇᕐᑐᓂ 150-ᓂᒃ ᓄᓇᕆᔭᐅᑲᐃᓐᓇᕐᑐᖅ ᐊᒻᒪᓗ ᐱᓕᕆᕕᐅᑐᓂ;
- 180 million litre-ᓂᒃ ᐃᒃᑕᓇᓐᓂᓕᖕᒥᒃ ᐅᖅᓱᐊᓗᖃᐅᑦ ᐊᐅᓚᐅᑎᓯᐅᑎᓄᑦ ᐃᓂᖓᑦ;
- ᐊᒃᓴᔫᑎᑦ ᐱᓕᕆᔾᔪᑎᑦ ᐊᒻᒪᓗ ᓴᓐᓇᕝᕕᒃ ᐃᒡᓗᕋᖦᖅ;
- ᑕᑭᓂᓕᒃ 1,200 ᒦᑕᓂᒃ ᒥᑦᑕᖅᕕᒃ ᖃᖓᑕᕖᓄᑦ

ᑭᖑᕙᕈᑏᑦ ᐅᕝᕙᓂ 2003-ᒥ ᑐᓚᒃᑕᖅᕙᓕᕆᓂᕐᒧᑦ ᓴᓇᔭᒃᓴᓄᑦ ᐊᕐᕋᒍᓕᒫᒥᒃ ᑭᖑᕙᕐᓂᕐᑲᓐᓂᐊᕐᑐᖅ. ᑐᓚᒃᑕᖅᕕᒃᒥᒃ ᓴᓇᓂᖅ ᒫᓐᓇ ᑐᒃᓯᕗᖑᓯᒪᓕᖅᑐᖅ ᐱᑭᐊᕋᔭᕐᒪᑦ ᓯᑎᕝᕚᓇ 2005-ᒥ ᐊᒻᒪᓗ ᐱᔭᕇᓪᓗᓂ ᔭᓐᓄᐊᓇ 2007-ᒥ.

ᐅᖓᓯᒃᓂᓕᒃ 211 km-ᓂᒃ ᖃᖓᓕᒫᖅ ᐊᕐᑕᐅᔪᓐᓇᕐᑐᖅ ᐅᖓᑕᓅᖓᓗᓂ 80 km ᐅᖓᓯᖕᓂᖓ

ᐃᓄᐃᑦ ᓄᓇᕐᑯᑖᓂᒃ ᐊᒻᒪ 129 km ᑲᓇᑕᐅᑉ ᓄᓇᕐᑯᑖ. ᐊᕐᑯᑎᒃᓯᓕᕆᔾᔪᑎᒃᓯᑦ ᐅᔭᕐᑲᑦ ᖄᖅᑎᑕᒐᑦ; 37 ᐅᔭᕐᑲᓂᒃ ᖄᖅᑎᕐᓯᕙᒃ ᓯᕐᑲᓪᓕᔭᓂᒃ ᑐᒃᓯᕌᖅ, 18 ᐃᓄᐃᑦ ᓄᓇᕐᑯᑖ ᐊᒻᒪ 19 ᑲᓇᑕᐅᑉ ᓄᓇᕐᑯᑖ.

ᐊᕐᑯᑎᒃᓯᒥᒃ ᓴᓇᓂᖅ ᐊᑰᑕᐅᔫᖅᑐᖅ ᒪᕐᕉᓕᖕᒐᓗᓂ ᑐᑭᐊ; ᑐᓪᓚᒃᑕᖅᐸᒃ ᐱᒋᐊᕐᑕᐅᓗᓂ January 2006-ᒥ ᐊᒻᒪ ᐱᒋᐊᕐᑕᐅᓗᓂ ᑎᑭᐅᑎᓯᒪᔪᖅ ᑲᓐᑐᐊᐃᑐ ᑕᓯᖕᒐᓄᑦ, ᐊᕐᑯᑦ ᓴᓇᔭᐅᓗᓂ ᐱᒋᐊᖅᑕᐅᓗᓂ February 2005-ᒥ ᐊᒻᒪ ᓴᓇᕙᓪᓕᐊᓗᒍ ᑐᕌᓐᓂᖕᒐ ᑐᓪᓚᒃᑕᖅᐸᒃᓯᒍᑦ. ᐊᕐᑯᑎᓕᐅᕐᓂᖅ ᐱᔭᕇᖅᑕᐅᓗᓂ December 2006-ᒥ. ᐊᐅᓪᓛᖅᓯᒪᕙᒃ ᐃᓄᕐᑲᐳᓐᓇᖅᑐᖅ 20-ᓂᒃ ᐊᒻᒪ ᓄᓇᓯᐅᑎᒃᑯᕙᒃ ᐱᓕᕆᔾᔪᑎᓄᑦ ᐃᒪᐃᓪᓗᐊᕐᓗᓂ 21 ᑭᓗᒦᑕᐃᑦ ᐅᖕᒐᓯᖕᓂᖕᒐ ᐅᐊᖕᓇᖕᒐᓅᖕᒐᔪᖅ ᓄᓇᐅᑉ ᓯᓈ ᑲᓐᑐᐊᐃᑑᑉ ᑕᓯᖕᒐᑕ.

ᐅᕙᖕᒐ ᐱᓕᕆᐊᒃᓯᒨᖕᒐᖅ ᐊᕐᑯᑦ ᐊᑐᖅᑕᐅᕐᑲᑦᑕᕋᔭᕐᒪᑦ ᐅᑭᐅᒥ ᑭᓯᒥᐊᓂ, ᐊᕐᑯᑦ ᓴᓇᔭᐅᓯᒪᓛᖅᑐᖅ ᖃᖕᒐᓕᒫᖅᓯᐅᑎᑎᑐᑦ ᐊᑑᑎᒎᕐᓂᐊᕐᓂᖅᑲᓐᓂᐊᕐᒥᖕᒪᑦ ᓯᕗᓂᒃᓴᑎᓐᓅᖕᒐᔪᓄᑦ ᐅᓯᔭᐅᕐᑲᑦᑕᕋᔭᕐᒪᑕ ᓴᕙᕋᔭᒃᓯᑦ ᐊᒻᒪ ᓱᓇᒃᑯᑖᑦ ᐱᓕᕆᔾᔪᑏᑦ ᑕᕝᕙᓇ.

ᐱᓕᕆᕕᒃᒥ ᐊᐅᓚᑦᓯᔾᔪᑎᑦ

ᐱᓕᕆᐊᒃᓯᓕᕆᔾᔪᑏᑦ ᐊᕐᖀᒍᑕᒦᑦ ᐊᐅᓚᑕᐅᕙᓛᖅᑐᑦ ᒪᓕᒡᓗᑎᒃ ᓯᓚᖕᒐᓂᒃ ᐅᑭᐅᖅᑕᖅᑑᑉ. ᐅᒥᐊᕐᔪᐊᒃᑯᑦ ᐅᓯᔭᒃᓯᑦ ᐃᓱᓕᕐᑲᑦᑕᕐᓗᑎᒃ ᕿᑎᖕᒐᓂ ᔪᓚᐃ ᐊᒻᒪ ᓄᖑᐊᓂ ᐆᒃᑑᕝᕙ. ᐅᓯᕐᑲᑦᑕᓛᕐᒪᑕ ᐅᑎᖅᑕᕐᑲᑦᑕᕐ-ᓗᑎᒃ 6-ᔫᕋᓪᓗᑎᒃ ᐅᕝᕙᓗᑭᐊᖅ 8-ᕋᓪᓗᑎᒃ ᓯᑯᒃᑯᑦ ᐅᒥᐊᕐᔪᐊᒃᑯᑦ ᐅᓯᔭᐅᕙᓛᖅᑐᑦ ᐅᕐᑯᒪᐃᓐᓛᑦ ᑎᑭᐅᑎᓯᒪᔪᓂᒃ 25,000 tonnes-ᓂᒃ ᐅᓯᔭᑦ ᑕᒪᐃᑕ ᒥᒃᓴᐅᓴᓪᓗᑎᒃ 180,000 tonnes ᐅᖅᓱᐊᓗᐃᓪᓗ ᐊᒻᒪ ᐊᓯᖕᒋᑦ ᐊᑑᑎᔪᑦ ᓄᓇᓕᖕᓄᑦ ᐊᒻᒪ ᐊᐅᓚᑦᓯᔾᔪᑎᓄᑦ ᐅᔭᕋᒃᓴᖅᓯᐅᖅᕕᖕᒥ ᐱᓕᕆᐊᒃᓯᓕᕆᓂᕐᒧᑦ. ᓯᑯᓯᐅᑦ ᐊᑑᑕᐅᕐᑲᑦᑐᐃᓐᓇᕆᐊᓕᒃ ᐊᓯᖕᒋᓐᓄᑦ ᐅᑭᐅᕐᑕᕐᑐᖅᓯᐅᑎᓄᑦ ᐱᓕᕆᐊᒃᓯᓕᕆᔾᔪᑎᓄᑦ, ᑕᒪᑐᒪ ᑐᑭᐊ ᐅᓯᔪᓄᑦ ᖃᖕᒐᒃᑯᑦ ᐊᑑᑕᐅᒍᓐᓇᖅᑲᑦᑕᓛᖅᑐᖅ ᖃᖕᒐᓕᒫᒃᑯᑦ ᐃᓕᕐᑯᓯᖅᓱᕐᓗᑎᒃ ᐊᐅᓚᔾᔪᑎᒋᕗᒃᑕᒥᒍᑦ ᐅᓯᓐᓇᐅᓕᕋᐃᑉᐸᑦ. ᐅᒥᐊᕐᔪᐊᒃᑯᑦ ᐅᓲᑦ ᐅᓯᕐᑲᑦᑕᓛᕐᒥᖕᒪᑕ ᐅᖅᓱᐊᓗᖕᓂᒃ ᕿᑎᕐᒥᐅᑦ ᓄᓇᓕᖕᒋᓐᓄᑦ ᐱᖕᒐᓱᐊᕐᑎᕐᑲᑦᑕᕐᓗᓂ ᓇᓪᓕᐊᓐᓄᑐᐃᓐᓇᖅ ᐊᐅᔭᒃᑯᑦ.

ᐊᕐᑯᑎᒃᑯᑦ ᐊᐅᓚᑕᑦ ᒪᓕᕐᑲᑦᑕᓛᕐᒥᔪᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᐅᑦ ᐃᓕᕐᑯᓯᖕᒐᓐᓂᒃ ᖃᖕᒐᐅᓕᕋᐃᑉᐸᑦ ᐊᕐᕋᒍᓗᒃᑖᖅ. ᐊᕐᑯᑦ ᓴᓇᔭᐅᓯᒪᓛᕋᓗᐊᖅᑎᓪᓗᒍ ᓯᓚᒥᒃ ᒪᓕᒃᑐᒥᒃ ᖃᖕᒐᓕᒫᖅ ᐊᑑᑎᒍᓐᓇᕐᓂᕐᒥᒃ ᐊᐅᓚᕐᑲᑦᑕᓛᖅᑐᑦ ᐱᒋᐊᕐᓗᑎᒃ ᔭᓐᓄᐊᕆᒥᒃ ᑎᑭᓪᓗᒍ ᐄᐳᕈᒧᑦ ᐊᒻᒪ ᒦᓐᓇ ᐊᕐᑯᑕᐅᕝᕙᒃᑐᖅ ᔫᐸᓐᒧᑦ ᐅᑭᐅᒥ ᔨᐊᓗᓐᓇᐃᒥᒃ ᐅᓯᕝᕙᒃᑐᑦ ᐅᕐᑯᒪᐃᓐᓂᓕᖕᓂᒃ 161,000 tonnes-ᓂᒃ ᐅᖅᓱᐊᓗᖕᓂᒃ ᐊᒻᒪ ᐊᓯᖕᒋᓐᓂᒃ ᐊᑑᑎᔪᒃᓯᓂᒃ ᖃᓄᑐᐃᓐᓇᖅ ᐃᑳᑎᒧᑦ ᐊᒻᒪ ᓯᑎᓛᓂᒃ ᐅᔭᕋᒃᑕᖅᕕᐊᓐᓄᑦ ᑕᐃᕙᒃᒥ ᓄᓇᑦᓯᐊᕐᒥ ᐊᒻᒪ ᔫᐸᓐ ᐊᒻᒪ ᔨᐅᕆᑰᒃᑯᓐᓄᑦ ᓄᓇᕗᒥ. ᓯᓂᒃᕕᐅᕝᕙᒃᑐᑦ ᐃᓪᓗᐃᑦ ᐊᒻᒪ ᓂᕆᕕᐅᕝᕙᒃᓯᑎᒃ ᐊᕐᑯᑎᓄᑦ ᐊᑐᐃᓐᓇᐅᓛᕐᑐᑦ ᐊᐅᓪᓛᖅᓯᒪᕕᑦ ᑐᓪᓚᒃᑕᖅᐸᒃᑕᓕᖕᒥ. ᐊᕐᑯᑎᒃᑯᑦ ᐅᓯᔪᕐᑲᕐᑲᑦᑕᓛᖕᒋᑦᑐᖅ ᑲᓕᑕᓂᒃ ᓄᖑᐊᓂ ᐄᐳᕈ ᓄᖑᐊᓂ ᑎᓯᒻᕚᓇ. ᐊᕐᑯᒻᒥᒃ ᐋᕐᑭᒋᐊᖅᓯᕐᑲᑦᑕᕐᓗᑎᒃ ᐊᒻᒪ ᐃᑳᖅᐸᓪᓗᑎᑦ ᑯᓚᓛᑦ. ᓯᐅᕋᐃᑦ ᑐᐊᐸᐃᓪᓗ ᐅᑭᐅᒥ ᐊᐅᓚᑦᓯᒍᑏᑦ ᐊᑐᐃᓐᓇᐅᕙᓛᖅᑐᑦ ᐊᐅᔭᒃᑯᑦ ᓄᐊᑕᕕᓃᑦ.

ᐱᓕᕆᐊᒃᓯᓕᕆᓂᕐᒨᖕᒐᔪᑦ ᐊᒃᑐᐊᔪᑦ ᐊᕙᑎᑦᑎᓐᓄᑦ

ᓴᓇᔭᐅᑎᓪᓗᒍ ᐱᓕᕆᐊᒃᓯᓕᕆᕕᒃ ᑐᓴᖅᓴᐅᕙᓛᕐᒪᑦ ᐃᒦᒃ ᐅᖕᒐᓯᖕᓂᓕᖕᓄᑦ ᓄᓇᒥ 512 hectares ᓄᓇᒥ ᓂᕐᔪᑎᑕᓕᖕᒥ, ᐊᒻᒪ 2.3 hectares ᐃᒪᕐᒥᐅᑕᓄᑦ ᑐᓪᓚᒃᑕᖅᐸᖕᒥ. ᐊᕐᑯᑎᒃᑯᑦ ᐃᑳᖅᓯᒪᕐᑲᑦᑕᓛᖅᑐᑦ 111 ᑰᒐᓛᖅᑕᓕᖕᓂ; 21 ᐃᑳᖅᑳᑦ ᓱᕐᕋᐃᔮᖕᒋᑦᑐᑦ ᐃᓕᕐᑯᓯᖕᒋᓐᓂᒃ ᑰᒃᑐᑦ; 88 ᑯᒐᓛᓂ ᓄᕐᑲᖅᕕᐅᕝᓗᑎᒃ ᐃᑳᖅᕕᐅᕐᑲᑦᑕᕐᓗᑎᒃ ᓱᓪᓗᓕᒃᑕᓛᑦ ᑰᒃᕕᖕᓂᒃ ᐅᕝᕙᓗᑭᐊ ᐅᔭᕐᑲᓂᒃ ᐋᕐᑭᒃᓯᒪᔭᓂᒃ. ᐃᑳᖅᕕᓕᐊᖑᓯᒪᔪᑦ ᒪᓕᒃᓴᖅᑐᓂᒃ ᐃᓕᕐᑯᓯᖕᒐᓂᒃ ᑰᑦ ᑭᓯᐊᓂ ᒪᕐᕉᓪᓚᓇᓛᖅᑑᒃ ᐃᑳᖅᑳᒃ. ᐊᕐᑯᑎᓕᐅᕐᓂᖅ ᐃᕐᑲᓗᓕᖕᓂ

ᐊᑲᐅᓈᖅᓯᒪᔭᐅᒐᓱᐊᕐᓗᓂ ᐋᕿᒃᓯᒪᓂᖏᑦ. ᓄᓇᒥ ᓂᕐᔪᑎᑕᓕᖕᒥ ᐊᕐᑯᑏᑦ ᐊᕝᕙᐊᖅᑎᑕᐅᔾᔭᖏᓐᓄᑦ ᓂᕐᔪᑎᓂᒃ. ᑕᑯᔭᐅᒐᔪᒃᑐᑦ ᓂᕐᔪᑏᑦ ᐱᓕᕆᕝᕕᒃᓴᒥ ᑐᒃᑐᐃᑦ ᕿᖑᐅᑦ ᑐᒃᑐᖏᑦ. ᐅᐱᖕᖔᒥ ᐸᓚᖅᑎᑦᓯᖅᑕᑦᑕᔾᔭ-ᖅᑐᑦ ᐱᔾᔪᑎᒋᓪᓗᒋᑦ ᐆᒪᔪᓕᒫᑦ ᐊᕐᑯᓵᕐᓂᐅᓴᔪᑦ ᐱᓕᕆᐊᒃᓴᓕᕆᕝᕕᒃᑯᑦ. ᐊᕐᑯᑦ ᐊᑐᖅᑕᐅᕙᔾᔭᖏᑦᑐᖅ ᐊᑯᖑᓐᓂ ᒪᐃ ᐊᒻᒪᓗ ᑎᓯᕝᕚᓇ, ᐅᐱᖕᖔᒥ ᐊᐅᓚᑎᓪᓗᒋᑦ ᑕᒫᓂ ᑐᒃᑐᐃᑦ ᐱᓱᓕᕋᐃᑉᐸᑕ; ᐅᑭᐅᒥ ᑐᒃᑐᐃᑦ ᖃᑦᓰᓐᓇᐅᕙᒃᑐᑦ ᐊᕐᑎᒃᑰᖅᐸᒃᑐᑦ ᐅᑭᐅᒥ ᐅᓯᔮᑦ ᑕᒪᐅᓈᖅᑕᑦᑕᕐᑎᓪᓗᒋᑦ. ᐊᒻᒪᓗ, ᑐᒃᑐᖅᑲᓗᐊᔾᔮᖏᑦᑐᖅ ᐊᕐᑯᒻᒥ ᓴᓇᔪᕐᑲᑦᑎᓪᓗᒍ ᐱᒋᐊᕐᓗᑎᒃ ᕿᑎᖑᓂ ᔪᓚᐃ ᑎᑭᓪᓗᒍ ᓄᑖᖑᑎᓪᓗᒍ ᓴᑉᑕᒻᐸ. ᐱᓕᕆᔩᑦ ᐱᓕᕆᕝᕕᖕᒥ ᐊᖑᓚᓱᒃᑎᑕᐅᔾᔮᖏᑦᑐᑦ ᐊᕐᑯᒻᒨᖑᔪᓂᒃ ᐊᒻᒪᓗ ᑐᓚᒃᑕᖅᕕᖕᒥ. ᐃᓛᓐᓂᒃᑯᑦ ᐃᖅᑲᓕᐊᕈᒪᔪᑦ ᐱᓕᕆᔩᑦ ᒪᓕᖅᑲᑦᑕᕆᐊᖅᑲᔾᔭᖅᑐᑦ ᒪᓕᒃᑕᐅᕐᑯᔭᓂᒃ ᐊᑑᑎᓕᕐᑯᔭᐅᓯᒪᔪᑎᒍᑦ ᐅᐊᓕᓂᐊᓂᒥᐅᓄᑦ ᕿᑎᕐᒥᐅᑦ ᓄᓇᓕᕆᔩᒃᑯᖏᑦᑕ.

ᐱᓕᕆᐊᒃᓴᖅᑲᕝᕕᒃ ᓴᓇᔭᐅᓯᒪᔾᔭᖅᑐᖅ ᐊᐅᓚᑕᐅᓂᖅᑲᓪᓗᓂᓗ ᐊᑦᑕᓈᕿᒍᑕᐅᔫᒪᕐᓂᐊᖏᑦᑐᓂᒃ ᐊᒻᒪᓗ ᐊᕙᒻᒨᖑᔪᑎᒍᑦ ᐅᔾᔨᑐᑦᓯᐊᕈᑎᓂᒃ ᐃᓕᕐᑯᓯᖅᑲᓪᓗᑎᒃ. ᐱᓕᕆᐊᒃᓴᖅᑲᕝᕕᐅᑉ ᐱᕙᓪᓕᐊᔭᐅᓯᒪᓂᖑ ᐋᕿᒃᓱᐃᔾᔪᑎᒃᑯᑦ ᒪᓕᒡᓗᑎᒃ ᓴᐳᔾᔨᒍᑎᓂᒃ ᐊᕙᑎᑦᑎᓐᓃᑦᑐᓂᒃ ᐊᒻᒪᓗ ᐆᒪᔪᓂᒃ ᐱᑳᓪᓚᑕᐃᓕᔾᔪᑎᓂᒃ ᐅᔾᔨᕐᑐᕈᑎᓂᒃ ᒪᓕᒡᓗᑎᒃ ᑐᓚᒃᑕᖅᕕᖕᒥ ᐊᒻᒪᓗ ᐊᕐᑯᒻᒨᖑᔪᓄᑦ.

ᐱᓕᕆᐊᒃᑰᖑᔪᑦ ᑮᓇᐅᔭᓕᕆᔾᔪᑎᑦ

ᒥᒃᓴᐅᓴᒃᑐᑦ ᐊᑭᑐᔪᓕᕆᔾᔪᑎᑦ ᓴᓇᔾᔪᑎᑦ ᐊᑭᒃᓴᖏᑦ ᐱᓕᕆᐊᒃᓴᒍᑦ $164 ᒥᓕᐊᓐ ᑖᓚᐃᑦ. ᐱᓕᕆᐊᒃᓴᒍᑦ ᑮᓇᐅᔭᓕᕆᔾᔪᑏᑦ ᑐᑭᖏᑦ ᐊᒻᒪᓗ ᐱᕙᓪᓕᐊᑎᑦᓯᔾᔪᑏᑦ ᑐᑭᖏᑦ ᑭᒃᑯᓕᒫᓅᖑᔪᓄᑦ ᓇᖕᒥᓂᓖᑦ ᑲᑐᔾᔨᖅᑲᑎᒌᒃᓯᐅᑎᒃᑯᑦ (P3) P-ᑰᖅ ᐱᖑᓱᑦ ᑐᑭᐊᑦ ᖃᓪᓗᓈᑎᑐᑦ, ᖃᑦᓯᕌᑦᑐᑦ ᑐᑭᖏᑦ ᐊᒻᒪᓗ ᐊᑲᐅᓈᖅᑐᖅᑲᓐᓂᖏᑉᐸᑦ ᐱᓕᕆᐊᒃᓱᖑᔪᑦ ᑲᑐᔭᐅᒐᔭᖅᑐᑦ ᑕᒪᒃᑮᓐᓄᑦ ᑭᒃᑯᓕᒫᓅᖑᔪᓄᑦ ᐊᒻᒪᓗ ᓇᖕᒥᓂᓕᖕᓄᑦ.

ᐱᓕᕆᐊᒃᓴᓕᕆᔾᔪᑦ ᑕᒪᐃᓐᓅᖑᓂᖑ ᑐᑭᓕᐅᖅᓯᒪᓂᐊ ᒥᒃᓯᖅᑲᑦᓯᐊᖅᑐᖅ, ᑮᓇᐅᔾᔭᒃᓴᐅᑎᓅᖑᔪᓄᑦ ᒪᑭᒪᔾᔪᑕᐅᔪᓐᓇᕐᒪᑦ ᐊᒻᒪᓗ ᐅᑎᕈᒫᕐᓂᐊᖅᑐᓄᑦ ᑐᑭᓕᐅᖅᓯᒪᔪᑎᒍᑦ ᐋᕿᒃᓯᒪᔾᔪᑎᑦ ᐅᑯᑎᒎᓇ (P3-ᑯᑦ).

ᒪᑭᒪᔾᔪᑎᒃᓵᓅᖑᓂᖏᑦ ᐱᓕᕆᐊᒃᓴᖅᑲᕝᕕᐅᑉ ᕿᑎᕐᒥᐅᓄᑦ

ᐱᓕᕆᐊᒃᓴᖅᑲᕝᕕᒃ ᐋᕿᒃᓯᒪᔭᐅᔾᔮᕐᒪᑦ ᐅᖓᑖᓅᖑᔪᓄᑦ 16 ᑕᕐᕿᑦ ᐊᒻᒪᓗ 2,800-ᓅᖑᔪᓂᒃ ᐱᓕᕆᐊᖅᑲᓐᓂᕐᒧᑦ ᑕᕐᕿᖅ ᐊᑕᐅᓯᖅ ᐃᖅᑲᓇᐃᔭᖅᑎᑦᓯᒍᑎᑎᒍᑦ ᐊᒻᒪᓗ ᐊᑭᓕᖅᑐᒐᖅᑲᕈᑎᒃᑯᑦ ᖃᑦᓯᐅᓂᖏᑦ $26.8 ᒥᓕᐊᓐ ᑖᓚᐃᑦ. ᐱᓕᕆᕝᕕᖕᒥ ᐊᐅᓚᑦᓯᔾᔪᑎᑦ ᓴᕿᔾᔭᕐᒪᑕ 31-ᓂᒃ ᓈᒻᒪᒃᓯᒐᐃᑉᐸᑦ ᖃᖑᒃᑯᑦ ᐱᓕᕆᓐᓇᖅ ᓴᓇᔭᒃᓴᖅᑲᑦᑎᑦᓯᓂᖅ ᐊᕐᕋᒍᑕᒦᑦ ᐊᒻᒪᓗ ᓴᕿᓐᓂᖅᑲᖅᑲᑦᑕᔾᔭᕐᒪᑕ ᐊᑭᓕᖅᑐᒐᖅᑲᕈᑎᒃᑯᑦ ᒥᒃᓴᐅᓴᒃᑐᓄᑦ $1.5 ᒥᓕᐊᓐ ᑖᓚᓂᒃ. ᐱᓕᕆᑎᑦᓯᒍᑏᑦ ᑲᓐᑐᕋᒃᑎᑦᓯᒍᑏᑦ ᐊᕐᑯᑎᓂᒃ ᐱᓕᕆᔾᔪᑎᓄᑦ ᐊᒃᓴᓲᑎᒃᑯᑦ ᐃᓚᒋᓕᐅᑎᓂᐊᕐᒥᖕᒪᑕ ᐊᑭᓕᖅᑐᒐᖅᑲᓐᓂᕐᒧᑦ $9 ᒥᓕᐊᓐ ᑖᓚᐃᑦ ᐊᕐᕋᒍᖅ ᐊᑕᐅᓯᖅ. ᐱᓕᕆᐊᒃᓴᓪᓗ ᓄᑖᑦ ᐊᑐᐃᓐᓇᕈᕈᓐᓇᖅᑲᑦᑕᕐᓂᐊᕐᒪᑕ ᐱᓕᕆᐊᒃᓴᓕᕆᓐᓂᐊᒃᑯᖏᑦᑎᒍᑦ ᕿᑎᕐᒥᐅᑦ ᒦᓇ ᐊᑐᐃᓐᓇᖅᑲᖏᑦᑐᓄᑦ ᐱᓕᕆᐊᒃᓴᓂᒃ ᐊᖏᓂᖅᓵᓅᖑᔪᓄᑦ ᑐᑭᓕᐅᕈᑎᖏᑦᑎᒍᑦ 25%; ᓴᓇᒋᐅᖅᓴᕈᑏᑦ ᐊᒃᓱᕉᑕᐅᓗᑎᒃ ᐱᓕᕆᐊᒃᓴᖅᑲᕈᓐᓇᕐᑯᓪᓗᒋᑦ ᐱᓕᕆᐊᒃᓴᖅᑲᕝᕕᖕᒥ, ᐊᑭᓕᖅᑐᒐᖅᑎᑰᖑᔪᑦ ᑮᓇᐅᔭᑦ ᕿᑎᕐᒥᐅᓅᖑᓗᑎᒃ.

ᒦᓇ ᓯᓚᕐᔪᐊᒥ ᐅᖅᓱᐊᓗᒃ ᐊᑭᒋᕙᒃᑕᖏᑦ ᖃᑦᓯᕌᓐᓂᕆᕙᒃᑕᖏᑦ ᑎᑭᐅᑎᒐᐃᒪᑕ ᐃᖅᑲᓗᒃᑑᑦᑎᐊᒍᑦ ᐱᔪᑦ ᑐᓚᒃᑕᖅᕕᖕᒐᓂᒃ ᕿᖑᐅᒻᒥᒃ ᐊᑭᓐᓂᖅᓴᐅᓕᕋᔭᖅᑐᑦ ᑎᑭᐅᑎᓯᒪᔪᓄᑦ 30%-ᒥᒃ ᒦᓇ ᐊᑭᐅᕙᒃᑐᑦ 2003-ᒥ ᖃᑦᓯᕌᓐᓂᕆᕙᒃᑕᖏᑦ ᐅᖅᓱᐊᓗᐃᑦ ᐱᔪᑦ Hay River-ᒥᒃ. ᖃᑦᓯᕌᓐᓂᕆᕙᒃᑕᖏᓪᓗ ᐅᓯᔭᑦ ᖃᓪᓗᓈᑦ ᓄᓇᖑᐊᓂᒃ ᐅᓯᔭᐅᓗᑎᒃ ᓄᓇᓯᐅᑎᒃᑯᑦ ᑐᓚᒃᑕᖅᕕᒃᑕᓕᖕᒨᖅᑕᐅᒃᐸᑕ ᐊᕐᑯᑎᒃᑯᑦ ᐅᑭᐅᒥ

ᐊᒻᒪᓗ ᐅᓯᕗᒃᑯᑦ ᐃᒫᒍᑦ ᐅᒥᐊᕐᔪᐊᒃᑯᑦ ᐃᖃᓗᒃᑑᑦᑎᐊᒍᑦ ᐊᔾᔨᒌᓐᓂᖃᔅᓯᒍ ᐊᑭᑕᐅᕙᔅᓯᑕ ᐅᓯᔭᐅᕚᒃᑐᑦ Hay River-ᑯᑦ ᐊᒻᒪᓗ ᓱᓇᑐᐃᓐᓇᐃᑦ ᑎᑭᔮᑦ ᑎᑭᖃᑦᑕᖅᔅᓯᑕ ᓄᓇᓕᖕᓄᑦ ᕿᓚᒥᐅᓂᖅᓵᖅ ᐱᓇᓱᐊᕈᓰᑦ ᓯᑕᒪᑦ ᐱᖕᖒᔪᖅᑐᓪᓗᑭᐊᖅ ᓯᕗᕚᖅᓯᒪᓂᖅᓴᐅᖃᑦᑕᓕᕐᓗᑎᒃ; ᐅᐱᖖᒥ ᓴᓇᓐᓇᐅᕚᒃᑐᖅ ᓈᒻᒪᒃᓯᕙᐃᒻᒪᑦ ᐃᒡᓗᓕᐅᖅᑎᓄᑦ ᐊᑑᑕᐅᖖᖄᖅᐸᓕᕐᓗᓂ ᑕᐃᒪᓐᓇ ᐊᐅᔫᖃᐅᓕᖅᑎᓐᓇᔪ. ᐅᓯᔭᒃ ᐊᑭᓯᕚᒃᑕᖏᑦ ᑕᒪᒃᑯᐊ ᓱᓇᑐᐃᓐᓇᐃᑦ ᓂᐅᕕᐊᒃᓴᐅᕚᒃᑐᑦ ᑎᑭᑎᑕᐅᕚᒃᑐᑦ ᐃᖃᓗᒃᑑᑦᑎᐊᒍᑦ ᐱᔪᑦ ᐅᖁᐊᓂᒃ ᑲᓇᑕᐅᐸ ᑐᓚᒃᑕᕕᖕᒍᑦᐃᒫᒃ ᐊᑭᑭᓐᓂᖅᓴᐅᓕᖃᔭᖅᑐᑦ 30%-ᒥᒃ ᐅᕝᕙᓇᓕ ᑎᑭᐸᖕᓚᑕ Hay River-ᑯᑦ. ᒥᒃᓴᐅᓴᒃᑯᑦ ᑕᒪᕐᒥᒃ ᐊᑕᖏᖅᑎᓪᓗᖏᑦ ᐊᒥᐊᒃᑯᓂᖅᓴᐅᕙᔅᓯᑕ ᐅᖅᓱᐊᓗᖕᒍᑦ ᐱᓗᐊᖅᑐ5 ᐊᖏᓂᖅᓴᐅᕙᔭᖅᑐᑦ $3 ᒥᓕᐊᓐᓂᒃ ᐊᕐᕌᒍᑕᒫᑦ ᕿᑎᕐᒥᐅᓄᑦ.

ᑕᒪᒃᑯᐊ ᐱᕚᓪᓕᕈᑕᐅᕙᔭᖅᑐᑦ ᐊᒥᐊᒃᑯᐃᑦ ᓴᕿᐅᒪᓂᖃᒻᒪᑕ ᑕᒪᓐᓇ ᐊᑐᑎᓂᖃᓪᓚᖑᔪᓐᓇᕐᒪᑦ ᐱᓕᕆᐊᒃᓴᖅ ᐊᑭᑭᓐᓂᖅᓴᐅᓕᖃᔅᓯᑕ ᐅᖅᓱᐊᓗᐃᑦ ᐊᒻᒪᓗ ᓂᐅᕕᐊᒃᓴᑦ ᑐᕋᖅᑐᑦ ᓂᐅᕕᖅᕕᕐᑯᑎᓕᖕᓄᑦ ᕿᑎᕐᒥᐅᑦ ᓄᓇᓕᖕᖏᓐᓂ, ᐱᓗᐊᖅᑐᒥᒃ ᐱᓕᕆᐊᒃᓴᖅᑳᕖᐅᐸ ᓴᓂᐊᓃᑦᑐᓄᑦ. ᓂᕆᐅᓇᕐᑐᖅ ᑕᒪᓐᓇ ᐱᓕᕆᐊᒃᓴᒍᑦ ᐱᔾᔪᑕᐅᔪᖅ ᐃᒫᓪᓚᕆᒃ ᐊᑭᑭᓐᓂᖅᓴᐅᑎᕐᓯᓕᖃᔅᓯᒪᑦ ᐊᒃᑐᐊᔪᓄᑦ ᐃᓄᓯᕆᔾᔪᕐᓄᑦ ᕿᑎᕐᒥᐅᑎᒍᑦ ᐊᒻᒪᓗ ᐆᒻᒪᕈᑕᐅᓪᓚᕆᐅᔭᖅᓯᓂ ᐊᑑᑎᓂᖕᒐ ᓄᓖᓄᑦ ᐊᑑᑎᔾᔮᓂᒃ ᐅᔭᖃᒃᓴᓂᒃ ᐊᐅᓚᕐᓯᓂᖅ ᐱᕆᐊᓖᕐᑎᓪᓗᕆᑦ ᓇᓂᓯᒐᓱᐊᕐᓂᕐᒍᑦ ᐊᒻᒪᓗ ᓴᕿᐊᑎᕆᔾᔪᑎᖏᓐᓄᑦ ᕿᑎᕐᒥᐅᓂ ᓄᓇᕙᕐᒥ ᐊᒻᒪᓗ ᓴᕿᐊᒐᔭᕐᒪᑕ ᐊᒥᓱᑦ ᓄᑖᑦ ᐱᓕᕆᐊᒃᓴᐃᑦ ᓴᓇᔭᒃᓴᐃᑦ ᓄᓇᓕᖕᓄᑦ ᐱᓕᕆᕝᕐᑯᑎᓕᖕᓄᓪᓗ ᑖᒥᓂ ᓄᓇᒥ ᐊᕝᒃᑐᖅᓯᒪᓂᐊᒍᑦ.

ᐃᓚᒋᓕᐅᑎᓪᓗᑎᒡᓗ, ᑮᓇᐅᔾᔭᒃᓴᐅᑎᓅᖓᔪᑦ ᒪᑭᒪᔾᔪᑎᑦ ᑐᑭᖏᓐᓂᒃ ᖃᐅᔨᓴᕐᓂᖅ ᓱᕐᑯᐃᔭᐃᓂᖅ ᓯᕗᖓᒍᑦ ᓴᕿᐅᒪᓂᖃᓕᕐᒪᑕ ᖃᓄᑐᐃᓐᓇᖅ ᐱᓕᕆᐊᒃᓯᓕᕆᓂᕐᒍᑦ ᑕᒪᑐᒥᖓ ᑲᓇᖕᓇᖓᓂ ᑲᓇᑕᐅᐸ ᐃᒫᓪᓚᕆᒃ ᓱᕋᐃᒍᔭᕐᒪᑦ ᐊᒃᑐᐃᓂᖓ ᐱᔪᓂᒃ ᖃᓪᓗᓈᑦ ᓄᓇᖓᓐᓂᒃ, ᐊᑐᐃᓐᓇᐅᕚᖏᑦᑐᑦ ᑕᕝᕚᓴᐃᓐᓇᖅ ᓴᓇᔭᒃᓴᑦ ᐊᒻᒪᓗ ᓂᐅᕕᐊᒃᓴᑦ ᑭᓱᑐᐃᓐᓇᐃᑦ ᐊᑑᑎᔾᔮᒃᓴᑦ.

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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 following the 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 Government of Nunavut has developed a detailed plan for Nunavut with the help of the people and organizations in Nunavut. This plan was finalized by Cabinet in Bathurst Inlet in August 1999 and became known as the "Bathurst Mandate". The plan sets out the priorities for Nunavut, outlining specific objectives for the first five years but also looks to the future, creating a vision of Nunavut in the year 2020.

The Nunavut priorities are:

- Healthy Communities
- Simplicity and Unity
- Self Reliance
- Continued Learning

Some of the underlying principles of these priorities include:

- People come first;
- Nunavut needs to provide options and opportunities which build the strengths of individuals, families and communities;
- Building the capacity of communities will strengthen Nunavut;
- Traditional activities and values will be incorporated into new strategies to participate actively in the development of economic resources.

The vision for 2020 includes the following:

- Well informed individuals and communities have the capacity and exercise responsibility for decision making; Nunavummiut own and manage a strong mixed economy where residents have productive choices for economic participation;
- Strong transportation and communication links exist between communities and southern Canada, and increase communities' land and water access;
- Create and maintain an *Economic Strategy* for Nunavut;
- Nunavummiut are active in taking up an increasing number of economic opportunities and have low levels of dependency on government.

Furthermore, the Government of Nunavut has developed a *Transportation Strategy* with a vision for transportation in Nunavut to the year 2021. Part of the vision for Land Transportation includes *"…important new surface transportation routes…between the Kitikmeot region mining properties and Bathurst Inlet. These are all-weather routes where resource development projects are able to contribute substantially to the required funding"*.

In addition, the Nunavut Planning Commission together with the people of the Kitikmeot have been developing a Draft West Kitikmeot Regional Land Use Plan. This Plan has been developed with a recognition that development of transportation infrastructure with resulting increased development of mineral resources is important to the future social and economic development of the region. The Plan envisions, in 15 to 20 years, a region where: *"Mines are operating and more are being considered. Skilled local people are working at the mines or for local businesses providing support services to those mines. A well-planned, environmentally sensitive transportation network exists to provide access to the mineral resources, southern market and the communities"*.

In all of the above, "Transportation Infrastructure" is the keystone for a sustainable future.

In their *"Nunavut Economic Outlook, 2001"*, the Conference Board of Canada states:

> ***"The state of infrastructure in Nunavut is a serious problem that is affecting both the economic and social development of the territory."***

A major issue facing all Nunavut communities is the lack of transportation infrastructure. In southern Canada, governments have generally provided transportation infrastructure such as roads and ports. In the north, during the last 20 years or so, where specific projects or regions required major transportation infrastructure, there has been a general reluctance for governments to become involved. Most of the existing infrastructure supporting the economic and social development of northern Canada was installed by or in direct response to resource development. 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 at Yellowknife, 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.

The vast area of Nunavut, with relatively small isolated communities, is a major obstacle to the development of roads. There is also an absence of marine infrastructure in Nunavut, even with the strong reliance on marine transport for supplies during the short summer shipping season.

The only non-municipal road transportation infrastructure developed within the Kitikmeot region has been the winter road from Yellowknife to Lupin Mine, now also servicing the Ekati™ Mine, Diavik Mine and other developing diamond projects in the Northwest Territories. The winter road capacity is limited by weather and by the additional trucking requirements for the new diamond projects south of the Nunavut border. Transporting fuel and supplies through a port at Bathurst Inlet could provide reductions in operating costs and increased security of supply for these mines also.

The Kitikmeot Inuit Association and the Kitikmeot Development Corporation have taken the lead to provide much needed transportation infrastructure for resource development in their region through the Bathurst Inlet Port and Road Project. By forming a partnership with industry and governments they have been able to raise the funds to begin moving this exciting project forward through the feasibility and into environmental assessment stages.

Prior to June 2000, approximately $4 million of preparatory work had already been undertaken to advance the Project. This preparatory work included, hydro-graphic studies to assess the most appropriate shipping channels and location of the port; proposed routing for the road network; preliminary economic studies of the project capital and operating costs; and modeling to assess the economic performance of the port and road project. This work was supported by the Kitikmeot Corporation, KIA, GNWT, DFO and industry.

In June 2000, following a meeting in Cambridge Bay, a Technical Committee was formed to move the Project forward. The Committee is comprised of representatives from the Kitikmeot Inuit Association, Kitikmeot Corporation, Nuna Logistics Limited, Inmet Mining Corporation, Hamlet of Kugluktuk, Government of Nunavut (DSD and CG&T) and since November 2002 a representative from Bathurst Inlet.

A Feasibility Study was completed in 2002 (Nishi-Khon/SNC-Lavalin and Kitikmeot Geosciences). The environmental baseline studies were completed in April 2003 (Rescan Environmental Services Ltd. and Kugluktuk HTO). All of these studies were under the supervision of the Project Technical Committee.

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, Echo Bay Mines, Fednav Limited, Government of Nunavut, Hope Bay Joint Venture, INAC, Inmet Mining Corp., Kinross Gold Corp., Northern Transportation Company Limited (NTCL), Nuna Logistics Limited, and Tahera Corporation.

The original Feasibility Study was based on an all-weather road from Bathurst Inlet to the Izok Project, linked by a summer barge or winter ice road on Contwoyto Lake. The Study has been revised to cover the reduced scope of this Project, which includes a port site on Bathurst Inlet, an all-weather road to Contwoyto Lake and a small camp at Contwoyto.

Findings of the revised feasibility study include:

- 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. The Project will provide increased certainty and security of supply;

- fuel supplied via the port proposed by this Project can be delivered to Lupin and Jericho, at lower costs 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 barge from Hay River, NWT;

- supplies delivered to the port via Yellowknife and the Lupin winter road can be shipped to Kitikmeot communities for a lower cost than the current barge network via Hay River and Tuktoyaktuk;

- supplies for Kitikmeot communities from suppliers in eastern Canada could be landed in Cambridge Bay for significantly less freight costs than via barge from Hay River or via 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. This provides a potential to increase the summer construction season by the same amount.

The primary benefits of the Port and Road Project will be:

- ***A reduction in the cost of fuel and supplies for Kitikmeot communities.*** Nunavut communities to be serviced by the Project will include Kugluktuk, Cambridge Bay, Umingmaktok, Bathurst Inlet, Taloyoak and Gjoa Haven. Fuel and supplies will be transported into Bathurst Inlet and shipped by barge to the communities, with significant cost savings.

- ***Reduced capital and operating costs for mineral exploration, mine development and operations in the northern portion of the Slave Geological Province resulting in more exploration activity.*** A large number of other mineral deposits have been identified within this region. Advanced projects in the region include Izok, George Lake, Goose Lake, Ulu, Hope Bay gold deposits and the Tahera diamond project. A new road system connecting to an arctic port will stimulate further exploration and increase the value of existing deposits leading to a greater probability of mine development.

  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 yet to be realized due, for the most part, to the lack of transportation infrastructure.

- ***Increased employment, training, business development and the resulting social benefits in the region.*** Nunavut has the youngest population in Canada, approximately 60% of the population is under 25 years of age. The unemployment rate for the Inuit in Nunavut was 35.8% in 1999, with the 15 – 24 age group averaging 48.1%. The mining industry has the greatest potential for employment in the future. The Kitikmeot communities rely on mixed economies blending wage employment, resource harvesting and government transfer payments and will benefit considerably from the increase in local employment and investment that the Project will provide.

- ***Increased economic activity and taxation revenues to Nunavut and Canada.*** While the Project is based in the Kitikmeot and substantive and sustainable benefits are expected for the Kitikmeot communities, the Project will also benefit the rest of Nunavut, the Northwest Territories and Canada through a stronger economy and tax revenues.

The findings of the Project feasibility study have shown that the Project as proposed is much more than a transport system for mines in the Slave Geological Province. 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.

The Project will provide lower costs for fuel, supplies and power (diesel fuel) resulting in a higher standard of living for Kitikmeot residents.

The establishment of a marine port on Canada's Arctic coast, even though connected to the rest of Canada by road for only 100 days per year, will provide a significant boost to the security and sovereignty of the Arctic and Arctic waters. This is especially true considering the closure of Polaris and Nanisivik mines and the future reclamation of these sites.

This Project Description describes the physical configuration of the Project, the environmental setting of the Project area, schedules for Project construction and operations, and the interactions of the Project 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 the **Bathurst Inlet Port and Road Joint Venture Ltd.** Bathurst Inlet Port and Road Joint Venture Ltd. 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, LICENSES, AND PERMITS

Project construction is entirely in Nunavut and will develop a marine port, and 211 km of all-weather road. Project operations will include:

- annual re-supply of Kitikmeot communities with fuels and other bulk cargo;
- annual re-supply of fuel and other bulk cargo for the Lupin and Jericho mines, in the West Kitikmeot region of Nunavut;
- annual re-supply of diesel fuel and some bulk operating supplies to Ekati™ and Diavik diamond mines in N.W.T.

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, licenses, and approvals required by the Project throughout its operating life and for its closure are enumerated below for each of the Project stages: construction, operations, and abandonment. All of 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 or were submitted earlier with the previous application. 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. The environmental review is expected to be conducted by NIRB under NLCA Article 12 Part 5, (see Appendix 5).

1.3.1 Construction Phase: Project Proposal, Environmental Screening, and Project Review

- **Nunavut Planning Commission**
  Robert Lyall, Chairman
  Tel. 867 983 2730

  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**
  Thomas Kudloo, Chairman
  Tel. 867 360 6338

Project review and Water Use License pursuant to NLCA Article 13.

Water use and waste disposal by Project operations including the camps are subject to terms and conditions of a license 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 4 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**
  Charlie Evalik, President
  Tel. 867 983 2458

  Land use license 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 a camp at Contwoyto Lake.

  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 at 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).

- **Indian and Northern Affairs Canada (INAC)**
  Wilf Attwood, Regional Director General
  Tel. 867 979 4501

  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.

  The port and about 60% 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 INAC will forward the applications for the permits and leases, and this Project Description to NIRB for screening.

- **Nunavut Impact Review Board**
  Elizabeth Copland, Chairman
  Tel. 867 983 2691

  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, INAC, and the NWB. NIRB would then conduct a screening and report its findings to the Minister of

INAC. 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 EIS. On refinement, the Project Description will be resubmitted to NIRB for final review and report of findings to the Minister. The Minster 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)**
  Bert Hunt, District Manager
  Tel. 867 979 8009

  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).

  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.

1.3.2 Operations Phase: Required Operating Licenses and Permits

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

  Land use license pursuant to NLCA Article 21 for operating roads, quarries, and a camp.

  Surface leases on Inuit Owned Lands pursuant to NLCA Article 21 for exclusive use to operate a camp.

  Implement IIBA pursuant to NLCA Article 26.

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

- **Nunavut Water Board**
  Thomas Kudloo, Chairman
  Tel. 867 360 6338

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

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

- **Indian and Northern Affairs Canada (INAC)**
  Wilf Attwood, Regional Director General
  Tel. 867 979 4501

  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 a camp fuel tank farm.

  Quarry leases and/or permits to operate quarries on Federal Crown Land.

  The licenses 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.

1.3.3 Closure and Abandonment: Approvals

- **Nunavut Impact Review Board**
  Elizabeth Copland, Chairman
  Tel. 780 890 8760

  Approval for closure and abandonment plan as it affects lands and waters in Nunavut.
- **Nunavut Water Board**
  Thomas Kudloo, Chairman
  Tel. 867 360 6338

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

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

  Approval for closure and abandonment plan for installations on IOL.

- **Indian and Northern Affairs Canada (INAC)**
  Wilf Attwood, Regional Director General
  Tel. 867 979 4501

  Approval for closure and abandonment plan for installations on Federal Crown land.

1.4 PREVIOUS ENVIRONMENTAL ASSESSMENTS

No previous environmental assessments have been completed for this Project. A broad scoping study of a transportation corridor through the SGP was completed for the Department of Transportation, Government of the Northwest Territories (Ferguson Simek Clark, 1999).

Elements of this Project Description were originally developed in the Izok Project Environmental Evaluation by Metall Mining Corporation in 1993; the materials included in this Preliminary Project Description derived from that Project will be cited as "Metall 1993". Metall Mining has since been renamed and is now called Inmet Mining Corporation. Inmet is an active participant in the Project Technical Committee.

2.0 PROJECT DESCRIPTION

2.1 PROJECT TITLE

Bathurst Inlet Port and Road Project

2.2 TYPE OF ACTIVITY

A new all-weather road connecting the Tibbitt to Contwoyto Winter Road with a marine shipping terminal on Bathurst Inlet is proposed. The marine shipping routes for this Project would use existing shipping lanes from the eastern arctic that have served Polaris Mine on Barrow Strait since 1980. The route from Barrow Strait will be south through Peel Sound (Chart #7575), Franklin Strait (Chart #7573), Victoria Strait (Chart # 7784), cross Queen Maud Gulf, pass through Dease Strait, and enter Bathurst Inlet (Figure 37). The portion of the route from Barrow Strait to Queen Maude Gulf, a distance of approximately 650 km, is currently not a regular shipping route but has been used by summer tourist cruise ships and other vessels "sailing the Northwest Passage". The remainder of the eastern shipping route, through Queen Maud Gulf, Dease Strait and into Bathurst Inlet, is used annually for the sealift re-supply of Gjoa Haven and Taloyoak to the east, and Umingmaktok and Bathurst Inlet in Bathurst Inlet. The final 40 km of the route south of Bathurst Inlet community is also new but has been charted (Canadian Hydrographic Service charts # 7781, 7793). Shipping to Kugluktuk would follow the route that has been used for marine barge operations by Northern Transportation Company Limited for many years in annual re-supply to Kitikmeot communities.

The proposed land route, an all-weather road, from Bathurst Inlet to the northeast shore of Contwoyto Lake crosses 211 km of tundra. A 69 km winter road will cross Contwoyto Lake to Lupin. (Figure 1)

The all-weather road will have a single lane 8 m wide running surface with a 12 m wide passing turnout at 1 km intervals.

Winter road operations as proposed would include re-supplying the diesel fuel and specific bulk cargo needs to Ekati™ and Diavik diamond mines south of Contwoyto Lake and to Lupin and Jericho to the north using the exiting winter road. Winter road operations may also include shipments of general cargo from the south destined for Kitikmeot communities by way of a Bathurst Inlet based summer barge service. The summer barge operations will also ship fuel to Kitikmeot communities from the port in Bathurst Inlet.

2.3 ALTERNATIVE AND PREFERRED OPTIONS

Previous studies have examined several road alignments from the Slave Geological Province to a marine shipping terminal on Bathurst Inlet. The Izok Project investigated a port site 20 km east of Kugluktuk and a 270 km all-season road to the Izok Project base metal deposit (Metall Mining, 1993). Figure 2 shows the locations of these routes and road alignments. The rationale for the current Project configuration is its reduced construction and operating costs; also, flatter topography over the length of the present road alignment will require less terrain disturbance for construction due to reduced borrow and quarry material needs. These factors also contribute to reduced capital costs for construction. The proposed Project alignment is also amenable to serving more sites currently active in Nunavut. It is also better aligned to serve other mineral deposits whose economic potential may be enhanced by the lower development and operating

costs as a direct result of the Project. Also, the landed cost of diesel fuel at Ekati™ and Diavik diamond mines in the Northwest Territories from Bathurst Inlet, by way of the Lupin winter road south of Contwoyto Lake, will be less than the current supply out of Edmonton via Yellowknife. Similarly, the freight cost of general cargo into Kitikmeot communities procured in eastern Canada and brought in through the Bathurst Inlet Port is estimated to considerably less than the current transportation system based out of Edmonton and shipped via barge from Hay River.

This Project description addresses the issues raised in the draft West Kitikmeot Regional Land Use Plan by the Nunavut Planning Commission (1997) with respect to route selection for a transportation corridor (draft West Kitikmeot Regional Land Use Plan Appendix 6) and guidelines for developing a transportation corridor (draft West Kitikmeot Regional Land Use Plan Appendix 7).

No new and/or untried design and construction methods, or transportation techniques are contemplated for any aspect of the Bathurst Inlet Port and Road Project.

2.4 PROJECT LOCATION AND LAND STATUS

All the elements of the Bathurst Inlet Port and Road Project are situated entirely within Nunavut. Figure 3, and Table 1 show the location and describe the areas of land ownership affected by the different elements of the Bathurst Inlet Port and Road Project, respectively. The Project and related infrastructure proposed will be located on Inuit Owned Lands (IOL) owned by the Kitikmeot Inuit Association and on Federal Crown land.

Facilities on IOL include:

- Contwoyto camp 1.5 ha
- 82.3 km of road, 140.5 ha (including 18 quarries)

Facilities planned for Federal Crown land include:

- the Bathurst Inlet port site including camp and airstrip - 159 ha
- 128.9 km of road, 211.2 ha (including 19 quarries and pits)

The locations of the proposed gravel pits and quarry sites for road construction materials are shown on Figure 4.

The design and construction technologies for all alternatives examined to date are similar with the exception that a Nuna Logistics proposal had a narrower running surface. In every case a route alignment has been proposed for an all-weather road built with local gravel and/or crushed rock overlying undisturbed tundra. The selection of the alignment and placement of materials would protect the underlying permafrost from thermal degradation. The road alignment connects a tidewater marine shipping port with inland mining locations. The port would handle incoming bulk materials, primarily diesel fuel, explosives, and grinding media. The road would enable the movement of these bulk commodities from tidewater by conventional highway tractor/trailer haul units. The port would be re-supplied with marine shipments of bulk goods on a shipping schedule determined by marine ice conditions, community concerns, and environmental considerations.

The preferred options for the Project were set by the Technical Committee to include specific criteria for the port site, and the road alignment.

Port site selection criteria for the Project included the following:

- the port site should have a steep shoreline to 15-metre water depth to accommodate large ice class vessels. The dock site has been designed to handle 50,000 tonne vessels carrying fuel, mineral concentrate and general bulk cargo. Vessels of this capacity would be required only when a base metal project is brought into production. It is estimated that this Project will require vessels up to 25,000 tonnes;
- the port site ocean floor marine geotechnical conditions should support a closed cell sheet pile rock filled wharf;
- port site shoreline should provide rock foundations for shore side structures;
- the port should have an ice-free season of 100 - 110 days per annum;
- shoreline features should provide a free vessel turning distance of 1,400 metres, allowing ships to operate without tug support;
- the port site should also accommodate marine tug and barge units for community re-supply;
- the port site should be close to local source of rock and granular construction materials;
- the site should have a nearby site that offers suitable conditions for a 1,200 metre airstrip;
- the site should include room for future expansion.

Road route selection criteria included:

- the route should be accessible by current and potential mines;
- the route should have terrain slopes less than 8% to minimize “cut and fill” sites;
- the route should be in close proximity to rock and granular construction materials to keep construction haul distances under 10 km;
- the route should maximize surface and near-surface rock road base to reduce drainage pattern alteration;
- the route should minimize the number of water crossings to reduce construction costs and minimize interference with fish and fish habitat.

Table 1. Land status of port, road alignment, and Contwoyto camp site

Facility	Location	Land ownership	Disturbed Area (ha)		Total		Sub Surface Interests*
			Road	Quarry/Pit	IOL	Federal	
Port, camp and airstrip	km 0	Federal Crown				**159.0**	Wheaton River Nunavut Ltd.
Port to Contwoyto	km 0 – 2.4	Federal Crown	3.2	2.0		5.2	Wheaton River Nunavut Ltd.
Lake Road	km 2.4 – 20.2	IOL: BB-27/76 J**	23.5	10.0	33.5		
	km 20.2 – 29.1	Federal Crown	11.7	4.0		15.7	
	km 29.1 – 34.5	IOL: BB-16/76 G, J**	7.1	4.0	11.1		
	km 34.5 – 56.6	Federal Crown	29.1	10.0		39.1	
	km 56.6 – 59.7	IOL: BB-16/76 G, J**	4.1	2.0	6.1		
	km 59.7 – 62.0	Federal Crown	3.0	0		3.0	
	km 62.0 – 66.4	Federal Crown	5.8	0		5.8	974143 N.W.T.Ltd.
	km 66.4 – 67.3	Federal Crown	1.2	2.0		3.2	
	km 67.3 – 70.7	IOL: 16/76 G, J**	4.5	2.0	6.5		
	km 70.7 – 75.3	Federal Crown	6.1	2.0		8.1	
	km 77.3 – 85.1	Federal Crown	12.9	6.0		18.9	Pinnacle Resources Ltd.
	km 85.1 – 89.1	Federal Crown	5.3	2.0		7.3	
	km 89.1 – 90.6	Federal Crown	2.0	0		2.0	
	km 90.6 – 92.9	Federal Crown	3.0	0		3.0	
	km 92.9 - 93.2	Federal Crown	0.4	0		0.4	Echo Bay Mines Ltd.
	km 93.2 – 94.6	Federal Crown	1.8	0		1.8	C. Ronaghan
	km 94.6 – 95.1	Federal Crown	0.7	0		0.7	Echo Bay Mines Ltd.
	km 95.1 – 100.9	Federal Crown	7.6	0		7.6	C. Ronaghan
	km 100.9 – 114.5	IOL: BB 04/76 F**	17.9	4.0	21.9		C. Ronaghan
	km 114.5 – 126.6	Federal Crown	16.0	4.0		20.0	C. Ronaghan
	km 126.6 – 149.0	IOL: BB 05/76 F**	29.5	6.0	35.5		C. Ronaghan
	km 148.5 – 155.7	Federal Crown	8.8	2.0		10.8	
	km 155.7 – 164.8	IOL: BB 17/76 F**	12.0	2.0	14.0		
	km 164.8 – 200.6	Federal Crown	47.2	8.0		55.2	Kennecott Cad. Exploration Ltd.
	km 200.6 – 203.1	Federal Crown	3.3	0		3.3	
	km 203.1 – 203.2	Federal Crown	0.1	0		0.1	TeckCominco
	km 203.2 – 210.7	IOL: CO-12/76/E **	9.9	2.0	11.9		Aber Resources Ltd
Sub-total			**277.7**	**74.0**	**140.5**	**211.2**	
Contwoyto Camp	km 210.7	IOL: CO-12/76/E			1.5		Aber Resources
Inuit Owned Land	± 82.3 km						
Federal Land	± 128.9 km						
Totals			**277.7**	**74.0**	**142.0**	**370.2**	

* indicates parties with mineral claims along segment of proposed Project road alignment

** IOL = Inuit Owned Land; alphanumeric code is the specific block of IOL affected

2.5 SITE ACCESS AND TRANSPORTATION METHODS

2.5.1 Marine Access

Marine access to the proposed port site from the northeast will use existing shipping lanes that have served Polaris Mine near Barrow Strait since 1980. From Barrow Strait the route will be south through Peel Sound, Franklin Strait, Victoria Strait, cross Queen Maud Gulf, pass through Dease Strait, and enter Bathurst Inlet. The portion of the route from Barrow Strait to Queen Maude Gulf, a distance of approximately 650 km, is currently not a regular shipping route but has been used by summer cruise ships and other vessels. The remainder of the shipping route, through Queen Maud Gulf, Dease Strait and into Bathurst Inlet, is used annually for the sealift re-supply of Gjoa Haven and Taloyoak to the east, and Umingmaktok and the Bathurst Inlet community. The final 40 km of the marine route south of Bathurst Inlet community is new. Barging to the communities will follow commercial shipping lanes used annually by Northern Transportation Company Limited (NTCL) in the annual marine re-supply of the coastal communities of Nunavut.

2.5.2 Overland Access

The transportation network proposed by the Project interconnects with the current Lupin winter road on Contwoyto Lake. The winter ice road on Contwoyto Lake is part of the current winter road between Yellowknife and Lupin Mine (Tibbitt to Contwoyto). (Figure 1)

2.6 PROJECT CONSTRUCTION

All Project construction activities will be based at, or serviced from camps at the Bathurst Inlet Port site and Contwoyto Camp. The road will be built in two "spreads", the initial spread from the Contwoyto camp site east and north; the second spread from the port site south and west towards Contwoyto Lake to meet up with the initial spread. The overall construction schedule will proceed in a sequence that includes:

- Port site development — late summer 2005 to winter 2006/2007;
- Road from km 0 (port) to km 126 — winter of 2005 through to the fall/ winter of 2006;
- Road from Contwoyto to km 126 — February 2005 to late fall 2006
- Contwoyto camp — January / February 2006

Figure 5 provides a schematic overview of this schedule; a more detailed Project construction schedule is provided in Appendix 3.

The initial shipment to start Project construction in September 2005 will include equipment and supplies for both port and road construction.

Mobile equipment	Equipment	Supplies
1 -150T crane 1 -50 T crane 1 -Fuel tanker 2 -Fuel trucks	1 maintenance shop 1 spill abatement equipment trailer 4 power generators 2 heat recovery units switch gear	7 rolls geo-textile 8 HDPE liner rolls with deploy equipment Sheet piling

3 -CAT D 8 dozer 4 -CAT 988 loader 1 -25T fork lift 1 -5 T fork lift 1 -boat with motor 1 -Hiab truck 2 -Excavator 2 -Sand/plow trucks 2 -CAT 14G graders 1 -CAT 14H grader 1 -CAT 16H grader 4 -CAT 777 trucks 2 -CAT 769 trucks 1 -100T float and tractor 2 -Tandem dump trucks 2 -Water trucks 1 -mechanics truck 1 -tractor with low bed trailer 2 -crew cab p/u trucks 1 -Ambulance 1 -Fire suppression unit 1 -12 passenger van 2 -Service trucks 1 -15 passenger van 2 -38 passenger bus 4 -Air track with compressor 1 -Tank drill 1 -CAT D 10 dozers 1 -CAT D 9 dozers 2 -CAT 992 front end loaders 2 -Agitator cement trucks	1 portable crushing and screening plant 1 Portable cement plant 1 -100 person camp for port 1 -60 person mobile camp with power plant, water treatment, and sewage treatment.	Steel for tanks Cement Bridges and decking 4 M litres diesel fuel

2.6.1 Port Construction

The first shipment of materials for construction at the Bathurst Inlet port site (shown above) will be shipped by marine barge from Hay River via Tuktoyaktuk to a staging site adjacent to the wharf site in the late summer of 2005. Functional accommodations and mess facilities for initial site work will be part of the barge shipment and will stay on site until the fall of 2006. Included in the initial shipment will be the camp, the construction equipment, construction materials for the dock, fuel and other bulk consumables for the first year of camp, airstrip and port and road construction. The fuel will be stored in a NTCL fuel barge that will be "tied up" and allowed to "freeze in" at the port site cargo staging area.

Construction for the major components of the port site is proposed to proceed as follows:

- Fall 2005 -site development
-install water supply
- Fall 2005 -150 person construction camp, potable water supply, and sewage treatment
-install first 4 fuel tanks;
-install permanent power supply;

- Winter 2005/06 -install fuel dispensing system;
- Winter/summer 2006 -construct wharf;
- Summer/fall 2006 -install remaining 6 fuel tanks;
- Winter 2006/07 -site development complete and in operation.

The facilities at the port site will be built following standard construction methods for tundra terrain. Development sites will be levelled by regular earth moving construction equipment laying down successive layers of gravel and crushed rock; in all cases care will be taken to ensure that permafrost integrity is not compromised, especially under built -up structures such as the airstrip, camp buildings, and tank farm. Overall fill requirements for port construction are estimated to be 270,000 cu m of quarried rock. The fill requirements for all site development at the port are in balance with the volume of quarried materials that must be removed for preparing the area at tidewater for the wharf. Rock for base course construction will be quarried using a standard drill, blast, and haul sequence. Rock for intermediate course and top dressing will be crushed to predetermined sizes and stockpiled for use as required.

The tank farm will be designed to include a perimeter berm and interior sumps to serve as the first line of protection in case of a large fuel spill. Also, the port site surfaces will be sloped so that all run off will pass through sedimentation ponds that can be controlled. In the event of an uncontrolled release of bulk materials that could be deleterious to marine environments, the run off would be trapped and the water treated before discharge - see Figure 6 for the configuration of the port site and related facilities. Final grades and drainage patterns will prevent site-specific surface erosion on or adjacent to the port site and associated facilities.

The sheet pile for the wharf will be driven from the ice in the spring of 2006. On completion of the sheet pile installation, rock fill will be placed in the space between the shoreline and the sheet piling. The rock fill will compact the marine clay sediment, but it is possible however, that the rock fill will displace the marine clay in which case it will have to be excavated and hauled to a spoil pile which will be located near the beach opposite km 2.5 of the road.

2.6.2 Port to Contwoyto Lake Road Construction

The road will be built using standard road building methods for tundra terrain - pushing quarried rock and granular materials over the tundra laid down by "end dump" mine trucks. In all cases the quarries and borrow pits will be developed immediately adjacent to the road alignment (Figure 4). The road base, 1 - 2 metres thick, will consist of quarried rock produced by drill, blast, load, and haul methods. This rock for the road base will be in the 600 - 900 mm size range. It will be covered with quarried crushed rock produced the same way but in the 100 mm size range. Road construction will run continuously with two shifts working 24 hours per day, 7 days per week. Road bed construction is expected to proceed at a rate of 10 km per month at each work camp; with two camps working (Port and Contwoyto camps) the rate of progress will be 20 km / month. Overall material needs for road construction from the Port to Contwoyto Lake are estimated to be 2.9 million cubic metres.

Please see Figure 7 for a typical cross section of the road.

Road construction from the port to Contwoyto Lake will proceed as follows:

- Winter 2005 -rough grade construction km 0 - 42 including bridge at km 2.5;
- Winter 2005/06 -mobilize camp and construction fleet to Contwoyto Lake;
- Winter /spring 2006 -rough grade construction km 42 -68;
- Spring/summer 2006 -intermediate grade km 2.5 - 65;
  -dress km 2.5 - 65;
- Spring/summer 2006 -rough grade km 68 – 126;
- Summer/fall 2006 -intermediate grade and dress km 65 – 126;
- Winter/spring 2006 -rough grade construction km 211 - 149;
- Spring 2006 -rough grade construction km 149 – 126
- Spring/summer/2006 -place intermediate grade and dress km 211 - 126;
- Summer/fall 2006 -complete intermediate grade to km 126;
- Fall/winter 2006 -road to Contwoyto complete and demobilize.

The equipment fleet above will be supplemented with an additional road construction fleet that will begin work from Contwoyto Lake toward the port. It will be mobilized from Yellowknife on the Lupin winter road in February 2005 and consist of:

Mobile equipment	**Equipment**	**Supplies**
1- 50T crane 1 -Fuel tanker 2 -Fuel trucks 2 -Service trucks 1 -Cat 14G grader 1 -CAT 16H grader 7 -CAT 777 trucks 2 -CAT 769 trucks 1 -100T float with tractor 1 -CAT D 6 wide pad 2 -Water trucks 2 -Sand/snow plough trucks 2 -Crew cab p/u trucks 1 -Boat with motor 2 -15 passenger van 1 -38 passenger bus 4 -Air tracks c/w compressors 1 -Tank drill 2 -CAT D 10 dozers 2 -CAT D 9 dozers	2 - 500,000 fuel tanks 1 -spill abatement equipment trailer 1 -portable crushing and screening plant 1 -60 person mobile camp with power plant, water treatment, and sewage treatment.	2 M litres diesel fuel cement bridge and deck

2 -CAT D 8 dozers 2 -CAT 992 loaders 1 -CAT 988 loader 1 -CAT 350 excavator		

Road construction workers will be based in two 60-person camps. They will be self-contained with a skid mounted sewage treatment plant and will be moved in response to progress in construction. Table 2 provides the details for a typical road construction crew required to operate two 12-hour shifts.

Table 2. Road construction crew

Job	Quantity
Site supervisor	1
Road foreman	2
Quarry/pit foreman	1
Drill/blast crew	5
Crusher crew	3
Dozer/loader/grader operators	21
Truck drivers	13
Servicemen/labourers	6
Camp/catering	5
Total	**57**

Road construction will begin with drilling and blasting rock at the quarry. The drilling/blasting pattern will be adjusted for the optimum size of blast rock required. Broken rock up to 900 mm size will be loaded into 90T trucks for hauling to the end of the road and dumping the rock for final placement by dozers pushing the rock to advance the road's base course. A portable crushing and screening plant operating in the quarry will produce the -100 mm size crushed rock road material for the top course. The crushers will not operate in the coldest months (December through February).

The rate of advance of the road is estimated to be 10 km / month and it is expected that the drills and crushers will be move every 30 days to reduce the haul distances for laying down the select granular base course of rock. Quarrying, hauling, and placing rock at the end of the road will have continuous construction activity occupy a linear distance of up to 20 km with the mobile camp located up to 20 km behind the active quarry.

2.6.3 Contwoyto Camp

Construction of the permanent Contwoyto camp will commence during the winter of 2006 as soon as the Lupin winter road from Yellowknife is operational. The campsite will be built with coarse and crushed rock on the same site development principles as the road.

2.6.4 Construction Labour Force

The construction labour needs identified in the Project feasibility study are provided in Table 3.

Table 3: Construction labour force requirements (man months)

Month/Year	2005		2006		2007	
	Port	Road	Port	Road	Port	Road
January			50	77	0	0
February			68	154	0	0
March			68	141	0	0
April			46	153	0	0
May			58	157	0	0
June			61	167	0	0
July	38		72	176	0	0
August	54		82	132	0	0
September	181		80	138	0	0
October	185	33	80	77	0	0
November	104	57	0	0	0	0
December	60	77	0	0	0	0
Sub-total	622	167	665	1372	0	0
Total Overall						**2826**

2.7 PROJECT OPERATIONS

Project operations will have a rhythm dictated by the seasons of the annual Arctic cycle. The shipping season may be variable from year to year but is expected to last approximately 110 days per year beginning as early as mid-July and running into late October. Fuel and selected cargo materials are expected to be delivered in ice class double hull tankers or OBO vessels (oil, bulk, ore). Summer shipping will also include barges from the port to Kitikmeot communities with fuel and general cargo. Table 4 shows the estimated volumes of cargo that is expected to be handled through the port in a typical year during the first 10 years of Project operations.

Table 4. Estimate of annual volume of cargo passing through the port in years 1 - 10

Destination/Source	Imports		Exports	
	Fuel (000's L)	Supplies (t)	Fuel (000's L)	Supplies (t)
Lupin	14,030	4,700		
Ekati	72,300	20,000		
Diavik	53,800	9,400		
Jericho	8,640	2,660		
Hope Bay	7,200		7,200	
Gjoa Haven	4,840	80	4,840	80
Cambridge Bay	9,360	150	9,360	250
Kugluktuk	4,800	110	4,800	150
Taloyoak	3,180	60	3,180	80
Bathurst Inlet	50		50	
Umingmaktok	60		60	
Total	**178,260**	**37,160**	**29,490**	**560**

2.7.1 Port Operations

A typical year of operations at the port will see 178 million litres of fuel delivered in six to eight voyages (round trips) through the Inlet. The time required to unload each vessel will be about 48 hours. Marine barges will load 22 million litres of fuel and 560 tonnes of general cargo for delivery to Kitikmeot communities in 3 barge movements.

As soon as marine ice conditions permit, expected to be mid-July to early August, the vessels will begin to arrive at the port in Bathurst Inlet. The shipping season is expected to last 110 days per year and six to eight voyages per shipping season are planned to deliver fuel and supplies before the end of October. In-bound freight will also include other bulk goods such as lubricants, cement, reagents, and explosives for the various mining operations served by the Project. The Camp at the Port will have accommodations for 150; 31 employees will provide the port's work force to unload fuel tankers, load the trailers hauling other bulk goods to the sites served by the Project, and maintain and manage the port and road. The remaining camp capacity will be required for the contract drivers for the trucks hauling between the port and mine sites served by the Project. Port maintenance will involve site management services such as water, sewage, garbage, and roadwork including snow removal in winter and dust suppression in summer. Basic truck and trailer maintenance services will be provided by a local team of mechanics and service personnel.

2.7.2 Road Operations

Road operations will consist of two separate activities, road maintenance by Project personnel and hauling by trucks and drivers contracted directly by the mining company requiring their services. Road maintenance crews based at the port will maintain the road to Contwoyto Lake. The crew based at the Contwoyto camp will service the southerly portion of the Contwoyto Lake ice road crossing and supplement the road maintenance towards Bathurst Inlet.

The road will operate during the 100-day winter ice road season from mid-January to late April. All trucks and drivers for fuel and cargo will be supplied by contract truckers. The Project will control and monitor traffic via radio communications and GPS tracking. Load and speed restrictions will be regulated by Project "highway patrols". Loads will be split at Contwoyto Lake for travel on the winter road.

Road operations will deliver fuel and other bulk supplies from storage at the port to Lupin, Jericho, Ekati™ and Diavik. Haulage will be by B-trains (90 tonnes) traveling up to 60 km/hr. Hauling on the Contwoyto Lake ice road will be restricted to single trailers traveling at a maximum speed of 40 km/hr. The Contwoyto Lake parking area will be a temporary parking location for trailers. All road haul operations will be winter only. Up to 45 tanker units will be required to disperse the 150 million litres of diesel to the participating mines. It is expected that the majority of the tanker fleet will be active seasonally, arriving from Yellowknife when the Lupin winter road opens and return at the end of its operating season. It is expected that fuel tanker units will operate 24 hours per day during the winter ice road season until all of the fuel and supplies are delivered. Drivers off shift will use accommodations in the main camp at the port.

Priority will be given to Inuit businesses to become involved in the trucking, this will include Inuit owner/operators.

Road maintenance will consist of snow removal where required, and sanding icy portions. Sand and crushed rock for road maintenance will be taken from borrow pits adjacent to the road alignment. Please see Figure 4

for borrow site locations. Camp size at the Contwoyto Lake camp site is expected to be 20 persons for road maintenance and emergency services.

There will be some road maintenance in summer, including bridge and culvert maintenance. The sand and gravel for winter sanding operations will be stockpiled at strategic points during the summer.

2.7.3 Contwoyto Lake Winter Ice Road Operations

The ice road will be built by crews and equipment based both at Contwoyto and Lupin. The main route running the length of Contwoyto Lake is well established; the spur to the Contwoyto road terminal will be similar. Initial snow clearing over the 30 m wide ice road is expected to begin in mid-December with the minimum ice thickness of 1.5 m for light loads being achieved by late December. Full loads are not expected to cross Contwoyto Lake until mid-January. Load and speed restrictions will be regulated by Project "highway patrols". Load and speed restrictions on the ice road of Contwoyto Lake will require that only 45 tonne single trailer loads be hauled at speeds not exceeding 40 km/hr.

2.7.4 Operations Labour Force Requirements

The work force required to operate the port and road is shown in Table 5.

Table 5: Bathurst Inlet Port and Road operations work force* requirements

Function	Quantity		Location
	Summer	Winter	
Project General manager	1	1	Cambridge Bay
Controller	1 (part time)	1	Cambridge Bay
Purchasing agent	1	0	Cambridge Bay
Accountant	1	0	Cambridge Bay
Secretary/clerk	1	1	Cambridge Bay
Personnel/Safety	1	0	Cambridge Bay
Site manager	1	1	Port
Equipment operators	2	2	Port
Labourers	2	2	Port
Catering	3	3	Port
Security/Emergency measures/coms	2	1	Port
Road maintenance operators	0	3	Port
Drivers	0	8	Port
Labourers	0	1	Port
Port maintenance mechanic	1	1	Port
Port serviceman	0	1	Port
Electrician	1	1	Port
Instrument tech.	0	0	Port
Haul truck mechanic	0	3	Port
Haul truck serviceman	0	1	Port
Total	**17**	**31**	

* work force on site on a daily basis

The project operations work force in the field will have a "fly in/out" work rotation of 21 days on and 7 days off. The total annual payroll for the operations workforce is estimated to be $1.5 million (2002 dollars). An

additional $ 9 million will be paid for contract services of drivers for contracted trucks hauling bulk supplies and fuel for a total estimated annual operating payroll of $10.5 million.

2.8 PROJECT SCHEDULE: DECOMMISSIONING

2.8.1 Quarries

Quarries and pits will be developed at locations that allow drainage and so should remain dry. Quarries that are not required for maintaining the road during operations will be contoured and abandoned on completion of road construction. At no time during the construction or operations of the Project will active erosion of any terrain on or adjacent to the port and road and associated lands be allowed to proceed unchecked of alter drainage patterns in adjacent lands.

2.8.2 Port Sites

It is expected that the project will be in use for many generations in the future, nevertheless, the Project proponents acknowledge that non-renewable resources are finite and that some day the road and associated facilities may no longer be required. Closure and abandonment will include removal of all imported materials and structures, treating all contaminated soils, contouring all surfaces to reduce the possibility of erosion, and to enhance the natural vegetation of all terrestrial surfaces disturbed or altered by the Project.

2.8.3 Road

It is expected that the project will be in use for many generations in the future, nevertheless, the Project proponents acknowledge that non-renewable resources are finite and that some day the road and associated facilities may no longer be required. Closure and abandonment will include removal of all imported materials and structures, treating all contaminated soils, contouring all surfaces to reduce the possibility of erosion, and to enhance the natural vegetation of all terrestrial surfaces disturbed or altered by the Project.

2.9 ENVIRONMENTAL PROTECTION AND CONTINGENCY PLANS

The major components of the Project from construction, through operations, and into decommissioning will have direct interactions with the environment. The effects of construction on the tundra terrain will be observable for many years. Under normal operating conditions, there will be no further long-term environmental effects. There is, however, always the chance for accident and human error, which may pose risk of negative environmental effect to the Project sites and adjacent lands and waters. Table 6 provides an overview of the environmental management system (EMS) that will be developed by the Project in preparation for obtaining Project approvals. The EMS will implement the overall Bathurst Inlet Road and Port Project Environment Policy, which is provided Appendix 1.

Table 6 Project/environment interactions and related features of the Bathurst Port and Road Project Environmental Management System

Project Activity	Interaction	Risk	Project EMS Response
marine shipping	marine passage	loss of cargo, i.e. fuel, lubricants, explosives	-compliance with AWPPA.*
camp operations	-waste water discharge -garbage disposal	-contamination and erosion; -attract scavengers	-water treatment and controlled release; -incinerate all non-effluent waste and bury the ashes; -Project operations EMS.
unloading ship cargo	coastal habitats	fuel spill, cargo spill	-port site marine spill contingency and response plan.
pit/quarry development	terrain disturbance	erosion and slumping	-avoid ice rich sites; -protect ground thermal regime ; -contour final grades and surfaces; -construction operations EMS.
port site development	-terrain disturbance/ shoreline disturbance	erosion and slumping/ alter fish habitat	-avoid ice rich sites; -protect ground thermal regime ; -contour final grades and surfaces; -alter minimal area of coastal habitat; -construction operations EMS.
road construction	terrain disturbance water crossings acid rock drainage	erosion and slumping alter fish habitat change water quality	-avoid ice rich sites; -protect ground thermal regime; -contour final grades and surfaces; -construction operations EMS; -protect flow regime in water crossing design and construction. -construction operations EMS; -avoid high sulphide content rock for road construction; -blend low sulphide content rock with neutralizing rock.
port operations	terrestrial/aquatic environments	-spills	-spill contingency and response plan.
haul road operations	-road traffic	-dust -spills of fuel, cargo, -wildlife road kills	-dust suppression; -spill contingency and response plans; -spill equipment stationed along road route and on all trucks. -wildlife has right-of-way instructions to all drivers; -Project operations EMS.
loading barge cargo	coastal habitats	cargo spill	-port site marine concentrate spill contingency and response plan.

* AWPPA = Arctic Waters Pollution Prevention Act (Canada).

A comprehensive suite of contingency plans will be submitted in support of the Project EIS.

3.0 DESCRIPTION OF THE ENVIRONMENT

3.1 TERRAIN AND GEOLOGY

The landscape of the region is low relief tundra. The road alignment rises to 400 m above sea level (asl) near km 10 and remains in the 400 - 450 m asl range all the way to Contwoyto Lake. The elevation of Contwoyto Lake is 445 m+/- (see NTS 76E).

The bedrock and surficial geology of the Project region is typical of the Precambrian shield; bedrock outcrops are common, glacial landforms such as eskers and drumlins are common with shallow lakes everywhere in sight. Examination of the lakes and other land forms along the alignment suggests that none of the lakes along the route are of great depth; similarly, the frozen tundra soils overlying the bedrock are a mere few metres thick for most of the alignment except in the area of the port where marine sediments of greater depth are expected in the first five kilometres of the route (Nishi-Khon/SNC-Lavalin and Kitikmeot Geosciences, 2002).

The chemical composition of the rock types along the road alignment was investigated to assess the potential for acid generation (Rescan 2003a). Acid generation occurs when naturally occurring sulphur in the form of sulphide in native rock is exposed to, and combines with, oxygen from the air. The run off from an area of rock with high sulphide content is usually mildly acidic. Acidic run off from man made structures of native rock can be mitigated by blending acid generating rock with basic rock so that the acidic run off is neutralized. A more satisfactory mitigation strategy would be to avoid using road-building materials that show acid generation potential. The occurrence of rock with sulphide content that has the potential to produce acid drainage was noted along the road alignment at km 99 - 104 on the Port/Contwoyto road.

Further to the field studies, acid base accounting (ABA) analysis was conducted on rock samples collected along the route. Although the samples collected from km 99-104 were not proven to be acid generating through ABA analysis, it should be noted that the samples came from a highly weathered shear zone, and that the potential exists for sulphides in the unweathered rock below the surface. ABA analysis indicated an uncertain potential to generate net acidity in an additional two areas other than those determined in the field. These sample locations are at km 65.7 and 194.5.

The risk of earthquake hazard in the Project area is rated in the lowest risk category projected on a Canada wide scale (Adams et al. 1999).

3.2 CLIMATE AND PERMAFROST

The climate of the Project area is characterized by short cool summers and long cold winters. Weather records from the Project area have been collected continuously since 1956 when a weather station was established on Contwoyto Lake. This weather station was shut down and records for the region were collected at Lupin since 1983. Figures 10 to 20 summarize the climate data collected at Contwoyto Lake, Lupin, and other locations in the Kitikmeot region.

Permafrost is a direct function of the prevailing climate over a long time. The presence of continuous permafrost in the terrain throughout the land portion of the Project shows the negative annual solar energy

budget in the region with a mean annual temperature of -11 deg. C. The depth of permafrost generally in the Project region is estimated to exceed 300 m (National Atlas of Canada). The maximum depth of thawed soils at surface in the late summer will vary depending on the type of surface cover; on bare granular sites the depth of thaw can reach 2 m (Metall, 1993) while on moss covered sites the depth of thaw will be much less. Also, permafrost is expected to be absent under large bodies of water like Contwoyto Lake and from land immediately adjacent to, and under the port site at Bathurst Inlet.

Climate records (Environment Canada) for Cambridge Bay, Jenny Lind Island, and Kugluktuk are summarized in Figures 14 to 20. Marine ice thickness analyses for Cambridge Bay and Kugluktuk were prepared for the earlier Izok Project study Metall, 1993, (Figures 21 and 22), the Cambridge Bay chart has been updated to 2003. The ice regime of the shipping route is further described in Figures 23 to 25, which show the mean ice fracture dates, mid-September open water distribution, and early winter ice consolidation dates for the shipping route from Barrow Strait near Polaris Mine to Bathurst Inlet. Observations of spring ice conditions by residents of Bathurst Inlet community show that the marine ice cover recedes from mid-June to early July with the Inlet being clear of ice by mid-July. In the fall the marine ice cover may reach 10 cm by late October. This is significant in that a 10 cm ice cover is adequate for both a snowmobile and caribou to cross the Inlet (Sam Kapolak, Bathurst Inlet resident).

A project specific climate-monitoring program began in late August 2001 with the installation of an automated meteorological station at the proposed Port site. The station uses an automatic data logger to record measurements of climatological elements. The design of the station was based on Environmental Canada guidelines.

3.3 AIR QUALITY

Data sets showing predevelopment air quality for the Project area are not available but will be developed as required for the Port site as well as the road. The prevailing winds for the area are north to northwest; air quality monitoring devices would be set up in appropriate locations to reflect the wind regime in relation to site configuration.

3.4 HYDROLOGY

Mean annual precipitation throughout the Project region is 250 mm with roughly equal amounts as rain in summer and snow in winter (please see Figure 11 for precipitation records for Contwoyto Lake: 1956 to 1982). Despite these low, desert-like annual precipitation rates, the low topographic relief throughout the Project area combined with the presence of permafrost provide conditions for numerous tundra lakes and ponds in the region. The tundra hydrologic regime is characterized by moisture accumulation throughout the winter in the form of snow, rapid melt and run off in June, and significant evaporation and transpiration throughout the short cool summer that is accompanied by light showers and rain. It is not unusual for tundra streams to dry up for periods following spring run off. The annual stream flow profile for small basins typical of the Project area can be represented by the Gordon River basin (1,530 km^2) as shown in Figure 26; it flows into Bathurst Inlet from the southeast. This basin was monitored by Environment Canada beginning in 1977 (Environment Canada, 1992). The data show zero flow for the months of January, February, March and April; very low flow in May and peak flows in June dropping off sharply in July and returning to zero flow by December. The extreme flow events recorded for the Gordon River shows that maximum instantaneous, and maximum daily flows (both recorded in June) are five times the mean daily flow for June. Mean annual water yield from run off for the entire basin for the Gordon River was 163 mm.

It is typical that summer evaporation and transpiration from tundra environments is roughly equal to summer precipitation, in the range of 100 - 150 mm (Environment Canada, 1978; UNESCO, 1976).

Detailed terrain analyses of the road alignment shows that 111 stream crossings will be required along its entire length. Figure 32 shows the road alignment in relation to drainage basins that would be bisected by the road.

3.5 VEGETATION AND WILDLIFE HABITAT

The terrestrial habitat of the Project region is typical of sub-arctic tundra. The soils of the area are of glacial origin and are for the most part well drained, supporting numerous herb and shrub species including dwarf birch and arctic willow. Low lying areas support lush wetlands with sedges and cotton grass.

Several rare plant species have been reported for the sub-arctic region generally, and are listed in Table 9. Their presence and distribution was a primary focus of the plant and vegetation study of the Project area. None of the species indicated in Table 9 were noted in the 2001 field studies of the road alignment.

Table 9 Rare plant species recorded within or near the Izok Lake-Bathurst Inlet Transportation Link

Scientific Name	Common Name	Habitat	Nearest Location
Braya glabella	Braya	mineral soil, damp tundra	near Bathurst Inlet area
Carex morrisseyi	Sedge	minerotrophic *Larix* fens	near the study area and towards Great Bear Lake and Hudson's Bay
Gentiana tendella	Gentian	local on sandy beaches and gravelly mud flats along the Arctic coast	near Bathurst Inlet
Mertensia drummondi	Drummond's Lungwort	sandy banks and eskers; not a seashore species	west of Bathurst Inlet near coast
Ranunculus pallasii	Pallas Buttercup	wet brackish meadow and slough, *i.e.* mainly along seacoast and estuaries.	near Bathurst Inlet and to west on coast

Source: GNWT 1999 in JWEL 2001

3.6 FISH AND WILDLIFE

The Project area supports a complete assemblage of Arctic fish and wildlife species. Lists enumerating marine and terrestrial species of fish, birds, and mammals reported for the Project region indicating their preferred habitats, abundance, and distribution are provided in Tables 10-15. None of the populations of wildlife species that are likely to interact with any aspect of the Project are currently listed as "at risk" in Nunavut (Government of Nunavut, 2000; unpublished).

3.6.1 Fish - Marine

The distribution of marine fish in Canada's arctic marine environments was documented in the Project scoping study (JWEL, 2001). Table 10 summarizes those findings on the species that may be present along the marine shipping route. Species appearing in **bold print** were confirmed to occupy the Project region in collections made during 2001 field studies (Rescan 2002a).

Table 10 Marine fish species, their habitat and economic status, along the marine shipping routes serving the Bathurst Inlet Port

Species	Habitat	Economic Status
Arctic cod *Boreogadus saida*	marine, demersal	subsistence
Polar cod *Arctogadus glacialis*	marine, bathypelagic	subsistence
Toothed cod *Arctogadus borisovi*	marine, demersal	subsistence
Saffron cod *Eleginus gracilus*	marine, demersal	subsistence
Greenland cod (Ogac) *Gadus ogac*	marine, demersal	subsistence
Arctic charr *Salvelinus alpinus*	anadromous, benthopelagic	subsistence and commercial
Lake trout *Salvelinus namaycush*	freshwater/brackish, benthopelagic	subsistence and commercial
Arctic Grayling *Thymallus arcticus*	freshwater/brackish, benthopelagic	recreational use
Lake whitefish *Coregonus clupeaformis*	freshwater, brackish, demersal	subsistence
Broad Whitefish *Coregonus nasus*	freshwater, brackish, demersal	subsistence
Inconnu *Stenodus leucicthys*	inshore anadromous	subsistence
Pacific herring *Clupea harengus pallasi*	Marine, pelagic	subsistence
Arctic cisco *Coregonus autumnalis*	anadromous, pelagic	subsistence
Least cisco *Coregonus sardinella*	anadromous, pelagic	subsistence

Capelin *Mallotus villosus*	marine, pelagic	subsistence
Rainbow smelt *Osmerus mordax*	anadromous, pelagic	subsistence
Longnose sucker *Catostomus catostomus*	freshwater, inshore	subsistence
Eelpouts - 9 species *Zoarcidae sp.*	marine, demersal	
Berring wolffish *Anarhichas orientalis*	marine, demersal	
Pricklebacks - 6 species *Sticheidae*	marine, demersal/benthopelagic	
Northern sand lance *Ammodytes dubuis*	marine, pelagic	
Stout sand lance *Ammodytes hexapterus*	marine, pelagic	
Ninespine stickleback *Pungitius pungitius*	freshwater/brackish, pelagic	
Fourhorn sculpin *Myoxocephalus quadricornis*	marine, demersal	
Arctic alligatorfish *Aspidophoroides oirko*	marine, demersal	
Atlantic poacher *Leptogonus decagonus*	marine, demersal	
Leatherfin lumpsucker *Eumicrotreus derjugini*	marine, demersal	
Atlantic spiny lumpsucker *Eumicrotremus spinosis*	marine, demersal	
Gelatinous snailfish *Liparis fabricii*	marine, bathydemersal	
Dusky snailfish *Liparis gibbus*	marine, demersal	
Kelp snailfish *Liparus tunicatus*	marine, demersal	
Arctic flounder *Liopsetta glacialis*	marine, demersal	

Starry flounder *Platichthys stellatus*	marine, demersal	
Longhead dab *Limanda proboscidea*	marine, demersal	
Twohorn sculpin *Icelus bicornis*	marine, demersal	
Spatulate sculpin *Icelus spatula*	marine, demersal	
Arctic staghorn sculpin *Gymnocanthus tricuspis*	marine, demersal	
Ribbed sculpin *Triglops pingelii*	marine, demersal	
Round whitefish *Prosopium cylindraceum*	freshwater/brackish, benthopelagic	
Shorthorn sculpin *Myoxocephalus scorpius*	marine, demersal	
Sea tadpole *Careproctus reinhardti*	marine, bathydemersal	
Slimy sculpin *Cottus cognatus*	freshwater/brackish, demersal	
Bigeye sculpin *Triglops nybelini*	marine, demersal	
Bering flounder *Hippoglossoides robustus*	marine, demersal	

The conservation status of marine fish in Nunavut has not been assessed (Government of Nunavut, unpublished). Fish and fish habitat in Canada are protected under the Fisheries Act (Canada). Notes on the biology and economic status of marine fishes were taken from Stewart et al (1993) and Froese and Pauly (2003).

3.6.2 Fish - Freshwater

Numerous studies of the lakes and streams in the Slave Geological Province have provided information on the distribution of freshwater fish species there (Metall, 1993; JWEL, 2001). These reports were supplemented with information from Scott and Crossman (1973, Freshwater Fishes of Canada) for preparing the freshwater species list of fishes in the Project area. Studies by the Project have refined the information on the distribution and abundance of species in the drainage basins bisected by the road (Rescan 2002b, 2003b). These data will be reported in support of the Project EIS.

The river basins bisected by the road alignment include the Burnside and Back (Contwoyto Lake drains into both), Mara/ Burnside, and the upper reaches of the Western river. Numerous freshwater and anadromous

fish species are known to occupy the region. Table 11 summarizes the species that may be present in the lakes, ponds, and streams adjacent to the road alignment. While there are currently no commercial or tourist operations that are located in the immediate vicinity of the Project's proposed facilities, some of the fish species in the region offer recreational opportunity for new commercial ventures that may arise in the future as a result of the Project.

None of the fish populations of the species in the region are listed as endangered or threatened (Government of Nunavut, 2000; unpublished). Species appearing in **bold print** were confirmed to occupy the Project region in collections made during 2001 and 2002 field studies (Rescan 2002b, 2003b).

Table 11 Freshwater fish species reported for the Project area and their conservation and economic status.

Species	Habitat/ Abundance	Conservation Status *	Economic Status/ Potential
Northern pike *Esox lucius*	lake and stream uncommon	secure	subsistence and recreational use
Longnose sucker *Catostomus catostomus*	lake	undetermined	subsistence use
Round whitefish *Prosopium cylindraceum*	lake and stream	undetermined	subsistence use
Lake cisco *Coregonus artedii*	lake and stream	secure	
Least cisco *Coregonus sardinella*	lakes and streams, anadromous	sensitive	
Arctic cisco Coregonus autumnalis	lakes and streams	sensitive	
Arctic charr *Salvelinus alpinus*	lake and stream, anadromous, common	sensitive	subsistence and recreational use
Lake trout *Salvelinus namaycush*	lake and stream, anadromous, common	secure	subsistence and recreational use
Arctic grayling *Thymallus arcticus*	lake and stream, common	sensitive	recreational use
Burbot *Lota lota*	lakes and stream, common	secure	
Ninespine stickleback *Pungitius pungitius*	lakes and streams, common	secure	

Slimy sculpin *Cottus cognatus*	lakes and streams, common	undetermined	

* the conservation status of freshwater fish in Nunavut as ranked in "Nunavut Wild Species Report, 2000" (Government of Nunavut, unpublished).

3.6.3 Birds

The bird species of the Project region include migratory and non-migratory species. Migratory birds may or may not be covered by the Migratory Birds Convention Act (Canada). Most raptor species are migratory and are not protected by the federal legislation but are covered by the Wildlife Act (Nunavut). This territorial statue is administered by the Government of Nunavut Department of Sustainable Development. The Migratory Birds Convention Act (Canada) is administered by Environment Canada. Tables 12 and 13 enumerate species that are covered by territorial and federal statute respectively; providing as well some notes on distribution and economic value. The information in these tables was gleaned from Tahera (2001) and supplemented with information from Godfrey (1966, Birds of Canada). Most bird species resident in the region are summer visitors with no particular significance to the domestic economy of the communities in the region; those that do, however, are so indicated.

None of the bird species known to breed in the Project area are listed as endangered or threatened (Government of Nunavut, 2000; unpublished; GNWT, 2000).

Table 12 Birds of the Project area protected by the Wildlife Act (Nunavut)

Species*	Distribution	Conservation Status**	Economic Status
Golden eagle *Aquila chrysaetos*	terrestrial; summer resident	sensitive	
Bald eagle *Haliaeetus leucocephalus*	terrestrial ; summer resident and migratory	accidental/vagrant	
Northern harrier *Circus cyaneus*	terrestrial; summer resident and migratory	sensitive	
Gyrfalcon *Falco rusticolus*	terrestrial; summer resident and migratory	secure	
Peregrine falcon *Falco peregrinus tundrius*	terrestrial; summer resident and migratory	may be at risk	
Rough-legged hawk *Buteo lagopus*	terrestrial; summer resident and migratory	secure	
Willow ptarmigan *Lagopus lagopus*	terrestrial; summer resident and migratory	secure	recreational and subsistence use
Rock ptarmigan *Lagopus mutus*	terrestrial; summer resident and migratory	sensitive	recreational and subsistence use

Raven *Corvus corax*	terrestrial year round resident	secure	
Snowy owl *Nyctea scandiaca*	terrestrial; summer resident and migratory	secure	
Short-eared owl *Asio flameus*	terrestrial; summer resident and migratory	sensitive	

* species appearing in **bold print** have been confirmed to breed in at least one location in the Project region

** the conservation status of birds Nunavut as ranked in "Nunavut Wild Species Report, 2000" (Government of Nunavut, unpublished).

Table 13 Birds of the Project area protected by the Migratory Birds Convention Act (Canada)

Species*	Distribution	Conservation Status**	Economic Status
Red-throated loon *Gavia stellata*	summer resident	secure	
Arctic loon *Gavia arctica*	summer resident	secure	
Yellow-billed loon *Gavia adamsii (Gray)*	summer resident	secure	
Tundra swan *Cygnus columbianus*	summer resident	secure	
White-fronted goose *Anser albifrons*	summer resident	secure	recreational and subsistence use
Canada goose *Branta canadensis*	summer resident	secure	recreational and subsistence use
Brant *Branta bernicla*	summer resident	secure	recreational and subsistence use
Green-winged teal *Anas crecca*	summer resident	undetermined	recreational and subsistence use
Northern pintail *Anas acuta*	summer resident	sensitive	recreational and subsistence use
Canvasback *Athya valisineria*	summer resident		recreational and subsistence use
Greater Scaup *Aythya marila*	summer resident	undetermined	recreational and subsistence use
Oldsquaw *Clangula hyemalis*	summer resident	secure	recreational and subsistence use
Common eider *Somateria mollissima*	summer resident	sensitive	recreational and subsistence use