

6.0 PROJECT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES

The Doris North Project as described in this updated Preliminary Project Description will involve activity on site for a period of approximately 41 months commencing in September of 2006 with the projected first landing of construction equipment on the beach at Roberts Bay through to the end of January 2010 when ore processing will be complete. In that period approximately 600,000 tonnes of development rock will be mined, 467,000 tonnes of ore extracted and processed and an estimated 306,830 ounces of gold produced. The shipping season of 2010 will see the salvageable equipment and material from the Doris Project removed and the site closed down and serve as a base for continued exploration in the Hope Bay belt. It is expected to initiate the closure and abandonment phase in the spring of 2010.

The Project as proposed would have environmental effects that are described in summarized form in the following section along with mitigation measures that will be practised to mitigate the consequences of the project's negative environmental effects.

The reader is referred to the document entitled "Final Environmental Impact Statement for the Doris North Project – Nunavut, Canada" dated November 2003 that was submitted to NIRB for a more in depth review of the projected environmental effects, mitigation measures, residual impacts and cumulative effects associated with the Doris North Project. Additional impact assessment work has been conducted in 2004 specifically in the area of Wildlife, Socio-Economic and Cumulative Effects to address deficiencies identified by NIRB in the August 2004 Final Hearing Report for the Doris North Gold Mine Project File # 02MN134. The results of this collective work will be submitted to NIRB in a series of stand alone supplementary reports expected to be available in draft form in February 2005 for stakeholder consultation.

6.1 Air Quality

The major Project interaction with air quality will be dust from surface transport during dry summer months, and the emissions produced from the combustion of diesel fuel.

Mitigation for dust will include driving at designated speeds and road surface watering as required.

Emissions from diesel fuel combustion will produce NO_x, SO_x, and greenhouse gas including CO₂, CH₄, and N₂O. The primary mitigation measure employed to reduce emissions will be an aggressive fuel conservation effort.

The total volume of diesel consumed during the Project is estimated to be 9.3 million litres. This will produce emissions estimated as follows:

NO _x -	9,256.3 kilolitres diesel x 0.84 x 0.07 =	544.3 tonnes
SO _x -	9,256.3 kilolitres diesel x 0.84 x 0.02 x 0.05 =	7.8 tonnes
Greenhouse gas		

CO ₂ -	9,256.3 kilolitres diesel x 2.73 =	25,270 tonnes
CH ₄ -	9,256.3 kilolitres diesel x 0.00016 =	1.5 tonnes
N ₂ O -	9,256.3 kilolitres diesel x 0.0004 =	3.7 tonnes

Explosives also produce emissions. The Project will consume an estimated 500 tonnes ANFO.

Emissions will be: NO _x -	500 x 0.008 =	4 tonnes
SO _x -	500 x 0.001 =	0.5 tonnes

Conversion factors: Diesel

density of diesel	0.84 tonnes/kilolitre
NO _x production	0.07 t/t of diesel
SO _x production	0.02 conversion factor x 0.05 sulphur content
CO ₂	2.73 tonnes/t of diesel
CH ₄	0.00016 tonnes/t of diesel
N ₂ O	0.004 tonnes/t of diesel

Conversion factors: ANFO

NO _x	0.070 t/t ANFO
SO _x	0.001 t/t ANFO.

Conversion factors were used as reported in the Ekati Environmental Agreement Annual 1998 Report.

6.2 Water Quality

Water quality in the Project area can be affected by surface runoff, sewage effluent, and tailings disposal. Site design, engineering, and construction will have all surface runoff from the plant site (including ore storage area) directed to a lined sump for containment and transfer to the tailings containment area by pump. The first line of defence in guarding against contaminated surface runoff will be vigilance in materials handling and an aggressive spill contingency plan.

Sewage will receive tertiary treatment in a modular skid mounted treatment plant. Treatment capacity will be 35 m³ / day. The treatment sequence will be a grinder pump, solids settling tank, and aerated bioreactors. Treated and clarified effluent disposal will be into the tailings discharge line as determined in the Projects final design and engineering.

Tailings will be discharged to Tail Lake. Water recycling and reclamation will be the primary mitigation measure to minimize environmental effects on water quality. Secondly, concentrating

the slurry that is subjected to cyanide leach circuit reduces the volume of the leach liquor and the need for regents. The final tailings output from the cyanide leach circuit is 10% of the original solids of the daily mill feed. The slurry from the cyanide leach circuit will be treated in an effluent treatment circuit within the mill using Caro's Acid to destroy the residual cyanide (through oxidation) and precipitate heavy metals as hydroxides.

Finally, managing Tail Lake as a controlled system will ensure that all water released to the environment will meet established water quality criteria as set out in the water use licence. Furthermore, water from Tail Lake will be released by a controlled pumping system into the outflow below Doris Lake, during periods of minimal potential effect on downstream aquatic life. The rate of discharge will be regulated to ensure that water quality downstream of the discharge point in Doris Creek is protective of aquatic life (i.e., not harmful to fish, benthic invertebrates or other wildlife).

6.3 Noise

Noise abatement is important at a work site that operates continuously for 24/7 (24 hours/day / seven days /week). It is also a public health issue for the workforce. Standard noise protective gear will be mandatory in work areas as required. Accommodations will be shielded as much as possible from sources of exterior work place noise for the benefit of persons off shift.

6.4 Fish and Fish Habitat

Interactions by the Project with fish and fish habitat may occur at water crossings and in Tail Lake. There will be no direct interaction between the Project and Doris Lake other than Doris Lake will be the source of fresh makeup water for the Project at an approximate rate of 35 m³ / day for the camp and other potable water uses. The mill will obtain freshwater from Doris Lake during winter months (October thru May) at an approximate rate of 1,183 m³ / day. During summer months mill make up water will be reclaimed from the tailings containment area. All water discharges from the Project will be into Tail Lake. The Tail lake trout population will be affected and mitigation measures could include removal by gill net by harvesters from Umingmaktok. Whatever option is to be used will be developed in consultation with KIA as the land lord and Hunters and Trappers Organizations of the local communities.

Water crossings by Project roads will occur below Doris Lake by the service road along the tailings pipeline. This crossing will be a free span bridge that will not encroach onto the stream channel with no effect on fish populations and fish habitat. Two intermittent streams will be crossed by the airstrip portion of the all-weather road to Roberts Bay. There are no water bodies upstream of the airstrip and so no fish have been found here.

Spill prevention contingency plans will be in effect to reduce the risk and mitigate effects on fish populations and fish habitat in the Project area.

Recreational angling by Project employees will be discouraged.

6.5 Birds

No measurable effects on bird populations in the Project area are envisaged. Terrain disturbance will alter approximately 92 ha of upland habitat and may displace some breeding pairs of local birds. No water fowl nests were noted on Tail and Doris Lakes.

No effects on raptors are expected. One known nest site on the Doris mesa is within 1 km of the camp and mill site. It was occupied by peregrines in 2000 but was vacant in 2001. A profile of its occupancy along with all other known raptor nest sites in the Project area will be provided in the Project EIS.

Project activities may displace the peregrines from this site during the 2007 - 2009 breeding seasons. If that occurs it will probably be reoccupied in 2010 after completion of the Project. In the meantime they may occupy one of the many raptor nest sites that are vacant each year. It should be noted that peregrines nest in downtown areas of both Calgary and Edmonton and so may not be displaced from the site on the Doris mesa.

6.6 Mammals

Interactions between the Project and mammals will occur on a seasonal basis. The nature of these interactions will be discussed below for each major group of mammals in the Project area. Several mitigation measures with general application to all wildlife will be applied to interactions and potential interactions with mammals.

- In interactions with mobile equipment animals will always have the right of way except those on the airstrip with aircraft on approach. In this case they will be chased off the strip to ensure their own safety and the safety of the aircraft.
- All putrescible garbage will be stored in appropriate containers while awaiting incineration and so eliminate that attraction to scavengers, especially bears, foxes, wolves, and wolverine.
- Hunting in the Project area by Project employees will not be permitted. Firearms on site will be used only for personnel safety purposes.
- Feeding wildlife will be strictly prohibited.

6.6.1 Small Mammals

This group, for the purposes of this discussion, includes all lemmings and voles, ground squirrels, and Arctic hare. Although approximately 92 ha of tundra habitat will be altered, no measurable effects on these populations is expected. It is probable that road kills may occur from time to time, especially for ground squirrels notwithstanding the right-of-way rule. It will be important that these casualties be picked-up to avoid attracting scavengers to minimize further occurrences.

6.6.2 Carnivores

Foxes roam throughout the Project area and if encouraged can become habituated and familiar with operations. The general prohibition against feeding wildlife will significantly reduce the likelihood of bothersome familiarity.

Wolves behave in a manner similar to foxes however may not be as common in that their territories are much larger and they travel in packs. If there is nothing to attract wolves to the Project area, like domestic dogs or food, they will not become a problem.

Bear and wolverine are present in the area and have been observed here infrequently. That is expected to continue. On seeing a bear in the Project area a "BEAR ALERT" will be posted in camp for the mutual safety of both personnel and the bear. Like with wolves, if there is no attraction to bear and wolverine, they will not be a nuisance. The principle mitigation measure to reduce the incidence of interaction will be aggressive garbage containment measures and prompt incineration of any and all garbage that may attract these carnivores.

6.6.3 Muskox

Muskox are permanent residents of the Project area and may occasionally be in the vicinity of the camp and or along the roads. Muskox will become habituated to the coming and going of personnel and equipment as they have at Lupin. No measurable effects from the Project are expected on the population. The complete muskox data set from baseline studies in the Project area was presented in the November 2003 FEIS.

6.6.4 Caribou

Caribou will be present seasonally. The relative absence of concentrations of caribou trails in the Project area suggests that it is not common summer habitat for high concentration of caribou. Nevertheless they must be expected at any time of year in that the Project area is within the annual ranges of three distinct caribou herds:

- The winter range of the Dolphin and Union Herd;
- The summer range of the Queen Maude Gulf herd;
- The summer range of the Bathurst herd.

None of the Project activities are incompatible with caribou densities that have been observed during the surveys in the Project area since 1996. High caribou densities however can halt site construction in that it is unsafe for all involved. Such condition are unlikely to last for more than 36 hours continuous and more likely half that time. Although an estimated 92 ha of tundra caribou range will be altered, no measurable effects are likely on any of the herds present. Project activities will not impede the spring and fall migrations of the Dolphin and Union herd between Victoria Island and the Kitikmeot mainland. Project activities will not affect the summer use by the Queen Maude Gulf nor Bathurst herds.

6.7 Social and Economic Effects on the Kitikmeot Region

The Project will be of short duration and have a relatively small on-site labour force. There is nevertheless potential for significant interactions with the Region. MHBL has negotiated an Inuit Impact and Benefit Agreement with the Kitikmeot Inuit Association that will be finalized once the Project has been authorized to proceed (i.e., after environmental screening and permitting).

The Project is situated entirely on lands Owned by the Kitikmeot Inuit Association and so the KIA will derive an income stream for land leases. NTI will receive mineral production royalties.

Supplies for the Project will be procured primarily from southern Canada for weekly delivery by flights from Yellowknife, or in bulk by annual sealift.

The Project workforce will range from 36 - 44 during the initial 12 month construction period and then increase to approximately 150 for mining and processing.

Recruiting the work force for the Project will be in the Kitikmeot and from Yellowknife. Roster rotations will be 14 days in and 14 days out and flights will be scheduled from Yellowknife and the designated Kitikmeot communities agreed to in the Inuit Benefits Agreement (Kugluktuk, Cambridge Bay, Gjoa Haven and Taloyoak). Several job functions like equipment operators and camp attendants required by the Project are skill sets that are currently present in the Kitikmeot labour force. Others, like crusher and mill operator could be achieved with on the job training. The exploration phase in the Hope Bay belt has benefited from a reliable and capable seasonal labour force from Kitikmeot communities that have provided invaluable services to the Project. It is the desire of Project management to hire as many Inuit as are suitably trained to return to the Project for the production phase. It is possible that a significant portion of the Project payroll can remain in the region. As an example, in a study of potential social and economic effects of a gold mine in the Keewatin, it was estimated that in addition to the direct payroll to the region, government would benefit by \$22,469. for every new job created in the region that was filled by a previously unemployed person. These benefits are a combination of tax revenue and saving in social program costs (Nexus, 1997).

Much of the mining and site services at the Project may be contracted out. Contract bids will be configured in a way that encourages businesses in the region to participate in the bidding process.

An inventory of businesses in the region was developed by Hornal and Associates Ltd. (2000) that will be used to assess the regional capacity for contracting to the Project.

All participants in the Project, both workers and businesses, must provide safe, reliable, and cost effective service. The participation in the Project by persons and businesses from the Kitikmeot Region is very important to Project management who will make its best effort to include both in Project execution. Project management will expect the same effort and commitment from its contractors.

6.8 Residual and cumulative environmental effects

One previous mining operation was active in the area. A silver mine operated on Roberts Lake in the 1970's. The site has had some clean-up commissioned by KIA but more is required. There is little by way of baseline information on the effects of this operation on the waters and aquatic life of Roberts Lake.

The residual effects of the Doris Project will include approximately 38 ha of altered tundra terrain (Tail Lake will return to pre-development water levels) and some 467,000 tonnes (dry weight) of tailings in Tail Lake. The altered tundra will remain visible for many years but there will be no progressive terrain disturbance. It is expected that Tail Lake will stabilize in less than 25 years.

The only cumulative effect of the Project that can be predicted is the hope that continued mineral exploration on the north end of the Hope Bay belt from the Doris camp will identify additional orebodies for ongoing gold production on the Hope Bay belt. The potential for more discoveries and development will be enhanced by the presence of the camp supported by an all weather road to the airstrip capable of serving large commercial aircraft.

7.0 PUBLIC CONSULTATION

7.1 Prior to MHL

BHP Worldwide Minerals undertook annual community consultation visits as part of its permit renewal process. Unfortunately, the specifics of time, place and personnel involved were not included in the documents transferred to MHL in the course of the sale.

7.2 By MHL

Consultation with the KIA was initiated immediately upon MHL assuming ownership of the Project in 2000. A summary of public consultation events undertaken since 2000 through the end of 2003 is presented in Table 7.1.

Table 7-1: Public Consultation Undertaken by MHL Related to the Hope Bay (Doris North) Project

Date of Consultation Visit	Location of Visit	MHL Personnel Involved	Issues Discussed
2000			
January	Kugluktuk/Cambridge Bay	Adrian Fleming	Introduce HBJV Outline 2000 work plan Invite ongoing Inuit involvement
February	Kugluktuk	Consultant	Stakeholder identification and related issues review
February	Umingmaktok	Adrian Fleming & D. MacDonald	2000 Work Plan
March	Taloyoak	D. Fennel/T. Walsh/H. Wilson	Project briefing to KIA Annual Meeting
May	Kugluktuk/Cambridge Bay	H. Wilson/B. Hubert	Review work plan Review wildlife studies and propose cooperative caribou telemetry program
August	Umingmaktok & Bathurst Inlet	H. Wilson	Program overview and update
November	Rankin Inlet	H. Wilson/M. Bardoux	Project overview at Nunavut Mining Symposium
2001			
March	KIA Annual Meeting	H. Wilson	Brief submitted; Meeting attendance in person was not possible due to bad weather
August	Bathurst Inlet	H. Wilson	Project review and update
August	Umingmaktok	H. Wilson	Project review and update

Table 7-1: Public Consultation Undertaken by MHL Related to the Hope Bay (Doris North) Project (Continued)

2002			
April	KIA Annual Meeting in Kugluktuk	H. Wilson/T. Walsh/D. Fennell/S. Quin	Project overview and update to KIA Board including community representation
April	Nunavut Mining Symposium in Cambridge Bay	H. Wilson/D. MacDonald	Presentation on Doris North and program update including Roundtable participation by Project personnel
August	Bathurst Inlet	H. Wilson	Project Review and Update, no issues raised.
August	Umingmaktok	H. Wilson	Project Review and Update, no issues raised.

In addition to these meetings, MHL personnel provided regular project updates to Inuit groups including: Nunavut Tunngavik (NTI), KIA, Kitikmeot Corporation, NWB, NIRB, Nunavut Planning Commission (NPC) via teleconference and at meetings and conferences like the Cordilleran Roundup, held annually in Vancouver and the Prospectors and Developers Association of Canada conference (PDAC) in Toronto. The teleconferences focussed on recently issued project specific press releases and project updates as required. The draft EIS was reviewed at public meetings in Kugluktuk, Gjoa Haven, Taloyoak, and Cambridge Bay from February 17 – 20, 2003 in preparation for the community hearing hosted by NIRB. Key issues and concerns raised by the communities are summarized as follows:

- The long-term integrity and health of the regional wildlife populations, particularly caribou;
- Water quality impacts and the long term health and integrity of fisheries resources, particularly Arctic char;
- A need to understand where the Hope Bay Project is going; and
- A need for employment and business opportunities from the Project in local communities.

The understanding and knowledge obtained through community consultation is reflected in the EIS (Miramar Hope Bay Limited, 2003). The Project management team re-visited the communities in early January 2004 shortly after the EIS was submitted to NIRB. These public meetings were intended to facilitate further understanding of the project and solicit comments, concerns and suggestions the public may have.

Table 7.2 lists the consultations undertaken by MHL and its consultants with stakeholders as part of preparing a revised socio-economic impact assessment to respond to the deficiencies that were identified by NIRB in their August 2004 Final Hearing Report. In addition to the references made to meetings held with community representatives, reference is also made to contact made with individuals for information.

Records of these contacts have been filed electronically and are available upon request. Copies of the notes taken at meetings held during the first week of October 2004 in the Hamlets of Kugluktuk, Cambridge Bay, Gjoa Haven and Taloyoak were distributed to representatives of the respective hamlets.

Table 7-2: List of Contacts and Meetings Held by MHL & its Consultants in Preparing a Revised Socio-Economic Impact Assessment

Date	Location	Meeting Participants	Purpose for Meeting / Contact	Meeting Format / Contact
September 16 and 23, 2004	Cambridge Bay	<ul style="list-style-type: none"> Dave Kaosoni, Nunavut Government, Community and Government Services 	To inquire and gather information about current community plans in the West Kitikmeot Region	Telephone
September 20, 2004	Cambridge Bay	<ul style="list-style-type: none"> Kim Smith, Nunavut Department of Education 	To gather current information about training in West Kitikmeot	Telephone
September 20, 2004	Iqaluit	<ul style="list-style-type: none"> Shawna O'Hearn, Policy and Planning, Nunavut Department of Education 	To gather current school enrolment numbers for the West Kitikmeot schools	Telephone
September 23, 2004	Cambridge Bay	<ul style="list-style-type: none"> Fiona Buchan-Corey, Kitikmeot Campus, Nunavut Arctic College 	To gather updated information re: training through Nunavut Arctic College	Telephone
October 4, 2004	Hamlet of Kugluktuk	<ul style="list-style-type: none"> Paul Waye, Senior Administrative Officer Alex Buchan, Manager of Community Development 	Guided tour of the Hamlet of Kugluktuk	Tour of community
October 4, 2004	Hamlet of Kugluktuk	<ul style="list-style-type: none"> Russ Sheppard, Teacher, Kugluktuk High School 	Tour of school and to gather information about educational trends/opportunities in the hamlet	Tour of and meeting at Kugluktuk High School
October 4, 2004	Hamlet of Kugluktuk	<ul style="list-style-type: none"> Mayor Peter Taptuna Paul Waye, Senior Administrative Officer Alex Buchan, Manager of Community Development 	To discuss points of concern and suggestions that the hamlet has regarding the Doris North Gold Project and the mining industry in general	Meeting at the hamlet office
October 4, 2004	Hamlet of Kugluktuk	Hamlet Interagency Committee: <ul style="list-style-type: none"> Lori Bewsher, Community Wellness Paul Waye, SAO Mayor Peter Taptuna Alex Buchan, Manager Community Development Constable Chad Summack, RCMP Margaret Hawioyak, Alcohol and Drugs Counsellor Kylo Harris, Kugluktuk High School Athletics Association Russ Sheppard, Councillor/High School Athletics Association Rob Walton, Nunavut Arctic College 	To discuss impacts and opportunities that committee members perceive to be associated with the Doris North Gold Project and suggested ways in which these could be best managed	Meeting at the hamlet office

Date	Location	Meeting Participants	Purpose for Meeting / Contact	Meeting Format / Contact
		<ul style="list-style-type: none"> • Laurie Avakana, Prenatal Nutrition Program • Helen Himiak, Prenatal Nutrition Program • Joanne Taptum, Housing Association • Sam Kikpak, Elders Centre • Catherine Cornish, Youth Coordinator 		
October 4, 2004	Hamlet of Kugluktuk	<ul style="list-style-type: none"> • Constable Chad Summack 	To gather information further to that provided at the interagency meeting re: increased demand on the RCMP	Meeting at the hamlet office
October 5, 2004	Hamlet of Cambridge Bay	Community Service providers: <ul style="list-style-type: none"> • Dawn Wilson, Kullik Elementary School • George Klaszewicz, Kiilink High School • Derrick Anderson, Hamlet • Wayne Weese, Hamlet • Jessie Lyall, Hamlet • Mona Kaosoni, Ladies Group • Colin Dickie, Lands Officer, Hamlet • Chris King, EDO, Hamlet • Jody Moar, Hamlet Acting EDO • Sandi Gillis, A/SAO, Hamlet • H. Koaha, Human Resources Manager, Hamlet • Terry McCallum, Hamlet 	To discuss key issues which community service providers perceive to be associated with the Doris North Gold Project	Meeting at hotel conference centre
October 5, 2004	Hamlet of Cambridge Bay	<ul style="list-style-type: none"> • RCMP detachment 	Discussion of how the problems introduced by a mobile work force can be contained	Meeting at the RCMP detachment offices
October 5, 2004	Hamlet of Cambridge Bay	<ul style="list-style-type: none"> • Community Wellness Centre 	Discussion about how increased demands on health services and community wellness programs created by projects can be effectively addressed	Meeting at the Wellness Centre
October 6, 2004	Hamlet of Taloyoak	<ul style="list-style-type: none"> • Mayor Jayko Neeveacheak • Scotty Edgerton, SAO Hamlet 	Discussion of the impacts that the community perceives the Doris North Gold Project will have on the community and how they can be effectively addressed	Meeting at the hamlet office

Date	Location	Meeting Participants	Purpose for Meeting / Contact	Meeting Format / Contact
October 6, 2004	Nunavut Arctic College	<ul style="list-style-type: none"> Wade Morrison 	Discussion of the potential of incorporating training programs as part of impact management	Meeting at the Taloyoak office of Nunavut Arctic College
October 6, 2004	Taloyoak Health Centre	<ul style="list-style-type: none"> Leela Subramaniam 	Discussion of impacts that the Doris North Gold Project might have on the community's wellness and how these impacts could be addressed	Meeting at the Taloyoak Health Centre
October 6, 2004	Taloyoak RCMP detachment	<ul style="list-style-type: none"> Constable John Baranyi 	Discussion of impacts that the Doris North Gold Project could have on protection services in the community and how these potential impacts could be addressed	Meeting at the Taloyoak RCMP detachment office
October 6, 2004	Taloyoak Community Meeting	<ul style="list-style-type: none"> Members of the community at large 	Presentation by representatives of MHLB describing the Doris North Gold Project in detail, the status of the project application, and the company's efforts to address regulatory concerns, followed by questions from the audience which emphasized interest in jobs, training and life skill management	Community presentation in the gymnasium, Taloyoak High School
October 7, 2004	Hamlet of Gjoa Haven	<ul style="list-style-type: none"> Raymond Kamookak, SAO, Hamlet Sterling Firlotte, A/SAO, Hamlet 	Discussion of potential impacts perceived by the Hamlet to be associated with the Doris North Gold Project and how they might be most effectively managed	Meeting at the hamlet office
October 7, 2004	Gjoa Haven RCMP detachment	<ul style="list-style-type: none"> Constable Michelle Ducharme Constable Martin Jobin 	Discussion of the potential impacts that the Doris North Gold Project might have on the provision of protective services and how they might be best managed	Meeting at the Gjoa Haven RCMP office
October 7, 2004	Hamlet of Gjoa Haven	<ul style="list-style-type: none"> Sterling Firlotte, A/SAO, Hamlet 	Discussion of housing issues the hamlet is experiencing regardless of the Doris North Gold Project	Meeting at the Gjoa Haven hamlet office

Date	Location	Meeting Participants	Purpose for Meeting / Contact	Meeting Format / Contact
October 7, 2004	Gjoa Haven Health Centre	<ul style="list-style-type: none"> Debbie Sarsen 	Discussion of possible impacts that the Doris North Gold Project might have on delivery of health services and community wellness	Meeting at the Gjoa Haven Health Centre
October 7, 2004	Gjoa Haven Economic Development Office	<ul style="list-style-type: none"> Roy Shiels, Economic Development Officer, Hamlet 	Discussion of the economic development programs being undertaken in the hamlet and the way in which they might help address community impacts potentially created by the Doris North Gold Project	Meeting at the Gjoa Haven Economic Development office
October 29, 2004	Nunavut Planning Commission	<ul style="list-style-type: none"> Adrian Boyd, Senior Policy Advisor 	Review and discussion of draft Nunavut Planning Commission's draft land use plan for the West Kitikmeot Region	Meeting at the AMEC office, Yellowknife
November 5, 2004	Department of Indian Affairs and Northern Development, Iqaluit	<ul style="list-style-type: none"> Peter Scholz, Environmental Assessment Coordinator Michael Hine, Socio-Economic Assessment Liaison 	General review of the process being followed in addressing the deficiencies associated with the Doris North Gold Project; set up subsequent meeting	Telephone
November 10, 2004	Department of Indian Affairs and Northern Development, Iqaluit	<ul style="list-style-type: none"> Peter Scholz, Environmental Assessment Coordinator Michael Hine, Socio-Economic Assessment Liaison 	Review of the activities implemented to involve communities and other stakeholders in addressing deficiencies, development of a table of contents for the SEIA report, definition of VSECs, need for further contact with them	Telephone
November 23, 2004	Community Policing Section, RCMP detachment Yellowknife	<ul style="list-style-type: none"> Constable Kerry Rhie 	Review status of Doris North Gold Project and its possible implications for delivery of protective services in the City of Yellowknife	Meeting at the RCMP detachment offices, Yellowknife
November 23, 2004	Nunavut Planning Commission	<ul style="list-style-type: none"> Adrian Boyd, Senior Policy Advisor 	Further discussion of monitoring programs associated with the draft land use plan for the West Kitikmeot Region as well as community input for monitoring impacts associated with project development	Meeting at the AMEC office, Yellowknife

Date	Location	Meeting Participants	Purpose for Meeting / Contact	Meeting Format / Contact
November 24, 2004	Stanton Territorial Health Authority	<ul style="list-style-type: none"> • Chuck Parker, CEO, Authority • Donna Zaozirny, CHE, Director of Operations, Authority • Sharon Cook, Director Patient Care Services, Authority 	Review status of the Doris North Gold Project and discuss possible impacts that project could have upon the delivery of health services, particularly those associated with the Stanton Territorial Hospital in Yellowknife	Meeting at the Stanton Territorial Hospital, Yellowknife
November 24, 2004	City of Yellowknife Planning and Lands Division	<ul style="list-style-type: none"> • Monte Christensen, Manager, Planning and Lands Division, Department of Public Safety and Development 	Review the status of the Doris North Gold Project and possible impacts the project could have on development in the city and provision of services	Meeting at City Hall, Yellowknife
December 22, 2004	Community Policing Section, RCMP Detachment, Yellowknife	<ul style="list-style-type: none"> • Constable Kerry Rhiel 	Discussion of the number of staff associated with the Community Policing Section	Telephone
December 23, 2004	Department of Indian Affairs and Northern Development, Iqaluit	<ul style="list-style-type: none"> • Michael Hine, Socio-Economic Assessment Liaison 	Discussion of information required for addressing cumulative effects associated with the Doris North Gold Project, including other projects referenced	Telephone
January 5, 2005	Community Policing Section, RCMP Detachment, Yellowknife	<ul style="list-style-type: none"> • Sergeant Paul McConnell 	Discussion of the number of staff associated with the Community Policing Section, the role of the Diamond Protection Service relative to gold mining projects, and cumulative effects	Telephone
January 7, 2005	NWT and Nunavut Chamber of Mines	<ul style="list-style-type: none"> • Mike Vaydik, General Manager 	To review the status of the Doris North Gold Project, steps that the proponent is undertaking to address deficiencies identified with its first application to the Nunavut Impact Review Board, discuss the potential impacts the Chamber perceives to be associated with the project and how they might be addressed	Meeting at Chamber Offices, Yellowknife

8.0 MONITORING PERFORMANCE AND COMPLIANCE

The project expects that several items for monitoring may be required as a compliance function in licences and permits. These will include water quality monitoring at prescribed locations, monitoring potable water for public health factors, and monitoring tailings containment area discharges.

The Project understands that a monitoring and reporting element may be included in an impact benefit agreement with the Kitikmeot Inuit Association. A monitoring and reporting function is also expected as a result of the mineral production lease with NTI.

9.0 FINANCIAL SECURITY

The land use history of the Hope Bay Joint Venture in the Hope Bay belt includes financial security on deposit for both the Boston camp and the Windy camp. Both sites are to be closed and abandoned during the course of the construction phase of the Doris North Project. It is expected that the financial security on deposit in respect of these camps will be refunded.

MHBL recognizes that financial security against the full reclamation liability associated with the Doris North Project will be required. An estimate of this liability was supplied to NIRB as part of the Mine Closure and Reclamation Plan for the Doris North Project included as Supporting Document G1 to the November 2003 FEIS. MHBL hopes that the proponent's good record and standing in previously providing financial security and meeting its reclamation obligations will be given consideration when assessing the amount of financial security for the Doris North Project.

REFERENCES

- Adams, J., Weichert, D.H., and Halchuk, S. 1999. Lowering the probability level - Fourth generation seismic hazard results for Canada at the 2% in 50 year probability level. Proceedings 8th Canadian Conference on Earthquake Engineering, Vancouver June 1999 @ http://www.seismo.nrcan.gc.ca/hazards/8ccee/8cceeha_e.html.
- BHP Diamonds Inc. 1999. Ekati Diamond Mine Environmental Agreement Annual Report for 1998.
- Bateman Engineering, 2002. Doris North Trial Operation Scoping Study.
- Beverly and Qamanirjuaq Caribou Management Board. 1999. Protecting Beverly and Qamanirjuaq Caribou and caribou range. Beverly and Qamanirjuaq Caribou Management Board. 40pp. Ottawa.
- Calef, G. and B. Hubert. 2000a. Wildlife studies May - August 2000 data report. Hope Bay Joint Venture Gold Project.
- 2000b. Abundance and distribution of caribou in the Hope Bay Study Area: 1996 - 2000. A report to the Hope Bay Joint Venture Gold Project. 9 pp plus maps.
- CCME, 2001. -Canadian Council of Ministers for the Environment Interim Sediment Quality Guidelines @ http://www.ccme.ca/4e_publications/4e.html.
- Canadian Council of Ministers for the Environment; water quality guidelines for freshwater aquatic life @ http://www.ccme.ca/4e_publications/4e.html.
- Government of the Northwest Territories, 1997. A guide to the mineral deposits of the Northwest Territories. Department of Resources, Wildlife and Economic Development. 126 pp.
- Government of Nunavut, 2000. Nunavut wild species report 2000. Unpublished.
- Gunn, A., A Buchan, B. Fournier, and J. Nishi. 1997. Victoria Island caribou migrations across Dolphin and Union Strait and Coronation Gulf from the mainland coast, 1976-94. GNWT Department of Resources, Wildlife and Economic Development. Manuscript Report No. 94.
- Gunn, A., J. Dragon and J. Nishi. 1997. Bathurst calving ground survey 1996. GNWT Department of Resources, Wildlife and Economic Development. File Report No. 119. 70 pp.
- Gunn, A. B. Fournier and J. Nishi. 2000. Abundance and distribution of the Queen Maude Gulf caribou herd. GNWT Department of Resources, Wildlife and Economic Development. File Report No. 126.
- Klohn-Crippen Consultants, 1995. Doris Lake Project, Northwest Territories; environmental study. Klohn-Crippen Consultants Ltd. Richmond, B.C. 110 pp. plus appendices.

Knight Piesold, 2001. Preliminary ARD and metal leaching: Assessment for the Doris and Naartok mineralized zones. The Hope Bay Project, Hope Bay Joint Venture.

Messier, F. and R. Case. 1998. Population Ecology of Grizzly Bears in the Slave Geological Province. West Kitikmeot Slave Study.

Miramar Mining Corporation. 2001. 2001 Annual Report.

Nexus Group, 1997. Labour Force Profile: Kivalliq Region. Prepared for WMC International Ltd.

Nuna Logistics, 2002. Cost Estimate for Hope Bay Project Doris Hinge open Pit Mining and Earth Works Construction.

Nunavut Planning Commission, 1997. Draft West Kitikmeot Regional Land Use Plan. 157 pp.

Rescan Environmental Services, 1993. BHP World Minerals Boston Property N.W.T.

Environmental Data Report. Rescan Environmental Services Ltd. Vancouver, B.C. 64 pp.

-1994. BHP Minerals Canada Ltd. Boston Property N.W.T.: Environmental Data Report. Rescan Environmental Services Ltd. Vancouver, B.C.

-1997. BHP World Minerals Hope Bay belt project; Environmental baseline studies report 1996. Rescan Environmental Services Ltd. Vancouver B.C.

-1998. BHP Diamonds Inc. Hope Bay Belt Project; 1997 Environmental Data Report. Rescan Environmental Services Ltd. Vancouver B.C.

-1999. BHP Diamonds Inc. Hope Bay Belt Project; 1998 Environmental Data Report draft. Rescan Environmental Services Ltd. Yellowknife, Northwest Territories.

-2001. 2000 Supplemental environmental baseline data report. Hope Bay Belt Project.

Robert Hornal & Associates Ltd. 2000. Socio-Economic baseline study of Kitikmeot communities and Yellowknife, Northwest Territories. Prepared for Miramar Mining Corporation.

SRK Consulting, 2002. Doris North Trail Operation - Draft Report - Hope Bay Joint Venture.

Westroad Resource Consultants. 1998. Terrestrial Ecosystems and Bioterrain of the Hope Bay Belt, Northwest Territories, Canada.