



Environmental Monitoring Advisory Board



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Executive Director
Kirstie Simpson 2001 to September 2002

Office Manager
Linda Tourangeau 2001-present



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Letter to Readers

Dear Reader,

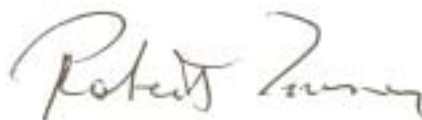
On behalf of the Diavik Environmental Monitoring Advisory Board I am pleased to report to you that the Board is now fully operational. This annual report reflects the Board's efforts to further define its focus and priorities over the past year.

We have been actively implementing the purposes and guiding principles set out in the Environmental Agreement, with special emphasis on development of strategies for communication and building capacity in Affected Communities. We are continuing to act as a watchdog on the company and the regulators involved in the Diavik project. We have kept up our visits to Affected Communities and have consulted with scientists, elders and other experts to ensure any questions or concerns about the effects of the mining activity and the results of the environmental management and monitoring plans and programs are clearly presented and dealt with.

The Diavik project has moved forward rapidly and by the end of this year production of diamonds had already begun and construction of the project was almost complete. The Board is receiving reports and briefings on all aspects of the construction and operation of the project as it relates to the environment, and is monitoring the company and the regulators.

I would like to take this opportunity to thank my fellow Board members for their continuing diligence in overseeing the project and fulfilling our mandate. In particular I would like to acknowledge the efforts of Alex Buchan from the KIA and Paul Partridge from the Government of Nunavut who left the Board during 2002-03. In their place the Board welcomed Doug Crossley representing the KIA and John Morrison representing the Government of Nunavut. I would also like to thank our staff who have provided so much assistance and support. The Board lost its Executive Director during 2002-03, and has hired a replacement to start early in 2003-04. Finally I would like to thank the Parties to the Agreement, the concerned public, the company and the regulators for their active involvement in helping to make this Environmental Agreement as effective and efficient as it can be.

Sincerely



Robert Turner
Chair





Summary

The Environmental Monitoring Advisory Board was established as a requirement of the Diavik Environmental Agreement (EA). The Board operates independently from Diavik Diamond Mines Inc. and the governments of Canada, Northwest Territories and Nunavut. EMAB aims to assist the Parties to the EA in the implementation of a common strategy to address environmental matters with the project.

The Board is composed of one representative from: Dogrib Treaty 11 Council; Yellowknives Dene First Nation; Lutsel K'e Dene First Nation; Kitikmeot Inuit Association; North Slave Metis Alliance; Governments of the Northwest Territories, Nunavut, Canada; and Diavik Diamond Mines.

EMAB has the mandate to make recommendations concerning management, mitigation and monitoring plans; and to identify when additional monitoring is required.

The participation of the Aboriginal Peoples from the Affected Communities in environmental training is required in order to provide a meaningful role for Aboriginal peoples.

The Board held 12 meetings in 2002-03 including meetings at Lutsel K'e, Old Fort Rae and the Diavik project site. Board meetings will continue to be held in the Affected Communities in rotation.

The Board also hosted a meeting of the Parties to review Article 4 of the EA.

A Communications Strategy was developed, and is being implemented.

From September 2002 until the end of the fiscal year, the Board operated without an Executive Director. A replacement was recruited and hired to begin in May 2003.

A Traditional Knowledge Monitoring Workshop was co-hosted by EMAB and IEMA. EMAB is considering its position on the recommendations made by the aboriginal caucus at this workshop.

The Board reviewed the Capacity Funding program and agreed to continue it in 2002-03. An independent review recommended changes to the reporting requirements of these funds.

A fish palatability study was undertaken in 2002. Scientists and community elders worked side by side, observing and learning from each other's methods. The study is a good example of how traditional and scientific knowledge can be combined in practical ways.

A Board development workshop was held in Lutsel K'e to define the mission of EMAB, and to clarify the roles and responsibilities of Board members and staff.

Members of EMAB and DDMI staff visited La Ronge, Rabbitt Lake, and Stony Rapids, in Saskatchewan to learn how the Northern Mines Monitoring Secretariat was formed and how it operates.

Members of EMAB attended workshops including: a DIAND workshop to discuss issues around regional monitoring; and a training workshop on cumulative effects assessment.

EMAB received 28 reports from DDMI during 2002-03. EMAB observed discussion on many of these reports at Diavik Technical Committee meetings.

Project Status

In February 2003, Diavik began diamond production, ahead of schedule.

Major Issues

Diavik applied to amend the Phosphorous and pH limits in its water licence. EMAB reviewed the application and observed regulator's comments before supporting the change, which was approved by the MVLWB.

EMAB reviewed DDMI's Wildlife Effects Monitoring Program and concluded that it would not meet its objectives. EMAB made 21 specific recommendations for changes. DDMI revised the plan which EMAB reviewed and found no further concerns with.

EMAB made six specific recommendations to DFO and DDMI. Five of these were accepted and implemented.

Fish habitat compensation continued to be an issue and EMAB recommended to DFO that pristine lakes not be disturbed in order to compensate for other lost fish habitat. This issue was not resolved by the end of the year.

EMAB agreed with the need to revise the Aquatic Effects Monitoring Program report for 2001 and supported a suggestion that the MVLWB contract an independent review of the program to determine if it could meet its objectives.

EMAB's priorities for 2003-04 are to continue to: build capacity, increase awareness and support meaningful participation of Aboriginal peoples in environmental monitoring activities related to the Diavik project; monitor environmental effects of the Diavik project focussing on issues surrounding wildlife, particularly caribou; fish and water; monitor regulators to ensure plans and programs are thoroughly reviewed and necessary follow-up is done; and to implement the Communications Strategy and establish an EMAB Traditional Knowledge panel.

Njht'è Neèk'qa T'à Hoql

Dii ndè hogihdi gha done dehkwe adlà sii, akwetò Diavik hoòlì hò, ndè asàwòde ch'à done gixòedi gha dii done dehkwe gha hoòlìxè. Ndèts'ò k'aawo nàke gohxè eyits'ò Hotenda neèk'e ts'ò sii Ndèts'ò k'aawo gohlì gha eghàlagide-le. Ndè esàwòdech'à gedi t'à wek'àhòtah gha nindè, akò goxè eghàlagide.

Dòne dii hatò gik'èkw'eh; Dogrib Treaty 11 Council; Yellowknives Dene First Nation; Łutsel K'e Dene First Nation; Kitikmeot Inuit Association; North Slave Metis Alliance; Government of the Northwest Territories; Nunavut, Canada eyits'ò Diavik Diamond Mines.

EMAB ndè haani-le dè tich'adi nezì wexogihdi gha gedi nindè, haani lah k'e eghàlagide, eyi weèrò lah k'e eghàlagide gha geedi nindè haadle gha.

Ami wekòta xèdi ha hōni xodi dè, eyi gha dōne ndè esàwòdech'à gha wexogihdi gha hoghàgetò gha.

2002-03 k'e 12 fèèadi, Łutsel K'e, Old Fort Rae, Diavik neèk'e, azhò efènda kòta fegehdi ha.

Ndè esàwòdech'à gedi t'à, njht'è 4 ghageeda gha sii ghò fègeadi.

Edaani deèrò nezì dōne ts'ò gogende gha njht'è gehtsì xè wek'èè eghàlagida ha.

September 2002 , xo lò ts'ò Board, k'aawo dè eghàlagida. May 2003 k'e dōne lah k'e ngjhtì.

Whaedò naawo ghò fègeadi EMAB eyits'ò IEMA xè. Dōne azhò dageedi ghò njht'è gehtsì gha.

Dii Board 2002-03 xo gha sōmba t'à gits'adi gha gedi t'à hagìlah, eyixè edaani sōmba nàgìtah gha fadi agìlah.

2002 k'e edaani fìwe tèè naàde tich'adi eyits'ò ndè gha naidik'èzhò elì, qhdaà xè asì azhò wek'agehtah gha efèxè eghàlagida. Efèk'à hoghàdegeetò.

Board hoghàdegeetò gha Łutsel K'e fègeadi, edani delah k'e eyits'ò dōne edaani lah k'e gehkw'e gha ghò fègeadi.

EMAB eyits'ò DDMI La Ronge, Rabbitt Lake eyits'ò Stoney Rapids nàgeede, akò edaani dii haani lah k'e eghàlagide wek'agehta gha akò nagide.

Dōne EMAB k'e dehkwe sii DIAND xè fègeadi, edaani dii sōmbak'è delah k'e eghàlagide gha, eyits'ò ndè hogihdi gha dōne lah k'e hoghàgetò gha sii fègeadi.

DDMI ts'ò 28 ginjht'è ghàgida, 2002-03, eyi xè wek'e sii committee ts'ò goginde.

Lah ghò Edàgph'e

Ayi dè lah xè xoghde hajle sii kwe, February 2003 k'e Diavik gilah xè xoghde.

Asidee ghò Nànegide

Diavik, tì yìi asì ehxoh gohlì sii, PH edàtò gohlì xè eghàlagide gha fadi agele gha njht'è geàke jìle, eyi njht'è ghàgida, eyi xè MVLWB hēre gogedi.

EMAB, DDMI's edaani tich'adi hogihdi lah k'e gehkw'e sii ghàgida hò, asì 21 jìta fadi agileh gedi t'à DDMI xè gighàda t'ahò, afàk'ah hēre gedi

EMAB DFO eyits'ò DDMI's ts'ò asì 6 fadi agileh gedi t'à eyits'ò 5 fadi agìlah.

EMAB fìwe wedè hohè sii gha mōhdaà tìi welagidèa-le gedi t'à njht'è gehtsì sii jìta wek'èè eghàlagida-le.

2001 xo gha EMAB, edaani fìwe wexòedi njht'è gehtsì hò asì mōhdaà fadi agele gedi t'à, eyi lah wegehda.

2003-04 xo gha EMAB dii asì hatò k'e eghàlagida gha gìwò, deèrò dōne xè eghàlagide ha gìwò, Diavik edaani dōne sòtì xè eghàlagide sii deèrò nezì dō xè eghàlagide ha gìwo, edaani ndè k'e asì hogihde ha, tich'adi wexògihdi ha, ekwò, fìwe eyits'ò tì deèrò, dōne azhò deghà delah k'e gehkw'e nìi gha hogihdi ha. Eyits'ò EMAB dōne naawo sii gha dōne dehkwe sii xè eghàlagide ha.

T'á ?asie ghá hani si

Ni ts'ók'ath ?asie hadi há dené ?atá dełtthi ?alyá si diri Diavik ni k'é ?eghaláná si ni ts'jdhí ch'á badi hal?j. Ni badi há yatí halj si ts'j ?at'é. Diri dené ni hałni si t'á ts'j tsamba t'at'j si Diavik bet'azj ?at'é tth'í nits'en k'aldhër jã Canada chu ?edza nené ts'j tth'í ?ékéna béhel ?at'é. Diri dené ni hałni si chu tth'í ník'é ghaláda dé badi hasi. ?aké nezq badi hadi diri lá k'é ha?ã si.

Ku t'ã diri Dené yek'é dełtthi si ?aghé Dené Łjchã ts'j, ?aghé Dené Béwuldesché ts'j, tth'í Łutsek'e ts'j ?jaghé Dené, ?jaghé Dené ?ekéna ts'j chu tth'í, Dené begarek'ã ts'j, tth'í nits'en k'aldé jã dezj ?edzá nené ts'j chu tth'í ?ekéna ts'j nits'en k'aldé tth'í Diavik ts'j k'aldé hel.

Diri Dené ?asie hałni dełtth'í si. Bela si diri yatí nilé ha?ã t'at'u ni badi hasi ts'edhi ch'á hadi. T'at'u yatí nilyé si nezq lat'éledé há ?aké yałni halya ?at'é.

Dené Sotiné ts'j Dené si chu Hayorjla dalá si t'á tsamba k'é ts'en nidhíle si ?at'édi. Ni hałni ha honelt'en dé. Dené yet'oréłthi há.

Diri Dené ni hałni dełtth'í si nayałti haréylq t'á naké ?ádhel ku nałti ?at'é. 2002-03 ghayé k'é hadi. Tó nałt'í si Łutsélk'e-u, Bescho k'úe-u tth'í Diavik t'a la k'é ha?ã. Yunedhé ts'en ?atq nati ha?á hayorjla jã naré dalá behel.

Dené ni hałni dełtth'í si haréylq t'á behel ?éghaláda si bel ?erit'is nanét'j ni lé.

T'at'u hani ?éłkanalyi hasi ?erit'is halj si ?atq begħã ?énołé hilé.

Łue dałti za 2002 belá ts'en Dené ni hałni dełtth'í si k'aldhër d'j ?éghaláná nil'é. ?éyer ts'j Degayé mari beza k'é 2003 ?jaghé Dené noréłt'is nilé.

Dené Sotiné bech'áni hel ?asie hadi há nałti. T'ã bet'as nałti Dené ni hałni dełtth'í chu IEMA. Dené Sotiné dené t'adi nilé si Dené ni hałni si yegħã nanidé ?at'é. Nałti ni si bagħaré hadi.

Dené ni hałni dené si t'at'u tsamba hel ?éghaláda si ?atq hat'é ha diri xayé 2002-03 ts'en. T'at'u tsamba hel għaláda si edq nalyé dé nezq heni.

2002 Łué béth'en natsedli ts'jdhí jã ha badi hundhër nilé. T'ã behéł si Scientists chu hayorjla ts'j ?ãłnedhé. ?atá t'at'u nezq Łué badi hundh'en si ghá hałuhénelt'en hundhër. Tat'u ?asié k'onetá si nezq ?át'é. Dené ch'anie chu scientific bech'anie chu yunedhé ba yatí haté halu diri begħaré.

Diri Board jã Łutsek'e nałti ni lé. Dené Ni hałni chu tth'í t'á Dené lá k'é nadé hel ?aké t'a Dené bela chu t'a ts'en k'aldé si chu hadi.

T'ã Dené diri EMAB chu DDMI la Dené si yu'ane nathédél ni le La Ronge, Rabbit Lake tth'í Stoney Rapids yu ?ané Saskatchewan ts'en honelt'en t'at'u dezj ?edza nené tsamba k'é dalá si badi ha tth'í t'at'u ?éghaláda si ghã.

Dené Ni hałni workshop nathedel tth'í tsamba nalé Dené hel. Jã dezj nené k'ayaghé ni hadi hel tth'í Dené honelt'en thá ?asie k'é għaláda dé ni bet'a ts'edhi t'a. T'at'u ni ts'jdhí dé benerédi ha.

Dené Ni hałni si nqna ts'en ?éłkedj ?erit'is ba nilýá t'ã yéł?j si DDMI t'o xayé hal?j ni si 2002-03. Dené Ni hałni Dené si Diavik nałti dé ?eyer naildil yuréłtthã ha.

La k'é

Sa nedu Zá k'é 2003 ku Diavik łthe luzé hale huniłthër. T'ó la hundhí betthé.

T'á ?asie bet'oré?á nedhé.

Diavik si diri ku yé t'a bet'á ?asie neyelé si chu pH ku badi ha?ã ku ts'j ?erit'is yé. Dené Ni hałni si t'at'u ku hel ?éghaláda si ?edq nalyé si horjłth'ã hułdq ħã heni. Ku ts'j ?erit'is MVLWB t'á ku tsj ?erit'is Dené t'ajł chuth ni si ?até.

Dené ni hałni si DDMI bet'sj ?erit'is t'at'u kechãndi hel ?éghaláda-u tth'í t'at'u yałni si ha. Nezq kechãndi badi k'izj ?erit'is halj le k'é. Dené ni hałni Dené si nona ts'en ?jaghé yatí ?edq nalé hets'édi. DDMI si ?erit'is senála ?eyer ts'j Dené ni hałni si bebá nezq.

Dené ni Hałni Dené si ?éłk'eká yatí Łué chu tu hel għaláná Dené-u tth'í DDMI yatí ghaj?á. Sqlaghé yatí t'a hıłchu begħaré għaláda ha.

Łué ku nezqilé dé senalyé ha tth'í tsamba ghã nanidé diri Dené Ni hałni Dené chu Ku chu Łué Dené hel. Diri t'a Łué tu dānechíle si badi há tth'í bek'enats'éde hailé. Łué tuwe si ?atq t'at'u begħaláda si ?atq besénıyałtíle diri xayé k'é.

Dené Ni hałni Dené chu t'a keyaghé ts'en ?asié dána si hel għaláda hundhí há xayá 2001 ?eyíle dené yuniłtthi dé nezq heni. MVLWB si t'a Dené nırit'is de ?eyer t'at'u begħaláda si hałni halu.

Dené ni hałni Dené t'a ?asie t'a ?asie bet'oré?á si 2003-04 k'e għaláda si ?atsédi. Haréylq Dené behéł hadi-u tth'í dené Sotiné haréł'á behel diri ni ?ake badi tth'í ni-u kechãndi-u tth'í Diavik naré la k'é ha?ã ?ake badi hadi. Diavik naré t'a kechãndi nadé-u diri ?etth'en, Łué-u tth'í tu. ?asie hadi si tth'í nai yatí ko ?edq nalyé dé hareylq Dené behéł hadi ha?á tth'í t'a k'onetá si ?ãłk'é nanét'j sqltha choilé-u. Tth'í t'at'u Dené behel hadi si-u tth'í Dené Ni hałni dené si-u chu ?atá Dené ch'anie hel ?éghaláda dełtth'í Dené si ha?ã.

Ilittuqhautait

Una Hilaryuatigut Ihivriughiyiit Uqaujjiyit Katimayiit (EMAB-kunnin taiyauvaktut) makipkaqtauhi mayuq pitquyauhimangmata Diavik-kut Hilaryuatigut Angirutainnin (EA-kunnin taiyauvaktut). Una Katimayitkut ilikkuuqhutik Diavik Diamond Mines Inc. Uyarakhiuqtinit kavamatkuaninlu Kanataup, Nunattiaplu, Nunavunmilu havaaqaqpaktut. EMAB-kut ikayurumavagait katimayut ukununga EA-kunnut atuquivaklutik atauttikkut atuqtaghainnin hilaryualirinikkut ihumagiyaayunin havaanginnin.

Hamna Katimayitkut atauhimik kivgaqtiqaqpaktut ukuningat: Itqilirini Dogrib Treaty 11 Katimayiannin; Yalonaimi Itqilirit Nunaqaqqaqhimayuni; Lutsel K'e Itqilirit Nunaqaqqaqhimayut; Kitikmeoni Inuit Katutyiqatigiit; North Slave Metis Katimaqatigiit; Kavamatkuanni Nunattiap, Nunavullu, Kanatauplu; ukuallu Diavik Diamond Mines Uyarakhiuqtit.

EMAB-kut pitquyauhimavaktut atuqtauyughanin ihumagiyaavaktunin aulapkainikkullu, hivuuranarnival-laakkullu pingillutik munaqhiqattarnikkullu parnaiyaivaghutik; ilittuqhaivaghutiklu munaqtiqhamingnit piyumaffaarumagumik.

Ilaugattaqpaktughanik Nunaqaqqaqhimayut Inuit Aktuqtauhi mayuni Nunalingni hilaryualirinikkut ayuiqhaivaktughauyut ilaa nakuuyumin havaaqaqpang-niarumik Nunaqaqqaqhimayut inuit.

Una Katimayitkut katimapkaihimayut 12-nik katimaplutik 2002-03-mi katimahimaplutik Lutsel K'e-mi, Old Fort Rae-mi uvanilu Diavik-kut havagvianni. Katimayit katimaqattaqpangniaqqut Aktuqtauhi mayuni Nunalingni himmauhiqattariiklutik.

Ukuat Katimayiit katimahimangmiyut Katimaqatiillu ihivriughiplutik Titiraqhimanianni 4 ukuat EA-kut.

Una Uqaujjinikkut Piyumayuyutighainnin havaariyayughatigut makipkaihimayut, talvalu aturutighaitigut atuquiplutik.

Uvangat September 2002-min kigliqarlutik una ukiuq nungutpat, ukuat Katimayitkut havaktaaqhimayut Aulapkaiyiqanngittutik. Himmautighaanin havaktittiligtut atulihaaqtumi May 2003.

Pitquhiminirnikkut Qauyimayatuqarnini Munaqhinikkut Ilihaihimayut ukuat EMAB-kut ukuallu IEMA. EMAB-kut ihumaliuligtut atuquyauhimajunin ukuat nunaqaqqaqhimayut katimayiannin katimajjutigiayit uvani.

Ukuat Katimayitkut ihivriughihimayaat Tigumiarungnaqtuni Kiinauyaghatigut havaariyaghainnin talvalu angiqatigiikhimayut ilaa nutqangillutik huli uvani ukiunganni 2002-03. Ilikkut ihivriughiyiit uqaqhimayut aallangayumin unipkaaliuq-tauyughauyunin pipkaiyumayut qanurliqaak hapkuat kiinauyatigut tuniqhaujutigahainnin.

Iqaluit iptiqarningani ihivriughihimayut uvani 2002-mi. Naunaqtuqhiuqtillu inutuqqallu havaqatigiikhutik pivaktut, takuurivaghutiklu ilitpalliaqatigiikhutiklu inmingnit pivaktut. Hamna ihivriughiniq nakuaqtuq uuktuutauhimayut qanurliqaak pitquhiminiillu naunaqtuqhiuqtillu qauyimayatuqangit atuqtaugumik ihuatqiauniaqtuq.

Katimayitkut pivalliajutigahakkut ilihaqhimayut Lutsel K'e-mi uqautigiplugit atuqtaghainnin EMAB-kut, talvalu ilittuqhaiplutiktautq havauhighainninlu munariyaghainninlu Katimayitkunni ilauqatayut havaktiinullu.

Ilaugatayut EMAB-kunni DDMI-kullu havaktiit pulaaqhimayut La Ronge, Rabbitt Lake, uvungalu Stony Rapids, Saskatchewan-mi ilihariaqtuqhutik qanurliqaak Ukiuqtaqtumi Uyarakhiuqtit Munaqhiyut Titirarvigyuangat makipkaqtauhi manianikklu havauhianniklu takuurivaghutik.

Ilaugatauyut EMAB-kunni katimaqatauhimayut iliharnikkut ukunani: DIAND-kut iliharnikkut uqautigiplugit aviktuqhimayuni munaqhinighakkut; ayuiqhanikkullu ilihaghutik katitpallianikkut akturninganin ihivriughinighainnin.

EMAB-kut tuniyauhimayut 28-nik unipkaanik ukunangat DDMI-kunnin ukiunganni 2002-03. EMAB-kut takuurivaghutik uqautauvaktunin ukunani amigaittuni unipkaaliuqhimayut Diavik-kut Naluqhaqtayuni Katimayiralaanginni katimajjutigivagainni.

Piliriarutighatigut Qanurijjutait

February 2003-mi, Diavik-kut qipligtunin uyarakhiuligtut, tikitinnagu havalirumajjutait.

Uqautigilluaqtaat

Diavik-kut ihuaqharumayaat ukuak Haviqannginnikkullu pH-kunnikkullu piqariakhaat imaqarninganni laisqarninganni. EMAB-kut ihivriughimayaat hamna ingiqtuut talvalu takuuriplutik aulapkaiyip uqauhiannin aallanguqhitannagit, angiqtaataaqhimayunin MVLWB-kunnin.

EMAB-kut ihivriuqtaat DDMI-kut Angunahuaqtauyutigit Akturninganin Munaqhiyutigit Piliriarutainni talvalu uqariiqhimaplutik tikilimaitaanguuq piyumayaitigit. EMAB-kut pihimayut 21-nik piyumalluaqtaat aallannuguqplugit. DDMI-kut ihuaqhaqhimayaat parnaiyautighat ukuat EMAB-kut ihivriuqtaaqhimayaat talvalu nalvaangiplutik ihumagilluaqpagainnin.

EMAB-kut uqaqhimayut siksiuyunik pitquhimayainnik ukununga DFO-kunnut DDMI-kunullu. Tallimat angiqtauhi mayut talvalu atuqtauliqhutik.

Iqaluit nayugaita tunihiffaarutait ilaa uqautauilluaqpakput tajja talvalu EMAB-kut uqaujjiyut DFO-kunnut tahapkuat atuqtauhi manngittut tahiit ilaa aktuqtaunngillugit amigaiqpallianiarungnaqhivut tammaqtaarhimayut iqaluit nayugait. Una uqautauhi mayuq ihuaqhitauihi manngittutq uvani ukiumi nungutinnagu.

EMAB-kut angiqhimayut ihariattinikkut ihuaqhiquiplutik Imarmiuttat Akturningatigut Munaqhiniit Piliriarutaita unipkaangit uvani 2001-mi talvalu uqautigiyaannin naammaguhughutik ukuanguuq MVLWB-kut kaantraaliquitit kitumulluqaak ihivriuqtiyuyughat piliriarutimin naunairahurrillugu piyumayayut tikinniarumikku.

EMAB-kut piyumalluaqtaat 2003-04-mi nutqaqtaililitik: amigaiqpallianikkut, ilitturivallialirlugillu ikayuqpaklugillu ilauqatauyughanikkut Nunaqaqqaqhimayut inuit hilaryuatigut munaqhininnik Diavik-kut havauhiannin; takuurivaklutiklu hilaryuatigut akturninganni ukuat Diavik-kut piliriarutaita takuuriqattarlugit anngutighatigut, ilaa tuktuqarninganni; iqaluillu immallu; takuqattaqpaglugit aulapkaiyit munaqhittiaqpakkumik parnaiyautiniklu piliriarutighaninlu ilaa ihivriuttiaqtauvagiahaita talvalu takuuriqattaqpagiakhaitalu pivagiakhaita; talvalu atuqtittilirlutik Uqaujjinighakkut Atuqtaghainnin talvalu makipkailutik EMAB-kunni Pitquhiminirnikkut Qauyimayatuqanginni katimayighainnin.



Board Members

The Environmental Monitoring Advisory Board members represent a broad cross-section of northern society, with experience ranging from years in corporate and public service, in the north and around the world, to life spent close to the land. This diversity brings with it challenges and opportunities, as we search for ways to build strong relationships with each other and with our industry partners, working to ensure that communities are full participants in all aspects of environmental monitoring and mitigation measures associated with the Diavik project.

Members of the Board, their position on the Board, the parties they represent, and the alternate Board member are listed here:

Robert Turner, Chair, North Slave Metis Alliance, (Clem Paul)

Floyd Adlem, Vice Chair, Government of Canada, (David Livingstone)

Doug Doan, Secretary-Treasurer, Government of the Northwest Territories, (Jane McMullen)

John Morrison, Government of Nunavut, (alternate position vacant)

Erik Madsen, Diavik Diamond Mines Inc., (Gord MacDonald)

Doug Crossley, Kitikmeot Inuit Association, (alternate position vacant)

Johnny Weyallon, Dogrib Treaty 11 Council, (Ted Blondin)

Lawrence Goulet, Yellowknives Dene First Nation (N'dilo), (Angus Martin)

Florence Catholique, Lutsel K'e Dene First Nation, (Charlie Catholique)



Back Row: Florence Catholique, Doug Crossley, John Morrison, Doug Doan, Erik Madsen.

Front Row: Lawrence Goulet, Floyd Adlem, Bob Turner, John McCullum. Missing – Johnny Weyallon

Changes to the Board

In 2002-03, two Board members resigned and were replaced by their alternates. In October 2002 Doug Crossley replaced Alex Buchan, representing the Kitikmeot Inuit Association. In November, 2002, John Morrison took over for Paul Partridge, representing the Government of Nunavut. Alternates for these two organizations are currently vacant. Jane McMullen was appointed as an alternate Board member in June 2002, to represent the Government of the Northwest Territories.



New Board Member

Doug Crossley, *Kitikmeot Inuit Association*

Doug has spent the past 30 years in the north working initially in the environmental field and for the past 22 years in the area of community development. He lives in Cambridge Bay, and is a Special Advisor to the Deputy Minister of Community Government and Transportation. Doug has served as a Board member with both the Cambridge Bay and the Kitikmeot Hunters' & Trappers' Associations. He also has extensive experience with water quality monitoring initiatives in the Western Kitikmeot area. His involvement with the Kitikmeot Inuit Association has developed through working relationships for initiatives including Regional Land Use Planning, assessing "Hinterland" development initiatives for their impacts on adjacent communities and residents, and the Bathurst Inlet Road and Port project.

Doug Crossley, *Kitikmeoni Inuit Katutyiqatigiit*

Doug tahamanihi mayuq 30-nik ukiunik ukiuqtaqtumi havaariplugu hiliaryualirinikkut talvalu 22-ni ukiunik havaaqapaghuni nunalingni pivalliajjutighainni. Nunaqaqhimayuq Iqaluktuuttiami, talvalu uqaujjinikkut kivgaqtiuyuq Minisitaup Tugliriyaanut ukunani Nunalingni Kavamatkuannilu Ingirayuliriyitkuannilu. Doug kivgaqtiuvaktuq Ilauqataupluni ukunani Iqaluktuuttiamilu Kitikmeonilu Angunahuaqtiini Naniriaqtuqtunullu Katutyiqatigiinginni. Ilihimattiaqturlu immatigut ihivriughiqattarninginni piyumayainnin uvani Uataani Kitikmeot nunanganni. Ilauqatauvakkami ukunani Kitikmeoni Inuit Katutyiqatigiinginni havaqatigittiaqhugit piyumayaayunin ilagiplugit Aviktuqhimayuni Nunatigut Aturutainni Parnaiyautit, takuuriqattaqpaghuni "Ukiurmiittut" havaariyaghauyuni piyumayaayunin akturnirutighaitigut ihivriughiqattaqhuni nunalingnilu nunaqaqtutigullu, ukunanilu Qingaungmi Apqutiliurnighakkut Tulagviliurnighakkullu havaariyaghainnin.



New Board Member

John Morrison, *Government of Nunavut*

John lives in Kugluktuk, Nunavut and works as an Environmental Protection Officer for the Department of Sustainable Development, Government of Nunavut. John has extensive experience in the management and monitoring of environment projects. In this capacity, John's role is to help represent the interests of the Nunavut people in the Kitikmeot. Of special concern is the water quality in the Coppermine River. He also provides a conduit for information to interested parties inside and outside the government.

John Morrison, *Kavamatkuanni Nunavut*


John nunaqatuuq Kugluktuk, Nunavunmi havaaqaqhuni Hilaryualirinikkut Pihimattiaqtiuyuq ukunani Havagvianni Ikuppiviliriyitkut, Kavamatkuanni Nunavut. John ilihimattiaqtuq havaarivakkamiuk aulapkaikkullu munaqhinikkullu hilaryuatigut havaariyayunin. Uvani havaariyami, John havaariyaa kivgaqtiupluni piyumayainnin Nunavunmiuttat inuit uvani Kitikmeoni. Ihumagilluaqtaa imaqarnia Kugluktup Kuugaata. Ilitturipkaiyiupluni ilitturiyayumavaktunin iluani hilataanilu kavamatkut.



New Alternate Board Member

Jane McMullen, *Government of the Northwest Territories*

Jane has called the Northwest Territories and Nunavut home since 1983. She has worked with numerous committees related to mining and the environment, and science education in that time. Jane is a policy analyst with the GNWT Department of Resources, Wildlife and Economic Development. As a Community Minerals Advisor in the Kitikmeot, Jane worked with regional organizations to help input those perspectives to the Diavik environmental assessment process.



Environmental Monitoring Advisory Board (EMAB)

The Environmental Monitoring Advisory Board (EMAB) was formed as a requirement of the Diavik Environmental Agreement, and is intended to provide an integrated and co-operative approach to the environmental management of the Diavik Diamonds Project. EMAB was incorporated under the Societies Act, on January 30, 2001, and held its first formal Board meeting in February 2001. The Board operates independently from Diavik Diamond Mines Inc. (DDMI) and the governments of Canada, the Northwest Territories and Nunavut and aims to assist the Parties in the implementation of a common strategy to address environmental matters associated with the project.

The establishment of EMAB

In September 1998, Diavik Diamond Mines Inc. (DDMI) submitted its environmental assessment report to the federal government. The submission was based on geotechnical, environmental and socio-economic investigations, public consultation, and discussions that took place between 1994 and 1998.

The “Comprehensive Study”

Further information derived from technical review and public consultations combined to form a Comprehensive Study of the Diavik Diamond Mines Project in 1998 and 1999.

At the conclusion of the Comprehensive Study it was determined that, with the mitigation measures proposed by Diavik, no significant adverse environmental effects were identified. However, it was also determined that mechanisms were required to ensure implementation of monitoring and mitigation measures.

Environmental Agreement

In response to the Comprehensive Study findings, an Environmental Agreement was developed that established appropriate responsibilities of Diavik and federal, territorial and Aboriginal governments in the cooperative development, on-going review and modification of follow-up programs to mitigate potential project effects on the biophysical environment.

On March 20, 2000, the Environmental Agreement for the Diavik Diamonds Project came into effect. It is a legally binding agreement between Aboriginal Parties affected by this project, the governments of Canada and the Northwest Territories.

The agreement requires that an environmental monitoring advisory board be established, operating at arm's length and independent from the Parties to the agreement. It specifies the mandate, composition and functioning of the Board and establishes the Board's responsibility to perform its functions consistently with the purpose and guiding principles of Article 1 of the Environmental Agreement, and it will remain in place until full and final reclamation of the project.



Article 1 of the Environmental Agreement

Purpose

- ◆ To ensure that the mitigation measures as identified by DDMI and the Comprehensive Study are appropriately implemented;
- ◆ To provide for additional monitoring which, in conjunction with the monitoring requirements of Regulatory Instruments, will serve to verify the accuracy of the environmental assessment of the Project and the effectiveness of mitigation measures, and whether commitments are being fulfilled;
- ◆ To facilitate the use of holistic and ecosystem-based approaches for the monitoring, management and regulation of the Project;
- ◆ To respect and protect air, land, water, aquatic resources, wildlife, archaeological and cultural resources, and the land-based economy that are essential to the way of life and well-being of the Aboriginal Peoples;
- ◆ To create opportunities for community and public input and participation;
- ◆ To provide advice and direction to DDMI in order to assist DDMI in managing the Project consistent with these purposes;
- ◆ To maximize the effectiveness and co-ordination of environmental monitoring and regulation of the Project; and
- ◆ To facilitate effective communication about the Project with Affected Communities and effective participation of the Aboriginal Peoples and the general public in the Achievement of the above purposes.

Guiding Principles

The Parties to the Environmental Agreement agree to carry out their responsibilities guided by the following principles:

- ◆ Adaptive environmental management;
- ◆ Sustainable development;
- ◆ Design and implementation of environmental protection measures to minimize adverse effects on environmental quality to the extent technically and economically feasible;
- ◆ Precautionary Principle;
- ◆ Promotion of capacity-building for the Aboriginal Peoples respecting Project-related environmental matters;
- ◆ Recognition of the particular environmental values of the Lac de Gras region;
- ◆ Full consideration and use of both Traditional Knowledge and other scientific information where appropriate; and
- ◆ Promotion of a co-operative approach among the Parties respecting Project-related environmental matters.



What is the mandate of EMAB?

- ◆ To assist the Parties to implement an integrated and cooperative approach to achieving the purposes and guiding principles in Article 1.
- ◆ To serve as a public watchdog of the regulatory process and the implementation of the Environmental Agreement.
- ◆ To review documentation produced by the Parties to the Environmental Agreement and regulatory authorities pertaining to environmental quality, and to make recommendations to DDMI, the Minister of DIAND, and any other party having regulatory or management responsibility pertaining to the Project.
- ◆ The agreement specifies that the recommendations are to be made respecting;
 - issues relating to access for purposes of wildlife harvesting;
 - the participation of each of the Aboriginal Peoples and affected communities in training initiatives and monitoring programs bearing on environmental quality; and
 - the need for and design of Traditional Knowledge and other studies, and, where appropriate, facilitate the management and implementation of these studies.
- ◆ To facilitate the provision of information to affected communities, the Parties to the agreement and the general public on the Board's activities and on matters bearing on environmental quality.
- ◆ To participate as an intervener in regulatory, dispute resolution and other legal processes.
- ◆ To provide a meaningful role for each of the Aboriginal Peoples in the review and implementation of environmental monitoring plans in respect to the Project.

What is the composition of EMAB?

The Board is composed of one representative from each of the Parties to the agreement, as follows:

Dogrib Treaty 11 Council	North Slave Metis Alliance
Yellowknives Dene First Nation	Government of the Northwest Territories
Lutsel K'e Dene First Nation	Government of Canada
Kitikmeot Inuit Association	Diavik Diamond Mines Inc.

The Government of Nunavut also has representation on the Board, as the agreement recognizes their involvement in transboundary issues relating to water quality and wildlife.



What are the Board's objectives?

The Board's objectives are to provide community input and advice to DDMI and regulators, with the overall intent of minimizing project related environmental impacts.

With participation and contribution from Aboriginal Peoples and affected communities, the Board plans to build a strong relationship with DDMI to ensure communities are full participants in all aspects of environmental monitoring and mitigation measures associated with the Project.

How does EMAB function?

The Board office in Yellowknife includes the Executive Director and staff. It houses a library of materials on the Diavik Diamonds Project and is open to the public. Materials such as annual reports and newsletters are produced, and initiatives such as caribou monitoring and Traditional Knowledge workshops are planned and implemented from this office, with meetings and workshops rotating among the affected communities.

Start-up costs for the first two years have been provided by the Government of Canada, Government of the Northwest Territories and DDMI, with future funding for the Board provided by DDMI.

Budget for each of the first two years of EMAB (2001/02, 2002/03)

Diavik Diamond Mines Inc.	\$600 000
Government of Canada	\$150 000
Government of the Northwest Territories	\$50 000

The Board aims to be fiscally prudent through utilization of other resources, and cooperative activities with other organizations like its sister socio-economic board, the Diavik Communities Advisory Board. For funding which is not available within the agreed-to budget, proposals may be submitted, and DDMI will provide funding based on the merit of the proposals.

The Board is registered as a "not-for-profit" society in the Northwest Territories.

Future Funding

The budget for the years following 2003 will be negotiated with DDMI, using the process outlined in the Environmental Agreement. The Board presented its 2003-2004 Workplan and Budget Forecast in September 2002, including the budget for 2004-2005 for \$600,000 for each year, to DDMI. This two-year budget was accepted and approved by DDMI in January 2003. The Governments of Canada and Northwest Territories made a commitment to provide contributions to EMAB during the first two years of the organization.

The Diavik Project

Environmental Setting

Lac de Gras is a large lake roughly in the centre of the Slave Geological Province north of the treeline and in Canada's Southern Arctic ecozone. The area is cold and dry. The lake is the headwaters of the Coppermine River, which flows 250 kilometres north to the Arctic Ocean. Lac de Gras is typical of arctic lakes in being quite cold with long ice-covered periods, and little food for fish and other creatures. Fish species include lake trout, cisco, round whitefish, Arctic grayling and burbot. Lac de Gras is also near the centre of the range of the Bathurst caribou herd and large numbers of the 350,000 strong herd can be seen in the area during spring and fall migration. Many other animals include the mine site are in their home ranges, including Grizzly Bear, wolves and wolverine, many small mammals, migratory birds and waterfowl.



Project Description

The Diavik Diamond Mine is located on a 20 square kilometre island in Lac de Gras, approximately 300 km by air northeast of Yellowknife, the capital city of the Northwest Territories, in northern Canada.

Diavik Diamond Mines Inc. expects to mine four diamond ore bodies, commonly called kimberlite pipes, over a 20-year mine life. The pipes are small compared to the world average, but they contain a higher than average content of attractive, high quality and readily marketable diamonds.

The Diavik project plan calls for a two-year period to reach full production. After this start-up period, kimberlite processing is expected to reach 1.5 million tonnes each year and it is anticipated that diamond production will peak at over six million carats annually. The Diavik Mine is expected to produce approximately 107 million carats of diamonds over its mine life.

A combination of open pit and underground mining methods will be used. DDMI plans to build three water diversion structures from shore to surround the four diamond-bearing pipes and allow mining to occur.

Construction of the first water diversion structure, or dike, around the two A154 pipes began in 2001, allowing the removal of water and overburden in the second half of 2002. Construction of the physical plant, including the maintenance shop, water treatment plant, power generation facility, and processing plant, was completed during the second half of 2002 and diamond production began in early 2003.





Board Operations

The Board held 12 official meetings in 2002-03 including meetings at Lutsel K'e, Old Fort Rae and the Diavik site. These meetings covered a range of topics that will be discussed throughout the report. In addition to Board meetings the Executive Committee met frequently, sometimes formally but often in a less formal way. The Board also hosted meetings and workshops to receive information and advice on issues resulting from the Diavik project.

The Board worked to improve the efficiency and effectiveness of its administration through a detailed review and substantial revision of its Operations Manual, based on the first year's experience. EMAB has found the revised manual to be helpful in its decision-making.

There have been some staff changes at the Board. Linda Tourangeau continues with the Board in the new role of Office Manager. Kirstie Simpson left the position of Executive Director in September and the Board took advantage of the transition period to review a number of its approaches and areas of emphasis before beginning the process to fill the position. The recruitment process was started during 2002-03 although the new Executive Director was not hired until the following year.

The Board also hosted a meeting of the Parties to the Environmental Agreement as required under clause 4.11 *Transitional* of the Environmental Agreement. This meeting was required to allow the Parties to review Article 4 of the Environmental Agreement that established EMAB, in the context of regional cumulative effects. The meeting was held on April 22, 2002. Each of the Parties provided their perspective on EMAB's effectiveness, followed by a lengthy discussion on the possible evolution of a regional monitoring agency in the Slave Geological Province and EMAB's role in that context. It was generally agreed that the Cumulative Effects Assessment and Monitoring Strategy/Framework Working Group would take the lead on development of a foundation document examining the various issues and laying out possible options.

"EMAB is well organized and has made a positive contribution to environmental monitoring activities and interactive management for the Diavik Diamond Mine. A key strength is the presence of community representatives on the Board."

Bob Overvold, *Regional Director,
Indian and Northern Affairs
Canada, NT Region.*

"EMAB continues to provide Diavik with sound advice on environmental management and monitoring practices. Our relationship continues to strengthen on the basis of mutual respect and cooperation and Diavik looks forward to continuing this important partnership through our transition from construction to full operations. Diavik congratulates EMAB on another successful year."

Joe Carrabba, *DDMI President*



Communications

Communications Strategy Report

In November, 2002, Outcrop Communications Ltd. was contracted to develop an Information and Communication Strategy for EMAB. The report addressed communication and information exchange within and among the Board members, and the parties to the Environmental Agreement and communication with the Affected Communities.

Recommendations were made in the area of personnel requirements, and several options presented for consideration. Target audiences and priorities were identified, based on input from Board members. Communication tools were also identified to be effective with different audiences. Resources required to support the communication strategies were noted. The report suggested that EMAB's communication program be evaluated annually to fine-tune the communication process.

The report recommends that EMAB give highest priority to communication with Affected Communities in the area of the Diavik Diamond Mine, with attention also paid to communication with DDMI, regulatory authorities, other EMAB Board members, ENGOs (environmental non-government organizations), and public interest groups, in this order. Board members should have the main responsibility for communicating with the Affected Communities about EMAB activities and concerns, and they should be assisted in their efforts by EMAB staff.

Some communication resources that were recommended include: information PowerPoint presentation for general and community use, updated annually; a community information display system, suitable for updating and modification, to be used in community meetings; a package of resources to accompany the display; a monitoring activity tracking report issued periodically to report on EMAB's monitoring and review activities; a website; and, development of an environmental monitoring report card protocol and process to support an annual EMAB rating of performance by Diavik and the regulatory agencies.

Key messages about EMAB's role should be at the forefront of all communication activities, namely, that EMAB is a bridge among the Affected Communities, the regulators and Diavik; that EMAB is monitoring Diavik's environmental performance; that EMAB checks on the regulators' enforcement of environmental conditions for the Diavik project; EMAB assists Aboriginal people to participate directly in monitoring activities; and that EMAB is an information resource to the communities and the general public on the environmental monitoring of the Diavik project.

The recommendations in the report were considered throughout the process of hiring the Executive Director, and will be revisited when further staff are hired.

Work is ongoing on other recommendations presented in the report (see page 38)

Community Consultation

There was a public meeting held in Lutsel K'e on July 4, 2002. The meeting was well attended. The Chair made a presentation on the role of EMAB. This was followed by a question and answer session.

Annual General Meeting

The first AGM for EMAB was held in Yellowknife on September 23, 2002. The current executive was re-elected. Robert Turner continues as Chair, Floyd Adlem as Vice-Chair and Doug Doan as Secretary-Treasurer. Following a presentation on the project, questions were welcomed. Issues were raised about effects of dike construction and lessons learned from the process.

Annual Report

EMAB presented its first annual report at the AGM, and provided copies to each Board member, for distribution among their communities. Reports were sent to the parties to the agreement, industry, and interested members of the public. Approximately 300 reports were distributed in total.

Aboriginal Involvement

Traditional Knowledge (TK) Workshop

A Traditional Knowledge Monitoring Workshop was held March 12, 13 and 14 in Yellowknife, and was co-hosted by EMAB and IEMA. Participants included participants from the two boards, community representatives, elders, and industry representatives.

The workshop objectives were: to bring the two host organizations together with others interested in incorporating TK in community-based monitoring programs for DDMI and Ekati; to highlight TK and aboriginal involvement requirements of the EAs of the two projects and to recognize how the two EAs differ; to work on strengthening relationships; and to recommend process and/or steps to take in order to answer questions around how aboriginal involvement and TK will be used at the two mines, how it will be monitored, how aboriginal involvement will be enhanced, and how TK will be accessed and gathered.

The recommendations shown on page 19 have been made by representatives of the Aboriginal groups. EMAB is considering its position on these recommendations in relation to the Environmental Agreement and the Parties, and its role, if any, in implementation of the recommendations.

"It makes good sense for a traditional knowledge panel to have a regional focus.

We welcomed the open discussion among all participants at the workshop, and look forward to encouraging and supporting the development of a regional TK panel.

EMAB's mandate is limited to the Environmental Agreement we are operating under, and so we plan to establish an EMAB Traditional Knowledge Panel for the Diavik Project with the hope that this will get the ball rolling. When a regional panel is formed there will be an opportunity to re-visit the role of the EMAB TK Panel."

Robert Turner, Chair, EMAB





Recommendations from the Aboriginal Caucus for a Regional Traditional Knowledge (TK) Panel

Yellowknives Dene First Nation, the North Slave Metis Alliance, the Kitikmeot Inuit Association, Dogrib Treaty 11 and Lutsel K'e Dene First Nation agree to work together to establish a Regional Traditional Knowledge (TK) Panel under the current Environmental Agreements. This Panel would play a coordinating role to ensure that TK is appropriately and meaningfully incorporated into the planning and management of the BHPB and Diavik project and other development activities in the region.

Structure

1. A Regional Traditional Knowledge Panel should be established under the Environmental Monitoring Advisory Board (EMAB). The Panel would be made up of TK experts (elders and others) from each of the affected Aboriginal groups. Panel members may change, from time to time, to ensure that the most knowledgeable and appropriate people are involved.
2. The Regional TK Panel should have the following functions:
 - Assess what TK research has been done in the past to determine research gaps;
 - Work with local communities to define what TK research needs to be done in the future including:
 - Baseline TK studies;
 - TK studies needed to address community concerns related to the environmental impacts of the BHPB and Diavik projects;
 - Other TK studies defined as important by communities (e.g. cumulative effects related studies);
 - Share information and provide coordination related to regional studies including guidance on how, when and where studies may be carried out;
 - Provide funding to communities to carry out these studies;
 - Assist with the communication and interpretation of results including the integration of TK and scientific information;
 - The Aboriginal groups should retain ownership over their TK. The agreement of the Aboriginal groups providing the TK shall be necessary before information is made public.

Funding

3. The TK Panel should determine the funding required to carry out its mandate. Communities should determine the level of funding required for community-based projects.
4. Core funding for the TK Panel should be provided. Initial administrative support for the Panel may come from the Environmental Monitoring Advisory Board (EMAB) and the Independent Environment Monitoring Agency (IEMA). Once established, core funding for the Panel should be provided by BHPB, Diavik, the Government of Canada, GNWT, GN and other relevant parties.
5. BHPB, Diavik, other industries, the Government of Canada, GNWT and GN should provide funding for TK studies identified as important by the Affected Communities.
6. The funding arrangement for the Panel should be flexible enough to allow for a broader geographic or project scope.

Coordination Traditional Knowledge and Science

7. The Regional TK Panel may consult with scientists from BHPB, Diavik, government and elsewhere to develop and design methodologies for TK studies to ensure that results are useful for decision-makers.
8. The Environmental Monitoring Advisory Board (EMAB), being represented by all the affected Aboriginal Groups, should play a central coordinating role to oversee the work of the Regional TK Panel.
9. The Independent Environmental Monitoring Agency (IEMA) should play a supportive role to EMAB with respect to the sharing and interpretation of scientific information, much like a scientific panel. Conversely, the Regional TK Panel should share information and work cooperatively with the IEMA with regard to environmental issues specific to the BHPB mine.
10. In future, the current Environmental Agreements should be amended and future agreements be developed to avoid duplication and ensure that monitoring is carried out in the most cost effective and efficient ways.



Fish Palatability

On August 27-28 2002, a fish palatability study was undertaken near the mine site on Lac de Gras, immediately south of the A154 dike and further east towards the mainland. A need for this study was identified during the environmental assessment of the Diavik project, and was written into the Diavik Fisheries Authorization. A study design was drafted, revised, and agreed to by all involved.

The intention was to establish a baseline of information regarding the quality of the fish. This will help in future monitoring projects, to help to determine any changes in fish health. Elders participated alongside Diavik scientists throughout the study.

It was agreed that fish would be evaluated fresh, and would not be compared to fish caught in other locations. Participants including youth, elders, women and fishermen, were identified by communities to be invited to participate in the study.

Johnny Weyallon, Angus Martin, Florence Catholique, Robert Turner and Allan Niptanatiak helped to coordinate the study. Participants were Ernest Boucher, Noel Crookedhand, Helen Toby, Elizabeth Michel, Leon Weyallon, Adeline Mackenzie, Louis Whane, Felix Beyonnie, Freddy Martin, Fred Turner, Madeline Drybones. Matt Kennedy was the biologist for the study. DDMI staff also participated.

A total of 46 fish were collected in five nets – 43 lake trout, two cisco, and one white fish. All participants assisted in weighing and measuring the fish. Scientific requirements included taking photographs of fish, observing visually for sex, stage of maturity, tissues were removed for metal analysis, stomach contents recorded, along with visible parasites, aging structures were collected. Another method used to determine fish quality is an electronic sniffer, which measures chemicals released from the tissue of the fish. Results of these tests are not known at this time.





Fish were selected for cooking and evaluating. Fish were observed before and during cleaning. Fish were cooked in a variety of ways, and no spices were added. A numbering system was established, ranging from 1 to 5 to rate the quality of the fish. Each community group filled in one set of forms.

The general consensus was that while the fish tasted different from fish they were used to eating, the Lac de Gras fish were good to eat.

Out of this study, came a recommendation to establish a permanent camp that would become a site for undertaking similar studies in the future. The camp will be situated near the mine site, and will enable community members to be involved in monitoring Diavik activities. The monitoring will be community-based and designed, with support and approval from DDMI and EMAB.

The Fisheries Authorization requires the taste testing to be done every five years, but participants have recommended that the study be done yearly for the next two years, and every other year after that.

The study was a good example of how traditional and scientific knowledge can be combined, and how scientists and community members can work together towards a common goal. A report on the study is being completed and will be used to guide future studies.





Capacity Funding

The Capacity Funding was established in 2001 by a motion of the Board as a way of supporting the aboriginal parties in building capacity in their communities. The Board agreed to:

" provide a budget of up to \$30,000 to be allocated to each aboriginal party to the agreement for the fiscal year ending March 31, 2002, to assist in:

- *Creating opportunities for community and public input and participation*
- *Facilitating effective communication about the Diavik Project with Affected Communities*
- *Facilitating effective participation of the Aboriginal Peoples*
- *Providing and implementing an integrated and co-operative approach to achieving the purposes of Article I of the Environmental Agreement*
- *Promoting capacity-building for the Aboriginal Peoples respecting Project-related environmental matters and to*
- *Allow their respective representative to adequately participate on the Board."*

from EMAB Motion #3-01-11-20

Each Aboriginal Party can submit a budget to the EMAB office in Yellowknife for the approval of the Board. Activities must be linked to the purposes and guiding principles of the EA and describe how the products or outcomes will support EMAB in fulfilling its mandate, and Parties must report on their activities and account for the funds.

In June of 2002 the Board reviewed the Capacity Funding program and agreed to continue it in 2002-03. On receipt of an activity report and accounting for the previous year, Aboriginal Parties receive capacity funds up to the amount accounted for in the previous year, to a maximum of \$30,000. An independent review of the Capacity Funds was undertaken by Dargo and Associates in late 2002 at the Board's request. The report recommended development of a clear statement of goals and use of funds, annual submission of project plans in a consistent format and development of financial contract agreements specifying accounting and reporting requirements. The Board will use these recommendations to develop principles, goals and clear reporting requirements for the Capacity Funding section of the Operations Manual.

Capacity Funding Reports for 2002-03

Yellowknives Dene First Nation

The Land and Environment Committee held a facilitated workshop with the EMAB member and an environmental expert to review technical reports received from DDMI going back to 1998. They also retained the services of an environmental expert throughout the year to advise the EMAB member on technical aspects of documents received from DDMI.

North Slave Metis Alliance

The capacity funds provided were largely used to support office administration. The EMAB member kept the general membership of the NSMA informed of activities. This included presentations to the Annual Gathering at Old Fort Rae and the Annual General Meeting, as well as at Board meetings.

Lutsel K'e Dene First Nation

The funds provided were used to participate in the Annual Spring Carnival April 11-14. An environmental contest was held. Partial support was provided for a trip to Parry Falls for youth and Elders April 28-May 1.

A Summer Fish Camp was held in July followed by a Youth Feast, Awards and Dance on July 19. An additional Summer Fish Camp was held in August due to the success of the first one in July. A total of 75 youth participated in the two fish camps. Consultation with elders and youth continues to be an important part of the EMAB program.

Kitikmeot Inuit Association

Funding was provided to the Kugluktuk Angoniatit Association (Hunters' and Trappers' Organization) to support a community-based water quality monitoring program on the Coppermine River using both scientific and traditional knowledge. The program is scheduled to begin in the summer of 2003-04. The intent of the program is to assist Kugluktuk community members to acquire skills to monitor and better manage the river's water quality.

Board Development Workshop

On July 3-5, 2002, the Board members and Executive Director held a Board/staff development workshop in Lutsel K'e. Mike Bell of Inukshuk Management Consultants in Yellowknife, served as the facilitator.

The purpose of the workshop was: to define the mission of EMAB, to clarify the roles and responsibilities of Board members and staff; to review day to day operations; and to develop the strategic priorities for the coming year.

After discussion, and review of the mandate as spelled out in the Environmental Agreement, a draft mission statement was developed and agreed to.

Rabbitt Lake Trip

On November 25-27, 2002 members of EMAB and DDMI visited La Ronge, Rabbitt Lake, and Stony Rapids, in Saskatchewan. The purpose of the trip was to learn how the Northern Mines Monitoring Secretariat (NMMS) was formed and how it operates, describing the relationship between the NMMS and the mining companies, regulators and communities. The group also heard first hand how Kitsaki Management, an aboriginal joint venture company, has become involved in the mining industry in northern Saskatchewan, specifically with the Cameco mine. The project officer (similar to a DIAND inspector) described how inspections and permitting issues are dealt with.

The NMMS holds meetings in various communities and at the mine site at various times throughout the year. EQC (Environment Quality Committee) members' per diems, and travel costs are paid for by the NMMS Secretariat. Each EQC member from the community is appointed for a two-year term and it can be renewed/extended.



Learning and Working Together

Throughout 2002/03, members of the Board participated in a variety of workshops, training sessions, and activities.



The role of the EQC is to review aspects of Environmental, Worker Health and Safety and Socio-economic issues at the mine site. Any cumulative effects monitoring programs are done separately from this committee and are paid for by the provincial government. This involves representatives from the communities. These programs were all contaminant-based programs.

A visit to the mine site was arranged for the second day. The mine manager welcomed the group, and was accompanied by environmental personnel, along with an EQC member, and long-time employee of the mine (Felix Macdonald). An overview and history of the project was presented. They described how they are recreating fish habitat around the pit that was developed in Walston Lake. There is a sport fishing policy for employees. A surface tour of the site was conducted and Felix Macdonald guided the group through the mill. There was a good opportunity for discussion on regulatory requirements, regarding who is responsible for what and how the Athabasca Working Group and the NMMS operate. In the evening, an underground tour was offered.

On the third day, the group travelled to Stony Rapids, where they met with a representative of the Athabasca Working Group, who works for Cameco, as well as a few other members. The group learned that most workers at Cameco work a one-week-in and a one-week-out schedule. It was noted that every year employees can bring family members to the mine site. They have an interactive web site for communities to inform them about what is happening at the mine.

All of the EMAB members and DDMI representatives felt the tour was very useful to see how Cameco has dealt with regulators, setting up boards and working with communities.

Regional Monitoring Agency

A workshop, "Towards a Single Regional Monitoring Agency for the SGP" was hosted by DIAND on November 13-14, 2002, and was attended by members of EMAB, along with a range of participants from government, industry, and other stakeholders with an interest in environmental research and monitoring in the Slave Geological Province.

The purpose was to explore the options and outline the potential next steps with respect to a regional approach to monitoring in the SGP.

EMAB supports the concept of a regional approach to monitoring, and participated as an observer at the workshop.



Cumulative Effects Training

A Cumulative Effects Assessment (CEA) workshop was held in Yellowknife on February 20-21, 2003. Members of EMAB attended and participated in this training workshop. The purpose of the workshop was to provide an understanding of what should be considered in completing a cumulative effects assessment. The workshop objectives were: to provide an introduction to CEA, to establish reasonable expectations of what CEA can accomplish, to review several of the key tasks in completing a CEA and the methods and approaches that can be used, and to use case studies to discuss practical issues that can arise in conducting a CEA. A definition of cumulative effects was put forward: "Changes to the environment that are caused by an action in combination with other past, present and future human actions."

Training

Providing training to Board members continues to be an important element of Board development, and capacity building. Three Board members and one alternate took computer courses to learn basic computer skills, including use of word processing and presentation programs, and using email and the internet.



Cumulative Effects
Assessment Workshop

Observations of the Board

Reporting

This year DDMI submitted 28 reports and one required revision to regulators, the Parties, EMAB Board members and the EMAB Public Registry. Regulators also considered a request submitted by DDMI in January 2002 to change the Phosphorous and pH limits in their Class A Water Licence, along with supporting technical information.

EMAB took particular interest in the Wildlife Effects Monitoring Program (WEMP), the Aquatic Effects Monitoring Program (AEMP), the fish and fish habitat monitoring, including application of the "No Net Loss" policy to pristine lakes, and the application to amend the Water Licence.

EMAB records indicate that several reports submitted in 2002-03 had not completed the review process by March 31, 2003. Five of these reports were not required until March 31, 2003.

Reports in Review at March 31, 2003

Report Description	Submitted	Agency
Rock Mass Deformation Potential	April 2/02	MVLWB
North Inlet Drawdown Continuation Summary Report 2001	May 22/02	MVLWB
Slimy Sculpins Baseline Metals Study	July 10/02	DFO
Design Specs & Monitoring Plans - Fish Habitat Compensation		
Streams	Aug 2002	DFO
Inside Dikes	Aug 2002	DFO
Lake Trout Habitat Utilization Study	Nov 26/02	DFO
A 154 Metal Leaching Study Results	Dec 2002	DFO
Sediment Deposition Study - Dike A154	Dec 2002	DFO
A 154 Fish Salvage Study Report	Dec 2002	DFO
Annual Water Licence Report (include documents below)	Mar 31/03	MVLWB
Seepage Reports	Dec 17/02	MVLWB
Winter Dissolved Oxygen Survey	Dec 2002	DFO
Aquatic Effects Monitoring Program Tech. Report 2001 - revised	Nov 12/02	MVLWB
Management Plans - Operations	Mar 2003	MVLWB
Hazardous Materials Management Plan ver.5	Mar 31/03	MVLWB
Operations Phase Contingency Plan ver. 5	Mar 31/03	MVLWB
Waste Management Plan Operational Phase ver. 5	Mar 31/03	MVLWB

DDMI produces many plans and reports as part of the regulatory process. Most of them are required by DDMI's Water Licence set by the MVLWB, the terms of the Fisheries Authorizations set by DFO, the terms of the Land Leases set by DIAND, or the Environmental Agreement. The conditions in these various permits and licenses are developed using the information and recommendations from the environmental assessment process documented in the Diavik Comprehensive Study Report.

In addition the DIAND inspector provides monthly inspection reports covering the Land Leases, Land Use Permits and the Water Licence.

These reports are an important part of the environmental management of the mine and are carefully reviewed by the regulators and EMAB. The reports tell us whether DDMI is meeting its terms, whether the mitigation measures are working, and whether the predictions about the effects of the mine were accurate.

The Board focuses on the contents and results of the reports. It also observes and considers the comments and concerns of the government regulators, and the role each plays in review, comment and follow up.

Reports Approved in 2002-03 or not requiring review

Report Description	Submitted	Agency
Reclamation Research Plan	June 26/02	MVLWB
2001-02 Environmental Agreement report		EMAB
PKC Containment Facility As-Built Design (final)	Nov 19/02	MVLWB
Collection Pond As-Built Rept.	Dec 2002	MVLWB
A 154 Dewatering Report	Dec 18/02	MVLWB
A 154 Fish Salvage Program Design	May 6/02	DFO
Mgmnt Plans - Operations	Mar 2003	MVLWB
Blasting and Explosives Management Plan ver. 2	Mar 31/03	MVLWB
Stratigraphic Delineation Program v. 2: North Inlet dikes	April 2/02	MVLWB
Collection Ponds Nos. 1&2, Collection Ditches		
DBM Water Collection Ponds Nos. 1,2,3,4,5 rev B	April 2/02	MVLWB

Diavik Technical Committee

The Diavik Technical Committee (DTC) was established to provide a forum for the discussion of technical matters related to the DDMI Class A Water Licence Number N7L2-1645 on September 14, 2000. The Mackenzie Valley Land and Water Board (MVLWB) gave approval to organize and establish the technical committee and to invite experts to serve as members of the DTC.

The DTC members provide expert technical opinions and recommendations to the MVLWB with respect to the acceptability of all development reports and plans submitted pertaining to the Water Licence N7L2-1645, and to assist the MVLWB in fulfilling its mandate and recommending acceptance or written approval of the reports or plans.

In May of 2001 staff of the Mackenzie Valley Land and Water Board met with EMAB to exchange ideas with respect to monitoring issues. A number of alternatives were discussed in respect to the relationship of EMAB and the DTC including having EMAB participate as observers on the DTC and the ability of EMAB to forward monitoring issues directly to the MVLWB. EMAB has since clarified by Board motion that it will act as an observer and will not participate in DTC decisions.

There were seven meetings of the DTC last year, with most of them taking place before the end of June. The major issues were a proposed amendment to the Phosphorous limits in the Water Licence, and the Aquatic Effects Monitoring Program report for 2001.

The DTC arrived at consensus on conditions and wording for the water licence amendment "advisory" and recommended this to the MVLWB.

The 2001 AEMP report was thoroughly reviewed and DDMI was directed to make a number of revisions to the report. As of the last DTC meeting of the year on October 16, the revised report had not been submitted to DTC. The report was submitted November 12, 2002.

During a presentation of a number of documents required by the Diavik regulatory process to EMAB in early 2003, the Board noted that they were not aware of any review of these documents taking place through the DTC. The Board also noted that they had not seen any evidence of comments or concerns about these documents from regulators. The Board directed that a letter be sent to the MVLWB stating that document review is an integral part of the enforcement process since it provides an assessment of compliance with regulatory instruments, and seeking assurance that such review would be done in a timely way.

There was some discussion of developing a Diamonds Technical Advisory Committee of the MVLWB encompassing all diamond mines in the NWT and a draft Terms of Reference was forwarded to the MVLWB by the DTC. The MVLWB is continuing to pursue this approach, and is currently trying to deal with some legal issues affecting the idea.



Major Issues

The MVLWB issued a water licence to DDMI on August 16, 2000. By early 2002 members of the DTC were informed that DDMI's Phosphorous levels were above the allowable levels in the licence, and that DDMI would be applying for an amendment. DDMI's application was to change the way Phosphorous is monitored from a maximum amount in any sample (concentration of 0.2 mg/l average with 0.4mg/l max for any sample) to a total amount per year, or loading. DDMI also asked that a qualifier be put on pH limits where natural acidity puts them out of compliance with the licence.

Water Licence Amendment

EMAB attended meetings of the DTC and observed the discussions by the various regulators and DDMI. EMAB told the MVLWB that they did not feel a public hearing was needed on the licence amendment, but asked to be full participants in the discussion. They also gave notice that they might provide recommendations on the amendment request. EMAB's letter to the MVLWB said that it felt DDMI's approach was reasonable, and commented that

We will rely on your board to ensure that the licence is amended to ensure that this change from "concentration" to "load" is manageable from a regulatory and enforcement perspective and that some form of monthly or seasonal limits are imposed such that a significant portion of the yearly load cannot be discharged over a short period of time.

EMAB supported and encouraged DDMI's use of "Best Available Treatment Technology" to ensure the best possible water quality. EMAB also noted that

An Aquatic Effects Monitoring Plan that is able to detect these near baseline changes and responses, low detection limit phosphorus increases, and changes in phytoplankton species composition is key to ensuring that the predicted effects on Lac de Gras are verified. EMAB will observe with interest how these matters are dealt with during the upcoming review of DDMI's Aquatic Effects Monitoring Program.

Based on a thorough review of DDMI's application and the issues surrounding Phosphorous levels by the DTC, and comments from a number of organizations including EMAB, the Mackenzie Valley Land and Water Board approved an amendment to the Phosphorous and pH limits in DDMI's Water Licence in a letter to the company on September 26, 2002.



Review of Wildlife Effects Monitoring Program

In a letter to DDMI's Vice-President of Environmental Affairs and the Deputy Minister of GNWT's Department of Resources, Wildlife and Economic Development dated June 5, 2002, EMAB concluded that

The 2001 Wildlife Environmental Monitoring Report, as currently designed, will not satisfy the three core objectives of testing environmental assessment predictions, validating the effectiveness of mitigation measures, and identifying new mitigation measures for newly un-covered impacts on wildlife.

EMAB expressed concern about: the limited scope of WEMP and restriction to East Island, particularly for caribou, Grizzly and wolverine, especially considering the identified "zone of influence" of the project. The Board noted the lack of a "control" area. They indicated that the limited geographic scope also limits contribution to cumulative effects assessment and management of the Bathurst caribou herd.

Recommendations

EMAB made a number of specific recommendations in the letter:

Wildlife Management

EMAB recommends that DDMI establish measures to ensure deterrence of animals before entering the site, including improved waste management practices. EMAB also recommends that DDMI systematically documents each time that measures are taken to deter carnivores from entering the site, and that this documentation becomes part of the Wildlife Monitoring Plan. These initiatives are ongoing and in conjunction with broader monitoring activities.

Need for Clear Impact Predictions and Objectives

EMAB recommends that:

- ◆ DDMI define a process to clarify impact predictions and objectives, within two months.
- ◆ DDMI and RWED engage in dialogue regarding the definition of impact prediction, objectives, and models taking into consideration the recommendations provided by EMAB, and that the progress of these discussions be reported back to EMAB for comment;
- ◆ DDMI and RWED ensure that monitoring objectives and protocols be coordinated in relation to all projects within the study area, in particular BHP;
- ◆ DDMI and RWED take into consideration the impact predictions identified in Dr. Messier's report, to be possibly improved and/or expanded upon;
- ◆ DDMI and RWED also consider and clearly state predictions of no impacts. Verification of predictions of no impacts must be incorporated into the monitoring program and documented.

Major Issues

The **Wildlife Effects Monitoring Program** was set up under the Environmental Agreement to assess whether predictions made during the environmental assessment of the project were accurate, to assess whether the mitigation measures work properly and to determine whether other mitigation measures are required.

Following a workshop in February 2002 with Affected Community members, scientists and regulators, EMAB developed a series of recommendations on the Wildlife Effects Monitoring Program (WEMP).



Geographic Area

EMAB recommends that:

- ◆ DDMI and RWED enlarge the monitoring area beyond the footprint area of the mine so as to identify a "zone of influence" for carrying out monitoring activities;
- ◆ DDMI and RWED ensure that the definition of a zone of influence be based on biological and behavioral characteristics of the caribou and should include the knowledge and participation of experienced caribou hunters and observers (i.e. consider the "shape" of the zone of influence rather than simply the size);
- ◆ DDMI collect monitoring data on zones of non-influence, for comparative purposes;
- ◆ DDMI coordinate their efforts to identify an appropriate zone of influence with the work currently undertaken by BHP and RWED in this regard.

Study Design

EMAB recommends that:

- ◆ DDMI work with BHP to establish standardized methods in terms of sampling of vegetation and wildlife habitat. Particular attention should be paid to developing standardized methods and coordination in monitoring behavioral issues and patterns of caribou. DDMI should receive input and support from RWED in this regard;
- ◆ Wildlife monitoring activities, and aerial surveys of caribou in particular, be carried out jointly and in a coordinated fashion between DDMI and BHP. It is recognized that additional community consultation is required to address concerns about the appropriateness of aerial surveys relative to their value;
- ◆ Specific improvements to the WEMP should be conducted in cooperation between DDMI, BHP and RWED;
- ◆ RWED should take a lead role in determining linkages between the WEMP, and improvements thereof, to the regional level cumulative effects framework;
- ◆ RWED should take a lead role in ensuring that monitoring protocols be developed with the collaboration of the Department of Sustainable Development, Government of Nunavut.

Involvement of Aboriginal Peoples

EMAB recommends to DDMI that:

- ◆ Training be provided for the Aboriginal Peoples to participate more directly in various aspects of monitoring activities;
- ◆ The knowledge and involvement of hunters and trappers, in particular, be drawn upon in monitoring caribou and carnivores in areas outside of the East Island;
- ◆ Any reports and recommendations provided to DDMI in the past be revisited and considered in making improvements to the WEMP.



Habitat Losses

EMAB recommends to DDMI that these indirect impacts of habitat losses and displacement be addressed in the WEMP, and that impact predictions and monitoring objectives relating to habitat losses be clearly stated and incorporate both Traditional and Scientific Knowledge and practices.

Dust Monitoring

EMAB recommends that DDMI reviews the methods and protocols currently applied to the monitoring of dust on vegetation utilizing external expertise as appropriate, and that impact predictions and monitoring objectives relating to impacts of dust on vegetation be clearly stated and incorporate both Traditional and Scientific Knowledge and practices.

Utilize Sufficient Expertise

EMAB recommends that DDMI ensure adequate expertise in wildlife management and monitoring is utilized. It is the view of EMAB that this approach will also contribute to increased public, community and regulatory agency confidence in the research and monitoring results.

Response/Outcome

DDMI responded June 26, 2002 saying that they have initiated action and supporting a meeting of RWED, EMAB and DDMI to review a revised WEMP for 2002 in the fall.

RWED sent a letter July 12, 2002 stating support for all EMAB's recommendations.

DDMI revised the WEMP to take EMAB's recommendations into account. EMAB contracted Dr. Francois Messier to review the revised 2002 WEMP. EMAB met with DDMI and RWED on November 18, 2002 to discuss the revised WEMP. Dr. Messier also attended the meeting and presented his report. The plan was revised to take the comments from the meeting participants and Dr. Messier's review into account, and EMAB did not have any further issues to raise when it reviewed the revised draft in December.



Major Issues

Following a workshop in February 2002 with Affected Community members, scientists and regulators, EMAB developed a series of recommendations on Fish and Fish Habitat Monitoring. EMAB also contracted Dr. Peter McCart to comment on a number of reports required by DFO's Fisheries Authorization. In a letter to DDMI's VP of Environmental Affairs and DFO's Area Chief, Habitat, dated June 25, 2002, EMAB made a number of recommendations.

Fish and Fish Habitat Monitoring Recommendations

Blasting Effects

EMAB recommends to DDMI that the options and methods for minimizing potential impacts be thoroughly examined and that the rationale and assumptions associated with each method be included in the DDMI Blasting Mitigation Strategy and incorporated into the DDMI Blasting Effects Study for DFO review and approval in September 2002.

Baseline Data on Fish Health

EMAB recommends to DDMI that the occurrence of parasitism and bacterial infection be included in DDMI's required health studies and that the results of these studies be compared with the baseline.

Study Design

EMAB encourages DFO to complete sampling method studies and in doing so, develop consistent sampling and baseline data collection methods that include traditional users and to share that information with EMAB.

Master Habitat Plan

EMAB recommends that DFO continue to gather information towards the development of a master habitat plan that focuses on the Slave Geological Province as a priority, improve the level of consultation with communities, and that their Slave Geological Province priorities be communicated to the parties and the public.

Adaptability of Fish Species

EMAB recommends that DDMI respond to the following:

- ◆ The potential response of different fish species to increased salinity levels;
- ◆ The potential response of different fish species to changes in nutrient levels, including clarification on whether particular fish species will gravitate towards discharge areas and the potential resulting impacts on distribution of fish species in the Lac de Gras area.
- ◆ Predicted ability of various fish species to re-adapt to lower levels of nutrients upon mine closure and the potential associated impacts thereof.



Flexibility in Application of No Net Loss Policy

EMAB recommends that flexibility in the application and procedural steps respecting the No Net Loss principle be sought by DFO. Specifically, EMAB recommends to DFO that the option for habitat compensation in areas not directly affected by the mine or in the vicinity of the mine, be explored for the purpose of restoring fish habitat and achieving an overall "net gain" in fish production in the Slave Geological Province as a whole.

Fish Palatability Testing

EMAB recommends that this go ahead as soon as possible with involvement of EMAB, DFO, and DDMI.

Response/Outcome

DFO responded on Oct 16, 2002 regarding the recommendations to them on the No Net Loss policy, Study Design, Master Habitat Plan and Fish Palatability Testing. DFO indicated that:

Study Design: DFO is putting the data into a database which they will use to make improvements to the way fish-outs and fish transfers are done.

Master Habitat Plan: DFO agrees with the recommendation and will develop a database of opportunities that would be of most benefit to users. They plan to use the information collected at the "No Net Loss" meeting planned for December (more on this under "No Net Loss", page 34).

Fish Palatability Testing: DFO supports this. The fish palatability testing took place in August 2002 and is discussed in more detail on page 20 of this report.

It does not appear that DDMI formally responded to the recommendations; however the following outcomes have occurred:

Blasting Effects – EMAB Board members receive regular updates on the blasting effects study and have been actively involved in discussions with DDMI on the development of the blasting effects study, which looks at the effects of blasting on fish eggs and very young fish. The study is expected to take place next year.

Fish Health – DDMI did add bacterial infection and parasitism to Fish Health Studies.

Adaptability of Fish Species – DDMI did not see any value in this research at this time.

Fish Palatability Testing – see page 20 of this report.



Major Issues

"No Net Loss"

Canada's Fisheries Act makes destruction of fish habitat illegal, so to allow for projects that will affect fish habitat, DFO has developed a *Policy for the Management of Fish Habitat* or "No Net Loss." When a project destroys or damages fish habitat, the company must offset the loss by replacing or creating an equal amount of fish habitat. Ideally the habitat will be in the same area as the project and will be the same kind of habitat as was destroyed. If this is not possible then the policy allows for habitat creation away from the site or increasing habitat for the affected fish. This could be by fixing up damaged habitat somewhere else, or by increasing the productivity of existing habitat.

Response/Outcome

EMAB recommended that damaged fish habitat in other locations be restored. The Board exchanged letters with DFO several times in 2002-03 on the issue of disturbing untouched lakes to compensate for fish habitat destroyed or damaged by the Diavik project. They also met twice with DFO to discuss the issue, including an all-day meeting on December 12, 2002, but as of the end of 2002-03 little progress had been made and the issue had not been resolved.

Fish Habitat Compensation – No Net Loss

The recommendations on the No Net Loss policy from EMAB's June 25 letter to DDMI and DFO (discussed on page 33) were followed up through meetings and correspondence. This section provides some background on the issue and a summary of the outcome during 2002-03.

As part of the environmental assessment process for the Diavik project DFO approved general proposals by DDMI to do some work in three lakes on the mainland near Diavik's minesite as well as on two lakes on the island itself. These lakes are not affected by the project, but DDMI's research says that these lakes could support more fish if some work was done on them. The work would involve changing the shape of the lakes using heavy equipment, for example to dig around the streams connecting the lakes or put some fill near the shore to create shallow spawning areas. This is part of a way to make up for loss of fish habitat resulting from the development and operation of the mine.

Recommendation

EMAB has taken the position that untouched lakes should not be disturbed as a way of compensating for destroyed habitat and passed the following motion/**recommendation**:

Motion #03-02-12-13

The Environmental Monitoring Advisory Board for the Diavik project does not support the modification of fish habitat in undisturbed lakes in order to satisfy the DFO "No Net Loss" policy. EMAB recommends that approval for the DDMI proposal to modify the fish habitat in lakes e14, e17, m1, m2, m3 be delayed and other community identified options to create or enhance the required fish habitat units in previously disturbed, impacted or modified off site areas be investigated in order to satisfy the "No Net Loss" requirements.



Aquatic Effects Monitoring Program Report – 2001

EMAB contracted Dr. Peter McCart to review the AEMP in June 2002. His report says the existing AEMP is considerably less than that required by the original Water Licence, because:

- ◆ The reasons for changes are not always clear – any future changes should have a clear, written rationale
- ◆ There is too little sampling and too little analysis to provide a sensitive indicator of environmental change
- ◆ EMAB should expect a revision of the AEMP by the MVLWB and should be prepared to respond with detailed technical comments.
- ◆ Any changes to the AEMP should ensure that they fit with current monitoring so that all the data can be used together. If data continuity is lost some of the data may become useless.

DTC members made a number of criticisms of the report, and in the end the report was approved subject to a number of revisions being made. The revised report was submitted by DDMI on November 12, 2002.

Questions raised about the report included: problems with some lab results, clarification of sampling procedures, problems with detection limits, changes to the way some statistics were used, a need to re-define the way the discharge enters the lake (the plume), the way the lake flushes and the need to address cumulative effects. Some fundamental questions were raised about the adequacy of the entire AEMP.

In a letter dated July 10, 2002 to the MVLWB, EMAB agreed with the concerns raised and the need for the report to be revised and re-submitted to the MVLWB. EMAB also stated that they wished to support the suggestion that the AEMP undergo a thorough and independent review by an expert in this field under the auspices of the MVLWB.

Major Issues

The **AEMP** is part of the Water Licence. It measures the effects of the discharge from the mine on the lake water and the fish and other living things in it. The 2001 AEMP report was presented to the DTC in June 2002.

Response/Outcome

EMAB did not receive a response to this suggestion, and MVLWB staff confirmed they had not commissioned a review of the AEMP during 2002-03.

As discussed under the Water Licence Amendment, EMAB also expressed interest in how the AEMP would verify the predicted effects of the changes to the Phosphorous limits. No changes were made to the AEMP, since it was already designed to detect changes due to Phosphorus.

Other Recommendations

EMAB continued to raise concerns about inspections of the Diavik project. A new inspector was assigned in April, 2002 to cover both BHP and Diavik as an interim measure, with a permanent inspector for Diavik alone in August. EMAB members expressed concerns about the level of inspection activity and the experience of inspectors at its August meeting and followed this up with a letter to the Minister of DIAND on September 24, 2002 expressing concern about insufficient numbers of experienced inspectors, loss of inspectors due to low salaries and inadequate funds to allow regular inspections. EMAB recommended that DIAND review the adequacy of resources available for attracting and retaining experienced inspectors.

EMAB also continued to follow up the concerns of Affected Community members regarding harvest levels in the range of the Bathurst caribou herd. The MVLWB was notified that the winter road that services the Diavik project is used by many hunters and asked to take concerns about harvest into account when considering Land Use Permits along the winter road.





Workplan and Budget for 2003-04

EMAB's priorities for 2003-04 are:

- ◆ To continue to build capacity, increase awareness and support meaningful participation of Aboriginal peoples in environmental monitoring activities related to the Diavik project
- ◆ Continue monitoring of environmental effects of the Diavik project focussing on issues surrounding wildlife, particularly caribou; fish and water
- ◆ Continue monitoring regulators to ensure plans and programs are thoroughly reviewed and necessary follow-up is done
- ◆ Implement the Communications Strategy
- ◆ Establish the Traditional Knowledge Panel

In addition to its day-to-day mandate of monitoring the Diavik project and the regulators and communicating with communities regarding the project, EMAB has a number of major initiatives planned for 2003-04.

Traditional Knowledge – EMAB will follow up the Traditional Knowledge workshop it jointly held with the Independent Environmental Monitoring Agency. The Board decided to establish an EMAB TK panel. EMAB will also consider the workshop recommendations in relation to **regional research** and **cumulative effects** in the Slave Geological Province.

Research – Further discussion is required in relation to responsibilities for regional-level initiatives such as the Single Regional Monitoring Agency, the Slave Geological Province Action Plan under the Cumulative Effects Assessment and Management Strategy and Framework, the Bathurst Caribou Management Plan and the West Kitikmeot/Slave Study's Interim Research Agenda. The Board has already indicated its support for continuation of initiatives to collect environmental baseline information and implement cumulative effects monitoring in the Slave Geological Province as a means to improve decision-making and environmental assessment.

Water Quality Workshop – EMAB will host a water quality issues workshop in Kugluktuk in August to discuss water quality issues and concerns from the community perspective as well as from the perspective of regulators, scientists and industry.

Water Quality Issues – EMAB will contract water quality expertise to assist in furthering their understanding of technical issues, particularly as they relate to elevated ammonia levels at the Diavik mine site.

Budget

Expenses

Administration\$94,952
Capital Cost8,850
Management Services170,045
Board132,500
Sub-Committees22,500
Projects125,000
Community Capacity Building150,000
Contingency35,000
Total\$738,847



Fish Habitat Compensation (No Net Loss) – EMAB is committed to moving forward in proposing community-supported alternatives to the disturbance of pristine lakes as a way of offsetting fish habitat losses caused by the Diavik project.

Implementation of the Communications Strategy – EMAB plans to implement a number of the recommendations in the Communications Strategy. These include: completion of the hiring process for the new Executive Director, hiring of a Communications Specialist to support communication with communities, development of a website, development of a more effective way of tracking and prioritizing DDMI regulatory reports, development of better tools for communicating with communities, and development of a "report card" format for upcoming annual reports assessing the performance of DDMI and regulators.

Capacity Building – EMAB will continue its capacity funding programs to support Affected Communities in participating in monitoring the Diavik project. Based on recommendations in the Communications Strategy EMAB plans to expand its staffing to include a Communications Specialist who will be able to support Aboriginal Parties in developing and implementing projects to build capacity in Affected Communities. The Communications Specialist may also assist in communicating complex issues to their communities and in making sure community concerns are heard, understood and addressed by EMAB.

Organizational Development – the Board will hold additional Board training sessions and workshops with Parties and with regulators to review the Environmental Agreement and increase awareness of the roles of EMAB and others. The Board will continue to review internal policies and procedures to improve efficiency and effectiveness.

EMAB anticipates eight Board meetings over the coming year and plans to continue rotating meetings among the parties' communities.



Auditors' Report

To the Board of Directors of the Environmental Monitoring Advisory Board

We have audited the balance sheet of the Environmental Monitoring Advisory Board as at March 31, 2003 and the statements of fund balances and cash flows for the year then ended. These financial statements are the responsibility of the Environmental Monitoring Advisory Board. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Environmental Monitoring Advisory Board as at March 31, 2003 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

Yellowknife, Northwest Territories

June 26, 2003

Michael Odell & Associates

Michael Odell & Associates
Chartered Accountants

Environmental Monitoring Advisory Board

Statement of Operations

For the year ended March 31, 2003

		March 2003 \$	March 2002 \$
Revenue			
Diavik Diamond Mines Inc		604,588	600,000
Government Assistance			
Government of the Northwest Territories		50,000	50,000
Department of Indian Affairs and Northern Development		30,013	150,000
Interest Income		9,706	12,509
		694,307	812,509
Operating Expenditures			
	Schedule		
Administration	1	82,325	65,126
Capacity Building (Note 2)		111,268	150,000
Capital Asset Purchases		7,146	56,818
Management Services	1	147,190	160,280
Project Expenditures			
Board Development	2	19,948	-
Caribou Workshop	3	5,017	65,020
Communication Strategy	4	25,188	-
Cumulative Effects	5	32,842	-
Executive Committee	6	20,559	7,028
Fisheries Workshop	7	11,018	31,589
Personnel Committee	8	2,850	8,595
Professional Development	9	16,663	-
TK Workshop	10	26,049	-
Board Meetings	11	174,000	106,669
		682,063	651,125
Excess Revenue over Expenditure		12,244	161,384

Environmental Monitoring Advisory Board

Balance Sheet

As At	March 2003 \$	March 2002 \$
Assets		
Current Assets		
Cash	292,879	264,387
Contributions Receivable - DIAND Holdback	-	25,254
Recoverable Costs	1,113	915
Purchase Deposit - CasCom	-	321
	293,992	290,877
Capital Assets (Note 3)	32,844	39,772
	326,836	330,649
Liabilities		
Current Liabilities		
Accounts Payable and Accrued Liabilities	10,110	19,239
Net Assets		
Investment in Capital Assets	32,844	39,772
Unrestricted Net Assets	283,882	271,638
	316,726	311,410
	326,836	330,649

Environmental Monitoring Advisory Board

Notes to Financial Statements

For the year ended March 31, 2003

March 2003 \$	March 2002 \$
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The Environmental Monitoring Advisory Board has been established in accordance with the Environmental Agreement for the Diavik Diamond Project. The Environmental Monitoring Advisory Board aims to provide a meaningful role for the Aboriginal Peoples in the review and implementation of environmental monitoring plans in respect to the Project. The Board will be in place until full and final reclamation of the Project is complete.

The Board is a not-for-profit organization and is exempt from income tax in accordance with section 149(1)(l) of the *Income Tax Act*.

1 Significant accounting policies

The financial statements have been prepared in accordance with Canadian generally accepted accounting principles. Because a precise determination of some assets and liabilities depends on future events, the presentation of financial statements for a period necessarily involves the use of estimates which have been made using careful judgment. Actual results could differ from those estimates and approximations. The financial statements have, in the opinion of management, been properly prepared within reasonable limits of materiality and within the framework of the significant accounting policies summarized below.

(a) Capital Assets

Capital Assets are recorded at cost minus accumulated amortization. Amortization is calculated using the diminishing balance method for office equipment using the following rates.

Office Equipment	30 %
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(b) Revenue

The Board follows the deferral method of accounting for contributions. Under this method, restricted contributions are recognized as revenue when the related expenditures are incurred. Restricted contributions received but for which the related expenditures have not been incurred are reported as deferred revenue.

Unrestricted contributions are recognized as revenue when received, or when receivable if the amount can be reasonably estimated and collection is reasonably assured.

Contributions from the Department of Indian Affairs and Northern Development are labeled - Comprehensive Funding Arrangement (CFA). When Operating Revenues exceed Expenditures no portion of the Excess Revenue over Expenditures is refundable to the Department of Indian Affairs and Northern Development.

(c) Financial Instruments

The company's financial instruments consist of accounts receivable and accounts payable. These financial instruments might expose the company to interest rate and credit risks. In the opinion of management, the financial statements and accompanying notes contain the relevant information to reasonably assess these risks.

2 Capacity Funding

Yellowknives Dene First Nations	26,545	30,000
North Slave Metis Alliance	26,373	30,000
Lutsel K'e Dene	28,366	30,000
Dogrib Treaty 11	29,984	30,000
Kitikmeot Inuit Association	-	30,000
	111,268	150,000

3 Capital Assets

	Cost	Accumulated Amortization	Net Book Value	Net Book Value
NXTEC AMD XP 1700 & HP Deskjet Printer	3,131	940	2,191	-
Various Computer Equipment	1,609	483	1,126	-
Board Room Furnishings	1,070	320	750	-
Recording Equipment	1,336	400	936	-
Digital Imager	5,350	2,728	2,622	3,745
Toshiba Satellite Pro 4240	4,676	2,385	2,291	3,273
Computers	24,284	12,385	11,899	16,999
Proxima DS2 Projector	1,605	819	786	1,123
Board room furnishings	1,873	955	918	1,311
Other office equipment and office furnishings	19,030	9,705	9,325	13,321
	63,964	31,120	32,844	39,772

4 Net Change in Non-cash Working Capital Balances

Operating resources provided by:		
Increase in Accounts Payable	-	19,239
Decrease Contributions Receivable	25,254	85,000
Decrease in Purchase Deposit	321	-
	<hr/>	<hr/>
	25,575	104,239
	<hr/>	<hr/>
Operating resources applied to:		
Decrease in Accounts Payable	(9,129)	-
Increase Recoverable Costs	(198)	(915)
Increase Prepaid expenses	-	(321)
	<hr/>	<hr/>
	(9,327)	(1,236)
	<hr/>	<hr/>
Net Change in Non-Cash Working Capital	16,248	103,003
	<hr/>	<hr/>

5 Related Parties

GeoNorth

GeoNorth provided the services of an Executive Director and Administrative Support during the period January 1, 2000 through October 15, 2001 in the amount of \$68,855 and during the current year on an as needed basis in the amount of \$26,295.

Independent Environmental Monitoring Agency

The Board shares board room facilities with Independent Environmental Monitoring Agency. In 2002, the Board and the Independent Environmental Monitoring Agency jointly purchased a Proxima Projector and other board room furnishings for \$3,478.

During the year, the Board held a joint Traditional Knowledge (TK) Workshop with the Independent Environmental Monitoring Agency. The arrangement was for each party to pay one half of the total expenditures. Expenditures paid for by the Board totalled \$50,942 and reimbursement of \$24,893 was received from the Independent Environmental Monitoring Agency.

McCullum Environmental Services

During the year McCullum Environmental Services performed consulting services in the amount of \$2,140. Subsequent to the period end, May 2003, John McCullum was appointed Executive Director of the Board.

Abbreviations

AEMP	Aquatic Effects Monitoring Program
AGM	Annual General Meeting
BHPB	BHP Billiton Inc.
CEAMF	Cumulative Effects Assessment and Management Framework
CIMP	Cumulative Impacts Monitoring Program
DDMI	Diavik Diamond Mines Inc.
DIAND	Department of Indian Affairs and Northern Development
DFO	Department of Fisheries and Oceans
DTC	Diavik Technical Committee
EA	Environmental Agreement
EC	Environment Canada
EMAB	Environmental Monitoring Advisory Board
ENGO	Environmental Non-Government Organization
GNU	Government of Nunavut
GNWT	Government of the Northwest Territories
IEMA	Independent Environmental Monitoring Agency
KIA	Kitikmeot Inuit Association
MVEIRB	Mackenzie Valley Environmental Impact Review Board
MVLWB	Mackenzie Valley Land and Water Board
NSMA	North Slave Metis Alliance
RWED	Resources, Wildlife and Economic Development
SEMA	Socio Economic Monitoring Agreement
TK	Traditional Knowledge
WEMP	Wildlife Effects Monitoring Program
WKSS	West Kitikmeot Slave Study Society
YKDFN	Yellowknives Dene First Nation

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Jiri Hermann, courtesy of Diavik Diamond Mines Inc.,
p. 7, 8, 9, 14, 20, 21, 23, 37: courtesy of Diavik Diamond Mines Inc.



Diavik Diamond Mine, Lac de Gras

Environmental Monitoring Advisory Board

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