DIAVIK
DIAMOND MINES INC.

2004 Annual Environmental Agreement Report

August 2005
Revision 1

1. EXECUTIVE SUMMARY

The Parties to the Environmental Agreement include the Dogrib Treaty 11 Council, Yellowknives Dene First Nation, North Slave Metis Alliance, Kitikmeot Inuit Association, Lutsel K'e Dene First Nation, Government of Canada, Government of the Northwest Territories, Government of Nunavut, and Diavik Diamond Mines Inc.

This report is written every year as part of the Environmental Agreement, which is commented on by the Environmental Monitoring Advisory Board (EMAB). This report gives the Parties to the Environmental Agreement and the affected communities and public, information about Diavik Diamond Mine's activities in 2004. It also talks about our plans for 2005 and how Diavik is taking care of the environment at the Lac de Gras site. This report is intended to meet the needs of Article 12 of the Diavik Environmental Agreement. In 2004, Diavik wrote and sent reports to many different regulators, and all of those reports are included in summary form in this report.

The Environment

The Diavik diamond mine site at Lac de Gras is about 100 km north of the treeline on the arctic tundra in the Northwest Territories. The tundra is made up of many lakes, bedrock and different types of landforms left from glaciers in the ice age. There is very little soil here and the subsoil stays frozen all the time.

The winters are long and cold and the summers are short and cool. There is not very much rain or snow here and the wind is calm on most days.

The land near the Diavik mine site is the home for a lot of wildlife. There are 84 kinds of birds and 16 kinds of animals in this area. Some of them stay the whole year and some just come in the summer. There are not many animals or birds that stay all the time on the east island of Lac de Gras. Some of the ones that stay are red fox, arctic hare, arctic ground squirrels, red-backed voles, brown lemmings and rock ptarmigan.

The Bathurst caribou herd travels in the area around

Community members at the Diavik mine site

Lac de Gras. Some of the herd comes here in the spring and fall. Wolves following these caribou den in the area during summer. About 30 grizzly bears also travel around this area.

Lac de Gras is a large lake that drains into the Coppermine River which flows all the way to the Arctic Ocean. Lac de Gras is 60 km long, and like many arctic lakes there are not many fish or plants in it. This is natural because there is not much food or light for the fish and plants in the winter months because ice covers the lake for a long time and the water is cold. Lake trout, cisco, round whitefish, Arctic grayling, burbot, longnose sucker and slimy sculpin are some of the fish found in Lac de Gras.

The Diavik Mine

The diamonds at Diavik are found in kimberlite pipes just off the shore of East Island in Lac de Gras. Large dikes are being built to hold back the water of Lac de Gras, so that Diavik can safely mine the diamonds from the lakebed. The A154 dike was completed in 2002. Another dike, called the A418 dike, will start to be built in the summer of 2005.

2004 was a very busy year for Diavik, because it was the first full year that we operated. Right now, Diavik is using open pit mining methods, and then will switch to underground mining. This will allow almost all of the diamonds to be mined. For the open pit mining, trucks run day and night. They take the kimberlite rock to the processing plant, where the diamonds are separated from the kimberlite. In 2004, Diavik produced 7.6 million carats of rough diamonds.

To help with the mining, things such as accommodations, offices, garages, a power plant and an airstrip were built.

Adaptive Management

Diavik works hard to make sure they keep their promise to respect and protect the environment. In 2004, like in all the other years, Diavik looked for ways to manage the environment as we continued to mine the diamonds. As an example, lessons that we learned from building the first dike (A154 dike) are being included in plans for the next dike (the A418 dike) that will be built next. We will keep looking for ways to adapt or change as we learn more about how our activities affect the environment, and as we build the second dike and plan to mine the diamonds from underground.

A wolf on the summer tundra

Monitoring Programs

Diavik has plans and programs to check how healthy the environment in the area is. The people in the communities, the Environmental Monitoring Advisory Board, and the people who control laws all help to make these programs better. Diavik always

tries to improve the understanding of how the Diavik mine, other projects in the Lac de Gras area and the Department of Resources, Wildlife and Economic Development (RWED) can use the same ways to check the environment. RWED changed their name recently, and is now called Environment and Natural Resources (ENR). Below is a summary of our monitoring programs, and there is more detail in the main part of this report.

Wolverine on the frozen lake

Wildlife

The Diavik Diamond Mine continued with its Wildlife Effects Monitoring Program in 2004. This program was created to collect information about animals in the area to see if they are affected. Where possible, Diavik has included information from earlier years so that it can be compared. Some of the things we noticed, and some of the recommendations for improvements to the program are listed here.

- During 2004, the area of vegetation and habitat lost due to the mine running was just less than 1 km^2. This was within the expected amount from the Environmental Assessment.

- The habitat loss for caribou and grizzly bears was within the expected amount during 2004. One caribou and one bear died because of the mine running in 2004. The bear had to be put down for human safety reasons, and Diavik had approval from RWED before doing it. Grizzlies are still found in the Diavik Wildlife Study Area .

- Diavik will continue to do surveys for caribou and will also keep checking to see if efforts to reduce mining impacts are working well.

- Wolverines were on the East Island in 2004. No wolverines died, were injured or moved because of mining in 2004. Diavik will keep checking wolverine tracks in the snow to see how many there are and where they travel.

- During 2004, one Peregrine Falcon nest was occupied and had chicks, and another was occupied but had no chicks. One Peregrine Falcon died during 2004, but we couldn't find out what killed it.

- Compared to the Environmental Assessment predictions, the Waterfowl Habitat Loss was within the expected amount. Waterfowl were seen at the East Island Shallow Bays and the waterfowl are using the mine-altered wetlands. There were more waterfowl and shorebirds in 2004 than in the past.

Dust

In 2004, dust measuring took place around the Diavik mine site and there are two parts to this program. First, to see if there are patterns in the amount and location of dust around the site,

Diavik does snow surveys every spring and collects dust particles throughout the year. The sampling for this part of the dust program includes melting the snow and testing for water chemistry and the amount of dust in the snow. Second, Diavik also does habitat reviews every third summer to see if there is any change in vegetation due to dust. As it was predicted, dust deposits are greater closer to the mine operations and are less further away from the mine operations. Dust deposits were higher in 2004 than 2003, especially in Zone 2 which is 75 to 100 m away from the project.

Youth from the communities at a water quality workshop (Photo supplied by EMAB)

Aquatic Effects

Diavik continued to do Aquatic Effects Monitoring in 2004. This is the third year of aquatic effects monitoring and it is required for Diavik's water license. Some of the results from the different kinds of sampling are talked about here.

Water Quality

Many of the results for 2004 are similar to the years before. Even though the water sampling station is very close to the waste discharge, the open water and ice cover test results are still better than the accepted guidelines for protection of water life. The results for this station are higher and they change more than other stations. This is probably because of wind that mixes the water. Changes in total arsenic and nickel are within the levels predicted and are below levels that would cause harm to the environment. Many of the measurements showed a possible change, when the real reason might have been because of a low baseline measurement. Also, there were some times where baseline measurements weren't available, so we couldn't compare results to them. It is recommended that Diavik and the Diavik Technical Committee improve the way they start the process before comparing values.

Phytoplankton and Zooplankton (Very small plant and animal organisms that float in water)

There is a short tem increase in productivity at the stations near the effluent discharge. The effluent could be causing this, but more testing is needed to tell for sure. Some increase in productivity was originally predicted, and efforts to control this are in place. The results for zooplankton vary a lot, so Diavik will have someone else review the sampling, measurement and analysis process.

Benthic Invertebrates (Lake bottom animals)

At the near-field location, there are higher numbers and more kinds of benthic invertebrates. This might be due to more nutrients in the water.

Sediment Quality

Examination showed that there were changes in the sediment quality, but it was not likely that Diavik's activities caused this since the results were the reverse of what would be expected if Diavik were the source. It was recommended by a consultant for EMAB that sediment samples be reduced to 2 cm instead of 5 cm.

Fish

Fish Palatability (Taste) and Texture Study

In August of 2004, members from several communities gathered again to do another study of the taste and texture of the fish at Lac de Gras. Scientific samples were also taken to check fish population and health. The study took three days and included people from Dogrib Treaty 11, Lutsel K'e Dene First Nation, North Slave Metis Alliance, Kitikmeot Inuit Association and Yellowknives Dene First Nation. EMAB took responsibility for organizing the camp in 2004.

Like other years, the fish were rated on how they looked before cleaning, during cleaning and how they looked and tasted once cooked. This study was originally going to be done every five years but people in the 2002 study suggested that it be done every year. The fish in following years will be compared to those caught in 2002 for the starting point study.

Nobody had any concerns about the fish quality, taste or condition. In general, all the community participants from the five groups agreed the fish from Lac de Gras tasted good. The scientific results also showed that there was no change in the health of the fish.

This 2004 Environmental Agreement Annual Report is intended to address the requirements of Article XII, ANNUAL REPORTS, of the Environmental Agreement.

12.1 ANNUAL REPORT

(a) DDMI shall prepare and submit an annual report (the "Annual Report") to the Parties, the Government of Nunavut, and the Advisory Board on March 31, (or on such other date as prescribed by the Minister from time to time), for each calendar year during the term of this Agreement, commencing March 31, 2001.

(b) Each Annual Report shall include the results of Environmental Monitoring Programs, and a rolling summary and analysis of environmental effects data over the life of the Project to illustrate any trends. The actual performance of the Project shall be compared to the results predicted in the environmental assessment and the CSR and an evaluation provided as to how DDMI's adaptive environmental management has performed to the date of each Annual Report.

(c) Each Annual Report shall include, but not be limited to, the following:

(i) a comprehensive summary of all supporting information, data and results from the Environmental Monitoring Programs and all studies and research;
(ii) a comprehensive summary of all compliance reports required by the Regulatory Instruments;
(iii) a comprehensive summary of operational activities during the preceding year;
(iv) actions taken or planned to address effects or compliance problems which are set out in the Annual Report;
(v) a comprehensive summary of operational activities for the next year;
(vi) lists and abstracts of all Environmental Plans and Programs;
(vii) verification of accuracy of environmental assessments;
(viii) determination of effectiveness of mitigative measures;
(ix) a comprehensive summary of all adaptive management measures taken;
(x) a comprehensive summary of public concerns and responses to public concerns;
(xi) a comprehensive summary of the new technologies investigated;
(xii) the Minister's comments, including any Minister's Report, on the previous Annual Report; and
(xiii) a plain English executive summary and translations into Dogrib, Chipewyan, and Innuinaqtun using appropriate media.

Table of Contents

(Each of the clauses listed are clauses from the Environmental Agreement (EA), and Section 12.1 of the EA is shown on the previous page.)

2. INTRODUCTION

The Environmental Monitoring Advisory Board (EMAB) has maintained a strong relationship with DDMI since the beginning, and this year was no exception. Community participation and consultation took place in various forums and formats such as the caribou fencing workshop, fish palatability workshop, and wolverine track surveys.

It is the goal of the Board to provide DDMI and regulators with input and advice from the affected communities, with the overall objective of minimizing environmental impacts that result from operations.

2004 was an exciting year for the Diavik Diamond Mine. The mine, located on an island approximately 300 kilometres northeast of Yellowknife, had an excellent first full year of operations. About 7.6 million carats of rough diamonds were produced, with a high priority placed on safety and environmental responsibility during all operations. Efforts to certify our Environmental Management System to international ISO 14001 Standards were successful, with the final registration audit taking place in late 2004.

One key activity that happened in 2004 was the amendment of Diavik's water licence. This was a result of higher ammonia concentrations within the A154 pit water, with subsequent changes required to ammonia limits in the licence for the next two years. Furthermore, Diavik also had to plan research into the effects of this ammonia in the surrounding environment as well as various ammonia treatment technologies.

Diavik maintains a good relationship with the Environmental Monitoring Advisory Board (EMAB) on issues that relate to the environmental aspects and impacts of the mine's operations. Efforts are ongoing to ensure that input from the affected communities is incorporated into Diavik's monitoring plans and programs related to the environment. Examples include input from such activities as those listed at the side of the page and the review of the Blasting Effects Study by an EMAB board member in 2003.

The link to the communities remains strong through the meetings, workshops, feedback and consultation that results from the collaboration between Diavik and EMAB to date. This Annual Report provides an updated summary of the operations, communication, programs, submissions, monitoring and results that are relevant to the communities' interests and needs.

Minister's Comments

The Minister did not provide any comments on last year's Environmental Agreement Annual Report.

Company Profile

The Diavik Diamond Mine is an unincorporated joint venture between Diavik Diamond Mines Inc. (60%) and Aber Diamond Limited Partnership. (40%). Both are Canadian companies with headquarters in Yellowknife, Northwest Territories, Canada. Diavik Diamond Mines Inc. is a wholly-owned subsidiary of Rio Tinto plc of London, England and Aber Diamond Limited Partnership is a wholly-owned subsidiary of Aber Diamond Corporation of Toronto, Canada. Diavik Diamond Mines Inc. manages the operation.

Regional Environment

Lac de Gras is about 60 kilometers long and is located approximately 100 kilometres north of the treeline in the arctic tundra of Canada's Northwest Territories. The lake has a large drainage area and the main inflow is through a channel from Lac du Sauvage to the northeast. The Coppermine River flows from the west end of Lac de Gras, over 500 kilometres north to the Arctic Ocean.

Similar to most arctic lakes, aquatic productivity is low. Relatively low natural concentrations of nutrients, low light levels during winter, long periods of ice cover and low water temperatures cause this naturally low productivity. Lake trout, cisco, round whitefish, arctic grayling, burbot, longnose sucker and slimy sculpin are among the fish species found in Lac de Gras. The surrounding tundra is composed of countless lakes and rocky outcrops. Boulder fields and eskers deposited by glaciers long ago are visible everywhere; other than glacial till, there is very little soil in the area.

Over 80 bird and 16 mammal species have been recorded as residents in the region. Many of the bird species breed in the area. During spring and fall, some of the Bathurst caribou herd migrate through the area as it falls within their vast range.

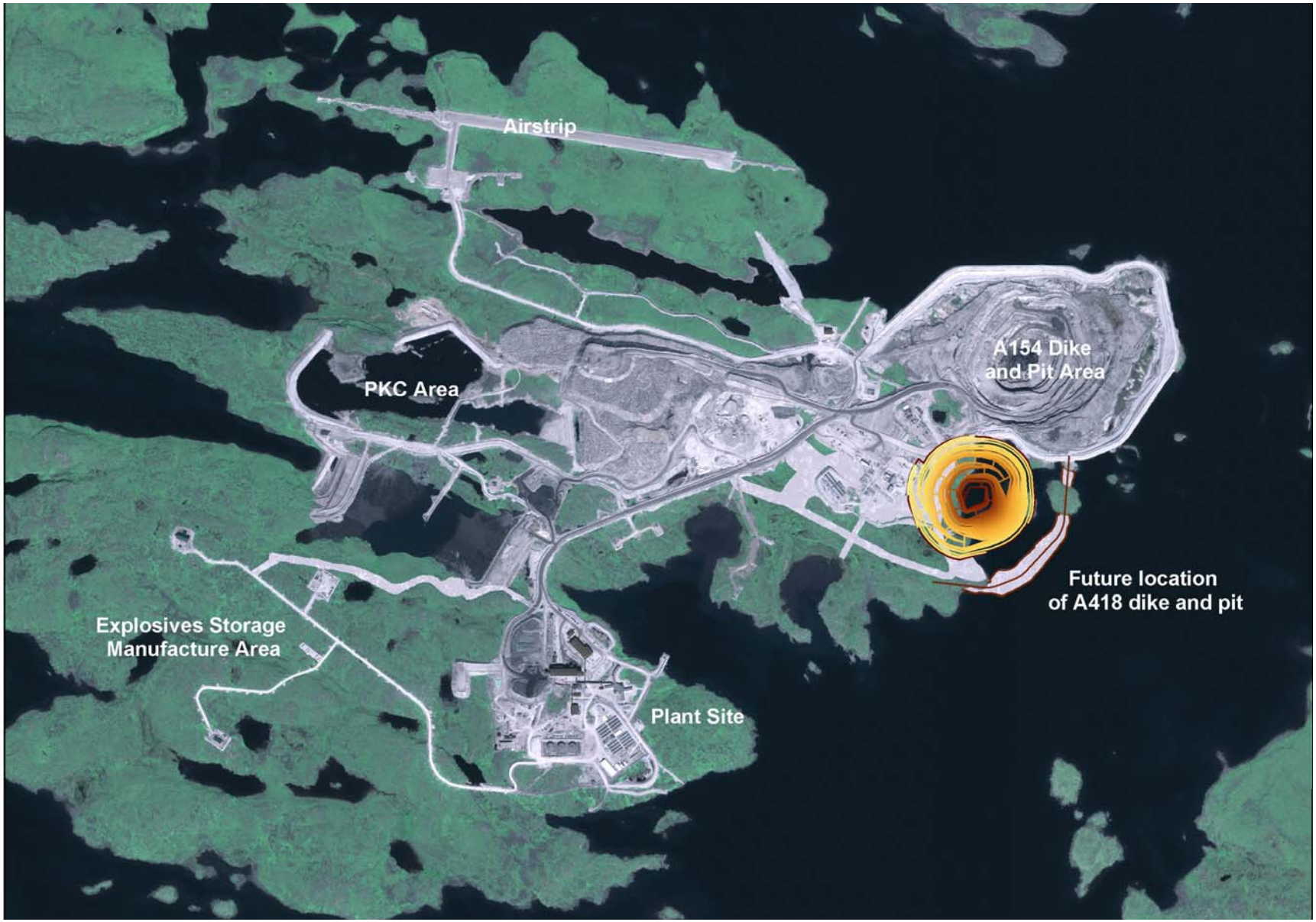
East Island

Although there are many mammal and bird species in the region, only a few species live on East Island permanently. These include red fox, arctic hare, arctic ground squirrels, red-backed voles, brown lemmings and rock ptarmigan.

Caribou may cross the ice of Lac de Gras to East Island during migration periods. Many bird species stop at the island during spring and fall migrations as well, and a variety of waterfowl, shorebirds and songbirds nest on East Island during the summer. Grizzly bears, wolves and wolverines have large home ranges and also occasionally visit East Island, especially when following the caribou.

The region has long, cold winters and cool, short summers. Annual precipitation levels are low, and this climate is reflected in the vegetation in the area. Northern shrub tundra vegetation is composed of hardy, low-profile species.

Figure 1: Diavik Diamond Mine Site Layout



3. ENVIRONMENTAL PLANS AND PROGRAMS

A418 Construction Environmental Management Plan
Submitted to MVLWB November 2004
Approved

The Diavik Diamond Mine deals with the development of the kimberlite pipes A154, A418 and A21, located beneath Lac de Gras. The initial construction included a large array of structures, including the construction of the A154 dike in Lac de Gras and all other facilities which made possible the mining operations of the diamond bearing A154 kimberlite pipes. Other structures included temporary and permanent accommodations, several on-land processed kimberlite containment structures, a sedimentation pond, a rock quarry, linear developments such as access roads, pipelines, power lines, a runoff water treatment plant, and a sewage treatment and outfall.

Construction of the A418 water retention dike will be carried out to permit the mining of the A418 kimberlite pipe. It will be constructed in Lac de Gras using the same design and the same construction techniques as were used for the construction of the A154. Ancillary facilities will be limited to the construction of small stretches of new access roads, new rockfill laydown areas, power lines and pipelines and the relocation of existing temporary facilities.

This document outlines the environmental construction management plans to be implemented, to minimize environmental effects during the A418 dike construction activities. Diavik Diamond Mines Inc. (DDMI) is committed to implementing Best Management Practices (BMP) for these activities. A description of each on-land construction activity such as crushing and batching, and in-lake construction activity such as dredging, embankment placement, cut-off wall construction and pool dewatering is provided. Environmental management controls available to the constructors are described. Finally monitoring and inspection programs are described which are compatible with the described BMP and which would provide relevant performance measurement.

A418 Dike Quality Assurance/Quality Control Plan
Submitted to MVLWB November 2004
Approved

The A418 dike is required to:

- Encircle the A418 kimberlite pipe located beneath Lac de Gras.
- Permit dewatering of the open pit mine.
- Permit open pit mining of the pipe.

The A418 dike will be constructed essentially of rockfill obtained from mining and crushing operations. The dike will be built in the wet. Due to the short summer season, some of the work will be carried out in cold weather conditions. For these reasons the A418 dike construction will have some unusual problems, which merits a detailed Quality Assurance/Quality Control (QA/QC) manual. This submission applies to the construction of the A418 dike and is addressed solely to the field inspectors. Activities covered are listed in section 3, “Site Inspection and Testing”. The general objectives of the Quality Assurance/Quality Control are described in the Site QA/QC in Section 4.

Aquatic Effects Monitoring Program 2001

This document describes the proposed Aquatic Effects Monitoring Program for the Diavik Diamond Mine site at Lac de Gras. This plan was developed on the information acquired through six years of project development (1994-2000), including aquatic baseline studies, community consultation, engineering design, environmental assessment, including recommendations from the Diavik Technical Committee. The program has been designed in unison with the Type A Water Licence and the Fisheries Authorizations for the mine. This version takes into consideration aquatic-based technical issues and follow-up recommendations developed through the public Comprehensive Study Review, June 1999.

This program will be implemented annually through the mine life and includes:

a) Water quality
b) Snow quality
c) Primary and secondary producers
d) Benthic Invertebrates
e) Lakebed sediment chemistry
f) Plume delineation study
g) Cumulative Effects Monitoring

Blasting and Explosives Management Plan v.5
Submitted to MVLWB April 2005

Explosives are used as a normal part of the mining operations of Diavik Diamond Mines Inc. (DDMI). The purpose of this updated Blasting and Explosives Management Plan is to describe how DDMI intends to minimize adverse environmental impacts in carrying out the blasting activities.

DDMI employs conventional open pit mining methods. Most of the explosives are bulk explosives manufactured on site. The recommended formulations are of commercial quality, industry-proven and accepted worldwide. The raw ingredients are delivered to the site in separate bulk containers and stored in separate bulk storage facilities. The bulk explosives manufacturing plant and storage facilities are operated by an experienced, reputable explosives supplier under long-term contract to DDMI, currently Denesoline Western Explosives. This supplier also provides down-the-hole delivery of the product to the mine by means of state-of-the-art facilities and equipment licenced and approved by National Resources Canada, Explosives Division.

In addition to the raw ingredients, DDMI's explosives supplier also provides commercial packaged explosives and accessories that are transported to the mine site. This includes detonators, boosters, detonating cord and packaged explosives for specialty applications. These materials are stored securely on site in approved magazines until released for use by authorized persons.

This document describes steps that are taken to minimize effects on the environment (water quality and wildlife). It describes actions that are taken to manage spillages of explosives at point source (areas) that in turn will assist in reducing ammonia levels to the environment. It describes how larger wildlife (i.e. caribou and bears) are protected during blasting activities.

This document is intended only to complement federal, territorial and local acts, regulations, codes, and bylaws. Applicable statutes include but are not limited to:

- Canada Transportation of Dangerous Goods Act
- Canada Explosives Act
- Northwest Territories Mine Health and Safety Act
- Northwest Territories Mine Health and Safety Regulations

Contingency Plan – Effluent Toxicity
Submitted to MVLWB November 2004
Approved

This section is an addendum to DDMI's Contingency Plan (March 2004). It is required based on the Amended Water Licence (June 30, 2004) Part J Item 5. This Plan became effective upon written approval by the Mackenzie Valley Land and Water Board. This Plan will be updated to reflect any changes in toxicity testing protocols as described in SNP Part F.

Country Rock & Till Storage Updated Design Report 2001

Presented herein is an updated Design Report for the storage of Country Rock and Till materials that will be obtained from the development and mining of three kimberlite ore bodies in Lac de Gras. The updated design follows the decision to segregate country rock into three types of rock based on acid generation potential that may produce heavy metal impacted water. The three types of rocks will be stored in separate cells whose design will eliminate the production of unacceptable water quality seepage. The updated design offers environmental advantages in terms of isolated containment of impacted water and reduction in the cost of reclamation bonding.

The updated design is in basic conformity with the Rock Management Plan, Version 2 Report dated November 2000, and provides environmental benefits over Country Rock & Till Storage Design Report dated August 1999.

The updated design employs the same total storage area as defined in the 1999 Design Report but places the three types of rocks into separate cells within this area. This design will maximize the opportunity to contain all unacceptable quality seepage water, and allow progressive reclamation. The updated design is based on, and supported by, thermal and stability analyses.

Dust Deposition Monitoring Program and Habitat Assessment 2001

Diavik Diamond Mines Inc. (DDMI) initiated a dust deposition monitoring program and a habitat assessment program during the spring and summer of 2001. The program is aimed at understanding dust deposition rates caused by project activities. Results are compared with the predictions outlined in the Environmental Effects Report, Climate and Air Quality (1998). The study also tries to determine if habitat changes are occurring due to dust particles depositing on vegetation. It is DDMI's aim to conduct snow surveys on an annual basis in the spring and perform habitat assessment reviews every third summer, to monitor trends in total deposited particulates, snow water chemistry and habitat community vitality (and water chemistry of snow cores where determined).

Hazardous Materials Management Plan v.8
Submitted to MVLWB April 2005

Diavik Diamond Mines Inc. (DDMI) requires that the transportation, storage, handling and use of hydrocarbon products, ammonium nitrate, and associated explosive materials, and all other chemicals be conducted safely and efficiently
.
Prevention, detection, containment, response, and mitigation are the key elements in the management of hazardous materials. DDMI is committed to minimizing the potential for adverse environmental effects on terrestrial and aquatic biota and ecosystems that may result from accidental release. The first step in accomplishing this is to apply consistent practices towards the management of hazardous materials site-wide. The purpose of this document is to establish the foundation for the application of procedures to the management of hazardous materials.

Interim Abandonment and Restoration Plan 2001

This Interim Abandonment and Restoration (A&R) Plan has been prepared as per the requirements of DDMI's Class A Water Licence. The report, along with its companion document titled Cost Estimates for Interim and Final Restoration Plan, August 2001, entails the complete Interim Abandonment and Restoration package. Both reports describe major areas and main closure activities including engineering design, research objectives and planning, as well as revegetation and fish habitat replacement and monitoring.

To the extent practical at this mid-point of the mine's construction phase, this plan outlines what can be expected in terms of costs of closure at various stages of operations, from premature shutdown through to scheduled closure. An inherent component of A&R Planning is the research and ongoing monitoring that will ultimately enable a Final A&R Plan to be compiled. At this early stage, research programs are just being developed and it will be several years before they will yield results, enabling an update to this Plan.

Throughout the development of this A&R Plan and the associated cost estimate, it became clear that synergies were available if progressive reclamation were to be carried out. The degree to which may be quite substantial due to the apparent viability of segregating potential acid generating rock in permanent enclosed and capped cells. With the addition of natural permafrost development, it is possible that a near 'walk away' scenario can be achieved at the scheduled end of mine life. Progressive reclamation will not only enable natural flora and fauna to establish early on in the mine life but will provide for several years of monitoring data to be collected prior to planned closure. Given this extra time during operations, when a variety of professional scientific and engineering personnel are typically on-site, a sound research program should evolve; one which would include site specific solutions to problem areas. Of final significance is the expected annual reduction in bonding costs realized as credit for reclamation is progressively achieved.

This A&R Plan also presents, on an interim basis, a reclamation schedule expected to take place at the site. The schedule entails a progressive reclamation effort, which is planned to reduce the exposure of DDMI's environmental liability and maximize the benefit of operational resources throughout mine life to achieve final closure objectives.

Operational Phase Contingency Plan v.8
Submitted to MVLWB April 2005

The purpose of the Diavik Diamond Mine Inc.'s (DDMI's) Operational Phase Contingency Plan (OPCP) is to provide response measures for any unintentional releases of hazardous/toxic substances (such as petroleum products) as well as procedures for water management. The attached site layout figure shows the project site layout for the operational phase. The OPCP defines the responsibilities of key personnel (i.e. On-Scene Coordinator) and outlines their duties and required procedures when responding to unintentional releases of products to the environment.

This plan has been designed to facilitate the efficient clean up of spills from potential hazardous materials. The hazardous materials include:

- Hydrocarbon liquids such as diesel fuel, gasoline, hydraulic oil
- Soluble solids such as ammonium nitrate prill
- Soluble liquids, such as glycols, acids, and paints
- Poor water quality (i.e. sediments and sewage and water treatment plant effluent & sludge)

The principle objectives of this plan are:

- To provide readily accessible emergency information to the clean-up crews, management, and government agencies in the event of any emergency situation.
- To comply with federal and territorial regulations and guidelines pertaining to the preparation of contingency plans and notification requirements.
- To comply with company environmental and safety policies.
- To promote the safe and effective recovery of spilled materials.
- To minimize the environmental impacts of spills to water or land.

This plan outlines response measures and the organization of the emergency response team. Alerting and notification procedures and cleanup strategies are outlined along with the duties and responsibilities of key response personnel. Contained within this document are the emergency contacts listed for DDMI, any applicable contractors, government agencies, private organizations and neighboring sites/ operations.

QA/QC Plan 2003

Diavik Diamond Mines Inc. (DDMI) Quality Assurance (QA) and Quality Control (QC) Plan was granted approval in 2000 by the Department of Indian Affairs and Northern Development (DIAND). This revised document was submitted as required by the Type A Water Licence.

The purpose of the revised QA/QC Plan is to specifically outline the steps, procedures, and equipment that will be used by Diavik personnel to maintain sample integrity and to assess the precision and accuracy of analytical results.

Reclamation Research Plan 2002

This Reclamation Research Plan has been developed as per Diavik's Class A Water Licence, Part L, Section 3. The objective of the plan is to outline research that will be used to verify closure design plan

concepts as outlined in the approved Interim Abandonment and Restoration Plan.

Six research projects have been identified:

Country Rock Test Piles: To determine if cover design for Type II rock piles is appropriate by investigating the effectiveness of a low permeability till layer using large scale test piles.

Till Cover Stability: To monitor till piles for cracks and settling to verify stability of the till and guide specifications for till placement at closure.

Revegetation Research: To determine the effectiveness of various cover amendments in promoting revegetation through monitoring test plots that will be seeded with various indigenous plant species.

PKC Closure Research: To measure various physical properties of fine PK over time to verify closure planning for the PK pond.

Disposal Alternative for Treatment Plant Sludge: To determine chemical and toxicological properties sludge, determine if there are any environmental concerns and evaluate disposal alternatives.

Inventory of Closure Materials: To develop an inventory of closure materials to identify any material shortfalls or surpluses which may re-direct material selection for closure design.

Each objective includes research design, monitoring schedules and estimated budget amounts required for each program.

Rock Management Plan 2004
Submitted to MVLWB September 2004
Approved

This document presents the management plan for the identification and segregation of potentially acid generating country rock produced from mining of the A154 and A418 kimberlite pipes. Segregation is conducted to minimize the potential for generating an acidic drainage and leaching metals from the North Country Rock Pile.

The country rock associated with the mine development is generally granitic in nature with small amounts of pegmatite, diabase and biotite schist lithologies. The granite, pegmatite and diabase rocks which account for approximately 80-85 percent of the total rock mass are generally non-reactive with very low sulphur levels and with adequate alkalinity to neutralize any potential reaction. The biotite schist which accounts for approximately 15-20 percent of the rock mass is potentially acid generating with sulphur levels up to 0.56 percent and with a mean concentration of 0.14 percent. The average sulphur level in the biotite schist is relatively low, however, the alkalinity is very low with minimal neutralizing potential thus the potential for acid generation.

The extensive geological and geochemical database of the mining area was developed by Diavik Diamond Mines Inc. (DDMI) over a four-year period prior to production mining. The database provided an essential source of information to formulate a preliminary plan to manage the small portion of country rock that is reactive. Additional operational information has now been compiled from 18 months of mining in the A154 open pit. This operational information has enabled refine-

ments to this plan. In order to conduct the rock segregation, it is necessary to develop criteria to delineate biotite schist within the country rock. Geochemical criteria have been established for the wasterock from the A154 and A418 mine areas.

Best management practices for the handling of country rock during operations are presented in this report and are based on blast hole sampling and assaying for total sulphur. The country rock is classified into three rock types depending on sulphur concentration.

- Type I: considered clean rock with <0.04 percent total sulphur.
- Type II: considered intermediate rock with a 0.04 – 0.08 percent total sulphur range and minimal to no potential for acid generation.
- Type III: considered potentially acid generating rock with >0.08 percent total sulphur.

The sulphur limits have been revised from the 2000 Preliminary Plan criteria based on the first 18 months of operation. These criteria will continue to be monitored and revised again if necessary. The sulphur determination for each drill hole composite sample is classified as either Type I, II or III. The rock type is assigned to each coordinate of the drill holes. Trained geologists then overlay the sulphur results over the blast pattern and section off manageable units of each rock type. The mound of blasted rock is then flagged off by rock type to allow it to be loaded and transported to the appropriate dump area. The plan to classify, segregate and encapsulate the potentially reactive rock addresses the best management practices proposed during the environmental assessment and the water licence permitting process.

Waste Management Plan v.8
Submitted to MVLWB April 2005

Diavik Diamond Mines Inc. (DDMI) is committed to taking all necessary steps to ensure that the collection, storage, transportation and disposal of all wastes generated by the mine are being conducted in a safe, efficient and environmentally compliant manner. The fundamental basis of the plan is the practical and positive management of wastes incorporating the implementation of a sound waste minimization program.

The main objectives of the plan are to:

- Create a framework for the proper disposal of wastes
- Minimize potentially adverse impacts on the physical and biological environment
- Comply with the Federal and Northwest Territories legislation

Along with the ideals of the four R's embodied in the Waste Management Plan, namely reduction, recovery, reuse and recycling of wastes, there are appropriate mitigation measures to counteract the adverse environmental effects which are identified and discussed.

This plan will be reviewed annually and revised as required. This Waste Management Plan is an integral part of Diavik Diamond Mine Inc.'s Environmental Management System (EMS).

Water Management Plan 2004

The purpose of Diavik Diamond Mine Inc's (DDMI's) Water Management Plan is to provide a description of the management and design of water systems at the Diavik site. The Plan describes existing management systems, and future water management changes. The environmental compliance monitoring program is in accordance with Diavik's Class "A" Water License, and is not repeated within this document.

Key objectives of DDMI's Water Management Plan include:

- Ensuring compliance with water license discharge and monitoring requirements.
- Minimizing use of fresh water through maximizing use of recycled water.
- Anticipating and proactively managing water handling issues.

DDMI has developed a number of strategies to achieve these objectives:

- System designs are conservative and contain contingencies to mitigate risks.
- All major water flows are monitored and reported through DDMI's Project Information Management System (PIMS).
- A water management committee meets quarterly to review water management performance, identify water management issues, and develop action plans to resolve these issues.

Wildlife Monitoring Program 2002

As per the Environmental Agreement, DDMI developed and implemented a Wildlife Monitoring Program to verify the accuracy of the environmental assessment and to determine the effectiveness of mitigation actions taken in regards to wildlife. This program was developed based on information acquired through four years (1995 – 1998) of wildlife baseline studies, community consultation, recommendations developed during the Environmental Assessment, and two years of project activity monitoring. This version takes into consideration wildlife and wildlife habitat based technical issues raised by the Environmental Monitoring Advisory Board (EMAB) and Resources, Wildlife and Economic Development (RWED) during draft reviews of this program in 2002.

The Wildlife Monitoring Program is a mechanism for observation and refinement of procedures for wildlife and habitat management at the DDMI site. The Wildlife Monitoring Program is therefore closely linked with DDMI policies and guidelines, management plans and technical procedures. There are several technical procedures in place to protect wildlife and these are evaluated for effectiveness as part of the wildlife monitoring program.

Key species have been identified as concern for monitoring purposes. These include barren-ground caribou, barren-ground grizzly bear, wolverine, wolves, foxes, falcons, and waterfowl. The Wildlife Monitoring Program is adaptive and can be changed in response to changes and unforeseen circumstances that are identified from the monitoring and from new information sources.

The only change to this Program has been the increased frequency of falcon nest surveys. The nests are now surveyed in July and August for occupancy, count of fledglings and productivity/ survival.

4. SUBMISSION SUMMARIES

This section provides summaries of all documents submitted to applicable regulatory bodies in 2004. Note: Submissions in the form of plans and programs are listed separately in Appendix A: Environmental Plans and Programs at the end of this Annual Report.

A418 Dike Design Report
Submitted to MVLWB November 2004
No approval required

The Diavik Diamond Mine deals with the development of the kimberlite pipes A154, A418 and A21, located beneath Lac de Gras. Field investigations, mine planning and economic evaluation of the resources have indicated that mining should begin with an open pit mining operation. This requires the construction of water retaining dikes to permit dewatering and access to the kimberlite pipes.

The A154 dike was constructed in 2001/2002 and the mine was put into commercial operation in 2003. The A154 pipes may be mined by underground operation as soon as 2007 which requires that the A418 pit be ready for this period so as to ensure an uninterrupted supply of kimberlite ore. The document addresses the design work that has been accomplished for the dike required for the A418 pit. The A418 dike will be constructed essentially of rockfill obtained from the mining operation unlike that of the A154 pit which had to be built entirely from quarry products. The design studies submitted are based on the available data and on the 1999 Final Design Report by Nishi-Khon/SNC-Lavalin for the A154 dike as well as on data obtained during the 2003 and 2004 site investigations. The task was carried out between December 2003 and July 2004.

The report consists of two volumes. Volume 1 (text) includes:

- an evaluation of hydrological, climatological, geotechnical and geological conditions
- dike design criteria
- dike cross-sections and cutoff
- results of technical studies
- construction techniques
- instrumentation and monitoring
- long term water handling
- summary of quantities
- construction schedule

The drawings are included in Volume 2.

A418 Groundwater Characterization and Fracture Zone
Submitted to MVLWB November 2004
Status: Not approved by end of 2004 (but approved February 25, 2005)

This work plan has been prepared according to the requirements of the Water Licence for the Diavik Diamond Mine in NWT. The plan presents a work plan for collection of hydrogeological data in the A418 open pit area with focus on detailed characterization of the fractured rock zone identified in the project area, in support of the pit engineering design.

The work plan is based on a similar document that was developed by Diavik Diamond Mines Inc. in 2001

for fracture zone characterization and hydrogeological test work throughout the entire depth of proposed mine workings in the A154 pit area.

Because the proposed A418 open pit is located only about 900 m SW from the existing A154 pit, it can be expected that the groundwater conditions in that area will be similar to those encountered around the A154 open pit. Therefore, it is likely that the groundwater inflows into the proposed A418 open pit and underground mine workings will be controlled by the structural and tectonic discontinuities within the generally massive granitic rock. In order to properly evaluate the potential groundwater inflows it is necessary to determine the character of these features such as spacing, frequency, orientation, apertures, infill, length, and the hydraulic connectivity of the fracture network.

A418 Pit Slope Design Review
Submitted to MVLWB November 2004
No approval required

This technical memorandum details a review of the A418 ultimate pit design. The A418 ultimate pit plan was developed by Diavik Diamond Mines Inc. (DDMI) in 2004, and was provided to Golder Associates Ltd. for review in October 2004.

Annual Dam Safety Inspection Report
Submitted to MVLWB September 2004
No approval required

Nishi-Khon/SNC-Lavalin (NKSL) was retained by DDMI to perform the Annual Dam Safety Inspection for the dams of the On-Land Dredged Sediment Storage Facility (OLDSSF), Processed Kimberlite Containment (PKC) Facility and Runoff Collection Facility. The annual dam inspection is required by the water licence to be carried out during July of each year.

All the dams were regularly monitored by DDMI geotechnical inspectors. Dr. X. Hu, a senior cold regions engineering specialist of NKSL also performed periodic inspections during the PKC Dam constructions. The annual inspection for year 2004 was carried out between July 16 and 18. Photos taken during the inspection are presented in Appendix A. Water levels for all the inspected facilities and the settlement monuments of OLDSSF were surveyed by the survey department of DDMI. Ground temperature sensors were installed for the dams of the OLDSSF and PKC. DDMI geotechnical inspectors carried out the readings for these thermistor cables.

It can be concluded that all the dams inspected on Diavik Site are functioning safely and satisfactorily, from environmental and geotechnical points of view, as specifically summarized below:

- All dams are functioning as designed.
- There are no seepage for all dams.
- There are no signs of instability.
- There is no danger to the environment due to the functioning of the facilities.
- The dams hold either no water or have sufficient freeboard at the time of inspection.

The following is recommended in the future operation:

• Continuing the regular inspections to monitor any sign of seepage and instability for the dams of OLDSSF and PKC.
• An annual dam safety inspection should be carried out during July of each year.
• Thermistor cables for PKC West dam at two stations, 5+005 and 5+078, should be replaced. One thermistor cable would be required at each station, located immediately downstream of the original cutoff trench. It is recommended not to install thermistor cables in the upstream area of the cutoff trench because a base liner was installed during the Phase 1 construction and the liner could be damaged during the installation of new thermistor cables.
• For both the PKC dams and the OLDSSF dams, the ground temperature readings can be carried out monthly.
• All survey monuments for the OLDSSF should be surveyed every year in July. This will provide information for the annual inspection to address dam movement.
• Survey monuments should be installed for the PKC dams in the downstream benches where the dam would not need raises for several years.
• The eroded upstream areas of the Pond 10 should be repaired.
• The damaged area on Pond 5 dam shall be repaired. The liner edge shall be repaired and properly anchored and the bedding and erosion protection zone properly replaced.
• Attention should be paid during the regular inspections to the ice-rich areas in the downstream of the dams for any signs of settlement, water accumulation and heave.
• Close attention should be paid for Ponds 1 and 5 for the basin settlements during the regular inspections.
• The area where the new runoff diversion ditch enters the Pond 1 should be riprapped to prevent further erosion at the edge of the pond.
• Collection Ponds 10, 11 and 12 should be drawn down as per the design to avoid seepage occurring from these ponds. As these ponds were designed to retain water for a short period of time after the snowmelt, they could only hold water for a certain duration with the foundation completely frozen. Should water be contained for a long period, water seepage may occur as the foundation starts to thaw.
• Avoid direct discharge of water on the dam slopes from any source.
• Avoid machinery traveling on the slopes of the dams. There are two reasons. Firstly, the cover zone for all collection pond dams were thin. Machinery traveling may damage the liner on the slopes. Secondly, the ruts created can become the concentrating points for runoff and therefore generate erosion problems for the dams during the high flow season.

Aquatic Effects Monitoring Program Technical Report
Submitted to MVLWB April 2005
Status: No Approval Required

DDMI conducted Aquatic Effects Monitoring in 2004 as a requirement of the Type A Water Licence N7L2-1645. This is the fourth year of post-baseline aquatic effects monitoring and the third full year of monitoring (open-water and ice-cover) since the Mackenzie Valley Land and Water Board approved the program in July 2001.

Water Quality

- Despite the very close (60m) proximity of SNP Station 19 to the effluent diffuser, open-water and ice-cover results remain below CCME Guidelines for the Protection of Aquatic Life.
- Ice-cover concentrations at SNP Station 19 tend to be higher and more variable than open-water concentrations. This is likely a result of increased wind driven lake circulation in the open-water, resulting in better initial dilution or mixing.

- Data analysis was conducted following the approved four step process. The results of the first step of the data analysis methods identified that there were changes in the concentrations of 6 parameters. Total arsenic and total nickel results were compared with original EA predictions (data analysis step 3). Measured changes are within the levels predicted in the environmental assessment and are below levels that would cause environmental effects.
- The results for several of the parameters indicated a possible change when the actual reason for the positive results was a low baseline statistic. There are also locations (LDG50) or parameters (nitrite at LDG46) where baseline data are not available and so the data analysis is not possible. Finally there are parameters where baseline detection limits have dominated the baseline statistic and could result in changes not being detected. It is therefore recommended that the Diavik Technical Committee, with DDMI, reset trigger values for the step 1 analysis on a parameter-by-parameter basis. The objective will be to set trigger levels that are sufficient to detect change while reducing the number of false positive results.

The following page (Figure 2) shows a map with the water quality stations where samples were taken.

Phytoplankton and Zooplankton

- Open-water chlorophyll *a* concentrations at 5 of the 7 mid-field and 1 of the 3 far field sites are the highest measured to date. The highest concentrations are at LDG45 and 42, which are closest to the effluent discharge. These results indicate at least a short-term increase in primary productivity and the gradient of increase indicates that the final effluent could be the source. Another year of open-water results will be needed to confirm these results. Eutrophication was predicted in the original Environmental Assessment (DDMI 1998) and additional mitigative measures (phosphorus treatment) are in place.
- Due to high variability in the zooplankton results, DDMI has contracted an independent review of the zooplankton sampling, analysis and data procedures.

Benthic Invertebrates

- Results from the near-field monitoring location showed an increase in number of tax and density of benthic organisms. While too early to be conclusive, combined with the chlorophyll *a* results, there appears to be some effects of nutrient enrichment.
- A statistical analysis of all the AEM benthic invertebrate data, as recommended in the 2003 AEM Report, similarly identified possible nutrient enrichment in the near field. The statistical analysis was similarly inconclusive.

Sediment Quality

- The data analysis (step 1) indicated changes at specific monitoring locations of 8 sediment quality parameters. The step 2 analysis determined that Diavik's activities were not likely the cause of the indicated changes primarily because the concentration gradients were the reverse of what would be expected if mine activities were the source.
- A recommendation is made to evaluate using a 2 cm thick sediment sample instead of the cur-

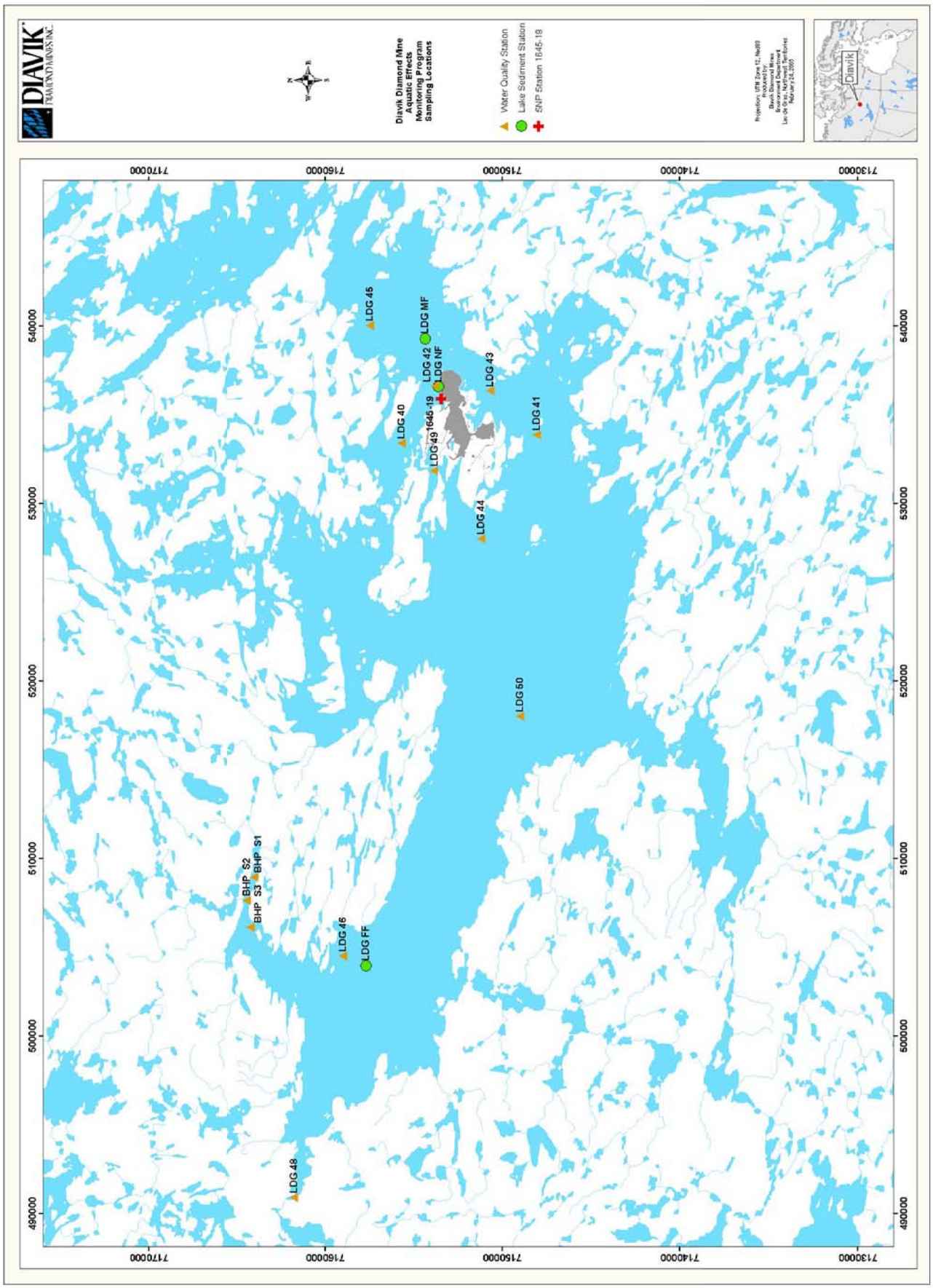


Figure 2: Location of Water Quality stations

rent 5 cm thick sample in order to address concerns raised by Diavik's Environmental Monitoring Advisory Board on the sensitivity of the sampling method. This recommendation was made by EMAB's consultant.

Assessment of slimy sculpin (Cottus cognatus) collected from East Island, Lac de Gras, NT
Submitted to DFO April 2005
Status: Awaiting Approval

DDMI was required to collect slimy sculpin for an assessment of metal concentrations in fish from a constructed dike and at reference sites in Lac de Gras, NWT. These studies were a condition of its Fisheries Authorization under Section 35(2) of the Fisheries Act. Previous attempts by consultants to collect fish with minnow traps and SCUBA diving were not successful at capturing slimy Sculpin (*Cottus cognatus*) in sufficient numbers within an appropriate time limit or level of effort. Previous conclusions that fish were not present in sufficient numbers may have been due to problems with both the timing and method of collections.

There is not a lot of information on the life history of slimy sculpin in northern lakes, but it is very important to consider habitat and behavior. Sculpin show relatively low mobility, with home ranges in river systems of less than 50 m. With respect to the collection timing, sculpin are spring spawners. Attempts to collect fish in traps during the spawning and incubation period are likely to be less successful as feeding is not a priority activity. Specifically, males construct nests that they guard carefully during the spawning seasons, limiting their movements. In southern Canada, spawning starts around 8ºC, so it is possible that spawning occurs in Lac de Gras in late July. Male sculpin guard nests for a considerable period of time, and incubation times may be extended due to colder water temperatures. At warmer temperatures, eggs take up to 4 weeks to hatch, so it is likely that in Lac de Gras males are guarding nests during July and into August – the females captured during our collections showed evidence of relatively recent spawning and gonad sizes in many females was <0.01 g.

DFO personnel from Yellowknife contacted Dr. Michelle Gray in April 2004 for advice on capturing slimy sculpin. It appeared that electrofishing was not attempted during previous studies due to the low conductivity of Lac de Gras water. Although Dr. Gray has many years of experience capturing slimy sculpin, she had no experience in low conductivity waters. The Smith-Root backpack electrofisher manual states that the unit is capable of shocking in waters with conductivity as low as 10 µS/cm. It was decided that electrofishing would be attempted in the absence of evidence refuting its efficacy in Lac de Gras. While on site, we measured a conductivity of 18 µS/cm beside the A154 dike, which is in fact more than adequate for electrofishing.

Blasting Effects Annual Update
Submitted to DFO April 2005
Status: Awaiting Approval

<u>Geophysical</u>

The University of Alberta was asked to assist in a study of the effects of mine blasts on the fish hatchery within Lac de Gras, NT in the vicinity of the Diavik mine site. This initial design of the study consists of both biological monitoring of fish hatching carried out by Sean Faulkner under the supervision of Dr. W. Tonn of the Department of Biology and correlative ground shaking measurements conducted by Marek Welz with Dr. Douglas Schmitt of the Institute for Geophysical Research in the Department of Physics. The Biological measurements have been reported under

separate cover, this brief provides a description of the geophysical measurements and a preliminary summary of typical blast parameters observed over the period from September 3, 2003 to August 9, 2004. The report first describes the measurement techniques employed then summarizes the results.

Biological

This section of the update provides an outline of the methods, sites, and retrievals during the study period. An update on objectives as well as proposed lab study and methods is also included in this annual update on the biological aspect of the Blasting Effects study. This is a graduate study, and therefore all results are pending peer review.

Country Rock Research Test Pile Research Annual Update
Submitted to MVLWB April 2005
Status: No Approval Required

At the Diavik Diamond Mine, open pit mining will lead to the development of two permanent 200 Mt stockpiles, each approximately 70 m high, to retain the excavated country rock that surrounds the diamond-bearing kimberlite pipes. The country rock consists of granite, pegmatitic granite, biotite schist, and diabase. The mean sulfide content of the granite is 0.01 wt.% S with a maximum sulfide content of 0.1 wt.% S. The biotite schist is the major source of sulfide-sulfur (mean sulfide content of 0.16 wt.% S, maximum of 0.56 wt.% S). The country rock contains a low concentration of carbonate minerals, the principal neutralizing minerals for acid released by sulfide oxidation. Segregation was revised in October 2004 to better balance distribution - criteria are <0.4, 0.4-0.8, >0.8

Faculty at the University of Waterloo have received a CFI award to assist in the acquisition of laboratory and field facilities, with a portion of the award dedicated to augmenting the construction field facilities to study the environmental impacts of mining. Diavik has agreed to allow the CFI project to augment the construction of a field installation planned by Diavik to study the evolution of the low sulfide waste rock at the Diavik site, under the severe climate conditions prevalent there. Because of the base infrastructure, collaborations are possible and a research team was formed that includes participants from the Universities of Alberta and British Columbia, Carleton University, and from the Australian Nuclear Science and Technology Organisation (ANSTO). The Diavik Field Facility involves the construction of four well-instrumented, large-scale test piles containing different rock types and two different remedial covers.

The construction of the test piles was initiated in 2004. The first test pile was designed for the uncovered Type III waste rock. The design includes three clusters of basal lysimeters, a series of soil water solution samplers within the pile, and a set of collection lysimeters at the top of the pile. The test pile sits on a geomembrane, all drainage will be monitored. Thermistors will be installed beneath and within the pile to provide continuous temperatures records. TDR probes will be placed in the pile to measure water contents. Gas sampling devices will be installed to monitor changes in the concentrations of oxygen and carbon dioxide resulting from sulphide oxidation and acid neutralization reactions.

Personnel arrived at the Diavik mine site on September 21, 2004. The purpose of the trip was to install thermistors and to oversee construction of the base drainage system for a waste rock drain-

age-test pile. Goals for this trip were to install thermistor strings in the waste rock test pad and complete construction of the three basal lysimeter clusters and the drainage collection systems leading from the lysimeters to an instrumentation hut. In addition to the lysimeter collection system, a collection drain ('basal drain') for the main area of the rock pad was also to be completed. The final goal for this trip was to leave the rock pad ready for completion of the rock-pile construction in the spring or summer of 2005. Thermistor string installation was completed on September 28, 2004 and the drainage system work at the site ended on October 19, 2004. This progress report provides a brief description of the activities done toward completion of the goals.

Diavik Geotechnical Review Board Report
Submitted to MVLWB November 2004
Status: No Approval Required

DDMI maintained a Diavik Dike Review Board (DDRB) during the design, construction and dewatering of the A154 dike. The last meeting of the DDRB was held on July 17 and 18, 2003. The DDRB has now been disbanded and replaced by a new Board consisting of three past members of the DDRB.

The terms of reference of the new Board are still being formalized. However it is the understanding of the members of the new Board that it will maintain dike performance oversight, as required by regulators, it will advise on new dike developments and it will extend its review function to all geotechnical aspects of Diavik's operations including pit stability, pit depressurization, waste and water management, and closure. Accordingly the new Board has been designated the Diavik Geotechnical Review Board (DGRB).

This report states that for all practical purposes, the site characteristics at A418 are the same as those at A154. The only significant difference so far is the deeper extent of moderately fractured surface bedrock, which will have to be considered in the design of the next grout curtain. Cone testing of the lake sediments is planned from the ice next winter, and with this the Board confirms that site characterization is sufficient to support final dike design. The Board accepts the alignment of the dike as proposed.

The Board also recommends that the criteria for removal of the lakebed sediments be reviewed, and that a field trial for dredging be done. It is recommended that placement methods for zonation be explored with the contractor. The Board, for cut-off sequencing, favors diaphragm wall, then jet grouting, and then curtain grouting. It is also recommended that with regard to jet grouting, best triple jet grout practice be followed but double jet grouting be allowed as an alternative, subject to review. With respect to instrumentation, the Board recommends the addition of upstream piezometers nested into fill, till and rock and a downstream inclinometer in the deeper section.

Dust Deposition Monitoring Report
Submitted to MVLWB April 2005
Status: No Approval Required

Diavik Diamond Mines Inc. (DDMI) initiated a dust deposition monitoring program during the spring of 2001. The program involved snow core sampling to determine levels of dust deposition. This program was continued in spring of 2002 with an additional trial program using dust gauges during the late spring and summer months. During 2003 and from then on the dust gauge program was continued and dust gauges were deployed for the entire year. The dust gauges act as a repository for air born dust particles. Both the snow core and dust gauge monitoring are aimed at understanding

dust deposition rates caused by project activities during the lifecycle of the mine. Results are compared with the predictions made in the Environmental Effects Report, Climate and Air Quality (DDMI, 1998). DDMI intends to conduct snow surveys on an annual basis in the spring, collect dust particles throughout the year and perform habitat assessment reviews every third summer, to monitor trends in total deposited particulates, snow water chemistry, summer dust deposition and habitat community vitality. The water chemistry of snow cores collected was compared to the water quality limits set out in the Type A Water Licence.

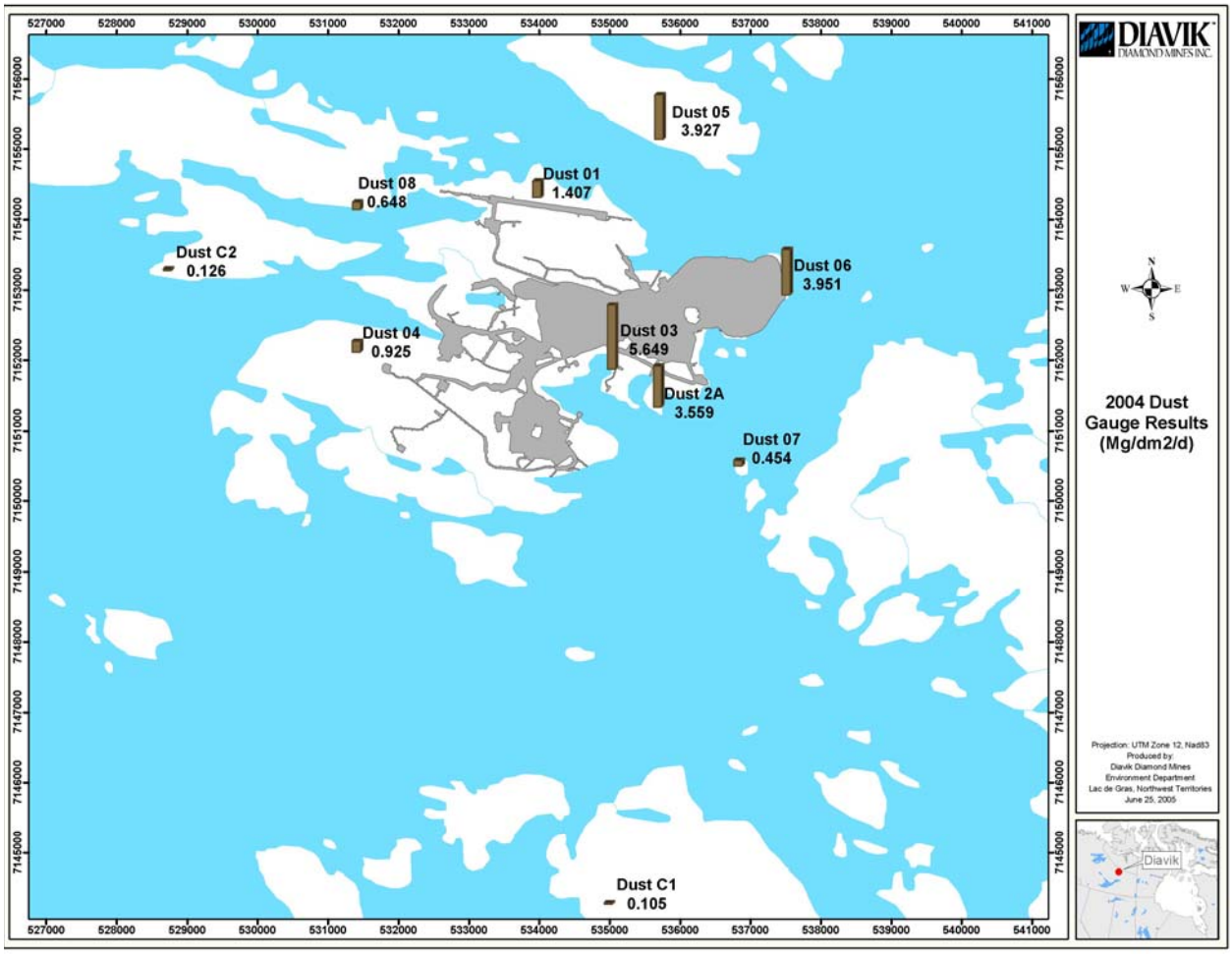
Consistent with the results from the 2002 and 2003 monitoring programs, the 2004 dust deposition program has revealed similar results to the environmental effects report. As predicted, dust deposition rates are higher adjacent to the project infrastructure and decrease as the distance increases from the project footprint. Snow chemistry results were all well below the discharge limits outlined in DDMI's Type A Water Licence.

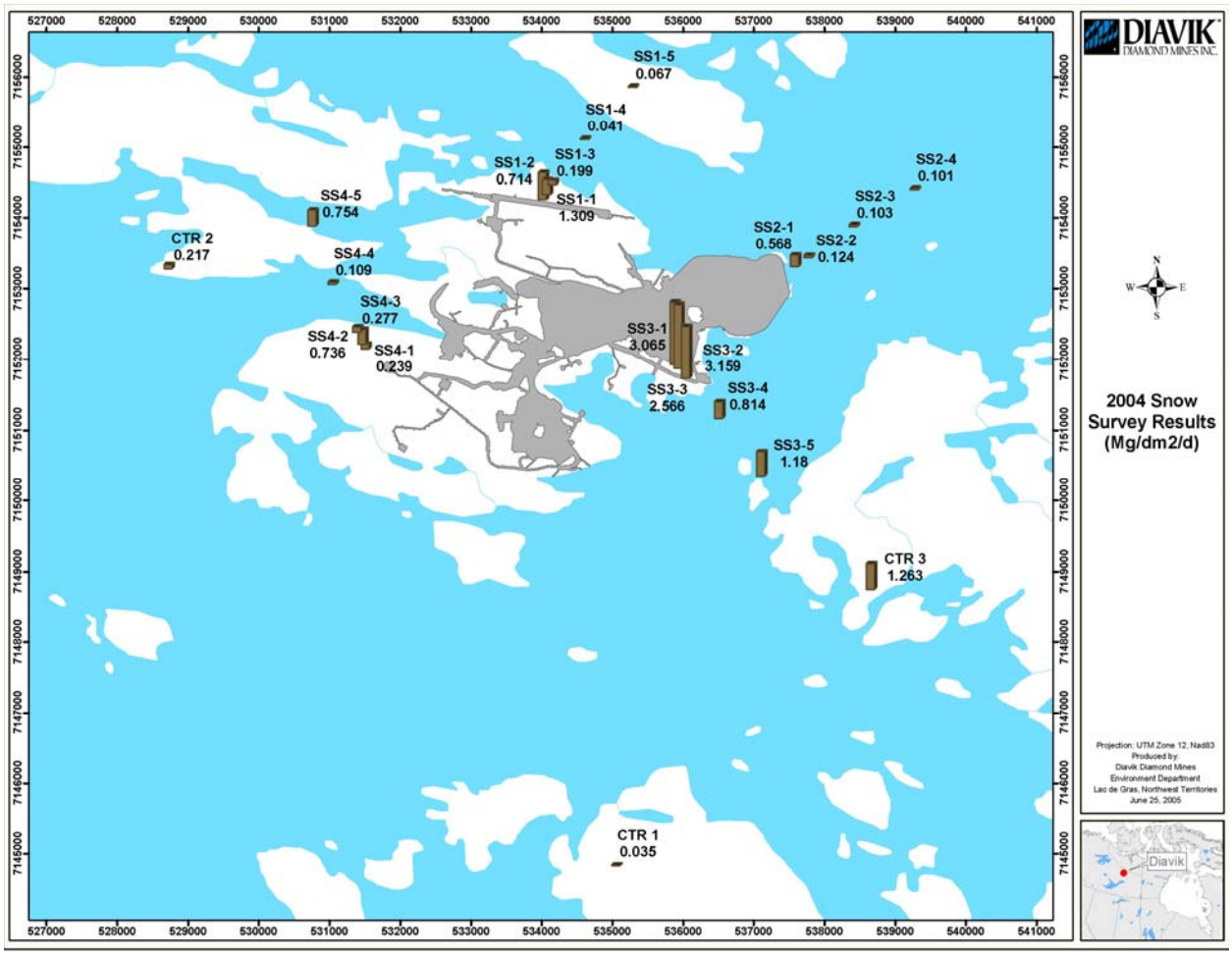
Results from 2004 indicate the following:

- Dust deposition levels in snow are highest adjacent to the mine and reduce to background levels at approximately one km from the project.
- Dust results obtained from summer gauges indicate higher deposition rates than during snow seasons.
- Dust deposition levels, as reflected in snow core samples, were reduced in comparison with 2003 levels. However, dust collector samples indicated an increase in deposition rates. This is due to the dust collectors having both summer and winter collection periods.
- The snow cores, which indicated the highest deposition rates, were collected northwest of A154 pit.
- The dust collectors, which indicated the highest deposition rates, were located west of A154 (station 03), south of the pit (station 2A) and on the A154 dike (station 06) respectively. Station 05 (north of A154 and east of station 01) also measured higher accumulation rates.

It is difficult to compare results with the Environmental Assessment predictions because specific construction activities that occurred during the year were not modeled. However, after correcting for background levels, the magnitude and extent of dust deposition predicted is comparable to measured levels.

The following maps illustrate a summary of the results from the two parts of the program (dust and snow samples).


Dust 05
3.927
Dust 08
0.648
Dust 01
1.407
Dust C2
0.126
Dust 06
3.951
Dust 04
0.925
Dust 03
5.649
Dust 2A
3.559
Dust 07
0.454
Dust C1
0.105
DIAVIK
DIAMOND MINES INC.
2004 Dust
Gauge Results
(Mg/dm2/d)
Projection: UTM Zone 12, Nad83
Produced by:
Diavik Diamond Mines
Environment Department
Lac de Gras, Northwest Territories
June 25, 2005
Diavik


SS1-5
0.067
SS1-4
0.041
SS1-2
0.714
SS1-3
0.199
SS1-1
1.309
SS2-4
0.101
SS2-3
0.103
SS4-5
0.754
SS2-1
0.568
SS2-2
0.124
CTR 2
0.217
SS4-4
0.109
SS4-3
0.277
SS3-1
3.065
SS4-2
0.736
SS4-1
0.239
SS3-2
3.159
SS3-3
2.566
SS3-4
0.814
SS3-5
1.18
CTR 3
1.263
CTR 1
0.035
DIAVIK
DIAMOND MINES INC.
2004 Snow
Survey Results
(Mg/dm2/d)
Projection: UTM Zone 12, Nad83
Produced by:
Diavik Diamond Mines
Environment Department
Lac de Gras, Northwest Territories
June 25, 2005
Diavik

Hydrocarbon Removal Report (under peer review)
Submitted to MVLWB April 2005
Status: No Approval Required

This report was not required to be submitted, but is provided as an example of adaptive management at the Diavik mine site.

Northern Canada has a growing mining industry that is driving an increased demand for proven remediation techniques in polar regions. Bioremediation is a useful technology to remediate hydrocarbon contaminated soils. The climatic and physiographic conditions in the Arctic provide a challenge for implementing proven remediation methods. Industrial practices at the Diavik Diamond Mine site have resulted in contaminated crushed granitic rock, where an investigation into hydrocarbon removal from crushed granitic rock was completed. Aeration and bioaugmentation techniques were tested to determine their efficiency on crushed granitic rock at the DDMI site.

Bioaugmentation with sewage sludge proved to be a viable method of reducing the concentration of hydrocarbons over time. The addition of aeration tubes also slightly increased the amount of degradation, but not enough to conclude a significant difference. After an 88 day study, total petroleum hydrocarbons were reduced from 15,000 mg/kg to less that 2,000 mg/kg with the use of both aeration and bioaugmentation. The methods of removal used in this study have been proven effective for crushed granitic rock, however, one season of degradation practices was not able to achieve CCME standards for petroleum hydrocarbons.

NIWTP Effluent Characterization Research Annual Update
Submitted to MVLWB April 2005
Status: No Approval Required

The North Inlet Wastewater Treatment Plant (NIWTP) at the Diavik Diamond Mine in the Northwest Territories currently disposes of its wastewater in the North Inlet, which was originally part of Lac de Gras. The wastewater, henceforth referred to as sludge, produced by the NIWTP consists of particulate matter from ground rock, old lakebed sediment, till that has collected at the bottom of the open-pit, and wastewater from seepage and runoff. The NIWTP uses two wastewater polymers to treat the sludge prior to its release into the North Inlet. North Inlet is currently isolated from Lac de Gras, but it has been proposed that at the time of mine closure, some 20 years in the future, the two water bodies could be reconnected.

As part of a sound environmental management strategy, this study was undertaken to determine the effect that the sludge and leachates created from the sludge would have on aquatic species representing multiple trophic levels, and to determine if constituents of toxicological concern were present that could potentially leach into water overlying the sludge. The sludge itself was tested as whole, condensed and aged sludge using two benthic species, Chironomus tentans and Hyalella azteca, which are routinely used in standardized toxicity tests. The solid phase of the sludge was also mixed with a 1:1 volume of reconstituted water having similar water quality characteristics to Lac de Gras water to create various leachates that could be used in standardized aquatic toxicity tests with an algal species, Pseudokirchneriella subcapitata, a daphnid species, Ceriodaphnia dubia, and a fish species, Pimephelas promelas. Furthermore, P. subcapitata and C. dubia bioassays were also conducted with pore-water that was extracted from the sludge, since this represented the worst-case exposure scenario.

Conclusions from this study were that although a full investigation would be needed to identify the

toxic of concern, based on this study it is most likely ammonia. This study concluded that different batches of sludge contained variable concentrations of total ammonia and, furthermore, the concentrations that were present in the pore-water and leachates were toxic to most of the aquatic species tested. It is difficult to predict how much ammonia will leach from the sludge, or what concentrations will be present in 20 years from now when the mine closes. It is recommended that ammonia in overlying water is tested and routinely assessed prior to reconnecting the North Inlet to Lac de Gras, and that consideration is given to other elements such as calcium and magnesium.

Results of Site Specific Toxicity Testing
Submitted to MVLWB December 2004
No approval required

This report was not required to be submitted, but is provided as an example of adaptive management at the Diavik mine site.

DDMI's Water Licence (N7L2-1645) was amended in June 2004 as a result of higher than anticipated ammonia levels in mine water. The 20 mg/L total ammonia discharge limit was derived based on the requirement to have a final effluent that is not acutely toxic to aquatic organisms. The acute toxicity of total ammonia is known to be significantly lower at lower pH levels and lower temperatures. Consequently, the June 2004 Water Licence amendment also requires DDMI to have the ability to control pH levels, as necessary, to be able to manage for acute toxicity.

During the review of the Water Licence amendment application *H. azteca,* a benthic invertebrate, was recommended as an acute toxicity test species as it was believed to be more sensitive to total ammonia than rainbow trout. Rainbow trout continues to be used as one of the acute toxicity tests. The amended Water Licence includes a requirement to evaluate the *H. azteca* acute toxicity test.

The purpose of this document is to provide for the Board, the Diavik Technical Committee and other interested parties, the results of site-specific toxicity testing that have been conducted by DDMI over the last 18 months. The toxicity testing was focused on two issues:

1. Determining the site-specific ammonia threshold of acute toxicity to rainbow trout. To effectively manage against acute toxicity due to ammonia, it was necessary to establish the specific conditions of total ammonia and pH that causes acute toxicity in actual mine water. This information can then be used to set operating procedures for pH control as required under Part H Item 14 of the Water Licence.
2. Determining the difference in sensitivity of the *H. azteca* acute toxicity test as compared to the rainbow trout acute toxicity test. An LC50 for *H. azteca* was estimated, by reviewers of the amendment application, to be equivalent to an LC20 for rainbow trout. The LC20 for rainbow trout was consequently specified as an interim trigger level for contingency planning (Part J). The study results support the following conclusions:

(1) That a value of 0.2 mg/L unionized ammonia be used as the site-specific threshold for acute toxicity. This value should be used as a reference in developing the operating procedures for pH control in the NIWTP.
(2) That acute toxicity for the DDMI effluent is more appropriately defined by the current LC50 for rainbow trout rather than the suggested *H. azteca* test.

Revegetation Research Annual Update
Submitted to MVLWB April 2005
Status: No Approval Required

Mining for diamonds in the Canadian North has been initiated in the past decade. Two companies, BHP Diamonds, Inc. (BHP) and Diavik Diamond Mines Inc. (DDMI), currently have diamond mines in the Northwest Territories, although exploration indicates that other diamond deposits exist and there is potential for further development. As a pioneer in the diamond industry in Canada, DDMI has the challenge to successfully reclaim mining disturbances to conditions resembling the premine environment and the opportunity to develop innovative, cost effective and environmentally sustainable methods to achieve this goal. Successful reclamation at select sites involves the re-establishment of soil processes such as nutrient cycling and of native plant communities including a

diversity of shrub, grass, forb and bryophyte species. These sites include gravel roads, gravel pads, waste rock and till stockpiles and the processed kimberlite containment facility. The greatest obstacles to overcome are the lack of soil moisture, soil water holding capacity, available organic matter following mining activities and information on propagation techniques for arctic plant species. The goal of this research is to identify the most effective and economical methods for establishing a self-sustaining native vegetation cover on disturbed sites at the Diavik Diamond Mine. Specific objectives are:

- To determine which substrates are most effective for plant establishment and growth.
- To determine which soil amendments are most effective at enhancing substrate properties and plant establishment.
- To determine which groups and individual native plant species are able to establish and survive on a variety of substrates.
- To evaluate the potential for native plant species to egress from site of introduction to adjacent areas.

In 2004, 72 of 144 test plots were established. The area was scarified and soil amendments added included organic sludge, 50/50 mixture of PK and lake bottom till, and scraped top soil. The study will continue in 2005.

Seepage Report
Submitted to MVLWB April 2005
Status: No Approval Required

Water quality monitoring was conducted at the Diavik site in 2004 at established seepage, collection pond and groundwater locations around the island. The objective was to document any changes in water chemistry where the upstream physical structures might have had an influence on ground water and/or surface water from precipitation. Water samples were scheduled to be taken from seven Seepage Survey Stations (SSS) as well as utilizing water samples collected from thirteen Surveillance Network Program (SNP) stations specified in the Diavik Diamond Mine Inc.'s (DDMI) Type A Water Licence #N7L2- 1645.

Under natural conditions, water seepage on the east island occurs within the active or thaw zone of low lying till areas predominantly as surface runoff, typically from May through to the beginning of October. Water from these sources is collect in a series of small steams, which are enclosed by

water collection systems (collection ponds). Monitoring efforts have focused on the mouths of these streams and on groundwater in topographic lows, where any seepage from future mine components would most likely be detected. Seepage water quality monitoring began during the spring freshet of 2004 and continued until freeze-up. Groundwater monitoring was limited to observations of water levels in wells, as insufficient groundwater was available for water quality analysis, indicating a lack of seepage.

None of the seven seepage-monitoring locations showed any signs of seepage during the spring freshet to the fall freeze. Therefore, all of the upstream collection ponds captured both run-off from the spring freshet, plus any precipitation during summer and fall. In 2004, all six collection ponds were effected by up stream construction activities, or rock placement within the rock piles.

Shoal Habitat Utilization Survey 2004
Submitted to DFO April 2005
Status: Awaiting Approval

As stated in the Authorization for Works or Undertakings Affecting Fish and Fish Habitat (DFO File No. SC98001), DDMI was responsible for conducting a Fish and Fish Habitat Utilization Study prior to in-lake dike construction. To meet the requirements outlined in the Fisheries Authorization, DDMI has been conducting a yearly Shoal Habitat Utilization Survey (hydro-acoustic shoal surveys). Hydro-acoustic shoal surveys for 2004 were conducted during September 26, 2004 and October 11, 2004 on nine transects, eight existing transects from last years survey which are located east of the A154 dike and one additional transect located at the proposed A418 dike site. Each transect was surveyed twice by boat based on previously mapped shoals.

In addition to the hydro-acoustic surveys, angling was utilized in an attempt to: 1) ground-truth the hydro-acoustic data and 2) to capture, tag, and obtain life history data from fish utilizing the shoals. Results concluded that lake trout continue to utilize the shoals along the A154 dike with fish being detected with the hydro-acoustic equipment as well as being caught or observed during angling. Fish were also detected at the other natural shoals in the survey, with one lake trout being caught while angling. Fish were detected at transect located by the proposed A418 dike, with one lake trout being observed following the lure to the boat.

Site Water Balance
Submitted to MVLWB April 2005
Status: No Approval Required

The purpose of this document is to address the quantitative aspect of the Water Management Plan at the Diavik mine site. The base case scenario has been set up to run water flows from October 1, 2003 to December 31, 2023.

This document will focus on two specific water balances at the project site:

• Section 2 of this document develops the water balance around the North Inlet (see Figure 1.1). The water reporting to the North Inlet contains mainly suspended solids and includes pool dewatering, pit inflows, dike seepage and underground water.
• Section 3 of this document develops the water balance around the Processed Kimberlite Containment (PKC) Facility (see Figure 1.1). The water reporting to the PKC contains mainly suspended

solids and includes fine PK slurry and treated sewage.

Water reporting from the A21 pit is not discussed in this document, as the mine plan in regards to A21 is currently pending resource evaluation.

Status Report – Special Effects Studies
Submitted to MVLWB July 2004
Status: Awaiting Approval

Part K Item 8 of Water Licence N7L2-1645 (amended May 2004) specifies that Diavik is to provide a status report on the special effects studies listed in Part K Item 7(i). Part K Item 9 specifies that all reports completed under Part K Item 7(i) be submitted. The status of each item in Part K item 7(i) is described in this status report; following this is the list of reports which document the completed studies and that have been submitted to the MVLWB.

Terms of Reference – Ammonia Fate Study
Submitted to MVLWB August 2004
Status: Approved February 25, 2005

Part H Item 26 of Water Licence N7L2-1645 specifies that DDMI is to provide a terms of reference, schedule and study design for a water quality study of the fate of ammonia from the North Inlet Water Treatment Plant discharge to Lac de Gras. The terms of reference outlines the objectives, design and schedule for the study.

Terms of Reference – Ammonia Management Investigation
Submitted to MVLWB September 2004
Status: Approved January 28, 2005

This document contains the proposed terms of reference as required in Part H Item 18 of DDMI's Water Licence. It covers the objective of ammonia management investigations, pit water management, and water treatment technologies.

Type A Water Licence 2004 Annual Report
Submitted to MVLWB April 2005
Status: Awaiting Approval

This Annual Report is prepared as per Part B, Section 4 of the Type A Water Licence, issued to DDMI by the Northwest Territories Water Board and now currently administered by the Mackenzie Valley Land and Water Board. The following appendices were included with the 2004 Annual Report:

- Tabular Summaries SNP Data
- Revised Operational Phase Contingency Plan (March 2005)
- Revised Hazardous Materials Management Plan (March 2005)
- Revised Waste Management Plan (March 2005)
- Revised Blasting and Explosives Management Plan (March 2005)
- 2004 Aquatic Effects Monitoring (AEM) Report
- Hydrocarbon Removal Report

- 2004 Seepage Report
- 2004 Dust Deposition Monitoring Report
- Fish Habitat Utilization Final Report (March 2004)
- Revegetation Research Annual Update
- Country Rock Research Test Pile Annual Update
- Blasting Effects Annual Update
- North Inlet Water Treatment Plant Effluent Characterization Report
- Meteorological Data 2004
- Traditional Knowledge Camp Reports
- Slimy Sculpin Report
- Diavik Site Water Balance

Wildlife Monitoring Report
Submitted to RWED April 2005
Status: Awaiting Approval

As a requirement of the Environmental Agreement, Diavik Diamond Mines Inc. (DDMI) conducts a Wildlife Monitoring Program (WMP). The objective of the WMP is to collect information that will assist in determining if there are effects on wildlife in the study area (Figure 1-1) and if these effects were accurately predicted in the Environmental Assessment (DDMI, 1998). The WMP also permits the collection of data to determine the effectiveness of site specific mitigation measures and the need for any modifications. The report documents results collected for the 2004 Wildlife Monitoring Program for the Diavik Diamond Mine located at Lac de Gras, Northwest Territories. The data was collected according to procedures outlined in the revised 2002 Wildlife Monitoring Program. Wherever possible, comparisons to the information gathered during the previous monitoring years (2000 to 2003) and the pre-construction baseline (June 1995 to August 1997) have been included.

In response to reviewer requests, a comprehensive statistical analysis of data collected from baseline through current operation in the Lac de Gras area has also been conducted to test impact predictions. The report titled, "Analysis of Environmental Effects from the Diavik Diamond Mine on Wildlife in the Lac de Gras Region" is included as Appendix A and is referenced throughout this report (Golder 2005). General observations and recommendations for possible improvement in each program are as follows:

<u>Vegetation/Habitat Loss</u>

- The direct vegetation/habitat loss in 2004 due to the mine footprint was 0.98 km^2, which is within the expected amount. Total habitat loss to date from mining activities is 7.31 km^2.
- Habitat analysis was conducted on permanent vegetation plots during 2004.

<u>Barren-ground Caribou</u>

- Direct summer habitat loss in 2004 from the mine footprint was 0.32 habitat units, which is within the expected amount.
- One mortality to caribou occurred due to the mine during 2004.
- The level of caribou advisory monitoring remained at "no concern" (no caribou or fewer than 100 caribou) for 366 days during 2004.

<u>Grizzly Bear</u>

- Direct terrestrial habitat loss in 2004 from the mine footprint was within the expected amount at 0.93 km^2.
- One bear mortality occurred in 2004. It was destroyed due to a human safety concerns, and after approval from RWED officials.

Waste Management

- Regular inspections were conducted at the Waste Transfer Area (WTA) and Inert Landfill in 2004.
- Food and food packaging were found during 24 percent and 34 percent of inspections, respectively, at the WTA.
- Food and food packaging were found during 11 percent and 37 percent of inspections, respectively, at the Inert Landfill.

Raptors

- Raptor monitoring was performed in June and July 2004, with this being the first year DDMI conducted June monitoring.
- During 2004, one peregrine falcon nest was occupied and productive.
- One nest in the study area never before occupied, was occupied but unproductive during 2004.
- A pair of peregrine falcons established a nest on the high wall of the A154 pit.
- One potential project related mortality occurred during 2004 (exact cause of death could not be determined).

Waterfowl

- Habitat loss in 2004 was within the expected range and equaled 0.04 km^2 of shallow and deep water.
- Waterfowl were present at the East Island shallow bays.
- Waterfowl and shorebird numbers increased during 2004.
- Waterfowl are utilizing mine-altered wetlands, particularly the PKC and North Inlet.

5. OPERATIONS SUMMARY

JANUARY: During the month of January 2004, all required sampling at the SNP stations was conducted, except for 1645-19 A, B, & C at the NIWTP diffuser line in Lac de Gras. Due to equipment problems, this monthly sample requirement was delayed until the beginning of February. The E.coli sample bottle obtained in December 2003 leaked during transport, requiring that the sample be re-taken for E.coli in January to fulfill the annual requirements for Station 1645-11 at the Sewage Treatment Plant (STP).

Stations 1645-49 (Pit Water) and 1645-52 A&B (Dike Seepage Wells) were sampled from the North Inlet Water Treatment Plant (NIWTP) bi-weekly and monthly, respectively, during the month of January.

The monthly sample from station 1645-12 at the North Inlet Storage Facility was obtained during the month of January. Also during the month, bi-weekly samples from station 1645-13 were completed in the North Inlet Storage Facility off of the North Inlet Reclaim Barge. Additionally, the monthly sample required from station 1645-16 was taken from the Process Kimberlite Containment Facility (PKC), off the PKC Reclaim Barge, with no notable concerns.

Samples were collected at 1645-18, the final effluent sampling point prior to discharge in Lac de Gras, in the NIWTP on a six-day schedule with no notable concerns.

The inspector requested on November 11, 2003 that Fecal Coliforms, BOD, and oil and grease be analyzed every six days during the transfer of water from the Sedimentation Pond to the North Inlet. Sampling for these additional parameters continued in January 2004.

SNP station 1645-15 was monitored within the Process Plant during the month for percent solids and monthly total volume pumped to the PKC.

The collection ponds were not sampled in January as they were frozen.

Dust gauges DUST1-8 plus Controls 1 & 2 were changed out.

Construction began on an addition to the 'B' wing of the main accommodation complex on January 4.

FEBRUARY: During the month of February 2004, all required sampling at the SNP stations were conducted by DDMI. Stations 1645-49, 1645-52 A&B, 1645-12, 1645-13, 1645-16 and 1645-18 were all sampled in February with no notable concerns.

Sampling related to the 11 November 2003 request from the inspector regarding collection of samples for Fecal Coliforms, BOD, and Oil & Grease analysis was discontinued as of 23 February 2004. The DIAND Inspector was notified before discontinuing collection for these additional parameters. All three parameters were well below licence limits.

Station 1645-19 was not sampled in February due to mechanical problems with equipment related to the extreme cold temperatures. Sampling for February was conducted during the first week of March. In an effort to resolve this problem, sampling of 1645-19 was moved from near the end of the month up to mid-month to ensure samples can be collected within the designated timeframe.

Tibbitt-Contwoyto Winter Road trucking began the on February 1st, and 603 loads were hauled during the month.

MARCH: During the month of March 2004, all required sampling at the SNP stations were conducted by DDMI.

Stations 1645-12, 1645-13, 1645-16, 1645-49, 1645-52 A&B and 1645-18 were all sampled as scheduled during March with no notable concerns.

Discharge into Lac de Gras was discontinued on March 13, 2004, and all mine waters were routed to the NISF. The inspector was notified that the discharge was discontinued due to the five-point moving average being only slightly under the 2-mg/L-threshold limit for ammonia. Sampling from station 1645-18 will be suspended until discharge to Lac de Gras resumes. Quarterly toxicity samples were obtained from the splitter box in the NIWTP, as 1645-18 was not flowing. The samples were taken on March 14 with no noted concerns.

Station 1645-19 A, B & C was sampled immediately prior to discharge being suspended.

A total of 902 loads were hauled on the winter road during March. The road officially closed on March 31st.

On-ice drilling program for the A418 pit was conducted to further delineate the resource.

APRIL: During the month of April 2004, all required sampling at the SNP stations were conducted by DDMI.

Sampling was completed at stations 1645-12, 1645-13, 1645-49 and 1645-52 A&B, with no concerns noted.

Collection of the sample from station 1645-16 was missed on 25 April 2004. A sample was later collected on May 5.

Discharge into Lac de Gras was discontinued in March, with all mine waters being routed to the NISF and Sedimentation Pond. Sampling at station 1645-18 was on hold until the ammonia amendment could be approved and flow re-activated. The inspector will be provided with analytical results prior to discharging back to Lac de Gras.

It was determined to continue sampling at 1645-19 in April. Sediment samples were also collected during April, as per the quarterly requirement. It must be noted that the mixing zone around the diffuser was static at the time, as water was not being discharged to Lac de Gras.

Dust gauges DUST1-8 plus Controls 1 & 2 were changed out. Snow surveys were completed.

Spring sampling began for the Aquatic Effects Monitoring Program (AEMP). A total of four stations were sampled during late April.

Wolverine tracking surveys were conducted along 23 transects at site. A total of 16 tracks were spotted, two of which were pairs, from April 16-24 .

Caribou aerial surveys, in conjunction with BHPB, began this month.

MAY: During the month of May 2004, all required sampling at the SNP stations were conducted by DDMI.

Station 1645-12, 1645-13, 1645-16, 1645-49 and 1645-52 A&B were sampled and no concerns were noted.

Station 1645-18 was not sampled due to continued suspension of discharge.

Station 1645-19 at the NIWTP diffuser line was sampled in May. It must be noted that the mixing zone around the diffuser was static at the time, as water was not being discharged to Lac de Gras.

Spring sampling continued for the Aquatic Effects Monitoring Program (AEMP). The remaining six stations were sampled during early May.

Daily observations were undertaken to determine waterfowl presence at the mine site. These observations continued from May 25 – June 20, 2004.

Caribou road, PKC and scanning observations commenced and ran until the end of September.

Site preparations began toward the Country Rock Test Pile study that will continue into 2005.

Work to construct/contour fish habitat at the till areas outside the pit wall, but within the A154 dike, commenced.

JUNE: During the month of June 2004, all required sampling at the SNP stations were conducted by DDMI except for 1645-19 and 1645-12, which were suspended due to ice safety concerns.

Station 1645-13, 1645-16, 1645-49 and 1645-52 were all sampled, with no notable concerns.

Discharge into Lac de Gras resumed on 9 June 2004, with approval from the Indian and Northern Affairs Canada (INAC) Land Use Inspector on site conducting an inspection. Station 1645-18 was sampled on June 10, as per the Land Use Inspector's request, with the regular frequency sample taken on June 14.

The application for amendment to the water licence regarding concentration levels of ammonia was approved by the MVLWB (30 June 2004). The new maximum concentration of any grab sample is 20 mg/L, with a pH range of 6.0 - 7.0.

Collection ponds were sampled for the first time in 2003 as the spring melt started to accumulate within them (POND-1, 1645-42A&B, 1645-45 to 47). DDMI has taken the initiative to collect and analyze for dissolved metals for all collection ponds. These are not part of the SNP requirements, but have been included in the monthly report. Pond 12 was dewatered into Lac de Gras after obtaining approval from the INAC Inspector and monitoring daily levels of TSS, pH and turbidity. Ponds 11, 5, 4 and 1 were all dewatered into the NIWTP.

Groundwater well and seepage surveys commenced this month as well, but no flow was observed at any station. (Groundwater wells: 1645-28 to 33; Seepage: SSS1645-20 to 26)

Quarterly toxicity samples at 1645-18 completed on June 15 with no noted concerns.

A spring survey of falcon sites was added to the falcon monitoring program for 2004 in an effort

to include nests which are occupied in spring, but may fail prior to the July chick count. Five of six known nesting sites were occupied.

Caribou aerial surveys are reduced to half the number of transects in response to the small number of caribou in and around the study areas. This is done for June and July.

Monitoring of the rain gauge and water evaporation pan was initiated for the season.

Construction to raise each of the two PCK dams 5 m began on June12. This project was undertaken to prepare for elevated water levels within the PKC that will result from a future increase in production with the addition of the A418 pipe. The final elevation is 440.00 and work was completed on 31 October.

Experimental biopiles were established in the contaminated soils area within the Waste Transfer Area to determine if amendments to the soil would promote hydrocarbon degradation. The piles were operational until first frost at the end of September.

Work began at the Diavik exploration camp at the end of June. This work included geological mapping, geochemical sampling, and drill testing of selected airborne and ground geophysical anomalies.

JULY: During the month of July 2004, all required sampling at the SNP stations were conducted by DDMI.

Station 1645-12 was sampled at the end of the month, due to ice still covering the inlet during the early part of July. Additionally, stations 1645-13, 1645-16, 1645-49, 1645-52 A&B and 1645-18 were all regularly sampled with no notable concerns.

Collection ponds POND-1, 1645-42A&B, 1645-45 to 47 were sampled with no noted concerns. Ponds 10 and 11 were dewatered into the NIWTP. Water from the Sedimentation Pond was pumped to the NIWTP. Pumping was done throughout the summer and ended in early September.

Groundwater well and seepage surveys were carried out, but no flow was observed at any station. (Groundwater wells: 1645-28 to 33; Seepage: SSS1645-20 to 26)

The DIAND Inspector collected regulatory samples at SNP stations 1645-18 and 1645-49 on 27 July 2004. DDMI collected samples at the same time and location as the inspector. These results have been included in the monthly report.

Sediment and water quality samples were obtained from station 1645-19, as per the requirements outlined in the water licence.

A second survey of the falcon sites was performed; five out of six known nesting sites were occupied, but only one nest was productive.

Surveys conducted to note grizzly bear sign occurred in 18 sedge wetland plots during early July.

Arctic Divers Ltd. and a researcher from the U of A were on site mid month to retrieve 40 incubators as part of the Blasting Effects Study.

Permanent vegetation plots were assessed as part of the Wildlife Monitoring Program. This occurs every three years and ran from July 27 – August 2, 2004.

A change in spill reporting regulations issued by Water Resources, Indian and Northern Affairs Canada on July 29, 2004 changed the requirements for industries reporting spills to the NWT Spill Line.

Construction on the 'B' wing of the accommodation complex is completed on July 14.

Construction of the south spigot road along the PKC began at the end of July and was completed August 25.

Sampling commenced for a study on North Inlet Sludge Toxicity Testing (see Characterization of the Effluent Produced by the North Inlet Water Treatment Plant, Appendix N).

Geotechnical ground drilling was conducted at the A154 dike (south approach) and the sewage outfall in the wetlands (near the former north camp) from 1-3 July and 7 July, respectively.

AUGUST: During the month of August 2004, all required sampling at the SNP stations were conducted by DDMI.

Stations 1645-12, 1645-13, 1645-16, 1645-18, 1645-19, 1645-49 and 1645-52 A&B were all sampled and found to have no notable concerns. Higher flows were recorded from the DPS well around the dike as pit maintenance removed upstream barriers within the collection toes to allow unobstructed flow of spring melt to the wells.

Collection ponds POND-1, 1645-42A&B, 1645-45 to 47 were sampled with no noted concerns.

Groundwater well and seepage surveys were carried out, but no flow was observed at any station. (Groundwater wells: 1645-28 to 33; Seepage: SSS1645-20 to 26)

Water used within the aggregate crusher for dust control was measured within the water used on the haul roads, as the water truck is used to spray the rock before crushing.

Dust gauges DUST1-8 plus Controls 1 and 2 were changed out.

Summer sampling began for the Aquatic Effects Monitoring Program (AEMP). A total of 13 stations were sampled during August; samples included water quality, sediment quality, benthic invertebrate, zooplankton and phytoplankton samples.

Baseline studies began around the future site of the A418 dike and included water and sediment quality and benthic invertebrates.

Construction for the extension of the helipad at the airport to include a storage pad took place (11-18 August).

LINE4A and LINE5A on the north side of the A154 dike were re-sampled for benthic invertebrates due to inadequate samples being obtained during the previous year's study (2003).

Surveys conducted to note grizzly bear sign occurred in 18 riparian shrub plots during mid-August.

The Fish Palatability and Texture Study was conducted from 24-26 August at a community camp established three kilometres from the Diavik site, in a small bay on the east mainland. Participants from Kugluktuk, Lutsel K'e, North Slave Metis Alliance, Yellowknives Dene, and Dogrib Treaty 11 participated.

The objective of the study is to enable community members to assess the quality of fish from Lac de Gras over the life of the mine, as required. Water quality (August 3-5) and Caribou Fencing (August 17-19) workshops were also held in 2004. EMAB organized the community-based camps.

Researchers working with DFO were on site to collect slimy sculpin for a bioaccumulation study.

Secondary piping installation commenced on August 24 at the PKC and continued through to the end of December. Piping was laid from August 24 to November 2 and heat tracing was installed from October 1 to December 31.

The PKC barge and access road were raised due to elevated water levels. Work began at the end of August and carried through to mid-September.

DDMI completed its Exploration work at the Lac du Sauvage camp.

SEPTEMBER: During the month of September 2004, all required sampling at the SNP stations were conducted by DDMI.

Samples from stations 1645-12, 1645-13, 1645-16, 1645-49, 1645-52A&B and 1645-19 were obtained with no noted concerns. Flow within the DPS wells decreased to approximately 200 cubic meters (m^3) per day. On September 19, flow increased to 2700 m^3 for a 24-hour period. Geotechnically, no changes within the dike were noted, however on September 17 approximately 17 millimetres of precipitation fell.

Discharge into Lac de Gras is ongoing and station 1645-18 was sampled during the month of September. The Quarterly toxicity sample was collected in September; unfortunately, the shipping carrier in Edmonton, Alberta lost the samples for over a week. Toxicity samples were collected again on October 3, along with a full chemistry sweep.

Quarterly toxicity samples at 1645-18 completed on 14 September with no noted concerns.

Collection ponds POND-1, 1645-42A&B, 1645-45 to 47 were sampled with no noted concerns. Pond 12 was dewatered into Lac de Gras after obtaining approval from the INAC Inspector and monitoring daily levels of TSS, pH and turbidity. Pond 5 was dewatered into the NIWTP.

Groundwater well and seepage surveys were carried out, but no flow was observed at any station. (Groundwater wells: 1645-28 to 33; Seepage: SSS1645-20 to 26)

Caribou aerial surveys were completed for the year.

Baseline studies continued around the future site of the A418 dike and included water & sediment quality and benthic invertebrates.

A fish habitat utilization study was conducted to determine shoal use around the A154 pit. A total of nine transects were surveyed from the end of September through to mid-October.

Vegetation plot site preparation work was conducted by DDMI.

Researchers from the University of Alberta were on site to begin seeding for the re-vegetation study related to evaluating the performance of different seedlings and soil amendments for remediation.

The Lac du Sauvage exploration camp was winterized, inventoried, and closed in mid-September.

Monitoring of the snow gauge was initiated for the season.

OCTOBER: During the month of October 2004, all required sampling for SNP stations were attempted by DDMI. However, due to unsafe conditions, samples were missed from 1645-12 and 1645-19 B and C. A sample was also missed from 1645-16 when access was restricted due to pipe being laid on the access road on the initial day that sampling was to be conducted.

SNP stations 1645-13, 1645-18, 1645-49 and 1645-52 A and B were all successfully sampled with no notable concerns.

Sampling at station 1645-19 was initiated in October; however, sampling efforts were called off due to unsafe ice conditions on the lake. Samples from 1645-19A were successfully collected, including quarterly sediment samples, but samples for 1645-19 B and C were taken in November.

Collection ponds, groundwater wells and seepage surveys are no longer performed due to freezing conditions for all open water bodies.

Velocity readings were obtained around the water intake structure to determine flows and transects were followed to determine fish numbers around the intake. Sandfilter analysis was also conducted on the intake backwash to identify any fish or fish parts that may have entered the intake structure.

Wings of the south camp accommodation were demobilized and those of the north camp were relocated to south camp beginning on October 20, to prepare for upcoming construction activities relating to the A418 pit.

NOVEMBER: During the month of November 2004, all required sampling for SNP stations were completed by DDMI.

Sampling occurred at stations 1645-12, 1645-13, 1645-16, 1645-18, 1645-19, 1645-49 and 1645-52 A and B, with no notable concerns.

One of the dust gauges (DUST8) was relocated due to its location within the planned footprint of the A418 pit.

A new incinerator was installed in the Waste Transfer Area.

Construction of the access road to the future A418 pit commenced.

DECEMBER: During the month of December 2004, all required sampling for SNP stations were completed by DDMI.

As per the licence requirements, an annual sample was taken from the Sewage Treatment Plant (STP) at SNP station 1645-11. No notable concerns, as this water is being reused within DDMI's processing plant before being directed to the PKC facility.
Stations 1645-12, 1645-13, 1645-16, 1645-18, 1645-19, 1645-49 and 1645-52 A&B were sampled during the month of December, with no notable concerns.
The level of total zinc for 1645-18 failed Quality Assurance criteria for a sample obtained on Dec. 1, 2004. The sample has since been re-analyzed resulting in a value below the maximum concentration of 0.02 mg/L. Quarterly toxicity samples were completed on December 13 with no noted concerns.

The seepage well transfer line on the north side of the dike froze on 21 December due to low flows. No concerns were noted from the geotechnical engineer.

The NIWTP shut down for two days (14&15 December 2004) while the Sulphuric Acid Dosing System was installed. As of 31 December, this system was not operational.

No data was collected from the PKC reclaim barge from 11-15 December due to the system platform running a data acquisition system upgrade.

Wolverine tracking surveys were conducted from 2-8 December at site. Based on the track survey it is believed that ten wolverine, which include a pair, live in the study area. Twelve sets of tracks were observed and four wolverines were spotted during the survey, two of which were a pair.

New criteria for waste rock management approved by the MVLWB and implemented on site for sorting rock types within the pit by sulfur content.

Construction of the pad for the underground mine portal for A154 and A418 commenced.

Operational Activities Planned for 2005

In addition to the regular environmental monitoring programs to be undertaken, Diavik plans to:

- Continue production, with a target of 2.3 million tonnes of ore processed for the year
- Continue stripping and mining the A154 pit, and mining and processing from both the north and south pipes
- Commence A418 dike construction in summer 2005
- Construct an exploratory decline that will support feasibility studies on underground mining for the A154 and A418 pipes
- Continue reclamation research in 2005 at the Diavik mine site
- Continue to create fish habitat inside the dikes

6. PUBLIC CONCERNS 2004

In 2004, there were no letters directly from the communities to Diavik expressing any concerns with the mine's operations.

The following table notes any issues or concerns from EMAB and the responses that DDMI provided during 2004.

DATE	From EMAB to DDMI	DDMI RESPONSE
January 7	Recommendations were made related to: site visits by EMAB community members, working with Kugluktuk on their Water Quality Monitoring Program, incorporating traditional knowledge in DDMI's WQ monitoring, and working with EMAB on training for community members for WQ monitoring at Diavik. EMAB requests a response to recommendations.	July 6—DDMI issued a letter response to each recommendation and indicated support for each recommendation.
January 29	Request for DDMI and DIAND to provide funding for Aboriginal peoples to participate in Diavik's water license amendment hearing on March 23/24, 2004.	February 2 –DDMI explains involvement with EMAB and communities with respect to the amendment application. Diavik provides for participation through financial contribution to EMAB and through participating in EMAB meetings/workshops. No additional funding can be provided.
March 1	Email request from EMAB for DDMI to provide an electronic copy of the Wildlife Monitoring Program 2002.	March 9 – Electronic copy of the report was provided to EMAB.
May 6	EMAB requests an update on the implementation of clauses 4.2 g) and 7.6 of the Environmental Agreement	June 11 – Letter provided to EMAB detailing DDMI's current and past involvement and training initiatives undertaken by Diavik to fulfill these clauses
May 10	EMAB recommends mediation to reach agreement between DDMI and DFO regarding some reports submitted to DFO under the Fisheries Authorization	May 21 – Letter from DDMI explains that a scheduled meeting took place between DFO and DDMI. It was considered a productive meeting, and actions were planned to resolve issues. Details summarized in this letter.
May 19	EMAB provided comments regarding the draft 2003 Environmental Agreement Annual Report.	Comments were incorporated into the Final EA Annual Report.
October 18	EMAB provided DDMI with a copy of a review of the Wildlife Effects Monitoring Report done by MSES Consultants. EMAB requests that DDMI respond to each point as well as respond to RWED's letter dated June 14th.	November 10 – DDMI provided a letter response to each point raised in the consultant's review as well as RWED's letter.

DATE	From EMAB to DDMI	DDMI RESPONSE
October 18	EMAB forwarded Gartner Lee's review of DDMI's AEMP report and requested that DDMI respond to each point that had been raised in the review.	November 10 – DDMI provided a letter response and outlined general and specific responses to concerns or recommendations raised in the Gartner Lee review.
November 19	EMAB agrees with the approach to caribou fencing developed by workshop participants and DDMI. EMAB requested that a work plan be submitted for the fencing activities.	December 15 – A work plan was submitted to EMAB. It detailed proposed activities and a tentative schedule for the installation and monitoring of caribou fencing.
October 13	EMAB recognized DDMI's letter dated June 11th, and requested further details on Aboriginal Peoples' involvement in programs.	December 17 – DDMI provided a chronological history of the number of aboriginal peoples that involved in various programs and meetings since 1996. Also attached were notes from several meetings that demonstrate such involvement.

Photo supplied by EMAB

7. ADVANCED TECHNOLOGY

During 2004, Diavik investigated two new technologies for possible consideration at the mine site—wind energy, and a hydrogen fuel injection (HFI) system.

Wind Energy Feasibility

Currently, diesel engines provide power for mining operations at the Diavik mine site. Very high power costs at the mine site result from the need to deliver diesel fuel by tanker truck during the winter months and store it in three 18 million litre storage tanks and other smaller tanks at site.

A plan was put in place to investigate the feasibility of installing wind turbines at the mine site. Wind generators provide power at lower costs and with less environmental impact than the diesel generators currently do. By doing this study, DDMI will be re-confirming its commitment to responsible use of resources in the North.

A company has been retained to perform a preliminary assessment on the feasibility. The first step was to gather and use wind data from existing meteorological stations at the mine site and do a preliminary assessment This phase also started to look at the challenges of delivering large pieces of the turbines to the site, and building and beginning operation of the turbines using construction resources that were already available.

The first assessment of the existing wind resources was encouraging. It has been recommended to go ahead and install a meteorological tower to collect more wind data.

Hydrogen Fuel Injection System

In late 2004, a new product called Hydrogen Fuel Injection (HFI) was investigated. The manufacturer claimed that the process would result in more complete combustion, reduced fuel consumption (by 10 percent), and considerable reductions of all emissions. The HFI unit splits the molecules of hydrogen and oxygen from distilled water, and introduces these gases into the air intake of an engine. The manufacturer claimed that the oxygen supports the combustion of the fuel and the hydrogen actually incinerates the diesel fuel because of its fast burn and heat generation capability.

Diavik did a test study and the results showed that there was a two percent increase in torque and horsepower, while the total fuel consumption remained the same. These results were not as positive as the manufacturer's claims, but it was still an improvement. Additionally, the engine's exhaust temperature showed a one percent reduction, indicating more fuel is being burned inside the cylinder, and less going out the exhaust manifold as unburned hydrocarbons.

The research on this new technology was put aside for a number of reasons, but mainly because DDMI does not know what (if any) long term effects hydrogen might have on its engines. There may be a possibility of longer term testing in the future.

8. ROLLING EFFECTS SUMMARY

Climate and Air Quality

Will the mine development affect air quality around Lac de Gras?

EA Prediction

- Ambient air quality objectives and occupational health criteria will not be exceeded.
- The mine will be a very minor contributor of greenhouse gases.

2004 Observations

- Total greenhouse gas emissions were 127,555 t CO_2 ee
- Dust deposition levels in snow are highest adjacent to the mine and reduce to background levels approximately one kilometre from the mine site.
- Levels were greater in 2004 than 2003, particularly within Zone 2 (75 to 100m from the mine).

2003 Observations

- Occupational health monitoring results (total suspended particulates) were below health criteria.
- Total greenhouse gas emissions were 104,800 t CO_2 ee
- Dust deposition levels in snow are highest adjacent to the mine and reduce to background levels at approximately one kilometre from the mine.
- Levels were greater in 2003 than 2002, particularly near the newly formed A154 pit.

2002 Observations

- Dust deposition levels in snow are highest adjacent to the immediate construction footprint and reduce to background at about 1 kilometre.
- Dust deposition levels were higher than 2001 particularly near the west PKC dam construction.
- Occupational health monitoring results (total suspended particulates) were below health criteria.
- Total greenhouse gas emissions were 138,878 t CO_2 ee

Previous Years

- Dust deposition levels are within EA estimates (2001).
- Greenhouse gas emissions were 73,637 t CO_2 e (2001)

Vegetation and Terrain

How much vegetation/land cover will be directly affected by the mine development?

EA Prediction

- Approximately 12.67 km^2 of vegetation/land cover will be lost at full development.
- Slow recovery of vegetation following mine closure.

2004 Observations

- The direct vegetation/habitat loss in 2004 due to the mine footprint was 0.98 km^2, which is within the expected amount. Total habitat loss to date from mining activities is 7.31 km^2.
- Habitat analysis was conducted on permanent vegetation plots during 2004.

2003 Observations

- The direct vegetation/habitat loss in 2003 due to the mine footprint was 0.44 km^2, which is within the expected amount. Total lost to date from mining activities is 6.28 km^2.

2002 Observations

- 0.24 km^2 of vegetation/land cover was lost.

Previous Years

- Cumulative vegetation/land cover losses to end of 2001 were 2.84 km^2.

How will the vegetation communities outside the mine footprint be changed as a result of mine development?

EA Prediction

- Localized changes in plant community composition adjacent to mine footprint due to dust deposition and changes in drainage conditions.

2004 Observations

- Habitat analysis was conducted on permanent vegetation plots during 2004. Speciation was slightly more comprehensive in 2004 compared to 2001, but overall species noted and percent cover were similar for both years.

2003 Observations

- Study proposal received from the University of Alberta for implementation in 2004.

2002 Observations

- Monitoring is every three years, starting in 2003, therefore no results to date.

Wildlife

Will the distribution or abundance of caribou be affected by the mine development?

EA Prediction

- The regional distribution and abundance of caribou will not be affected measurably by the small (2.8 habitat units) loss of habitat.
- Caribou are expected to divert around the mine development during migrations but this would not affect the overall distribution or abundance of the Bathurst herd.

2004 Observations

- Direct summer habitat loss in 2004 from the mine footprint was 0.32 habitat units, which is within the expected amount.
- One mortality to caribou occurred due to the mine during 2004.
- The level of caribou advisory monitoring remained at “no concern” (no caribou or fewer than 100 caribou) for 366 days during 2004.

2003 Observations

- Direct summer habitat loss in 2003 from the mine footprint was 0.142 habitat units, which is within the expected amount.
- No mortalities to caribou due to the mine occurred during 2003.
- The levels of the caribou advisory monitoring remained at “no concern” (no caribou or fewer than 100 caribou) for 365 days during 2003.

2002 Observations

- Direct habitat loss was 0.083 habitat units.
- No mortalities to caribou due to mine activities.
- Caribou advisory at "no concern" for 362 of 365 days.

Previous Years

- Cumulative direct habitat loss to 2001 was 0.980 habitat units.
- There have been no mine related caribou mortalities.

Will the distribution or abundance of grizzly bears be affected by the mine development?

EA Prediction

- Approximately 8 km^2 of grizzly bear habitat will be lost and there will be some avoidance of the area, but the abundance and distribution of grizzly bears in the regional area will not be affected measurably.
- Bear mortalities due to mine related activities are expected to average 0.12 to 0.24 bears per year over the mine life.

2004 Observations

- Direct terrestrial habitat loss in 2004 from the mine footprint was within the expected amount at 0.93 km^2.
- Grizzly bears are still present in the Diavik Wildlife Study Area.
- One bear mortality occurred in 2004. The calculated mine mortality rate over the past five years is 0.2, which falls within the range predicted during the environmental assessment.

2003 Observations

- Direct terrestrial habitat loss in 2003 from the mine footprint was within the expected amount at 0.423 km^2.
- Grizzly bears are still present in the Diavik Wildlife Study Area.
- No bear mortalities occurred in 2003.
- A bear was relocated from the East Island in June 2003.

2002 Observations

- Loss of 0.243 km^2 of grizzly bear habitat.
- No grizzly bear mortalities due to mine related activities.

Previous Years

- Cumulative direct habitat loss to 2001 is 2.858 km^2.
- There have been no mine related grizzly bear mortalities.

Will the distribution or abundance of wolverine be affected by the mine development?

EA Prediction

- Reduced ability for East Island to support wolverines will cause a localized shift in habitat use.
- No measurable change in regional population sizes or distributions.

2004 Observations

- Wolverines were present on East Island in 2004.
- No mining related wolverine mortalities, injuries or relocations occurred during 2004.
- It is recommended that a DNA analysis study be added to the wolverine monitoring program for 2005.

2003 Observations

- Wolverines were present on East Island in 2003.
- No mining related wolverine mortalities, injuries or relocations occurred during 2003.

2002 Observations

- No carnivore mortalities due to mine related activities.
- Fewer wolverines on East Island than 2001 or pre-development.
- Food or food wastes were found at waste disposal sites during up to 50 percent of inspections.

Previous Years

- There has been one mine-related wolverine mortality (2001).

Will the distribution or abundance of raptors be affected by the mine development?

EA Prediction

- Habitat suitability for nesting will likely be reduced.
- Mine related mortalities possible but expected to be low.
- No measurable effect on regional distribution or abundance.

2004 Observations

- Raptor monitoring was performed in June and July 2004, with this being the first year DDMI conducted June monitoring.
- During 2004, one peregrine falcon nest within the regional study area was occupied and productive.
- One nest in the study area never before occupied, was occupied but unproductive during 2004.
- A pair of peregrine falcons established a nest on the high wall of the A154 pit.
- One potential project related mortality occurred during 2004 (exact cause of death could not be determined).

2003 Observations

- During 2003, one peregrine falcon nest was occupied but was not productive.
- No project related mortalities occurred during 2003.

2002 Observations

- No raptor mortalities due to mine related activities.
- Productivity was higher at peregrine falcon nests than during pre-development or previous years.

Previous Years

- There have been no mine related raptor mortalities.

Will the distribution or abundance of waterfowl be affected by the mine development?

EA Prediction

- At full development, 3.58 km^2 of aquatic habitat will be lost.
- Distribution and abundance of waterfowl is not expected to be measurably affected outside the local area.

2004 Observations

- Habitat loss in 2004 was within the expected range and equaled 0.04 km^2 of shallow and deep water.
- Waterfowl were present at the East Island Shallow Bays.
- Waterfowl and shorebird numbers increased during 2004.
- Waterfowl are utilizing mine-altered wetlands, particularly the PKC and North Inlet.

2003 Observations

- Habitat Loss in 2003 was within the expected range and equaled 0.016 km^2 of shallow and deep water.

- Waterfowl were present at East Island Shallow Bays.
- Waterfowl are utilizing mine-altered wetlands.

2002 Observations

- Aquatic habitat loss of 0.968 km^2 from A154 dike dewatering.
- Waterfowl are utilizing water storage facilities on East Island.
- Mortality of five red-throated loons during A154 fish salvage.
- Waterfowl continue to use shallow bays of East Island.

Previous Observations

- Cumulative loss of aquatic habitat to 2001 was 0.252 km^2.

Fish and Water

What effect will the mine development have on water quality?

EA Prediction

- Water will remain at a high quality for use as drinking water and by aquatic life.
- Localized zones of reduced quality during dike construction.
- Nutrient enrichment likely from the mine water discharge.
- Post-closure runoff expected to influence quality of two inland lakes.

2004 Observations

- As with the previous year's results, despite the very close (60m) proximity of SNP Station 19 to the effluent diffuser, open-water and ice-cover water quality results remain below Canadian Council of Ministers for the Environment (CCME) Guidelines for the Protection of Aquatic Life.
- Ice-cover concentrations at SNP Station 19 still tend to be higher and more variable than open-water concentrations. This is likely a result of increased wind driven lake circulation in the open-water, resulting in better initial dilution or mixing.
- Data analysis was conducted following the approved four step process. The results of the first step of the data analysis methods identified that there were changes in the concentrations of six parameters. Total arsenic and total nickel results were compared with original EA predictions (data analysis step 3). Measured changes are within the levels predicted in the environmental assessment and are below levels that would cause environmental effects.
- As with the previous year, the results for several of the parameters indicated a possible change when the actual reason for the positive results was a low baseline statistic. There are also locations (LDG50) or parameters (nitrite at LDG46) where baseline data are not available and so the data analysis is not possible. Finally there are parameters where baseline detection limits have dominated the baseline statistic and could result in changes not being detected. It is therefore recommended that the Diavik Technical Committee, with DDMI, reset trigger values for the step 1 analysis on a parameter-by-parameter basis. The objective will be to set trigger levels that are sufficient to detect change while reducing the

number of false positive results.

2003 Observations

- Despite the very close (60m) proximity of SNP Station 19 to the effluent diffuser, open-water and ice-cover results remain below CCME Guidelines for the protection of aquatic life.
- Ice-cover concentrations at SNP Station 19 tend to be higher and more variable than open-water concentrations. This is likely a result of increased wind driven lake circulation in the open-water resulting in better initial dilution or mixing.
- Data analysis was conducted following the approved 4 step process. The results of the first step of the data analysis identified specific monitoring locations where there were changes in the concentrations of seven water quality parameters. Of these, only total arsenic could be identified as possibly being caused by the NIWTP effluent (data analysis Step 2). Measured changes in total arsenic are within the levels predicted in the environmental assessment (data analysis Step 3) and are below levels that would cause environmental effects.
- The results for several of the parameters indicated a possible change when the actual reason for the positive results was a low baseline statistic. There are also locations (LDG50) or parameters (nitrite at LDG46) where baseline data are not available and so the data analysis is not possible. It is therefore recommended that in the future the data analysis method be modified so that the baseline references are from the combined mid-field and far field sites instead of each individual monitoring site. This change would reduce the number of false positives results.

2002 Observations

- Water quality at all Lac de Gras monitoring locations, including sites immediately adjacent to effluent diffuser remained high.
- Increases from location specific baseline levels were measured for turbidity and suspended solids at 3 mid-field monitoring stations, however all remained within typical baseline values for the area.
- Predicted nutrient enrichment effects were not realized although phytoplankton biomass was determined to have increased over baseline at one far-field location but not at any mid-field locations.
- No trends or specific concerns were noted for zooplankton, benthic invertebrates and sediment quality, based on two sampling results.
- Snow chemistry results were all below discharge limits.

Previous Years

- Localized increases in turbidity, suspended solids and aluminum were measured due to dike construction.
- Water and sediment quality, zooplankton, phytoplankton and benthic invertebrate results were generally consistent with baseline, however some results, particularly benthic invertebrate numbers, showed larger year-to-year variability.

What effect will the mine development have on water quantity?

EA Prediction

- Water supply to the mine is not limited and use of the resource will not cause changes in water levels and discharges from Lac de Gras beyond the range of natural variability.

2004 Observations

- Consumptive water use totaled 1.16 million cubic metres (Mm^3).
- Treated effluent discharged 4.7 Mm^3.

- Approximately 1.0 Mm^3 water stored for treatment and discharge in 2004.

2003 Observations
- Consumptive water use totaled 0.52Mm^3.
- Treated effluent discharged 6.9Mm^3.
- Approximately 1.0 Mm^3 water stored for treatment and discharge in 2003.

2002 Observations
- Consumptive water uses totaled 0.17 Mm^3.
- Treated effluent discharges totaled 4.12 Mm^3 with approximately 3.5 Mm^3 water stored for treatment and discharge in 2003.

Previous Years
- Consumptive water uses totaled 0.19 Mm^3 in 2001.
- Treated effluent discharges totaled 0.06 Mm^3 with 2.9 Mm^3 water stored.

What effect will the mine development have on fish?

EA Prediction
- On a regional scale the only effect on the fish population of Lac de Gras would be due to angling.
- Local effects due to blasting, suspended and settled sediment from dike construction, increase in metal concentrations around dikes and post-closure runoff.

2004 Observations
- No fish were taken by recreational fishing from Lac de Gras by DDMI.
- Fish palatability is good.
- Metals levels in fish sampled for tasting were as expected.
- Fish habitat utilization studies show that lake trout continue to utilize both natural and man-made shoals near the A154 dike.
- Blasting Effects Study continued. Incubator trays were collected and a laboratory phase of the study commenced.

2003 Observations
- No fish were taken by recreational fishing from Lac de Gras by DDMI.
- Fish palatability is good.
- Metals levels in fish sampled for tasting were as expected.
- Sediment deposition rates measured during the construction of the A154 dike were below levels predicted in the Environmental Assessment. *See A154 Dike Program report for summary*.
- Blasting Effects Study initiated.

2002 Observations
- No fish were taken by recreational fishing from Lac de Gras by DDMI.
- Measured sediment accumulation near dike construction activities was within the predicted range.
- 2526 fish were salvaged from inside the A-154 dike pool area and released in Lac de Gras.

Previous Years
- No fish were taken by recreational fishing from Lac de Gras by DDMI.
- Turbidity and suspended solids levels elevated due to dike construction activity remained below the threshold effects levels outside the silt curtain.
- 526 fish were salvaged from the North Inlet and released to Lac de Gras.

Table 1: 2004 Compliance Summary

Inspection Date	Issue	Issue Response
January 14	Confirm that addition of snow/ice at snow dump will not affect PKC East Dam in spring (due to ponding).	The inspector and the geotechnical engineer had a meeting on site during the February site inspection. No concerns were noted by the geotechnical engineer.
	Stop leak from sewage tank at ROM, and scrape/clean up frozen spilled material.	An investigation was undertaken and determined that the liquid leaking from the wash cart was potable water and not sewage. Area was scraped after the sizer project was completed.
	Submit missing TSS value from 1645-18 (Nov.18th) to inspector. If PKC water quality data is available, provide as well.	November's SNP report was updated with missing TSS value. PKC water chemistry samples are taken monthly and are in the November SNP report
February 17	Restock spill kit at A154 Large Truck Refueling Station	Spill kit was restocked and a second 205 L kit was placed by the refueling nozzle.
	Seal holes in AN bags at AN Building, and eliminate abrasion to bags from ropes	Damaged bags were used prior to non-damaged bags. Snow was placed against the bottom of tarps, reducing tarp movement and abrasion from ropes.
	Provide investigation results from Feb.9th	Investigation results were provided.
March 17	Submit information regarding the concentration, a plan for storage, handling, quantities to be used, and spill response for sulphuric acid	DDMI will provide these details once SOP for handling has been written, and quantities to be used once the system has been engineered.
April 21	Move vats of sulphuric acid that are currently stored on pallets to a contained area. Implement a plan for spill response as requested in previous inspection report, before May 7, 2004	Product information was provided to the inspector, including a site tour of the building to contain the 1000 L containers.
	Food waste observed in the burn pit and contaminated soil cells of Waste Transfer Area, as well as inert landfill. Ensure wastes are properly separated and disposed of.	DDMI has increased site awareness of waste management practices.
	Minor spillage of fuel noted in the vicinity of the small diameter drill water intake apparatus on the A154 dike. Scrape area clean and properly disposed of snow.	Area was scraped after the drill program was completed.
	Provide Inspector with a copy of the completed drill holes when the A418 dike delineation drill program is complete.	A schematic of the drill hole locations was provided to the inspector on completion of the drill program.

Inspection Date	Issue	Issue Response
May 17	Clean the Envirotank within the Waste Transfer Area and check soil underneath for contamination. Remove any contaminated soil to the land farm.	Envirotank was cleaned, and contaminated soil was removed to a lined area.
	Pay close attention to detect any possible seepage downstream of the West Dam, due to ponding of water at the West PKC Dam	Geotech Inspections were conducted, with no notable concerns.
June 9	Provide inspector with preliminary results of all SNP sampling as soon as they are received.	Preliminary results for SNP Station 1645-18 were provided to the inspector as DDMI approached its water licence limit of 2 mg/L of ammonia.
	The Inspector agreed with the action agreed to be taken in the Contaminated Soils Cell of the Waste Transfer Area. Take action as soon as possible in order to minimize potential impact to waterfowl.	DDMI dewatered the contaminated soils cell to the PKC facility. Prior to dewatering, hydrocarbon booms were used to absorb any oils or fuels floating on the surface of the water.
July 7	Provide a plan as to how contaminated snow/ice is managed at the mine site. Provide a rationale as to why each product is placed where it is and how it is to be remediated, if at all.	Hydrocarbon/glycol contaminated snow (spills) taken to Waste Transfer Area. Equipment line-up area snow taken to PKC if hydrocarbon/glycol drips present. Snow around rejects bin taken to PKC.
	Ensure that cleanup of outstanding reported and small unreported spills is completed	Areas were revisited and additional materials were removed.

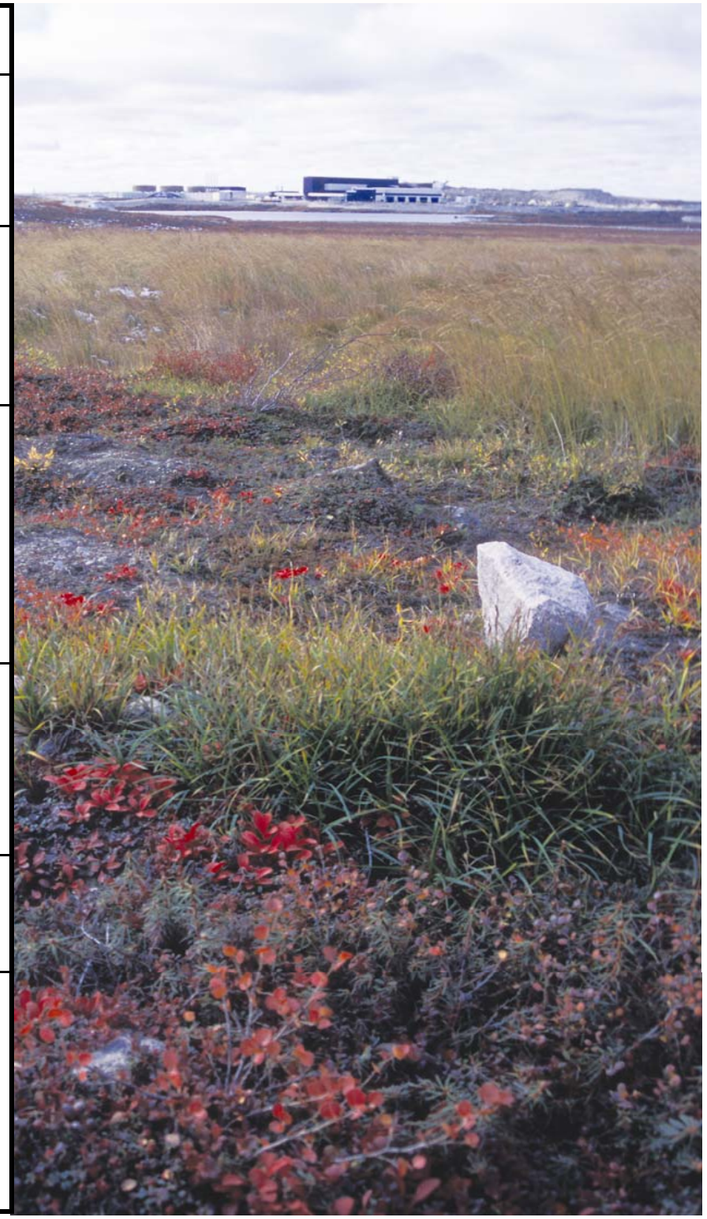
Aerial view of the Diavik Diamond Mine

Table 2: Environmental Monitoring Programs 2004

Program	Purpose of the Monitoring	Key 2004 Activities	Key Results
Dust Monitoring	Determine if environmental assessment predictions are accurate. To inform management when dust levels require management response.	• Ongoing notification to Operations for dust suppression. Summer and winter dust sampling to determine extent of dust dispersion related to operations activities.	Dust suppression using water is effective for reducing dispersal of dust during non-freezing periods. Dust deposition rates are higher close to operational activities.
Meteorological	Measure/detect meteorological trends. Determine influences on site water balance. Provide design and construction information to operations.	Measured: • horizontal wind speed and direction, and standard deviation of horizontal wind direction • ambient temperature • relative humidity • precipitation – rain and snow • incoming solar radiation • evaporation rate	On going collection of site-specific data including evaporation data. In-house analysis of data undertaken.
Water Quantity	Measure limits, sources and purpose of water consumption as established in water licence.	• All water used for consumption and operations is metered. • PKC facility levels monitored. All make-up water measured. • Completed an updated mine site water balance.	Total water used for operations, including consumption, domestic use, dust suppression, and PKC make-up was 1,163,646 m^3.
Water Quality Compliance	Monitor effluent limits as required by water license.	• Collected and analyzed samples in compliance with the water licence at required SNP locations.	Results of monitoring are consistent with baseline data and compliant with water licence requirements. Water licence amendment application submitted, to adjust how ammonia is measured. Approved June 30, 2004.
Aquatic Effects	Collection of information to determine the short and long-term effects in the aquatic environment resulting from the project.	• Samples collected at AEMP sites for water quality, phytoplankton biomass, zooplankton biomass, and sediment chemistry.	Localized effects noted around the diffuser. These effects were within Environmental Assessment (EA) predictions.
Wildlife	Determine if predictions in environmental assessment are accurate. Assess the effectiveness of mitigation strategies.	• Caribou monitoring for: (1) numbers on island, (2) mitigation effectiveness, (3) aerial surveys, in conjunction with BHP Billiton • Raptor and waterfowl monitoring. • Wolverine track surveys for presence. • Grizzly Bear habitat plot surveys for presence. • Carnivore mitigation effectiveness monitoring.	One grizzly bear was destroyed in 2004, due to safety concerns for site employees. RWED staff were consulted prior to action being taken.
Wildlife Habitat (Vegetation loss)	Determine if environmental assessment predictions (linked to wildlife program) are accurate. Determine extent of loss of vegetation/habitat.	• Survey extent of mine footprint related to vegetation loss. • Vegetation plots were surveyed for population change and density.	Total area disturbed during 2004 was 7.31 km^2; this is within EA predictions (12.67km^2). Note that boulder, bedrock and esker complex, and human disturbance cover types are approaching predicted values.
Fisheries	Fisheries authorization requirement. Establish additional baseline information. Initiate long-term monitoring programs and identify control sites. Test monitoring methodology. Test modeling predictions.	• Fish palatability study conducted in conjunction with EMAB. • Year two of the Blasting Effects study was completed at the University of Alberta. • Completed lakebed sediment, water quality and benthic invertebrate study – A418 pre-dike construction. • Water intake study • Fish habitat utilization	Fish continue to taste good. Texture and metals results within expected limits. Incubators were collected from three sites around the dike and one reference site. Results will be used to design next phase of the mine. Incubators were not re-deployed, but monitoring to determine extent of blast zone is ongoing. Lake trout continue to utilize both natural and man-made shoals near the A154 dike. Water intake structure is effective in shielding fish from intake during high and low flows. Structure was cleaned and inspected in August 2003. Completed West Island steam enhancement engineering.
Reclamation Research	To establish research programs related to reclamation research. Information gathered from these programs will be used for closure.		
Re-vegetation Test Plots		• Established 72 of 144 test plots. Area was scarified to simulate road and plant site conditions. Soil amendments added: organic sludge, 50/50 mixture of PK, lake bottom till, and scraped top soil.	No results yet at this stage. Field work will recommence after snow melt in Spring 2005. Year 1 data to be analysed in late 2005.
Country Rock Test Piles		• Constructed the main loading platform. One of four rock pile foundations was constructed, with the installation of a geotextile liner and a seepage collection system. Rock placement was not performed due to weather.	No results yet at this stage. Further construction and testing to continue in 2005.
Characterization of the Effluent Produced by the North Inlet Treatment Plant		• Several 15 gallon samples were taken in 2005 for laboratory testing. The University of Saskatchewan has conducted chemical characterization of the sediments.	Characterization showed ammonia as the major toxicant of concern. The study has shown that ammonia levels are elevated in the pore water and may be the cause of negative effects to the aquatic species tested. Further evaluation of the sediment is required, as ammonia may dissipate over time.
A154 Dike Area Fish Habitat Construction		• Lake bottom till placed in all of the deep depressions to allow shoals to be created over the next few years.	Completed approximately 72 percent of the fish habitat construction within the A154 pit shelf area by the end of 2004.

Table 3: Adaptive Environmental Management 2004

	Performance/Compliance	Adaptive Management	Mitigation Measures
Waste	Minimal waste management issues. Maintained dump site for inert waste materials.	• All domestic and office wastes are incinerated in waste transfer area	• All employees are provided orientation on proper waste management • Color-coded garbage bins for non-food waste around site
Water	All effluent treated before discharge to Lac de Gras, or recycled. Ammonia levels in pit water going up but still within license limits.	• Effluent from sewage treatment plant being discharged into closed PKC system • PKC water recycled within the Process Plant	• Implemented new water management procedures within the A154 pit. Reduce water contact with blast rock
Hazardous Materials	No significant spills or non-compliance issues occurred.	• All spills are reported, recorded and cleaned up. External spill reporting quantities amended to 100L by Indian and Northern Affairs Canada • Contaminated soils are placed in the lined, waste transfer area for remediation, large aggregate placed within Type III waste rock pile	• Orientation and specific training for employees and contractors handling hazardous materials • All employees and contractors require WHMIS training
Wildlife	No wildlife related compliance issues.	• Herding of caribou away from airstrip • Deflection of bears away from the mine site	• Orientation and environmental awareness training • Caribou advisory updated daily • Waste inspections conducted regularly • Waste Management System in place
Dust	Performance as anticipated. Isolated higher readings due to construction activities (ie Fish Habitat Construction)		• Dust suppression using water during non-freezing periods, in crusher area and on haul roads
Emissions	Performance as anticipated.	• Waste oil recycled and transported off site • Recovered heat from generators recycled to heat maintenance & accommodation complexes and the Process Plant • Optimization of fuel used by the 4.2MW generators	• Use of low sulphur fuels



APPENDIX A - Translation of Executive Summary

1. Chipewyan
2. Dogrib
3. Innuinaqtun

1. Chipewyan

T'ą K'aldé Déltth'ı bets'ı ʔerehatł'ís

ʔedırı ʔerehtł'ís xaye ʔąlt'u detł'ís sí Envıronment Agreement (Ní xadı xa ʔełélyatı xálı) húlye xél xałʔı, ʔeyı sí Ní Xadı Xa Déltth'ı (EMAB) begháré yelʔı. T'ą ʔerehtł'ís k'e límashí xálı ʔı́lé sí bezí níla sı-u, t'a hayurı́la bets'ę́n nádhër sí-u, harelyú dëne xél ʔeyı Diavik bets'ı tsamba k'é xáʔą yuní (2004) t'at'ı́ sí ghą dëne xálnı xáʔą. Yunedhé 2005 ghaye dé ts'etáy t'ahene xa sí ghą náyatı-u tth'I t'at'ú Diavik ʔeyëre Lac de Gras ní xadı sí ghą náyatı. ʔedırı ʔerehtł'ís t'a xa xálı sí ʔedıre Diavik Envıronmental Artıcle 12 húlye beye yatı thela xałʔı, Diavik harelyú ʔełk'éch'a ʔasíe ghą k'aldé, tth'ı ʔeyı ʔerehtł'ís dáhálı nı sí ʔedıre xél thela ʔat'e.
ʔeyı t'ą Envıronment Agreement húlye bek'e bezí nı́la sí Dogrıb (Łıchaghé) Treaty 11 xa déltth'I chu, Łútsël K'é Dëne First Nation chu, Canada xa government chu, ʔedızı́ nę́né xa government chu, ʔeténa xa government chu, tth'ı Diavik bets'ı tsamba k'é.

Nı xáʔą

ʔeyı Diavik bets'ı tsamba k'e t'oót'ı theʔą sí Lac de Gras ghá ʔat'e ʔeyı ʔełǫ́nona dechën ʔanıłtha ʔedızı́ nën k'éyághe yudaghé hazú dënë ʔą́zé ʔat'e. Kozı́ nę́né sí tu nedhé łą dǫ́lı-u, the nę́n-u tth' ní k'e ʔełk'éch'a lárát'I ʔeyı t'a t'á t'e sí ʔatth'e yunízí t'at'ú tën bek'e ʔełtën ʔılé t'á t'e. ʔeyëre sí nı xanúnıle , t'a nı hu̧lı sí ʔak'étł'as ts'ę́n hetën ʔat'e.

Xaye dé dhá́á ts'ën ʔedza-u, sıne dé hunék'ëth lat'e-u tth'ı tháíle ts'ę́n sıne. Ją chą chu dzıl chu xanúníle xél tth'I xálą k'éneth déghel.

ʔeyër Diavik bets'ı tsamba k'é xáʔą sí tech'ądíe łą náday ʔat'e. ʔełk'é dı̨ǫna ts'ę́n dı̨ghı̨ ʔełk'éch'a ʔıyëzaze hu̧lı-u, ʔełk'é taghe ʔadhel ʔełk'éch'a tech'ądíe ʔeyëranáre náráday ʔat'e. Naye harelu̧ xaye náday-u, naye sı̨n-u łı nıdíl. Lac de Gras k'e tthı́s ts'ę́n xáʔa sí tech'ądíe chu ʔı̨yezaze chu náday húlı xanúníle. ʔeyı t'a náday sí ts'íbay tthogh-u, gah cho-u, dlí-u, *red-backed voles,* dlúne lárát'e-u, tth'ı k'asba.

Lac de Gras náré ʔetthën dzérétł'aı ʔat'e. Naye xat'as dé nı̨ltł'a-u, naye łuk'é dé. Sı̨ne dé nunı ʔetthën k'ínı̨ ʔat'ı̨ ʔat'e. ʔeyër ʔanáre tth'ı ʔasíe tǫ́nǫna lı dléze ʔeyër ʔanáré náday ʔat'e.

Lac de Gras sí tu nejá sí Coppermine River yé nı̨lı ts'I yudághé tu cho ghą nílı ʔat'e. Lac de Gras sí ʔełk'étǫna dechën ʔą̨ı̨tneth ʔat'e, tth'I ʔeyíle túé dádhela sí k'ízı̨ łue chu teláré chu xanúnıle ʔat'e. ʔedırı kút'a xát'e ʔat'e xaye dé tën t'a harelu̧ xayé tu k'e hetën xél tth'I tu nék'ën t'á łue xa benı chu saʔál chu ʔu̧líle. Lac de Gras t'at'ı łue dǫ́lı sí łuesą́né chu, łúáze chu, łu round whıtefısh húlye chu, łú chu, tthı́tel chu, deldël chu tth'ı ʔedıre slımy sculpın húlye sí dǫ́lı ʔat'e.

Diavik **bets'ı tsamba k'é**
ʔeyı Diavik bets'ı tsamba k'é ʔeyı tthís ts'ę́n xáʔa sí tthe kımerlıte húlye beyé t'a hu̧lı̨ ʔat'e.
ʔeyër Lac de Gras ts'ı tu sí dıke húlye dánecha t'á bedą́relye, xát'u dé húnejëríle-u tetł'ághe ts'ı̨ dıamonds hílchu. Yuní 2002 kú A154 dıke húlye noxǫ́t'e. ʔeyíle dıke 418 húlye yunedhé sıne 2005 dé búnídhır xat'e.
Yuní ghayé 2004 kú Diavik beba ʔu̧ʔáíle, k'ąní t'atthe gháye búnídhër t'á. Dų Diavik t'at'u ʔeghádálada sí ní daghe open pıt húlye xát'u t'alʔı̨ ʔeyëre tł'ą́ghe dé níáyaghe ts'ę́n yíle xat'e.
Xat'u dé k'ájën harelyu dıamonds náltsı̨ xa. Níádaghe ʔeghálada dé łes beschëné harelyu dzıné-

u, harelyų tëth ʔetɬ'el ʔat'e. ʔeyı tthe beyé dıamonds hųlı sí beghálada kųé nílya dé ʔeyı tthe chu dıamonds chu nádárelye. Yuní 2004 kú Diavik bets'ı tsamba k'é 7.6 límelʔǫ́ carats néłt'e dıamonds t'atthe selye tthe hílchu.

T'at'u ʔeghálada lí sí xa, náts'ede xa kųé chu, ʔerehtɬ'ís kųé chu, kón ʔídı xałé kúé chu tth'ı dzeret'ay k'é dáhálı.

T'at'ú ʔedǫ́ nádhër hezeldı xa ʔeghálada

Diavik bets'ı tsamba k'é ʔedırı ní súdí-u, yalnı xa ts'ën hútɬ'ëth ʔeghálana ʔat'e. Haryurıla ts'l dëne-u, Ní Xalnı Xa Déltth'l sí-u, t'á betɬ'azı ʔasíe nádáneʔën dąlı sí bet'a ʔerdırı programs deʔąrıłzų ʔíle. ʔak'étɬ'as ts'ën Diavik bets'ı tsamba k'é t'at'u zúghą-u ní xálnı xa benedredí lísí xa bets'ı tsamba k'e-u, ʔeyíle la Lac de Gras náre ghádálada chu tth'l ʔejër K'élnı xél ʔeghádálana sí-u yek'ízí ní xałnı xa yurélʔı. RWED k'ąní tthách́óíle bezí ʔełnąıʔą sí, dú Ní chu Ní Ts'ı ʔasíe (Environment and Natural Resources (ENR) húlye ʔat'e. Dų ją nı xadı xa ghálada ghą bek'e rehtɬ'ís xél tth'l xałǫ́ begą nıé sí ʔedırı ʔerehtɬ'ís xél thela ʔat'e.

Tech'ądíe

Diavik bets'ı tsamb k'é 2004 kų ts'ı ʔałǫ́ t'at'u tech'ądíe bets'ën nádhër sí xalnı xa ʔeghálana ʔat'e. ʔedırı la búnídhër sí tech'ądíe ʔeyër ʔanáre t'arąt'e sí ghą hanı náltsí. T'ólásí, Diavik yuní ghaye dóhódhër ts' hanı t'ahet'I xa huréldzáy t'ahút'e lasí xa. Naye ʔasíe bek'érújáíle-u, tth'l t'at'u zúghą-u selye xa sí dú ją bek'eréhtɬ'ís ʔat'e.

- Yuní 2004 ghaye kú tsamba k'é bet'á t'anáre ʔasíe dánísheu tth'ı ʔasíe náday dódı ʔajá 1 km2 k'áʔǫ́. Nı xadı bek'ónedą sí gháré dé ʔút'a hánítt'e xa hunıdhën nı sí hája.

- Yuní 2004 ghaye ʔetthën chu dłéze chu t'óót'ı naday ní dódı ʔája sí kút'a xáne xa hunıdhën nı sí hája. ʔıłághe ʔetthën chu ʔıłághe saze chu ʔełáıde k'e ʔeyı tsamba k'é xáʔą t'á.

- Diavik bets'ı tsamba k'é ʔałų t'at'ú ʔetthën k'ónełta chu tth'ı t'at'ú tsamba k'é bet'á huníláíle ts'ën ʔeghálana sí bet'óréʔą́ǫ́ sí xa.

- Yuní 2004 ghaye kú nunı East Island húlye k'e náde k'e. Tsamba k'e bet'a nunı łegháídhër hulıle-u, ʔeya ʔájáíle-u, tth'ı ʔedíyáíle. Diavik ʔałǫ́ t'at'u yath yé nunı ke xalnı xa t'óót'I hųlı sí xa-u tth'ı t'a ts'ën dzérełʔás lísí xa.

- 2004 ghaye kú, tsël t'óghe beyé besken dólı k'é, tthı ʔayíle tóghe tsël tthënı yeyé theda. Yunı 2004 ghaye kú ʔılághe tsël łegháídhër xat'e húlí t'a łegháídhër sı bek'órejáíle.

- T'at'u bek'ǫ́nétą gháré ʔedıre Waterfowl (chëth-u, det'ą́n-u, ʔıyezáze-u) húlye sí t'a náday nı dódí ʔája. East Island xatɬ'ás ʔeyër t'a Waterfowl dát'ı tth'ı ʔeyı waterfowl sí tsamba k'é yeba núníʔa ts'ën nídel. Yunı 2004 kú Waterfowl chu tábąghe ʔıyezaze nárádé sí deʔą́nítt'e yunı ghaye ʔą́zé.

Tthay Tth'ághé

2004 kú, tthay tth'ághé xa Diavik bets'ı tsamba k'é xáʔą yúldzáy ʔayı sí náts'ę́n beghálada ʔat'e. T'atthe net'ı sí xa dé t'aníłte sí xa-u, t'oót'ı hųlı sí xa-u ʔełéłt'e lát'e lí sí xa net'ı, Diavik łuk'é ʔąlt'u yath k'onełta-u tth'I tthay tth'ághé ts'I ʔasíe náltsı xalyǫ́ xayé. ʔedıre tthay tth'aghe bek'ǫ́neta ghálada xa dé,yath nalghı-u, betúé ye náídí słıne hųlı dé xa, tth'I tthay tth'ághe t'anıłt'e sí xa. Bek'íni xa dé, Diavik taghe ghaye xą́lt'u t'óǫ́t'I ʔasíe dánıshe sí tthay tth'aghe t'á ʔedǫ́ ʔájá lı xa naynílʔı ʔat'e. ʔeyı tthay tth'ághé tsamba k'é ʔeghálada gá deʔą́nıłt'e-u bech'azé dé dek'áʔu ʔat'e, hút'a háne xa hundhën nı sí hája. Tthay tth'ághé ts'ıʔę́n 2004 deʔą́nıłt'e, 2003 ghaye xa de, tezu Zone 2 sí ʔeyı ʔı łą́ı́sdı ts'ę́n sǫlághe ts'I ʔı lǫ́nonądechën ʔanıłttha ʔeghálada ts'ę́n.

T'at'u te ts'ę́n nádhę́r sí

Diavik ʔałǫ́ yuní 2004 ghaye te t'at'ú bets'ę́n nádhër sí yałnı ʔat'e. Dǫ́ dırı taghe ghaye ʔat'e te t'at'u bets'ę́n nádhę́r badı sı, Diavik tu yé ʔeghálana xa hurélʔı dé xáyíle xaʔą. ʔedırı ʔasíe bek'oneta t'at'e sí dǫ́ jąbeghą náyat'ı ʔat'e.

Tu t'at'e sí

Yuní ghaye 2004 kú ʔasíe k'onétą t'at'e sí yunı ghaye dóhódhër sí k'ízı́ lat'e. ʔeyı tu bek'ǫnétą sí ʔeyı ʔasíe ch'ëlé ʔádıl ká húlí , tu chu tën yaghe tu chu t'at'e sí ʔałǫ́ te yaghe ʔasíe dána sí xa ʔałų ʔesát'eíle t'at'u badı ghárе xa dé. ʔeyër statıon t'at'e sí xa bek'óneta xáʔą sí deʔą́nıłt'e xél tth'ı xąlą k'énedhé ʔełełt'eíle. ʔedıre t'a t'á t'e sí nıłts'I t'á tu ʔełtanágës lát'e ʔat'e. Náídí słıne arsenıc húlye chu nıckel húlye chu t'at'ú ʔaxą ʔedǫ́ nat'í sí t'aníłt'e hunıdhën nı sí hájá tth'ı nı tsędhır xa bech'onejëríle. Xalą k'énedhé ʔasíe búldzáy gháré ʔedǫ́ lábúrelʔı húlí begháré húldzáy hųlıle t'á. Tth'ı beghątthën nok'e begháré búldzáy sí xa hųlíle t'á t'aǫ́t'e sí bek'órejáile. ʔeyı Diavik chu tth'ı Diavik xa Technical Committee k'e déltth'ı sí t'at'u súghą ts'ę́n beghálada xa tthe húlta húłdǫ́, ʔeyëre tł'ą́ghé dé t'at'ú ts'ę́n bet'óréʔą́ sí net'ı.

Phytoplankton and Zooplankton (detł'áré chu teguáze tu yé dálʔǫ́l)

T'óót'ı ʔasíe ch'ël ʔą́dıl dólı gá ʔasíáze dána dǫ́lı sí deʔáníłt'e ʔája. ʔeyı ʔasíe ch'ël ʔą́dıl ʔaxą bet'a ʔat'eúdí húlí xałǫ́ bek'óneta dı́naltí xałǫ́ bek'órejąxa dé. ʔeyı naye ʔasíe deʔą́nıłt'e ʔájá sí kút'a xát'e xa hunıdhën nı sí xájá ʔat'e, tth'I t'at'ú súgháú badı xa sí xályá ʔat'e.

Tetłághe ʔasíe dáną

Te t'aʔút'e xáʔą sí, tetł'ághe ʔasíe dána sí dána sí deʔą́nıłt'e. ʔedëri t'a t'á t'e sí tu yé benı sí deʔą́nıłt'e ʔát'e.

Te tłaghe t'at'e sí

Bek'oneta ghárе te tł'aghe t'óót'e sí ʔedǫ́ ʔája húlí Diavik ʔeyër ʔanárét'ı t'á t'eíle, xat'e t'á nıdé t'e t'oʔǫ́t'e nı sı deʔázé xat'e nı. ʔeyı EMAB ba ʔeghálana síʔádı-u, ʔeyı te tł'ághe net'ı sí dek'áʔǫ́ náke cm ʔanıłtha ʔályе-u sǫlághe cm bedı-ǫ́.

Łue t'ǫ́nı chu betthę́n t'at'e sí xa bek'ǫnétą

Yuní 2004 ghaye kú, Lac de Gras ʔeyëre háyurıla dáhála ts'ı ʔełaníts'ıdel ʔedıre łue t'ǫ́lní sí xa-u tth'I betthę́n t'at'e lísí xa. ʔedırı łue sí bek'onétą t'arą́t'e sí xa-u tth'I t'aníłt'e sí xa. ʔeyı t'ą taghe dzı́né xa ʔasíe k'oneta xa ʔełaníts'ıdel nı sí, Dogrıb (Łıghághe) Treaty 11 chu, Lútsël K'é Dëne First Nation chu, Beghǫ́rék'ą́ʔaze Hárelya chu, Kıtıkmeot Inuıt (ʔeténá) chu tth'I Beghúldesche Dëne First Nation.

Yuní ghayé dóhódhër sí k'ízį́, łue sélye tthe t'abúréł;į sí xa net'į-u, selye gháré tth'ı t'abúrelʔį sí xa net'į-u, ʔet'e tł'ą́ghe tth'I dǫlní sí xa tth'I badı. ʔedıre sǫlághe xayé ʔáłt'u bek'oneta xanı húlí dëne yuní 2002 ghaye kú yeghádáláná sí ʔaıdı-u xaye ʔą́łt'ú hólye hedı. T'at the bek'ǫ́neta húnídhır xa dé łue yuní 2002 ghaye ts'I beghare łue xadı xa.

ʔį́łą́ghé húlí łue t'at'e-u, t'anílt'e-u, dǫ́lnı-u ghą nánıdéíle. Harelyǫ́ dënë háyurį́la ts'ı Lac de Gras nádhedel sì dáhedı-u łue łekën hedı. Tth'ı beghątthën ʔeyı ʔasíe nedhé k'ódórelyą sí dáhedı-u łue sí ʔedǫ ʔajáíle hedı.

2. Dogrib

K'àdè Wegodì

Dı nıhtł'è atł'è sìı, xo tàt'e Ndè Hoıdı Naàwo atł'è wetł'a hohłè hot'e. Dı nıhtłł'è ghàà dǫ Environmental Monitoring Advisory Board (EMAB) k'è dehkw'e sìı nıhtł'e ghàgeda ghàà Ndè Hoıdı Naàwo ghǫ gogede hot'e. Dı, Ndè Hoıdı Naàwo nıhtł'è atł'è wetł'a, kǫ̀ta eyıts'ǫ dǫ wexèıdı ha sìı, Dıavık Diamond Mıne sombak'è 2004 xo k'è edaànı eghàlagıda ghǫ dǫ xè gogedo ha hot'e. Eyıts'ǫ ıdaa xo k'è edaànı eghàlageda ha gıwǫ eyıts'ǫ dıdzę edaànı Lac de Gras Ek'atì ndè hoıdı t'à eghàlageda ghǫ dǫ xè gogedo ha hot'e. Dı nıhtł'è atł'è sìı, Dıavık Environmental Agreement Ndè Hoıdı Naàwo atł'è, Artıcle 12 wetł'a atł'è hot'e. 2004 k'è, Dıavık xè naàwo ghàà eghàlaede dǫ hazǫ kà?a ts'ǫ̀ denıhtł'è agıla ıle hot'e.

Ndè Hoıdı Naàwo tł'a dǫ dı hatłǫ ełexè dehkw'e: Tłıchǫ Treaty 11 Council, Yellowknıfes Dene First Natıon, North Slave Metıs Alliance, Kıtıkmeot Inuit Associatıon, Łuts'el K'è Dene First Natıon, Canada Gha Ndèts'ǫ̀ K'aowoh-dè, Edzanę Gha Ndèts'ǫ̀ K'aowoh, Nunavut Gha Ndèts'ǫ̀ K'aowoh eyıts'ǫ Dıavık Diamond Mınes Inc.

Ndè
Dıavık Diamond Mınes, Ek'atì k'è whe?ǫ hot'e. Edzanę dechıla gots'ǫ 100 km edzanę k'è eyı sombak'è gò?ǫ hot'e. Hozìnę k'è tıa łǫ, kwèkàts'ì łǫ eyıts'ǫ whàà ndè ehtǫ ekìyeh edaànı ndè naehdǫ gots'ǫ kwèkàts'ì wegoht'ı. Ndè k'è ehtł'è detǫ gòłı laànı le eyıts'ǫ xo ghàà ndè ehtǫ hot'e.

Xo ghàà nıwàà xè edza eyıts'ǫ ımbè nek'ǫa xè gòk'o. Chǫ łǫ at'ı laànı le eyıts'ǫ zah sìı łǫ laànı le, eyıts'ǫ nıhts'ı whìle.

Dıavık mıne wegàà ndè k'è tıch'adı łǫ nàdè hot'e. Tıch'adı wehda xo ghàà eyı nàdè, eyıts'ǫ tıch'adı wehda ımbe k'è nıdè zǫ eyı nàdè. Ek'atì chık'èda ts'ǫnę ndıa k'è tıch'adı eyıts'ǫ chıa łǫ laànı le. Tsàwò dek'oa, gahcho, dlòò, red-backed voles, dlıa eyıts'ǫ k'àba haànı xò ghà eyı nàdè hot'e.

Bathurst gots'ǫ ekwǫ̀, Ek'atì k'è nageʔa hǫt'e. Edak'ǫ eyıts'ǫ hat'ǫ nıdè ekwǫ̀ Ek'atì k'è nageʔa. Dìga ekwǫ̀ k'èè k'èdè sìı ɻmbè k'è eyı deʔǫ gehła hǫt'e. Sahcho 30 sìı eyı k'èdè hǫt'e.

Ek'atì, Copper Mıne deh ts'ǫ Arctıc Ocean Tıcho ts'ǫ̀ nɻlɻ hǫt'e. Ek'atì 60 km haɻhdo t'à nedè eyıts'ǫ weyìı ɬıwe eyıts'ǫ dla-ɻt'ǫ̀ haànı dehshe laànı le. Tı tah t'ası gòɬɻ le, xo k'è tǫ detǫ xè tı whek'o eyıts'ǫ sadè wexèıdı le t'à ɬıwe eyıts'ǫ dla-ɻt'ǫ̀ haànı dehshe le. Ɬıwezǫ, cısco, ɬıh, Arctıc graylıng, burbot, longnose suckers eyıts'ǫ slımy sculpın, Ek'atì k'è ɬıwe haànı kàʔa gòɬɻ hǫt'e.

Dıavık Sǫmbak'è

Dıavık dıamonds wegòt'ǫ sìı kımberlıte kwè nìʔa weyìı, Ek'atì chɻk'èdà ts'ǫnę taba ndıa k'è dıamond wegòt'ǫ hǫt'e. Kwɻ necha hohle sìı Ek'atì tì whehtǫ ìtǫ t'à Dıavık tè gotɬ'a gots'ǫ dıamond gıhchı ha hǫt'e. Kwɻ A154 2002 k'è hòlɻ ɻle hǫt'e. Kwɻ A418, ɻmbè k'è nıdè hohłe ha hǫt'e.

2004 xo k'è dıavık gha làà łǫ ɻle, sǫmbak'è dakwełǫ etłe adza t'à. Dıdzę Dıavık ndè goka gots'ǫ dıamond hagele hǫt'e. Ndè goka eghàlageda t'à dzę ghàà eyıts'ǫ to ghàà satsǫ̀ behchɻ k'èdè hǫt'e. Kımberlıte kwè dıamond wets'ǫ̀elɻ sìı, processıng plant kwè sìʔɻ kǫ̀ gots'ǫ̀ agehʔɻ hǫt'e. 2004 k'è Dıavık sǫmbak'è gots'ǫ 7.6 mıllıon carrats dıamond kwè hàłǫ hàgɻla hǫt'e.

Naàwo Hàts'eta T'à Eghàlats'eda

Ndè k'è hotì eghàlageda gedı t'à, Dıavık deyatì k'ègedı ha hòtɬ'ò eghàlageda hǫt'e. 2004 k'è, ɻnęę laànı Dıavık ndè xè ładɻ eghàlageda t'à dıamond hàgele ha gɻɻwǫ. Dakwełǫ kwɻ nawheʔa agɻla ɻle ts'ǫ t'ası łǫ hoghàdegehtǫ t'à ɻdàà k'achɻ kwɻ nahohłe ha nıdè, edaànı deʔǫ nezɻ hohłe ha sìı wek'ègezǫ ha hǫt'e. Ndè xè eghalats'eda ha ts'ɻɻwǫ t'à ɬ'adɻ ndè k'è eghàlats'eda hats'eta hǫt'e eyıts'ǫ ndè k'è eghàlats'eda t'à edaànı wexèıdı t'à hoghàdets'etǫ hǫt'e, eyıt'à dì kwɻ nahohłe ha eyıts'ǫ ndè gotɬ'a eghàlats'eda t'à dıamond hàts'ele ha ts'ɻɻwǫ hǫt'e.

Ndè Hoıdı Làà

Dıavık ndè k'è eghàlageda t'à edaànı ndè xèıdı ha ndè hogıhdı t'à eghàlageda hǫt'e.

Kǫ̀ta, Environmental Monitoring Advisory Board k'è dǫ dehkw'e eyıts'ǫ naàwo ghàà eghàlaede dǫ haànı hazǫ ełexè eghàlageda t'à deʔǫ nezı wek'è eghàlageda ha hogehdza hǫt'e. Dıavık, dǫ hazǫ xè ndè hoıdı làà k'è eghàlagıde sù hazǫ cłexèht'è ndè hoıdı làà k'è eghàlageda t'à ełets'àgedı ha gıwǫ hǫt'e. RWED dı whàà lea deızì ładı agıla eyıt'à Environment and Natural Resources (ENR) hagiyeh adza hǫt'e. Dzǫ t'asi dek'èhtł'è sù wehoıdı t'à wegodı hòlı hǫt'e.

Tıch'adı

Dıavık Diamond Mine, 2004 k'è Wıldlife Effects Monıtorıng Program k'è eghàlagıda hǫt'e. Ndè k'è eghàlageda t'à edaànı tıch'adı xèıdı sù wek'èhodzǫ ha wegodı natsıgela t'à godı hòlı hǫt'e. Dıavık godı nats'ıgela t'à ınęę ndè k'è edaànı ıle ghàgeda t'à ndè ładı at'ı sù wek'èhodzǫ at'ı hǫt'e. T'asi wehda wek'èhodzǫ adza t'à edaànı weghàlats'eda dè nezı ha ts'ıwǫ sù dek'ehtł'è ats'ıla hǫt'e.

- 2004 k'è ndè 1 km wezhù, ıt'ǫ dehshe eyıts'ǫ tıch'adı nàdè sù zǫ wexèhdı hǫt'e, Environmental Assessment nıhtł'è hòlı k'è ndè edaıhcho xèıdı ha gedı ıle xèht'e.
- 2004 k'è Ekwǫ̀ eyıts'ǫ Sahcho edatłǫ wedę hohłe ha gedı ıle sù hatłǫ wedę hohłe. Sǫmbak'è wets'ǫdahatǫ gots'ǫ ekwǫ̀ ıłe eyıts'ǫ sahcho ıłe ełaıwo hǫt'e. Dǫ t'asawode sǫ gıwǫ t'à, RWED dagıhke tł'akǫ sahcho ıłe gehk'e hǫt'e. Dı ıła Dıavık ndè k'è tıch'adı hoıdı k'èè, Wıldlife Study Area, sahcho gòłı hǫt'e.
- Dıavık aıłı edaànı ekwǫ̀ hogıhdı t'à wegodı natsıgele sù aıłı wek'è eghàlageda ha hǫt'e eyıts'ǫ sǫmak'è edaànı ndè k'è eghàlageda sù, ndè xèıdı ha le gha eghàlageda hǫt'e.

- 2004 East Island k'è Dìga gòłı̨ ı̨le. Dıavık dìga hogıhdı ha, zah k'è gık'è k'è gòla ghàà, dìga edàtłǫ eyıts'ǫ edı̨ k'èdè sìı wehoıdı ha hǫt'e.
- 2004 k'è, Peregrıne Falcon det'ǫcho wet'oh gı?ǫ. 2004 k'è Det'ǫchǫ ı̨łe ełaı̨wo gı̨htı̨, haanıko edaànu t'à ełaı̨wo sìı wek'èhodzǫ le.
- Envıronmental Assessment nı̨htł'è laànı det'ǫcho eyıts'ǫ chıa haànı edàtłǫ wedę hohłe ha gedı ı̨le xeht'e. East Island Shallow Bays eyıts'ǫ sǫmbak'è gomǫ ndè xèhdı t'à ts'otì gòłı̨ adza k'è det'ǫ eyıts'ǫ chıa łǫ at'ı̨ adza. 2004 k'è ınęę nahk'è det'ǫ eyıts'ǫ chıa łǫ gòłı̨ adza hǫt'e.

Ehtł'è

2004 k'è Dıavık Mınes sǫmbak'è gomǫ ehtł'è k'ehts'I gı̨hdza ı̨le, eyı nàk'è eht'a wek'è eghàlageda ha hǫt'e. Dakwełǫ ehtł'è edàtłǫ eyıts'ǫ edı̨ k'èhts'ı eyıts'ǫ xo tat'è zah eyıts'ǫ zah tah ehtł'è gı̨hdza sìı wek'aeta ha hǫt'e. Zah gıhtsı tat'è, zah nayı̨ agehʔı̨ tł'akǫ nàèdı gha wek'aeta hǫt'e. Eyıts'ǫ tai xo tat'è ı̨mbè k'è Dıavık gomǫ ndè k'è ehtł'è k'ehts'ı sìı edaànu ndè k'è t'ası dehshe sìı wek'aeta ha hǫt'e. Sǫmbak'è edı̨ eghàlageda gots'ǫ̀ nı̨wàà ndè k'è ehtł'è k'ehts'ı sìı k'aʔı̨ wegohtʼı̨ hǫt'e. 2004 k'è 2003 nahk'e deʔǫ ehtł'è gòłı̨ ı̨le, zone 2 sǫmbak'è 75m gots'ǫ 100m gots'ǫ̀ ehtł'è k'ehts'ı hoıdı hǫt'e.

Tı̀ Edaànı T'asɪ Xèıdı

Dıavık, 2004 k'è Aquatıc Effects Monıtorıng k'è eghàlagıda hǫt'e. Dı Taı xo łıwè hoıdı làà k'è eghàlageda adza eyıts'ǫ Dıavık tì t'à eghàlageda nıhtł'è naàwo tł'a, tì eyıts'ǫ łıwè hoıdı k'è eghàlageda hǫt'e. Dzǫ dı haànı tì eyıts'ǫ łıwè hoıdı làà k'è eghàlageda t'à wegodı dek'èhtł'è hǫt'e.

Tı̀ Edaànı Wegoht'ı̨

2004 k'è tì wegodı, ɻdì xo tì edaànı ɻle xèht'e laànı hǫt'e. *Tı k'aeta k'èè, tìch'ì* ełaetł'ǫ k'èè gots'ǫ̀ nıwàà le kò, tè tì ts'ıhdza eyıts'ǫ toh ts'ǫ golı k'aeta sìı tè t'asɪ eda gha wehoıdı hǫt'e. Eyı deʔǫ tì ładı at'ı̨ sìı wegoht'ı̨. Eyı nıhts'ı tì tah at'ı̨ t'à nę tahko. Nàèdı arsenıc eyıts'ǫ satsǫ̀ nıckel haeyeh sìı tì tah wègoht'ı̨ sìı, edàtłǫ ha ɻle sìı hatłǫ hǫt'e, eyıt'à tı tah t'asɪ wègoht'ı̨ sìı asanı le. Tı k'aeta sìı ładı wegoht'ı̨ at'ı̨ sìı, Baselıne Study ndè wegodı ìchì ɻle sìı wegodı k'aʔı̨ ìchì ts'ɻhʔǫ nę tahko. Eyıts'ǫ ɻhk'è Baselıne Study ndè wegodı whìle t'à edaànı t'à ndè k'è t'asɪ ładı at'ı̨ sìı wek'èhodzǫ ha dì. Eyıt'à Dıavık dı haànı yatı gehtsı̨, Dıavık eyıts'ǫ Dıavık Technıcal Commıttee k'è dǫ dehkw'e sìı ndè wegodı nats'ɻgele sìı, deʔǫ nezı̨ wet'à ełexè gogedo t'à eghàlageda dè nezı̨ ha gɻwǫ gedı.

Dlaa eyıts'ǫ Tehtsa(tè ɻt'ǫ eyıts'ǫ tehtsa nechalea daele)

Whàà lea gots'ǫ̀ tìch'ì ełaetł'ò k'è tı tah ɻt'ǫ eyıts'ǫ tehtsa nechalea gòłı at'ı hǫt'e. Tìch'ì ełaetł'ò k'èè gò?ǫ ts'ɻh?ǫ nę tahko, haànıko nezı wek'èhodzǫ ha ts'ɻwǫ dè, dè?ǫ wehoıdı ha hǫt'e. Haànı ha sǫnı gɻwǫ ɻle eyıt'à de?ǫ wehoıdı ha gehdza ha hǫt'e. Tehtsa wegodı t'à ełexeht'e laànı le, eyıt'à Dıavık gha dǫ ładı sìì, t'asi hazǫ gha tı k'aehta ha gɻwǫ.

Ehtł'ètì tah Tehtsa

Tìch'ì ełaetł'o k'èè, tè ehtł'ètì tah de?ǫ tehtsa łǫ laànı. Tı tah dezǫ t'asi gede gòłı ts'ɻh?ǫ nę tahko.

Ehtł'ètì Edaànı Wegoht'ı

Ehtł'ètì k'agehtǫ kǫ̀, ehtł'ètì ładı adza wegoht'ı, haànıko Dıavık wet'à t'à nı le, Dıavık wet'à t'à nıdè, de?ǫ ładı wegoht'ı ha ɻle. Eyıt'à Dıavık dı haànı yatı gehtsı, EMAB k'è dǫ dehkw'e gha dǫ ładı ehtł'ètì k'aehtǫ tł'akǫ dè ehtł'ètì edaıhtǫ ha ɻle sìì, 5cm gots'ǫ 2cm ts'ǫ̀ ɻzì agɻla nıdè gɻwǫ hǫt'e.

Łıwè

Łıwèkwǫ̀ edaànı wegoht'ı̨ eyıts'ǫ edaànı łedı wegodı.

August 2004 k'è kǫ̀ta gots'ǫ dǫne, Ek'atì k'è łıwè edaànı wegoht'ı̨ eyıts'ǫ łıwèkwǫ̀ edaànı łedı k'è eghàlageda ha, ełexè negıde ı̨le. Łıwè edàtłǫ gòhı̨ eyıts'ǫ edaànı tè tì tah geda gha wegodı nats'ı̨gela ı̨le. Taı dzę gots'ǫ̀, Dogrıb Treaty 11, Łutsel K'e Dene Fırst Natıon, North Slave Metıs Alliance, Kıtıkmeot Inuit Associatıon eyıts'ǫ Yellowknıfe Dene Fırst Natıon gots'ǫ dǫne łıwè k'agehta ha ełexè negıde ı̨le. EMAB k'è dǫ dehkw'e gıtł'à 2004 k'è haànı eghàlagıda ı̨le hǫt'e.

Ǫnęę laànı łıwe wek'aeta, łıwè sì?ı̨ gokwe, łıwè sì?ı̨ tł'akǫ eyıts'ǫ łıwè et'è tł'akǫ dè edaànı łedı eyıts'ǫ edaànı wegoht'ı̨ gha wek'aeta. Sı̨laı xo tat'è dı haànı łıwè k'aeta ha hǫt'e ı̨le, haànı 2002 k'è kǫ̀ta gots'ǫ dǫne sìı̀, ı̨łè xo tat'è dı haànı łıwè k'aeta ha gı̨ıwǫ gedı t'à, dı haànı łıwè k'aeta hǫt'e. Ǫdàà łıwè hazǫ wek'aeta sìı̀, 2002 k'è łıwè edaànı wegoht'ı̨ ı̨le xè weghàgeda nıdè t'ası̨ łıwè ładı̨ adza wek'èhodzǫ ha hǫt'e.

Dǫne wı̨zì łıwè edaànı wegoht'ı̨ eyıts'ǫ edaànı łedı ghǫ nanıgede gedı le. Kǫ̀ta gots'ǫ dǫne hazǫ ełexè łıwè k'agetǫ sìı̀, Ek'atì ts'ǫ łıwe nezı̨ wegoht'ı̨ eyıts'ǫ łedı gedı hǫt'e. Łıwè gha nàèdı k'èzǫ sìı̀ łıwè k'agehtǫ t'à łıwè ładı̨ wegoht'ı̨ le gedı hǫt'e.

3. Innuinaqtun

Okaotit Naitoliogat

Hamna onipkak titigakhimayuk okiok enigangat elaogami Nunalikotini Angigotini, ona okaotigivagat kinat okoa Nunanik Taotoktit Okakpaktot Katimayiit (EMAB). Hamna onipkak atokpagat Kinat Sainikhimayut Nunalikotinik Angikhimayut ovalo kinatlo homiitot nunalagit ovalo inuitlo, naonaitkotigivagat Diavik Diamond Mine's havaagivagait ovani 2004. Onalo okaohikakmiok ematot ovagut opalongaiyaotivut havakhano ovani 2005 ovalo kanok okoa Diavik kanoktot monagitiakpaktok nunamik atokhotik ovani oyagakhiokvikmi Lac de Gras site. Hamna onipkak okatikagahoaktok ematot kanok ehagianaktonik ovani Nakatak 12 ovani Diavik-kot Nunalikotait Angigotit. Ovani 2004, Diavik-kot titigaktot ovalo aolaktitat titigak onipkakhak amigaitonot nunanik malikoiyunot, ovalo tamaita okoa onipkat elaohimayut naitoliokhogit onipkat.

Okoa Saisnikatigiit ominga Nunalikotinik Angigotinik elakakt okoninga hamani Dogrib Treaty 11 Katimayiit, Yellonaimiot Itkileet Katimayiit, North Slave Itkiliagatlo Katimayiit, Kitikmeot Inuit Katimayiit, Lutsel K'e Itkileet Katimayiit, Kavamatokat Kanatami, Nunatiap Kamavat, Kavamat Nunavutmi, okoalo Diavik Diamond Mines Inc.

Ona Nunatokak

Okoa Diavik-miot kovvikhanik oyakikiot ovani Lac de Gras-mi ematot ongahiktigiok 100 km tonongani nappaktokakniop tahamani nappaktoitomi nunami ovani Nunatiami. Hamna nuna nappaktoitok nuna amigaitpiaktonik tahivaloinnak, kaiktoniklo ovalo allatkiinik nunalik engilgat nuna hikkokyoakhimatitlogo okiot amigaitoni. Tahamna nuna nunakokitok ovalo nuna hingmikhak kikkomainaktok hikokagami nunap ataa aoyak okiogaaloklo.

Talvani okiomi okiokhangoyuktok ovalo kaayuknakhoni ovalo aoyanga naitovloni ovalo niglaomaplonilo. Tahamna nuna nippalokpalayoitok naliak apitikpalaayoitonilo ovalo anogikokitpakhonilo oblotoak.

Tahamna nuna haniani ooma Diavik oyagakhiokviani hogaat allatkiit nunagiyat. Emakak kaffit 84-goyut allatkiit tingmiat tahamaniitot ovalo 16 allatkiit hogaat nunagiyat tahamna nuna. Elait tahamani nunami aolayoitot aoyak okiokmilo ovalo elaitlo kaivaktot aoyiyaktokhotik. Elait ekittot hogaat nunami aolayoitot naliak tingmiatlo tahamani aolayoitot kivataani kikiktami Lac de Gras-mi. Elait tahamani aolayoitot nunami okiok aoyak okoat kayuktot, okalgit, higheet, avingat okoalo akilgitlo.

Okoa Kengoap tuktungit apkohakpaktot tonomooyut hivokamoovaktotlo tahamani Lac de Gras-mi. Elait tuktut tikitpaktot tonomooyut hivokamooyut okiakhamilo. Ammakot malikpagait toktot hittikakp[aktot tuktokaknimi aoyagangat. Emakak 30 aghat tahamaneetpaktot nunami aolayoitotlo.

Lac de Gras nuna tahilik angamkmik kugaktok taononga Kugluktumot taononga tonomot kugakaktok Okioktaktomi Taggionganot. Lac de Gras ema 60 km takiyuk, ovalo amigaitonik tahilik nuna kihime ikalukokittot tattit ovalo honatlo naovaktot nunami okiok kikomatitlogo. Hamna nuna nunatiagoyuk nuna nikikhakokitoni naliak tattit etigamik ikalukokittot okiok kikomatitlogo hikkokainagami ovalo emak niglaomavalaagami ikalukokitjutivaktok. Ehookitlo, tiktaalitlo, annakheetlo, holokpaogatlo, milogiatlo okoalo kanayutlo tahamani tahikmiit ovani Lac de Gras.

Hamna Diavik Oyagakhiokvik

Okoa kovvikhat ovani Diavik-mi takokhaoyut okonani kimberlite pipes kaiktomiitot kitaani tattip ovani Kivatani Kikiktami ovani Lac de Gras-mi. Tahik elanga emaiyakhogo himmiktokhogo oyakikivikhak havakpagat emak kovilaiyakhogo ovani Lac de Gras-mi , ema Diavik ehoaktomik oyakikiyangitni kovvikhani tattip ataaniitonik. Ona A154 emaiyaknik enikhimayuk tahik ovani 2002. Aipataok emaiyaknik tahik, atilik A418 emaiyakhimayuk, emaiyaktaoniakomi aoyak ovani 2005.

2004 okiok havakpiaknaktok okiok okononga Diavik-konot, ema hivoliovloni okiok eniktomi havaktat okiok tammat enikmat aolatitainaktitlogit. Hajja, okoa Diavitkot atoliktot nunap kanganik algakhotik ammogailiktot kovvikhanik, kakogo atpalikat nunap ataanot amogailikniaktot kovvikhanik. Ematot taimatot tamaita ammogakniaktait kovvikhat. Talvani nunap kangani algaklotik, aghalutit engilgavakniaktot oblok onnogaalokmot. Oyagaknik algaktoni agyaktakniaktat pilokyiligivikmot, talvani kovvikhat aviktiklogit oyagakmit. Ovani 2004, Diavik amokhaivaktot 7.6 million carats kovvikhanik.

Hamani ekayukniaktot oyagakhioknikmik, okoninga hiniktakviknik, afisikakvikmik, aghalutikakvikmik, kulilikivikmik ovalo milvikmik hanahimayut.

Ehoaktonik Monagitjutit

Diavik-kot aghot havakpaktot ematot okagiiyakhimayatik maliknahoakhogit havagiamingni oyagakhiokvikmi nuna atoktaktik hilalo kayaginahoakhogo. Ovani 2004, kangalo okioni kengolini, Diavik-kot kanokot monaginahoakpaktot nunamik oyagakhiokvikmi kovvikhanik ammogainahoakhotik. Ematotlo, elittogiavut honat hanalgaagaptigo oyakikivikhak aolanahoaliktitlogo tahik elanga emaiyakkaligaptigo (A154 dike) elanga elaoyuk havaotikha opalongaiyakhimayakot aipa tahik elanga emaiyalikmigaptigo (ona A418 emaiyaknik) havaktaolikniakmiok kagogo. Ovagut hokot oktokhimakniaktogut ehoaktonik atoklota naliak ahikot oktoklota kanok havakniaktakot monagitiaklogo nuna emaklo, ovalo aipa tahkaknik elanga emaiyalikmigoptigo kovvikhakaknik tattip natka, ovalo emaikat nunap ataanot oyakikilikniaktogut.

Taotutit Atoktakhat

Diavik kakogo oktokniakhimaliktot ovalo atoktakhanik opalongaiyaliklotik kanok hila nammagonakhiok oyagakhiokvikmi aolalikat. Okoa inuit haniani ittot inukaniknik, okoa Nunanik Taotuktit Meetiktit , ovlao inuit maligakot atoktitiot nunamik nunalikotit ehoaktokhaokmata. Diavik atoknahoakpaktot ehoatokokhotik nunamik atokpaktot. Diavik ovalo atogahoakpaktot ehoatkianik havaotinik pinnahoakhotik Diavik oyagakhiokviani, allatlo havakhat ovani Lac de Gras-mi ovalo Kavamat Angohikiitkot, Hogaalikiot ovalo Maniliogotikhalikiot (RWED) kanokot ehoaktonik nunanik taotutikaktot. RWED atiktik allangoktat kangannoak, ovalo nutamik atiniktot Nunalikiniknik ovalo Maniliogotikhalikiot(ENR). Haffoma ataani naitoliogami titigami ovagut taotutivut atoktakhat, ovalo titigatiakhimayut hamani onipkaliogami.

Hogaalikinik

Okoa Diavik Diamond Mine atokhimaktot okoninga Hogaalikotinik Taotutikaktot Atoktokhanik ovani 2004. Hamna atoktakhak eliogakhimayuk katitigotinik naonaitkotinik hogaanot kanok oyagakhiokviop kanogilitpagait hogaat nunamiotat. Homi homangitpat, Diavik havaanik elakmiot naonaitkotinik kanga kengolikni atokhotik hajjatot kanogilitonaktot. Elait hamani elittogiamot nutaat, ovalo elaittaok

pitkoyaohimayut ehoakhakoyaoyut atoktakhat atoliktavut hamani titigakhimayut.

- Hamani 2004-mi, tahamna nuna naovaktok ovalo hogaat elait nunaiktot oyagakhiokvik angmakmat aolaliktitlogo mikkak nuna hogangiktok mikkakmik 1 km^2. Hamna naonaitok ehomagihimayat elitaknaktok Nunalitoni Ehivgioknia.

- Elait hogaat nunaiktot tuktut okoalo aghatlo naonaitot elihimayat ovani aolaliktomi 2004-mi. Ataohik tuktu onalo ataohik aghak tokohimayuk oyagakhiokvik aolalikmat ovani 2004-mi. Ona aghak tokotaovaktok inuknik hivoganakhikmat oyagakhioktinot, ovalo Diavik angikhimayat okoat RWED-kot apigilgakhogit. Aghat tahamani aolayoitot takokataknaktot Diavik Hogalikotaitni Nunami.

- Diavikmiot ehivgiokhihimakniaktot tuktunik ovalo takokayakniaktait ekilionakhiot oyagakhiokvik angmaomatitlogo.

- Kalaviitlo tahamani takokhaolikpaktot ovani Kivaliani Kikiktap ovani 2004-mi. Kalviit tokoyoitot tahamani, anniktokakhimaitok naliak nuutaohimaitot aolatitlogo oyagakhiokvik 2004. Diavik holi taotokhimakniaktot kalviknik tublikaktoik apotimi kaffioyakhainik ovalo homongaovaktonik.

- Talvani 2004-mi, ataohiik Kilgavik oblokaktok tahamani ovalo pikkikhimayut obloani, ovataok ataohik oblokakto kihime evvahimaitok. Ataohik Kilgavik tokovaktok talvani 2004-mi, kihime elittoginggitakot kanok tokolakihimanianik.

- Kangami hamani Nunalikotinik Ehivgioknik elittogihimayakot, okoa Emakmiotat Tingmiat Evvatokliikhimayut naonaitot elait mikkaogaloaktoni. Tingmiat takokhaokataktot Kivaliani Kikiktami Kangikhokmi ovalo tingmiat atokhimaktat emmak oyagakhiokviop emakmi. Tahamani tingmiavaloit aolayoitot ovalo hinnanikmiotat kopannoat ovani 2004.

Poyoktaknik

Ovani 2004, aghalutit poyoktakpaktot hiogamik takokhaoyuk ovani haniani Diavik oyagakhiokvikmi ovalo malgok naonaitok elihimayat poyoktakpaktot aghalutit. Hivolik, takokhaoyuk kanok hiogak poyoktakpaktot ovalo homot poyokpaktot apkotini, Diavik ehivgiokhivaktotlo apotmik opingaami ovalo katitigivaktot hioganik poyokhimayunik hiamayakhimayunik nunamot ovalo apot poyoknia emaktikhogo mahakhogo ovalo ehivgiokpata kanogitakhanik emangoktok poyoknik. Aipaniklo, Diavik ovalo nunakakninik hogaat ehivgiokhivaktot pinggahoani aoyagangat nuna allangogiakhanik poyokmit. Elihimayat, poyot hiogat amigaitkiat apkotmi oyagakhiokvikmi aolatitlogo ovalo ekilivaliavaktok ongahiktoanit oyagakhiokviop.Hiogak poyok amigaitkiagovaktot ovani 2004-mi 2003-mi, ovani Zone 2 akongani 75-mit 100 m oyagakhiokviop haniani.

Emakmeetoni Kanogilitjutiot

Diavik havakhimaktot ehivgiokhivlotik Emakmeetonik Kanogilitjutionik Taotutikakmiot ovani 2004-mi. Hamna pingahogilikta okionga emakmeetonik kanogilitjutivaktok taotutikakmiot ovalo atogiakakmiyat Diavitkot emaktutinik laisikakmata. Elait allangayut ehivgiogait emat hamani okaotaoyuni.

Emmak Emmagiknia

Amigaitot eniktait ehivgiogatik ovani 2004-mi ajikotait okioni aolayoitot emaginigit emmat oyagakhiokvikmi. Kihime emmat ehivgiokpagait emmanik ehivigiokhivikni kannitogeektot haniani emmakokvikmi, onalo emmak tahikmeetok ovalo hikkokaktitlogo ehivgiokpagatlo emmak emmagiktok aolayoitok maligat atoktoni hogaanot hivoganakhiyoitok emagikkami. Okoa eniktot emmaknik ehivgiogotait haniani oyagakhiokviop emaklivyakhimayut ahiniitoni. Ehomagiyat emakak annogip emaklikpaga emmak malliktitlogo. Allangoktok tamaita tokonak arsenic onalo havilgak naonaitot ovalo hivoganakhitiyoitok nunamot emmakmot. Amigaitot ooktaktait emakak allangotivaktot, kihime aolatiangitot elait ehivgiogat aolatiangitmata. Pitkoyaoyut okoa Diavitkot emalo Diavikmiot Ayoknaktolikot Katimayiit ehivgiokpagait emmalikotit.

Phytoplankton okoalo Zooplankton (Mikkalait naovaktot okoalo kopilgoit emmap kanganiitot)

Hamanikaffok ekitoni amigaikpaaliktot omayut ehivgiokhivikni emmakokvikmi. Okoa emmakot naopkaivaktot mikkalaknik kopilgonik elihimayat, ovalo kanoklo naottailijutikhainik oktoktot. Okoa eniktait ehivgiogatik zooplankton allatkiiktot kopilgot, ema Diavik kinanik ehivgioktitiniaktot, ooktaktitilotik.

Benthic Kopilgot (Tattip Natkaniitot kopilgot)

Hamani haniani-nunap ovagakhiokvikmi amigaitkiat kopilgot ovalo amigaitkiatlo kopilgot omayut. Emakaka nikkikatialikmat hiogak emak oyagakhiokvikmi.

Hiogak Natkaniitok

Ehivgiokpagat elittogiyat allangovaktot elait natkaniit hiogat allangoktot, kihime emakak Diavitlot havaangit allangotiot hiogamik tattip natkanik elitogiyat Diavikmiot ehivgiomagitik. Pitkoyaoyut ematot tohaktitaklogit okoa EMAB ehigioktak tahiop natka kanogilittakhanik ovani 2 cm mikitkianik 5 cm.

Ikaluit

Ikaluit Niggiominagiakhanik (Tippait) ovalo Nikkait Ehivgioktait

Ovani Agasimi 2004, kinat elaoyut homiotat nunami meetikpaktot ehivgiokhiffakhotik honanik ikaluit tippainik oktohotik ovalo nikkainiklo ehivgiokhivlotik ikaluknik ovani Lac de Gras. Naonaktonik ehivgioktit oktokpakmiot kaffioyakhainik ikaluknik ovalo povvalayakhainiklo. Ona ehivigonik pingahoni obloni ehivgiokhivaktot ovalo inuit okoa Dogrib Treaty 11, Lutsel K'e Itkileetlo, North Slave Itkiliagat Katimayiit , Kitikmeot Inuit Katimayiit okoalo Yelonaimiotat Itkileet. EMAB havagivagat opalongaiyakhogo ehivgiokhivikhak ovani 2004-mi.

Kanggamitot okioni kengolini, okoa ikaluit naonaiyaktait kanok pinnigiakhaita halummaktiktinagit, talvanilo halummaktikhiktotlo tiayaoyut ikaluit ovalo niggivlonik ehivgiokpagait. Hamna ehivgioknik atokhimakniaktat okioni tallimani kihime inuit ovani 2002 okaktoat okiotoak oktokatagomayait. Okoa ikaluit okioni kanogittakhaita oktakpakniaktait ovani 2002 aolaniaktok okiotoak.

Inuit ehomaalutigingitat ikaluit pinniktot, nikkitiangoyut ovalo mammaktotlo. Hamani, tamaita inuit elaoyut tallimat angiktot ikaluingok Lac de Gras-mi mammaktot. Ayoknaktolikiot ehivgioktait ikaluit aolangittot nikkait homangittotik povvalavlotiklo.

pitkoyaohimayut ehoakhakoyaoyut atoktakhat atoliktavut hamani titigakhimayut.

- Hamani 2004-mi, tahamna nuna naovaktok ovalo hogaat elait nunaiktot oyagakhiokvik angmakmat aolaliktitlogo mikkak nuna hogangiktok mikkakmik 1 km^2. Hamna naonaitok ehomagihimayat elitaknaktok Nunalitoni Ehivgioknia.

- Elait hogaat nunaiktot tuktut okoalo aghatlo naonaitot elihimayat ovani aolaliktomi 2004-mi. Ataohik tuktu onalo ataohik aghak tokohimayuk oyagakhiokvik aolalikmat ovani 2004-mi. Ona aghak tokotaovaktok inuknik hivoganakhikmat oyagakhioktinot, ovalo Diavik angikhimayat okoat RWED-kot apigilgakhogit. Aghat tahamani aolayoitot takokataknaktot Diavik Hogalikotaitni Nunami.

- Diavikmiot ehivgiokhihimakniaktot tuktunik ovalo takokayakniaktait ekilionakhiot oyagakhiokvik angmaomatitlogo.

- Kalaviitlo tahamani takokhaolikpaktot ovani Kivaliani Kikiktap ovani 2004-mi. Kalviit tokoyoitot tahamani, anniktokakhimaitok naliak nuutaohimaitot aolatitlogo oyagakhiokvik 2004. Diavik holi taotokhimakniaktot kalviknik tublikaktoik apotimi kaffioyakhainik ovalo homongaovaktonik.

- Talvani 2004-mi, ataohiik Kilgavik oblokaktok tahamani ovalo pikkikhimayut obloani, ovataok ataohik oblokakto kihime evvahimaitok. Ataohik Kilgavik tokovaktok talvani 2004-mi, kihime elittoginggitakot kanok tokolakihimanianik.

- Kangami hamani Nunalikotinik Ehivgioknik elittogihimayakot, okoa Emakmiotat Tingmiat Evvatokliikhimayut naonaitot elait mikkaogaloaktoni. Tingmiat takokhaokataktot Kivaliani Kikiktami Kangikhokmi ovalo tingmiat atokhimaktat emmak oyagakhiokviop emakmi. Tahamani tingmiavaloit aolayoitot ovalo hinnanikmiotat kopannoat ovani 2004.

Poyoktaknik

Ovani 2004, aghalutit poyoktakpaktot hiogamik takokhaoyuk ovani haniani Diavik oyagakhiokvikmi ovalo malgok naonaitok elihimayat poyoktakpaktot aghalutit. Hivolik, takokhaoyuk kanok hiogak poyoktakpaktot ovalo homot poyokpaktot apkotini, Diavik ehivgiokhivaktotlo apotmik opingaami ovalo katitigivaktot hioganik poyokhimayunik hiamayakhimayunik nunamot ovalo apot poyoknia emaktikhogo mahakhogo ovalo ehivgiokpata kanogitakhanik emangoktok poyoknik. Aipaniklo, Diavik ovalo nunakakninik hogaat ehivgiokhivaktot pinggahoani aoyagangat nuna allangogiakhanik poyokmit. Elihimayat, poyot hiogat amigaitkiat apkotmi oyagakhiokvikmi aolatitlogo ovalo ekilivaliavaktok ongahiktoanit oyagakhiokviop.Hiogak poyok amigaitkiagovaktot ovani 2004-mi 2003-mi, ovani Zone 2 akongani 75-mit 100 m oyagakhiokviop haniani.

Emakmeetoni Kanogilitjutiot

Diavik havakhimaktot ehivgiokhivlotik Emakmeetonik Kanogilitjutionik Taotutikakmiot ovani 2004-mi. Hamna pingahogilikta okionga emakmeetonik kanogilitjutivaktok taotutikakmiot ovalo atogiakakmiyat Diavitkot emaktutinik laisikakmata. Elait allangayut ehivgiogait emat hamani okaotaoyuni.

Emmak Emmagiknia

Amigaitot eniktait ehivgiogatik ovani 2004-mi ajikotait okioni aolayoitot emaginigit emmat oyagakhiokvikmi. Kihime emmat ehivgiokpagait emmanik ehivigiokhivikni kannitogeektot haniani emmakokvikmi, onalo emmak tahikmeetok ovalo hikkokaktitlogo ehivgiokpagatlo emmak emmagiktok aolayoitok maligat atoktoni hogaanot hivoganakhiyoitok emagikkami. Okoa eniktot emmaknik ehivgiogotait haniani oyagakhiokviop emaklivyakhimayut ahiniitoni. Ehomagiyat emakak annogip emaklikpaga emmak malliktitlogo. Allangoktok tamaita tokonak arsenic onalo havilgak naonaitot ovalo hivoganakhitiyoitok nunamot emmakmot. Amigaitot ooktaktait emakak allangotivaktot, kihime aolatiangitot elait ehivgiogat aolatiangitmata. Pitkoyaoyut okoa Diavitkot emalo Diavikmiot Ayoknaktolikot Katimayiit ehivgiokpagait emmalikotit.

Phytoplankton okoalo Zooplankton (Mikkalait naovaktot okoalo kopilgoit emmap kanganiitot)

Hamanikaffok ekitoni amigaikpaaliktot omayut ehivgiokhivikni emmakokvikmi. Okoa emmakot naopkaivaktot mikkalaknik kopilgonik elihimayat, ovalo kanoklo naottailijutikhainik oktoktot. Okoa eniktait ehivgiogatik zooplankton allatkiiktot kopilgot, ema Diavik kinanik ehivgioktitiniaktot, ooktaktitilotik.

Benthic Kopilgot (Tattip Natkaniitot kopilgot)

Hamani haniani-nunap ovagakhiokvikmi amigaitkiat kopilgot ovalo amigaitkiatlo kopilgot omayut. Emakaka nikkikatialikmat hiogak emak oyagakhiokvikmi.

Hiogak Natkaniitok

Ehivgiokpagat elittogiyat allangovaktot elait natkaniit hiogat allangoktot, kihime emakak Diavitlot havaangit allangotiot hiogamik tattip natkanik elitogiyat Diavikmiot ehivgiomagitik. Pitkoyaoyut ematot tohaktitaklogit okoa EMAB ehigioktak tahiop natka kanogilittakhanik ovani 2 cm mikitkianik 5 cm.

Ikaluit

Ikaluit Niggiominagiakhanik (Tippait) ovalo Nikkait Ehivgioktait

Ovani Agasimi 2004, kinat elaoyut homiotat nunami meetikpaktot ehivgiokhiffakhotik honanik ikaluit tippainik oktohotik ovalo nikkainiklo ehivgiokhivlotik ikaluknik ovani Lac de Gras. Naonaktonik ehivgioktit oktokpakmiot kaffioyakhainik ikaluknik ovalo povvalayakhainiklo. Ona ehivigonik pingahoni obloni ehivgiokhivaktot ovalo inuit okoa Dogrib Treaty 11, Lutsel K'e Itkileetlo, North Slave Itkiliagat Katimayiit , Kitikmeot Inuit Katimayiit okoalo Yelonaimiotat Itkileet. EMAB havagivagat opalongaiyakhogo ehivgiokhivikhak ovani 2004-mi.

Kanggamitot okioni kengolini, okoa ikaluit naonaiyaktait kanok pinnigiakhaita halummaktiktinagit, talvanilo halummaktikhiktotlo tiayaoyut ikaluit ovalo niggivlonik ehivgiokpagait. Hamna ehivgioknik atokhimakniaktat okioni tallimani kihime inuit ovani 2002 okaktoat okiotoak oktokatagomayait. Okoa ikaluit okioni kanogittakhaita oktakpakniaktait ovani 2002 aolaniaktok okiotoak.

Inuit ehomaalutigingitat ikaluit pinniktot, nikkitiangoyut ovalo mammaktotlo. Hamani, tamaita inuit elaoyut tallimat angiktot ikaluingok Lac de Gras-mi mammaktot. Ayoknaktolikiot ehivgioktait ikaluit aolangittot nikkait homangittotik povvalavlotiklo.