



Working with *the People for the* Environment

HOW TO CONTACT US

ENVIRONMENTAL
MONITORING
ADVISORY BOARD
FOR THE DIAVIK MINE

P.O Box 2577, Room 204 –
5006 Franklin Avenue
Yellowknife, NT X1A 2P9

Phone: 867-766-3682

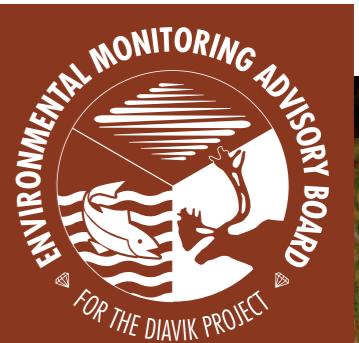
Executive Director
John McCullum
Emab1@northwestel.net

Environmental Specialist
Allison Rodvang
Emab2@northwestel.net
www.emab.ca

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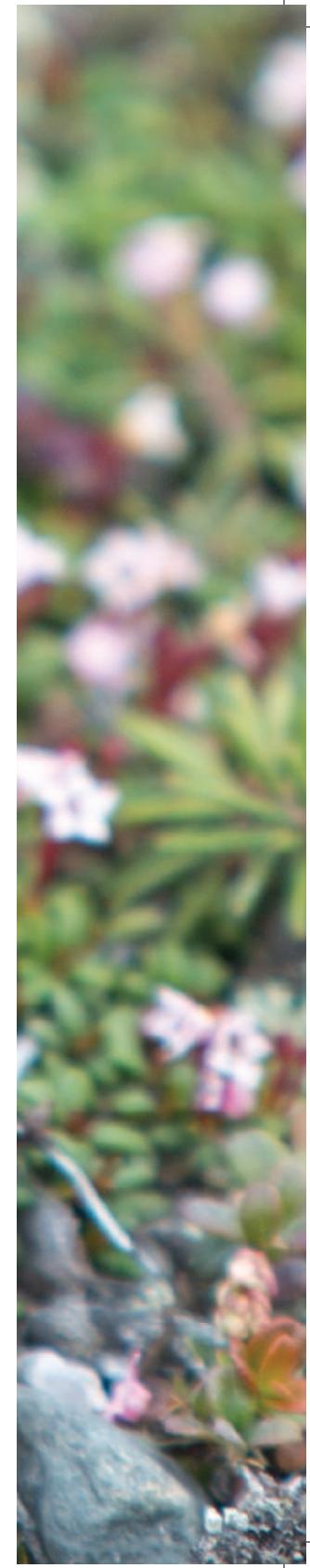


ANNUAL 2015 2016
REPORT



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ABOUT US

Diavik photo

Diavik Mine



HOW EMAB WAS FORMED

EMAB exists because of the Environmental Agreement (EA) for the Diavik Diamond Mine. The EA came into effect in March 2000. It was signed by five Aboriginal Parties, the Federal and Territorial governments and Diavik. EMAB is the environmental watchdog organization that came out of the Environmental Assessment to make sure the environment around Diavik remains protected. The EA states EMAB will work independently and at arm's length from Diavik and the other Parties who signed the agreement.

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WHY THE EA IS IMPORTANT

The EA is a legal contract between the Parties. It says what Diavik and the Parties must do to minimize environmental effects of the mine. The EA says Diavik must meaningfully involve the Aboriginal Parties in environmental monitoring at the Diavik Mine. This includes the use of Traditional Knowledge and Inuit Qaujimajatuqangit (TK/IQ). Finally, the EA sets out EMAB's mandate.

WHAT EMAB DOES

EMAB was set up in 2001 and is in its 15th year of operations. EMAB's mandate is split up into four main areas:

1. Oversight and Monitoring
2. Aboriginal and Community Involvement
3. Communications
4. Leadership and Governance

WHO ARE WE?

There are 8 Parties to the EA. Each Party appoints one Director to the Board. EMAB has 2 staff members:

- Executive Director
- Environmental Specialist

Since December of 2013, the Government of Canada, Aboriginal Affairs and Northern Development, has taken steps to withdraw from the EA as a result of the Devolution process. Canada has delegated its authority regarding the EA to the GNWT in the meantime.

WHERE WE ARE LOCATED?

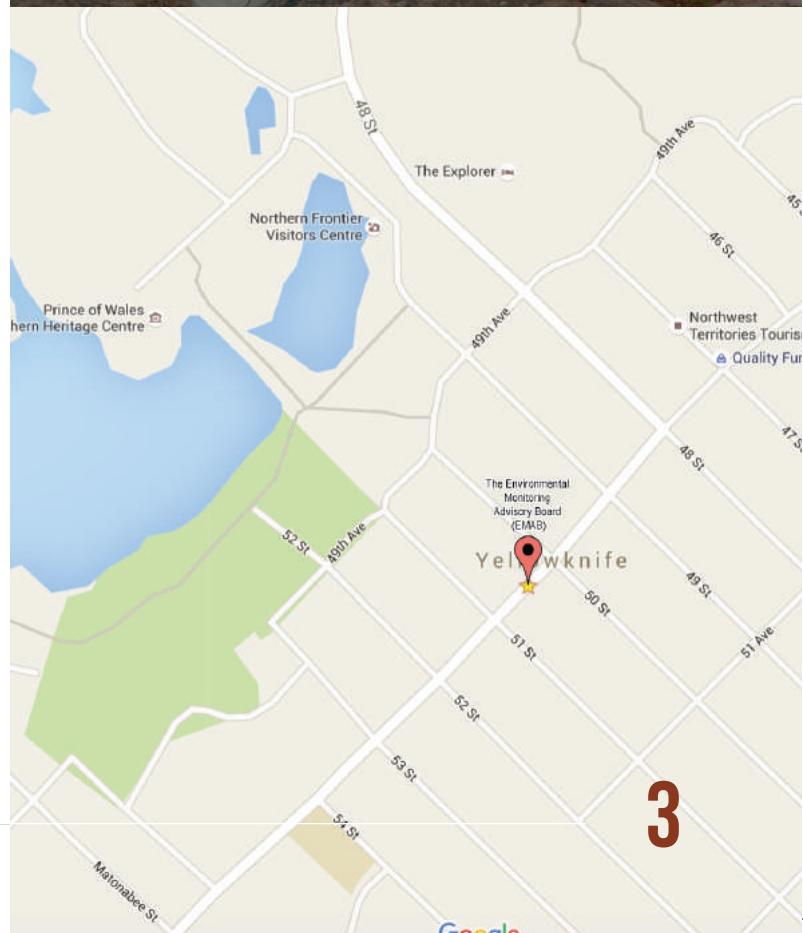
Our office is located in downtown Yellowknife at 5006 Franklin Ave., Suite 204 on the 2nd floor of the 50/50 Mini Mall.

Our phone number is **867-766-3682**

Email contact is **emab1@northwestel.net**

Website is **www.emab.ca**

EMAB ANNUAL REPORT 2015-2016



REPORT CARD ON THE ENVIRONMENT

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Lac de Gras

At the beginning of the Project, Diavik went through an Environmental Assessment to learn more about the water, vegetation, air, fish, and wildlife in the area. All of this information was documented in the Comprehensive Study Report where Diavik also made predictions about environmental changes that would happen as a result of the mine. This summary gives a broader picture about how much the environment has changed at Diavik, and how in line they are with predictions.

WATER

Water quality is within licence limits and predictions. Diavik exceeded its Total Suspended Solids limit on one day of the approximately 100-day construction season in 2015 as a result of construction of the A21 dike.

Lac de Gras is experiencing mild nutrient enrichment in about 25% of the lake based on chlorophyll *a* levels in the 2013 AEMP report. This is beyond the predicted extent of effect, which was 20% of the lake. EMAB will continue to monitor the extent of nutrient enrichment.

FISH

Fish, plankton, and benthics in Lac de Gras are showing weak signs of being affected by contamination from the mine. These signs are weak and irregular, so EMAB will continue to monitor to see if this trend continues.

Community participants in Diavik's fish palatability study say taste and texture of fish in Lac de Gras have not changed.

Mercury levels in Lake Trout have been variable in Lac de Gras since the mine opened. Many other lakes in the NWT are seeing increased mercury levels in fish so this effect may not necessarily be linked to Diavik.

WILDLIFE

Wildlife populations, besides caribou, are stable and effects are within or below predictions. The average population size of Bathurst caribou dropped from 349,000 in 1996 to 20,000 in 2015. The cause of this decline is unknown but EMAB is making sure Diavik continues to participate in regional caribou monitoring programs. The Zone of Influence (ZOI) for caribou was much larger than predicted and EMAB has recommended that Diavik study what operational changes it can make to reduce the ZOI.

AIR

Diavik did not submit an air quality report in 2015-16. The 2013 report indicated that total suspended particulate emissions were generally within GNWT guidelines with a single one-day exceedance. However, there were many issues with the methodology that put the data collected into question.

CLOSURE

Diavik submitted the final closure plan for the North Country Rock Pile as part of its progress report on closure. EMAB was concerned that the plan might not be sufficiently protective of the environment and that more attention was needed to long-term monitoring plans to identify potential failures early, and make sure closure is successful.



CHAIRMAN'S MESSAGE

Diavik Photo

"We believe it is important to see what is going on with our own eyes as important background for our reviews and decisions."

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This has been another year of significant change for EMAB and we emerge rejuvenated and prepared to continue our important role as an environmental watchdog on the Diavik Diamond Mine.

We have seen a number of significant changes within the Board and at the EMAB office. We welcome Jack Kaniak as the new KIA appointee, and Julian Kanigan as the GNWT appointee, and our new Secretary-Treasurer. We thank Stephen Ellis (GNWT) for his work with the Board.

After the departure of our Executive Director, Brenda Macdonald, in May of 2015, the Board undertook a

recruitment process and hired John McCullum as the new Executive Director in November. John brings long experience with EMAB as the Executive Director from 2003 to 2011. EMAB's Environmental Specialist, Robin Heavens, also left in April 2015. Her replacement, Allison Rodvang, was recruited in December and started at EMAB in January 2016.

With new board members, new Executive members and new staff, EMAB is geared up to carry on with monitoring implementation of the Environmental Agreement, provide information to Affected communities and provide constructive comments and recommendations for improving environmental monitoring and management at the Diavik minesite. We are making greater efforts to communicate with the Parties and to provide useful information that they can use in their own oversight of Diavik.

This past year, much of our focus was on Diavik's water licence renewal and related follow-up. We were pleased with the WLWB's decision and the terms and conditions contained within the renewed licence. We also participated in reviewing Diavik's request to amend the terms of the Total Suspended Solids

limits in the new licence and look forward to the WLWB decision. We also reviewed a number of other important reports related to aquatic effects and effects on wildlife.

Board members visited the minesite in October 2015 to observe current activities and status of the main parts of the mine. Staff also visited the mine in March 2016. We believe it is important to see what is going on with our own eyes as important background for our reviews and decisions.

We expect next year to be a busy one with a strong focus on closure components, as well as the re-design of the aquatic effects monitoring program.

We continue to welcome input from the Parties about EMAB's role and activities and look forward to hearing from you and working with you to protect the environment



Arnold Enge, Chair

The Environmental Monitoring Advisory Board is an independent body that plays an important role in the monitoring of the Diavik Mine.

It is the mandate of this Board to review all Diavik's environmental monitoring programs, plans and activities.

WHAT HAVE WE DONE THIS YEAR?



EMAB Board Members, Arnold Enge and Jack Kaniak with Diavik Employee

EMAB works with the people of the Affected Communities to help protect the environment around the Diavik Mine.

This is a summary of our activities in 2015-16, with more detail on the following pages. Readers can also visit our website: www.emab.ca.

GOVERNANCE: Since 2014 the Board decided to take a more active role in the Oversight & Management area. This means EMAB now focuses more on

reviewing Diavik Reports that relate to our priority areas. We use the results of those reviews to develop comments and recommendations that are submitted to the WLWB and Diavik to help inform decision making. We also make sure to provide these reviews and comments to the Parties for their information and use.

COMMUNITY INVOLVEMENT: EMAB did not hold any community update meetings in 2015-16. EMAB is now fully staffed and looks

forward to providing community updates in 2016-17.

BUDGET: As a result of EMAB's reduced budget, EMAB's board activities were cut back this year.

OPERATIONS: The Environmental Specialist left at the end of April 2015 and the Executive Director left at the end of May 2015. The Board maintained essential operations until a new Executive Director, John McCullum, was hired in November 2015. Allison Rodvang was hired in January 2016 as the new Environmental Specialist.

REVIEWING REPORTS: In 2015-16 EMAB received 14 reports from Diavik and did detailed reviews of six. These reports are required by the water licence, fisheries authorizations and the Environmental Agreement. EMAB focuses on reports that are in our priority areas (water, air, wildlife, closure and TK/IQ).

BOARD MEETINGS: The Board met 7 times in 2015-16; six face-to-face meetings and one conference call. Several board members visited the Diavik minesite in the fall.

EMAB is pleased to welcome two new board members. Jack Kaniak now represents KIA and Julian Kanigan replaced Stephen Ellis for the GNWT.

WHAT DO WE DO?

- Watch over the environment at Lac de Gras, especially around the Diavik Mine
- Independent review of regulatory and management reports and plans by EMAB staff and expert consultants

- Provide and receive information from the affected communities through community visits and our Aboriginal Party board members
- Assess and recommend on Diavik's use of Traditional Knowledge / Inuit Qaujimajatuqangit
- Provide information to the public through our website, public registry, annual report and other publications



WHO ARE WE?

There are 8 parties to the Environmental Agreement. Each party appoints a member to the Board.

Arnold Enge,
Chair
North Slave Métis Alliance

Charlie Catholique,
Vice Chair
Lutsel K'e Dene First Nation

Julian Kanigan,
Secretary/Treasurer
Government of the Northwest Territories



Gord Macdonald
Diavik Diamond Mine Inc.



Napoleon Mackenzie
Yellowknives Dene First Nation



Jack Kaniak
Kitikmeot Inuit Association



Sean Richardson
Tłı̨chǫ Government

Vacant - Government of Canada



ENVIRONMENTAL SETTING OF DIAVIK MINE

Lac de Gras is a large lake, 60 kilometres in length, with an average width of 16 kilometres and 740 kilometres of shoreline. This lake is located roughly in the centre of the Slave Geological Province, north of the tree line, and in Canada's Southern Arctic ecozone. The area is cold and dry. Lac de Gras is the headwaters of the Coppermine River, which flows 520 kilometres north to the Arctic Ocean. Typical of Arctic lakes, it is cold with long ice-covered periods and with little food for fish and other creatures. Fish species include lake trout, Cisco, round whitefish, Arctic grayling and burbot. Lac de Gras is also near the centre of the Bathurst caribou herd range. The caribou population has declined considerably from 186,000 in 2003 to 20,000 in 2015 (GNWT). Many other animals include the Lac de Gras area in their home ranges, such as grizzly bears, wolves, wolverines, smaller mammals, migratory birds and waterfowl.



Windfarm at Diavik

DIAVIK NOW (courtesy of Diavik)

In 2015, Diavik received national recognition for wildlife and waste rock research. The windfarm continues to deliver renewable energy as planned, providing the mine with 11 per cent of its power needs reducing reliance on diesel and lowering the site's carbon footprint. For the year, Diavik produced 6.4 million carats of rough diamonds, including its largest rough gem-quality diamond ever recovered – the 187.7 carat Diavik Foxfire. Over the year, the mine's geology team added 2.8 million tonnes to reserves more than offsetting the 2.1 million tonnes mined in 2015. As a result, Diavik now aims for consistent production past 2023. The mine's water licence, which covers an eight-year term, was renewed in 2015. Currently, Diavik is an all underground mine producing rough diamonds from the A154 South, A154 North, and A418 kimberlite orebodies. Work continues to develop a fourth orebody, A21, located south of existing operations. The \$US 350 million development, which includes a rockfill water retention structure build into the waters of Lac de Gras, is on budget and on schedule with first ore production expected in 2018. A21 is not expected to extend mine life, but will offset decreasing underground output, ensuring a continuation of existing production levels.

INVOLVING AND SUPPORTING COMMUNITIES

EMAB Photo



EMAB workshop

With the many changes that took place regarding the Environmental Agreement and at EMAB, over the last year, EMAB has been working to improve our support for communities.

As always, EMAB board members appointed by Aboriginal Parties act as a link between the board and the communities. Board members update community members on EMAB activities and bring back any community concerns for board discussion.

EMAB has also made it a policy to ensure that all EMAB official documents and submissions related to requirements under



EMAB workshop

the Diavik water licence or the Environmental Agreement are provided to the Parties along with a summary of EMAB's key concerns and recommendations. We include the land/environment managers for each of the Aboriginal Parties. Where work is done by a technical



EMAB workshop

reviewer we require that a plain language summary be provided as part of the report.



TRADITIONAL KNOWLEDGE / INUIT QAUJIMAJATUQANGIT

The use of Traditional Knowledge / Inuit Qaujimajatuqangit (TK/IQ) in environmental management and monitoring at the Diavik Mine has been an ongoing point of discussion between EMAB and Diavik. The meaningful involvement of Aboriginal people in environmental monitoring program design, as well as the inclusion of TK/IQ has been an EMAB priority since EMAB's creation. EMAB has tried various ways to encourage Diavik to take action on this EA commitment.

EMAB is pleased to see that Diavik has made efforts to include TK/IQ in closure planning through the Panel.

In 2011, EMAB became more actively involved in bringing TK/IQ holders together as a TK Panel, to address issues such as caribou and closure planning.



Then in 2013, Diavik began to take a greater role in facilitating the TK Panel, with EMAB assessing the results of the work and Diavik's response. EMAB also made recommendations to Diavik on ways to work more effectively with the panel.

The Panel's recommendations and Diavik's responses, are included as part of Diavik's closure planning reports and can be found on the EMAB website: www.emab.ca

OVERSIGHT AND MONITORING

JK Photo



Board members on a Diavik site tour

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EMAB monitors Diavik and regulators to make sure they are doing a good job protecting the environment around the Diavik Mine and are keeping the promises they made in the Environmental Agreement.

Most of EMAB's focus is on Diavik's environmental monitoring programs and reports, and on the way the regulators handle them. When EMAB notes concerns coming from regulators we take that as a signal that we need to know more about the issues. These issues are outlined in the following pages.

Each year we do our own reviews of the Wildlife Monitoring Program report and the Aquatic Effects Monitoring Program report. We also review reports on Air Quality and on Closure and Reclamation. Occasionally we review other reports.

WHO ARE THE REGULATORS AND MANAGERS?

- **Wek'èezhìi Land and Water Board (WLWB)** is responsible for the Diavik water licence and the technical review of all documents required under the licence. The WLWB is a regional panel under the Mackenzie Valley Land and Water Board.
- **Canada**
 - **Department of Fisheries and Oceans (DFO)** reviews some of the reports submitted under the water licence and all the reports submitted under the fisheries authorizations.
 - **Environment and Climate Change Canada (ECCC)** reviews the reports required by the water licence focusing on water and air quality. EC officers inspect compliance with federal environmental regulations and permits, such as Fisheries Authorizations.
- **GNWT**
 - **Department of Lands** reviews reports required by the water licence and the land leases. Lands

has an inspector assigned to Diavik. This inspector updates the Board regularly to keep us aware of what is happening at the site. The inspector is also responsible for ensuring Diavik meets the terms of its water licence and land leases.

- › **Environment and Natural Resources (ENR)**, has regulatory responsibility for wildlife, including monitoring under the *Wildlife Act*. It also proposes better ways to monitor effects of

Diavik on wildlife. ENR also has responsibility for environmental protection, including air and water quality, and provides detailed reviews of reports in these areas.

- **Wek'èezhii Renewable Resources Board (WRRB)** is a wildlife co-management authority established by the Tłı̨chǫ Agreement. The WRRB is responsible for managing wildlife and wildlife habitat (forests, plants and protected areas) in the Wek'èezhii area.

REPORTS RECEIVED FOR REVIEW

Report Name	Date Received	Regulatory Instrument
Type 'A' Water Licence (Annual, 2014)	21 March 2015	Water Licence
Seepage Report (Annual, 2014)	31 March 2015	Water Licence
Wildlife Monitoring Program (Annual) 2014: includes Waste Management Plan, Lichen and Permanent Vegetation Plot Monitoring Programs	31 March 2015	Environmental Agreement
Water Management Plan (ver 14)	16 Dec 2015	Water Licence
Waste Management Plan Version 1.1	19 Jan 2016	Water Licence
2011 to 2013 Aquatic Effects Re-evaluation Report Version 3.1	1 Feb 2016	Water Licence
Consolidated Report: North Inlet Sludge Management Report and North Inlet Hydrocarbon Investigation Report	26 Feb 2016	Water Licence
2015 Annual Interim Closure and Reclamation Plan Progress Report	31 March 2016	Water Licence
Risk Based Closure Criteria Report	17 March 2016	Water Licence
Type 'A' Water Licence (Annual, 2015)	30 March 2016	Water Licence
Management Plans (Annual, Various) 2015: Hazardous Materials (ver 19), Operational Phase Contingency Plan (ver 20)	30 March 2016	Water Licence
Seepage Report (Annual, 2015)	31 March 2016	Water Licence
Waste Rock Management Plan (ver 7)	31 March 2016	Water Licence
Wildlife Monitoring Program (Annual) 2015: includes Waste Management Plan	31 March 2016	Environmental Agreement



IAVIK WATER LICENCE RENEWAL

The Wek'èezhii Land and Water Board (WLWB) is in charge of issuing a water licence to Diavik. The licence is a legal requirement that regulates many important activities at the mine that take water from Lac De Gras and release waste around the mine. The previous licence, W2007L2-0003, lasted from 2007 to October of 2015.

Diavik submitted an application to renew their Water Licence on January 16, 2015. Diavik wanted to renew their licence for 15 years so they could line up closure and reclamation activities with post closure monitoring. EMAB had Byers Environmental Studies (BES) do a technical review of the application.

On May 28, 2015, the WLWB held a Public Hearing in the community of Behchokò. EMAB Chair Sean Richardson and Tim Byers (BES) attended and intervened on behalf of EMAB. GNWT-ENR, GNWT-Lands, North Slave Metis Alliance, LKDFN, and Diavik all submitted written interventions to the WLWB. Environment and Climate Change Canada participated as an observer. Diavik gave a written response to all the interventions.

After the public hearing, the WLWB considered what all intervenors said when making their final decision. The WLWB did not find there was enough evidence to approve a 15-year term. The new Water Licence came into effect on October 19, 2015, and is good until October 18, 2023.

EMAB's intervention recommended changes to some terms of the Diavik Water Licence, W2007L2-003 and raised a number of concerns:

- hydrocarbon contamination in the North Inlet and negative effects on benthic invertebrates and zooplankton communities.
- Stability of the North Inlet East Dike post-closure.
- Need for monitoring impact of air quality on aquatic life and lakebed sediments.
- Doubling of phosphorus loadings to Lac de Gras comparing May 2013 to May of any previous year.
- How representative current eutrophication indicators are.
- Non-lethal monitoring of slimy sculpin annually as an early warning indicator of potential issues.

EMAB was generally pleased with the conditions in the new licence. We will continue to pursue our concerns regarding ways to reduce nutrient enrichment.



Dredging A21



Filling in A21 dike (background), A21 turbidity barrier (front)

TSS AMENDMENT APPLICATION

Diavik submitted a request to the WLWB on October 20, 2015, to change the limit of Total Suspended Solids (TSS) allowed in their Water Licence under Part H, item 31. They argued that the level was too restrictive and that the requested level would continue to protect the aquatic ecosystem while preventing delays in construction of the A21 dike.

Diavik requested changing the TSS grab limit from 25 mg/L to a moving 30-day average limit of 25mg/L. They stated that this level would not cause any death of fish, or effects on growth or hatching, or long term effects on feeding. They also argued that dike construction is affected by many conditions with limited control so a time averaged TSS limit is more appropriate.

EMAB had North-South Consultants (N-S) review the proposal. Based on the N-S review, EMAB accepted adding a moving average to the TSS limit. The Board proposed a 25mg/L limit for TSS over a **15-day** moving average would be more protective of fish.

On February 12, 2016, the WLWB held a public hearing. Diavik, ECCC, DFO, and the GNWT intervened. EMAB decided not to intervene at the hearing based on Diavik's response to our recommendation.

The WLWB is expected to make its final decision on this amendment application between June and July of 2016.



Extra weights for A21 turbidity blanket

THE ENVIRONMENTAL AGREEMENT AND THE WATER LICENCE

The water licence and the Environmental Assessment both contain requirements for the AEMP. Most of the water licence requirements are more detailed than those in the Environmental Assessment. The WLWB cannot make Diavik meet any of the Environmental Assessment commitments unless they are also in the water licence. In the Environmental Assessment, Diavik said it would do its best to involve Aboriginal People in designing monitoring programs, and that all its monitoring programs would include activities to:

- consider TK/IQ;
- establish or confirm thresholds or early warning signs;
- trigger adaptive mitigation measures;
- provide ways to involve each of the Aboriginal Peoples in the monitoring programs; and
- provide training opportunities for each of the Aboriginal Peoples.

EMAB is working with Diavik to help it meet its commitments as described throughout this annual report.

Diavik Photo

AQUATIC EFFECTS MONITORING PROGRAM (AEMP)

1. REFERENCE CONDITIONS IN LAC DE GRAS

In EMAB's review of the 2011-13 AEMP Summary Report, the Board recommended that Diavik address the issues related to assessing Diavik-related effects on Lac de Gras as the background data was changing. The AEMP design is based on having reference areas in Lac de Gras (i.e., areas that are not affected by mining activity). These reference areas are critical in determining if the mine is having an effect on the lake. Diavik compares areas close to the mine, known as "near-field" sites, to the reference areas to see what the impacts of the mine are on Lac de Gras. Water quality measurements show that the reference areas have been affected by effluent released by Diavik since 2007. They may also be affected by Ekati Mine's effluent which flows through a series of small lakes into Lac de Gras. So the reference areas no longer represent the background conditions in Lac de Gras.

To address this issue, the WLWB directed Diavik to submit a Reference Conditions Report by 15 April, 2015. The WLWB directed Diavik to re-submit the 2011-2013 AEMP Summary Report and the 2014 AEMP Annual Report after the Reference Conditions Report was approved, and to use the Reference Conditions Report as the basis for the analysis. WLWB also directed Diavik to hold off on submitting the 2015 AEMP report until the Reference Conditions Report was approved.

Based on WLWB direction, Diavik pulled together data they had from 2007-2010 that best represented the natural conditions of Lac de Gras and submitted an



Elders bringing in fishing nets

initial Reference Conditions Report. ECCC submitted comments on the report; DFO and ENR indicated they did not have comments. EMAB did not submit comments. The WLWB did an extensive review of the report and sent it back for revision. ECCC submitted comments on the revised report; DFO and ENR indicated they did not have comments. EMAB did not submit comments. Version 1.1 of the Reference Conditions Report was approved by the WLWB in November 2015.

Now, instead of comparing new data to the reference areas, data are compared to the conditions in Lac de Gras between 2007-2010 as set out in the Reference Conditions Report.

2. 2011 TO 2013 AQUATIC EFFECTS RE-EVALUATION REPORT VER. 3.1

Diavik re-submitted Version 3.1 of the 2011 to 2013 Aquatic Effects Re-evaluation Report on February 1, 2016, following approval of the Reference Conditions Report, as directed by the WLWB. The current Re-evaluation Report includes a reassessment of all data against the Reference Conditions Report, Version 1.1.

EMAB had North-South Consultants review the report. Overall, EMAB found the quality of this report much improved from the original version. ENR also submitted comments on the report. DFO and ECCC did not submit comments.

A complete record of EMAB's recommendations on the report can be found in the Recommendations Table on p. 55. Some highlights of EMAB's comments and recommendations are:

2.1 EUTROPHICATION

Lac de Gras is ultra-oligotrophic meaning the water is very clear and has low nutrient levels. The



Diavik Photo

Environmental Assessment predicted increased nutrient levels from the Diavik Mine would affect up to 20% of Lac de Gras.

Diavik monitors chlorophyll *a* and phosphorus loadings as indicators of eutrophication. Phosphorus levels have not gone over this prediction during open water, although we note that in the 2013 AEMP report the extent of eutrophication as measured by chlorophyll *a* was almost 25%, well above the maximum 20% predicted in the Environmental Assessment. Nutrient levels have gone over this prediction two times in ice cover (2008 and 2013).

EMAB is concerned about the potential for a mine-caused shift in the trophic status of Lac de Gras given the extent of eutrophication to date, and will continue to pay close attention to the nutrient enrichment trend.

RECOMMENDATION: provide additional context (e.g., operation of second diffuser, move to underground mining, etc.) to the Re-Evaluation Report to better describe the increase in annual loading rate of phosphorus to Lac de Gras.



Ulu with baked Lake Trout

2.2 FISH HEALTH

In 2013, Diavik found that Slimy Sculpin close to the mine were smaller and had smaller reproductive organs (called gonads) than fish in reference areas. This result is different from the last two fish surveys in 2007 and 2010. Over the years Diavik has also found that Slimy Sculpin near the mine have higher than normal concentrations of bismuth, lead, strontium and uranium in their flesh. EMAB will monitor Slimy Sculpins' response to the mine during the next fish surveys in 2016 to see if these trends continue.

Diavik has run a Fish Palatability Camp near the mine since 2003. Elders and scientists team up and analyze the health of fish in Lac de Gras by doing taste testing and tissue sampling. The Re-Evaluation Report says fish quality hasn't changed because elders at the Camp say the fish taste the same as they used to. EMAB objected

to this statement because some changes in fish health cannot be tasted or detected this way. For example, an increase in mercury would not alter the taste or texture of fish.

The fish palatability studies are meant to assess whether fish taste and texture has been tainted by the mine. The fish tissue analysis assesses whether metals or other contaminants are found in fish tissue. The results of both types of studies give an assessment of fish health.

RECOMMENDATION: As presently written the term fish quality creates confusion about the meaning of the results of each section, and about the actual CSR predictions. Sections 10.3.3, 12.3.1 and 12.4 should be rewritten to reflect the CSR predictions.

RECOMMENDATION: Compare fish tissue data to other appropriate thresholds (e.g., Canadian Food Inspection Agency).

2.3 MERCURY IN LAKE TROUT

EMAB disagreed with Diavik's conclusion that because the pattern of increasing mercury in Lake Trout is similar in both Lac de Gras and Lac du Sauvage (and concentrations in a given year are also similar), there is no link to the mine and therefore the change over time in the fish in Lac de Gras is not an effect caused by Diavik.

RECOMMENDATION: This conclusion of no link between the mine and increasing mercury in Lake Trout would be better supported with fish movement data that demonstrates minimal or no movement between the two lakes and/or a description of how mercury has changed in fish in other northern lakes over the same amount of time that the mine has been operating.



Lake Trout

EMAB Photo



Elder Madelaine Drybones
tasting Lake Trout

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2.4 TRADITIONAL KNOWLEDGE

EMAB is pleased with the work being done by the Traditional Knowledge Panel with Diavik's support. EMAB will be investigating possible activities to expand the Traditional Knowledge component of the AEMP and may make recommendations about this in future.

3. 2014 AEMP ANNUAL REPORT

Diavik submitted the 2014 AEMP Annual Report on February 1, 2016, however the WLWB waited to circulate it to reviewers due to the large number of Diavik reports and plans currently under review. The 2015 AEMP is due September 15, 2016. EMAB plans to review both these documents.

4. AEMP DESIGN PLAN, VERSION 4.0

Diavik is required to submit a revised AEMP Design Plan in 2016.

The WLWB directed Diavik and Dominion Diamonds Ekati Corporation to work together on the 2017-2019 AEMP Design Plan, Version 4.0. This plan will be designed to address cumulative effects from the two mines on Lac de Gras, as well as the effects caused by Diavik alone. It must be submitted to the WLWB for approval by June 30, 2016.

SPILL DATABASE – 2015-16 (GNWT)

Spill No.	Date	Site Description	Commodity	Quantity	Source
2015124	2015-04-01	Diavik Diamond Mine	Oil - Engine	2 L	Truck
2015131	2015-04-05	Diavik Diamond Mine	Hydraulic Oil	2 L	Truck
2015174	2015-05-02	Diavik Diamond Mine	Sewage	100 L	Storage tank less than 4000 L
2015180	2015-05-06	Diavik Diamond Mine - A21 Drill Site	Engine/Hydraulic Oil	40 L	Truck
2015184	2015-05-07	Diavik Diamond Mine - A21 Drill Site	Drill Cuttings (lake water & granite)	200 L	Storage tank less than 4000 L
2015210	2015-05-20	Diavik Diamond Mine	Sewage	300 L	Sewage lagoon
2015262	2015-06-19	Diavik Diamond Mine	Hydraulic Oil	180 L	Other transportation
2015276	2015-06-25	Diavik Diamond Mine	Hydraulic Oil	120 L	Instrument
2015301	2015-07-15	Diavik Diamond Mine	Gasoline	0 L	Other transportation
2015307	2015-07-17	Diavik Diamond Mine	Engine Oil	200 L	Truck
2015322	2015-07-30	Diavik Diamond Mine	Process Water	1000 L	Pipe or line
2015404	2015-09-24	Diavik Diamond Mine	Gasoline	1 L	Marine vessel
2015442	2015-10-22	Diavik Diamond Mine	Hydraulic Oil	1600 L	Instrument
2015486	2015-12-01	Diavik Diamond Mine	Hydraulic Oil	200 L	Instrument
2015496	2015-12-10	Diavik Diamond Mine	Hydraulic Oil	200 L	Instrument
2016003	2016-01-03	Diavik Diamond Mine	Hydraulic Oil	7500 L	Other transportation
2016009	2016-01-09	Diavik Diamond Mine	Hydraulic Oil	240 L	Instrument
2016036	2016-02-08	Diavik Diamond Mine, 64 31N 110 20W	Glycol	250 L	Storage tank less than 4000 L
2016062	2016-03-01	Diavik Diamond Mine, 64 31N 110 20W	Hydraulic Oil	450 L	Other transportation
2016101	2016-03-31	Diavik Diamond Mine	Hydraulic Oil	423 L	Other transportation
2016102	2016-03-31	Diavik Diamond Mine	Hydraulic Oil	450 L	Other transportation
2016105	2016-04-01	Diavik Diamond Mine	Hydraulic oil	112 L	Other transportation
2016104	2016-04-01	Diavik Diamond Mine	Hydraulic Oil	112 L	Other transportation

TOTAL SPILLS ON THIS REPORT: 23

TOTAL SPILLS ON THIS REPORT IS 23 COMPARED TO 18 IN 2014-2015.



Diavik employees checking a dustfall gauge

ENVIRONMENTAL AIR QUALITY MONITORING PROGRAM (EAQMP)

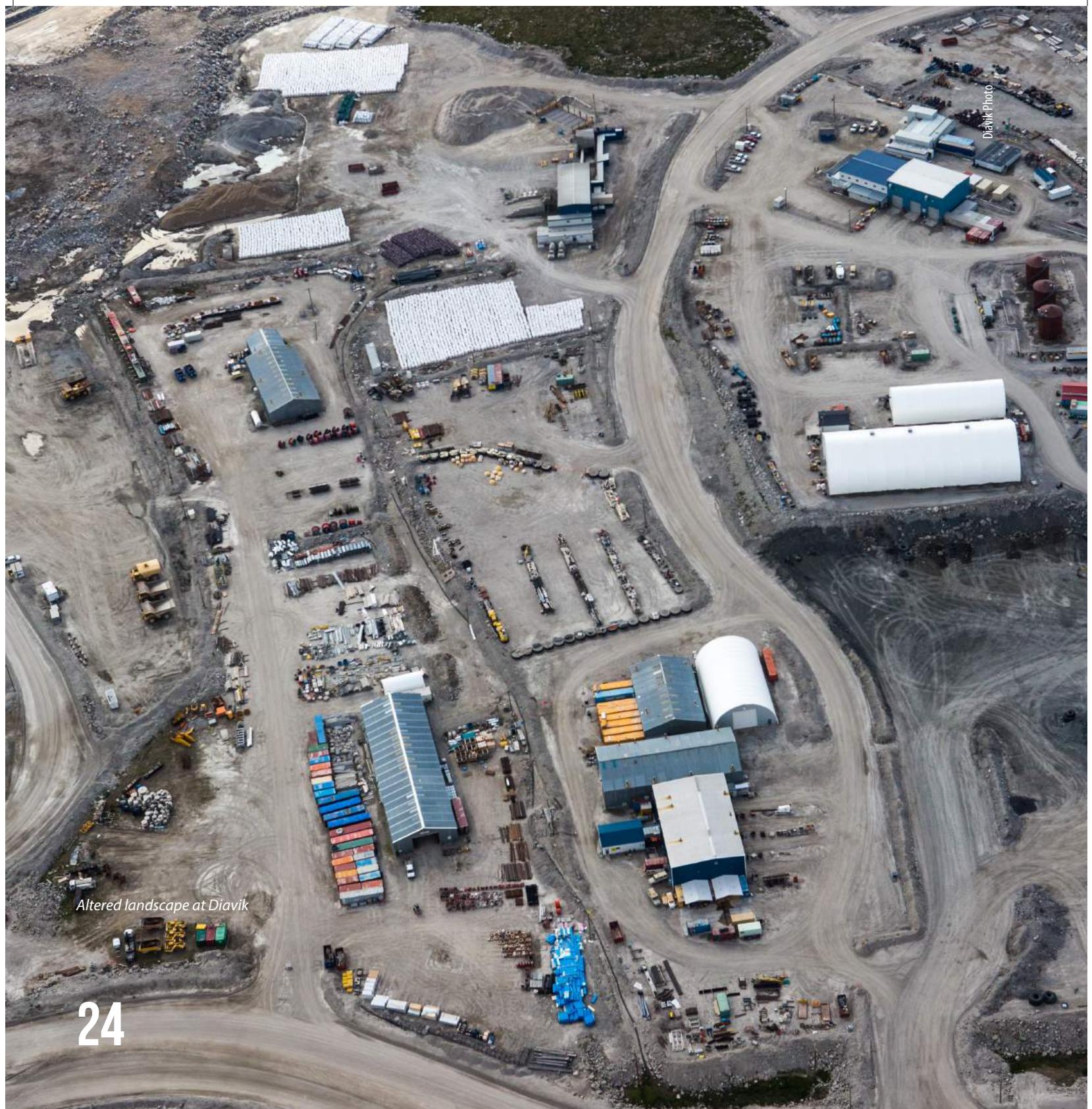
In Diavik's Environmental Air Quality Monitoring Program it committed to submit a report on the program results by June 30 of each year as part of its obligations under the Environmental Agreement.

Diavik did not submit the EAQMP report for 2014 during the 2015-16 year, nor request a delay in submitting the report. EMAB raised this issue with Diavik by letter and at board meetings, requesting an explanation. Diavik proposed submitting a consolidated EAQMP report for 2014 and 2015 by May 1, 2016, and EMAB accepted this.



Diavik Photo

EMAB Photo



INTERIM CLOSURE AND RECLAMATION PLAN

Diamond mining produces large amounts of waste and disturbs the landscape: roads, gravel pits, concrete pads, buildings and processed kimberlite containment facilities. Interim closure and reclamation is the process Diavik will follow to reclaim the land as close to its original state as possible.

Diavik works with a Traditional Knowledge Panel to review the proposed closure planning and receive input. The Panel's recommendations can be found on the EMAB website: www.emab.ca.

1. ICRP PROGRESS REPORT

Diavik is required to provide an ICRP Progress Report to the WLWB every year. The purpose of the Progress Report is to keep all parties informed about closure planning at the minesite and to make sure Diavik remains on schedule.

The Progress Report was due Dec 31, 2015, but was delayed to January. The WLWB determined the original report did not conform with its direction. Diavik submitted a revised version on March 31, 2016. This report is normally circulated for comment, not approval. However, the revised version included three important parts that require the WLWB's approval:

- The North Country Rock Pile Final Closure Plan
- The A21 Pit Interim Closure and Reclamation Plan
- The revised RECLAIM security deposit estimate

EMAB had Arcadis Canada review the documents listed above, including site specific risk-based closure criteria that Diavik developed and applied to the North Country Rock Pile (NCRP) final closure plan. EMAB also asked Slater Environmental Consulting to review the

effectiveness of Diavik's proposed closure criteria to ensure that the closure objectives are met, and apply these findings to the NCRP final closure plan. ECCC, GNWT-ENR, GNWT-Lands, LKDFN, NSMA, WLWB, and YKDFN also made comments on the 2015 ICRP.

A complete record of EMAB's recommendations on the ICRP Progress report can be found in the Recommendations Table on p. 56. Highlights of EMAB's comments and recommendations are included below.

Arcadis Canada noted the research on closure and the work completed at Diavik is world class. They noted a number of areas that need to be addressed:

1.1 FUNDING AND RESPONSIBILITY FOR LONG-TERM CARE AND MONITORING

Diavik has budgeted for seven years of maintenance and monitoring to make sure all systems work as planned. Some areas that need monitoring after seven years are:

1.1.1 PROCESSED KIMBERLITE (PK) FACILITY

The PK facility has a dam that holds tailings, and a spillway for floods. Both of these structures require long-term care and maintenance.



RECOMMENDATION: Diavik determine what (if any) monitoring/action is appropriate over the long-term to ensure failure of the dam and/or spillway does not occur.

1.1.2 COVER ON NCRP

The design engineer has identified a number of credible failure modes– see NCRP Final Closure Plan, section 2.5 pg 29.

LONG TERM RESPONSIBILITY AND LIABILITY FOR CLOSED / ABANDONED MINES

EMAB notes the laws are not clear who is in charge of long-term care and maintenance at closed / abandoned minesites in the NWT and who covers the costs. It is EMAB's understanding that once the government is satisfied with the minesite they release the company from liability / legal responsibility and return the security deposit. Any failures at the mine that happen after the deposit is returned will be fixed and paid for by the government and taxpayer.

RECOMMENDATION: a mechanism to ensure long-term care of mine waste facilities be investigated by the appropriate jurisdictions with the objective of identifying responsibility for long-term monitoring, care and maintenance of such facilities, and associated costs.

1.2 REVEGETATION

While Diavik has done a lot of research on revegetation, the reclamation estimates do not include any funds for revegetation.



RECOMMENDATION: Diavik should provide a clear rationale for where and how they will adopt the site-wide vegetation plans, and provide costs for revegetation in the RECLAIM financial security estimate.

1.3 FINE PK MANAGEMENT

Studies have shown that very fine PK may be toxic to some aquatic organisms.

RECOMMENDATION: Diavik provide an evaluation of findings regarding extra fine processed kimberlite tailings by the Toxicology Center at the University of Saskatchewan and what this means for closure of the site.

2. NORTH COUNTRY ROCK PILE FINAL CLOSURE PLAN

The North Country Rock Pile (NCRP) holds waste rock from A154 and A418 kimberlite pipes. The NCRP is very tall and steep and covers a large area on the ground. Diavik wants to begin closure of the NCRP in 2017 and finish in 2024.



Slope at the top of North Country Rock Pile



North Country Rock Pile

Diavik submitted a NCRP Final Closure Plan for public review and approval by the WLWB as part of the 2015 ICRP Progress Report.

EMAB made detailed comments and recommendations on the NCRP final closure plan, with highlights presented below. ECCC, GNWT-ENR, GNWT-Lands,

LKDFN, NSMA, WLWB, and YKDFN also made comments on the 2015 ICRP.

A more comprehensive record of EMAB's recommendations on the ICRP Progress report can be found in the Recommendations Table on p. 56. Some highlights of EMAB's comments and recommendations are:

2.1 COMMUNITY ENGAGEMENT

EMAB has supported Diavik's work with the TK Panel on closure and appreciates the Panel's input. However the Panel members have stated they do not represent the communities that appoint them. EMAB is concerned that the level of actual community engagement on the NCRP final closure plan is unclear and likely not satisfactory. The section on community engagement for the plan is very brief and general about the input received. There are no records of

engagement provided, as required by the Mackenzie Valley Land and Water Board *Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories and Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits*.

EMAB has made detailed recommendations to Diavik to make community engagement on closure effective, going back to ICRP version 3.1. Diavik has not addressed these past recommendations.

RECOMMENDATION: Diavik must demonstrate that it has engaged Affected Communities on the NCRP Final Closure Plan in a meaningful way, that it has documented concerns and recommendations made through these engagements, and show how its plan addresses each of the concerns and recommendations, or provide a rationale for why it has not accepted them.

RECOMMENDATION: Diavik should identify its community engagement plan with respect to closure, for each of the Affected Communities.

2.2 CLOSURE CRITERIA

The Mackenzie Valley Land and Water Board *Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories* describe how to close and reclaim sites in the NWT using Closure Objectives and Closure Criteria. Diavik developed Closure Objectives and Closure Criteria for the NCRP.

Closure objectives are the end goals of closure activities. They must be measurable, achievable, and allow for the development of closure criteria.

Closure criteria are developed for each closure objective. They are used as a ‘checklist’ to make sure closure objectives are met. Closure criteria must be meaningful, measurable, and achievable to ensure minesites are left in a safe, desirable state for people and wildlife. Companies can choose to develop site-specific criteria or use generic guidelines.

2.2.1 SITE-WIDE AND SPECIFIC CRITERIA

Diavik developed nine site-wide closure objectives and three site-specific closure objectives for the NCRP.

Arcadis noted some of the closure criteria aren’t clear and don’t relate to their closure objective. They focused on two criteria that make sure the NCRP fits in with the surrounding area.

RECOMMENDATION: Additional discussion is required to improve the design to address objectives W2 and SW9 (or to change the objectives and criteria).

2.2.2 SITE-SPECIFIC RISK-BASED CLOSURE CRITERIA

EMAB also asked Arcadis to review the site-specific risk-based closure criteria used for the NCRP.

The site-specific risk-based closure criteria (SSRBCC) did not identify all contaminants of concern and did not consider some receptors properly. Diavik chose the less protective closure criteria for human health effects from surface runoff / seepage in a number of cases – this is not in line with SSRBCC methods. Diavik did not use the SSRBCC developed for protection of aquatic life, and instead used Metal Mining Effluent Regulation values which are not protective of the aquatic environment.

2.2.3 GENERAL REVIEW OF CLOSURE CRITERIA

EMAB also asked Slater Environmental Consulting (SEC) to review how well the closure criteria Diavik developed would work to measure whether the closure objectives were met or not. SEC found that a number of the criteria were not good at measuring whether the objective was met.

- Lack of adaptive management planning for wildlife and water quality
- Conformance with design as a criterion instead of satisfactory performance supported by ongoing monitoring
- Some criteria originally proposed for the NCRP have been left out of the final plan

RECOMMENDATION: Diavik should develop closure criteria for the NCRP that include effective indicators and thresholds for which performance can be measured and verified. Diavik should address the flaws in development of SSRBCC used in the NCRP plan and in the approaches used to select criteria for the protection of human, wildlife and aquatic health.

2.3 CARIBOU RAMPS

Diavik plans to re-slope the sides of the NCRP to make it more stable. More gradual slopes will also make it easier for caribou and other wildlife to climb the pile. TK Panel members suggested making caribou trails through the pile and cover them with fine material. However, Diavik's construction drawings do not show caribou trails or placement of fine material.

RECOMMENDATION: Till (or coarse PK) should be included as fine cover material for the caribou ramps as was committed to in the original closure plan, requested by the TK Panel, and as contained in the 2015 RECLAIM estimate.

2.4 REVEGETATION

Diavik has not proposed any revegetation of the NCRP.

RECOMMENDATION: Diavik provide a clear rationale for its decision not to include any vegetation of any portions of the waste rock piles.

2.5 COVER

Type III waste rock can leach contaminants if it is in contact with air and water. Diavik plans to put 1.5 meters of till (scraped from lake bottom when dikes were built) capped with 3 meters of Type 1 rock on top of the pile. The cover is designed to stay frozen so water can't get into the Type III rock underneath and leach contaminants.

The cover on the waste pile may stop working as it is supposed to, such as thawing out, and need maintenance over the long-term. The NCRP design report said there were ways the cover system could fail. This shows there is a potential future need for long-term monitoring and maintenance of the cover.

RECOMMENDATION: Diavik assess the costs for institutional care and maintenance of the closed NCRP and include these costs in the financial assurance funding.

3. A21 PIT INTERIM CLOSURE AND RECLAMATION PLAN

On 19 August, 2015, the WLWB directed Diavik to submit A21 Closure and Reclamation Plan for approval. The plan must address closure of the dike area before pit development. Diavik included A21 Interim Closure and Reclamation Plan as part of the 2015 Annual ICRP Progress Report.



A21 dredging

The closure plan for A21 is largely the same as closure plans for A154 and A418. EMAB asked Arcadis to provide technical comments on the A21 ICRP.

When A21 pit is mined, there will be a lot of waste rock just like there was for A154 and A418. Diavik plans to put the rock from A21 in a separate pile called the South Country Rock and Till Storage area. However, EMAB's review found Diavik hasn't proposed where to put the rock yet. As well, financial security for reclamation of South Country Rock and Till Storage area needs to be added to the RECLAIM estimate.

RECOMMENDATION: Diavik should clarify the location planned for the South Country Rock and Till Storage areas (SCRP). Furthermore, the RECLAIM estimate should be updated to include allowances for the closure of the SCRP.

4. REVISED RECLAIM SECURITY DEPOSIT ESTIMATE

Diavik has Security Deposits held under the Water Licence, land leases and the Environmental Agreement. These security deposits are intended to support the cost of reclamation and make sure that Diavik pays the cost of care and

maintenance, permanent closure, and post-closure monitoring.

Diavik's water licence outlines how much financial security is needed for the project. The WLWB *Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories* say that the total financial security held at any time during mine life should equal the cost of reclamation left to do for land and water. This financial security estimate should be based on an outside contractor doing the reclamation and monitoring work.

EMAB monitors changes to Diavik's security deposits. This year Diavik updated their Water Licence security estimate.

EMAB asked Arcadis to review the revised RECLAIM estimate. EMAB's review of the RECLAIM estimate found the following areas to be lacking:

- Re-vegetation of the minesite
- Allowance for long-term maintenance and monitoring
- Travel routes for caribou on the North Country Rock Pile and for muskox on the PK Facility
- Allowance for closure of the A21 South Country Rock and Till Storage areas
- Clarity on cover for Type III rock in North Dam of PKC



GNWT Inspector Photo

PKC dam raise phase 6

EMAB plans to comment on these areas during the WLWB's public review process to make sure they are added to the RECLAIM estimate.

RECOMMENDATION: Diavik should address deficiencies in the RECLAIM estimate.

5. PKC NORTH DAM MODIFICATION REQUEST

On December 9th, 2015, Diavik requested approval from the WLWB to raise the height of the North Dam using Type III waste rock. The North Dam is part of the dam that surrounds the Processed Kimberlite Containment (PKC) Facility.

The PKC Facility stores ore that has already been processed to take out any diamonds. The PKC Facility is surrounded by a dam to contain the tailings and make sure the processed kimberlite does not leach potentially harmful substances to the environment.

Diavik has raised the dam six times since 2005 as the amount of processed kimberlite increased.

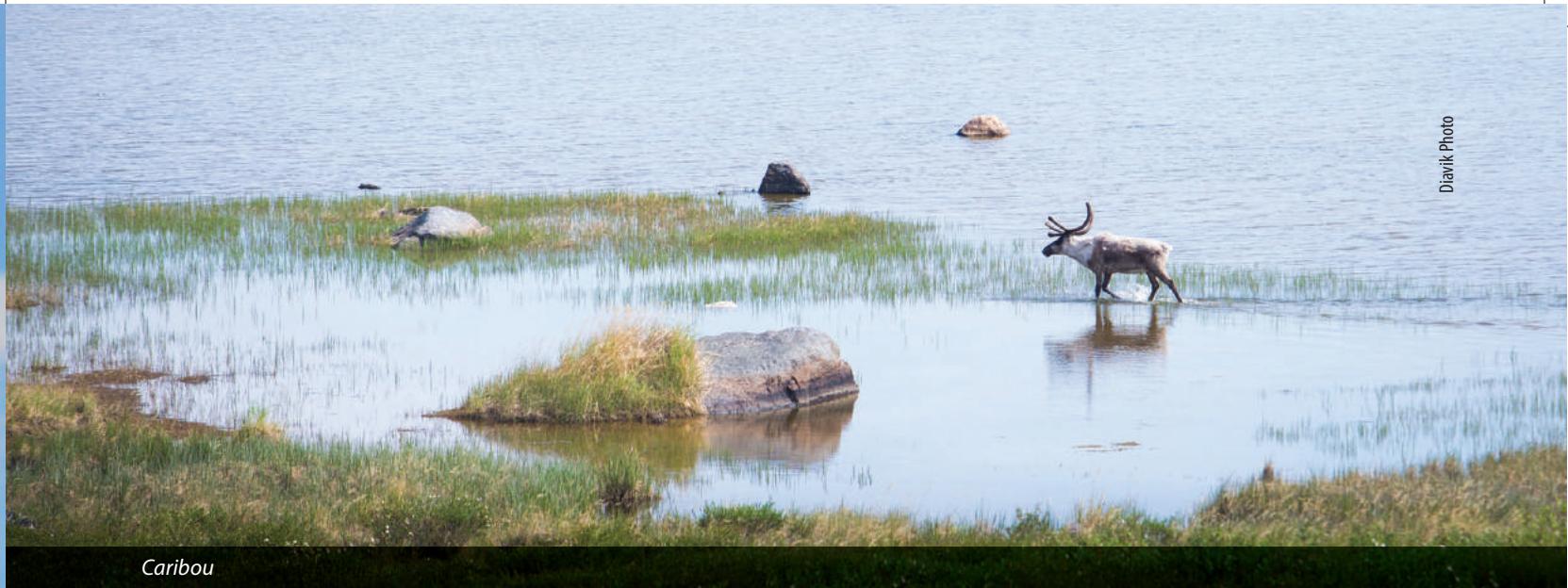
Type III waste rock is potentially acid generating, so it can cause contaminants to enter the environment.

EMAB had concerns with the modification request. EMAB asked Arcadis Canada to review the technical memo, and submitted comments and recommendations to the WLWB. EMAB was most concerned with how Type III waste rock on the North Dam would be reclaimed, and what the drainage system around the PKC Facility was, in case the Type III waste rock leached. NSMA, WLWB, GNWT-ENR, and GNWT-Lands also submitted comments on this request.

RECOMMENDATION: the modification request not be approved and the Type III rock be placed in the NCRP.



Grizzly Bear



Caribou

WILDLIFE MONITORING PROGRAM

Diavik has carried out a Wildlife Monitoring Program (WMP) every year since 2002 as part of the Environmental Agreement. The WMP studies the effects of the mine on wildlife and vegetation in the study area. (Note: The study area is 1,200km² and covers the East and West Islands, smaller islands in the northeast part of Lac de Gras, and the mainland along the southern, eastern and northern shores of Lac de Gras.)

Diavik produces a Wildlife Monitoring Report (WMR) each year as part of the WMP. This report describes the results of the studies and compares them to predictions made at the beginning of the Project.

EMAB's wildlife consultant, Management and Solutions in Environmental Science Inc. (MSES), reviewed Diavik's 2015 WMR. EMAB reviewed MSES' comments and sent them to Diavik as recommendations. EMAB was unable to determine whether ENR made comments, or plans to make comments, on the 2015 WMP report.

REVIEW OF THE 2015 WILDLIFE MONITORING REPORT

The report examines vegetation, caribou, grizzly bear, wolverine, raptors, and the Waste Transfer Area.

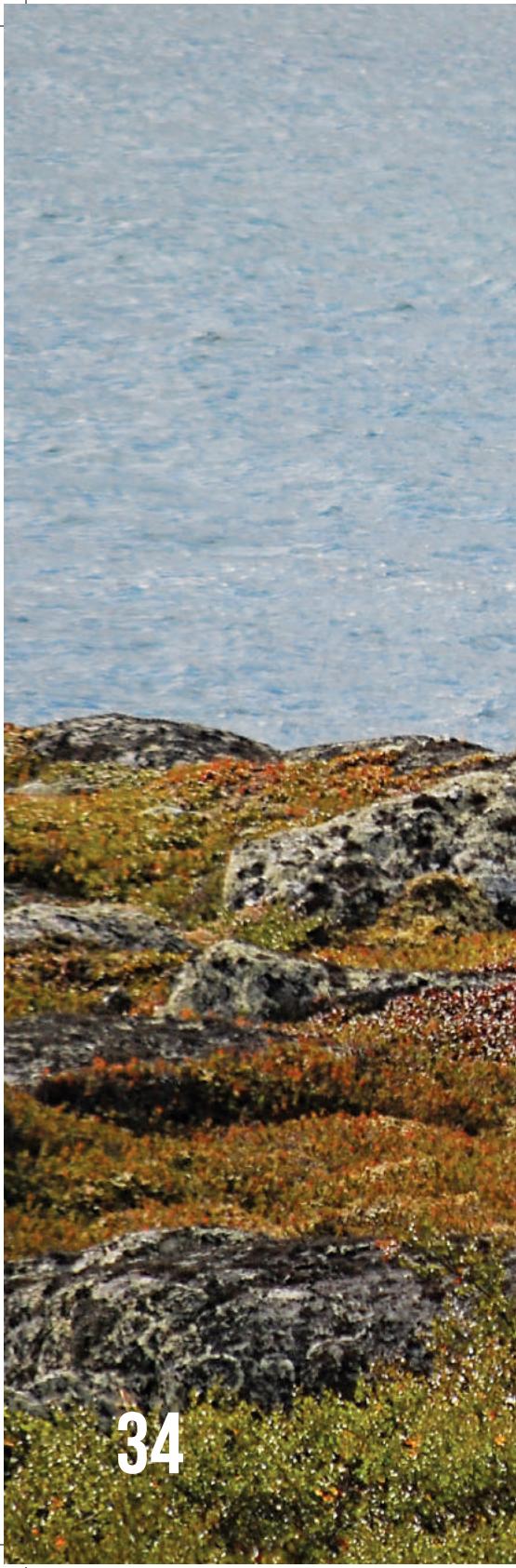
1. VEGETATION

There was a minor increase in the mine's footprint in 2015. The expansion was at the very south end of the project footprint due to A21.

2. CARIBOU

Direct summer caribou habitat loss remains at or below predicted levels.

Caribou aerial surveys have not been done since 2012. In 2013 Diavik and Ekati asked the GNWT if they could remove caribou aerial surveys from their programs. The GNWT supported this request; caribou aerial surveys were not done in 2015. EMAB agreed the suspension of surveys was reasonable, but was disappointed that the decision was made without our participation. The GNWT started a Zone of Influence Technical Task



Group that will decide under what conditions aerial surveys should resume, or if other studies would better address caribou ZOI. EMAB looks forward to the results of this Task Group.

RECOMMENDATION: Diavik should ask the ZOI Technical Task Group when they expect to provide direction regarding when or if aerial surveys should be resumed.

Diavik uses satellite collars to track caribou migration patterns. Caribou migrate north to the calving grounds in May. Normally caribou leave the calving grounds between July and October, however in 2015 caribou stayed until the end of November. This was not predicted and EMAB asked Diavik what might have caused caribou to stay at their calving grounds. Diavik suggested caribou are more sensitive to industrial activity during this time as they wait for their calves to mature.

RECOMMENDATION: Diavik should discuss whether a response action is required for this unexpected, potential effect of the mine.

Diavik and Ekati work together on ground-based behavioural surveys of caribou. Diavik is surrounded by

water so they survey caribou far away from the mine. Ekati looks at caribou close to the mine. The purpose of these surveys is to see how caribou behaviour changes with distance from the mines.

Diavik collected data on 38 caribou groups all further than 30 km away from the mine in 2015. More data needs to be collected on caribou closer to Diavik and Ekati mines before data can be analyzed.

Mine related caribou mortality is at or below predicted levels.

Diavik did not conduct road, PKC, and rock pile caribou surveys on a scheduled basis in 2015.

RECOMMENDATION: Diavik should continue on-site caribou surveys to make sure there are no caribou at the mine that can't be seen by on-site staff.

3. GRIZZLY BEAR

Grizzly bear habitat loss and mine related mortality is at or below predicted levels.

More bears have been seen on East Island over the years. This means the number of days where actions to make the bears go away has also increased. Diavik does not think the increase in number of bears seen on site has to do with the number of people on site.

RECOMMENDATION: Diavik should consider that grizzly bears may be becoming habituated and their presence on the site may be on the rise. They should provide a detailed analysis of grizzly bear data. Ekati, Snap Lake, Gahcho Kue and Diavik mines do a grizzly bear hair snagging program together to estimate grizzly bear abundance and distribution over time. The program was done in 2012 and 2013 to get baseline data to compare future results to. The results of 2012-2013 show that grizzly bear populations are stable and may be increasing. The program was not done in 2014 or 2015. How often this program is done will be decided at wildlife workshops hosted by ENR in fall of 2016.

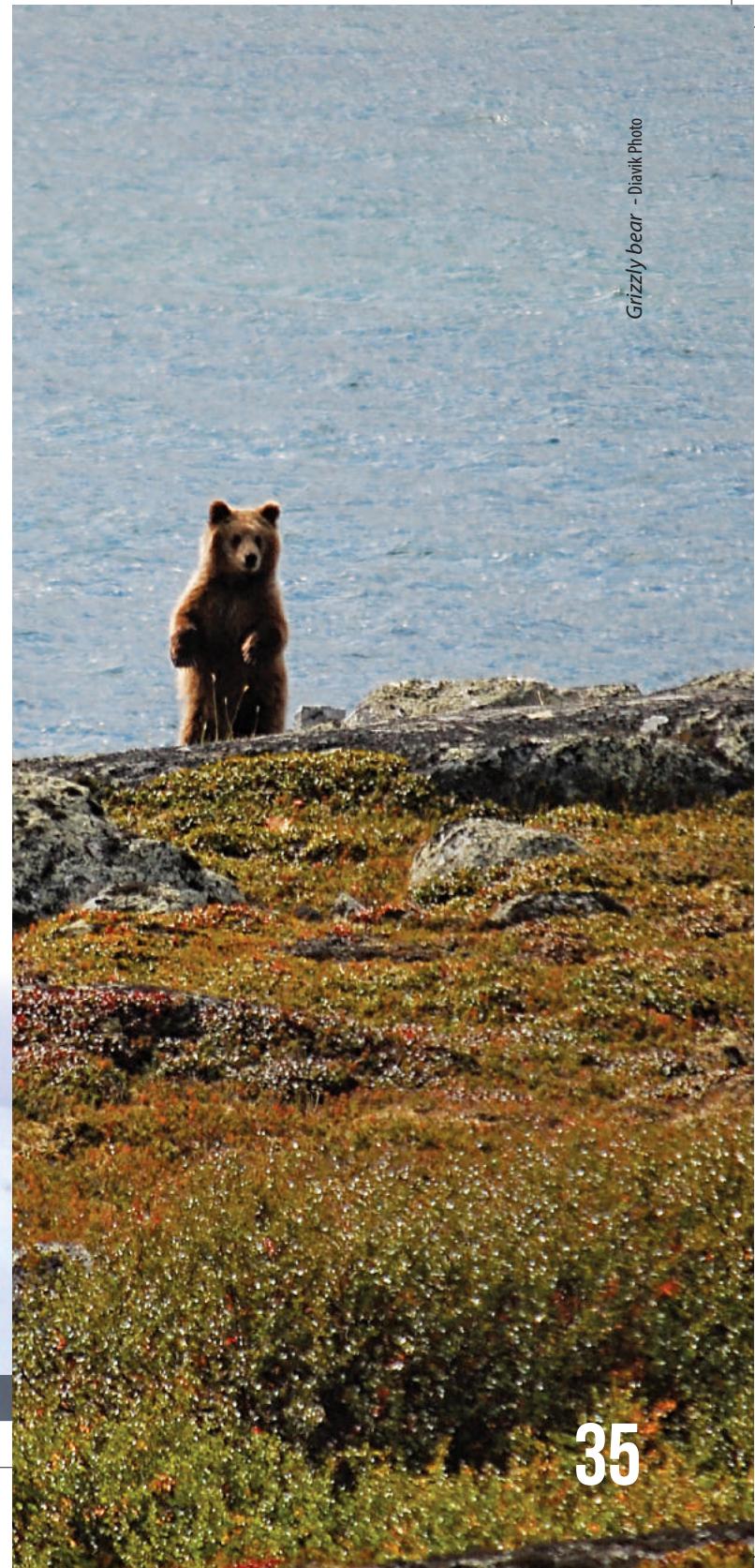
RECOMMENDATION: Diavik provide clarity on their specific plans and schedule for future grizzly bear data collection and analyses that would allow for adequate testing of the GNWT (2013) grizzly bear monitoring objective.

4. WOLVERINE

The objective of the WMP for wolverine is: *"To provide estimates of wolverine abundance and distribution in the study area over time."*



Wolverine



Wolverine presence around the mine is monitored by snow track surveys, hair-snagging, and incidental observations. Hair snagging surveys were not done in 2015. Diavik plans the next wolverine hair snagging survey in 2017, but the decision will be made at wildlife workshops to be held in the fall of 2016.

Diavik recorded 83 days where a wolverine was seen on East Island. This is the highest number of wolverine recorded at Diavik since 2000. Diavik thinks the high number of sightings is from one wolverine that got used to the mine.

RECOMMENDATION: Diavik should evaluate potential attractants for wolverine on-site to determine where mitigation measures are not as successful as anticipated and, if necessary, any potential corrective actions.

RECOMMENDATION: Diavik should indicate when they expect to complete the next comprehensive data analysis for wolverine.

5. RAPTORS

There do not seem to be any changes to presence or

productivity of falcons at the minesite. No falcon or bird mortalities were recorded on the minesite in 2015. Diavik continues to monitor pit walls and mine structures for nesting raptors.

6. WASTE MANAGEMENT

Diavik continues to improve waste management measures in the Waste Transfer Area to keep wildlife out of this area. The number of fox seen in the Waste Transfer Area seems to have decreased since 2013.

RECOMMENDATION: Diavik should evaluate whether the decrease in fox observations in the Waste Transfer Area in 2015 persists in future years.



7. WATERFOWL

The waterfowl monitoring program has been discontinued for the time being. No waterfowl information was included in the 2015 WMR.

The Canadian Wildlife Service recommended that Diavik think about re-starting the waterfowl monitoring program when the mine begins reclamation.

8. WINDFARM

The windfarm at Diavik began its first year of operation in 2012. Diavik staff completed a windfarm bird mortality monitoring program. No bird mortalities have been observed. From now on, this area will be inspected for bird mortalities as part of general site compliance.





Board members on a site tour

Julian Kanigan Photo

REPORT CARD ON DIAVIK AND REGULATORS

Part of EMAB's mandate is to serve as a public watchdog of the regulatory process. This section summarizes how Diavik and other Parties have responded to EMAB recommendations. It also summarizes the level of engagement of the various regulators responsible for the Diavik file.

Diavik's responsiveness to EMAB's recommendations last year has been good with respect to issues related to its water licence, including closure planning; Diavik has responded promptly and thoroughly to EMAB's recommendations as made through the WLWB review process.

EMAB was disappointed that Diavik did not submit its air quality monitoring report in 2015-16 and did not inform us that the report would be late nor did they request an extension. We expect that this issue has now been resolved. We also note that in the prior year Diavik did not respond to EMAB's comments on the report.

Diavik's responses to EMAB's recommendations on wildlife monitoring have been variable. EMAB will work with Diavik to develop a more structured process for responding to WMP recommendations.

EMAB was unable to determine whether ENR made comments, or plans to make comments on the 2015 WMP report.

EMAB notes that regulator response to Diavik requests and reports has been variable. For input related to Diavik's water licence please see the following table:

Reviewer	Water Licence Renewal	TSS Amendment Request	Reference Conditions Report	Revised AEMP Summary for 2011-13	PKC North Dam Request
ECCC	Participated as observer	Intervened	Commented	No comment	No comment
DFO	No intervention	Intervened	No comment	No comment	No comment
ENR	GNWT Intervened	GNWT Intervened	No comment	Commented	Commented
Lands	GNWT Intervened	GNWT Intervened	No comment	No comment	Commented

In particular, EMAB notes that DFO has made little effort to engage on the Diavik water licence file in recent years and has provided minimal input where it has engaged. ECCC has a more variable record and has submitted substantial comments where it has engaged. We are pleased to note the active engagement of ENR with respect to the Diavik water licence file, as well as that of Lands. We also note that in all cases WLWB has provided substantial comments.

DFO PROVIDED THE FOLLOWING RESPONSE TO EMAB'S COMMENTS (edited to reduce size):

The mandate of the Fisheries Protection Program (DFO-FPP) is to maintain the sustainability and ongoing productivity of commercial, recreational and Aboriginal fisheries. This mandate is achieved through the administration of Section 35 of the *Fisheries Act*. Subsection 35(1) prohibits *serious harm to fish* (death of fish, permanent alteration to, or destruction of fish habitat). DFO-FPP also addresses fish passage, as described by Section 20 of the *Fisheries Act*.

Following a Designation Order on February 28, 2014, Environment and Climate Change Canada (ECCC) became the responsible minister for the administration and enforcement of subsections 36(3) through (6) of the *Fisheries Act*, which prohibits the deposition of deleterious substances in waters frequented by fish. That means DFO-FPP no longer provides regulatory guidance on: the establishment of water quality guidelines for potentially deleterious substances, including suspended sediments in water; the specific techniques or methodologies by which water quality is monitored; toxicological thresholds of exposure for the protection of either fish or aquatic invertebrates; or impacts to fish as a result of exposure to deleterious substances, such as changes in fish health. Consequently, many aspects of Water Licences and associated plans, including Aquatic Effects Monitoring Programs, waste containment facilities or discharge criteria for water quality or contaminants including total suspended solids, are not within DFO-FPP's mandate and therefore comments are not provided. DFO-FPP recommends that ECCC be consulted regarding these items.

COMMUNICATIONS

Diavik Photo

Brown Lake

ANNUAL GENERAL MEETING (AGM)

Each year, we hold our AGM in our Yellowknife office boardroom. Parties to the EA are invited to attend and provide input on EMAB's activities and direction. Arnold Enge was elected as Chair, Charlie Catholique as Vice Chair, and Julian Kanigan as Secretary Treasurer.

EMAB DIRECTORS

EMAB Directors are one of the main ways EMAB communicates with Affected Communities. Our Directors are responsible for updating communities on what is going on at Diavik and bringing any concerns and questions about the environment at Diavik back to EMAB.

COMMUNITY MEETINGS

As noted in the section on Involving and Supporting Communities, EMAB holds public updates in the communities of the affected Parties. The goal is to keep people informed and allow them to ask questions and voice opinions and concerns.

PUBLIC REGISTRY

EMAB is responsible for making sure that people have access to information on the environment at Diavik. Anyone interested can visit our office and access plans and reports, expert reviews, correspondence, board meeting minutes, maps and images. Our office hours are 9 a.m. – 5 p.m. Monday to Friday.

WEBSITE

The website is another way for EMAB to reach out to the people. We use our website to post Diavik's Wildlife Monitoring Program Reports and the Environmental Air Quality Monitoring Reports. We do not post documents already posted on the WLWB public registry, such as the Aquatic Effects Monitoring Program Reports or Closure Reports. We also use our website to post EMAB Annual Reports, Diavik's Environmental Agreement Annual Reports, and meeting minutes. You can visit us at our website: emab.ca.

ANNUAL REPORT

EMAB circulates its annual report to all Parties to the EA, as well as key leaders in the Affected Communities and throughout the NWT.

Board members observing the pit
on Diavik site tour

EMAB GOVERNANCE AND OPERATIONS

The Board met seven times in 2015-16; six face-to-face meetings and one conference call. The Annual General Meeting took place on December 2, 2015.

DAVIK SITE VISITS

Several board members took a site tour of Diavik in October 2015.

EMAB staff went to the Diavik mine for a site tour in March 2016.

It was very helpful for board members and staff to see the site with their own eyes.

Both tours covered the above-ground portion of the site including: North Country Rock Pile, Processed Kimberlite Containment Facility, A154 and A418 pits, Waste Transfer Area, Water Treatment Plant, North Inlet, A21 dike construction, and the wind farm.



STAFFING

Environmental Specialist (ES) Robin Heavens left EMAB in April 2015.

Executive Director (ED) Brenda McDonald left EMAB in May 2015.

During the period from June to October board members undertook administrative tasks, met to discuss next steps, and engaged in a hiring process for a new ED.

In November 2015, EMAB welcomed back John McCullum as the ED. John was also in the position from 2003-2011.

EMAB hired Allison Rodvang as the ES in January 2016.



WHAT ARE EMAB'S PLANS?

A21 turbidity barrier -Tracy Covey Inspector Photo



Our priorities for the 2016 – 2017 year will be:

OVERSIGHT AND MONITORING

Continue monitoring construction of the A21 dike

Review TSS amendment process

Review Reports:

- AEMP Version 4.0 Redesign
- 2014 AEMP Annual Report
- 2015 AEMP Annual Report
- 2015 Annual WMP Report
- 2014-2015 EAQMP Combined Report
- 2015 Annual ICRP Progress Report
- Site Specific Risk Based Closure Criteria
- ICRP Version 4.0
- North Inlet Hydrocarbon Investigation
- 2015 Waste Rock Management Plan

Review closure planning with community members

ABORIGINAL AND COMMUNITY INVOLVEMENT

- Meet with Diavik TK Panel
- Engage Communities through board members and community update meetings

COMMUNICATIONS

- Annual Report
- Website
- Public Registry

GOVERNANCE

- Hold regular meetings
- Oversee EMAB operations



Caribou Tracks - Diavik Photo

AUDITED FINANCIAL STATEMENTS

Independent Auditors' Report

To the Board of Directors of Environmental Monitoring Advisory Board

We have audited the accompanying financial statements of Environmental Monitoring Advisory Board (the "Board") which comprises the statement of financial position as at March 31, 2016 and the statements of operations - operating fund, changes in tangible capital asset fund and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Accounting Standards for Not-for-profit Organizations, and such for internal control as management determines is necessary to enable preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion

Opinion

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Board as at March 31, 2016 and the results of its operations and cash flows for the year then ended in accordance with Accounting Standards for Not-for-profit Organizations.



Chartered Accountants

Yellowknife, Northwest Territories

July 25, 2016

Environmental Monitoring Advisory Board

Statement of Operations - Operating Fund

For the year ended March 31,	Budget (Unaudited)	2016	2015
Revenue			
Diavik Diamond Mines Inc.	\$ 467,663	\$ 467,663	\$ 604,909
Interest income	3,750	3,714	7,541
	471,413	471,377	612,450
Program expenditures			
Administration (Schedule 1)	88,346	81,066	162,574
Management Services (Schedule 2)	107,914	104,714	156,501
Board Expenditures (Schedule 3)	91,040	83,333	115,497
Science Program (Schedule 4)	64,500	42,089	85,313
Air Quality Management Program (Schedule 5)	-	1,532	56,268
Transfer of tangible capital asset purchases	3,332	3,332	14,728
	355,132	316,066	590,881
Excess revenue	116,281	155,311	21,569
Contribution repayable	-	-	(76,569)
Transfer from (to) deferred revenues	-	(155,311)	55,000
Excess revenue	116,281	-	-
Balance Operating Fund, beginning of year	-	-	-
Balance Operating Fund, end of year	\$ 116,281	\$ -	\$ -

Environmental Monitoring Advisory Board

Statement of Changes in Tangible Capital Asset Fund

For the year ended March 31,	2016	2015
Tangible Capital Asset Fund, beginning of year	\$ 18,862	\$ 9,935
Transfer from operating fund of tangible capital asset additions	3,332	14,728
Amortization	(6,022)	(5,801)
Tangible Capital Asset Fund, end of year	\$ 16,172	\$ 18,862

Environmental Monitoring Advisory Board

Statement of Financial Position

<u>As at March 31,</u>	2016	2015
Assets		
Current		
Cash	\$ 670,907	\$ 788,997
Accounts receivable	-	2,875
Prepaid expenses	2,174	13,372
	673,081	805,244
Tangible capital assets (Note 3)	16,172	18,862
	\$ 689,253	\$ 824,106
Liabilities		
Current		
Accounts payable and accrued liabilities (Note 4)	\$ 40,180	\$ 75,171
Contributions repayable (Note 5)	-	262,410
Deferred revenues (Note 6)	632,901	467,663
	673,081	805,244
Net Assets		
Tangible capital asset fund	16,172	18,862
Operating fund	-	-
	16,172	18,862
	\$ 689,253	\$ 824,106

Approved on behalf of the Board

 Director

 Director

Environmental Monitoring Advisory Board

Statement of Cash Flows

For the year ended March 31,	2016	2015
Cash provided by (used in)		
Operating activities		
Excess revenue (expenditures)	\$ -	\$ -
Change in non-cash operating working capital		
Accounts receivable	2,875	(2,875)
Prepaid expenses	11,198	(12,267)
Accounts payable and accrued liabilities	(34,991)	17,566
Contributions repayable	(262,410)	76,569
Deferred revenue	165,238	(192,246)
Change in cash position	(118,090)	(113,253)
Cash position, beginning of year	788,997	902,250
Cash position, end of year	\$ 670,907	\$ 788,997

Environmental Monitoring Advisory Board

Notes to Financial Statements

March 31, 2016

1. Organization and Jurisdiction

The Environmental Monitoring and Advisory Board (the "Board") is a not-for-profit organization established as a requirement of the *Diavik Environmental Agreement*. It aims to provide a meaningful role for Aboriginal People in the review and implementation of environmental monitoring plans with respect to the Diavik Diamond Mine site in the Northwest Territories. The Board will be in place until full and final reclamation of the mine is complete.

The Board is exempt from income tax under section 149(1)(l) of the *Income Tax Act*.

2. Significant Accounting Policies

The following is a summary of the significant accounting policies used by management in the preparation of these financial statements.

(a) Financial Instruments – Recognition and Measurement

Financial assets originated or acquired or financial liabilities issued or assumed in an arm's length transaction are initially measured at their fair value. In the case of a financial asset or financial liability not subsequently measured at its fair value, the initial fair value is adjusted for financing fees and transaction costs that are directly attributable to its origination, acquisition, issuance or assumption. Such fees and costs in respect of financial assets and liabilities subsequently measured at fair value are expensed.

The Board subsequently measures the following financial assets and financial liabilities at amortized cost:

Financial assets measured at amortized cost include cash and accounts receivable.

Financial liabilities measured at amortized cost include accounts payable and accrued liabilities and contributions repayable.

At the end of each reporting period, management assesses whether there are any indications that financial assets measured at cost or amortized cost may be impaired. If there is an indication of impairment, management determines whether a significant adverse change has occurred in the expected timing or the amount of future cash flows from the asset, in which case the asset's carrying amount is reduced to the highest expected value that is recoverable by either holding the asset, selling the asset or by exercising the right to any collateral. The carrying amount of the asset is reduced directly or through the use of an allowance account and the amount of the reduction is recognized as an impairment loss in operations. Previously recognized impairment losses may be reversed to the extent of any improvement. The amount of the reversal, to a maximum of the related accumulated impairment charges recorded in respect of the particular asset, is recognized in operations.

Environmental Monitoring Advisory Board

Notes to Financial Statements

March 31, 2016

2. Significant Accounting Policies (continued)

(b) Fund Accounting

The Board uses fund accounting to segregate transactions between its Operating Fund and Tangible Capital Asset Fund. The Operating Fund accounts for the Board's operating and administrative activities. The Tangible Capital Asset Fund reports the assets, liabilities, revenues and expenses related to tangible capital assets.

(c) Tangible Capital Assets

Purchased tangible capital assets are recorded in the Tangible Capital Asset Fund at cost. Amortization is recorded in the Tangible Capital Asset Fund using the declining balance method at rates set out in note 3.

(d) Revenue Recognition

The Board follows the deferral method of accounting for contributions. Restricted contributions are recognized as revenue in the year in which the related expenses are incurred. Unrestricted contributions are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and its collection is reasonably assured. Contributions which are not expensed in the current year are set up as deferred funding to be used in the future year when services are provided and goods acquired or refundable contributions that must be repaid to the contributor. Interest income is recognized on the basis of the time funds are in the account and interest is accrued.

(e) Unexpended Funds

On January 16, 2011 an Arbitration Award findings resulted in a change in accounting policy for the recognition and treatment of unexpended funds. Previously the Board classified the unexpended funds as unrestricted net assets. Beginning in 2011, unexpended funds are classified as net unexpended contributions repayable. The Board may not accumulate unrestricted net assets from unexpended Diavik Diamond Mines Inc. funds over a two year period.

(f) Allocation of Expenses

The Board allocates expenditures according to its activities. Expenditures are allocated to Administration, Management Services, Board, Science Program and Air Quality Management Program based on the nature of the expenses.

(g) Use of Estimates

The preparation of financial statements in conformity with Canadian accounting standards for not-for-profit organizations requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the updated amounts of revenues and expenses during the period. Actual results could differ from those estimates.

Environmental Monitoring Advisory Board

Notes to Financial Statements

March 31, 2016

3. Tangible Capital Assets

	Rate	Cost	Accumulated Amortization	Net Book Value	2016	2015
Furniture and fixtures	30%	\$ 24,209	\$ 17,318	\$ 6,891	\$ 5,603	
Office equipment	30%	31,484	28,705	2,779	3,970	
Computer equipment	30-100%	60,895	54,393	6,502	9,289	
		\$ 92,379	\$ 83,098	\$ 16,172	\$ 18,862	

4. Accounts Payable and Accrued Liabilities

		2016	2015
Trade accounts payable		\$ 33,628	\$ 67,590
Payroll remittances payable (E.I., C.P.P, Income Taxes)		5,496	6,477
NWT Payroll Tax		1,056	1,104
		\$ 40,180	\$ 75,171

5. Contributions Repayable

	2016	2015
Contributions repayable - Diavik Diamond Mines Inc.	\$ -	\$ 262,410

6. Deferred Revenues

	2016	2015
Contribution - Diavik Diamond Mines Inc.	\$ 632,901	\$ 467,663

Environmental Monitoring Advisory Board

Notes to Financial Statements

March 31, 2016

7. Interfund Transfer

The amount of \$3,332 (2015 - \$14,728) consists of the transfers from the Operating Fund to the Tangible Capital Asset Fund to fund the acquisition of assets.

8. Financial Instruments

Credit risk

Credit risk is the risk that a third party to a financial instrument might fail to meet its obligations under the terms of the financial instrument. The Board's financial asset that is exposed to credit risk consists primarily of cash and accounts receivable. The Board's cash is maintained with one large federally regulated financial institution. The Board is exposed to credit risk on accounts receivable of \$0 (2015 - \$2,875). This risk has not changed from the prior year.

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Board's financial asset that is exposed to interest rate risk consists primarily of cash. The cash flow from variable rate financial instruments fluctuate as market rates of interest change. The risk has not changed from the prior year.

9. Commitments

The Board has entered into contracts for lease of office premises with the following future minimum payments:

2017	\$ 31,500
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10. Economic Dependence

The Board is dependant upon funding in the form of contributions from Diavik Diamond Mines Inc. Management is of the opinion that if the funding was reduced or altered, operations would be significantly affected.

Environmental Monitoring Advisory Board

Schedule 1 - Administration

For the year ended March 31,	Budget	2016	2015
Expenditures			
Advertising	\$ 6,500	\$ 5,844	\$ 8,412
Annual report	8,000	7,748	1,733
Audit fees	12,000	9,000	11,000
Bank charges and interest	1,020	855	797
Bookkeeping fees	3,000	2,683	3,434
Contract wages	-	-	49,849
Insurance	7,284	8,371	8,499
Library/Publications	1,000	-	1,500
Office supplies	4,000	2,281	10,535
Postage and freight	500	580	1,018
Printing and photocopy	2,500	2,386	5,464
Professional fees	3,042	1,070	6,349
Rent	31,500	31,500	31,500
Repairs and maintenance	500	273	8,354
Telephone and internet	6,000	5,325	8,062
Janitorial	4,000	3,150	-
Text translation	1,000	-	500
Webpage	500	-	5,568
	\$ 88,346	\$ 81,066	\$ 162,574

Schedule 2 - Management Services

For the year ended March 31,	Budget	2016	2015
Expenditures			
Employee benefits	\$ 15,640	\$ 17,645	\$ 16,411
Professional development	4,174	393	6,917
Relocation	-	-	1,999
Salaries	81,900	82,364	125,421
Travel	5,000	3,649	5,445
Workers' compensation	1,200	663	308
	\$ 107,914	\$ 104,714	\$ 156,501

Environmental Monitoring Advisory Board

Schedule 3 - Board Expenditures

For the year ended March 31,	Budget	2016	2015
Expenditures			
Accommodations	\$ 3,000	\$ 2,267	\$ 24,242
Conference calls	-	-	-
Food and beverages	-	197	2,375
General community consultation	22,125	7,500	40,225
Honoraria	19,000	18,575	28,788
Hospitality	-	608	2,005
Meetings	1,000	525	916
Per diem	2,000	2,541	3,313
Personnel Committee	3,915	3,913	3,375
Preparation	34,000	40,500	-
Transportation	6,000	6,707	10,258
	\$ 91,040	\$ 83,333	\$ 115,497

Schedule 4 - Science Program

For the year ended March 31,	Budget	2016	2015
Expenditures			
Consultants	\$ 64,500	\$ 42,089	\$ 85,313

Schedule 5 - Air Quality Management Program

For the year ended March 31,	Budget	2016	2015
Expenditures			
Workshop	\$ -	\$ 1,532	\$ 56,268

EMAB RECOMMENDATIONS

EMAB RECOMMENDATIONS TABLE 2015-2016

Recommendation	To	Response
AEMP		
<i>EMAB submitted 36 recommendations to Diavik via the WLWB on the 2011 to 2013 AEMP Re-evaluation Report. Some of these can be found on pages 18-21. The complete list of recommendations, as well as detailed technical reviews, can be found on our website, emab.ca. Diavik's responses have been modified, or were marked as being "accepted" or "rejected" due to the length and technical language.</i>		
Trends in outliers over time need to be an ongoing consideration as they may provide insight into potential sources of error introduced at various points of data collection (e.g., in the field, laboratory analyses, etc.).	Diavik via WLWB	Modified to: DDMI acknowledges outliers should continue to be monitored over time and potential trends should be investigated from a QA/QC standpoint. An approach for monitoring outliers over time will be included in the QAPP Version 3.0.
Please consider amending the methods to clearly indicate what type of statistical analysis was conducted for snow chemistry.	Diavik via WLWB	Accepted.
Please consider providing additional context (e.g., timing of second diffuser, underground mining, etc.) to the ReEvaluation Report (Version 3.1) to better describe the increase in annual loading rate of phosphorus to Lac de Gras.	Diavik via WLWB	Accepted.
It would be helpful if results for important field parameters with benchmarks, such as DO, are briefly summarized for the period of time covered by a 3-year synthesis report as they are not included as SOIs (and, as such, they are not assessed over time).	Diavik via WLWB	Modified to: In situ field-measured parameters like DO are assessed in detail in the AEMP annual reports. Field measured parameters are assessed by evaluating spatial trends in relation to the Mine effluent diffuser. They do not represent long-term trends which was the focus of the Re-evaluation Report.
Provide a more detailed explanation for sharp decrease in TDN values in 2013 compared to previous years. Going forward, additional consideration will need to be given to an approach for evaluating temporal trends for data with known compatibility issues due to changes in analytical laboratories and/or detection limits.	Diavik via WLWB	Modified to: Agreed, the decrease in TDN concentrations in the open-water season in 2013 was likely the result of switching from the University of Alberta to Maxxam Laboratories. The approach for dealing with changes in labs and detection limits going forward was previously set by the WLWB, through the use of established and approved reference conditions.

Recommendation	To	Response
The conclusion of no link between the mine and increasing mercury in Lake Trout would be better supported with fish movement data that demonstrated minimal or no movement between the two lakes and/or regional fish mercury data from other lakes that demonstrated a similar pattern of increasing mercury in fish tissues over time comparable to the timeframe for the operation of the mine.	Diavik via WLWB	Modified to: A Lake Trout movement study was conducted as part of the 2014 AEMP (submitted to the WLWB on March 31, 2016). It concluded that Lake Trout are moving between the two lakes. Given that we now have evidence that Lake Trout move between the two lakes, the conclusion of no link between increasing mercury and the Mine can be supported by the fact that mercury is not detected in the Mine effluent (Table 3-2, 2011 Annual AEMP). The AEMP Re-evaluation Report has been updated to show this.
Rewrite section 10.3.3. to present the two CSR predictions regarding fish health and remove reference to "fish quality and to the results of the fish palatability studies. Address CSR prediction regarding mercury concentrations in fish in 10.4. To provide a more thorough assessment of fish quality, please consider comparing fish tissue data to other appropriate thresholds (e.g., Canadian Food Inspection Agency).	Diavik via WLWB	Accepted.
Rewrite 12.3.1 to present CSR prediction regarding fish tainting and remove reference to "fish quality" and prediction regarding metal concentrations in fish flesh.	Diavik via WLWB	Accepted.
Rewrite 12.4 to refer only to CSR prediction regarding tainting of fish flesh and the fish palatability testing, and results from the study.	Diavik via WLWB	Accepted.

ICRP

EMAB submitted 70 recommendations to Diavik via the WLWB on their ICRP Progress Report, NCRP Final Closure Plan, A21 ICRP, and the RECLAIM estimate through reviews by technical consultants. Some of these can be found on pages 25-31. EMAB also made its own recommendations on how Diavik has engaged communities on the NCRP Final Closure Plan. The complete list of recommendations, as well as detailed technical reviews, can be found on our website, emab.ca. Readers should note EMAB's recommendations were made after March 31, 2016 so there was no opportunity for Diavik to respond by March 31, 2016. Diavik's responses will be assessed in the 2016-17 annual report.

Please respond to recommendations in Arcadis Canada's technical review of 2015 ICRP Progress Report.	Diavik via WLWB	N/A - no opportunity to respond by March 31, 2016
Please respond to recommendations in Arcadis Canada's technical review of SSRBCC used in NCRP Final Closure Plan.	Diavik via WLWB	N/A - no opportunity to respond by March 31, 2016
Please respond to recommendations in SEC's technical review of closure criteria effectiveness, including NCRP Final Closure Plan.	Diavik via WLWB	N/A - no opportunity to respond by March 31, 2016

Recommendation	To	Response
The NCRP Final Closure Plan should include an appendix which presents the engagement activities that Diavik undertook to consult with communities to ensure stakeholders had the opportunity to gain an understanding of the proposed closure objectives and criteria, address concerns, and ensure those concerns are resolved. Diavik should include a record of engagement related to final closure planning of the NCRP as an appendix to Appendix IV-1 and include the information required in the MVLWB/AANDC Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites / MVLWB Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits.	Diavik via WLWB	N/A - no opportunity to respond by March 31, 2016
Diavik should provide a Record of Engagement for each community engagement session. A list of topics discussed is not sufficient and does not meet the requirements set out in the MVLWB/AANDC Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories or the MVLWB Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits.	Diavik via WLWB	N/A - no opportunity to respond by March 31, 2016
The NCRP Final Closure Plan should stand alone. Diavik should explicitly include this information in the community engagement section of the report, or as an appendix to the report. Simply having links to other ICRP Progress Reports is not adequate.	Diavik via WLWB	N/A - no opportunity to respond by March 31, 2016
WMP		
<i>EMAB submitted 16 recommendations to Diavik on the 2015 WMP Report. Some of these can be found on pages 33-36. The complete list of recommendations, as well as detailed technical reviews, can be found on our website, emab.ca. Readers should note EMAB's recommendations were made after March 31, 2016, so there was no opportunity for Diavik to respond by March 31, 2016. Diavik's responses will be assessed in the 2016-17 annual report.</i>		
Consider how information from various caribou datasets could be used in terms of mitigation and adaptive management for the Diavik mine and for other future projects in the region.	Diavik	N/A - no opportunity to respond by March 31, 2016
Provide detailed explanation and justification why aerial surveys have been postponed "in favour of other studies". Please provide details on what "other studies" would examine regarding mechanisms that may cause caribou to avoid the mine.	Diavik	N/A - no opportunity to respond by March 31, 2016
Diavik should ask the ZOI Technical Task Group when they expect to provide direction regarding when or if aerial surveys should be resumed. (See recommendation in Annual Report)		

Recommendation	To	Response
Consider an analysis of the indirect (in addition to the currently presented direct) footprint effect on caribou habitat for understanding the true effects on caribou and for determining future mitigation measures. This is particularly relevant given the effects of dust deposition on local plant species composition and elevated metal concentrations in lichen near the mine.	Diavik	N/A - no opportunity to respond by March 31, 2016
Provide a discussion of the potential response actions to the departure from the prediction regarding the southern migration of caribou and changes to the timing of the migration.	Diavik	N/A - no opportunity to respond by March 31, 2016
Discuss the results showing an effect of the mine on vegetation structure in reclamation and revegetation studies and discuss the implications for wildlife recolonization in terms of the likelihood for re-establishment of natural or pre-disturbance vegetation and wildlife communities.	Diavik	N/A - no opportunity to respond by March 31, 2016
Consider that grizzly bears may be becoming habituated and their presence on the site may be on the rise. Provide a detailed analysis of grizzly bear data.	Diavik	N/A - no opportunity to respond by March 31, 2016
Diavik provide clarity on their specific plans and schedule for future grizzly bear data collection and analyses that would allow for adequate testing of the GNWT (2013) grizzly bear monitoring objective.	Diavik	N/A - no opportunity to respond by March 31, 2016
Diavik should indicate when they expect to complete the next comprehensive data analysis for wolverine.	Diavik	N/A - no opportunity to respond by March 31, 2016
Evaluate whether the decrease in fox observations in the Waste Transfer Area in 2015 persists in future years.	Diavik	N/A - no opportunity to respond by March 31, 2016
In future WMP Reports please indicate which wildlife studies included community members in monitoring or data collection.	Diavik	N/A - no opportunity to respond by March 31, 2016
When objectives or methods of the WMP are altered, removed or replaced by new studies, including participation in regional studies, the WMP report should describe the changes and rationale for them. The WMP should clearly demonstrate how the changes will meet the WMP objectives.	Diavik	N/A - no opportunity to respond by March 31, 2016
The WMP is a requirement of the Environmental Agreement. EMAB must be involved in development of changes to the program objectives that affect how or what information is collected and reported.	Diavik	N/A - no opportunity to respond by March 31, 2016

FOLLOW UP ON PREVIOUS RECOMMENDATIONS

BELOW ARE RECOMMENDATIONS EMAB MADE IN 2014 - 2015 THAT DIAVIK DID NOT PROVIDE A RESPONSE TO. EMAB SUBMITTED THESE RECOMMENDATIONS AGAIN IN 2015 - 2016.

Recommendation	To	Response
EAQMP		
EMAB submitted 14 recommendations to Diavik on the 2013 EAQMP Report. None of the recommendations have been responded to by Diavik.		
WMP		
Discuss the implications of a larger than expected effect on caribou for future environmental management.	Diavik	No discussion provided in 2015 WMP
What is the actual size of the larger caribou ZOI, 14 or 28 km?	Diavik	No discussion provided in 2015 WMP
How can the information on caribou behaviour be used to adapt management actions at the mine and in the region?	Diavik	There was no 2013, 2014, or 2015 update regarding caribou behaviour. Not enough data for analysis.
In the future, when behavioural data are analyzed, please justify the pooling of caribou behavioural data across years and any assumptions made.	Diavik	No discussion provided in 2015 WMP
Please provide a discussion of the potential causes of this unpredicted migration pattern, and potential response actions.	Diavik	Diavik did not address the second part of this request regarding response actions.
Please consider how the information gained from various caribou datasets could be used in terms of mitigation for the Diavik Mine in particular and for other future projects in the region in general.	Diavik	No discussion provided in 2015 WMP
Please give careful consideration to the possibility that bears may be becoming habituated and their presence on the site may be on the rise.	Diavik	No discussion provided in 2015 WMP



TABLE OF ACRONYMS

Acronym	Definition
AEMP	Aquatic Effects Monitoring Program
AGM	Annual General Meeting
CEMP	Construction Effects Monitoring Plan
COPC	Contaminant of Potential Concern
CSR	Comprehensive Study Report
DDEC	Dominion Diamond Ekati Corporation
DDMI	Diavik Diamond Mines Incorporated
DFO	Department of Fisheries and Oceans
DO	Dissolved Oxygen
EA	Environmental Agreement
EAQMP	Environmental Air Quality Monitoring Program
ECCC	Environment and Climate Change Canada
ED	Executive Director
EMAB	Environmental Monitoring Advisory Board
ENR	Environment and Natural Resources
GN	Government of Nunavut
GNWT	Government of the Northwest Territories
ICRP	Interim Closure Reclamation Plan



Acronym	Definition
KIA	Kitikmeot Inuit Association
LKDFN	Lutsel K'e Dene First Nation
MVLWB	Mackenzie Valley Land and Water Board
NCRP	North Country Rock Pile
N-S	North-South Consulting
NSMA	North Slave Métis Alliance
PK	Processed Kimberlite
PKC	Processed Kimberlite Containment
SEC	Slater Environmental Consulting
SOI	Substance of Interest
TDN	Total Dissolved Nitrogen
TK/IQ	Traditional Knowledge / Inuit Qaujimajatuqangit
TSS	Total Suspended Solids
WLWB	Wek'èezhìi Land and Water Board
WMP	Wildlife Monitoring Program
WMR	Wildlife Monitoring Report
WRRB	Wek'èezhìi Renewable Resources Board
YKDFN	Yellowknives Dene First Nation

