DILLON CONSULTING

"A PROJECT GETS THE GREEN LIGHT: NOW WHAT?"
Mackenzie Valley Resource Management Act Workshop

2018 Workshop Summary Report

Hosted by the Mackenzie Valley Review Board, the Land and Water Boards, the Government of the Northwest Territories, and the Government of Canada

Canada

Government of Northwest Territories / Gouvernement des Territoires du Nord-Ouest

Mackenzie Valley Review Board

Mackenzie Valley Land and Water Board

SAHTU Land & Water Board

Gwich'in Land and Water Board

Wek'èezhìi Land and Water Board

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1.0 Introduction

In January 2016, in response to questions raised by the onset of devolution in the Northwest Territories, the Mackenzie Valley Environmental Impact Review Board (MVRB), the Land and Water Boards of the Mackenzie Valley (Mackenzie Valley Land and Water Board, Wèk'eezhìı Land and Water Board, Sahtu Land and Water Board, and Gwich'in Land and Water Board) (LWBs), as well as the Government of the Northwest Territories (GNWT) hosted a workshop for interested and affected parties from across the NWT. The purpose of the workshop was to address questions related to Devolution and provide an open venue for discussion. Based on the feedback from the January 2016 workshop participants, two smaller regional workshops were subsequently held in Hay River in January, 2017 and in Norman Wells in February, 2017. A decision was made to host smaller regional workshops every two years and a larger single workshop in Yellowknife every other year.

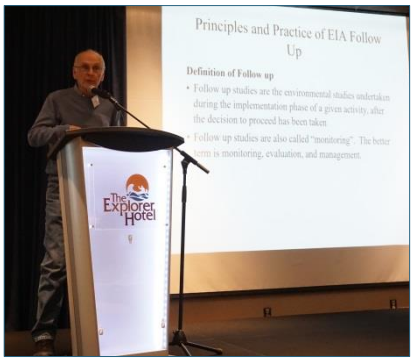
Following up on these previous two workshops, a third workshop entitled the *Mackenzie Valley Resource Management Act* (MVRMA) Workshop - A Project Gets the Green Light: Now What? was held on February 13th and 14th, 2018 at the Explorer Hotel in Yellowknife, Northwest Territories. The event saw approximately 170 participants from Indigenous governments and organizations, municipal governments, the GNWT, MVRB, LWB, the Government of Canada, industry members, independent monitoring agencies, and a representative from the Government of Saskatchewan.

A series of presentations and smaller break-out sessions focused on the follow-up, monitoring and compliance of development projects in the Mackenzie Valley. Three panel discussions and nine interactive break-out sessions provided avenues for discussion between participants, and presenters. Elder Violet Camsell-Blondin from Behchokǫ̀ led the opening prayer. This summary report provides an overview of each presentation, panel discussion, and break-out session. The view and opinions of participants have been synthesized and incorporated throughout the document. A list of presenters and copies of the presentation slides are provided as Appendices to this report.

The goal of the workshop was to focus on the stages of a project lifecycle after the environmental assessment is complete, including regulatory permitting, ongoing project monitoring and compliance, and closure and reclamation. Additionally, the workshop serves to identify opportunities for Indigenous and public input in the process.

2.0 Keynote Speaker: Principles and Practice of Environmental Impact Assessment

Dr. Ross provided an overview of Environmental Impact Assessment (EIA) and best practices for follow-up to help establish the context for the overall workshop. The following summarizes Dr. Ross' keynote address.



The EA is done, now what?

There are a number of principles and practices that are involved in an EIA follow-up. The principles were developed years ago and were initially based solely on practice.

An EIA follow-up study is defined as a study that is carried out during the implementation phase of a given activity, after the decision to proceed has been taken. Environmental Management of a study must also monitor compliance with an agreed-upon set of conditions laid out during the construction, permitting, and operator licensing phases. In addition, it must review predicted impacts that allow for the proper management of any risks or uncertainties. It must also allow for modification of the activity or development mitigation measures in case of any unpredictable harmful effects on human health or the environment.

EAs should also identify information gaps and bring to light potential issues which may arise. EAs become important not only for their academic merit, but for the information they provide decision makers in order to understand the certainty of as many conclusions and alternatives as possible. This becomes necessary as it allows a regulator to say that if an impact is not certain, we may need to impose regulations for a follow-up study to determine the impacts.

A 1990 study published by the United Nations Economic Commission for Europe noted that an advisory board will increase the credibility and quality of follow-up studies, and that public participation and sharing of the results are equally as important. Although the importance of follow-up studies is undeniable, not all issues need to be studied. There are two important considerations when deciding if a follow-up study needs to be completed: the potentially important effects, and their uncertainty. Both of these considerations should be discussed within the EA.

Both the time and resources of the project proponent should carefully focus on where gaps exist. If effects are already well known and significant, there is no need to start a monitoring program.

Placing limitations on follow-up studies can also be dangerous. This is especially true for Adaptive Environmental Management. One example of this is the Old Man Dam panel. A hearing was held for a

dam that was 80% finished, which made it difficult to determine if mitigation measures were effective. Information provided by technical experts highlighted that if the dam were to fail; there would not be enough time for any sort of mitigation of the effects. This type of monitoring is not sufficient. It also highlights the importance of early warning indicators. In addition to the mitigation problems, the initial monitoring for the dam had been completed but no further analysis was carried out due to lack of funding. This entire approach does not meet the key definition of monitoring - repeated data collection and proper evaluation and management.

The project is authorized, now what?

One of the contributions borne from the Independent Environmental Monitoring Agency (IEMA) for the Ekati Diamond Mine has been the requirement to hold a workshop where all affected and interested parties can discuss findings, and how to make processes better and less costly. The continuity of the workshops made approval of changes easier due to overall consensus prior to the development approval process. It should be noted that a monitoring program is considered 'good' not only based on what it can do, but on its overall ability to change with time and with new requirements.

The project is closed, now what?

Even though production on a site is finished, a project is still not complete. Ultimately the project is not complete until the site is cleaned up.

Prior to developing closure plans, the closure criteria should be determined at the very beginning of the project planning process. This way, monitoring agencies can push for expectations to be met during both interim and final closure plans. Both of these plans should have objectives that are specific and include indicators that determine whether overall objectives were successfully met. The overall contribution of monitoring agencies is to improve and revise monitoring programs while they are going on, and to share the information with affected communities. The Rogers Pass Revegetation Project (1984 CP Rail) is one example of where measurements were needed to meet the final criteria for closure. One criterion identified was that following a vegetation fertilization process over a set number of years, a certain percentage of ground area was required to have regrown a specified amount of vegetation in order for the criteria to be identified as complete.

3.0 Environmental Assessment is done, now what?

Alan Ehrlich, Manager of Environmental Impact Assessment at the MVRB, provided a presentation on how the environmental measures included in an EA can provide a framework for mitigating the risks to the natural environment.

The *Mackenzie Valley Resource Management Act* (MVRMA) is designed to create an integrated system of environmental management. Within the EIA process, there is much more than a simple 'yes' or 'no' approval process. Instead, the EA provides a framework for ongoing project improvement throughout the lifetime of a project as well as a platform that lets others work together more effectively.

Measures from an Environmental Assessment can:

- Provide goals to regulators
- Help to focus developer's monitoring and adapative management
- Create monitoring agencies and expert panels
- Promote compliance

Ultimately, measures taken from the EA will describe goals and targets for what may be identified as acceptable. At this stage, regulators will identify targets and translate those targets to a permit or licence. Measures also include legal compliance to prevent environmental issues and concerns.

To provide another layer of resilience, recently narrative statements have been introduced into licences. One example is Nico Mine, who included the narrative statement: 'traditional fishing areas have to be protected'. Another example is Snap Lake Mine, who included: 'water quality objectives will ensure that fish are safe to eat and water is safe to drink' in the licence.

In order for tools to be more effective, EA measures may also require developers to provide regulators information that they would not normally have to provide. Examples include the Dominion Diamond Ekati Corporation Caribou Management Plan that was provided to the GNWT Environment and Natural Resources (ENR).

Including adaptive management throughout the life of a project ensures shorter time waiting for outcomes, and more complete monitoring, evaluation and reporting. It also considers both social and cultural impacts. Built within adaptive management is a system of tiered action levels or thresholds.

Establishing this threshold-based system allows incremental actions and responses to change. The process is designed to help prevent actions from only being taken at significant impact levels.

Once measures are in place, an oversite committee may need to be created to improve monitoring and management on site, and to provide additional confidence in projects. In addition to agencies, technical panels are created through measures. These independent expert panels help developers design parts of projects, such as: road safety and design, constructed wetlands, or tailings and waste rock co-disposal. Some proponents, such as Dominion Diamond, will incorporate TK expert panels to further aid with project design.

The final step after the EA is complete is compliance. At this stage, any of the measures that have been included in compliance are only as good as their implementation. The MVRB can decide to include additional follow-up measures that require work be reported back to regulators. Follow-up measures can also require a developer, government and regulatory agency to report back to the MV.

Beyond existing measures, the MVRB will soon introduce Development Certificates. These certificates provide a regulatory mechanism that allows measures to be turned into conditions. The certificates will become an enforceable tool for each measure of an EA, with a shelf-life of five (5) years from the date they are written. It will be required by the MVRB 30 days after the Minister has signed off. The MVRB will still be allowed to amend measures as long as they are consistent with the original measure. New certificates can be applied and enforced to a maximum fine of up to $100,000 if the certificate is not followed.

3.1 Panel Discussion: Environmental Assessment is done, now what?

The first of three panels addressed some of the larger issues around environmental assessment measures and the conditions of project approval, drawing on the knowledge of all panel members, each of whom has participated directly in the environmental assessment process. By way of introduction, the panelists were asked to share some of their own personal experiences with how environmental assessment measures have been translated into practical actions. Panelists were able to answer questions from the audience about the real-world success of measures, how measures reflect the goals and values of Indigenous peoples, and the strengths of adaptive management.

The panel was comprised of the following members: *Natalie Plato, Giant Mine Remediation Project Deputy Director; Professor Emeritus Dr. Bill Ross; Claudine Lee, Head of Environment for Dominion Diamond Ekati ULC;* and Stephanie Poole, *Treaty #8 Tribal Council, Akaitcho Interim Measures Agreement (IMA) Implementation Officer Coordinator.*

Questions and Discussion

The facilitator opened the panel with questions to the panelists. The audience was also given the opportunity to ask the panelists for their input on various issues or concerns they had with implementing measures of an EA. A summary of the panelists' responses are organized under each question below.

Question 1 – What is your experience, good or bad, with how EA measures have been translated into practical actions implemented by developers or measurable regulatory requirements?

When clear cut measures are established, those measures can be used to create targets. The initial targets will stay in use for a time until an impact occurs. If the objectives in the process continue to be met then nothing changes, but if they are no longer met then adaptive management will be applied to make changes. Another important action is the engagement with communities. The communities make arguments through their engagement and as a possible result quantitative measures can be put in place.

After EA, the Giant Mine Remediation Project had 26 legally binding measures. There have been both good, and bad experiences with the measures implementation. One difficult example was to negotiate

an environmental agreement that took over a year to negotiate and involved six parties as well as the Giant Mine Oversight Board (GMOB). Another challenging, but positive experience after EA was the routing of Baker Creek. The consultation and engagement process took over 24 months but improved the project significantly. In the end, some measures are incredibly constrictive and place a potential limit on innovation.

The Jay Project at Ekati Mine received the EA report in February of 2016 and has been operating for almost two years under 22 measures. Some of the measures that are included are prescriptive while some are very broad. There was one measure that specifically focused on caribou, and was discussed quite a bit during the EA, but the measure was left open to other issues outside of caribou to allow for a lot of engagement. This was done to allow for more innovation, which can be both exciting and challenging.

One of the more important pieces of advice for proponents is to ensure that the EA and what comes next are not left as two separate silos, and that all components are completely carried out. Measures that are left more open are difficult to interpret, and the original measures intent may be lost. Individuals and groups often want to see action on measures as soon as they happen, but some action may happen throughout the entire lifetime of a project. When conversations arise about measures that have not yet triggered, they will often require a lot of discussion and dialogue about what the measures mean.

It is difficult to think of some good experiences from measures that came from EA, so this will be a more general overview. Measures are designed to be both serious and enforceable and can include suggestions that may or may not be followed. In addition, there are the commitments that a proponent may 'say they will do', and the Review Board may take these items as commitments.

In many cases, even if concerns make it through the process as a measure, it can lose its original intent as it makes its way through the review process. Many of the measures focus on bio-physical aspects during the process. Socio-economic concerns are one of those issues that are difficult to enforce and create measures for. It is these orphan measures, which have no designated regulatory authority, that have been difficult to deal with in the past. They lack interpretation into enforceable measures.

The new Development Certificates may offer some answers when dealing with orphan measures, and designate responsibility for enforcement of the certificate. This is where an Indigenous guardianship program could assist with enforcement.

Question 2 – What are some of the factors that affect success in measures that are translated into practical actions, or measurable limits?

There are three important indicators of success when determining clear measures. The first is the proponent themselves. Most proponents today are cooperative and willing to work together; this has not always been the case, and still isn't in some parts of the world. The second indicator is oversite exerted by regulators and independent oversite bodies. Any sensitive measures require input from regulators. If the project has been around for a long time, regulation fatigue may set in. This is where independent oversite bodies have a role to play. The final and very important indicator is consultation with communities. This process involves ensuring that the proponent continues dialogue with stakeholders and keeps them informed and engaged as they work through measures. At the same time, measures may lead a proponent or regulator down a path but may not dictate how they may deal with an issue over time.

One of the major challenges faced when trying to implement measures is the lack of recognition on the rights and TK of Indigenous peoples and the role they play within the regime. Within the current system, there is a divide between settled and un-settled land claims, resulting in a multi-tiered system from one group to another. Overall, measures must be led by Indigenous peoples and not on their behalf.

Question from the audience - We understand that these measures should reflect the reality of the Indigenous peoples as well as the government and proponents. I want to get a sense of how you rate the reflection, because it should reflect our values and goals as indigenous peoples, and our values nation to nation because everyone in this room is treaty. What are some factors that affect success that are translated into practical action or measurable limits?

There are two distinct aspects of engagement with Indigenous communities. The first aspect is that the communities themselves carry a lot of authority, and if an entire community makes the same argument it can carry a lot of weight. The second aspect is that not only must an agency obtain consent from a community, but also their intellectual property. The argument of dust affecting caribou first came from the communities and over the years was identified as an intellectual contribution. Respectively, there is also a fundamental difference between engagement and consultation. Sometimes the way in which engagement is carried out best suits how the proponent would like to do it, but not how the Indigenous group would like it done.

Throughout these processes and relationships, Indigenous organizations should not be considered only stakeholders, but also partners. An example where the role of Indigenous organizations has been translated into practical actions is the Giant Mine Remediation Project. The project itself is within the area of land known as the Chief Drygeese Territory, the traditional territory of the Yellowknives Dene First Nation (YKDFN), and the North Slave Metis Nation. A number of members each organization sit on panels and working groups, making decisions about the project.

Question 3 – What are the biggest or most interesting impacts you have seen in the life of a project that were not predicted in the EA?

One project that had a large unpredicted impact happened during work in Thailand 15 years ago. Volatile organic compounds (VOCs) that were released from an industrial estate that caused terrible health issues within the community. It was the result of cumulative effects from petroleum companies and cost millions of dollars. This became a very serious health hazard, especially considering that nothing had been anticipated.

Winter roads are often associated with mine operation are not included in the EA. They carry with them a large impact on the environment and should not be overlooked. Another example was a water licence that was granted to Snap Lake Mine. Even though the proponent was unable to adhere to the criteria, a new water licence was approved through the EA process.

One of our measures for Baker Creek was written as 're-route Baker Creek' without the term 'possible re-route'. The response from the public was surprising and it was clear that they did not want to have the creek re-routed, even when the intent was to prevent the flooding of the underground mines.

The Ekati Mine has been in operation for over 20 years, and it was surprising to see how much information and knowledge was lost since the original EA was completed. After the measures come out, it is up to the proponent to follow through and deliver on them. The process of trying to track down original measures and understand the original agreement and intent, while using new tools to supplement activities that we did not understand 20 years ago, was very challenging.

Question 4 – Why do you think the surprise impact was not adequately predicted?

The EA for the Thailand example was conducted horribly. Cumulative effects' reporting was not required at the time.

Returning to the Ekati Mine example, the effects on the Bathurst caribou herd were not adequately considered in the original EA. Because the population was well over 300,000 caribou, the EA had focused on many other things. The surprise came when the population of caribou was driven down from 300,000 in the mid-1990s to 20,000 by 2017. Dominion Diamond has now addressed this within the new Jay Project. The Jay Project expansion looked at the cumulative effects of multiple components that surround the mine site. It becomes difficult to criticize the individuals at work on the Ekati project in 1995 for not adequately predicting all environmental outcomes. Better work is now being done and has more room for improvement moving forward.

All of the existing scientific models are wrong, and only some are useful. All along, TK has been correct. For the Łutsel K'e community, the decline of the barren ground caribou was not a surprise. From the initial proposal of the Ekati Mine, Elders had said that caribou would leave the area. If community members heard the Elders bring up these concerns back then, so should have the rest of the regulators.

Little value was placed on the Elders knowledge back then, and much more value should be given to that knowledge going forward.

Throughout the initial Giant Mine Project, engagement and consultation were not adequately carried out. Once that was carried out, as part of the remediation project, it greatly improved the overall project.

When the initial Ekati Mine EA went through 20 years ago it was within a framework of that particular time. Over time, other information has come forward such as cumulative effects, multiple mines in the area, climate change, etc. and other changes. 20 years is a long period of time where things can change, and knowledge needs to be shared. Proponents try to do their best throughout the EA process and must maintain a level of flexibility going forward, while trying to achieve the intent of a measure. Everyone should anticipate surprises moving forward.

Question 5 – Do you have any experiences for ideas on how to ensure adaptive management stays true to the purpose and intent of EA measures?

Adaptive management seems to have different meanings to many people. It takes into account what the question is and what the ultimate risk is. It must also be consistent with EA frameworks by ensuring there are meaningful responses to issues that are most likely to arise.

In some cases, industry will use adaptive management to justify trying out different plans and observe what ends up happening. This can create a relationship of 'blind faith' monitoring. It may also lead to scenarios where standards that are set are not achievable and will be lowered in order for a proponent to meet them. That being said, the adaptive management response framework that is used in the NWT is one of the best and receives praise from other bodies around the world.

In order for adaptive management to work to everyone's benefit, it must be an active and not a passive process. It must also be grounded in elements based on guiding principles of longer term learning, rather than only addressing short term problems. The information gathered from the learning process can then be shared and ensure that poor decisions are not continually repeated.

Question 6 – How can adaptive management inform timely adjustments to ensure the environment is protected?

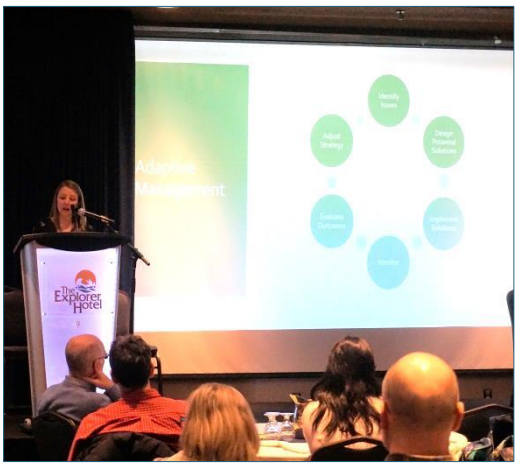
There are some good examples of monitoring agencies using adaptive management to promote better environmental management on sites.

In 1997/1998 there was a water quality monitoring program that was established under the ice of Kodiak Lake. In 1998, the IEMA discovered that dissolved oxygen below the ice was dropping considerably. Without any sort of intervention over the next few weeks, the lake would become anoxic. The monitoring agency spoke with the company; a hole was created through the ice and the lake aeriated. After the lake thawed in the spring, there were no dead fish. The process is rather

straightforward - concern was raised about the lake; a monitoring program was put in place; something was learned from the program; and a response came back and action was put in place to avoid any significant impacts that could have arisen.

With the Jay Project, every three (3) years there is an environmental impact report released that discusses adaptive management. All the key things learned from earlier years, such as caribou and water quality monitoring, can be applied to create an even stronger management plan.

4.0 The Project is Authorized, now what?



Sarah Elsasser, Regulatory Manager with the Wek'èezhìi Land and Water Board, provided an overview of what happens after a project has been authorized. Sarah discussed the basics of the permitting and licensing system of the MVRMA, and how Adaptive Management plays an important role in the Board's responsiveness to changing conditions as needs arise.

Under the direction of the MVRMA, the four (4) management Boards identified in **Figure 1** – Mackenzie Valley Land and Water Board, Sahtu Land and Water Board, Gwich'in Land and Water Board, and Wek'èezhìi Land and Water Board - regulate the use of water and the deposit of waste by way of licences. Currently, the Mackenzie Valley Land and Water Board (MVLWB) is also responsible for managing areas of the NWT that do not yet have land claim agreements as well as transboundary requirements, ensuring that policies within the Mackenzie Valley are consistent.

Figure 1: Map of the Northwest Territories showing the regions where the land and water boards of the Mackenzie Valley operate.

The basis of the water licences and land use permits is to provide the terms and conditions of water use or land use activities. Set out in the legislation, the terms of land use permits can be a maximum of five (5) years, with up to an additional two (2) year extension. Water licences can last much longer; in some cases, they can last the entire length of a project. The Boards have developed a standard list of land use permit conditions, as well as a standard process for developing new conditions. Within the permits and licences, conditions are established and are intended to mitigate the potential impacts of activity relating to the ongoing management of a project. These could include conditions for: engineered drawings or Aquatic Effects Monitoring Programs (AEMPs); management plans, including waste water management, water management, contingency planning, and closure planning; and reporting, which may include annual reports and Surveillance Network Programs (SNPs). The enforcement of all permit and licensing conditions is then carried out by the federal and territorial inspectors.

Mentioned in previous presentations, but equally important is the principle of Adaptive Management (**Figure 2**). In cases where management responses must occur to changing conditions as the change arises, Adaptive Management becomes fundamental to any Boards' processes. One example of this is how changes to an AEMP design may be required in response to a changing environmental condition that may or may not have been predicted in the initial issues identification.

All Land and Water Boards will rely on additional parties, including: Indigenous organizations and governments, Territorial and Federal government departments, independent monitoring agencies, the general public, and many other bodies to inform the Adaptive Management process and generate the evidence boards require to make decisions on the ongoing management of authorized activities.

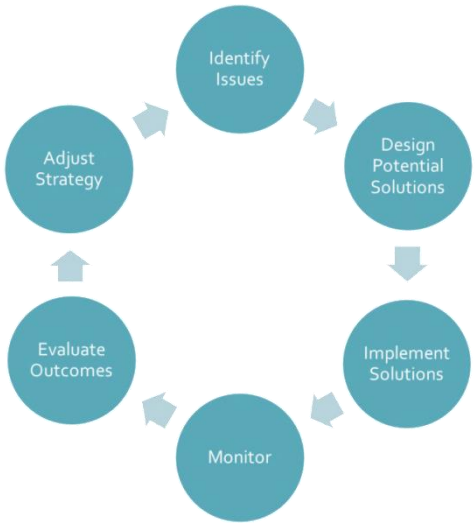


Figure 2: Adaptive Management Model

Some of the Policies and Guidelines that assist the boards in fulfilling their mandates are listed in **Figure 3** below:

Figure 3: Samples of policy and guidance documents prepared by the Land and Water Boards (in some cases, jointly with the Territorial and Federal governments.

Similar to the review process that the Boards undertake for decisions on individual applications and submissions, all related policy and guidance documents also undergo stringent public review.

During the process of decision making, the Boards are to provide for the conservation, development and utilization of land and water resources in a matter that will provide optimum benefit generally for all Canadians and in particular for residents of the region within which the Board operates. They must consider the importance of conservation to the well-being and way of life of the Indigenous peoples of Canada, and must consider both TK and scientific information.

A high degree of public participation must be included in the process of decision making. Public participation in the process can include public reviews, technical workshops, and public hearings. If high

degrees of participation can be achieved, the best decisions can be determined regarding the ongoing management of projects within the Mackenzie Valley.

4.1 Panel Discussion: The Project is Authorized, now what?

The second of three panel discussions addressed issues around regulation and enforcement and provided personal insights from the panel members own experiences. By way of introduction, the panelists were asked to share their ideas about the strengths and weaknesses of public involvement in the current regulatory model. Panelists also responded to questions from the audience around enforcement, monitoring, and data gathering.

The panel was comprised of the following members: *Tim Byers, Board Member for the Independent Environmental Monitoring Agency (IEMA); Julian Kanigan, Manager of the NWT Cumulative Impact Monitoring Program (CIMP) and the NWT Environmental Audit; Scott Stewart, GNWT Department of Lands Regional Superintendent for the North Slave Region; and Zabey Nevitt, Senior Policy Advisor with the* Tłı̨chǫ *Government.*

Questions and Discussion

The facilitator opened the panel with questions to the panelists. The audience was also given the opportunity to ask the panelists for their input on public engagement in decisions making, and the strengths and weaknesses of the current regulatory model. A summary of the panelists' responses are organized under each question below.

Question 1 – In terms of public engagement and involvement in decision making, what would you say are the strengths of the process under the current regulatory system? What are the weaknesses?

One of the biggest strengths of the current regulatory system is the ability for Indigenous People and communities to have a strong voice in the monitoring process. The system has also helped communities to document TK. One of the more important shifts with the regulatory system is the recognition of TK as intellectual substance. What this means is that the use of TK is not solely for academia or a political perspective, but can be used to help drive and design programs. If the decision-making process becomes inclusionary of Indigenous peoples and their TK, projects are able to get social licence from a community.

Some of the weaknesses of the current regulatory systems are the ways in which proponents will organize engagement practices as a process driven approach that will often lack integration. Proponents will often carry out engagement with a fragmentation of efforts instead of a more holistic approach. To counteract this, proponents can do much more work with and within communities.

Question from the audience – There are a lot of trucks that are using the roads to the mines, using a lot of diesel and they may also spill things on the road. That road goes right through the heart of caribou country. Are there any studies that have been done on the large amounts of trucks that use those roads? We also notice that the caribou are a lot less fat. Is that fat enough to carry a calf to the calving grounds?

There was a study led by the Yellowknives Dene First Nation (YKDFN) in conjunction with the University of Ottawa that looked specifically at the effects of diesel emissions on the roads leading to the mines. Lockhart Lake was chosen as the study area because it is used for a day and evening rest spot for trucks traveling to the mine sites. Samples were taken from both the snow and the lake. The initial hypothesis was that because this was such a heavily used site for the vehicles, most of the diesel emissions would be found in this area. When no significant level of diesel was found on the ground, sediment samples from the lake were also drawn. Although the sediment samples from the bottom of the lake did contain petrochemicals, it was discovered that the material was from previous forest fires and not from vehicles.

Another study is particulate monitoring being carried out at Ekati Mine for dust. Monitoring stations are set up as far as 10 kilometres to 14 kilometres away from the road. Sampling has determined that most of the heavier particles will only fall within 100 metres of the roadways. Lichen is also sampled for heavier metals resulting from dust deposition.

An additional study was started three years ago to look at why there was a 14-kilometre zone around the mine where the caribou would rarely enter. The researchers looked at three issues: large dust particulate matter; smaller particulate matter, such as PM 2.5 that comes from the emissions of vehicles; and visual and noise disturbance. In the past 3 years, the researchers were able to establish zones of larger particulate matter disturbance and zones of visual disturbance but are still unable to establish zones for the smaller particulate matter or noise disturbance. At this time, additional research is being conducted but is not yet conclusive.

Issues around the caribou herds are very complex. CIMP has looked at many other causes that could impact the Bathurst caribou herd such as human impact, climate change and predation. Although it is very difficult to have control over issues such as climate change, it is possible to have control over where development happens through land use permits and water licensing.

Question from the audience – I am concerned with vegetation along the trucking routes. It is not only a concern of mine, but across the NWT. I know that there is some mention of negative effects; there is a difference between hauling things to the mine and machinery working around the mine creating dust. Are any studies are being done?

There is an ongoing study that is not complete but has been underway for the last three years. The study is using a combination of field work and remote sensing to understand why there is a 14-kilometre radius around the mine that seems to be affecting the caribou.

The researchers looked at large particles (such as dust), smaller particles from vehicle emissions (PM 2.5), and visual and noise disturbances. So far, researchers have been able to identify zones of influence for the larger particulate matter and for visual disturbances but are still unsure how far the smaller particulate matter or noise can extend. The research is continuing but is not conclusive as of yet.

Question from the audience – Who enforces and monitors the measures and conditions, and what are the repercussions if they are not met?

Enforcement will vary depending on which oversite body is carrying out enforcement. In the case of the GNWT, it has a group of inspectors that focus on completing inspections for the mines. When smaller projects are involved, it also has its own specialized resource managers that will carry out all inspections on resource projects.

Existing enforcement policy in the NWT was carried over from federal legislation and focuses on education as the main component. The role of the inspector is to convey the compliance 'line'. The tools for inspectors to enforce compliance exist under regulations set out in the MVRMA and the Waters Act. In situations where non-compliance is conveyed to the company, interpretation issues arise quite frequently, and inspectors can help to provide guidance and bring a company back into compliance. If issues continue to occur, an inspector's discretion or order can be placed against the company. Once the inspector has identified what needs to be changed to be in compliance, most proponents are willing to comply.

For any project watchdog, the information gathered in the inspection reports can provide a lot of insight and will play an integral role in continuing a transparent and open system.

Regardless of regulatory body, inspectors' roles are crucial and projects cannot be carried out properly without consistent inspection. Risk assessment is carried out by the inspectors but there is room for the

potential growth of Indigenous guardianship programs that allow people who are already on the land, to support the work that inspectors are currently doing.

Question from the audience –You mentioned some tools of enforcement for the inspector in terms of education and re-occurring non-compliance, or further lawsuits. Is there any enforcement tools for enforcement offices to use in between the steps you mentioned? Or is there a monetary penalty that gives inspectors more ability to enforce?

There are no intermediary tools that an inspector can use for enforcement. This makes it challenging for inspectors because there is no intermediary between the inspector's directorate and the courts. This is further challenged by the timeframe for court orders; court briefs themselves can take over a year to write.

At this time, there is work that is underway to develop a corrective fine that would apply to the *Mackenzie Valley Resource Management Act* (MVRMA), and has the potential in the future to apply to the *Waters Act*. The changes would allow inspectors to issue a fine for any non-compliance described in the regulations. The fine would be based on a severity scale of one to three depending on the offense, with the penalty varying based on the severity. These tools are both still in draft phase.

Question from the audience – In terms of inspection and enforcement, perhaps we don't have enough dialogue. We often don't have faith because we don't see the outcomes. We don't have faith because of the relationship that the Dene people have with the Government. The Dene want to bring knowledge; we have our own enforcers and inspectors in our own way. Inspectors have to be able to go to a site whenever it is deemed necessary and not in a scheduled way.

Regulators can use all the extra resources they can receive, especially if the Dene people have information that the regulator doesn't have about a site. Site inspections are completed approximately once a month, and to a minimum of 10 per year. Due to safety concerns on many of the sites, it is understandable that it could be perceived that they are not 'random', but any sort of non-compliance on a larger project would be difficult to withhold. Inspectors will look for indications of poor management; therefore the frequency of inspection will counterbalance the likelihood of covering up larger issues. In the case of regular non-compliance, surprise inspections would not be out of the question.

Whenever there have been issues with inspections in the past, IEMA has provided input to the inadequacies and this is why oversite boards play a crucial role.

Question 2 – With our current systems in place, how can we best benefit from monitoring the data gathered by the projects to help inform ongoing and future regional decision-making processes?

That sort of process sounds very much like the Cumulative Impact Monitoring Program (CIMP), which illustrates the importance of harmonizing all data that is gathered from a project site. Beyond harmonization of data, standardizing monitoring processes and protocol is paramount. One example of this could be the Diavik and Ekati Mines taking sediment samples from Lac de Gras. If the sampling is carried out with inconsistent equipment and methodology, it may serve the purpose of the individual

mine, but not the larger goals required for regional decisions. This is where land management legislation, such as Land Use Plans, should be implemented prior to any project. This allows key regional issues and conflicts to be addressed and values identified prior to initiating further research.

Participants in the process should also consider what they are monitoring and why. Even though some variables may have been studied together for a long period of time, this does not necessarily mean they should always be studied together in the same manner. When working with scenarios, constant revision should be considered to verify each scenario against the predictions. If any are found to be incorrect, the early models should be corrected. Working through this process can ultimately lead a company or regulator to stop monitoring one aspect of project and start focusing on another.

One of the largest improvements that can be made is to have data available in an organized and accessible form. There is plenty of data from companies that is very useful, but not very accessible. A clear step to provide greater public access would be to build a database that compiles information into understandable and downloadable files. If industry is open to working in co-operation with the government, they too can play a vital role in shaping the process of this database design.

5.0 The Project is Closed, now what?

Shelagh Montgomery, Executive Director of the Mackenzie Valley Land and Water Board, provided an overview of the regulatory process for land use permits and water licences, site closure and reclamation, and the importance of planning closures.

There is a great deal of planning effort that goes into closure, particularly with larger projects. Even though closure is one of the later phases of a project, proponents should start to plan what closure could look like during the very early stages of project planning. **Figure 4** below describes the objectives-based approach typically used for larger projects and their closure planning process. Smaller projects, such as a land use permit, will typically require a final closure plan before the end of the project that is followed by a final inspection.

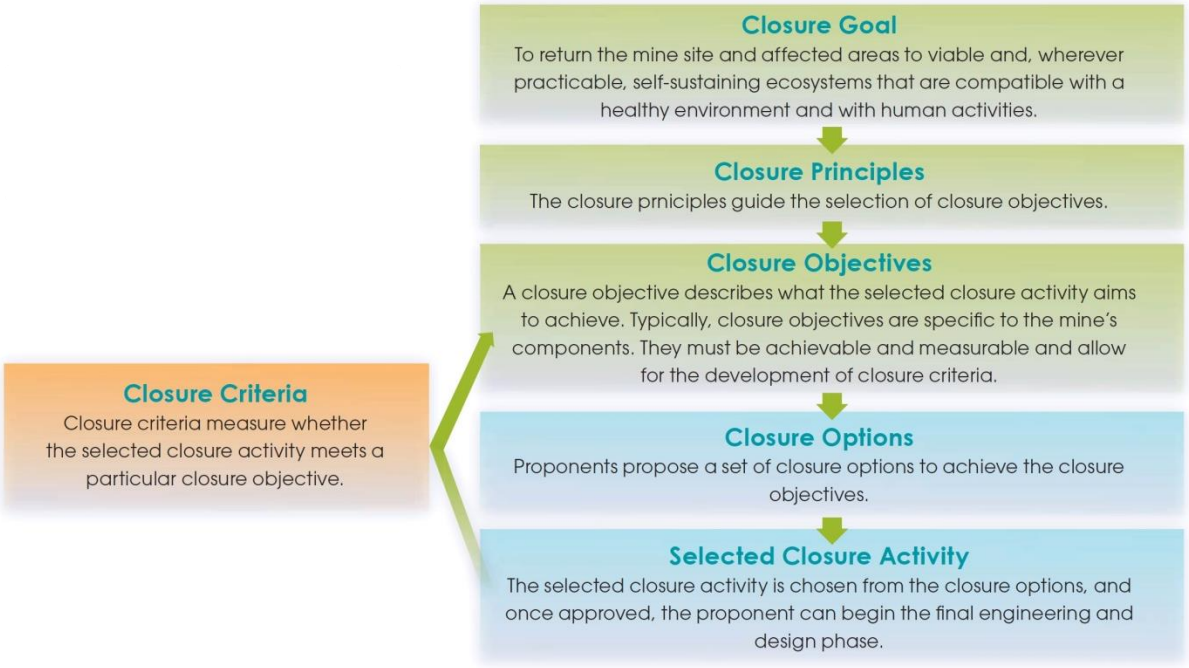


Figure 4: Objectives-based Approach to Closure and Reclamation Planning

Across the north there are many past examples where operations have closed without adequately addressing their cleanup and reclamation responsibilities. This has compelled governments to take responsibility for hundreds of millions of dollars in cleanup costs. The co-management system in the Mackenzie Valley has helped to prevent this. Instead, it provides many opportunities for northern

residents to participate in the closure planning and security determination process, ultimately creating an even more robust and transparent system.

Other approaches to closure have been explored in other provinces such as Saskatchewan. In 2005, Saskatchewan began to develop a framework for the long-term management of decommissioning of mine and mill sites on Crown land. Through a series of legislations and regulations, Saskatchewan was able to build a framework for returning Crown land held under surface lease back to the Province; this could only be authorized when site reclamation was completed to an acceptable standard. Saskatchewan was also able to establish clear oversite and funding responsibility for the long-term monitoring and management of the reclaimed sites.

5.1 Panel Discussion: The Project is Closed, now what?

The final panel discussion focused on long-term monitoring and securities, and on the province of Saskatchewan's Institutional Control Program. By way of introduction, the panelists were asked about some of the strengths and weaknesses of the Mackenzie Valley regulatory system.

The panel was comprised of the following members: *John McCullum, Executive Director of the Environmental Monitoring Advisory Board (EMAB); Keith Cunningham, Senior Analyst and Manager of the Institutional Control Program with the Mineral Lands and Resource Policy division of the Saskatchewan Ministry of Energy and Resources; and Dwight Grabke, Environmental Manager for Newmont Mining Corporation.*

Questions and Discussion

The facilitator opened the panel with questions to the panelists. The audience was also given the opportunity to ask the panelist for their input on various issues or concerns they had about the calculation of securities, monitoring capacity for Indigenous groups, and risk factors in releasing projects into government run long-term monitoring programs. A summary of the panelists' responses are organized under each question below. Individual responses have not been identified in the report.

Question 1 – In terms of closure planning and setting of security, what are the strengths of the Mackenzie Valley regulatory system? What are some of the weaknesses?

The structure allows for co-management which can provide for a broad level of input from communities and individuals in the decision-making process. The Boards approach to public engagement, such as hosting workshops is extremely valuable to resolving issues. Securities are a much more technical process, and often require hiring outside expertise to complete the process. It should be noted that both of these processes can take a long time, and finite constraints can help the processes move in a timelier manor.

One of the main weaknesses is the technical aspect of closure planning. Many of the components are extremely complicated and must be contracted out to a number outside professionals. When communities are interested in participating, there are often capacity barriers for increased participation. Beyond capacity, cost barriers to hiring the needed technical expertise can further exasperate the problem.

Finally, the process is also still relatively young without a formalized framework that pinpoints who is responsible for residual risk in the long run. This is where key examples from jurisdictions that have been successful in designing a model, such as Saskatchewan and British Columbia can be used. The Saskatchewan examples' design is undertaken for relinquishment rather than closure, and provides long-term known authority of identified sites.

Question from the audience – What part of the reclamation are you relinquishing? Are you required to relinquish parts of funds paying for the costs of the specific reclamation component, or do you wait for the monitoring to tell you that reclamation has been completed?

The answer is entirely site specific. Sites will generally remain one complete site until it is closed in its entirety and includes a five (5) – ten (10) year assurance. Portions of a site can be pre-released if they haven't been impacted. In most cases it is difficult to progressively reclaim and release smaller sites on a project site.

The financial assurance and security would also be dependent on the type of project. Transitional Monitoring Programs will realistically look at a 10-year period in order to ensure a site is safe, stable and secure. This period is needed to ensure that if work on a site was completed very recently, it doesn't get included in the program until it is stable.

Question from the audience – There has been a lack of capacity and a lack of funding to find expertise that can play a meaningful role to us. More roles have to be made for Indigenous communities for the abilities to be brought in. We expect a certain relationship and duty. How can we overcome and accomplish that?

There are two sides to this discussion. Most of the recent closure carried out in the north has dealt with abandoned sites that had no reclamation plans in place. Over the course of time, and learning new things, reclamation will improve, and expectations will continue to increase.

Through the development of land, the very nature of the land can change, and so too can the relationship. This leads to a fundamental question of environmental management. From the perspective of EMAB, the majority of the Board is made up of Indigenous people who use the land. It still requires members of the Board to pass on knowledge to communities, and is not the same as Indigenous people having a management role through the entire process. That is what co-management will hopefully carry out. At the end of the day, sites going through closure need to be safe for wildlife, people and the water. This tends to be the general feedback received by EMAB, and is used to push forward into plan reviews.

Question from the audience – What is the definition of long-term monitoring? I have heard it is 3-5 years. Would refilling a dewatered lake be considered long-term monitoring? How is the security determined for long-term monitoring?

When defining long-term monitoring, three (3) – five (5) years should not be considered long-term monitoring. In Saskatchewan for example, sites will have a minimum of 10 years to ensure it is safe, stable and secure before it is brought into the institutional program. Once on site, items such as shaft plugs, or the need to re-route creeks constitute a need for natural systems to settle. In the case of Beaver Lodge Mine, the site has been in transitional monitoring for over 30 years. At this time, the government has no plans on bringing it under transitional control because it does not meet the criteria of safe, stable and secure. Once the site has been included in the program, a 100-year window is used to determine the longer maintenance costs and funding needs.

Question from the audience –How is the security deposit bond for long term monitoring and long-term care and maintenance calculated? Who holds the bond? In addition, does the community have input into the costs?

The GNWT uses a 100-year forecast for calculating long care and maintenance needs. Depending on the timeframe of the maintenance required, the bonds are discounted accordingly.

The Government of Saskatchewan uses a different process all together. The next phase involves the relinquishment of the site to the province, which includes the estimated costs of monitoring and maintenance over the 100-year timeframe. This also includes an additional 10-year time frame to account for inflation. All of this is factored into a cash sum and is standalone within the government. Additional legislation has also been put in place to protect the funds.

Question from the audience – In terms of securities, how are the funds representative of what the project needs, and how are they protected in trust?

Jurisdictions all have their acts or legislation for protection. Regardless of province or territory, the securities are held by the government and protected to prevent the government from spending the funds. One local example in the NWT is Con Mine. The reserve for the company is held in cash dollars if the company decides to walk away from the project.

Question from the audience – The environment knows no borders. How can you work with cross boundary issues to protect things such as water and caribou? If you were on the other side of industry, what would you do?

The responsibility of the EMAB is monitoring Diavik Mine. Diavik does have programs in place, such as the AEMP which monitors cross boundary issues for a defined region around the mine. Some of these transboundary issues take place so far away from the mine that it is unfair to require the mine to monitor them. The Federal Government is then responsible for anything outside of this area. Further integration is needed between industry, the government and Indigenous groups to use all knowledge available to address larger transboundary issues.

Question 2 – Should there come a time where securities are no longer held for a site?

There are varying opinions depending on the perspective. From an industry perspective, the removal of securities requirements can transfer the requirements back to the original land owner. In the NWT, the government is in the process of examining this, but the process is still unclear in terms of residual risk and how that is quantified. If you focus on the polluter should pay model, then securities should always be held for a site. If a proposed form of closure does not work, the company involved should be held responsible.

With regards to Saskatchewan, there is a point in time where the security can be relinquished. Once the Ministry of Environment releases the site, it affirms that all closure criteria are met for the closure plan. This is when the institutional transfer is carried out, and the company provides the cash reserve and finances for the unforeseen circumstances fund. This then replaces the assurance system. There are some financial assurances that are kept for a maximum failure event until the unforeseen circumstances fund is large enough to cover a maximum failure event. It is at this point that the company is released from responsibility. It is unrealistic to expect a company to maintain a site for in perpetuity. This would mean that there would be an expectation for the company to exist for the same time-period.

Question from the audience – What risk factors have you experienced when moving forward and releasing projects? Did it work or not?

In the case of Saskatchewan, some projects were released, and it was not until the next round of lessons learned within the same project category that there was realization that long-term responsibility for the sites was needed. It was that initial work and lessons learned that provided the genesis for the overall institutional program. At this time, there are five (5) uranium sites and one (1) gold site that are having

their financial securities returned. That money would then be transferred to a long-term monitoring fund, with a portion of the total funds placed in an unforeseen events fund.

One of the larger lessons learned was when the government began to contract out site inspection work. There was a 300% difference in the budgets provided by bidders for the monitoring programs.
In the long-term as sites are removed from the program, the monitoring fund will continue to grow to a point where there will not be any requirement for bridging funds. Before reaching this point, the funds should be reviewed and reassessed annually.

Question from the audience – It was my understanding with the closures and cost estimates for the mines in respect to the proponent not having to pay; I thought the specific guidelines were created to prevent this from happening? Are they required to pay the estimates up front in full, or within phases?

Financial securities are based on what it would take to return a site as close to the original state as possible. The costs estimates are often very complex equations that involve many factors. There are specific costs in the calculation that you can anticipate, but sometimes things can happen that you do not predict. When that happens, the liability aspect is incredibly important to understand.

It is also important to be able to plan and set a security and distinguish between the securities themselves and who is responsible if something goes wrong. There are sections in all environmental legislation that allow governments different tools to go after a company to complete closure of a site. Even with the tools in place, if there is not a significant enough financial assurance in place then the government is ultimately responsible for cleanup.

Once securities costs have been established, they do not have to remain fixed at an amount. The process is intended to be a dynamic and can be reviewed and changed throughout the lifetime of a project, or during times of substantial changes to the site. This way, the costs can be either increased or decreased depending on the changes to the project.

6.0 Breakout Sessions

Nine break-out sessions were designed for participants to get an in-depth look at the different activities that happen to help implement the measures of an EA. Attendees participated in three sessions for each of the major themes of the workshops:

(1) Environmental Assessment is Done, now what?

- Public Input and Review
- Wildlife Management and Monitoring Plans
- How the Regulatory Process Works

(2) The Project is Authorized, now what?

- Follow-up Measures
- How is Traditional Knowledge / Community Involvement and Monitoring Considered in the Life of a Project and Closure Planning?
- Mackenzie Valley Environmental Impact Review Board – Technical Sessions on Cultural Impacts – A New Cultural Impact Tool (A single session was done impromptu in lieu of the presenter's time conflicts with the Traditional Knowledge session)
- How Inspectors Enforce Conditions (Compliance)

(3) The Project is Closed, now what?

- What Does Long-Term Monitoring Look Like for You?
- Institutional Control Program
- Closure Planning and Securities

6.1 Environmental Assessment is Done, now what?

6.1.1 Public Input and Review

Jacqueline Ho and David Finch Regulatory Specialists with the MVLWB and Chuck Hubert, a Senior Environmental Assessment Officer with MVRB gave a presentation on enhancing public participation during an EA. The presentation provided a general overview of the EA process, highlighting when and how the public is engaged and can provide input in each step of the process.

To help participants better engage with the material, a 'Hot potato game' was used to identify what activities happen in each phase of the EA. After the game was complete, participants were invited to ask questions.

The summary of discussion and key issues raised during the breakout session are listed below:

Summary of Discussion

- For the Tłı̨chǫ All Season Road EA, students were actively included in the processes (including being asked to make a presentation). This was very good and should be incorporated into other EA processes.
- Northern studies program in schools should include the regulatory process in their curriculum so that students are more equipped to understand the processes and can participate because such decisions can affect them.
- Translation to the local community language would be nice.
- Scoping is very important that needs to be a more in-depth process that is more than just a meeting or written comments. There are many ways that this can be done and should be explored. An example was provided was the Tłı̨chǫ Government's strategic priority-setting approach in which they are using many different mechanisms to engage their people.
- There needs to be more effort for engagement in the scoping stage (currently there is just a public meeting and written submissions), each region will be different, the Board should develop region specific protocols for engagement.

Key Issues Raised

- Funding for participation is important. Many Indigenous groups don't have the funding to completely participate.
- Capacity is always a struggle.
- Timelines are too restrictive. As a result, input isn't as comprehensive and holistic as it could be.

6.1.2 Wildlife Management and Monitoring Plans

Andrea Patenaude, an Environmental Assessment/Habitat Wildlife Biologist with Government of Northwest Territories (GNWT), Department of Environment and Natural Resources (ENR), gave a presentation on Wildlife Management and Monitoring Plans (WMMPs). The presentation covered the intent behind the WMMP guidelines, proposed changes to the Wildlife Act; specifically, section 95 relating to WMMPs, the proposed process for the submission review and approval of WMMPs, and the importance of organizations receiving information packages for any legislative or policy changes

The summary of discussion and key issues raised during the breakout session are listed below:

Summary of Discussion

- Discussion around the review process was brought up. Technically items do not have to go to review due to Ministerial authority, but the Minister must operate within the legislative framework and as part of good governance, requires a duty to consult the public.
- Any new changes to the *Wildlife Act* should ensure it conforms to existing land use plans, legislation and policies etc.

Key Issues Raised

- Consideration that WMMPs be required for all development applications.
- Existing land use plans should take precedence.

6.1.3 How the Regulatory System Works

The breakout session was led by Tyree Mullaney, a regulatory specialist with the MVLWB who provided an overview on the how the regulatory system works, requirements for land permits and water licences, and the overall permitting process. She also presented the post environmental assessment, updates needed for the project description and the public hearing process for application. After the presentation, participants were invited to ask questions.

The summary of discussion and key issues raised during the breakout session are listed below:

Summary of Discussion

- Who makes the determination of whether or not an application is complete.
- What Minister is responsible for the final decision?
- The importance of connectivity with the local Water Board offices.
- Ensuring the process is followed to determine if proper engagement of the communities is completed.

Key Issues Raised

- There is confusion as to who to call when water issues are observed.
- Important to ensure that all meetings have the correct interpreters present.
- Did not like that the public process begins after the rights of access have been granted.
- More Indigenous peoples need to be included in the on-land inspections.
- There can be uneasy interactions between Indigenous groups and proponents.

6.2 The Project is Authorized, now what?

6.2.1 Follow-up Measures

Brett Wheler, a Senior Environmental Assessment Policy Officer from the Mackenzie Valley Review Board (MVRB) led the breakout session on the follow-up measures of an EA. An EA follow-up is a program for evaluating the soundness of the EA and determines the effectiveness of the measures. He provided an overview of how the follow-up is implemented, why follow-up is important and why the MVRB is now starting to implement follow-up, what other jurisdictions are doing such as the Nunavut Impact Review Board (NIRB) and Canadian Environmental Assessment Agency (CEAA) and he also provided insight from the federal review of impact assessment. MVRB is implementing a reporting

system to help track implementation follow-up. Brett gave the participants an opportunity to review some examples of follow-up reporting and asked for input.

The summary of participant's comments and input on the example reports raised during the breakout session are listed below:

Summary of Discussion and Feedback

- MVRB consolidation of reports (e.g. from GNWT and Dominion Diamond) into a single report and addition of Review Board commentary on the status of each measures would be the most useful for communities.
- A 'snapshot' summary at the front of the report would be helpful.
- Detailed analysis is very helpful, but perhaps a template could be provided to obtain information in a consistent format.
- It would help to have clarity on whether the Review Board considers the measure to be completed/fulfilled.
- The example reports provided are not in plain language. Need to have plain language to make these accessible for all audiences.
- Written reports are good, but it would be helpful to have an option of presenting in person to community to talk about measure implementation.
- Multiple separate reports reduce readability and accessibility.
- Look at the Giant Mine Oversite Board (GMOB) format for measures reports, they have some good ideas.
- Report card format is good.
- Color coding status of measures is a great idea (e.g. complete, in progress, not implemented, not applicable to current phase, etc.).
- The Nunavut Impact Review Board (NIRB) has thresholds in a table format, this is good information and easy to review.
- Canadian Environmental Assessment Agency's (CEAA) Rainy River example does not have enough detail.
- The GNWT's table format is good, the direct links that are provided in the table are also easy to use and help sort information.
- Is there a way to think about passing on learnings from developer to developer (not just to public and to the Review Board)?
- Use links to make concise report card that can be expanded as reviewer/audience wishes. An example: for each measure, have one short row in a table, with several links to expand text of the measure, more detail on status, etc.
- Possible to have an EA 1 page summary?
- Is there a way to report to communities on things they care most about and in a way that is meaningful?

- Think about SNP sampling field guides for communities and happy face graphs for reporting.
- Are there ways to piggyback engagement – e.g. measures implementation report/update presented by the Review Board as part of a community engagement session that includes government updates and developer updates?

6.2.2 How is Traditional Knowledge /community involvement and monitoring being considered in the life of the project and closure planning?

The first two breakout groups were presented Nick Ballantyne, a permitting specialist from Dominion Diamond Ekati Corporation. Nick provided an overview of how Traditional Knowledge (TK) and Community Planning have been integral to projects with Dominion Diamond Mines, and how TK will continue to be implemented in the future. Due to Nick's time constraints, the third session was given by Mark Cliffe-Phillips, the Executive Director of the MVRB. He provided an overview of what cultural impact assessment is, how TK fits into EAs, and at what point it enters the process. He also provided insight on the gaps that still exist, and how the cultural impact assessment tool will help the Board moving forward. This tool is still under development and will be used by the MVRB to offer better solutions and mitigation measures. After each of the breakout session presentations, participants were then invited to ask questions or provide comments.

The summary of discussion and key issues raised during the breakout session are listed below:

Summary of Discussion

- TK Workshop with Elders came out of Jay Project process.
- Student Seed Program run on site at Ekati.
- Distinction between TK and Community Knowledge when undertaking knowledge collection.
- TK can be gained through direct communication, from formal traditional studies or with the proponent.
- Ensuring community public hearings are culturally appropriate.
- Reaching out door to door in communities.
- Understanding that perspectives on mitigation may be different.

Key Issues Raised

- Expectation that communities want to share community knowledge or TK.
- Research gained through Indigenous communities needs to be appropriately shared back to the communities.
- More monitoring and research should be carried out by the Indigenous community and included in earlier phases of projects.
- Community Knowledge may not necessarily be TK.
- Elder's Traditional Knowledge is not always 'portable'. With a new project, or changes to an existing one, you must continually return to a community and ask who the experts are.

6.2.3 How Inspectors Enforce Conditions (Compliance)

Trevor Bremner, Manager of Resource Management with the Government of Northwest Territories (GNWT) Department of Lands in the Sahtu Regional Office, and Mike Roesch, Head of Federal Lands Inspection Team with Indigenous and Northern Affairs Canada (INAC) presented an overview of compliance, inspections and enforcement in the NWT. They provided an overview of the authorities and regulators within the MVRMA.

The summary of discussion and key issues raised during the breakout session are listed below:

Summary of Discussion

- Integrated Risk Program (IRP) provides inspector with baseline information on how often inspections should occur and variability and probability of risk. This baseline information is based off of a jury of senior inspections and their experiences with other projects.
- Most important tool for inspectors is in-person inspection. It ensures compliance and educates and builds relationship with permittee.
- Inspection reports are completed immediately on return from inspection.
- Both positive and negative items are noted in reports.
- First tool of non-compliance is the inspectors report – clearly states what condition of a permit the company is in violation of.
- Stop work orders can be issued and almost always work as they cost companies money.
- Suspension is the next step and can shut down the entire project.
- The final step is investigation and prosecution which inspectors try to avoid.
- There is currently no step between stop work order and prosecution. The court process can cost tax payers a lot of money.
- GNWT Department of Lands is relatively new and is working on ways to better relationship with the public, regulators and proponents.

Key Issues Raised

- Difficulty of carrying out duties within the scope of legislation.
- Logistics and educating industry is complicated from the inspector's point of view.
- In some cases, even with consistent non-compliance, persecution is not realized due to overall costs of proceeding.
- Difficult to make un-announced inspection trips on larger projects, such as mine sites.
- Difficult to make un-announced inspection trips in smaller communities where everyone may know you are coming.
- After devolution, it is important to build relationships between both the Land and Water inspectors.
- More Indigenous People should be acting in the roles for inspectors.

6.3 The Project is Closed, now what?

6.3.1 What Does Long-Term Monitoring Look Like to You?

Meghan Schnurr, a Regulatory Specialist and Anneli Jokela, a Senior Technical Advisor from the Wek'èezhìi Land and Water Board (WLWB) gave a presentation on the post-closure monitoring and maintenance stage during project development. The presentation also highlighted the steps taken during an objective based approach to closure planning. Following the presentation, participants were presented with a case study and supporting questions. A scenario of a post closure activity was provided, and a series of questions were provided to help guide the participants through the activity. Following the activity, a general discussion was held to get participant feedback on long-term post closure monitoring.

The summary of discussion and key issues raised during the breakout session are listed below:

Summary of Discussion and Feedback

- Industry should fund more Indigenous monitoring programs.
- Random site visits by inspectors should occur more frequently.
- Data collection from monitoring should be shared with all parties.
- When is monitoring complete? How timelines are selected? This should be more widely discussed.
- Including communities in the decision-making process is very important.
- Important to consider the traditional methods of monitoring sites.
- If elements are left in perpetuity, the government should fund 'forever' monitoring for communities.
- More monitoring power should be placed in the hands of the First Nations – views are grounded in environmental protection.
- During the closure monitoring process, an independent group should be established to help complete the monitoring.

- Monitoring between the companies and government should be equally shared.
- Monitoring should be done seasonally.
- Knowing the audience when preparing monitoring programs and seeking input.
- Criteria need to be measurable and not influenced by anything else.
- Specific factors as a result of landscape change.

6.3.2 Post Closure Management of Decommissioned Sites in Saskatchewan

Keith Cunningham, a Senior Analyst with the Saskatchewan Ministry of the Economy, Mineral Policy Branch presented on Saskatchewan's Institutional Control Program for Post-Closure Site Management. The presentation provided an overview of the program, how control funds factor into the program, how management of the program works (including examples), and the current and future plans for the program. After the presentation, participants were invited to ask questions.

The summary of discussion and key issues raised during the breakout session are listed below:

Summary of Discussion

- Many questions have to be established about what projects are accepted, at what point in the process can you accept them, and what are the requirements of accepting them?
- Long-term care and control of the sites have 100-year cycle for funding.

Key Issues Raised

- Balancing the closure criteria decisions between the company and government to achieve the best possible out-come.
- Indigenous consultation is a part of the program; may not be as comprehensive as NWT.
- Impacted communities in Saskatchewan have not conducted any post closure inspections.

6.3.3 Closure Planning and Securities

Nathen Richea from the GNWT Department of Environment and Natural Resources, Lorraine Seale from the GNWT Department of Lands, and Angela Plautz from the MVLWB each led a section of the breakout session on closure planning and securities. The presentation provided an overview of what closure planning is, how it is done and how securities are calculated. It also covered how public participation fits into the various phases of closure planning, and the overarching legislation and policies that currently exist.

The summary of discussion and key issues raised during the breakout session are listed below:

Summary of Discussion

- Securities are held by the GNWT, INAC or land owner depending on where project takes place.
- If a land use permit or water licence is required, a security can also be held.
- Securities are held for all projects in the GNWT regardless of size and scope.
- GNWT uses a model called RECLAIM to account for reclamation estimates. The model is approximately 20 years old and takes into account third party estimates for clean-up costs. The model was recently revised in 2017.
- Early involvement is the biggest part to be involved with in pre-application phase.
- Closure standards need to be reflected back to proponent. Without it, the proponent cannot determine a successful closure.
- There are opportunities for engagement to improve and set requirements to determine if closure has been successful. That process ultimately leads to more accurate securities estimates.
- Most applications in the preliminary screening phase will have a conceptual closure plan for review and comment. The security estimate can also be commented on.
- Security deposits can also be set by a land owner. Both the GNWT and INAC can hold securities.
- GNWT is in the process of updating and amending a number of pieces of legislation: *Northwest Territories Lands Act*, *Commissioner's Lands Act*, and *Waters Ac*t.
- Security adjustment and refund processes discussions are underway for end of project life and long-term management plans for mines.

Key Issues Raised

- Concern with smaller projects being approved with no securities.
- Confusion between GNWT policy of asking for securities for all projects and small projects being approved with no securities.
- Need to ensure that RECLAIM model deals properly with uncertainty.
- Concern over past companies without securities in place leaving and not cleaning up.
- Complicated to put a value on everything related to land.
- Importance of socioeconomic and cultural considerations evaluated during EAs and IBAs.

7.0 Final Thoughts and Feedback

The Mackenzie Valley Resource Management Act (MVRMA) Workshop provided a venue for participants working within and outside of the system, learning about how environmental assessments are executed in the development, operation, closure and post closure phases of a project. Panel sessions highlighted the range of perspectives and expertise that are involved after an EA has been completed and it moves from life of project to closure. An important focus of this workshop was on follow-up and monitoring. How does this support the environmental measures that are included as part of the EA? Breakout workshops further allowed participants to engage on specific topics related to different stages in the life of a project.

Nearing the end of the MVRMA workshop, a wrap-up and summary of the sessions was provided. The facilitator also read through additional comments that had been provided on sticky notes, or placed on the white board located in the reception area.

General themes that emerged throughout the workshop included:

- Indigenous engagement and Traditional Knowledge are important in environmental impact assessment.
- Participating in an environmental assessment and its follow-up measures is difficult for small communities and Indigenous governments and organizations due to capacity and available funding.

The workshop is a continued opportunity to place the MVRMA system in context, continue to inform participants on the goals of the MVRMA co-management system, and to prepare participants to be more engaged in the future.

There were several opportunities for feedback provided to the participants outside of the panel discussion, presentations, and breakout groups. These included a 'survey box' available throughout the entirety of the workshop where participants could submit feedback anonymously. Participants were asked to answer a series of questions about their experience at the workshop: how it could be improved and any additional comments they cared to add. Summaries of the responses from the survey feedback approach follow this section.

In closing, Mark Cliffe-Phillips thanked all partners for attending the fourth MVRMA Workshop. Moving forward, the organizers are looking to rotate the workshop to different communities to strengthen outreach and participation. Elder Samuel Gargan of the Deh Gáh Got'ję First Nation closed the workshop with a prayer.

7.1 Participants Comments

Using a ballot box, participants were asked to comment on a series of questions about the workshop and provide any other additional feedback they wished to include.

The questions from the feedback were as follows:

What did you find valuable about the MVRMA workshop?

Overall the participants found the workshop well organized with appropriate content for the main themes of the workshop. In particular, participants enjoyed:

- The opportunity to network with people with diverse backgrounds and from different communities.
- The breakout sessions were useful and allowed for greater interaction between presenters and participants.
- The variety of the panel members was well received.
- The opportunity to hear from presenters and panelists with a variety of perspectives.
- Discussions around Traditional Knowledge.

How could this workshop be improved?

Many of the participants found the time spent sitting and length of each segment too long, and that people felt unprepared during the breakout sessions. Participants also commented that there were not enough opportunities to network. Many people commented that there needs to be more diverse representation on the panels and for the presentations in the breakout groups. The reoccurring themes were:

- More Indigenous representation on the panel and in the discussion groups.
- Presentations need to use more 'plain language' – difficult to understand.
- More breaks and interaction with fellow participants – e.g. icebreaker events.
- Provide presentations and list of speakers ahead of the workshop.
- Better formatted questions for the panelists.
- Questions asked to the panel should appear on the large screen behind the panel.
- Breakout group presentations were too long for the allotted time.

What would you like to learn about or see at the next MVRMA workshop?

Many of the participants agreed that there should be better representation of Indigenous people and women on the panel and breakout groups. Participants also agreed that they would like to see updates

to projects that were used as examples for this workshop, as well as any changes to legislation that was mentioned. The reoccurring themes were:

- More information presented or a panel devoted to Traditional Knowledge.
- Indigenous involvement in the EA processes.
- Updates to any projects or legislation.
- More comparisons between Canada and other jurisdictions outside of Canada.
- Shorter breakout sessions with more interaction included.

Any additional comments?

The remaining comments from the participants ranged from congratulatory thanks to smaller organizational matters. Reoccurring themes included:

- There should be a member from the GNWT on all panel discussions to help with responses to audience questions.
- Less writing on presentation slides and too many slides for many presentations.
- Panels were too long.
- More Indigenous people presenting and providing their experiences.
- Greater encouragement for industry to attend.