

# Newsletter of the Land and Water Boards of the Mackenzie Valley

FEBRUARY 2012 VOLUME II, ISSUE 1



Tsiigehtchic, NWT (“mouth of the iron river”) Photo Robert Alexie



**Wek'èezhii**  
Land and Water Board

## Inside this Issue

## Water Monitoring Training Capacity Building at the Community Level

- Water Monitoring Training
- NWT Audit and Timelines
- Closure and Reclamation Plans for Diavik and BHP
- Risk Management Workshop
- External Initiatives
- Quarterly Licence, Permit, and Plan Report



**“Sharing responsibility—working together to make the best decisions for the land, water, and people.”**

Brett Wheler (Wek'èezhii Land and Water Board) leads discussion of water-quality monitoring for the Gameti sewage disposal facility during a training workshop. Participants included staff from the community government, GNWT-Municipal and Community Affairs (GNWT-MACA), and Aboriginal Affairs and Northern Development Canada (AANDC).

**Water quality** is an important issue for all NWT communities and is of special concern for Aboriginal communities that engage in traditional land and water use activities. The Land and Water Boards are mandated to provide for the

conservation, development, and utilization of water resources and require detailed water-quality information in order to make responsible decisions regarding water and waste management. Monitoring is essential in order to understand background water quality, human and natural impacts on water quality, and the implications for aquatic ecosystems and human activities.



*(l-r): Brett Wheler, Larry Flunkie, John Steinwand, and Alfred Nitsiza (taking sample) collect water near the Whati solid waste disposal facility.*

The water licences granted to the communities by the Land and Water Boards include requirements for monitoring related to sewage discharge and solid waste facilities. (Drinking water is regulated by the Government of the Northwest Territories.) Therefore, it is vital that training and support to facilitate community-based water-quality monitoring be provided. If local skills are not kept up-to-date, knowledge about the water can be intermittent or otherwise unreliable, making it challenging for both the Wek'èezhìi Land and Water Board (WLWB) and the communities to make informed decisions related to water and waste management.

To address this training and information gap, WLWB staff has been working collaboratively with the Tłjcho communities to build local capacity for water-quality monitoring, focusing on the monitoring requirements

of the community water licences, including, sampling procedures, reporting and record keeping, and communication and interpretation of results. Training workshops have been designed and delivered in three parts: the first is in the classroom discussing water licence requirements and water-sampling procedures, the second takes place in the field collecting water samples at SNP locations, and the third is a discussion of the results and how to properly fulfill regulatory reporting requirements.



*Labelling sample bottles.*

Community staff members are provided with a field manual that describes the sampling locations, parameters, and procedures specific to the community, instructions for pre- and post-sampling logistics, and templates for record-keeping and annual reporting. To help foster understanding of water quality issues and to connect community staff with staff from the agencies responsible for various aspects of water management, the WLWB has worked collaboratively with other organizations, including: Environment Canada, GNWT– MACA, AANDC, and Ecology North. Community participants have included community Senior Administrative Officers, community employees, land officers, Chiefs and council members, and other interested community members. Early results of this initiative are encouraging: regular water-quality monitoring was undertaken by community staff in Wekweeti and Behchoko during 2010, both of these communities submitted annual reports in 2011, and in that year monitoring began in Gameti and Whati.



# The NWT 2010 Environmental Audit

## When the number crunching was over, it turns out that the Land and Water Boards are doing just fine.

The Auditors, SENES Consultants Ltd. who were appointed to carry out the 2010 audit, wanted to know if the Land and Water Boards of the Mackenzie Valley (LWBs) were carrying out their responsibilities in a timely manner. To research this, they analyzed statistics found on the Land and Water Boards' Public Registries. What they found was no surprise to the LWBs. As Larry Wallace, Chair of the Sahtu Land and Water Board said, "What I personally found of most value in the 2010 NWT Audit is the observation that the majority of our applications continue to be processed in a timely manner".

*"The data suggests a generally efficient process."*  
SENES Consultants

### What did they find?

The data indicates that 72 per cent of all land use permits (types A and B) were issued within 42 days of their applications being deemed complete and that 90 per cent of the time the Mackenzie Valley Land and Water Board (MVLWB or the Board) carried out an application completeness check within the 10-day regulated time period. The Auditor states that, "This indicates that the LWBs are primarily deciding to issue permits rather than referring....to environmental assessment, ordering a public hearing, or ordering further study, and that these data suggest a generally efficient approvals process".

The MVLWB has also crunched some numbers which support observations regarding foundational gaps as the root of the problems in the NWT regulatory system. Since the establishment of the MVLWB in 1998, of the roughly 1500 applications before the Board, only 4 per cent have been referred to a higher level of screening, and of those 4 per cent of applications referred, 90 per cent of them have been in regions with unsettled land claims and no land use planning.

The Auditor concluded that "foundational elements of the system of land and water management are still

missing and need to be resolved before a truly efficient, timely and integrated system....can be implemented and judged as to its ultimate effectiveness and timeliness".

*"What I personally found of most value in the Audit is that the majority of our applications continue to be processed in a timely manner."* Larry Wallace, Chair, Sahtu Land and Water Board.

These foundational issues – as pointed out by the Auditor and many others – are largely related to unsettled land claims, absence of land use plans, and clarification of engagement and consultation requirements, including Crown consultation under section 35 of the Constitution.

### Improving Community Engagement Best Practices

While the Board has no ability to influence the settlement of land claims or the completion of land use planning, it is working to improve its community engagement guidance to applicants and holders of permits and licences. As cited by SENES, Neil McCrank, and the Auditor General, lack of adequate community engagement is often cited as the reason why applications are deemed incomplete or why the Board must lengthen timelines using its regulations to ensure that adequate community engagement occurs.

**To address this concern, the LWBs will soon be releasing draft *Engagement Policy* and draft *Guidelines for Engagement for Applicants or Holders of Land Use Permits or Water Licences*. These draft policy and guidelines establish clear requirements for engagement, life-of-project planning, and best practices for industry engagement in the Mackenzie Valley.**

**Please check any of our LWB websites in the upcoming weeks to review these draft documents and to find out how you can provide your input.**



# Opening the Doors for Closure and Reclamation Plans

## Landmark reached as mining companies get approvals

BHP Billiton Canada Inc. (BHP) and Diavik Diamond Mine Inc. (DDMI) have type A water licences (administered by the Wek'èezhìi Land and Water Board (WLWB) that allow them to construct, operate, and close their respective mines. For the first time in the history of the Northwest Territories, two operating mines completed the approval process for their closure and reclamation plans *in collaboration with the stakeholders of the Mackenzie Valley.*



*Ekati Diamond Mine, NWT*

BHP went through an extensive closure planning process which involved a multi-stakeholder working group whose efforts have subsequently helped shape the closure planning process for projects throughout the NWT. Following a series of interviews conducted by the Land and Water Boards of the Mackenzie Valley (which resulted in an interim set of guidelines), DDMI helped to incorporate the lessons learned from BHP's experience and further refined the closure planning process for large-scale mines.

As a result of the efforts of both BHP, DDMI, and other industry and federal, territorial and Aboriginal government representatives, First Nations, and regulators, the Land and Water Boards of the Mackenzie Valley and Aboriginal Affairs and Northern Development Canada are close to releasing *Guidelines for the Development of Closure and Reclamation Plans for Mines and Mineral Exploration Projects within the Northwest Territories.*

The guidelines will clarify the roles for all stakeholders in the closure and reclamation planning process and clearly outline the regulatory expectations and timelines associated with the submission of closure and reclamation plans.

*The collaboration exemplified by BHP and DDMI has paved the way and made it easier for future companies with similar requirements to prepare their closure and reclamation plans.*



*Diavik Diamond Mine, NWT*

These guidelines are a tool that ensures everyone is on the same page with respect to closure and reclamation planning, and that we are doing everything possible to clarify our expectations and to employ all means necessary to properly close and reclaim disturbed sites. The collaboration exemplified by BHP and DDMI has paved the way and made it easier for future companies with similar requirements to prepare their closure and reclamation plans. The De Beers diamond mine is currently undergoing a renewal of its type A WL which will include requirements for closure and reclamation. During the recent public hearing, most parties agreed that the Snap Lake Closure and Reclamation Plan is anticipated to be updated in accordance with the guidelines. This is a significant step forward as we all have an interest and responsibility to ensure that projects are cleaned up so the land, water, and wildlife can be enjoyed by future generations.



# An Introduction to Risk Management

## A Two-Day Information Session and Discussion on Human Health and Ecological Risk Assessment

Patty Ewaschuk (WLWB) and Rebecca Chouinard (MVLWB) were the lead organizers of an information session which looked at risk assessment and mines. MVLWB Communications Officer Jonathan Churcher interviewed Patty to learn more about the session which was held in Yellowknife at the Explorer Hotel on December 6-7, 2011.

### **JC: Why did you decide to hold the session and why at this time?**

PE: Risk assessment can play a role in many Board decisions and is often part of the evidence that people give us. Risk assessment can be intimidating because it is often misunderstood as being a big technical mystery. Our basic idea was to host a generic workshop which would educate everybody—Board staff, scientists, and people with little or no technical background—on what risk assessment is and is not about. The goal was to get all of us to the same level of understanding.

The WLWB needed to make decisions regarding mine closure criteria. We realized that the many parties involved in the file didn't have a common understanding of risk assessment and the role it plays in mine closure. The MVLWB and the WLWB are regulating mines that are at the same stage concerning closure planning, so it was a great time for us to collaborate. Closure was the starting point, and then we broadened the scope of the workshop to include any mining issue that related to human health and ecological risk assessments.

### **Who was your target audience?**

Our target audience was Board staff and any parties that are involved in the Boards' decisions related to the mines, but we really wanted the session to be of value to individuals who are not experts or who do not have much knowledge of risk assessment. Our workshops are often quite technical and scientific, but this time we structured the sessions so they could be accessible to an audience that often gets overlooked.

### **What did you set out to accomplish?**

We wanted everybody to get a basic understanding of how risk assessment applies to mining and to provide opportunities to ask questions to experienced risk as-

sessors. We encouraged a lot of open discussion, and this helped to develop a common language. We also wanted to address some of the mysteries and misconceptions people have about risk assessment.

### **Which aspects of mine risk assessment did you focus on?**

As this was only a two-day session, we did not want the scope to be too broad, so we concentrated on the risks posed by chemicals on human health and ecologies. This is the area that most Boards have to deal with when they consider risk assessment, so for us it was the priority subject matter. Risk assessment can apply to many issues, such as 'failures' or 'catastrophes'; that level looks at devastating weather or infrastructure collapse like dam failures, but was not really what we needed to cover.

### **Who were the presenters and why did you choose them?**

Our main speaker was Dr. Ken Froese from SLR Consulting. He is an expert in the field and he understands integrated holistic risk assessment. Looking at the environment, humans, and industrial development from a holistic standpoint is vital here in the North, and we wanted the information presented in that light.

We were fortunate to have Edna Willier from the Lesser Slave Lake Indian Regional Council. She participated in a risk assessment in northern Alberta to determine if moose and other game could safely be eaten by the local communities. We didn't want only the industry or government sides of risk assessment, and Edna spoke from a community perspective.

We were very glad to have a number of risk assessors who came from mining companies and the federal government. We had spokespeople from Environment Canada and SENES who have experience with the Giant

Risk Assessment continued.

*I liked the way that experts and non-experts came together, especially during the question periods and the discussion sessions. Patty Ewaschuk, session organizer.*

Mine remediation project; there were representatives from Newmont sharing what they have learned about Con Mine; we had experts from the Diavik mine; and we listened to speakers from Rescan who talked about the BHP site. So we had experts who knew about a mix of decommissioned, contaminated mining sites and current, in-operation sites. Each of them provided different and important insights on how to handle risk assessment.

### What were the highlights of the workshop?

In terms of the process, I liked the way that experts and non-experts came together, especially during the question periods and the discussion sessions. We don't often see scientists and non-scientists learning from each other and I was glad we could offer that kind of opportunity. The plan was that the workshop would be participant led and that we would have a lot of visual information; and from my perspective, we succeeded in both aspects.

In terms of content, what stood out was *problem formation* which is the very first step of assessing risks. At that point, the problems are defined. Our guests all stressed that planners do not spend enough time asking or answering the basic questions in their initial assessments. They also emphasized that the local community—the people who live near a project—can play a key role in making sure assessors ask the right questions.



*Participant-generated diagram of typical mine site risks.*



*Day 1 at the Risk Assessment Information Session.*

## External Initiatives Update

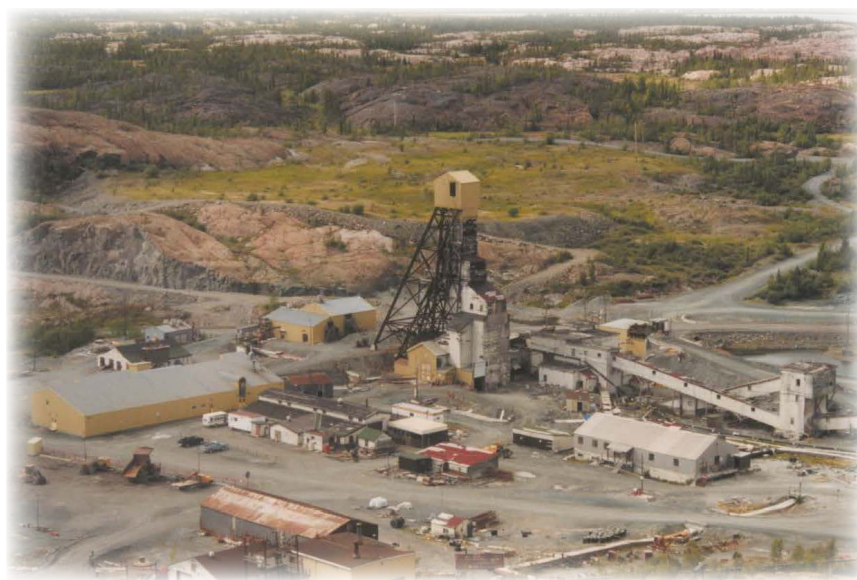
A summary of the latest developments concerning external initiatives undertaken by the Land and Water Boards. External initiatives are important events that stabilize, define, clarify, and enhance our relationships with major players in the regulatory regime of the Mackenzie Valley.

### MVLWB and MACA Make Joint Determination on Regulating Land Use within the City of Yellowknife

Since 2009, the Land and Water Boards (the Boards) have been in discussions with the GNWT - Municipal and Community Affairs (MACA) on a process to determine, on a case-by-case basis, the extent to which communities in the Mackenzie Valley have the ability to regulate land use within their boundaries, as per section 98 of the *Mackenzie Valley Resource Management Act*. The Boards and MACA have developed and agreed to a process that will help them with the determinations.

One issue that has been resolved was whether or not the City of Yellowknife could regulate specific landuses, such as drilling on the Giant Mine site. In late August, the MVLWB and MACA signed a City of Yellowknife determination which outlines that the MVLWB will regulate within City boundaries to the full extent of paragraphs (4)(b) and (5)(b) of the Mackenzie Valley Land Use Regulations and that the City will continue to regulate to the extent of its authority in its General Plan By-law. This ensures that the MVLWB will have a role in regulating activities at the Giant Mine site during clean-up.

For more information about this external initiative, contact Angela Plautz, Regulatory Advisor, at [aplautz@mvlwb.com](mailto:aplautz@mvlwb.com).

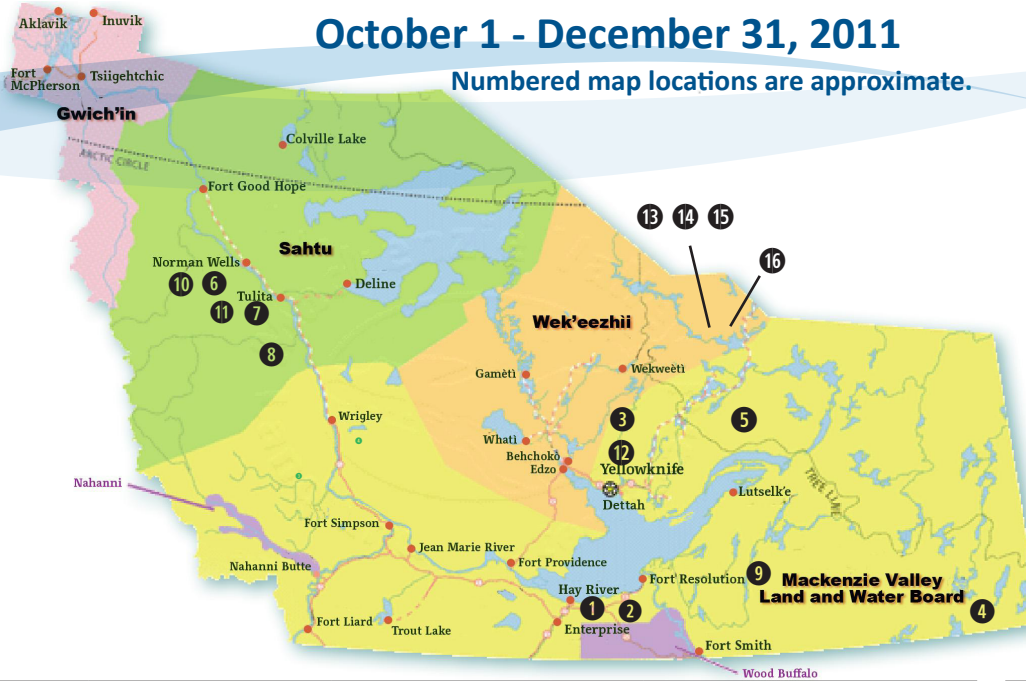


*The Mackenzie Valley Land and Water Board is responsible for issuing permits for activities at Giant Mine (photo) which is situated within the limits of the City of Yellowknife.*

# Land Use Permits - Water Licences - Plans

October 1 - December 31, 2011

Numbered map locations are approximate.



Key	LW Board	Land Use Permits	Company	Project
1	MVLWB	MV2011Q-00177	Daniel Beck	quarry
2	MVLWB	MV2011Q-0023	Hay River Disposals	quarry
3	MVLWB	MV2011C-0021	Tyhee NWT Corporation	winter road, camp, and mine maintenance
4	MVLWB	MV2011C-0024	Strongbow Exploration Inc.	drilling and camp maintenance
5	MVLWB	MV2011J-0019	Mantle Diamonds Inc.	camp and fuel cache maintenance and cleanup
6	SLWB	S11T-002	Husky Oil Operations	staging, winter road, camp,
7	SLWB	S11A-003	Husky Oil Operations	oil and gas drilling
8	SLWB	S11B-004	Explor Geophysical Ltd.	2-D seismic survey
		<b>Water Licences</b>		
9	MVLWB	MV2011L4-0002	NTPC	Taltson power plant
10	SLWB	S11L3-002	Husky Oil Operations	staging, winter road, camp
11	SLWB	S11L1-003	Husky Oil Operations	oil and gas drilling

		Plans (long-term and associated with major projects)		
12	MVLWB	MV2009L4-0004	NTPC	Aquatic Monitoring for Bluefish Hydroelectric Facility
13	WLWB	W2009L2-0001	BHP Billiton Diamonds Inc.	Wastewater and Kimberlite Management
14	WLWB	W2009L2-0001	BHP Billiton Diamonds Inc.	Interim Closure and Reclamation
15	WLWB	W2009L2-0001	BHP Billiton Diamonds Inc.	Pigeon Stream Diversion Fish Habitat Compensation and Monitoring
16	WLWB	W2007L2-0003	Diavik Diamond Mines Inc.	Ammonia Management

## Other permit- and licence-related activities

### New Applications Received

MVLWB - 1  
GLWB - 0  
SLWB - 5  
WLWB - 3

### Amendments

MVLWB - 6  
GLWB - 0  
SLWB - 0  
WLWB - 0

### All Report and Plan Approvals

MVLWB - 10  
GLWB - 0  
SLWB - 0  
WLWB - 6

### Closures

MVLWB - 11  
SLWB - 0  
GLWB - 0  
WLWB - 0



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