

# Land and Water Boards of the Mackenzie Valley: Approach to Closure & Reclamation



Northern Latitudes Mining Reclamation Workshop  
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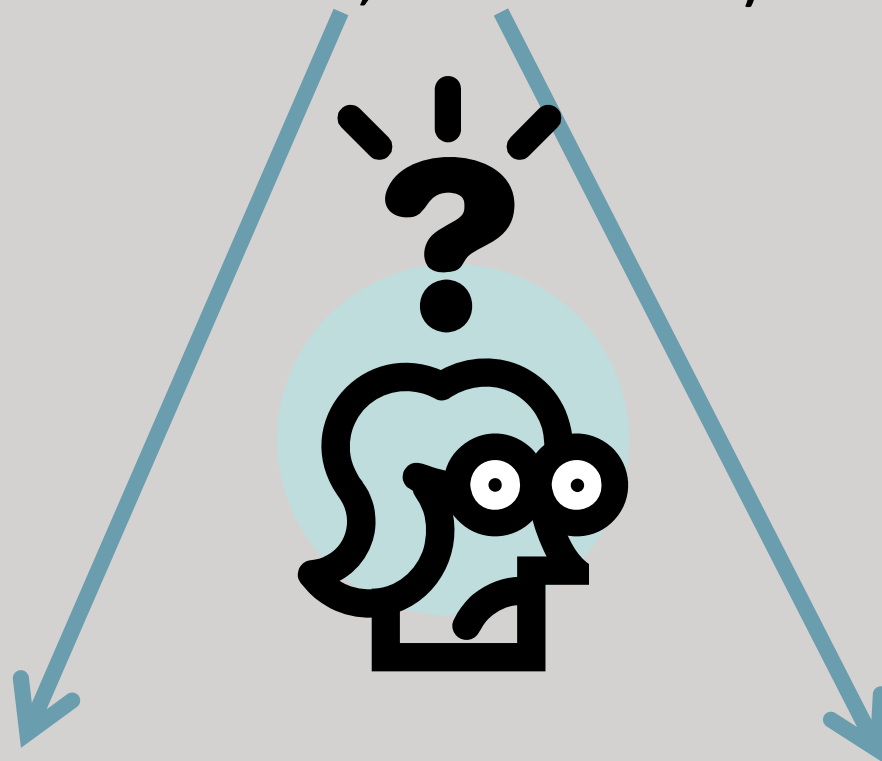
# Jurisdiction of the 4 Land and Water Boards of the Mackenzie Valley



# Boards regulate the use of land and water through issuance of permits and licences

## Legislation

(Mackenzie Valley Resources Management Act (MVRMA), NWT Waters Act, Land Claims etc.)



**Land Use Permits**

**Water Licences**

# Inter-Board Consistency

## Legislation

(Mackenzie Valley Resources Management Act (MVRMA), NWT Waters Act, Land Claims etc.)

Legislation interpreted, by individual Boards, to create business processes (i.e., policies and procedures)

**GLWB – 1998**  
**SLWB – 1998**  
**MVLWB – 2000**  
**WLWB - 2005**

**Land Use Permits**

**Water Licences**

# Inter-Board Consistency?

**Inconsistent Policy and Procedures**

```
graph TD; A[Inconsistent Policy and Procedures] --> B[Intentional]; A --> C[Un-intentional]; B --> D[Due to differences in regional values]; C --> E[Due to when Boards were formed];
```

**Intentional**

**Un -intentional**

**Due to differences in regional values**

**Due to when Boards were formed**

# Section 106 of the Mackenzie Valley Resource Management Act (MVRMA)

- “The Board may **issue directions on general policy matters** or on matters concerning the use of land or waters or the deposit of waste that, in the Board’s opinion, **require consistent application throughout the Mackenzie Valley.**”

# Clarity and Consistency

## Standard Procedures and Consistency Working Groups

- Review existing policies and procedures throughout the Mackenzie Valley
- Develop new policies and procedures
- Established in January 2008
- Made up of staff of all four Boards

# There are 6 Working Groups

1. Public Engagement and Consultation Working Group
2. Plan Review Process and Guideline Working Group
3. Water/Effluent Quality Working Group
4. Terms and Conditions Working Group
5. Data-Resource Sharing Working Group
6. Application Processes Working Group

# Working Group #2: Plan Review Process & Guidelines

## Purpose:

- Greater certainty, clarity and consistency for management plans

## Scope:

- Develop a standard process for the review of management processes

# Working Group 2

## Plan Review Process & Guidelines

### Products

- Aquatic Effects Monitoring Program Guidelines
- Adaptive Management Guidelines
- Closure and Reclamation Guidance (mining and oil & gas)
- Waste Management Guidelines
- Internal Procedural Manual (how to conduct reviews of management plans)

# Reducing Uncertainty

- Proponents will know what to expect before they apply
- Reviewers and stakeholders will understand how they can contribute to Board decision-making process
- Documented policies, procedures and guidelines will increase Board capacity

# Closure and Reclamation in the North

## Three Stages of Development

- Exploration
- Advanced exploration
- Mining & milling



Exploration Camp, 2000



Prairie Creek Advanced Exploration, 2004



Ekati Mine, 2000

# Closure and Reclamation in the North

## Three Closure Planning Phases for Mining & Milling

- Preliminary CRP
- Interim CRP (potentially many iterations)
- Final CRP

Before



After



# Closure & Reclamation Document

## Approach to Closure and Reclamation for Mines within the Mackenzie Valley

- PROCESS for HOW a proponent develops a closure and reclamation plan
- Addresses all three stages of development
- Addresses all three phases of mining & milling
- TEMPLATE for WHAT the plan should look like

# Lessons Learned for Developing C&R Plans

Based on lessons learned from other projects and closure planning processes:

1. Make the process shorter
2. Get buy-in upfront
3. Need more stakeholder involvement
4. Too technical

# Process for Developing C&R Plans

Identify Reviewers



Site Visit



Submission of proposed closure objectives


Closure Objectives - what are we trying to achieve?

- Land
- Water
- Wildlife
- Air
- Community

Responsibility of the Board

Responsibility of the Proponent

# **Mine Component = Waste Rock Piles**

A large pile of waste rock from a mine, showing a dark top layer and a lighter, rocky base. The pile is composed of various sizes of rocks and debris, with a distinct horizontal layering. The top layer is dark and appears to be a fine-grained material, while the lower layers are composed of larger, angular rocks and gravel. The pile is situated in an open area with a clear sky in the background.

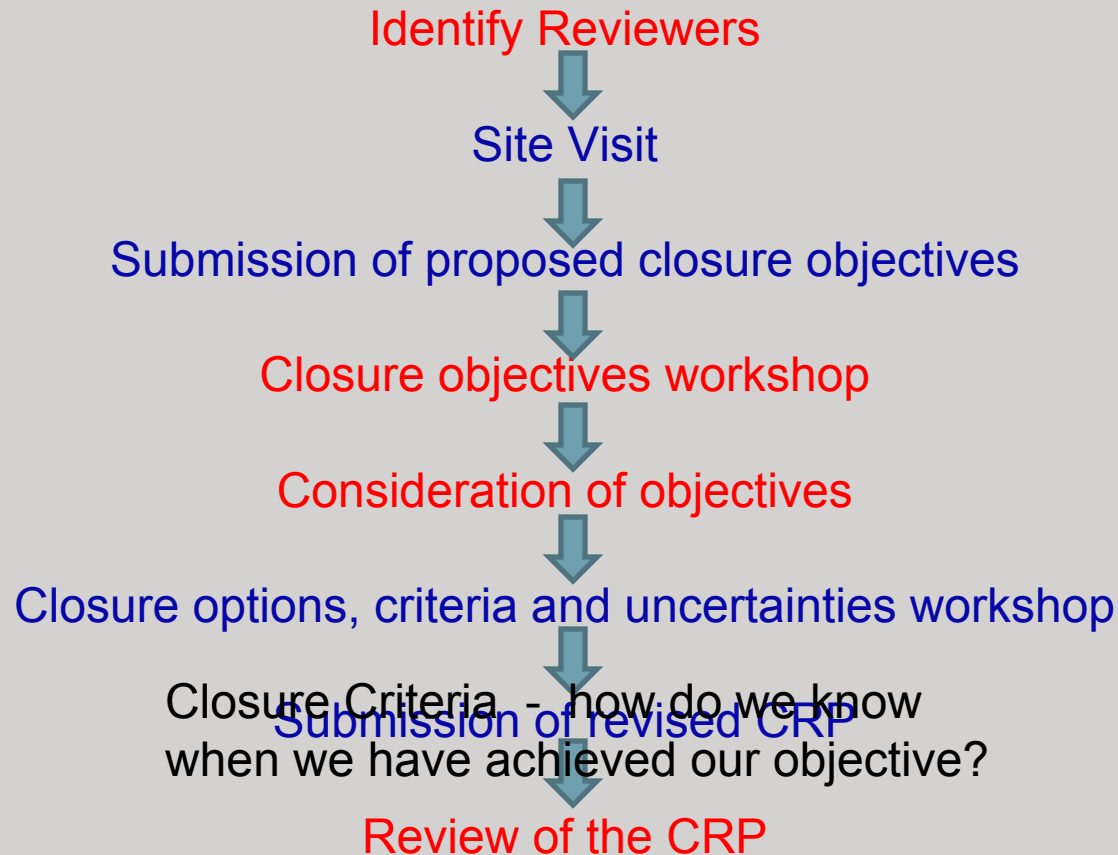
## **Closure Objective:**

**To ensure that the waste rock piles don't present a safety hazard for wildlife**

## **Closure Criteria:**

**The side slopes of the waste rock piles are no steeper than a 20 degree angle**

# Process for Developing C&R Plans



Responsibility of the Board  
Responsibility of the Proponent

# What a closure plan should look like

## **Chapters:**

1.0 – Executive Summary

2.0 – Introduction

3.0 – Project Environment

4.0 – Project Description

5.0 – Requirements for Permanent Closure

6.0 – Progressive Reclamation

7.0 – Temporary or Interim Closure Measures

8.0 – Integrated Schedule of Activities

9.0 – Post-closure Site Assessment

Appendices

# Working Group #2 – Next Steps

- CRP document sent out for public review and is available online
- Incorporate comments
- Investigate options for moving forward with one document
- Continue to communicate

# How you can get involved

Check the public registry

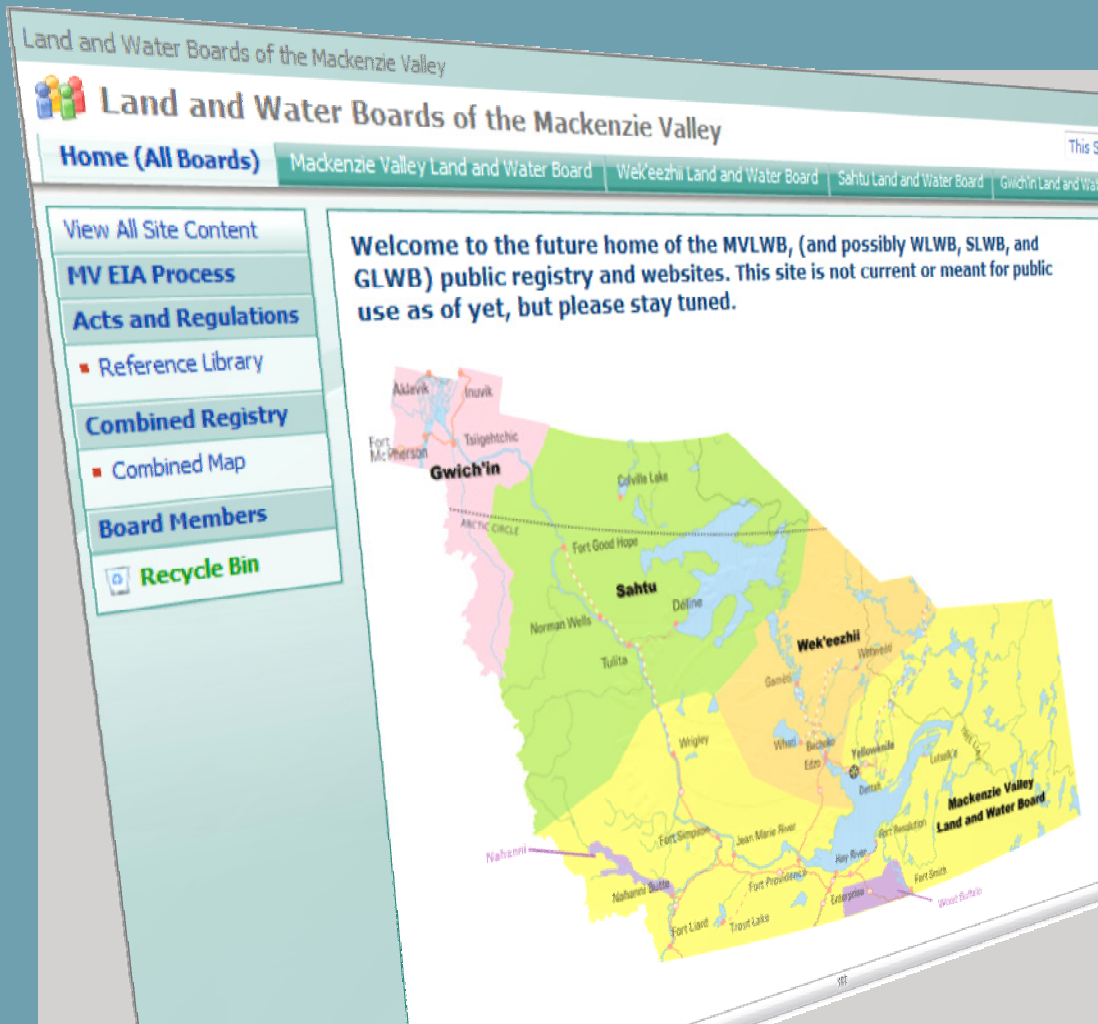
Attend public hearings

Submit written comments

Provide traditional knowledge

Contact Board staff or proponents

# WWW.MVLWB.CA



- Separate tabs for each Board
- Hosted by MVLWB
- Online ledger and registry
- Application Lists and Maps
- Shared Calendar and Contacts

**Working Group Info:**

**[www.mvlwb.ca/pages/WorkingGroups.aspx](http://www.mvlwb.ca/pages/WorkingGroups.aspx)**