Central Mine Remediation

From Vision to Achievement

Justin Kong, OAM Program, Manitoba Environment and Climate Change

2nd Annual OAM Workshop – Oct 24, 2024



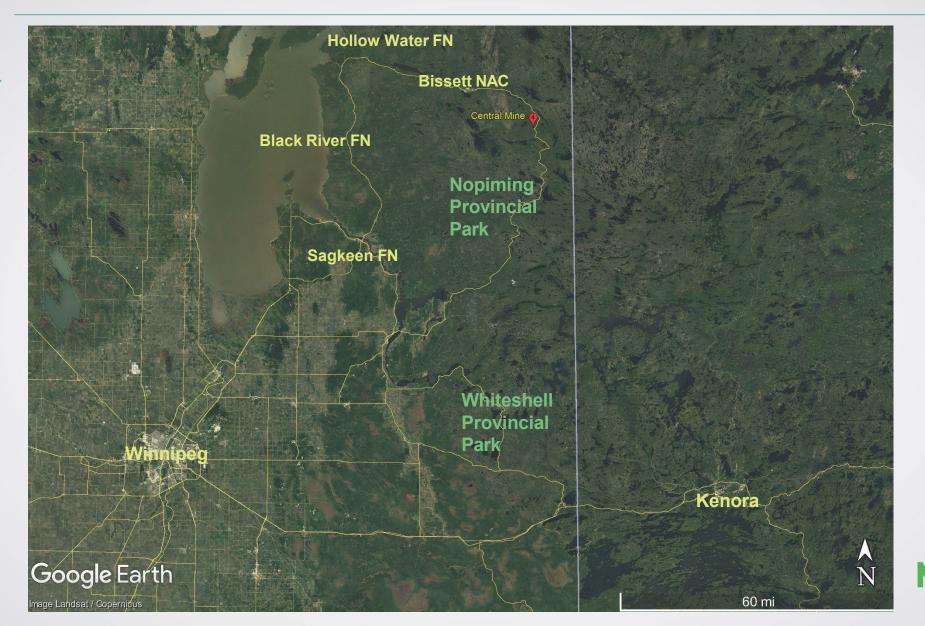
OVERVIEW



- Part 2 CHALLENGES AND SOLUTIONS
- ▶ Part 3 PROJECT PROGRESS



Site Location





Nopiming Provincial Park

- Private lodges
- Cottage communities
- Hunting and fishing



Background

Remediations works previously completed at site including:

- Reconstruction of PR304 with Bituminous Geomembrane Liner
- Tailings capping on east side of the highway





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PROJECT CHALLENGES AND SOLUTIONS

Engage stakeholders early to discuss remedial solutions and provide project updates to stakeholders on a regular basis.



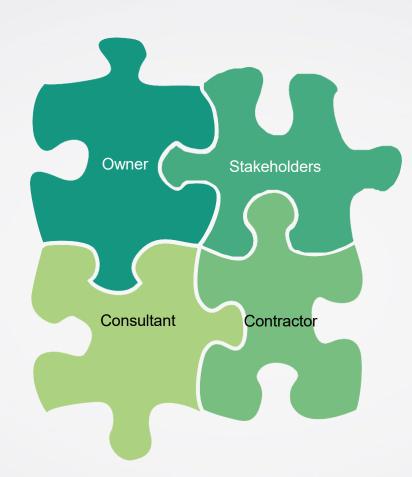
Project Team Members

Manitoba OAM

Project Manager: Cory Graham Project Sponsor: Morgan Hallett

Consultant

KGS Group Sub: ODK (survey)



Internal Stakeholders

Parks: Park Permit Forestry: Timber Permit

Historic Resources Branch: HRB Approval Crown Land Management

Wildlife Branch Mines Branch Local Conservation Office

Local Communities

Hollow Water First Nation
Black Water First Nation
Sagkeng First Nation
Bissett Northern Affairs Community
Cottage Owners Associations
Adjacent Mining Companies
Manitoba Metis Federation

Contractor

Prime: Sigfusson Northern Sub: Titan (geomembrane)



Feedbacks from Previous Work

Feedbacks from previous works:

- Improve communications with stakeholders and local communities.
- Clay borrow development created significant disturbance to local communities.
- Soft tailings surface was challenging for clay compaction. Also created tailings tracks on highway.



Communication

• **Requirement**: Obtain permits and approvals from stakeholders without delaying the project

Solution:

- Internal Stakeholder:
 - Active communication, involve stakeholders early in design phase.
 - Create meetings to clarify project scope
 - Push communication: create project channel on MS Teams, post project updates regularly.
- Local Communities:
 - Sending notification letters regularly
 - Communicate and answer questions

Internal Stakeholders

Parks: Park Permit

Forestry: Timber Permit

Historic Resources Branch: HRB

Approval Crown Land Management

Wildlife Branch Mines Branch

Local Conservation Office

Local Communities

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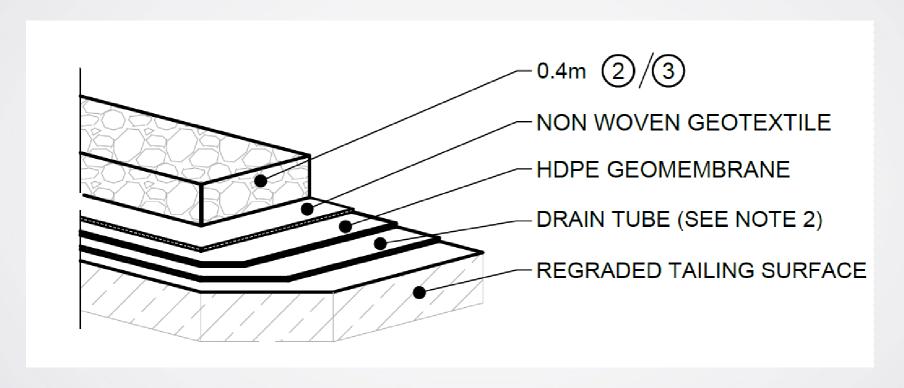
Manitoba Metis Federation



HDPE Liner

Requirement: Capping 125,000 m² mine tailings with no clay

Solution: High-density polyethylene (HDPE) geomembrane (liner)





Soft Tailings

Requirement: Mange the risk of soft tailings that may impact construction schedule.

Solution: Notified all potential risks in Mandatory Virtual bidders meeting with proper documentations. Review contractor's construction plan.





Project Solutions

Local Economy Development:

- Tendering: Target 10% of the construction contract value delivered by indigenous involvement.
- During construction:
 - Contractor hired workers from nearby indigenous communities.
 - Consultant hired indigenous business for survey works.
- After construction: planning local engagement for potential long-term maintenance works (e.g. tree planting, revegetation)





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PROJECT PROGRESS

September 2023 to October 2024





Winter 2023:

- Kitchener Shaft Capping
- Produce rockfill
- Stockpile on site









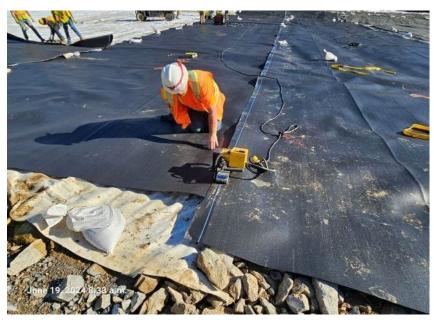




1. Drain tube textile



3. Identify weak weld with pressure test and repair with a patch



2. Wedge welding HDPE Liner



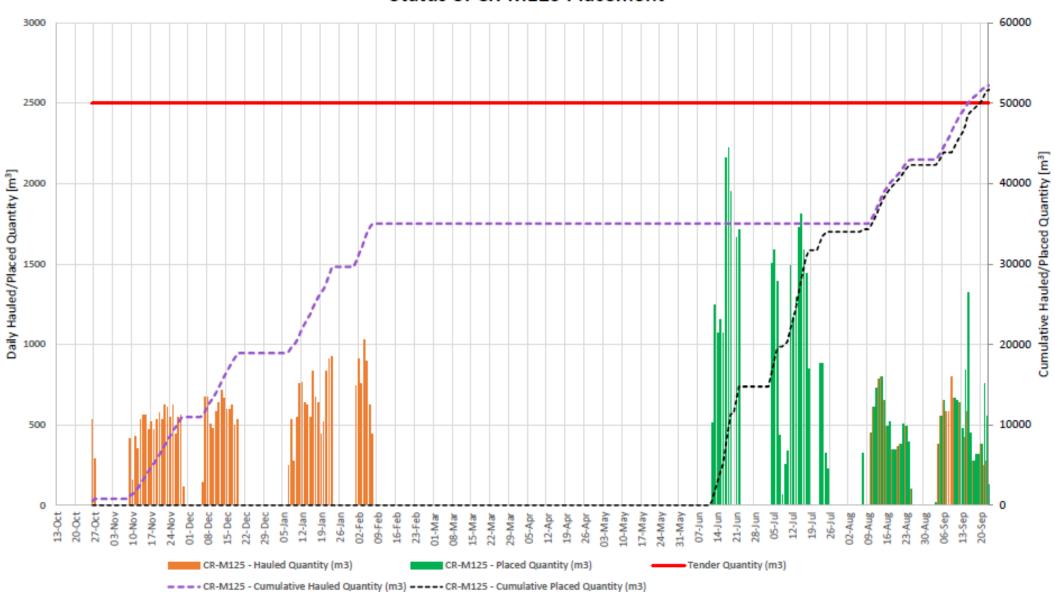
4. Seamed geotextile with hot guns





Material Tracking

Status of CR-M125 Placement













Anchor Trench Installation with Clay Compaction







THANK YOU MERCI

Manitoba Environment and Climate Change

