

Revisions to Amendment Application No. 1 of Project Certificate 003 and Water Licence 2AM- DOH1323

NWB Technical Meeting – January 2016

**TMAC Resources
January 28, 2016
Cambridge Bay**

TMAC Resources Inc. is a publicly traded, Canadian-based company.

Our Vision and sole focus is to explore, develop and mine the Hope Bay Greenstone Belt in the Kitikmeot Region of Nunavut with the support of our landowner and community partners.

Operates with a deep respect for the land and the people of Nunavut.

Hope Bay History



1988 - 1999

- Initiated first large exploration program



1999 - 2007

- Permitted production at Doris North under NIRB project certificate and NWB Type A Water Licence



2007 - 2013

- Built significant infrastructure at Doris
- Project on Care and Maintenance 2011 - 2013



**2013 –
onward**

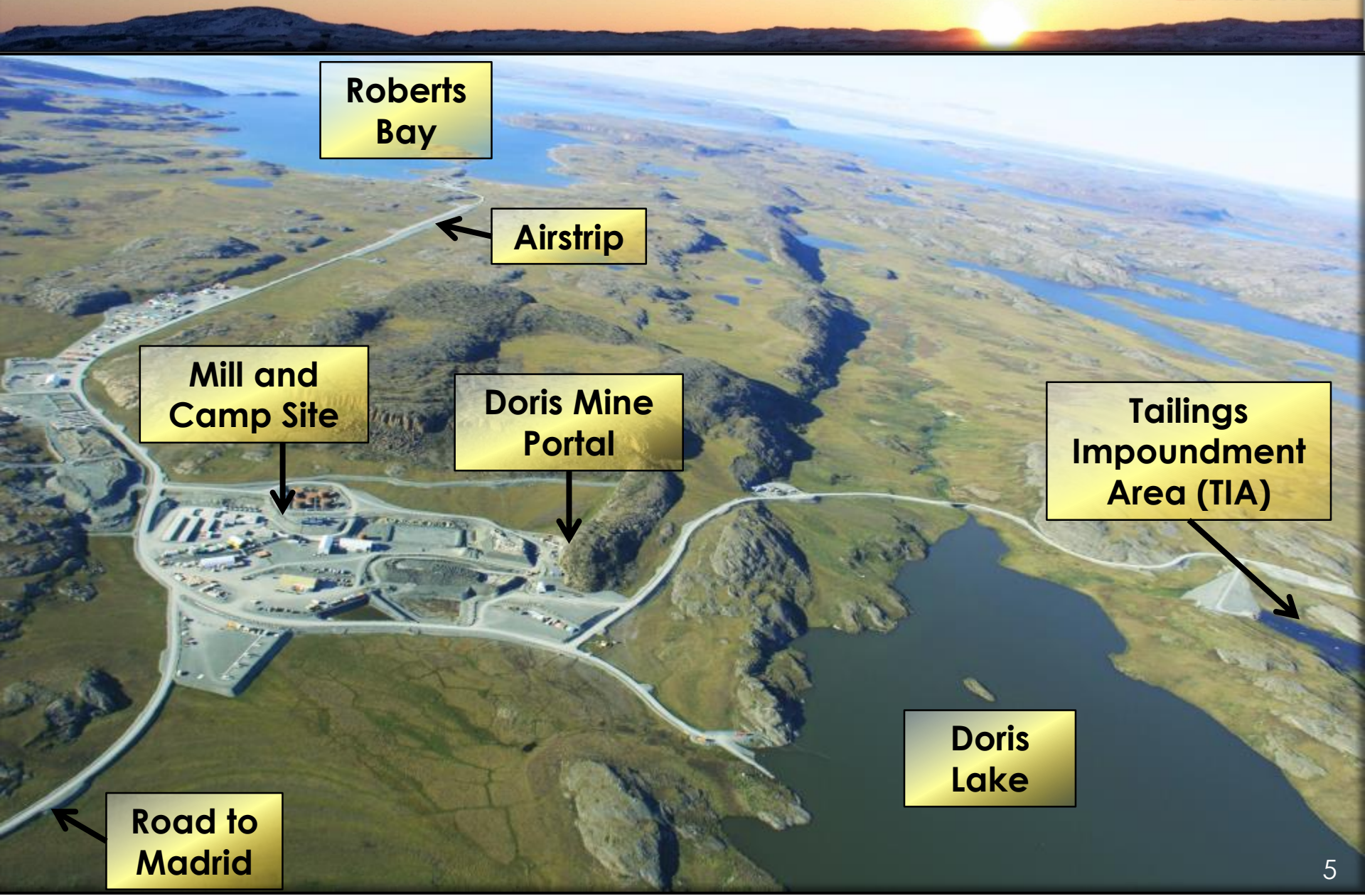
- Belt-Wide Exploration and Development Planning
- Comprehensive Framework Agreement with KIA
- TMAC publically listed; fully funded to production
- Doris North Construction

Project History



March 2013	TMAC purchased the Hope Bay Project
August 2013	Type A Water Licence renewal No. 2AM-DOH1323 (Doris North)
November 2014	NWB Type A Water Licence amendment application NIRB Project Certificate amendment application
April 2014	TMAC request to suspend review of NIRB and NWB amendment applications
June 2015	Re-submission of updated Project Certificate and Type A Water Licence amendment applications
November 2015	NIRB and NWB commence technical review of the application
January 2016	NIRB and NWB Technical Meetings
2016	TMAC plans to commence activities requiring Project Certificate and Water Licence Amendment as soon as the permit is issued
April 2017	Target for commercial production

Site Orientation



Purpose of the Application



- Amend the Doris North Type A water licence and Project Certificate because of changes to:
 - the mine plan
 - waste water management
 - the tailings deposition strategy
- Reduce the risk to the environment
- Provide authorizations that are practicable and can be implemented

Aspects that Change

- **Mine**
 - Mining method
 - Mining rate
 - Mine Life
 - Ore storage
 - Vent raises
- **Mill**
 - Mill rate
 - Cyanide destruction
 - Mill process
- **Tailings**
 - Volume
 - Deposition
 - Containment structures
- **Waste Rock**
 - Volume
 - Handling
 - Disposal
- **Water Management**
 - Collection
 - Treatment
 - Testing
 - Disposal
- **Waste Management**
 - Type
 - Disposal
- **Laydown**
 - Area
- **Camp**
 - Size
- **Explosives**
 - Storage
- **Closure**
 - Cost estimate

Water Licence Changes



- Updated description of the Project
- Tailings Management
 - Allowance for sub-aerial tailings deposition
 - Addition of an interim dyke
 - Changes to the design of the South Dam
- Additional infrastructure
 - Water crossings
 - Pipeline to Roberts Bay
- Conditional Discharge
 - Mine water to Roberts Bay
 - TIA water to Roberts Bay
- Updated management, monitoring and inspection requirements
- Revisions to the Closure Bond

Application Package



Package

Content

- 1 Project summary and outline of Application package
- 2 Description of the proposed changes to the Project as currently authorized
- 3 NIRB, NWB and NPC Applications
- 4 Outlines the existing conditions, project interactions and potential effects
- 5 Revised Management Plans
- 6 Design details for the proposed changes
- 7 Proponent information

Water Use and Management



- Change to the terms of the water licence
 - No Change in water use sources and volumes
- Key Considerations
 - Freshwater (surface and groundwater) balance and predictive water quality model
 - Geochemical characterization and inputs to predictive water quality model

Waste Disposal and Management

- Change to the terms of water licence
 - Subaerial deposition to tailings
 - Effluent discharge to Roberts Bay
- Key Considerations
 - TIA dust fall
 - TIA effluent balance and predictive water quality model
 - Marine mixing zone and predictive water quality model

Emergency and Spill Contingency Planning



- Changes to the terms of the water licence
 - No Changes

Operations and Maintenance Procedures



- Changes to the terms of the water licence
 - No Changes
- Key Considerations
 - TIA Design Criteria and Details
 - Roberts Bay Pipeline Design Criteria and Details
 - Other Site Infrastructure (example - Water Crossings)

- Changes to the terms of the water licence
 - No Changes, but updates to existing mitigation and monitoring plans
- Key Considerations
 - Aquatic Monitoring Framework – Marine and Freshwater
 - Wildlife Monitoring and Management Plan
 - Air Quality Management Plan
 - Water Management Plan
 - Waste Rock and Ore Management Plan
 - Update to other (existing) plans as needed

Closure and Reclamation Planning

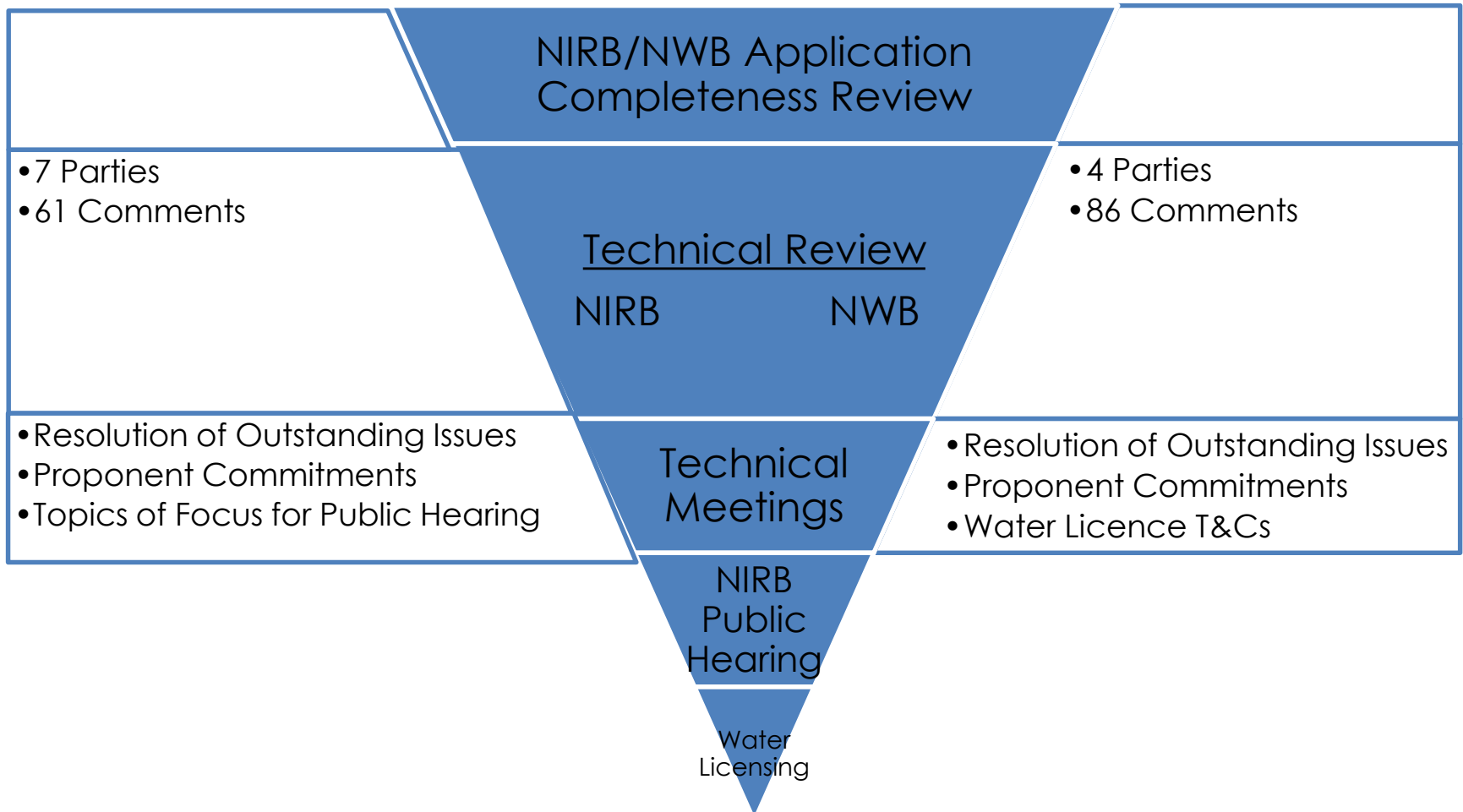


- Changes to the terms of the water licence
 - No Changes
- Key Considerations
 - Revised closure plan submitted
 - Update the Closure Cost Estimate
 - Bonding requirements amongst parties (NWB, KIA, DFO)

Technical Review

NIRB

NWB



Focus of the NWB Technical Meeting

Topics

Water Use

Waste Disposal

Emergency and
Spill, Operations and
Maintenance

Monitoring and
Closure

Other – Project
Interaction

Issues

- Site Wide Water Balance

- Waste Rock Management
- Minewater and Tailings Management Strategy
- Infrastructure Design (TIA, Roberts Bay Pipeline)
- Effluent Discharge to Roberts Bay (TIA and Minewater)

- Aquatic Monitoring Framework – Marine and Freshwater

- Update to AEMP – Marine and Freshwater
- Update to Wildlife Monitoring and Management Plan
- Update to Air Quality Management Plan
- Update to other plans as needed
- Update the Closure Cost Estimate

- Phase 2 and the Madrid Application