April 8, 2022

Note to file

Follow-up with Government of the Northwest Territories departments on the Terms of Reference for the Pine Point Mine Project

Review Board staff met online with Government of the Northwest Territories departments on April 8, 2022, to follow-up on the Terms of Reference for the Pine Point Mine Project.

Government of the Northwest Territories participants:
Alexis Campbell, Alison Brown, Ash Varghese, Chris Hewitt, Chris Van Dyke, Dinah Elliot, Emily Ingarfield, Heather E. Beck, Jeffrey Cederwall, Jennifer Spencer-Hazenberg, Jon Posynik, Joshua Gauthier, Kate Mansfield, Katie Rozestraten, Kayla Hoff, Laurie McGregor, Lorraine Seale, Malorey Nirlungayuk, Mark Bell, Melissa Pink, Mishcelle Remigio, Rohan Brown, Sarah Samms, Terrianne Berens, Tony Vermillion, Tye Hand

Review Board staff: Eileen Marlowe, Mark Cliffe-Phillips, Alan Ehrlich, Chuck Hubert, Catherine Fairbairn, Jeremy Freeman, Simon Toogood

Summary of discussion:
Review Board staff presented an overview of the structure and content of the Terms of Reference with Government of the Northwest Territories department representatives. Review Board staff also answered questions from meeting participants.

Slides from the presentation are attached to this Note to File.

Information on the environmental assessment of the Pine Point Mine Project is here:
https://reviewboard.ca/registry/ea2021-01

A summary of the Pine Point Mine Project Terms of Reference is here:
https://reviewboard.ca/sites/default/files/news/files/7812_mve_summary_tor_web.pdf

Terms of Reference

for the
Pine Point Mine Project

Follow-up with Government of the Northwest Territories departments

April 8, 2022

Outline

1. What is the [Pine Point Mine Project - Terms of Reference](#) ?

2. Overall approach to assessing impacts

3. Assessing impacts on the environment and people

4. Systems approach for the most important issues

5. Workplan – steps where your participation is required (or, how and when your involved can help the Review Board)

What is a Terms of Reference?

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It is a document that describes **what information the Review Board needs** from the developer to **assess impacts of the Pine Point Mine Project** on:

- all aspects of the environment
- people and communities

How was the Terms of Reference developed?

- community meetings – both on-line and in person
- technical meetings online
- written comments on the draft Terms of Reference

The Terms of Reference **reflects what the Review Board heard from communities** and **expert government departments**

Where is the Pine Point Mine Project?

- open pit and underground mining
- about 50 zinc and lead deposits

- overlaps parts of old Pine Point Mine

- 10-15 year mine life
- 5 years to close and reclaim

Terms of Reference - document structure

1. Introduction

2. Scope of development and scope of assessment

3. Overall approach to assessing impacts

4. Changes to air and land
   - impacts to biophysical environment
   - assessing impacts on people and communities
   - using a holistic lens and systems approach

5. General requirements

   Appendices
   - guidance documents, assessment methodology, baseline information

Approach to assessing impacts

Terms of Reference asks the developer to:

- describe **construction, operation and closure** of the mine project
- describe the **existing environment and people** in the region

- **predict** how project will interact with the environment and people
- **assess impacts** of project on environment and people

- **describe mitigation** methods to avoid or reduce impacts
- predict impacts that may still occur even after mitigation is implemented

- **prepare monitoring plans** that allow for mitigation to be **adaptable** based on mine operating experience

Terms of Reference - general requirements

- assess impacts **holistically using systems approach**

- use and incorporate **Traditional Knowledge during all phases** of the project from project planning through construction, operations and closure

- cumulative effects including **legacy of past mining**

- consider sustainability and **lasting well-being to people** and communities

- predict **risks of climate change** on the project and how the project contributes to climate change

Assessing impacts

Changes to air and land
- air, noise and vibration, visual, terrain and soil

Impacts on biophysical environment
- groundwater, surface water, fish and aquatic life, vegetation
- caribou, moose, furbearers, other wildlife, birds, species at risk, whooping crane

Impacts on people and communities
- Indigenous land use, other land use, heritage resources, culture
- social and economic conditions, economy and employment, human health

Holistic lens and systems approach
- keeping water clean and safe, lasting well-being on people, sustainable caribou

Assessing the impacts of the project on the environment and people

Assessment methodology (engagement)

Direct the developer to **involve potentially affected Indigenous Governments** in all aspects of preparing Developer's Assessment Report:

- scope of development
- baseline data collection
- describing project interactions with environment and people
- characterization of impacts
- mitigation measures
- significance of impacts after mitigation
- monitoring

Assessing impacts on air and land

impacts to air from:
- dust, odors and contaminants
- greenhouse gas emissions
- ways to reduce emissions over the life of the project

impacts from noise and vibration
- including sound levels, sources, timing, frequency and duration of these impacts
- particularly during sensitive periods for wildlife and people

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Assessing impacts on air and land

impacts from visual changes, such as
- light pollution, dust plumes, landscape change
- how that might impact people and wildlife
- key locations where traditional activities could be affected

impacts on terrain, geology and soil, including
- characteristics of pits used for storage of tailings,
- characteristics of ore, waste rock, soils, permafrost, karst
- quality of soils from past mining and use in future reclamation.

Impacts on biophysical environment

impacts on groundwater from:
- groundwater management to access pits and underground
- re-injection of groundwater, movement between pits
- tailing placement in old pits

impacts on surface water:
- water management, discharge and flow
- metal leaching from waste rock
- acid rock drainage
- accidents and malfunctions

Impacts on biophysical environment

impacts on fish and aquatic life, including

- noise and vibration due to blasting
- changes to water quality
- habitat loss, impacts to spawning or migration routes
- impacts to areas known for traditional harvesting

impacts on vegetation, including

- direct loss of wildlife habitat in upland, wetland, and riparian ecosystems
- impacts to plants of traditional, medicinal, cultural, ecological, or economic importance
- description of regeneration at sites disturbed by past mining.

Impacts on biophysical environment

impacts on birds, including changes to
- habitat
- movement
- distribution
- uptake of contaminants

impacts on moose and other wildlife, including changes to
- habitat
- sensory disturbances
- mortality rates and predation
- uptake contaminants
- disruption of movement patterns

Impacts on biophysical environment

impacts on boreal caribou, including changes to
- habitat
- sensory disturbance
- uptake of contaminants
- predation
- population status
- considering range planning and sustainable harvest

impacts on species at risk, including
- changes to habitat, with a focus on critical habitat, timing windows
- contaminants, predation and sensory disturbance
- impacts from dewatering
- considering species recovery plans
- special focus on whooping crane

Impacts on communities and people

- **impacts on Indigenous land use** such as harvesting and gathering, and perception of changes on the land

- **impacts on other land uses** such as hunting, commercial fishing, tourism and recreation

- **impacts on heritage resources** including avoidance and mitigation of sites that may be discovered

- **Impacts on culture** such as important places, values, cultural continuity, transfer of knowledge, language, place names, and sense of place on the landscape

Impacts on people and communities

- **impacts on social and community conditions** including cost of living, social structures, population, uneven distribution of benefits, existing social issues, safety and capacity of facilities and services

- **impacts on economy and employment** including wages, contracts, capacity of local workers, barriers to employment, training and impacts on the traditional economy

- **impacts on human health** including impacts to physical and mental health from changes to air, noise, water, availability of country foods and medicine, income, and community services

Systems approach for the most important questions

1. **Keeping water safe and clean**

- will water be clean and safe for people, fish and wildlife?

- will the project change how people traditionally use and experience the land?

2. **Lasting well-being of people and communities**

- what are the long-term effects on people and communities?

- how does the project support lasting health and well-being of people?

- how does the project act cumulatively with other projects to affect social, health, cultural and economic conditions?

3. **Sustainable caribou: protection and harvest**

- will the project change caribou populations and movement?

- will the project change harvesting opportunities and will caribou be safe to eat?

Workplan next steps – analytical phase

- Communities work with PPML to prepare Developer's Assessment Report
- Developer's Assessment Report submitted
- Adequacy Review by Review Board and responses from PPML
- Reasons for Decision on why EA can proceed to public review

- **Information requests on DAR from parties**/responses from PPML
- Community meetings
- **Technical sessions**
- Undertakings from PPML and others
- **Information requests (if necessary)**

Next steps – hearing phase, decision phase

- **Parties submit interventions (technical reports)**
- PPML submits responses
- Pre-hearing conference facilitated by Review Board staff
- **Parties submit hearing presentations**, Developer submits presentation

- **Technical hearings**
- Community hearings
- Hearing undertakings
- **Closing arguments from parties and developer**
- Report of EA and Reasons for Decision from Review Board
- Minister's decision