

Presentation for Natural Resource Strategy Phase 2 Expert Panel Consultation

Minerals Panel

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Communities want to see controls on pollution from mines

Communities want to have a say in whether mines are constructed and where they are constructed

Overview

Pollution

- Mine tailings and toxic by-products
- Inland lakes as tailings ponds
- Fragmentation of habitat

Jurisdiction and Data

- NSE & DNR – water
- Knowledge gaps
- VP report inconsistencies

Mines and Communities

- Early notification for mining proposals
- Formalized role for adjacent communities
- Approval from adjacent communities
- Early engagement
- Mitigation and monitoring

Conclusion and Discussion

Overview

Pollution

- Mine tailings and toxic by-products
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Pollution

- Effluent from waste rock and mine tailings
- Acid Mine Drainage
- Toxic By-Products and tailings ponds
(containment liners engineering to withstand 200 year storm event)

Recommendation: Need for 100% containment for tailings and wastewater in mining operations

Mine Tailings – Not in Lakes

- Schedule 2: Federal Regulations
- Surface and groundwater interactions (should be treated as one resource)

Recommendation: New Provincial Legislation to explicitly prevent use of lakes as tailings ponds

Connectivity

- Mining operations can cause or contribute to fragmentation of wildlife habitat

Recommendation: Prevent permitting mining operations near ecologically sensitive ecosystems and protected areas.

Impact on Watershed

- Must consider entire watershed and downstream impacts from mines

Recommendation: Buffer zones (50 m +) for watercourses to protect ecological integrity and prevent contamination

Groundwater

- Protection of groundwater quality from contamination:
“Management and regulatory actions to remedy groundwater contamination and prevent further degradation remain inadequate for sustainable groundwater management”.

From: The Sustainable Management of Groundwater in Canada by Expert Panel on Groundwater

[http://www.scienceadvice.ca/documents/\(2009-05-11\)%20GW%20Report.pdf](http://www.scienceadvice.ca/documents/(2009-05-11)%20GW%20Report.pdf)

Overview

Mines and Communities

- Early notification for mining proposals
- Formalized role for adjacent communities
- Approval from adjacent communities
- Early engagement
- Mitigation and monitoring

Mines and Communities

- Recognize environmental and community groups as stakeholders: engage them up front

HOW?

Mines and Communities

Recommendations:

- Allow adjacent communities to have a formal role in proposed mine projects
- Require formal approval from adjacent communities for proposed mining projects
- Develop up-front mitigation measures and monitoring programs in collaboration with communities where approval is given

Overview

Jurisdiction and Data

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Jurisdiction NSE & DNR Water

- NSE developing Water Strategy
- Recommendations through VP report for mining and water

Recommendation: Need to work with NSE to have coherent and integrated NRM Strategy and Water Strategy

Gaps in DNR Work

- Need for more groundwater mapping and groundwater quality testing

Recommendations:

- Increase well monitoring network and monitor water quality
- Facilitate information management and data-sharing (consolidate studies carried out by consulting firms, universities, NGO's, etc).

VP report inconsistencies

- Industry posing as general public in VP report. Attendance at public consultation for minerals was low and mainly representative of the mining industry.
- VP report inaccurately reflects what the public cares about with regard to minerals and mining.

Overview

Conclusion and Discussion

Conclusion

- Imperative that mineral management in NS implement best pollution-prevention strategies
- Communities must have a formal role in assessing proposed mining projects
- DNR and NSE must work together in developing Water Strategy to ensure mineral exploitation does not compromise water quality and quantity