Opportunities for Stakeholder Consultation Moving Forward on the Risk Assessment for Giant Mine

G. Mark Richardson, Ph.D.,¹ Alexis Fast, M.E.Des.¹, Lindsay Smith-Munoz, M.Sc.¹, Jane Amphlett² & Katherine Ross²

¹Stantec Consulting Ltd.; ²INAC
To date, consultation has occurred with the Giant Mine Working Group and the Giant Mine Advisory Committee on the approach to and content of the Problem Formulation for the next Giant Mine Risk Assessment.

This talk relates to what further stakeholder consultation should be considered as the full risk assessment is conducted.
Mackenzie Valley Review Board Conclusion

“The Review Board finds as fact that the human health risk assessment does not provide an adequate basis for identifying, evaluating and avoiding impacts to human health from the proposed Project.”

This Conclusion was reached (in part) due to a lack of public involvement:

MVRB Suggestion 1: The Developer should further consult with surrounding communities, including Dettah, Ndilo and the City of Yellowknife...
What is Stakeholder Consultation?

Consultation is NOT simply telling stakeholders what you are doing
Or what you have done.

Proper consultation establishes a working relationship and is the foundation for working together.

Proper consultation is asking stakeholders what they think you should do, and ultimately if they think you are doing it adequately.

Stakeholders should determine the extent to which they want to contribute to the risk assessment process.
Risk Assessment is a Process

PROBLEM FORMULATION
- Chemicals of potential concern
- Receptors
- Exposure pathways

TOXICITY ASSESSMENT
- What dose is safe?

EXPOSURE ASSESSMENT
- What dose do receptors get?

RISK CHARACTERIZATION
- Is dose received > or < safe dose?

Consultation
Potential Receptors

Specific geographic areas:
- General populace of Yellowknife
- Residents of Ndilo
- Other residents of Latham Island
- Residents of Dettah
- Campers using local camping areas
- Recreational users of boat launch
- Residents near the Ingraham Trail
- Residents of the Bayly residence

Unique community members:
- Students of K'àlemì Dene School in Ndilo (fish lunches)
- Children of Ndilo wading/playing in shore sediments
- Consumers of fish, game, country foods and medicinal plants
- Residents relying on surface water for drinking water
- Residents using backyard or community garden produce
- Giant Mine remediation workers
Giant Mine Stakeholders consulted by Stantec for Problem Formulation development

- Giant Mine Working Group (GMWG), which includes staff from:
  - The Yellowknives Dene First Nation (YKDFN)
  - North Slave Metis Alliance (NSMA)
  - Alternatives North
  - Environment Canada
  - Health Canada
  - Fisheries and Oceans Canada
  - City of Yellowknife
  - Indigenous and Northern Affairs Canada (INAC)
  - Public Works and Government Services Canada (PWGSC)
  - Government of the Northwest Territories (GNWT)

- Giant Mine Advisory Committee (GMAC), including representatives of:
  - Youth, Elders, Business and former Chief of the YKDFN
Other potential Giant Mine Stakeholders as the Risk Assessment moves forward

- The YKDFN Elders Senate and Chief/Council
- The Giant Mine Oversight Body
- The Northwest Territories Territorial Farmers Association
- The Hunters and Trappers Association
- The Yellowknife Gardeners Association
- Great Slave Sailing Club
- NWT Mining Heritage Society
- Giant Mine Community Alliance (GMCA)
- General populace of Yellowknife
Aspects of Risk Assessment requiring consultation for progress

- Identifying need for revision of or changes to Problem Formulation
  - Additional receptors
  - Additional exposure pathways
  - Unique exposure scenarios
  - Other (obvious to stakeholders but not so obvious to risk assessor)
- Joint fact-finding (further data collection) (see next slide)
Aspects of Risk Assessment requiring consultation for joint fact-finding

• Identifying locations used for hunting, fishing, country food gathering

• Identifying species hunted, fished, gathered
Aspects of Risk Assessment requiring consultation for joint fact-finding (cont.)

• Defining the need for additional data

• If additional data are needed, defining the sampling plans for flora, fauna, soil, etc., and the geographic locations where these additional data should be collected

• Food use frequency surveys
  • YKDFN and Metis hunters, fishers, and harvesters of other local country foods
  • Users and consumers of backyard and community garden produce
Review of background reports and available data; Review and revision of the Problem Formulation

Stakeholder consultation regarding revisions to Problem Formulation

Proposal for sampling; Proceed upon approval

Proposal for bioaccessibility testing; Proceed upon approval

Joint fact-finding: Food preferences, food use, harvest locations etc.; Proceed upon approval

Stakeholder consultation prior to initiation

Stakeholder consultation prior to initiation

Stakeholder consultation and participation

Conduct sampling

Conduct testing

Conduct fact-finding

Draft deterministic DQHHRRA:

• Background case (sources unrelated to, or not impacted by, Giant Mine operations)
• Current case (current conditions)
• Future case (100 years after implementation of Giant Mine Remediation Project)
• Propose future monitoring program(s) as part of the conclusions and recommendations of the DQHHRRA

Stakeholder consultation on results of Draft DQHHRRA

Final DQHHRRA
Questions?