

Addressing human health impacts in EIA:

Case study observations from Northern Canada

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Introduction: Research Context

Integrating 'health' in EIA Northern Environments



Background: Northern Health and EIA

- “...improvement of social well-being...should be explicitly recognized as an objective of planned interventions...”
- “...a much broader conceptualization of social health and well being in EIA”

“ The impact of projects is much greater in the north. The influx of money into northern areas brings social problems such as alcoholism, violence, radical change to traditional ways. Most...impact assessments do not look at these issues, yet they could have the most significant impact on the individuals in these areas” (Interviewee - Health Canada)

- “No development should be allowed to proceed in the North unless it makes a positive contribution to health and communities”

Research Question

What is Canada's experience with health integration in Northern EIA?

- **What lessons emerge from recent practices?**
- **What is required of EIA for effective health integration?**

Principal Case Studies: Practices and Performance



Case Study: Northern Saskatchewan Uranium Mines

- Rabbit Lake (1968) - Eagle Point Extension (1987)
- Cluff Lake (1976)

Scope of health concerns: radionuclide exposure

“...too many confounding factors...to ever be able to tell whether there was an effect or not since all communities were too far away for a direct effect based on ecological risk and pathways monitoring”
(Interviewee – SK uranium company)

1993 Review Panel Report:

- > 10 years of data collection; few comparable data concerning the effects of mining on fish
- limited public assurance; fish contamination, human consumption and health

IAIA 2004, Vancouver, BC, Canada



Source: www.cri.ca

.... Northern Saskatchewan Uranium Mines

“There now exists in the north (and it has nothing to do with uranium mining) a social disorder...To superimpose upon that kind of society a project such as a uranium mine and mill which has the potential of exacting additional social costs and then try and measure those additional costs presents a near impossible task” (Cluff Lake Board of Inquiry, 1978: 174)

McArthur River (1997)

- Reflects well on the ‘scope’ of health

Three health-based assessment and monitoring programs:

- effects assessment of physical health (contaminants)
- epidemiological assessment of cancers, risks, mortality
- social and community health assessment

Case Study: NWT BHP Diamond Project

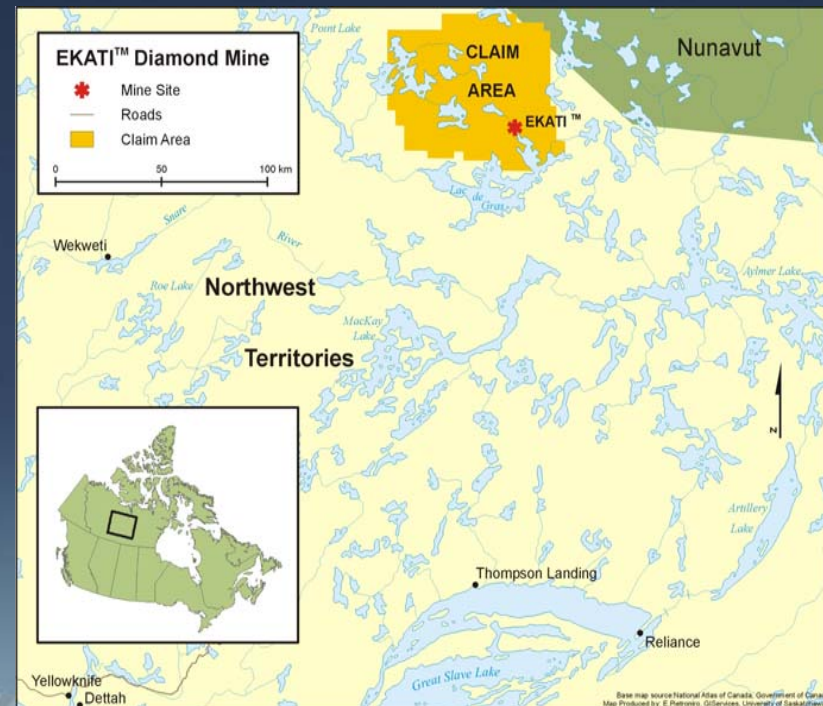
Although physical health impacts are not a concern, the impacts to spiritual, cultural and economic and social infrastructure are large compared to environmental impacts (Interviewee – EIA consultant).

Impact Management

- local job creation
- cross-cultural training
- education / employment programs
- community-based health committees
- financial management programs

Impact Monitoring

- 14 indicators of social / physical health



... NWT BHP Diamond Project

Coarseness of the indicators

- Territory-wide versus community based

Contextual relevance of impact management

- "...the idea of banking is so foreign to most of us..."
- "The nature of work...creates a situation in which the benefits of employment in the mines are often offset by the costs of social and family disruption...and disruption of traditional diets and land activities"

Longer-term sustainability

- What will be done to assist communities during the second phase of transition?

Case Study: Voisey's Bay Mine/Mill

EIA MOU required consideration of:

- traditional land use activities and patterns
- housing, quality of life, health
- diet and country food dependency
- morbidity and mortality
- interactions between these indicators



“one of the more comprehensive EIAs that considered health impacts on the local Innu and Inuit populations in detail, particularly concerning project effects on traditional land use activities and wildlife migration patterns” (Interviewee – Health Canada)

... Voisey's Bay Mine/Mill

Unprecedented Panel requirements:

- **Explicit sustainability mandate**
- **Gender-based issues, including gender-based health concerns**

A step backwards in practice?

- **Little attention on the direct impacts on worker health and safety**
- **Separate documentation of gender-based impacts; little assessment**

Ad Hoc Committee of Women and Mining in Labrador:

- **Proponent took advantage of existing social and health conditions facing Inuit communities to promote the project benefits**

Case Study Observations

From Rabbit Lake to Voisey's Bay...

- health impacts are not addressed, not addressed well, or limited to physical health
- what is addressed are the health impacts that the proponent has direct control over (e.g. employment, business opportunities)
- difficulty in identifying causal links, identifying appropriate resolution of health indicators, and creating contextually relevant management efforts

We are seeing progress:

- Example: NWT Environmental Health

....albeit at glacial speed

Case Study Observations: Requirements of EIA

- adopt a *broader definition* of health and identify health VECs *beyond physical components* when scoping project impacts and baseline environments
- identify direct, indirect and cumulative health and health-related impacts based on the *determinants of health*
- adopt a *pro-active and contextually relevant* approach to impact management by proposing measures to avoid or mitigate potentially negative health impacts, but also to create or enhance positive ones
- *following-up* to address the actual health impacts and ensure that project related health objectives are being met

Conclusions

“There are so many things to look at in an EA other than human health. I think that you can’t keep adding everything that keeps arising regarding a project...EAs are complicated enough already”

- **How much consideration *should* be given to human health effects in project EA?**
 - **Should health effects be assessed in a parallel health impact assessment process?**
- 1. We can and need to do a better job of assessing health issues in EIA**
 - 2. At present, EIA can be seen as a necessary (but perhaps not sufficient) process for assessing and promoting human health associated with development**