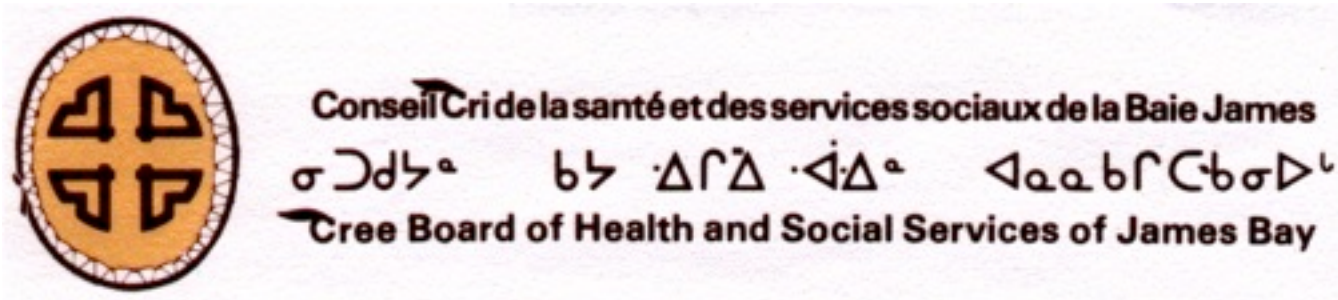


# Matoush Project: Determining the health and social impacts



Public Health Department

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Presentation submitted to the hearing

# Outline

This presentation does not discuss the specific project proposal which has already been covered by other presentations during this hearing, and by the Public Health Department at the previous hearing in Mistissini in November, 2010. Rather it addresses the need for an appropriate process for determining benefits and risks from large-scale projects.

- Section 1: Context and history of Eeyouch
- Section 2: Potential impact on human health from the project

# Section 1: Context and history

- We Eeyouch of Northern Quebec:
  - Number about 16,000 people
  - Have used this land and its resources in a productive and sustainable way from time immemorial
  - Live in 9 communities
    - 5 coastal
    - 4 inland
  - Have high fertility rates and a rapidly growing population
    - On average 400 births per year
  - Present a very young demographic curve
    - 38% are women of child-bearing age and children under 5 years

# Context and history

We are an Aboriginal people dealing with modern social issues:

- Over 60% of youth ages 15–24 years are not in school
  - compared to only 33% in the rest of Quebec
- Unemployment rates are 16–18% (mostly long term)
  - compared to 8–12% in the rest of Quebec

These social issues link to poverty and in turn to health problems:

- Alcohol and drug abuse
- Violence and injuries
- Mental health problems
- Food insecurity and malnutrition
- Chronic diseases (obesity, diabetes)
- Overcrowding and problems of mould in homes
- etc.

# Context and history

However, being Eeyouch in Eeyou Istchee provides us with many protective factors and its from here we find out strength as families, communities and the Nation:

- Social cohesion within families
- Cultural continuity
  - Cree language
  - Cree foods
- Social renewal on the land
- The teaching role of Elders
- Community support
- Self-determination
- Self-government
- etc.





# Context and history

- A number of large economic development projects on Eeyou territory over the last several decades (e.g. hydro–electric development projects, mines, forestry and its highway infrastructure, etc.)
- Concern that the Plan du Nord will result in an even greater number of proposals for economic development projects in the region
- Included in this concern are the numbers of potential uranium mining claims in the territory including this present proposal

**“According to the James Bay and Northern Quebec Agreement, the development should be compatible with the Cree way of life. Our experience of development until today has not been as good as we hoped. The last experience is what we have to relate to, but it was not good enough and you will have to do much better. Can you ensure that this project will be compatible with the Cree way of life? How will you do that? And what is the company planning to make sure it will be acceptable?”**

- Anonymous Cree person, Opinaca mines consultation with Cree communities as part of Environmental and Social Impact Assessment (ESIA Report, 2010)



# Section 2: Potential impact on human health

We all know that:

- some will benefit from positive impacts and
- others will suffer harm from negative impacts

However, **the goal must be** to:

- Maximize potential health and social benefits,
- Minimize potential harms, and
- Ensure that the distribution of benefits and harms within and between populations is fair

# In general, what are the health impacts of development projects?

A review of the literature has shown that development projects in the sub-Arctic and in Aboriginal communities can lead to:

- **Positive impacts**

- Higher individual, community, and family income
- Increased economic diversification and prosperity
- Higher standards of living – at least in the short term

- **Negative impacts**

- Potential for permanent environmental contamination
- Such contamination would threaten Cree identity
- Often involves a “boom and bust” cycle
- Entrenchment of social strata and inequities
- Often drives up prices artificially in local communities (e.g. wages)
- This reduces the purchasing power of individuals not directly involved
- Most vulnerable more likely to be left behind
- Increase in social problems after development

# In general, what are the health impacts of development projects?

- While the potential exists for large-scale development projects to benefit local communities in terms of employment, the actual **impacts on employment are small and often have unexpected negative impacts**
  - Aboriginal workers are a small proportion of total workforce in many northern development projects
  - Often their participation is confined to low-wage, short-term, poor-quality positions
  - Incompatibility of work schedules, with the demands of subsistence hunting
  - Rotation schedules have had the most disruptive effects on families' economic and food security
  - Few projects have increased the overall skill levels of Aboriginal workers

# In general, what are the health impacts of development projects?

- Some studies have noted negative impacts related to the inexperience of individuals and organisations in dealing with the large sums of money that may result from mitigation measures or from highly paid work on the development project itself
  - This often takes the form of unrestrained spending
  - Leading to greater poverty when the money runs out
  - Increases in debt and bankruptcy
  - As well as greater mental health problems

# In general, what are the health impacts of development projects?

- Studies of Northern and Aboriginal communities in Canada undergoing rapid change due to development projects have found that the social disruption leads to **deterioration in the community social fabric** and results in many health and social problems:
  - Marital conflict, family breakdown and child neglect
  - Behavioural and discipline problems among children
  - Increased rates of alcohol and drug abuse and violence
  - Increased rates of suicide and violent deaths

# In general, what are the health impacts of development projects?

- The psychosocial impacts of rapid community changes have been shown to be greatest on **women who take on greater responsibilities** during men's absences for work at the site
- Often health and social services are not able to keep up with increasing demand, due in part to increasing population size accompanying the development project, as well as increasing need
- Without mentioning the potential for environmental disruption and contamination and the impact on traditional practices and on cultural integrity

## Section 3: the way forward

How can we know in advance the overall impacts of this project?

- Currently, according to the James Bay and Northern Quebec Agreement (and in many other parts of the world), the potential health and social impacts of economic development projects are examined as part of a larger Environmental (and Social) Impact Assessment process

# What is the problem with this?

- There are growing concerns that the current Environmental and Social Impact Assessment process is unable to systematically identify nor effectively address important health and social impacts relating to economic development
- Past experience in the region has shown that the consideration of health and social impacts as part of this process has been very weak at best and at times non-existent



# What is needed to remedy this?

- Each year there are over a dozen new projects proposed on the Cree territory that are reviewed by the James Bay Advisory Committee on the Environment (including COMEX and COMEV), and this number will dramatically increase with the implementation of the Plan du Nord
- It is therefore necessary to put in place a more effective process for examining the potential health and social impacts of economic development projects in a more explicit, comprehensive and systematic way

# How can this be done?

- We propose the following approach:
  - STEP 1: List all who could be affected
  - STEP 2: Determine potential impacts
  - STEP 3: Make recommendations

# STEP 1: Whose health and social well-being could be affected?

- Examples of groups who could potentially be affected by the proposed development project:
  - Cree workers employed by development projects
  - Cree workers employed by spin-off businesses
  - The spouses, children and families of workers
  - Hunters and their families with trap lines on/near project sites
  - Communities downstream from project sites
  - Providers of health and social services
  - The entire Cree Nation
  - The animals, the fish, the land and the water
  - Other populations

## STEP 2: What are the likely health and social impacts for each group?

- **This step is answered in 3 parts:**
  - a. **How are the determinants of health affected?**
    - a. How will the development project influence the underlying causes (or determinants) of health and social problems?
  - b. **What are the likely health outcomes?**
    - a. Which physical, mental, social and spiritual health problems are likely to result from these influences on determinants?
  - c. **Will this lead to benefit or harm?**
    - Will this ultimately be positive (improved health, prosperity) or negative (deteriorated health, increased inequities)?

# STEP 2: What are the likely health and social impacts for each group?

1) What are the main determinants (or underlying causes) of health and how will these be influenced by the proposed development project?

- **Lifestyle factors**

- Diet, exercise, engaging in safe behaviours (at work, at home and at play), absence of harmful behaviours (alcohol, tobacco, drugs, gambling), etc.

- **Physical environment**

- Air, water, land, food, housing, etc.

- **Social environment including culture and identity**

- Income and education, employment and working conditions, social support and social cohesion, early childhood development, gender, self-determination, traditional way of life, etc.

- **Health and social services**

- Availability, accessibility, quality, effectiveness, efficacy

# STEP 2: What are the likely health and social impacts for each group?

2) Which health and social outcomes are likely due to the influence of the economic development project on the determinants of health?

- **Health status**

- Physical health (e.g. mortality, disease, disability, quality of life, etc.)
- Mental health (e.g. anxiety, depression, violence, substance abuse, etc.)
- Social health (e.g. community cohesion, social support systems, etc.)
- Spiritual health (e.g. traditional way of life, relation to the land, etc.)

- **Health inequities**

- Within the population
- Between the population and Quebec overall

## STEP 2: What are the likely health and social impacts for each group?

3) Is the individual and/or group more likely to benefit or be harmed as a result of the economic development project?

- **Benefit**

- Improved health, greater prosperity, increased social support, fewer health and social inequities, etc.

- **Harm**

- Poor health, increased social stressors, deteriorated sense of well-being, unable to follow traditional way of life, growing health and social inequities, contaminated environment, disturbance and/or desecration of sacred sites, etc.

# Putting it together group by group:

Individual or group affected	Impact on health determinants	Likely health outcomes	Benefit or harm
Workers employed by the development project and their families	Stable employment for a duration of several years or even decades as well as greater income for workers and their families (estimated 120 jobs out of 600)	Potential improvement in overall health status for workers and their families compared to those at lower socio-economic levels	<b>Benefit</b>
Workers employed by the development project	Occupational hazards including noise pollution, poor air quality, physical strain and minor injuries, isolation, and the more unlikely yet more dangerous possibility of serious injury or death in the event of a flood or collapse of the mine, or a large scale spill or leakage of toxic substances released through the mining process	Risk to physical health for workers, which may also place increased burden on health services. May lead to long-term impact on mental and social health.	<b>Harm</b>
Workers employed by the development project and their families	Remote location of work-site leading to long periods of separation and fragmentation of families, lack of experience in managing a large increase in income, the possibility of misuse of funds for harmful behaviours such as alcohol, drugs or gambling, and difficulties adjusting and finding employment at the end of the development project	Risk to mental, social and spiritual health of workers and their families, which may also place increased burden on health and social services	<b>Harm</b>



# Putting it together group by group:

<b>Individual or group affected</b>	<b>Impact on health determinants</b>	<b>Likely health outcomes</b>	<b>Benefit or harm</b>
Hunters and their families	Hunters and their families who use the trap lines and have bush camps in the vicinity of the development project may experience increased disturbance and potential safety risks from the increased infrastructure and activity (e.g. cars, heavy trucks and machinery, planes and helicopters), as well as potential exposure to environmental contamination from harmful pollutants whether released through transportation, or directly from the mine, or indirectly through acidification leading to greater solubility of substances naturally found in the rock and soil. Likewise, if the birds, fish and animals have been disturbed in their usual habitat and move away this may lead to friction with other hunters on neighbouring trap lines and camp sites as well as reduced access to traditional foods and the traditional way of life. Experience shows that roads attract southern hunters which disturb local patterns of using the land.	Risk to physical, mental, social and spiritual health of hunters and their families, which may also place increased burden on health and social services	<b>Harm</b>

# Putting it together group by group:

<b>Individual or group affected</b>	<b>Impact on health determinants</b>	<b>Likely health outcomes</b>	<b>Benefit or harm</b>
Workers employed by Cree-owned spin-off businesses and their families	Cree-owned businesses (e.g. convenience stores, cable and internet services, security services, environmental monitoring services, ambulance and First Aid services, fire fighting services, helicopter services, delivery and transport services, construction and outfitting services, etc.) providing services for the development project leading to greater income, social status and self-determination for workers and their families	Potential improvement in overall health status for workers and their families compared to those at lower socio-economic levels	<b>Benefit</b>

# Putting it together group by group:

<b>Individual or group affected</b>	<b>Impact on health determinants</b>	<b>Likely health outcomes</b>	<b>Benefit or harm</b>
Providers of health and social services and their families	Providers of health and social services are already over-burdened, and with the rapidly growing Cree population, and the potential for an important increase in health and social problems relating to the development projects (described above), these service providers risk becoming burnt-out, with negative consequences not only for them and their families, but also for the communities as retention and recruitment may become an increasing problem if services are not expanded to adequately meet the growing needs	Risk to physical, mental, social and spiritual health of health and social services workers and their families, as well as the communities if services are not able to meet growing demands	<b>Harm</b>

# Putting it together group by group:

<b>Individual or group affected</b>	<b>Impact on health determinants</b>	<b>Likely health outcomes</b>	<b>Benefit or harm</b>
Communities downstream from the development project	Potential for risks to the health of the communities downstream since certain contaminants can travel far distances by air to be deposited into the water and soil, and other contaminants released directly or indirectly into the water may affect those at distance.  Also cultural risks if major sacred sites are disturbed within the territory.	Risk to physical health for members of downstream communities, which may also place increased burden on health services. Cultural risks show up later through social disruption and dislocation.	<b>Harm</b>

# Putting it together group by group:

Communities and the entire Cree Nation	Potential for profit sharing in the development project leading to greater income, social status and self-determination for communities and the Cree Nation. Potential to share these benefits across	Potential improvement in overall health status for the communities and the Cree Nation compared to those at lower socio-economic levels	<b>Benefit</b>
Communities and the entire Cree Nation	Potential for lack of transparency and coordination with regard to profit sharing resulting in profits going to a small number of individuals, groups or communities, lack of equal opportunities for employment in the development project or lack of access in starting spin-off businesses, as well as failure to reinvest profits into health and social services and other support services	Risk of increased health inequities (i.e. some people very wealthy and in good health whereas others lack sufficient income and suffer poor health) within the communities and the Cree Nation	<b>Harm</b>
Communities and the entire Cree Nation	Potential for lack of adequate experience and training of Cree workers resulting in unequal access to specialized jobs in the development project including higher-paid management level jobs	Risk of increased health inequities between the Cree Nation and non-Aboriginal populations	<b>Harm</b>

# Putting it together group by group:

<b>Individual or group affected</b>	<b>Impact on health determinants</b>	<b>Likely health outcomes</b>	<b>Benefit or harm</b>
The animals, the fish, the land and the water	Potential risks of disturbance and contamination due to transportation of dangerous materials, the actual mining operations, and through release of materials as a result of mining. Disturbance and/or desecration of sacred sites.	Risk to physical health of these bodies and subsequent physical risk to human beings.  Risk to the spiritual link between humans and these bodies.	<b>Harm</b>

## STEP 3: Make recommendations to maximize benefits and minimize harm

- The potential benefits of the economic development project mostly stem from:
  - employment opportunities and increased income which could lead to improvements in the health status of workers and their families.

# STEP 3: Make recommendations to maximize benefits and minimize harm

- However, there are also many potential harms including:
  - occupational health and safety risks
  - potential water and air contamination of downstream communities
  - inability to manage increased income leading to harmful behaviours such as alcohol and drug abuse and gambling
  - negative impacts on spouses and children including long periods periods of absence leading to more abuse and neglect
  - disputes among hunters using the territory in proximity to the project
  - added strains on over-burdened health and social services workers
  - lack of transparency and fair distribution of profits leading to increased health inequities within the Cree Nation
  - lack of equal opportunities for employment leading to increased inequities with non-Aboriginal groups, and
  - threats to cultural continuity.



## STEP 3: Make recommendations to maximize benefits and minimize harm

- Prior to the approval of any development project, those who may be affected should be consulted in a meaningful way and proponents should be obliged to demonstrate that their plans for the project as well as their ongoing operations and management:
  1. promote the Cree way of life (i.e. minimize disruption to hunting, family life, traditional diet, etc.)
  2. consider suggestions of the Cree in the design of the project and in promoting workers' rights (e.g. dry camp, recreational facilities, computers for workers to keep in touch with family, etc.)
  3. minimize potential risks to the environment and to the health of communities even if this entails greater costs and/or delays
  4. Develop consensus on minimizing threats to sacred sites

## STEP 3: Make recommendations to maximize benefits and minimize harm

5. coordinate the emergency response plans in advance with Cree authorities and determine the lines of communication and the division of responsibility in case of an emergency,
6. conform to government regulations for the duration of the project including planning for and financing the restoration of the land and the long-term environmental surveillance not only at the project site but also in the surrounding communities in case of unanticipated contamination, and
7. make transparent and respect agreements for profit-sharing and provide training and equal opportunities for employment and spin-off economic opportunities for the Cree Nation.

To make truly informed decisions,  
each and every development project must be  
assessed  
on a case-by-case basis,  
and the consultation process  
needs to be more transparent and  
participative,  
even if this entails greater time and cost

# The need for a more transparency and a more participatory process

- The value of this type of analysis will depend to a large extent on the quality of the information that is provided and synthesized from multiple sources, including:
  1. Detailed plans of proponents and governments
  2. Input and advice from health authorities
  3. Two-way communication with communities
    - Inform about the economic development plans
    - Learn about the potential impacts on people's lives

# Who will bear the human costs of economic development in the North?

- The Northern populations are already at a disadvantage due to their remote location and suffer considerable health and social inequities as compared to the rest of Quebec.
- Profiting from the natural resources and tourism potential in the North at the expense of these Northern populations would be unjust, further increasing inequities rather than helping those who need it most.

# Can health and social services cope with the increased demand?

- There is a need to try to mitigate the potential negative health and social impacts of economic development not only for the welfare of the population, but also to avoid over-burdening the health and social services system.
- The institutions created through the provisions of the JBNQA, such as the Cree Board of Health, have to be examined to see if their mandate and jurisdiction need to be redefined and whether resources available will be adequate to do the additional work that will likely arise from health, social and public health challenges relating to new and ongoing development projects in the North.

# Better knowledge can assist with more informed planning for the future

- Better and more systematic assessment of potential health and social impacts relating to large-scale development projects is an important first step in determining what challenges we will face and how best to plan to meet these new challenges
- Our 3-step approach to assess health and social impacts of development projects is intended to maximize the benefits, minimize harm, and ensure that the distribution of benefits and harms within and between communities is fair

**“Failure to plan  
means  
planning for failure”**

**– Cree Elder**



# Conclusion

**It is important to minimize the potential risks and maximize the benefits for the Cree communities as a whole.**

**The decision for the Cree Nation is therefore not whether there will be an impact – there will be – but will the impact from this project for this generation and for future generations be sufficiently counterbalanced by the benefits to make this worthwhile?**

# For more information:

**Please contact the environmental health group of the Public Health Department of the Cree Territory of James Bay, Cree Board of Health and Social Services of James Bay at [www.creehealth.org](http://www.creehealth.org)**