

I attended the November 28 public meeting in Kamloops as an observer. I am a member of Kamloops Area Preservation Association, which made one of the presentations and submitted an extensive report to the Expert Panel. I was part of the team that prepared the presentation and the report. I have also been a member of the Community Advisory Group (CAG) since its inception. During the presentations there were several points made that I felt needed clarification. In this letter I hope to clarify these points:

1. Where in Canada can you get more background information on Health Impact Assessments?
2. What is an example of a HIA conducted in Canada?
3. How has the CAG interacted with the CEAA and the Technical Working Group?

Background - Health Impact Assessment

Because the proposed Ajax mine will be adjacent to a large established population, a Health Impact Assessment (HIA), separate and distinct from an Environmental Assessment, must be conducted. The current studies conducted by the proponent in no way approach the detail required in a HIA.

The current environmental assessment process, designed for mines in remote areas, fails to address this and other key issues pertaining to population health and wellness. The people of Kamloops *need and deserve* a comprehensive Health Impact Assessment .

Health Impact Assessment is a systematic approach, using biomedical and social definitions of health to identify positive and negative impacts of a proposed project on people's health and wellness. The main purpose of HIA is to enhance decision making before a commitment is made.

At minimum, HIA involves the proponent, key decision makers (ministry representatives), public health officials and all stakeholders, particularly the most vulnerable such as pregnant women, young children, the elderly and those with chronic heart and lung diseases. Given the scope and nature of the proposed Ajax mine and that baseline health studies need to be done, this interdisciplinary, multi-dimensional, six-step process can be expected to span several months, perhaps even years.

Canada's National Collaborating Center for Healthy Public Policy and the World Health Organization offer research expertise, short courses and publications on the topic of HIA. Please visit: http://www.ncchpp.ca/54/Health_Impact_Assessment.ccnpps

In August and September 2014, a delegation from Kamloops Area Preservation Association met with MLAs Jackie Tegart, Todd Stone, and Terry Lake, and warned them that a HIA needed to be started immediately.

On March 8, 2015, Kamloops Area Preservation Association wrote to Dr. Perry Kendall, Public Health Officer for BC. He was asked that, in accordance with its mandate, his office advocate for a Health Impact Assessment of the proposed KGHM Ajax mine.

Kendall deferred this task to the Medical Officer of Health for the Interior Health Authority, Dr.

Robert Parker. He responded:

“...At a November 26, 2014 meeting our representative Greg Baytalan, was informed that the proponent has retained a consultant to conduct a HIA. The consultant in attendance described that modelling will be conducted, and that input and output evaluation will be included...”

A full and proper HIA goes far beyond the air, water and soil quality or respiratory illness and cancer rates in the Application. How will we know whether humans experience higher blood levels of heavy metals down the road since we have no baseline data? Broad-based studies of public human health must be conducted in order to gauge the future impact of the proposed Ajax mine. Such studies require extensive data collection and should have been launched at the beginning of the process.

Example of a Health Impact Assessment conducted Yukon

A comprehensive Health Impact Assessment (HIA) is missing from the current Ajax Environmental Assessment process. How is this different from the present health impact studies being conducted by the proponent, KGHM?

1. The HIA is conducted by an unbiased third party.
2. Baseline human health studies are conducted.
3. All aspects of human health are studied – the physical, mental and social health of human populations.

An example of a Health Impact Assessment can be viewed at http://www.hss.gov.yk.ca/pdf/hia_keno.pdf

*This document is titled *Health Impact Assessment (HIA) of Mining Activities near Keynote City, Yukon. Prepared for the Yukon Department of Health and Social Services, September 30, 2012. Prepared by: Habitat Health Impact Consulting, Calgary, Alberta.**

HIA Methodology follows five standard steps:

1. Scoping – identifies stakeholders and preliminary health areas.
2. Baseline Health Profile – describes the current health status of the local population.
3. Assessment of Impacts – describes and characterizes the potential impacts of the mining activities.
4. Recommendations – provides recommendations to mitigate identified health harms and to enhance health benefits.
5. Report Writing – reports results to relevant audiences.

From the Yukon HIA:

Stakeholder Engagement

Local residents and various stakeholders were identified and consulted over a two-month period via telephone interview, one-on-one interview, email correspondence and group meetings. The consultant met with residents, the Chief Medical Health Officer, Yukon, the Manager of Environmental Health Services, Yukon, the two mining companies, the Mayo Health Clinic, and the Mayo Ambulance Service.

Scoping

Based on the review of public comments, community and stakeholder interviews, and literature summarizing health effects observed in other mining contexts, the following health pathways were selected for inclusion in the Yukon HIA. They were:

1. Air- and soil - related health effects
2. Water- related health effects
3. Noise- related health effects
4. Infectious disease.
5. Stress and mental well-being
6. Injury
7. Emergency medical response

Assessment Methodology

For each of these, the Yukon HIA consultant looked at:

1. background literature linking mining and resource development activity to health outcome,
2. potential linkages between mining activities and health outcomes,
3. current knowledge of project impacts on health,
4. summary of potential effects based on selected parameters: direction, severity, duration and likelihood,
5. recommendations to minimize or mitigate potential health harms and where possible enhance human health benefits

****It is apparent from this brief summary and by reading the entire document that the present health studies being conducted by KGHM do not achieve the same level of rigorous assessment of all aspects of human health. A particularly glaring omission is baseline studies which are needed to produce a Baseline Health Profile.** Stratified population sampling must come from all affected regions and sub-populations including "sensitive, displaced and vulnerable" groups. This is critical to valid and reliable baseline data collection for future follow up. Without this information there is no way to know how much future health problems can be attributed to industrial projects such as the Ajax mine.

CAG Interactions with CEAA and TWG

The CAG has had many meetings with representatives of the BCEAO and the CEAA. All of these meetings were chaired by the BCEAO, and the agendas were drawn up by the BCEAO. The CEAA was at the meetings but rarely contributed. (However during the final Public Comment

Period the CEAA office in Victoria received submissions, and is reviewing them separately from the BCEAO). The CAG has had no contact with the Technical Working Group. The TWG is appointed by and reports to the BCEAO. Members of the TWG are almost entirely ministry employees (mines, forestry, fisheries, etc.), plus 1 from the City of Kamloops, 1 Interior Health employee (though not an expert in Public Health), 1 Health Canada representative, and a number of First Nations representatives. The following list, though not updated recently, gives you an idea of the composition:

The Environmental Assessment Working Group, officially called the Technical Working Group, is a list of consultants assembled by the BC Environmental Assessment Office from federal, provincial, local, and First Nations governments.

Federal and Provincial Government Representatives

Carl Alleyne, Regional Environmental Assessment Coordinator , Health Canada
Scott Bailey , Executive Project Director , Environmental Assessment Office
Shelley Ball , Senior Environmental Assessment Officer , Natural Resources Canada
Greg Baytalan ,Air Quality Specialist ,Interior Health
Kim Bellefontaine , "Manager, Environmental Geoscience and Permitting", Ministry of Energy and Mines
Phil Belliveau ,Ecosystems Section Head ,Ministry of Environment
Darren Bennett ,Water Stewardship Officer, "Ministry of Forests, Lands and Natural Resource Operations"
Melanie Campbell, Senior Policy Analyst , Natural Resources Canada
Tom Charles, Inspector of Mines Permitting ,Ministry of Energy and Mines
Samantha Cooper,Water Technician, Ministry of Environment
Cheryl Delwisch ,Consultation Coordinator, "Ministry of Forests, Lands and Natural Resource Operations"
Tania Demchuk ,Senior Environmental Geologist ,Ministry of Energy and Mines
Roberta Dight ,Navigable Water Protection Officer, Transport Canada
Susan Fitton, Senior Project Manager ,"Ministry of Forests, Lands and Natural Resource Operations"
Corrinne Gibson,Fisheries Protection Biologist ,Fisheries and Oceans Canada
Diane Howe ,"Deputy Chief Inspector of Mines, Reclamation and Permitting",Ministry of Energy and Mines
Bruce Hupman ,"Regional Director, South Region", Ministry of Energy and Mines
Kevin Inouye Project Manager ,Canadian Environmental Assessment Agency
Scott Jackson Hydrologist - Mining ,Ministry of Environment
Suzanne L'Heureux ,Environmental Officer ,Transport Canada
Tracy LeClair ,Senior District Development Technician ,Ministry of Transportation and Infrastructure
Jacques Marc, Visuals (Landscape) Forester ,"Ministry of Forests, Lands and Natural Resource Operations"
Gabriele Matscha ,Environmental Quality Section Head ,Ministry of Environment

Jennifer McConnachie ,Senior Reclamation Inspector ,Ministry of Energy and Mines
Carolyn Pharand ,Senior Operational Officer , "Natural Resources Canada, Major Projects
Management Office"
Jennifer Puhallo ,Impact Assessment Biologist - Mining Operations ,Ministry of Environment
Peter Rennie , Landscape Forester, "Ministry of Forests, Lands and Natural Resource
Operations"
Andrew Rollo ,Senior Environmental Geologist ,Ministry of Energy and Mines
Steve Rothman ,Senior Inspector of Mines ,Ministry of Energy and Mines
Stephen Sheehan ,Senior Environmental Assessment Officer ,Environment Canada
Andrew Taylor ,Economist ,Ministry of Jobs Tourism and Skills Training
Melissa Wade, Regional Hydrogeologist, "Ministry of Forests, Lands and Natural Resource
Operations"
George Warnock ,Geotechnical Engineering Manager ,Ministry of Energy and Mines
Kristin Worsley,Project Assessment Officer,Environmental Assessment Office
Sheryl Wurtz ,Range Agrologist,"Ministry of Forests, Lands and Natural Resource Operations"
Brian Yamelst ,Environmental Protection Officer,Ministry of Environment

Local Governments and First Nations Representatives

Jen Fretz - Public Works and Utilities Director, City of Kamloops
Representatives from:

Thompson-Nicola Regional District
Skeetchestn Indian Band
Tk'emlups Indian Band
Lower Nicola Indian Band
Ashcroft Indian Band