



MEMORANDUM

To: Stk'emplupsemc te Secwepemc Nation **Date:** 7 November 2016

From: KGHM Ajax Mining Inc.

CC: B.C. Environmental Assessment Office, Canadian Environmental Assessment Agency

Subject: Response to Ajax Project Application/EIS Panel Report: COMMUNITY HEALTH RISKS AND OPPORTUNITIES ASSOCIATED WITH RESOURCE DEVELOPMENT IN TL'AZT'EN NATION by L. Jokinen, J. Shandro, R. Roberts, V. Tom, N. Mohammadi, K. Kerr, A. Ostray

1 INTRODUCTION

The KGHM Ajax Project Environmental Assessment Application/Environmental Impact Statement for a Comprehensive Study was formally submitted for review to the BC Environmental Assessment Office and the Canadian Environmental Assessment Agency on January 18, 2016. The Stk'emplupsemc te Secwepemc Nation (SSN) provided KGHM Ajax (KAM) with comments associated with reports prepared by technical experts and provided to the SSN in support of the SSN Panel Hearings which occurred May 2, 2016 through May 6, 2016. This memorandum documents the response for comments number SSN-UU and SSN-VV based on the Community Health Risks and Opportunities Associated with Resource Development in Tl'azt'en Nation, Canada – University of Victoria 2015. The paper reports on potential health risks, impacts and opportunities from the perception of key health and social service providers and project-affected people from a remote First Nation community in Northern BC.

2 COMMENTS FOR RESPONSE

Specific comments submitted by the SSN and addressed within this memo are listed below.

SSN-UU

SSN requests that KGHM review the conclusions made for economic impacts, access to traditional plants and medicines and health care services, and make modifications to the residual and cumulative effects, as well as mitigation and monitoring plans.

SSN-VV

SSN requests that KGHM describe how the project may contribute to distrust and social division amongst Band members, families and individuals as a result of employment and contracting opportunities and how these impacts are proposed to be mitigated.

3 RESPONSE

KAM appreciates the opportunity to provide additional information to address questions and comments submitted by the SSN. The following information has been prepared to address the specific comments listed above.

SSN-UU and SSN-VV Response

KAM understands the SSN request that the conclusions included in the Application/EIS for economic impacts, access to traditional plants and medicines and health care services be revised to consider additional effects as identified in research conducted by Jokinen et al. (2015) and Shandro et al. (2014), including potential effects on distrust and social division due to unequal access to Project opportunities.

KAM has reviewed the Jokinen et al. (2015) and Shandro et al. (2014) research and believes that the Application/EIS and Addenda already address the findings of the papers and recommendation of the authors (summarized in Tables 1 and 2 below) and does not believe that modifications to proposed mitigation measures or monitoring are required. The concerns identified in Jokinen et al. (2015) and Shandro et al. (2014) for the Tl'azt'en Nation are similar to the concerns expressed by the SSN through communications with KAM and with regulators and have already been assessed in the Application/EIS and the Addendum #1 SSN Aboriginal Economies Valued Component, which was submitted as an Addendum to the Application/EIS on March 18, 2016. In addition, the recommendations suggested by the authors are consistent with mitigation and management strategies already proposed by KAM (as demonstrated in Table 2).

Summary of Findings and Recommendations of Jokinen et al (2015) and Shandro et al (2014)

Jokinen et al. (2015) describes qualitative research conducted in the Tl'azt'en Nation to understand the perceived health risks and impacts and opportunities related to resource development projects. The assessment is based on interviews of 14 key informants, including key health and social service providers and project-affected people from Tl'azt'en Nation. Tl'azt'en Nation is a Northern British Columbia (BC) First Nation situated along the northern shore of Stuart Lake. A number of resource development projects have been active on Tl'azt'en Nation traditional land. Shandro et al. (2014) identified the Tl'azt'en Nation as being particularly vulnerable to health impacts from resource development due to poor community health conditions, isolation and the lack of access to a range of essential health and social services (Shandro et al., 2014).

Adverse health and social impacts/risks identified in the studies included impacts to culture due to loss of access to traditional lands and reduced quality and availability of resources, increased traffic, increased health and social service provider workload and changes in social dynamics (e.g., mistrust and social division) in the community. Health and social opportunities arising from developments included increased access to education, training programs and to short-term employment.

These effects identified in Jokinen et al. (2015) and other concerns identified by the SSN have been assessed in the Addendum #1 SSN Aboriginal Economies Valued Component. Addendum #1 follows an integrated approach that considers direct and indirect effects of the Project through a

variety of economic, social and environmental pathways, which are consistent with the pathways discussed in Jokinen et al. (2015) and Shandro et al. (2014). The assessment recognizes that employment opportunities arising from Project workforce requirements may lead to increased training and employment opportunities in SSN communities, but they could also affect the SSN's participation in the traditional economy and affect social and family cohesion if there are barriers and disparity among SSN members to access jobs. The labour needs and anticipated local hiring for the Project are described in Section 7.2 Labour Force, Employment and Training of the Application/EIS. Specific effects to SSN Aboriginal economies related to employment opportunities and unequal access to jobs, including proposed mitigation and enhancement strategies, are described in Section AD 5.2.1 of Addendum #1.

Similarly, the assessment also recognizes that changes in the environment caused by the Project have the potential to affect the SSN's current use of lands and resources for traditional purposes, including potentially changing the ability to hunt, fish, gather and carry out cultural practices. These potential changes in the environment surrounding harvesting locations could affect the SSN's ability to harvest traditional foods, and in turn could affect SSN food security, health, and social and family cohesion. The environmental effects of the Project on the SSN's use of lands and resources for traditional purposes are assessed in Section 8.5 Current Use of Lands and Resources for Traditional Purposes of the Application/EIS. Addendum #1 SSN Aboriginal Economies Valued Component complements the analysis of current use of lands and resources for traditional purposes and expands on additional indirect effects related to changes in the ability to use traditional lands, including changes in income and food security, community and family cohesion, and health. In particular, specific indirect effects (and mitigation) such as changes in intergenerational transfer of traditional knowledge, in traditional food diet, in quality of resources harvested for consumption, and in ability to practice traditional cultural activities are assessed Section AD 5 of Addendum #1 SSN Aboriginal Economies Valued Component.

Table 1 below presents a summary of the potential impacts identified in the Jokinen et al. (2015) research and indicates where in the Application/EIS and Addenda they have been assessed.

Table 1: Comparison between Jokinen et al. (2015) Findings and the Project Application/EIS and Addenda

Impact Identified in Jokinen et al.	Description of Findings in Jokinen et al.	Section of the Project Application/EIS and Addenda that Addresses the Potential Impact Identified by Jokinen et al.
Cultural and health impacts associated with loss of access to traditional lands and reduction in supply and purity of traditional foods and medicines	Access to traditional land was identified as a major risk associated with resource development projects proposed and operating on Tl'azt'en Nation territory. Concerns were identified with respect to loss of access to traditional food sources, as well as the ability to engage in traditional land-based activities, such as storytelling and accessing ancestral trails. Interviewees also were concerned about a reduction in resources available for harvesting and questioned the purity of their traditional food sources and whether they were safe to consume.	Similarly to the Tl'azt'en Nation, the SSN have also expressed concerns that the Project could affect access to traditional harvesting areas and the quality of resources harvested. This could affect their food security and health. The SSN are also concerned that if development activities continue on their traditional territory, they will not be able to pass traditions and culture to future generations. Addendum #1 SSN Aboriginal Economies Valued Component assesses those indirect effects related to changes in access to traditional lands, and changes in quality and quantity of harvested resources, such as changes in food security, health effects, and intergenerational transfer of traditional knowledge and

Impact Identified in Jokinen et al.	Description of Findings in Jokinen et al.	Section of the Project Application/EIS and Addenda that Addresses the Potential Impact Identified by Jokinen et al.
		<p>continuation of SSN culture.</p> <p>These effects are assessed in the following sections of Addendum #1:</p> <ul style="list-style-type: none"> AD 5.2.3 Effects on Income and Food Security AD 5.2.4 Effects on Community and Family Cohesion AD 5.2.5 Effects on Mental and Physical Health <p>Propose mitigation measures for such affects are described in Sections AD 5.3.3, AD 5.3.4 and AD 5.3.5 of Addendum #1.</p> <p>Project effects on the SSN's use of lands and resources for traditional purposes are assessed in Section 8.5, Current Use of Lands and Resources for Traditional Purposes of the Application/EIS.</p> <p>The risk to human health associated with the ingestion of country foods has been assessed under the human health Valued Component (VC) (Section 10.4).</p>
Increased industrial traffic that could affect community safety	Interviewees were concerned about heavy industrial traffic on roads connecting the Tl'azt'en Nation and the lack of a collaborative safety management strategies to mitigate/manage effects. The primary concern among interviews was how industrial traffic impacts community safety.	<p>The Application/EIS acknowledges that Project-related traffic could result in increased collision and accident incidence on public roads, which could affect community health and well-being. This is assessed in Section 10.7.4.2 Potential Effects on Community Health and Well-being. Mitigation measures and safety management strategies are discussed in Section 10.7.4.3 Mitigation Measures for Community Health and Well-being.</p> <p>Potential effects on traffic volumes and on public road infrastructure are assessed in Section 8.1 Infrastructure, Public Facilities and Services VC. Potential Project effects on collision and accident incidences are discussed in Section 10.7 Community Health and Well-being.</p>
Health and social service provider work overload	<p>Service providers interviewed noted a progressive increase in the total workload volume related to consultation requests from industry resulting from the regulatory requirements of resource development permitting processes. Although the importance of consulting with the communities was recognized, for the interviewees, the consultation process involved drawing from limited community resources, which otherwise could be allocated towards supporting community programs and events.</p> <p>Interviewees considered that a central component of meaningful consultation included capacity for Aboriginal communities to take an informed position.</p>	<p>The Project is located close to several communities (including the City of Kamloops, and the primary SSN communities of Kamloops Indian Reserve #1 and Skeetchestn Indian Reserve). The Application/EIS recognizes that the Project may place stress on local infrastructure and services because of direct Project use and Project-related in-migration. This potential effects of the Project and proposed mitigation measures for local infrastructure, public facilities and services, including effects on emergency, health and social services, are assessed in Section 8.1 Infrastructure, Public Facilities and Services VC of the Application/EIS.</p> <p>Specific effects on community health and well-being associated with increased stress on provision of community health services are assessed in Section 10.7 Community Health and Well-being and in Section 14 Other Aboriginal Interest of the Application/EIS.</p> <p>In addition, as described in Section 15 Procedural Aspects of Aboriginal Consultation of the Application/EIS, KAM has provided and continues to provide capacity funding to the SSN to support their understanding of potential risks and impacts of the Project and their meaningful participation in the assessment process. KAM has provided funding during</p>

Impact Identified in Jokinen et al.	Description of Findings in Jokinen et al.	Section of the Project Application/EIS and Addenda that Addresses the Potential Impact Identified by Jokinen et al.
		the Pre-Application/EIS and Application/EIS Review phases, including assisting the SSN in undertaking their own review process, which includes the establishment of the SSN Review Panel.
Impacts to social dynamics due to unequal access to Project opportunities	Interviewees noted that resource development projects could increase resentment, mistrust and social conflict among community members as a result of unequal distribution of industry-related employment and benefits. “Those who directly benefit from industry may be more inclined to approve proposed projects than those who are not”.	Interference of employment with education, changes in training requirements and disparity in access to jobs among SSN members was also identified as a concern by the SSN. Addendum #1 SSN Aboriginal Economies Valued Component assesses potential effects associated with unequal access to employment and procurement opportunities and provides mitigation and enhancement measures to eliminate barriers to accessing employment and business opportunities for SSN members and businesses. Specifically, these potential effects are discussed in sections AD 5.2.1.2 Employment Barriers and Inequality of Access to Jobs and AD 5.2.2.1 Inequality and Barriers to Access to Project Procurement Opportunities of Addendum #1.
The value of education and training	Interviewees reported the employment-related benefits were limited for Tl’azt’en members, despite the number of proposed and operating resource development projects on their traditional land. If available, most employment opportunities for band members were described as short-term, low paying, and seasonal (e.g., brushing, weeding, tree planting). Interviewees highlighted a gap that exists between training and meaningful employment for band members.	Section AD 5.2.1 of Addendum #1 assesses potential effects in access to quality, long-term jobs and training opportunities for SSN members. The assessment considers five measures or indicators related to employment and training concerns identified based on SSN input, including the following: <ul style="list-style-type: none"> • Labour availability; • Employment barriers and inequality of access to jobs; • Labour force migration and stability; • Interference of employment with education; and • Changes in training requirements. The assessment provides specific mitigation and enhancement measures to provide First Nations members with opportunities to be successfully integrated in the Project, as well as to create long-term careers for SSN members that endure beyond the end of the Project. KAM has proposed to work with the SSN to develop a First Nations Human Resources Development Plan for all phases of the Project that defines First Nations-specific recruitment and training and education strategies to enhance the SSN’s participation in long-term Project employment.

Based on the qualitative analysis summarized in Table 1, Jokinen et al. (2015) proposed a series of recommendations to industry operating in the Tl’azt’en Nation territory. These recommendations can be applicable to resource projects operating or proposed in other First Nations traditional territory, such as the Ajax Project. Recommendations for industry include the implementation of enhanced risk management strategies to minimize social and health risk to communities, development and implementation of wellness plans that merge and strengthen education and training opportunities, and provision of adequate community-based capacity funding so First

Nations can meaningfully participate in understanding potential risk and impacts of major development projects. These recommendations are consistent with mitigation measures and management strategies proposed for the Project, as demonstrated in Table 2 below.

Table 2: Comparison between the recommendations of the Jokinen et al. (2015) research and Mitigation and Monitoring Proposed in the Ajax Project Application/EIS and Addenda

Recommendation	Description of Recommendation	Consideration of Recommendation in the Project Application/EIS and Addenda
Adopt and implement international standards	<p>Proponents should consider international performance standards such as the performance standards on Environmental and Social responsibility developed by the International Finance Corporation (IFC). These standards outlines the need for a company to do the following:</p> <ul style="list-style-type: none"> • Identify and evaluate environmental and social risks and impacts of a project throughout the life of the project. • Adopt a mitigation hierarchy of avoid, minimize or compensate. • Promote improved environmental and social performance through the effective use of management systems. • Ensure that grievances from affected communities and external communications from other stakeholders are responded to and managed appropriately. • Engage with affected communities throughout the project cycle on issues that could potentially affect them and to ensure that relevant environmental and social information is disclosed and disseminated. 	<p>The assessment of potential effects of the Project follows best practices and is in line with international standards, including the IFC performance standards. Although KAM is not a recipient of financing from IFC, nor is the Ajax Project an IFC-financed project, KAM finds themselves in broad agreement with the high-level principles articulated in the IFC Performance Standards and highlighted in Jokinen et al. (2015). In particular, the Application/EIS acknowledges and endorses the importance of the following:</p> <ul style="list-style-type: none"> • Identify and monitor environmental and social risks and impacts of the Project throughout the life of the Project; • Adopt a mitigation hierarchy of avoidance, minimization or compensation; • Use management systems effectively to ensure the Project is implemented in a sustainable manner; • Ensure that concerns from First Nations and other stakeholders are responded to and managed appropriately; and • Engage with affected communities throughout the Project cycle on issues that could potentially affect them and to ensure that relevant environmental and social information is disclosed and disseminated (see Section 15 of the Application/EIS). <p>As described in the Application/EIS (Section 11), KAM is committed to developing, implementing and maintaining the Project's Environmental Management System and continually improving environmental and social performance in accordance with industry-recognized standards at each stage of the mining lifecycle. The Project's Environmental Management System is developed in alignment with the internationally recognized ISO 14001 standard for environmental management systems and the Mining Association of Canada Towards Sustainable Mining requirements (see Section 11 – Summary Proposed Management Plans of the Application/EIS).</p> <p>KAM has engaged and continues to engage with the SSN as part of Project planning and as a requirement of the Environmental Assessment process (see Section 15 – Procedural</p> <p>Aspects of Consultation of the Application/EIS). KAM is committed to open and transparent communication and the continued enhancement of positive relationships with the SSN. KAM's consultation will continue throughout the duration of the Environmental Assessment process and persist throughout the life of</p>

Recommendation	Description of Recommendation	Consideration of Recommendation in the Project Application/EIS and Addenda
Help meet basic needs of the community	<p>Tl'azt'en Nation community is facing a housing crisis; does not have a local Royal Canadian Mounted Police office; lacks basic services (including waste management and high-speed broadband Internet); and experiences intermittent, disconnected and disruptive ad hoc health and social services. The resource development sector should contribute to community development that helps enhance wellness, training and service capacity.</p>	<p>the mine.</p> <p>Although the socio-economic conditions of the SSN differ from those of the Tl'azt'en Nation, KAM is committed to creating long-term careers for SSN members that endure beyond the end of the Project. To this end, KAM will work with the SSN to develop a First Nations Human Resources Development Plan for all phases of the Project that provide jobs with transferrable skills within mining and other industries. This plan will provide First Nations members with opportunities to be successfully integrated in the Project through First Nations-specific recruitment and training and education strategies (refer to Section AD 5.3.1 of Addendum #1 SSN Aboriginal Economies Valued Component).</p> <p>In addition, given that potential interaction between the Project, residents and local services is difficult to predict, KAM will implement ongoing socio-economic monitoring with participation of local and SSN representatives and local service providers.</p> <p>KAM will establish a Community Liaison Group comprising representatives from municipal and regional governments, SSN representatives, health and social service providers, and other relevant organizations to discuss potential issues and solutions in relation to effects associated with strains on local services (see Section 11.29 – Socio Economic Monitoring Plan in the Application/EIS).</p> <p>KAM will implement a Socio-Economic Monitoring Plan to help to identify any unanticipated changes in local conditions, evaluate effectiveness of mitigation measures and implement adaptive follow-up programs as needed. The Socio-Economic Monitoring Plan will include a monitoring program for Community Health and Wellbeing. See Section 11.29 for detailed description.</p> <p>KAM is also pursuing a Project Agreement with the SSN to developing long-term partnerships for the enhancement of SSN members' wellbeing.</p>
Support a comprehensive Community Wellness Plan	<p>Wellness plans are critical for optimizing success of future education, training and employment opportunities. Wellness plans should be implemented in coordination with training and education programs associated with the extractive sector and need to be tailored to individuals. It also should consider a holistic approach, focusing on essential and life skills, such as budgeting, coping, problem-solving and stress-management. This Wellness Plan would be a shared responsibility and partnership for community wellness between Tl'azt'en Nation, government and industry.</p>	<p>KAM will implement a Socio-Economic Monitoring Plan (refer to Section 11.29 in the Application/EIS), which will include a monitoring program for Community Health and Wellbeing.</p> <p>The plan will help to track performance, evaluate effectiveness of mitigation measures and implement adaptive follow-up programs as needed. The approach to and content of this monitoring program will be defined in collaboration with the Community Liaison Group, including relevant service providers and healthcare specialists. The program will be designed to monitor topics of concern (to be determined, but may include grievances related to workforce behaviours; hospital/emergency services usage statistics, specific health indicators, etc.). See Section 11.29 – Socio Economic Monitoring Plan for detailed description.</p> <p>KAM has proposed a First Nations Human Resources Development Plan to optimize success of training and employment opportunities for SSN members, including actions to minimize barriers to accessing employment opportunities such as First Nations-specific recruitment</p>

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		<p>and training and education strategies. Some aspects of the plan would include the following (refer to Section AD 5.3.1 of Addendum #1 SSN Aboriginal Economies Valued Component for a detailed description):</p> <ul style="list-style-type: none"> • Provide hard skills (e.g., degrees, certificates, specialized training) and soft skills (e.g., teamwork, time management, communication) training to SSN members. The focus will be on developing transferrable skills; • Create a labour force database of SSN members; • Work collaboratively with local education and training institutions, provincial and federal education/training funding agencies, and organized labour and contractors to identify and access or establish training programs needed over the life of the Project from Construction to Post-closure; • Work collaboratively with SSN leadership and local high schools to deliver a “don’t drop out – complete high school” message to students attending high school career days and/or community meetings about the Project; • Consider work experience equivalency to education or training in meeting qualification requirements for SSN mature workers with workplace experience; and • Provide cross-cultural training to Project employees.
Support community-based capacity funding	Provide capacity to allow community representatives to review and respond to resource development requests, including to support capacity needs for negotiations and legal, technical and advisory services.	KAM has provided and continues to provide capacity funding to the SSN to support their meaningful participation in the regulatory process and in understanding potential risks and impacts of the Project (see Section 15 of the Application/EIS). KAM has provided funding during the Pre-Application/EIS and Application/EIS Review phases, including assisting the SSN in undertaking their own review process, which includes the establishment of the SSN Review Panel.
Provide practical employment experience	Industry needs to actively engage with Tl’azt’en Nation to help them prepare (in advance) and take advantage of employment and subcontractor opportunities. Industry could consider providing small business seed funding that encourages and supports local business development.	<p>KAM has proposed a First Nations Human Resources Development Plan to optimize success of training and employment opportunities for SSN members (see above and Section AD 5.3.1 of Addendum #1 for a detailed description).</p> <p>KAM is developing a Business Procurement Plan with specific elements to enhance local and SSN business participation through measures such as the following:</p> <ul style="list-style-type: none"> • Working with the SSN to identify opportunities for unbundling contracts or directly awarding contracts where known qualified SSN providers exist; • Assisting the SSN in developing and maintaining a database containing all SSN businesses and partnerships with the potential capacity, capabilities and qualifications to pursue procurement opportunities; and • Informing SSN businesses at the earliest possible stage (prior to requests for qualifications or proposals) regarding upcoming procurement

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		opportunities. See Section AD 5.3.2 of Addendum #1 for a detailed description.

4 CONCLUSION AND PROPOSED PATH FORWARD

KAM has considered the concerns expressed by the SSN during consultation with KAM and communications with regulators, as well as through the SSN Assessment Process. KAM has also reviewed and considered additional secondary sources provided by the SSN. Concerns have been incorporated and addressed in the Application/EIS, Addenda and supplemental submissions.

KAM has reviewed the research conducted by Jokinen et al. (2015) and Shandro et al (2014) and believes that the Application/EIS and Addenda already address the findings of the papers and recommendation of the authors, as demonstrated in Tables 1 and 2 above. Although not all recommendations are applicable to the SSN's conditions, the recommendations of the papers are consistent with mitigation and management strategies proposed by KAM; therefore, no modifications to proposed mitigations measures or monitoring are required based on the review of the additional literature referred by the SSN.

We hope that the information provided in this letter addresses the questions or concerns noted in Section 2. We appreciate the comments received from the SSN and look forward to continued collaboration.

5 REFERENCES

- International Finance Corporation. (2012). Performance Standard 7 Indigenous Peoples. Retrieved January 24, 2014 from http://www.ifc.org/wps/wcm/connect/1ee7038049a79139b845faa8c6a8312a/PS7_English_2012.pdf?MOD=AJPERES
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