

Issues and Direction

To Support Completion of the Application Information Requirements/ Environmental Impact Statement Guideline for the Proposed Ajax Mine

**NOTE: Development of the AIR/EIS Guidelines is an iterative process. Implementation of the direction contained within this document does not guarantee that the draft AIR/EIS Guidelines will become a final product. Approval of the final AIR/EIS Guidelines comes from BC EAO and CEA Agency.*

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DRAFT

This document outlines identified issues and corresponding direction to support KGHM Ajax Inc. (Proponent) in the completion of the Application Information Requirements/ Environmental Impact Statement Guidelines. Documents referred to in this document are: Draft Application Information Requirements/ Environmental Impact Statement Guidelines (dAIR/EISG), Revision "D" (January 6, 2012); Public Issues Tracking Table Response Summary (Summary Document) (June 27, 2012); and Public Issues Tracking Table (Tracking Table) (September 19, 2012)

1. Preamble

Except where otherwise stated, the direction in this document is based on:

- Draft Application Information Requirements/ Environmental Impact Statement Guidelines (dAIR), Revision “D”, January 6, 2012;
- Public Issues Tracking Table Response Summary (Summary Document), June 27, 2012; and
- Public Issues Tracking Table (Tracking Table), September 19, 2012.

2. General Direction to Proponent on Various Issues and Documents

- 1) *Direction:* Track all comments made regarding statements about information that will be captured in the Application. This information shall be provided to EAO/CEAA in a suitable format for future cross-reference, which includes identifying the section of the Application where the information will be (e.g. add column to tracking table: “Commitment to Application” Y/N)

NOTE: This is not intended to duplicate efforts already undertaken, rather it is intended to ensure that EAO and CEAA can be confident that commitments made to provide information in the Application in any of the three documents can be easily identified and verified. If the information can be readily extracted from the Tracking Table in its current format, this will be suitable for that document. It is also a requirement that all such commitments across the three documents be available.

- 2) *Direction:* Ensure the Tracking Table references the section of the final AIR that comments will be addressed in (and populate).

NOTE: The existing column for dAIR section is for previous versions of the dAIR. This direction is to ensure that the final AIR can be referenced from the Tracking Table.

- 3) *Direction:* Ensure the Tracking Table references the section of the Summary Document that comments will be addressed in (and populate).

NOTE: The purpose of this direction is to ensure that a reader can cross-reference from the issue-specific Tracking Table to the more general Summary Document.

- 4) *Direction:* Provide definitions/ description and justification for each VC to be included in the AIR.
- 5) *Direction:* remove references to “N/A” in public issues tracking table (proponent response column only) and replace with “out of scope – not directly related to AIR,” where applicable.
- 6) *Direction:* Add section to Public Issues Summary document noting that all comments in the public issues tracking table deemed “out of scope” have been deferred to EAO/ CEAA for consideration.
- 7) *Direction:* Ensure EAO/CEAA can easily identify all comments that the Proponent has referred to EAO and/or CEAA.
- 8) *Direction:* Ensure the Public Consultation Plan is clearly referenced in the Public Consultation Section of the AIR.
- 9) *Direction:* Ensure the First Nations Consultation Plan is clearly referenced in the First Nation Section of the AIR, including commitment to fulfil it.

10) *Direction:* Update instructions to public for navigating Tracking Table (that is currently within the Summary Document) to ensure public can easily navigate Tracking Table, Summary Document and AIR.

11) *Issue:* The Tracking Table, dAIR and summary document do not fully capture all issues and potential effects related to the existing Kinder Morgan Pipeline in its existing location.

Direction: Explicitly include potential effects related to the existing Kinder Morgan pipeline (both effects from and on the pipeline) in accidents and malfunctions, as well as the following VC's: Geology, Landforms and Soils; Land and Resource Use; Noise and Vibration as well as any other VC's where the proponent could reasonably anticipate an effect.

12) *Issue:* There is inconsistent labelling of issues "out of scope", "statement of opposition", "N/A". Also, responses often do not sufficiently answer the question or issue raised by the public. Not all instances of this inconsistency have been noted by CEAA/EAO in the Tracking Table.

Direction: Cross-check comments that have been labelled "out of scope", "statement of opposition", or "N/A" to ensure they have been properly labelled and answered appropriately.

13) *Issue:* Responses are not always thorough and consistent within and across all documents. In some cases these issues were identified by CEAA/EAO in the review of the Tracking Table with direction to change, but not all cases were identified.

Examples of inconsistent answers can be found in:

- a. 3D model (e.g. Issue # 99 and 320)
- b. feasibility study (e.g. Issue #369 and 1209)
- c. bonding requirements – in the case of bonding, this should be referred to government agencies.

The above is not an exhaustive list.

Direction: Ensure consistency in answers within the Tracking Table and also between the Tracking Table, Summary Document and AIR.

14) *Issue:* Compensation is repeatedly stated as being "out of scope". Compensation is not out of scope under the Provincial EA process.

Note that Provincial EAO guidance documentation for proponents explicitly references compensation as a potential strategy to avoid or minimize significant adverse effects. Potential effects will be assessed and mitigation proposed. This does not exclude compensation.

Direction: Comments that say compensation is "out of scope of the EA process" must be changed. The Proponent is required to more clearly and fully address questions of compensation throughout the tracking table and the Tracking Table Response Summary document. A more complete and useful response would refer to the studies of potential effects pathways and strategies to mitigate adverse effects.

15) *Issue:* Mapping in the dAIR is not always consistent, complete or accurate.

Examples of known past issues are noted below. Issues include, but are not limited to: missing or not clearly marked items, including City boundary; City growth boundary; power lines (present and potential future); and road names.

For Example:

- Figure 6.5-1 of draft AIR does not include entire western/northwestern area of Aberdeen.
- Figure 2.2-1 of dAIR is difficult to read, does not have clear labels, and does not include subdivision boundaries, etc.
- There are different references in the dAIR to distance from site – in some cases, the centre of the site is the datum, in other cases, the project boundary is the datum.

Direction #1: Ensure all maps are up to date, accurate, and complete. Ensure that all references in the AIR regarding the distance of the proposed mine to various landmarks (e.g. location of mine site in relation to city limits) are consistent and clear.

Direction #2: Ensure there is a single map that clearly demonstrates to the public the location of all project components in relation to key features in the proposed project area.

- 16) *Issue:* EAO/CEAA are not confident that all potential effects from transportation associated with mine operations are included in the dAIR (e.g. potential effects from dust and noise in the vicinity of the mine site, but not on the mine property; potential safety effects from mine related traffic on and off-site).

Direction: Ensure AIR captures all potential effects in appropriate VC's using a study area that reasonably incorporates areas beyond the mine property. Proponent is asked to identify a reasonable area and confirm with EAO/CEAA if it will be suitable prior to submission of the Application/EIS.

- 17) *Issue:* The public has requested better maps and 3-D models of the proposed mine development. These are requested as part of the assessment of social and economic VCs including property values, land and resource uses and visual/ aesthetics values.

Direction: Ensure sufficient mapping and visual aids are developed to support a full visual impact assessment as outlined by EAO through a memo from the Ministry of Forests, Lands and Natural Resource Operations (July 19, 2012).

Recommendation: Develop better visual aids than are currently available to assist with the public review.

- 18) *Issue:* The Tracking Table has a number of instances across VC's where commitments have been made to specific mitigation measures that will or will not occur (e.g. quantification of effects to foundations). Many have been identified in the Tracking Table, but not necessarily all instances. Such commitments are premature for the pre-application phase of the EA. It is inappropriate to provide specific commitments to mitigation at pre-application phase of the EA.

Direction: Ensure there are no references to mitigation measures being made in the Tracking Table or AIR. It is premature to say what mitigation will/ will not occur.

- 19) *Issue:* There are inadequate linkages between VC's – how the outcomes of the assessment on one VC informs the assessment of another VC (e.g. how air quality effects assessment will inform the assessment of various social or economic VC's).

Direction: Modify "Assessment Methodology" in the AIR to state whether or not (and how) the outcome of the assessment of one VC will inform the assessment of other VCs. Modify each VC in Section 6 to include a listing of VCs in other categories that will be drawn upon, if applicable. Ensure the Summary Document and AIR make all linkages

clear for all VCs. Be clear where socio-economic studies will be undertaken that will be drawing on results from VCs in other categories.

- 20) *Issue:* a number of changes to VCs have occurred as a result of EAO/CEA Agency/ Working Group review of the dAIR.

Direction: Any changes to VCs must be reflected in the proponent's responses to public comments in the Tracking Table and explained in the Summary document.

- 21) *Issue:* AIR does not reference EAO requirements for Executive Summary and Certified Project Description.

Direction #1: Update AIR to provide commitment to including an Executive Summary in the Application that summarizes key elements of the application, including analysis and results. (Key elements of this are outlined in draft in an email from Scott Bailey to Dianna Stoopnikoff on July 12, 2012. It is anticipated that final direction will be provided approximately one month prior to application submission. It is further anticipated that the final direction will be refined from the initial draft information).

Direction #2: Update AIR to provide commitment to including Certified Project Description in the Application that outlines the proposed components and activities that are relevant to consider for EA certification. (An early draft of this direction was provided in an email from Scott Bailey to Dianna Stoopnikoff on July 12, 2012. It is anticipated that final direction will be provided approximately one month prior to application submission. It is further anticipated that the final direction will be refined from the initial draft information). A high level commitment to this approach is all that is required.

- 22) *Issue:* The public has raised concerns regarding possible future modifications or expansions of the mine, or abandonment (e.g., proponent goes bankrupt, walks away from mine.) The federal Act defines a project to include the construction, operation, modification, decommissioning, abandonment or other undertaking in relation to a physical work. The dAIR methodology does not include modification or abandonment of the project.

Direction: The AIR must include commitment to consider abandonment in the Application; this can be in the reclamation and closure plan. **Once clarification is received by EAO/CEAA from the proponent regarding the project being assessed (i.e., how future potential twinning and/or relocation of the Kinder Morgan pipeline will be included in the AIR and Application) further direction may be forthcoming.**

- 23) *Issue:* In the dAIR, Section 5 generally, and Section 5.1.6 more specifically, would benefit from the use of the graphic developed for the AIR Information Session, instead of that on page 42.

Direction: Utilize the following updated graphic to replace the existing outdated graphic.

- 24) *Issue:* The importance of potential effects to social and economic valued components associated with this proposed project lends itself to the potential for an ongoing socio-economic monitoring and public reporting program.

Recommendation: The proponent is advised to contemplate an ongoing socio-economic monitoring and public reporting program. The proponent should consider which key elements would be required, and the resultant needs, to ensure study design and implementation would support such a program - it may be beneficial to provide discussion within the AIR to this effect. Such key elements may include: sufficient baseline information; publicly accessible reporting; long term (life of project); access to

information to support monitoring and reporting; and, access to proponent and community members by the monitor.

25) *Direction*: Ensure comments/direction in email dated November 28, 2012 from S. Bailey to D. Stoopnikoff regarding water (comments on section 3.12 and 6.14 of the dAIR) are fully addressed.

26) *Issue*: Comments and Issues from August 3, 2012 letter from Thompson-Nicola Regional District not fully captured within the Working Group Tracking Table.

Direction: Ensure all comments and issues are captured in Working Group Tracking Table and responded to by proponent. Confirm, in particular, that TNRD issues are fully captured and responded to.

27) *Direction*: Key Guideline Documents that must be utilized (per email from EAO to D. Stoopnikoff on October 17, 2012) include :

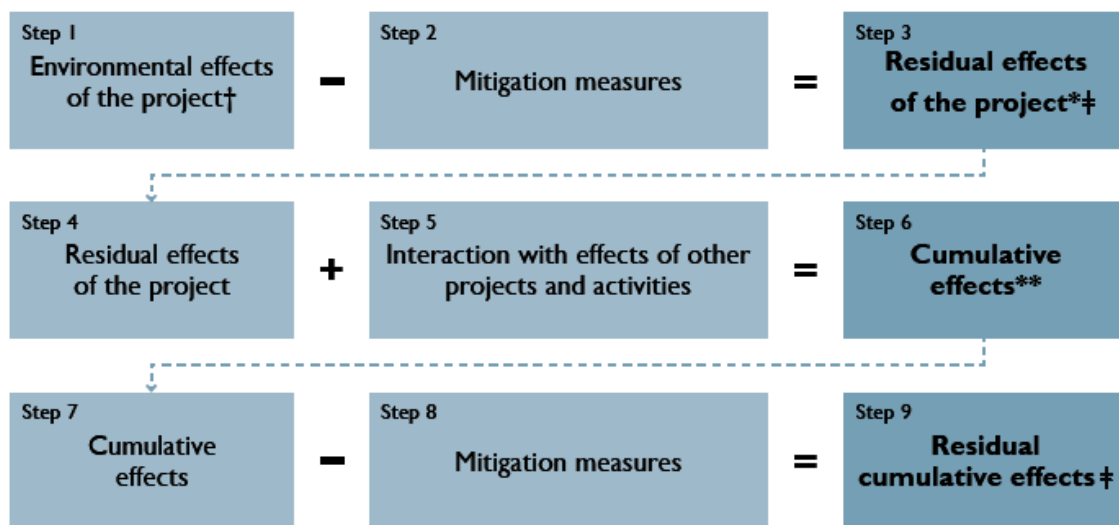
“Water and Air Baseline Monitoring Guidance Document for Mine Proponents and Operators”

http://www.env.gov.bc.ca/epd/industrial/mining/pdf/water_air_baseline_monitoring.pdf

“Guidelines for Groundwater Modelling to Assess Impacts of Proposed Natural Resource Development Activities”

http://www.env.gov.bc.ca/wsd/plan_protect_sustain/groundwater/library.html

EAO and CEA Agency Environmental Assessment Framework For Determining and Assessing Project Effects



† Including direct and indirect effects

‡ A final determination of significance is made by the EAO and CEA Agency by applying the Six Factors for Evaluating the Significance of Adverse Effects

* If there are no residual effects, no further steps are needed

** If there are no cumulative effects, no further steps are needed

3. Valued Components to be Newly Created or Re-Named

1) **Create New VC – Economic Growth**

Issues:

- The current proposal in the draft AIR is to include government revenues in the Project Benefits description. It would be more complete to describe expected project benefits in the Application, including expected effects on government revenues.
- The current proposal in the draft AIR is not clear on how GDP is captured. It would be more complete to describe expected project benefits in the Application and refer to the BC Stats Input-Output model as a source of employment and GDP effects estimates.

Direction: Create new VC “Government Revenues”, complete with methodology description. This would inform the Project Benefits Description and Benefits to Canadians (federal requirement).

2) **Create New VC – Property Values; Remove Existing VC “Housing”**

Issue #1: The draft AIR includes discussions of residential property values as part of the Housing VC is incomplete. Other property types including residential, commercial, industrial, agricultural and institutional are not captured.

Direction #1a: Create a new VC named “Property Values” to enable assessment of property value effects on *all* property types. The effects assessment on property values would include both expected positive influences (e.g. workers moving into areas, improved road access) and negative influences (e.g. noise, dust, visuals, increased traffic on nearby roads), as well as mitigation strategies (e.g. monitoring and adaptive management) to help minimize effects on properties.

Direction #1b: Remove VC “Housing”. The remaining (non-property value) components of the current “Housing” VC to be grouped as “Housing and Accommodation”, and focus primarily on potential accommodation options for construction and operations workers, and any displacement of current residents that may result. This new grouping to be added to the existing VC entitled “*Infrastructure, Public Facilities and Services*”

Issue #2: The public comments on the draft AIR highlight public concerns related to the potential effects on property values in the Aberdeen, Pineview, Knutsford and other neighbourhoods.

Potential effects on property values are contingent on the results of separate studies on other VCs that may have an effect on property values.

Direction #2: Identify potential effects pathways (e.g. dust, noise, vibration, lighting, aesthetics, public health and groundwater) that may influence property values, and develop mitigation and monitoring strategies (e.g. pre and post strategies) for those pathways to understand and minimize potential effects on property values.

3) Create New VC – Outdoor Recreation

Issue: “Outdoor Recreation” in the draft AIR is included as part of existing “Land and Resource Uses” VC. The potential project effects on outdoor recreation opportunities are an important public concern for the project area, with an emphasis Jacko Lake and Inks Lake. Activities in the area include fishing, hiking, bicycling, skiing, orienteering, hunting, and other recreation activities.

Direction #1: Create new VC called “Outdoor Recreation” and include the outdoor recreation components from “Land and Resource Uses” VC into the new VC. It will be important to consider that recreation uses of Jacko Lake should be captured in the “Jacko Lake” section.

Direction #2: Ensure that the use of any water bodies for navigational purposes is identified, and impacts on such use assessed. This information may be required by Transport Canada for consideration of future authorizations.

4) Remove VC – Cost of Living

Issue: There is no indication that cost of living is not a major public concern, and the likelihood for significant adverse effects is considered to be small.

Direction: Remove “Cost of Living” as a separate VC and incorporate any cost-of-living concerns into “Community Health and Well-Being” or another economic VC, as appropriate.

5) Rename VC – Public Facilities and Services, including Transportation; Remove VC – Infrastructure, and add to newly named VC

Issue: “Infrastructure” (currently Economic VC) and “Public Facilities and Services, including Transportation” (currently Social VC) have potential for overlap. Additionally, the current draft AIR does not include all potentially affected modes of transportation.

Direction #1: Rename VC “Public Facilities and Services, including Transportation” to “Infrastructure, Public Facilities and Services”

Direction #2: Remove “Infrastructure” VC and incorporate into expanded VC “Infrastructure, Public Facilities and Services”.

Direction #3: Ensure transportation component of new VC addresses all potentially affected modes of transportation including project effects on road, air and rail transport (if shipping concentrate by rail is raised as an option in the alternative means discussion).

6) Combine VCs – Healthy Living and Health Education

Direction: Combine Healthy Living and Health Education into one VC (currently two VCs).

7) If Required, Split VCs – Dark Sky and Shading: Dark Sky is one VC; Shading would be combined with Visual Impact

Issue: Proponent reports that ‘Shading’ effects assessment methodology is more consistent with ‘Visual Impact’ assessment methodology than ‘Dark Sky’ assessment methodology.

Direction: As appropriate, ‘Dark Sky’ can be stand alone VC and ‘Shading’ can be combined with ‘Visual Impact’ VC.

4. Valued Components to be Updated

The following comments and direction are considered to be generic in nature as they pertain to the VC's they are listed under. If there is a discrepancy between this direction and direction from CEAA or EAO in the Public Issues Tracking Table, the below will apply.

1) Climate (6.1)

Issue #1: Much of the language in the Climate section is highly technical – in both the Tracking Table and in the Tracking Table Summary Document.

Direction #1: In general the language throughout this section (in both documents) needs to be made easier to read for general public – this may mean either providing more explanation of the current language or simplifying it. Some comments are made in the Tracking Table about this issue, but not all instances are necessarily identified.

Issue #2: Conclusive statements that the project will not result in certain effects (e.g. changes in solar radiation, acid rain, substantive changes in snow fall/drifts, fog formation, etc) are not suitable. Such statements are prevalent in the tracking table and in the Response Summary.

Direction #2: These statements must be removed or more clearly explained and justified. In some cases, assessment of potential effects will be required – such cases will be stated in the Tracking Table.

Issue #3: Number of Meteorological Stations is questioned a number of times.

Direction #3a: Clarification and justification of the approach being used must be provided.

Direction #3b: Provide direction regarding what guidance will be followed for the assessment of Greenhouse Gas Emissions.

Issue #4: Safety Implications due to Increased Humidity not clearly responded to.

Direction #4: This must be explained more clearly.

2) Geology, Landforms and Soils (6.2)

Issue: The Summary Document does not capture all the key issues.

Direction: Key Issues identified in the Tracking Table that need to be added to, or more clearly addressed, in the Summary Document are:

- Composition of rock, soil, etc.
- Potential damage to public infrastructure, including question of who covers costs of updates as required
- Impacts on groundwater flow/stability and the linkages to blasting and weight of TSF
- See comments above in this document regarding Kinder Morgan Pipeline

Issue: Some responses in the table, under the heading “Summary of Proponent Responses”, in the Summary Document are not complete:

Direction: Update the responses as follows:

- There needs to be a clearer description and acknowledgment of the known issues and risks with stability and hydrogeology in surrounding neighbourhoods, including the Risk Management Plan that the City has completed. These issues need to be explicitly considered in any studies, modeling, etc, that the Proponent will be undertaking.

- The issue of financial compensation is not outside the scope of EA. Note that EAO guidance documentation for proponents explicitly references compensation as a potential strategy to avoid or minimize significant adverse effects. The Proponent is required to more clearly and fully address questions of compensation throughout the tracking table and the Tracking Table Response Summary document.

3) Surface Water Quality & Quantity (6.3, 6.4)

Issue #1: Unclear in dAIR as to what specific models will be used for water quality/ quantity.

Direction #1: Clarify in all documents which models will be used for water quality, which for water quantity, which for both (references to watershed and water balance models). Consider providing name and source of model to be used, where applicable, and what information it will provide. Links to other models for other VC's should be made, e.g., air quality and groundwater quality.

Issue #2: Summary of assessing impacts on water licenses does not include reference to mitigation measures being proposed as appropriate.

Direction #2: Add reference to summary of assessing impacts on water licenses that mitigation measures will be proposed as appropriate.

Issue #3: In the Summary, the explanation of “hydrologic analyses of the effects of water extraction on Kamloops Lake and Thompson River flows” is too technical for the public

Direction #3: Rework explanation of hydrologic analyses of the effects of water extraction in plain language (to be understood by a wider audience). Efforts at water conservation should be included.

Issue #4: Unclear messaging around mine being zero discharge.

Direction #4: ensure all documents consistently and better explain how the mine will be zero discharge. E.g. include information on if/how the water will be discharged during the life of mine, and how that will be assessed.

Issue #5: No reference in dAIR to the development of unique water quality objectives for the site.

Direction #5: If unique water quality objectives will be made for the site, this should be described in the Summary document with reference to provincial guidelines.

4) Groundwater (6.5, 6.6)

Direction:

1. Need to build link to Water Quality VC for concerns related to drinking water supply and contamination.
2. If methodology continues to be included in Summary, it needs to include assessment of significance of residual effects (comment applies throughout Summary document).
3. Include description of how baseline information will be used with model – groundtruthing, calibration.
4. Include in Summary consideration to date and information to come in Application regarding need to line/seal Inks Lake and TSF West Pond. Proponent to add input regarding monitoring and management plans.

5. In Summary, make reference to future water monitoring programs over life of mine and thereafter.
6. Explain how “zero discharge” facility relates to groundwater quality and quantity.
7. Address concerns of soil compaction from weight of TSF and waste rock piles impacting underlying aquifers, or at least cross reference to other VC.

5) Fish and Fish Habitat (6.7)

Direction:

- 1) Ensure that potential increases in water temperature are addressed.
- 2) Description of methodology in Summary needs to include assessment of significance of residual effects.
- 3) The proponent shall consider the Department of Fisheries and Ocean’s “Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters” in assessing the impacts of the Project on fish and fish habitat. The proponent shall state how the anticipated effects compare to those discussed in the document, and describe any necessary mitigation commitments.

6) Rare Plants (6.8); Rare and Sensitive Ecological Communities (6.9)

Direction:

- 1) In the Summary document, emphasize that answers to questions are coming in the Application; please tie answers to provided to info that is coming, and not make them seem like stand alone answers.
- 2) Answer to key issue of “impact of project on sensitive grassland ecosystem” in Summary should make mention of mitigation measures.
- 3) Commit in AIR to consider in Application efforts to manage noxious weeds throughout life of mine, not just as part of reclamation.

7) Migratory Birds (6.13); Raptors (6.14)

Direction:

- Concerns have been raised that only listed or endangered species are included in Application. Describe scope of birds included in study, from common to endangered, and provide rationale.
- dAIR uses terms NAD and UTM – include in list of acronyms.

8) Community Health and Well-Being (8.2)

Issue: Community Health is a vague term with no known consistent definition (may be confused with health of the individual).

Direction: Proponent to define the term “community health” and any other related terminology such that it can be assessed.

9) Air Quality (10.1)

Issue #1: Much of the language in the Air Quality section is highly technical – in both the Tracking Table and in the Tracking Table Summary Document.

Some specific examples of terms that are technical include: “gridded receptors”, “modelling domain”, “assay”.

Direction #1: In general the language throughout this section (in all documents) needs to be made easier to read for general public – this may mean either providing more explanation of the current language or simplifying it.

Issue #2: Little information is provided about how the constituents of the dust will be determined and how that information will be used in the HHERA.

Direction #2: More clarity is required in the Summary Document and Tracking Table about how the constituents of the dust will be determined and how that information will be used in the HHERA.

Issue #3: Comment about elements being present in multi-vitamins is misleading.

Direction #3: Remove the reference.

Issue #4: Neither EAO nor the Health sub-committee are approving the modelling, rather they sub-committee is providing input into the modelling approach.

Direction #4: Remove all references.

Issue #5: The Summary Document does not capture all the key issues.

Direction #5: Key Issues identified in the Tracking Table that need to be added to, or more clearly addressed, in the Summary Document are:

- Why is CALMET/CALPUFF the chosen modeling approach
- Why is the chosen grid suitable
- Use of existing Kamloops particulate measurements in impact assessment
- Ambient and compliance monitoring should the mine be built
- Increased fog formation due to evaporation

10) Noise and Vibration (10.3)

Issue #1: Project related effects of noise, as well as of blasting and related hydrology changes on building structures, are a concern often expressed in the public comments on the draft AIR. Further clarification and rationale for the proposed approach needs to be provided.

Direction:

- 1) At a minimum, the Proponent is required to provide clear, consistent and more thorough responses to questions about this in the Tracking Tables.
- 2) Remove from Summary document comments that provide premature answers to questions that are to be fully answered in Application. E.g. “blasting noise...will certainly not be audible everywhere in the city of Kamloops.” The results of the modelling are needed to make such

a statement. Similarly, comments such as “therefore no adverse effect on human health is expected” are premature.

- 3) Need to clarify in Summary that noise will be modelled before the mine is built, not once it is up and running. This is not clear in the Summary paragraph which starts “The noise from activities other than blasting will be determined once the mine layout and the operating equipment are finalized.”
- 4) Remove references to possibility of pre-development structural assessments if blasting and hydrology studies suggest properties may be at risk – mitigation measures will be considered in Application.
- 5) Commit in AIR to identifying potential effects pathways (e.g. blasting and hydrology changes) that may influence building structures, and to developing mitigation and monitoring strategies (e.g. pre and post strategies) for those pathways to minimize effects on building structures.
- 6) Describe briefly in AIR and Summary how noise background levels will be established, including duration of background study.
- 7) Describe in AIR how possible alternate blasting schedules will be assessed in Application.
- 8) Add linkage to 6.2 Geology, Landforms and Soils – for concerns about soil stability.
- 9) Clarify what is meant by “sensitive sub population” – impacts on fish, wildlife, livestock, domestic animals should be included (see page 133 of dAIR, section 10.3 Noise/ Vibration)
- 10) Ensure that impacts of noise and vibration on existing KinderMorgan pipeline and dam at Jacko Lake are included.
- 11) Application must include description of plan should noise emissions exceed modelling or allowed values; commitment to this should be included in AIR.
- 12) Application must include a Transportation Management Plan that addresses increases in transportation arising from the mine. The Noise VC can reference this, but the scope of the issues addressed is greater than noise.

Issue #2: from the responses provided in Tracking Tables and in Summary, it is not always clear what standards are being used.

Direction:

- 13) The Summary needs to better describe the standards being referenced in the text.

- 14) Incorporate the use of the Ontario MOE NPC-119 standard (new since the dAIR was made public)

Issue #3: It is not clear to CEAA/EAO if the proposed test-blast approach is sufficient for effects assessment.

Direction:

- 15) Await further direction from CEAA/EAO on this question. NRCan is actively reviewing the blasting report and is expected to express an opinion in January 2013 as to the approach for assessing effects from blasting using the data available to date.

5. CEAA specific direction to proponent for Part D: Section 17 - Federal Information Requirements

Direction: Add clarification that, although the *Canadian Environmental Assessment Act, 2012* (CEAA 2012) and associated regulations came into force on July 6, 2012, the Ajax Copper-Gold Mine Project falls under the transitional provisions of CEAA 2012. More specifically, the proposed project will continue to be assessed as a comprehensive study in accordance with regulated timelines, as if the former *Canadian Environmental Assessment Act* had not been repealed.

1) Section 17.1 Environmental Effects

See direction provided in separate document re incorporating aboriginal issues.

2) Section 17.2 Federal Components

Direction: change “potential changes” in opening sentence to “environmental effects,” making link to federal definition of environmental effects in section 17.1 and/or elsewhere.

Direction: With respect to the federal *Species at Risk Act* (SARA), the proponent must identify any anticipated affect to a listed wildlife species or its critical habitat and propose measures to avoid or lessen those effects and to monitor them. The measures must be consistent with any applicable recovery strategy and action plans.

3) Section 17.4 Alternative Means of Carrying out the Project

Direction: add text to existing bullet

“Identify the environmental effects of each alternative means.

- Identify those elements of each alternative means that could produce effects in sufficient detail to allow a comparison with the effects of the project; and,
- The effects referred to above include both environmental effects and potential adverse impacts on potential or established Aboriginal and Treaty rights and related interests.”

”

See CEAA direction provided to proponent Dec 3, 2012, using Mt. Milligan as example.

4) Section 17.6 Accidents or Malfunctions

Direction: The proponent must identify the probability of potential accidents and malfunctions related to the project, including an explanation of how those events were identified, potential consequences (including the environmental effects), the worst case scenarios and the effects of these scenarios. The proponent must assess the significance of such events, taking into account the risk.

Direction: The geographical and temporal boundaries for the assessment of malfunctions and accidents may be different than those in the scope of factors for each VC. The EIS/Application must include an identification of the magnitude of an accident and/or malfunction, including the quantity, mechanism, rate, form and characteristics of the contaminants and other materials likely to be released into the environment during the accident and malfunction events. Commitments to this must be in AIR.

Direction: The EIS must also describe the safeguards that have been established to protect against such occurrences and the contingency/emergency response procedures in place if accidents and/or malfunctions do occur. Contingency and response plans should be presented. Commitments to this must be in AIR.

5) Section 17.7 Mitigation Measures

Direction: the components identified in section 17.7, starting with “Reduction of the effects,” should be referenced in section 5.1.4, Potential Effects of the Proposed Project and Proposed Mitigation, as part of the methodology.

Direction: Add “Where mitigation measures have been identified in relation to species and/or critical habitat listed under the *Species at Risk Act*, the mitigation measures should be consistent with any applicable recovery strategy and action plans.”

Direction: Where mitigation measures are proposed to be implemented for which there is little experience or for which there is some question as to their effectiveness, the potential risks and effects to the environment should those measures not be effective should be clearly and concisely described.

Note: Adaptive management is not considered a valid mitigation measure, but if the Follow-up Program indicates that corrective action is required, the proposed approach for managing the response could be identified.

6) Section 17.11 Aboriginal Engagement and Consultation

See direction provided in separate document re incorporating aboriginal issues.

7) Section 17.14 Benefits to Canadians

Direction: replace “the following summary will be included in the Application” with

“The Application/EIS will describe how the EA process for the proposed Project provided a benefit to Canadians. Categories of potential benefits to Canadians from an EA process to be considered for the Ajax Mine Project EA specifically include:”

8) Accurate description of federal process

The following changes should be made to the AIR to ensure an accurate reflection of the federal EA process.

1. Preface, p.4 of 6

“The *Canadian Environmental Assessment Act, 2012* (CEAA 2012) and associated regulations came into force on July 6, 2012. Nonetheless, the Ajax Copper-Gold Mine Project falls under the transitional provisions of CEAA 2012, where it will continue to be assessed as a comprehensive study in accordance with regulated timelines, as if the former *Canadian Environmental Assessment Act* had not been repealed. The federal environmental assessment will continue to follow the requirements of the former Act.

Under the former Act, there are five types of federal EA: screening, class screening, comprehensive study, mediation, and review panel. Because the Project as proposed is defined in Section 16 of the *Comprehensive Study List Regulations* (a metal mine with an ore production capacity of greater than 3000 tonnes per day) the project will undergo a comprehensive study.

2. Preface, p.6 of 6

“Similarly, the CEA Agency will submit a Comprehensive Study Report, containing conclusions on whether the project is likely to cause significant adverse environmental effects, to the Federal Minister of the Environment for a decision pursuant to Section 23 of the former CEAA. Once the EA decision statement is issued by the Minister, the project will be referred to the applicable federal agencies for decision on the issuance of federal authorizations required for the Project. .”

3. Part A, Section 1.0, p.1

- The decision will also include a formal assessment of whether the proposed Project is likely to cause significant adverse environmental effects, taking into account the implementation of mitigation measures. The project will then be referred back to the federal responsible authorities.”
- “Where the project is found to likely result in significant adverse environmental effects that can be justified in the circumstances, the responsible authorities (DFO or NRCan) may exercise powers that permit the project to be carried out in whole or in part. Where those effects cannot be justified in the circumstances, the responsible authorities shall not enable or permit the project to be carried out.

4. Part A, Section 2.2.1, page 3 of 159

“The Project is subject to review under the CEAA. It is anticipated that the Project will require an Authorization from Fisheries and Oceans Canada (DFO) under Section 35(2) of the *Fisheries Act*, as well as a licence from Natural Resources Canada (NRCan) under Section 7(1) of the *Explosives Act*. The CEA Agency will exercise the powers and perform the duties and functions of the responsible authority in relation to the project until the Minister is provided with the comprehensive study report as required in section 21.3 of the CEAA.

6. First Nations Valued Components and AIR Part C: First Nations

1) Comments for dAIR generally:

1. Involvement of, consultation with, impacts on and input from Aboriginal Groups must be integrated throughout the EA. This should be reflected in the methodology and throughout the analysis.
 - a) The proponent must commit to incorporate into the EIS/Application the traditional and local knowledge to which it has access or which is acquired through Aboriginal engagement, in keeping with the appropriate ethical standards and without breaching obligations of confidentiality. Include a description of where and how Aboriginal traditional knowledge or other Aboriginal views were incorporated in the consideration of environmental effects and potential adverse impacts on potential or established Aboriginal rights and related interests resulting from the Project. (See section 23, page 74 of KSM AIR/EIS Guidelines for an example)
 - b) Agreement should be obtained from Aboriginal groups regarding the use, management and protection of their existing traditional knowledge information during and after the EA. Need a clear statement about confidentiality (see KSM, page 74, section 23);
 - c) The methodology must include an assessment of environmental effects as defined in the federal Act, as described in section 17.1. This definition requires the assessment of a number of potential indirect effects on Aboriginal Groups, that is, where any environmental changes resulting from the project results in an effect on: health and socio-economic conditions; on physical and cultural heritage; on the current use of lands and resources for traditional purposes by aboriginal persons; or on any structure, site or thing that is of historical, archaeological, paleontological or architectural significance.
2. Any significant changes to the existing structure of this section of the dAIR is not recommended without a basis for doing so. Consultation to date has been based on the current structure - significant changes may require additional consultation. It is important to do all that is reasonably possible to work with First Nations in the completion of this section of the dAIR.
3. Ensure consistency with the requirements as set out in the Section 11 Order as issued to the Proponent by the EAO.

2) Section 8.1 Culture (VC)

Issue: Should not be a separate VC as it is difficult to define and is inconsistent with current EAO practice.

Direction #1: Aboriginal culture items to be assessed in other appropriate VCs (which may include Community Well-Being, Economic Diversification, Heritage VCs), and fully discussed in Part C.

3) Section 8.5 Land and Resource Use (VC)

Issue: The draft AIR notes that 'Land and Resource Uses' will focus on if, and/or how the project fits within community and regional land use plans, and how the project footprint conflicts with other resource users. However, it is not clear what specific values, components, and effects pathways will be assessed under the current draft AIR.

Direction #1: The draft AIR should make it clearer that consideration of the ‘Land and Resource Uses’ VC will include a review/analysis of the Kamloops OCP and associated neighbourhood plans (including specifically, the Aberdeen Area Plan and referencing that it is part of the Kamloops OCP), including an assessment of the project on city growth plans/strategies; additionally the AIR shall include a review and analysis of where the project footprint potentially conflicts with other resource users.

Direction #2: Current use of lands and resources for traditional purposes, as well as impacts on right associated with land and resource use, are to be addressed in Part C.

4) Section 8.6 Jacko Lake (VC)

Context: Jacko Lake is currently a stand-alone VC in the draft AIR that has overlap with other VCs. Determining significance of any adverse effects may be more difficult with this structure; additionally there is risk of double counting and/or not equally representing the weighting of components of VCs. It is unusual to have a geographic feature assessed as a separate VC rather than assessing the feature’s contribution to environmental services (VCs) such as fish habitat and recreation. The BC EAO defines Valued Components as: “components (environmental, economic, social, heritage or health) that are considered important by the proponent, public, First Nations, scientists and government agencies involved in the assessment process.” From a social and economic standpoint, VCs are indicators of economic health and social well-being.

Direction: Recognizing the potential issues with this VC, the proponent is required to outline an approach to fully capturing, assessing and discussing the values of Jacko Lake in appropriate VCs (e.g. Outdoor Recreation, Country Foods, Heritage VCs), as well ensuring a complete discussion about the Aboriginal values of Jacko Lake in the AIR (recognizing its significance by calling it a ‘supporting topic’ or similar). It will also be necessary to discuss the Aboriginal use of Jacko Lake in Part C of the AIR (which may include Sections 13 [rights or title items] and 14 [items not related to rights or title]).

5) Section 8.8 Aboriginal Community Interests (VC)

Issue: EAO and CEAA are of the view that the interests in this VC would be better assessed in other VCs and discussed in Section 14 of the AIR/EIS Guidelines, named “Other Aboriginal Interests” In Rev “D” of the dAIR.

Direction: Remove this VC and ensure the elements and interests are assessed in other VCs and discussed in Section 14 of the AIR/EIS Guidelines, named “Other Aboriginal Interests” In Rev “D” of the dAIR.. The Proponent will be required to seek input from First Nations to provide more specificity on the components of these values.

6) Section 9.2 Assessment of Potential Heritage Effects

Issue #1: CEAA wants to provide the following further guidance on federal requirements regarding cultural heritage.

From a federal perspective, the *Canadian Environmental Assessment Act* (the federal Act) requires an assessment of the changes that may result from any change in the environment to “physical and cultural heritage,” and to “any structure, site or thing that is of historical,

archaeological, paleontological or architectural significance.” Cultural heritage includes human works or places that give evidence of human activity or that have spiritual or cultural meaning, and that have historic value. Cultural heritage resources are distinguished from other resources by virtue of the historic value placed on them through their association with an aspect(s) of human history.

In assessing effects on cultural heritage, the effects upon cultural heritage resources within the proposed project area, which by their very nature are “cultural” entities, i.e., with meanings and significance rooted in the customs, beliefs, traditions, stories, etc., such effects must be identified and assessed. This assessment requires an understanding of the way that the identified cultural heritage objects and sites fit into the cultural sets of meanings attributed to them by Aboriginal groups. Further, the significance of cultural heritage sites and objects is best understood when considered in relation to an Aboriginal group’s historical and cultural connection to the broader landscape in which the study takes place.

The proponent is referred to the document, “Reference Guide on Physical and Cultural Heritage Resources” (1996) for further guidance on satisfying requirements of the federal Act regarding physical and cultural heritage.

<http://www.ceaa.gc.ca/default.asp?lang=En&n=1BE75513-1&offset=&toc=hide>

The linked guide makes reference to how to scope cultural heritage resources, focusing the EA analysis on relevant environmental issues and concerns arising from the proposed project; how to analyze the potential effects on cultural heritage resources; and how to determine significance, and design mitigation and follow-up programs.

Direction #1:

Ensure that the federal requirements described above are reflected in and captured by the work described in the AIR.

Issue #2: There is no rationale provided for the preliminary study area for discussion provided in Figure 9.1-1.

Direction #2:

Provide a rationale for the study areas for assessing impacts on heritage. Draw on existing knowledge of where heritage objects may be expected.

7) Comments for Part C Specifically:

1. Be specific with wording:
 - The term “First Nations” in the AIR does not necessarily have the same definition as in the EAO’s section 11 order (which currently only includes SSN FNs). For the purposes of the AIR, the Ashcroft Indian Band and the Lower Nicola Indian Band are also First Nations.
 - The term “Aboriginal Groups” includes all First Nations described above as well as the Metis
2. Part C and component sections need explanation about purpose so that the reader can understand what the section is intended to accomplish, including objectives, outcomes, etc. Part B has some explanation, as does Section 4.0 – this level would be a minimum for Part C.

3. Add context at beginning of Part C that states the requirement of the Proponent to consult with First Nations named in the Section 11 Order, subsequent Section 13 Orders, or as directed by CEAA. Make clear that this Part of the Application will consider the potential effects of the proposed Project on each of these First Nations' interests.
4. Sections 13 and 14 (in Rev "D") are meant to differentiate between the assessment of impacts on asserted Aboriginal Interests (Rights and Title) and effects to Aboriginal Groups that are not associated with Rights and Title. These would generally be a collection of Valued Components that have already been assessed in Part B of the AIR/EIS Guidelines, with clear linkages made to those Valued Components. The Proponent is required to ensure there is clear discussion of key features that are important to Aboriginal Groups – at a minimum, Jacko Lake and the Hunting Blind Complex must be explicitly and comprehensively discussed, and, as possible, with their own sub-headings.
 - a. Section 13 ('Aboriginal Rights' in Rev "D") to be renamed 'Aboriginal Interests (Rights and Title)' in recognition of the Section 11 Order definition of Aboriginal Interests. This section is about assessing effects on asserted Interests (rights and title). There should also be language added to this section to explicitly commit to assessing and reporting on Rights and Title separately. Aboriginal interests associated with those rights would be included. Make linkages to assessment of Valued Components where possible. This section needs to assess the effects of the proposed project on Aboriginal Interests.
 - b. Section 14 ('Other Aboriginal Interests' in Rev "D") to be renamed 'Other Potential Aboriginal Effects' to differentiate these effects from those that are associated with asserted Interests (rights and title). This section is about assessing effects on Aboriginal Groups that are not associated with Rights and Title. This section is not intended to overlap with effects already discussed in Section 13. These effects would include effects identified through the assessment of Valued Components in Part B of the AIR/EIS Guidelines, with clear linkages made to those Valued Components, as well as any other potential effects (e.g., federally required assessment of indirect effects on current use of lands and resources for traditional purposes). This section needs to assess the effects of the proposed project on aspects that are important to Aboriginal Groups that are not associated with Aboriginal Interests.
5. Provide clarity on methodology for assessing impacts in Sections 13 and 14 (named 'Other Aboriginal Interests' and 'Aboriginal Rights in Rev "D")', including cumulative effects. Impacts and/or effects during construction, operation, closure and post-closure must be included.
6. Proponent to commit in Section 14 (named 'Other Aboriginal Interests' in Rev "D") to describing all issues and concerns raised by Aboriginal Groups that are not captured in the Section 13 (named 'Aboriginal Rights' in Rev "D"), making linkages to asserted interests and assessment of valued components where possible.

7. From a provincial (EAO) perspective, the following should be explicitly noted, with a commitment to provide answers/responses to each statement as best as possible (Section 13 could be re-worked to incorporate these, possibly also Section 16):
 - Identify practices, traditions, or customs that have been engaged in by the First Nations, in the past, particularly at the time of European contact and at 1846, on the project site, in the vicinity of, or in relation to the area of the proposed Project area.
 - Describe practices, traditions, or customs currently engaged in by the First Nations on the project site, or in the vicinity of, or in relation to the proposed Project area.
 - Describe how the proposed Project would potentially impact the practices, traditions, or customs of the First Nations.
 - Describe measures could be used in the proposed project's design or operation to avoid, mitigate or otherwise address those potential impacts.
 - Describe opportunities for all or some of the identified practices, traditions and customs to be engaged in elsewhere within the First Nations asserted traditional territory. Describe First Nations views as to whether these practises would still be meaningful if engaged in elsewhere within the traditional territory.
8. For background, a description of all Aboriginal Groups that assert Aboriginal Rights and Title that could potentially impacted by the proposed Project must be provided. This includes for each a contact name, general location, as well as the information already included in the dAIR. To satisfy requirements of the federal Act, include a description of the current use of lands and resources for traditional purposes by Aboriginal persons.
9. For Aboriginal Interests (rights and title), identify the proponent's understanding of rights asserted by First Nations, and potential impacts on those interests. Indirect effects as described in the federal Act (e.g., on the current use of lands and resources for traditional purposes by Aboriginal persons) must be included for all Aboriginal groups. Linkages to the assessment of valued components should be made where possible.
10. Information regarding consultation should be consolidated from sections 4.3, 15 and 17.11 and placed in a single section in Part C.
11. Proponent to commit, as a minimum, in Aboriginal Consultation to:
 - Making clear linkage to activities and products of the consultation plan as directed by EAO.
 - A summary of past and planned consultation activities with any Aboriginal Groups.
 - Providing in the application a discussion on measures taken to identify and document any Aboriginal Group's concerns and attempts to mitigate or resolve those concerns that are related to impacts rights.
 - A summary of issues the Proponent has been made aware of and the responses to these issues.

NOTE: Where direction in this section potentially overlaps with guidance related to the Summary section, it is left to the discretion of the proponent to ensure the appropriate elements are captured in the appropriate section – the intent is not to seek duplication of information in multiple sections of the AIR.

12. Need to commit, as a minimum, in the Summary to:

- Summarize issues and suggestions raised by Aboriginal Groups
- Summarize potential impacts on Aboriginal rights, and possible indirect effects as per federal Act. Make clear linkages between impacts on rights / indirect effects as per federal Act and VCs.
- Specify direct or indirect impacts to Aboriginal Groups at each stage of the proposed project (construction, operations, decommissioning)
- Summarize potential accommodation (including avoidance/elimination, mitigation/minimization, compensation) measures raised by Aboriginal Groups