

Federal Authority Advice Record (FAAR)

FAAR Response must be submitted by October 11, 2024

Rocky Creek Metallurgical Coal Project – CTI Plus Resources Ltd.

Registry File: [88867]

Department/Agency	Health Canada
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1. a) Is it probable that your department or agency may be required to exercise a power or perform a duty or function related to the project to enable it to proceed?

If yes, specify the Act of Parliament and that power, duty or function.

b) Please describe any Indigenous or public consultation that will be undertaken in relation to the exercise of that power, duty or function, including when it would take place.

[Not applicable \(N/A\)](#)

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2. Is your department or agency in possession of specialist or expert information or knowledge in its area of expertise that may be relevant to the conduct of an impact assessment of the Project?

[See Below](#)

Specify the specialist or expert information or knowledge.

- [Health Canada’s \(HC\) mandate and areas of expertise relevant to impact assessments relate to the health of Indigenous Peoples, as described in section 2 of the amended *Impact Assessment Act* \(IAA\). It should also be noted that expertise related to assessing human health that is relevant to Impact Assessment \(IA\) may be held by other federal, provincial, and municipal partners, reflecting the shared jurisdiction for environmental and human health within Canada. For example, the Public Health Agency of Canada \(PHAC\) has expertise in the social determinants of health approach and health equity, and may provide that expertise through HC, upon request from the reviewing body\(ies\). How the expertise provided by HC and PHAC will be used in the IA process will ultimately be determined by the reviewing body\(ies\).](#)

[HC can provide human health expertise in the following areas:](#)

- Air quality;
 - Recreational and drinking water quality;
 - Traditional foods (country foods);
 - Noise;
 - Methodological expertise in Human Health Risk Assessment (HHRA);
 - Methodological expertise in Health Impact Assessment (HIA);
 - Electromagnetic fields;
 - Radiological emissions; and
 - Public health emergency management of toxic exposure events.
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3. Has your department or agency considered the project; exercised a power or performed a duty or function under any Act of Parliament in relation to the Project; or taken any course of action that would allow the Project to proceed in whole or in part?

Specify.

N/A

4. Has your department or agency had previous contact or involvement with the proponent or other party in relation to the Project? (for example: an enquiry about methodology, guidance, or data; introduction to the project)

Provide an overview of the information or advice exchanged.

No

5. Does your department or agency have additional information or knowledge on the project not specified above, including information on the geographic, environmental, economic or social context of the project? (e.g. location of protected or sensitive areas, previous history between local communities and proponent or similar projects, local or regional social or economic concerns)?

Specify as appropriate.

No

6. Based on the mandate and area(s) of expertise of your department or agency, what are the key issues related to the project?

For each key issue:

- Describe the potential effect or the nature of the issue, including any relevant context ;
- Provide the rationale and/or evidence for why it is a key issue;
- Provide advice on how to address the issue, including any information or studies that should be required in the Tailored Impact Statement Guidelines, potential mitigation measures, and/or regulatory requirements relevant to the issue;
- Provide a concise, plain-language summary of the issue for inclusion in the Summary of Issues.

The information provided will be considered by IAAC and may be used to inform its decision on whether an impact assessment is required and, where appropriate, for next steps in the impact assessment process including to develop project-specific draft Tailored Impact Statement Guidelines.

Please see Table 1.

7. Where possible, identify any additional information the proponent could include in their response to the Summary of Issues, and, if IAAC requires it, in their Detailed Project Description, that would:
- Give confidence that minor issues or effects could be addressed and managed by clear measures, existing guidelines, other regulatory processes or other existing tools;
 - Inform the decision as to whether an impact assessment is required; or
 - Aid in tailoring the Tailored Impact Statement Guidelines, if IAAC decides an impact assessment is required.

These clarifications and additional information will be included as specific questions in the Summary of Issues provided to the proponent.

[Please see Table 1.](#)

[Herbert Antill](#)

Name of Departmental / Agency
Responder

[Regional Manager,
Environmental Health Program -
British Columbia Region](#)

Title of Responder

October 11, 2024

Date

Table 1: Key Issues to inform the impact assessment process

IAAC asks that federal authorities align expert advice with IAAC’s approach to tailoring by project, which focuses on key project issues, clearly focused on the prevention of adverse effects within federal jurisdiction. In identifying key issues, federal authorities should be mindful of the project’s context (size, scope, location), Indigenous Knowledge and perspectives, and public concerns. Key issues that may be relevant to the decision include:

- adverse effects within federal jurisdiction and direct or incidental adverse effects that may be to some extent significant, based on federal experts’ knowledge and experience with past projects;
- potential impacts on Indigenous Peoples and their rights, based on Indigenous Knowledge and perspectives or experience with past projects;
- effects on key species or habitats (e.g. at risk, important to Indigenous communities, commercial importance, provide important ecosystem function);
- issues or effects that may result from novel project activities, components or technology;
- effects with large uncertainties, including in the effectiveness of mitigation measures;
- adverse effects within federal jurisdiction or direct or incidental adverse effects where mitigation measures are limited;
- positive effects, including where project may support other governmental priorities, including reconciliation with Indigenous Peoples; and
- key concerns raised by Indigenous groups or local communities.

Effects that are anticipated to be minor or which can be managed using well understood mitigation, existing guidance, and/or other regulatory processes may have simplified information requirements or may be removed entirely. Measured advice from federal authorities on key issues and solutions —and on the scope and detail of any required information and studies — will enable IAAC to focus assessments on issues that are important to participants and to decision-makers.

Comment ID	Relevant section of the Initial Project Description	Valued Component or Factor to Consider	Description of Key Issue (Context and Rationale)	Advice	Plain language summary for inclusion in Summary of Issues
HC-01	Location & Health, Social and Economic Context (general comment)	Human Health	<p>Potential human receptors of Rocky Creek Metallurgical Coal Project (the Project) are not adequately identified.</p> <p>The IPD identifies that the Project overlaps the territories of several First Nations and is close to Métis Nation British Columbia Chartered Communities. In addition, land uses within the area surrounding the Project include trapping, guided hunting, commercial recreation, and outdoor recreation (including fishing, hunting, camping, hiking, snowmobiling, all-terrain vehicle riding, and backcountry skiing). However, the location of receptors in relation to the Project is not clearly outlined.</p>	<p>Health Canada (HC) recommends the following additional information (e.g., using a map) be provided in the response to the Summary of Issues and/or future Project documents:</p> <ul style="list-style-type: none"> • The locations of sensitive human receptor locations, such as traditional use sites, temporary camps, etc.; and • The distances between human receptor locations and the key components of the Project that may have potential impacts on these receptors be. 	Provide the locations and distances of all sensitive human receptor locations (including temporary facilities) that may be affected by the Project.
HC-02	Table 6 Preliminary List of Possible Project Effects PDF pp. 20-22 (general comment)	Human Health Indigenous Nations’ Health, Social or Economic Conditions	<p>Potential biophysical risks to human health are not fully identified.</p> <p>The IPD identifies the following:</p> <ul style="list-style-type: none"> • The Project may be a source of contaminants; • The area surrounding the project may be used by Indigenous peoples; and • Exposure to contaminants may occur via direct contact (dermal contact, ingestion, inhalation) with air, water and country foods. <p>However, the IPD does not provide:</p> <ul style="list-style-type: none"> • An inventory of all project-related discharges/emissions and exposure pathways (see HC-06, HC-09, HC-10); • Necessary information on human receptors (see HC-01); and • Clarity on how/if exposure to contaminants in other media will be considered for human health. 	<p>HC recommends a problem formulation be provided in future Project documents to help identify all major factors to be considered in an HHRA. It is important that a problem formulation take into account the views of potentially impacted Indigenous peoples to help identify the following:</p> <ul style="list-style-type: none"> • Study boundaries; • Current and future contaminants of potential concern (COPCs); • Current and future human receptors; and • Current and future exposure pathways. <p>HC also recommends developing a conceptual site model (CSM) showing the links between COPCs, receptors, and exposure pathways.</p>	Complete a problem formulation exercise in consultation with Indigenous peoples to identify all major factors to be considered in an HHRA. This could be used to justify COPCs, environmental media and exposure routes that will be excluded and/or eliminated from the assessment of human health risks.

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HC-03	Table 6 Preliminary List of Possible Project Effects PDF p. 22 Table 10-2 Potential Project Effects and Mitigations PDF p. 110	Human Health Indigenous Nations' Health, Social or Economic Conditions	Potential Project-related impacts to the health of Indigenous peoples specifically, has not been clearly identified. Under Indigenous Nations' Health, Social or Economic Conditions, a number of potential Project-related impacts are described, including impacts to the biophysical environment, and to social and economic factors. However, the linkage between these potential impacts and any resultant health effects to Indigenous peoples specifically, has not been clearly identified.	HC recommends that it may be appropriate to include additional wording (in bold) to the following bullet: <ul style="list-style-type: none"> Potential effects are related to the Project's potential impacts to the biophysical environment and to social and economic factors (e.g., related to food security, transmission of knowledge, employment). These could, in combination, potentially affect legal, spiritual, and cultural practices; transmission of traditional culture, knowledge and law; and improve employment and economic opportunities. All these factors may affect Indigenous health and well-being. 	Include a more direct linkage between potential Project-related impacts and the health of Indigenous Peoples.
HC-04	3.3.3 Status and Existing Infrastructure PDF p. 42	Human Health Indigenous Nations' Health, Social or Economic Conditions Air Quality	Potential cumulative effects from oil and gas facilities have not been addressed. Non-project infrastructure within the coal licenses includes oil and gas facilities, most of which are suspended or abandoned. HC is aware that methane emissions from abandoned oil and gas wells can contribute to water and air quality degradation.	HC recommends consideration of any (cumulative) environmental effects from the presence of oil and gas facilities in the Project area, and potential adverse effects on the health of Indigenous peoples in the area.	Consider whether the Project will interact with existing oil and gas facilities and contribute to any cumulative health effects.
HC-05	7.2.3 Fish and Fish Habitat PDF pp. 84-85 Table 6 Preliminary List of Possible Project Effects PDF pp. 20-21	Human Health Indigenous Nations' Health, Social or Economic Conditions	Fish tissue sampling could be used to inform the assessment of human health risks. The Project is located in the Sukunka River watershed, and the Sukunka River is the primary waterway in this region. The Sukunka River has a relatively high fisheries value, and supports several regionally important sport-fish populations, including Arctic grayling, Mountain whitefish, Bull trout, Rainbow trout, and Northern pike, which are fished for human consumption. Halfway River First Nation, Horse Lake First Nation, McLeod Lake Indian Band, Sauteau First Nations, and West Moberly First Nations have raised concerns about selenium and mercury affecting water quality. The IPD indicates that fish tissue chemistry will be evaluated to better understand aquatic ecosystem interactions but does not link this information with human health.	HC supports the evaluation of fish tissues (including piscivorous fish, which are more likely to accumulate contaminants) which are consumed by Indigenous peoples. This information would be used to inform people's overall risk of exposure from contaminants from multiple pathways (including the ingestion of fish) during all Project phases. At a minimum, HC recommends assessing the risks of exposures to arsenic (as inorganic and total arsenic), mercury, cadmium and lead from subsistence foods.	Analyze fish tissues to better understand potential human health effects due to changes in fish tissue quality.

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HC-06	Table 10-1 Potential Project Interactions PDF p. 107	Human Health Indigenous Nations' Health, Social or Economic Conditions	<p>Additional Project infrastructure could have the potential to interact with human health.</p> <p>Several Project components are identified as interacting with human health, including the open pits and water management structures. However, no interactions with human health are identified for either the Waste Rock Management Facilities (WRMFs) or Roads (Site Access Road, Clean Coal Haul Road, NW SE Connection Road, other Haul and Service Roads).</p> <p>HC is of the view that additional Project components (e.g., WRMFs and roads – both their construction and use) could have effects on human health, for example, from the generation of dust.</p>	HC recommends confirming whether the WRMFs and roads have the potential to interact with human health, and updating all relevant tables (e.g., Table 10-1).	Confirm whether the WRMFs and roads have the potential to interact with human health.
HC-07	Table 10-2 Potential Project Effects and Mitigations PDF pp. 109-110	Community Infrastructure and Services, and Community Well-being Employment and Economy Non-traditional Land Use Current Use of Lands and Resources for Traditional Purposes Indigenous Nations' Health, Social or Economic Conditions	<p>Potential social determinants of health are not fully identified.</p> <p>Table 10-2 could consider social determinants of health beyond income, employment, and access to health services. A detailed Health Impact Assessment (HIA) is an approach that could be used to consider Indigenous community concerns (e.g., employment, training, cultural transmission, etc.) and incorporate Gender-Based Analysis Plus to reflect how Project activities (e.g., the influx of workers) could affect subgroups of the population in different ways.</p> <p>The temporary work force would be an important factor to consider in an HIA. As part of this, it would be useful to understand the work scheduling arrangements (e.g., rotational schedule) for the peak workforce. For example, HC recommends that the influx of workers and their impact on the communities of Chetwynd, Tumbler Ridge, and Indigenous communities be assessed, with particular consideration of Indigenous women.</p>	HC recommends that a detailed HIA be undertaken, in collaboration with Indigenous peoples, to assess the Project's potential effects on the social, economic and health conditions of Indigenous peoples. Particular attention can be paid to the influx of workers and their impacts on Indigenous women.	Consider undertaking an HIA to identify and assess important socio-economic factors (i.e., determinants of health) that can influence the health of Indigenous community/ies.
HC-08	Table 10-2 Potential Project Effects and Mitigations PDF p. 110	Human Health Indigenous Nations' Health, Social or Economic Conditions	<p>A noise assessment could be used to inform the health effects of Project-related noise.</p> <p>The IPD indicates that “[i]ncreased levels of noise and traffic can cause stress or harm, such as sleep disturbance”.</p> <p>A noise assessment would be useful to identify and describe human receptors who may have a heightened sensitivity to noise exposure (e.g., Indigenous traditional use sites).</p>	<p>Since compliance with mitigation for noise does not necessarily guarantee the absence of noise complaints or annoyance, HC recommends the following:</p> <ul style="list-style-type: none"> • Conducting a noise assessment (for audible and low frequency noise) in accordance with HC guidance (HC, 2023). It should be noted that human receptors in rural areas could have a greater expectation of “peace and quiet”; and • Undertaking community consultation, which includes a commitment to rapidly address and resolve noise complaints. 	Undertake a complete assessment of potential noise effects to Indigenous peoples who could be in the project area or live nearby, as well as other identified sensitive receptors, by using noise guidance available from HC (2023).

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				<p>HC. 2023. <i>Guidance for Evaluating Human Health Effects in Impact Assessment: Noise</i>. Available at: https://publications.gc.ca/collections/collection_2024/sc-hc/H129-54-3-2023-eng.pdf.</p>	<p>In addition, undertake community consultation to address unanticipated noise impacts from the Project.</p>
HC-09	Table 10-2 Potential Project Effects and Mitigations PDF p. 110	<p>Human Health</p> <p>Indigenous Nations' Health, Social or Economic Conditions</p> <p>Air Quality</p>	<p>Potential air contaminants are not fully identified.</p> <p>The IPD indicates that some of the emissions from the Project would include nitrogen dioxide (NO₂), sulphur dioxide (SO₂), and particulate matter (PM). Additional air pollutants are expected to be emitted from a mine during all Project phases but have not been identified.</p> <p>The Project is located on LTN territory, extensive traditional and recreational activities take place in the regional area, and off-duty workers may reside near the Project. West Moberly First Nations has also raised concerns about potential Project effects to air quality.</p>	<p>HC recommends that an air quality assessment be conducted to assess scenarios such as: baseline, Project alone, baseline plus Project, and cumulative or future development, as appropriate.</p> <p>In addition to considering emissions of NO₂, SO₂ and PM*, HC recommends that emissions of volatile organic compounds (VOCs) from the use of vehicles and equipment, polycyclic aromatic hydrocarbons (PAHs), and diesel particulate matter (DPM) also be considered (both carcinogenic and non-carcinogenic effects). Finally, HC recommends that there be consideration of emissions during construction and operations for all transportation-related activities that may be scoped into the Project assessment.</p> <p>* Of note, the Canadian Ambient Air Quality Standards (CAAQS) for PM, nitrogen dioxide (NO₂) and ozone (O₃) recognize that there is no population health threshold for human health effects; therefore, any increase in exposure will result in an incremental population risk (HC, 2023).</p> <p>HC. 2023. <i>Guidance for Evaluating Human Health Effects in Impact Assessment: Air Quality</i>. Available at: https://publications.gc.ca/collections/collection_2024/sc-hc/H129-54-1-2023-eng.pdf.</p>	<p>Undertake a complete assessment of potential air quality health effects for the Project, using the most recent air quality guidance available from HC (2023).</p>
HC-10		Human Health	<p>Per- and polyfluoroalkyl substances (PFAS) may need to be considered for assessment.</p> <p>It is unclear if PFAS* or PFAS-containing materials/products etc. will be used as part of any activities (e.g., drilling, metal processing or fire suppression systems) related to this Project. For example, HC is aware that PFAS may be used as a fluoropolymer in pipes, cables, hoses and conveyor belts, among other uses. Additionally, PFAS may be present for uses that are ancillary to mining operations, such as in Aqueous Film Forming Foams for fire suppression/firefighting activities, for cleaning of metal surfaces, and for use as a foaming agent in drilling fluids, paints and coatings. For more information on the fate, sources, occurrence, and potential impacts of PFAS on the environment and human health, refer to the Government of Canada's updated state of PFAS report (2024)†.</p>	<p>If any PFAS-containing products will be used or produced as a result of the Project, HC recommends that PFAS be assessed as part of the HHRA. A future site management plan for PFAS may also be warranted, given the concerns associated with these "forever chemicals".</p>	<p>Confirm if PFAS (i.e., "forever chemicals") will be used in any aspect of the Project. If so, a future human health risk assessment and/or site management plan may be needed to reduce potential exposure.</p>

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			<p>*PFAS, sometimes referred to as “forever chemicals”, are a large group of extremely persistent human-made substances used in a wide range of everyday products. They are also used in industrial products and specialized applications including firefighting foams, lubricants, and oil/water repellants. PFAS are found nearly everywhere in the environment.</p> <p>† Environment and Climate Change Canada & Health Canada. 2024. <i>Updated Draft State of Per- and Polyfluoroalkyl Substances (PFAS) Report</i>. Available at: https://www.canada.ca/content/dam/eccc/documents/pdf/pded/pfas/updated-draft-state-per-polyfluoroalkyl-substances-pfas-report.pdf.</p>		
HC-11	12. References	Human Health (general comment)	<p>HC has updated its Impact Assessment Guidance.</p> <p>HC has updated its guidance document series, <i>Guidance for Evaluating Human Health Effects in Impact Assessment</i>. HC’s updated guidance documents are listed below.</p> <p>HC. 2023. <i>Guidance for Evaluating Human Health Effects in Impact Assessment: Air Quality</i>. Available at: https://publications.gc.ca/collections/collection_2024/sc-hc/H129-54-1-2023-eng.pdf</p> <p>HC. 2023. <i>Guidance for Evaluating Human Health Effects in Impact Assessment: Country Foods</i>. Available at: https://publications.gc.ca/collections/collection_2024/sc-hc/H129-54-5-2023-eng.pdf</p> <p>HC. 2023. <i>Guidance for Evaluating Human Health Effects in Impact Assessment: Drinking and Recreational Water Quality</i>. Available at: https://publications.gc.ca/collections/collection_2024/sc-hc/H129-54-2-2023-eng.pdf</p> <p>HC. 2023. <i>Guidance for Evaluating Human Health Effects in Impact Assessment: Human Health Risk Assessment</i>. Available at: https://publications.gc.ca/collections/collection_2024/sc-hc/H129-54-6-2023-eng.pdf</p> <p>HC. 2023. <i>Guidance for Evaluating Human Health Effects in Impact Assessment: Noise</i>. Available at: https://publications.gc.ca/collections/collection_2024/sc-hc/H129-54-3-2023-eng.pdf</p> <p>HC. 2023. <i>Guidance for Evaluating Human Health Effects in Impact Assessment: Radiological Impacts</i>. Available at: https://publications.gc.ca/collections/collection_2024/sc-hc/H129-54-4-2023-eng.pdf</p>	HC recommends that the Proponent reference HC's updated guidance in all future Project documentation, as applicable.	

Comment ID	Relevant section of the Initial Project Description	Valued Component or Factor to Consider	Description of Key Issue (Context and Rationale)	Advice	Plain language summary for inclusion in Summary of Issues
			HC. 2022. <i>Interim Guidance Document for the Health Impact Assessment of Designated Projects under the Impact Assessment Act</i> . Draft for review. June 30, 2022. Available upon request to: ia-ei@hc-sc.gc.ca		

Table 2. Clarifications or additional information the Proponent could include in the response to Summary of Issues

Comment ID	Relevant section of the Initial Project Description	Description of Issue, Concern or Uncertainty	Clarification or additional information	Plain language summary for inclusion in Summary of Issues
		(See comments in Table 1 above.)		