ATTACHMENT: May 18, 2023
Federal Authority Advice Record
Response due by June 16, 2023
Moraine Power Generation Project – Moraine Initiatives Ltd.
Agency File: 005860

Department/Agency	Health Canada
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1. 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.

   No

   1b. Please describe any Indigenous or public consultation that will be undertaken in relation to the excise of that power, duty or function, including when it would take place.

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

   Yes

   Specify the specialist or expert information or knowledge.

   As a federal authority, Health Canada will provide specialist or expert information and knowledge in the Department's possession (expertise) to

support the assessment of impacts on human health from projects considered individually or cumulatively under the *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 Health Canada, upon request from the reviewing body(ies). How the expertise provided by Health Canada and PHAC will be used in the IA process will ultimately be determined by the reviewing body(ies).

Health Canada can provide human health expertise in the following areas:

- Air quality health effects;
- Contamination of country foods (e.g. fish, wild game, garden produce, berries, etc.);
- Drinking and recreational water quality;
- Radiological effects;
- Electric and magnetic fields;
- Noise impacts;
- Methodological expertise in human health risk assessment;
- Methodological expertise in conducting Health Impact Assessment (HIA); 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?

   No

   Specify.

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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)

   No

   Provide an overview of the information or advice exchanged.

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5. Does your department or agency have additional information or knowledge 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)?

   No

   Specify as appropriate.

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6. What are the key issues likely to be relevant to the public interest decision, based on the mandate and area(s) of expertise of your department, and which should be addressed in an impact assessment of the Project, should the Agency determine that one is required?

   For each key issue:

   - Describe the effect or the nature of the issue, including any relevant context;
   - Provide the rationale and/or evidence for why it is a key issue;
   - Identify briefly solutions to 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 used by the Agency to determine if and an impact assessment is required and where appropriate to develop project-specific draft Tailored Impact Statement Guidelines that focus on the key issues likely to be relevant to the public interest decision.

   Please use table 1 to respond to this question
   HC did not comment on Table 1.

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7. Where possible, identify any clarifications or additional information the Proponent could include in the Detailed Project Description or in the response to the Summary of Issues that would:

   - give confidence that an issue or effect could be addressed and managed;
   - inform the decision as to whether an impact assessment is required; or
   - aid in tailoring the Impact Statement Guidelines, if 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 use table 2 to respond to this question

Brenda Woo
Name of Departmental / Agency Responder

Regional Manager, Environmental Health Program
Title of Responder

June 15, 2023

Date

Table 1: Key Issues to inform decision-making

The Agency asks that federal authorities align expert advice with the Agency's approach to tailoring, which focuses on key issues or effects that are likely to be relevant to the public interest decision. 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 public interest decision include:

- effects that may be significant, based on federal experts' knowledge and experience with past projects;
- effects that may impact 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;
- transboundary 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 or local communities.

Effects that are anticipated to be minor or which can be managed using well understood mitigation measures, 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 the Agency to focus assessments on issues that are important to participants and to decision-makers.

Comment ID	Valued Component or Factor to Consider	Description of Key Issue (Context and Rationale)	Solutions	Plain language summary for inclusion in Summary of Issues
Please identify comments by organization and comment number. *e.g.: IAAC-01*	*Identify valued component(s) or factor to consider—within the mandate of your department or agency—to which the effect or issue applies.*	*Provide a brief description of the issue and rationale for being a key issue.* *Include, where relevant,:* • *the pathway of effects;* • *social, economic or environmental context which are relevant to it being a key issue;* • *key uncertainties that should be addressed in the impact assessment;* • *Indigenous or public concerns or perspective;* • *potential for differential effects among diverse subgroups;* • *scientific evidence or traditional knowledge, including from past project experience, which supports inclusion as a key issue.*	*Where applicable, briefly identify solutions to address the potential issue or effects including* • *Information or studies required to describe and characterize the effect, should an impact assessment be required; including any guidance for data collection and/or analysis or existing data sources to inform the assessment;* • *Any powers, duties or functions that your department or agency has that may mitigate, manage, or set conditions related to the effect;* • *Guidance or policies for mitigating effects or any standard and well-understood mitigation measures that would address the effect, including follow-up monitoring activities; and/or* • *Commitments the proponent could make to respond to the issue.* *Where available, please refer to existing text in the TISG template.*	*For issues to be included in the Summary of Issues, provide a concise, plain language synopsis of the key issue and any questions or directions for the proponent.*

Please insert additional rows as necessary.

Table 2. Clarifications or additional information the Proponent could include in the Detailed Project Description or 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
Please identify comments by organization and comment number. *e.g.: IAAC-01*	*If the comment is related to a specific section of the Initial Project Description, please provide a reference.* *You may also choose to copy the relevant text here.*	*Provide a description of the issue, concern or uncertainty the proponent could address in their detailed project description that would give confidence that the issue will be addressed and managed, or which could aid in tailoring the Guidelines* .	*Provide recommended clarification or additional information to be included in the Detailed Project Description to address the issue, concern or uncertainty, for example* • *Clarifications to project description (e.g. components, activities, locations or alternatives);* • *Project design changes that could avoid effects;* • *Evidence that could be presented to demonstrate there is no effect pathway or that effects will be negligible;* • *Evidence that standard mitigations will address potential effects;* • *Commitments the proponent could make to respond to the issue, including the implementation of federal operational policies or guidance documents.*	*For issues to be included in the Summary of Issues, provide a concise, plain language synopsis of the issue and of the question or direction for the proponent.*
HC-01	Section 4.3 (Results of Engagement & Key Issues Raised), Table 4.2 (Summary of Key Issues, Concerns, and Responses), Section 15 (Health, Social and Economics of Woodlands County and the Town of Whitecourt	Potential human receptors that may be impacted by Project-associated changes to environmental quality are not adequately identified. The Initial Project Description (IPD) should provide sufficient information on potential human receptors, such as the approximate number, distance, and identity factors of likely human receptors, including any foreseeable future receptors, to identify those that may be impacted by changes in air, water, country food quality (e.g., dust deposition on vegetation), and noise levels. When identifying potential receptors, special consideration should be given to potentially sensitive and disproportionately impacted populations that may be exposed to increased levels of risk due to physiology, health status, behaviour, and/or lifestyle. Examples include seniors, pregnant or nursing mothers, infants, and consumers of higher quantities of local country foods that may receive greater exposure to contaminants of potential concern (COPCs). Health Canada acknowledges that Section 13 provides a description of the distance to some recreational locations, First Nation reserves, and communities that were not in the draft IPD. However, important receptor information is still missing, such as identification of sensitive or disproportionately impacted receptors and precise location of these receptors. Additionally, spatial boundaries for the assessment (or study) of potential Project effects are not defined. Although a community profile and health related indicators were provided for review, they have not been carried forward into an effects assessment. For example, the following information would be useful in determining whether there may be Project effects on human health from a determinants of health perspective: i. Information on the social and economic impacts of the Project that may have direct and indirect health effects, and	HC recommends that the Agency request the following information from the Proponent in the Detailed Project Description (DPD): 1) Identify all human receptors (both Indigenous and non-indigenous) that may be impacted by changes to air, water, country food quality, and noise levels associated with the Project activities. Provide a map showing approximate locations of permanent residences, temporary land uses (e.g., cabins and traditional sites) and known locations of sensitive human receptors (e.g., schools, hospitals, community centres, retirement complexes or assisted care homes). 2) Delineate the preliminary spatial boundaries (i.e., regional study area, local study area, and Project study area) and provide a rationale for boundaries of the areas. 3) Identify whether certain identity factors (e.g., age, gender, family status, occupation) may result in some receptors being impacted differently by project associated changes to social and economic conditions. Refer to HC-08 for a link to HC's Guidance for Evaluating Human Health Impacts in Environmental Assessment: Human Health Risk Assessment, which provides further detail on the type of information Health Canada looks for when reviewing documents submitted by project proponents as part of the impact assessment process.	Identification and locations of existing and potential future human receptors, including sensitive receptors, are needed. The areas to be studied should be identified.

		ii. profiling of the local communities that will be potentially affected by the Project to identify vulnerable communities, groups or individuals. Engagement with Indigenous groups raised health concerns with the Project. Additionally, the IPD provides few details on the extent and magnitude of effects or effectiveness of mitigation measures proposed. These considerations may reinforce the value of conducting a Health Impact Assessment (HIA). It is important to consider the potential positive and negative effects of the Project on the broader social determinants of health, and how the potential effects are distributed across different population groups (e.g., Indigenous peoples, youth etc.). Plans for monitoring impact on social determinants of health on an ongoing basis during the Project – through use of a HIA or other methods – have not been clearly articulated. The proponent has not included potential residual effects for human health risk assessment.		
HC-02	Section 4.3 (Results of Engagement & Key Issues Raised), Table 4.2 (Summary of Key Issues, Concerns, and Responses), Section 14.1.2 (Air Quality), Section 19.2 (Air Quality) Section 20 (Potential Effects on Extra-Provincial and Federal Lands) Section 22 (Potential Effects on Indigenous Health, Social, and Economic Conditions), Section 24.2 (Air), Appendix D (Air Quality Technical Memo)	There is no discussion on the potential for health effects from short-term increases of contaminants in ambient air quality, especially for sensitive receptors. Section 22 concludes that impacts to Indigenous people's health is expected to be minimal because changes to air quality are limited to the Power Generation Facility (PGF) site and within guidelines. The nearest First Nation Reserve (Alexis Whitecourt No. 232) is only 1 km from the PGF. The IPD and Air Quality technical memo predict exceedances of the Canadian Ambient Air Quality Standards (CAAQS) for 1-hour nitrogen dioxide (NO_2). HC notes that for non-threshold pollutants where health risks may exist below established thresholds (e.g., fine particulate matter ($PM_{2.5}$) and NO_2), that any increase in concentration of the pollutant is an increase in risk. In addition, rationale should be provided on the applicability of existing air quality information provided in Section 14.1.2 and Appendix D, given that the monitoring stations are 75 km southwest for NO_2, sulphur dioxide (SO_2) and $PM_{2.5}$, and 175 km east-southeast for carbon monoxide (CO). These sites may have different emissions sources and justification for the use of these monitoring sites should be provided. Section 19.2 and Appendix D describes the anticipated air contaminants and their sources during construction and operations. • construction: oxides of nitrogen (NO_x), CO, particulate matter (PM), volatile organic compounds (VOCs), and SO_2 from construction equipment and diesel-powered equipment such as generators. • operations: NO_x, SO_2, CO, ammonia (NH_3), and $PM_{2.5}$ from the PGF and other minor sources such as emergency diesel generators, emergency diesel fire pumps, and fuel gas heaters. However, the air contaminant emissions inventory does not include diesel exhaust (DE) emissions from operation of heavy equipment and diesel generators during the construction and operation phases. DE is a complex mixture of gaseous and particulate compounds, including diesel particulate matter (DPM), polycyclic aromatic hydrocarbons (PAHs), and VOCs, and	HC recommends that the Agency request the following information from the Proponent in the DPD: 1) Provide the location of sensitive receptors (e.g., hospitals, schools, retirement complexes or assisted care homes) and traditional land use activities by Indigenous communities (e.g., hunting, fishing, trapping, gathering of plants or medicines, ceremonial or spiritual practices, passing on of Indigenous knowledge and/or language) when identifying potential Project-related air quality impacts on human health. 2) Provide a complete inventory of all potential air pollutants including, but not limited to, NOx, SO_2, CO, ozone (O_3), $PM_{2.5}$, coarse particulate matter (PM_{10}), PAHs, VOCs, DPM, and metals. Justify the exclusion of any common air pollutants from further consideration. 3) Use a conversion rate of 100% NO to NO_2 when providing predictions of NO_2 ambient air quality concentrations. Refer to HC-08 for a link to HC's Guidance for Evaluating Human Health Impacts in Environmental Assessment: Air Quality, which provides further detail on the type of information Health Canada looks for when reviewing documents submitted by project proponents as part of the impact assessment process.	Additional information is recommended related to the location of facilities, disproportionately impacted populations and air quality. Additional information is recommended related to Indigenous uses of the Land and air quality. The inventory of potential air pollutants is incomplete. Diesel emissions should be included in the air quality assessment of the construction and operation phases. Use of a conservative conversion rate for the assessment of human health is recommended.

		considered a highly toxic air contaminant associated with cancer and adverse health problems such as respiratory illnesses and increased risk of heart disease. HC acknowledges that the proponent provided a description in the IPD of the primary air quality pollutants the Project is expected to emit during the operations phase. However, HC recommends the proponent provide a full inventory of air quality pollutants the Project may emit during all phases (including construction). Additionally, section 4.3 of Appendix D has the conversion rate for nitric oxide (NO) to NO_2. HC acknowledges that the proponent plans to use the process outlined in the Alberta Air Quality Model Guideline. HC's position remains that NO is at least as harmful to human health as NO_2 and a 100% conversion rate of NO to NO_2 should be provided in the air quality assessment. Based on the information provided, HC cannot characterize the potential risks to human health. The proposed mitigation approaches in Table 19.4 and 19.5 appear to be standard/known for air quality effects. HC encourages the use of all available mitigation measures that are technically and economically feasible to limit negative impacts to air quality [e.g., Cheminfo (2005) Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities. Available at: http://www.bv.transports.gouv.qc.ca/mono/1173259.pdf]. There is no discussion on predicted residual effects on air quality from Project construction and operations. However, section 19.2.2 states the Project is not expected to cause or contribute to a substantial degradation of ambient air. Although standard mitigation measures are provided, no rationale is provided to justify the assumption that there will not be a substantial degradation to ambient air quality.		
HC-03	Section 4.3 (Results of Engagement & Key Issues Raised), Table 4.2 (Summary of Key Issues, Concerns, and Responses),	The IPD states that the earth moving and concrete work activities are short-term and seasonal, and that noise from the construction phase of the Facility is expected to be similar to that of other construction activities and traffic in the Whitecourt vicinity. It does not appear that existing conditions were measured as no information on current noise levels were provided. Additionally, discussion on the effects of operation noise are short with no quantifiable predictions provided. Based on the information provided, HC cannot characterize the potential risks to human health. The mitigation measures listed appear to be known/standard for noise effects including a complaint response procedure. In the absence of an assessment of human health impacts of noise, HC cannot comment on the sufficiency of the proposed noise mitigation measures, or whether additional measures (e.g., physical sound barriers) may be required.	HC recommends that the Agency request the following information from the Proponent in the DPD: 1) Provide detailed information (e.g., location and duration of monitoring, baseline noise levels, location of sensitive receptor, etc.) from the ambient noise surveys. 2) Consider the location of sensitive receptors (e.g., hospitals, schools, retirement complexes or assisted care homes) and traditional land use activities by Indigenous communities (e.g., hunting, fishing, trapping, gathering of plants or medicines, ceremonial, or spiritual practices, passing on of Indigenous knowledge and/or language, etc.) when identifying potential Project-related noise impacts on human health. 3) Provide the timing of construction activities.	Additional detail is recommended about the timing of construction activities. Additional information is recommended on predictions of noise levels during construction and operation phases. Additional information is recommended on adaptations to activities to mitigate noise effects. Information is recommended on noise communications plans, complaints resolution procedures and other noise follow-up monitoring plans.

		Section 19.3, Section 22, or Section 24.2 do not identify whether residual effects on noise are anticipated, but section 24.2 does state that a noise impact assessment will be completed during the Detailed Project Description.	4) Provide noise levels for an existing conditions scenario. 5) Provide predicted noise levels from both the construction and operations phases. 6) Identify any applicable noise adjustments (e.g., community type, time-of-day, tonal and/or impulsive noise, etc.) that will be considered in the noise assessment. 7) Develop a comprehensive communication plan that describes how the proponent will inform residents ahead of time of any Project-related activities that may lead to noise disturbances, as well as a complaints resolution procedure that describes how noise complaints will be received and addressed. 8) Consider or recommend a follow-up monitoring plan to confirm the effectiveness of mitigation measures. Refer to HC-08 for a link to HC's Guidance for Evaluating Human Impacts in Environmental Assessment: Noise, which provides further detail on the type of information Health Canada looks for when reviewing documents submitted by project proponents as part of the impact assessment process.	
HC-04	Section 14.1.4 (Surface Water and Fish and Fish Habitat), Section 19.4 (Groundwater), Section 19.7 (Surface Water and Fish and Fish Habitat)	Surface and groundwater that may be used for drinking water and/or recreational purposes were not identified. There was no discussion on the potential for drinking and recreational water quality to be impacted by the Project. Also, air deposition onto local surface water bodies was not considered. Based on the information provided, HC cannot characterize the potential risks to human health. HC acknowledges the proponent's response to HC comments on the draft IPD, that the proponent states there are no watercourse in proximity to the PGF site. However, section 19.7.1 describes the PGF site 800 m away from the Athabasca River and that transmission lines and natural gas pipelines may cross the Athabasca River and its tributaries. The potential for impact to these waterbodies may remain such as during an accident/malfunction scenario and is missing from the articulation of effects. The proponent has not articulated mitigation measures for surface or groundwater quality as they relate to drinking and recreational water bodies. HC is unable to comment on the effectiveness of the planned mitigation measures. The proponent did not assess the potential residual effects for human health related to drinking and recreational water quality changes.	HC recommends that the Agency request the following information from the Proponent in the DPD: 1) Identify all water sources that are used for drinking, recreational, and/or traditional purposes, such as potable water wells, municipal drinking water supplies and treatment systems, and the location of recreational water bodies as part of a baseline study. Clarify whether Indigenous users consume treated or untreated water. 2) Describe any potential Project-related changes to drinking and recreational water quality and associated effects on human health. Refer to HC-08 for a link to HC's Guidance for Evaluating Human Impacts in Environmental Assessment: Drinking and Recreational Water Quality, which provides further detail on the type of information Health Canada looks for when reviewing documents submitted by project proponents as part of the impact assessment process.	Information is recommended on water sources affected by the project. Information is recommended on how Indigenous population consume water. Information is recommended on potential surface water and groundwater quality changes from the project and effects on human health.

HC-05	Section 4.3 (Results of Engagement & Key Issues Raised), Table 4.2 (Summary of Key Issues, Concerns, and Responses), Section 22 (Potential Effects on Indigenous Health, Social, and Economic Conditions)	There is no discussion on the potential uptake of contaminants in country foods from Project-related changes in air, water and/or soil quality. The Summary of Key Issues, Concerns and Responses in Table 4.2 indicates that the Indigenous peoples engaged as part of the Project hunt, fish, and gather in the Project area, which was identified as an important area for traditional land use activities. The closest Indigenous community, Alexis Whitecourt No. 232 is 1 km from the proposed Project location. Based on the information provided, and given the uncertainty raised in comments HC-02 and HC-04 on Project effects on ambient air quality and drinking and recreational water quality, HC cannot characterize the potential risks to human health from consumption of contaminated country foods. The proponent has not articulated mitigation measures. HC is unable to comment on the effectiveness of the planned mitigation measures. The proponent has not included potential residual effects for human health related to consumption of country foods.	HC recommends that the Agency request the following information from the Proponent in the DPD: 1) Identify country food consumption as a potential pathway of contaminant exposure for traditional land users. Identify potential country food types/species (e.g., plants, fish, birds, and wildlife) that may be harvested from the area. Relevant information may be collected from Indigenous engagement activities and/or dietary/consumption surveys. 2) Identify all COPCs from Project-associated emissions and potential transport pathways of the COPCs into country foods (e.g., aquatic food web accumulation, atmospheric deposition). 3) Provide any available information on background concentrations of Project-related COPCs in country foods and discuss whether concentrations may increase as a result of the Project. Discuss the human health impacts associated with these potential Project-related changes to country foods quality. Refer to HC-08 for a link to HC's Guidance for Evaluating Human Impacts in Environmental Assessment: Country Food, which provides further detail on the type of information Health Canada looks for when reviewing documents submitted by project proponents as part of the impact assessment process.	Information is recommended about country foods use by Indigenous populations. Information is recommended about existing contamination in country foods and any possible increases of contamination of country foods due to the Project as well as potential related effects on human health.
HC-06	Section 19.4 (Groundwater), Section 19.5 (Soils)	Section 19.4 and 19.5 indicates the potential for accidental spills to affect groundwater quality and soils. Few other details are provided on the impacts of these accidental spills. There is no discussion on the capacity to address potential scenarios that may result in contamination of drinking/recreational water and country foods from spills of chemicals (e.g., chemicals used in manufacturing, fuel (e.g., diesel fuel, gasoline) or wastewater that could be caused by containment failure, fuel/chemical storage tank leak, traffic accident, etc.). Such spills may also produce chemical fumes that can temporarily affect local air quality. Based on the information provided by the proponent, HC cannot characterize the potential risks to human health. The proponent has not included mitigation measures for potential impacts of accidents and malfunctions. The proponent has not included potential residual effects for Indigenous health related to accidents and malfunctions.	HC recommends that the Agency request the following information from the Proponent in the DPD: 1) Describe the potential for environmental effects caused by accidents and malfunctions, including the types of accidents and malfunctions, their likelihood and severity and the associated potential environmental and health impacts. Refer to HC-08 for a link to HC's Guidance for the Environmental Public Health Management of Crude Oil Incidents, which provides further detail on the type of information Health Canada looks for when reviewing documents submitted by project proponents as part of the impact assessment process.	More information is recommended on potential accident and malfunction scenarios that could lead to the release of contaminants into the surrounding environment for each phase of the Project, and their potential effects on human health. Information is recommended on human health effects of environmental releases of contaminants in the event of accidents or malfunctions.
HC-07	Section 4.3 (Results of Engagement & Key Issues Raised), Table 4.2 (Summary of	The IPD does not articulate potential health, social, and economic effects in sufficient detail; therefore, it is not possible to determine the possible effects of the Project on the social determinants of health and health equity.	HC recommends that the Agency request the following information from the Proponent in the DPD:	More detailed information is recommended on how impacts to human health are linked to project

	Key Issues, Concerns, and Responses), Section 15 (Health, Social and Economics of Woodlands County and the Town of Whitecourt	In addition to the uncertainties raised in previous comments on Project-related effects on the environment, no linkages or effect pathways were described between the Project's changes to economic, social, and ecological conditions and health. An assessment of these linkages and effect pathways could be completed if an HIA were to be conducted. The IPD does not explain the possible impact of this Project on housing and service demands and possible mitigation measures to address this issue. Given the limited scope of the health, social and economic information in the IPD, there is insufficient justification provided to conclude that resulting effects on human health are not significant. HC acknowledges that the proponent expects the socioeconomic effects of the Project to be positive and additional details will be provided in the DPD. There are insufficient details in the IPD on the impacts the Project may have on socioeconomics. The proponent does not explicitly provide an effects pathway that links social determinants of health to potential health outcomes. The proponent has not articulated mitigation measures. Plans for monitoring impact on social determinants of health on an ongoing basis during the Project – through use of HIA or other methods – have not been clearly articulated. The proponent has not included residual effects for health and wellbeing in the IPD.	1) Provide a description of how health effects considered the linkages and effect pathways between project impacts on the economic, social, and ecological conditions were considered. 2) Provide detail on potential effects on the host community resulting from workforce recruitment practices, including housing pressures and increased service demands. Refer to HC-08 for HC's (2022) Interim Guidance Document for the Health Impact Assessment of Designated Projects under the Impact Assessment Act. Draft for review. June 30, 2022. (Available upon request to: ia-ei@hc-sc.gc.ca)	impacts in the economic, social, and ecological environments. More detailed information is recommended about employment opportunities effects on communities.
HC-08	IPD	HC has published a series of Guidance Documents that provide general guidance on assessing risks to human health from major resource and infrastructure projects in Canada. It presents the principles, current practices, and basic information HC looks for when it reviews the environmental impact statement or other reports submitted by Project proponents. These Guidance Documents were prepared for the benefit of proponents and their consultants and to support an efficient and transparent project review process. References to these Guidance Documents can be included in the DPD or addressed through the Tailored Impact Statement Guidelines (TISG).	HC recommends an assessment of the potential health impacts as per the department's guidance documents for Evaluating Human Health Impacts in Environmental Assessment: **1.** Guidance for Evaluating Human Health Impacts in Environmental Assessment: Air Quality[1] **2.** Guidance for Evaluating Human Health Impacts in Environmental Assessments: Country Foods[2] **3.** Guidance for Evaluating Human Health Impacts in Environmental Assessment: Drinking and Recreational Water Quality[3] **4.** Guidance for Evaluating Human Health Impacts in Environmental Assessment: Human Health Risk Assessment[4]	Recommended guidance documents for the assessment of health effects of the Project.

[1] Health Canada. 2016. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Air Quality. Available online at: https://www.publications.gc.ca/site/eng/9.802343/publication.html
[2] Health Canada. 2018. Guidance for Evaluating Human Health Impacts in Environmental Assessments: Country Foods. Available online at: https://www.publications.gc.ca/site/eng/9.855584/publication.html
[3] Health Canada. 2016. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Drinking and Recreational Water Quality. Available online at: https://www.publications.gc.ca/site/eng/9.832511/publication.html
[4] Health Canada. 2019. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Human Health Risk Assessment. Available online at: https://www.publications.gc.ca/site/eng/9.870475/publication.html

			5. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Noise[5] **6.** Guidance for Evaluating Human Health Impacts in Environmental Assessment: Radiological Impacts[6] **7.** Guidance for the Environmental Public Health Management of Crude Oil Incidents[7] **8.** Draft Interim Health Impact Assessment Guidance Document[8]	

Please insert additional rows as necessary.

[5] Health Canada. 2017. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Noise. Available online at: https://www.publications.gc.ca/site/eng/9.832514/publication.html
[6] Health Canada. 2017. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Radiological Impacts. Available online at: https://www.publications.gc.ca/site/eng/9.803614/publication.html
[7] Health Canada. 2018. Guidance for the Environmental Public Health Management of Crude Oil Incidents. Available online at: https://publications.gc.ca/collections/collection_2018/sc-hc/H129-82-2018-eng.pdf
[8] Health Canada. 2022. Draft Interim Health Impact Assessment Guidance Document. Available by request from: **ia-ei@hc-sc.gc.ca**