

Environmental Health Program (EHP)
Regulatory Operations & Enforcement Branch (ROEB)
Health Canada
180 Queen Street West, 10<sup>th</sup> Floor
Toronto, ON
M5V 3L7

June 14, 2023

Natalie Boyd Project Manager, Ontario Region Impact Assessment Agency of Canada (IAAC) 600-55 York Street Toronto, ON M5J 1R7

Submitted to the IAAC Registry for the Marmora Clean Energy Hub Project

Subject: Health Canada's Comments on the Initial Project Description for the Marmora Clean Energy Hub Project

Dear Natalie Boyd,

Thank you for your email dated May 19<sup>th</sup>, 2023 requesting Health Canada's comments on the Initial Project Description (IPD) for the Marmora Clean Energy Hub Project.

Health Canada participates in the impact assessment process as a federal authority under the *Impact Assessment Act (IAA)*. Health Canada makes available specialist/expert information or knowledge in their possession to reviewing bodies under the IAA, upon request. Health Canada does not make decisions or issue licenses, permits, or authorizations in relation to the impact assessment of a development project.

Health Canada has completed Enclosure 1 based on the information included in the IPD.

Should you have any questions concerning Health Canada's comments, please contact the undersigned.

Sincerely.

Kitty Ma

Regional Manager, EHP - Ontario Region

ROEB, Health Canada

ia-on-ie-on@hc-sc.gc.ca

CC:

Heather Jones-Otazo, A/Manager, Environmental Assessment and Contaminated Sites (EACS) Division, Healthy Environments and Consumer Safety Branch (HECSB), Health Canada

Christine Gagnon, Senior Environmental Health Specialist, EACS, HECSB, Health Canada

Alexandra Iliescu, Impact Assessment Coordinator, EACS, HECSB, Health Canada

Julie Boudreau, Impact Assessment Specialist, EHP – Ontario Region, ROEB, Health Canada

Umme Akhtar, Impact Assessment Specialist, EHP – Ontario Region, ROEB, Health Canada

Attached: Enclosure 1: Federal Authority Advice Record

# **Enclosure 1: Federal Authority Advice Record**

## Response due by June 14, 2023

Marmora Clean Energy Hub Project

Agency File: 84597

All comments should be submitted via the **Submit a Comment** feature available on the Project's Canadian Impact Assessment Registry page<sup>1</sup>. Letters and forms can be uploaded using this feature. If you have any difficulties submitting this way, please contact the Agency at

Marmora@iaac-aeic.gc.ca.

Department/Agency	Health Canada
Lead Contact  Kitty Ma, Ontario Regional Manager, Environmental Health Program (EHF Regulatory Operations and Enforcement Branch (ROEB)	
Full Address 180 Queen Street West, Toronto, Ontario, M5V - 3L7	
Email	ia-on-ie-on@hc-sc.gc.ca
Telephone	416-954-2206
Alternate Contact	Umme Akhtar, Impact Assessment Specialist, EHP, ROEB

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.

#### Not Applicable

(b) 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.

### Not Applicable

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?

Specify the specialist or expert information or knowledge.

Yes, as a federal authority, Health Canada provides 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).

<sup>&</sup>lt;sup>1</sup> Reference #84597 at http://iaac-aeic.gc.ca/050/evaluations/document/147660?culture=en-CA

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;
- · Recreational and drinking water quality;
- · Country foods;
- · Noise:
- Methodological expertise in human health risk assessment;
- · Methodological expertise in health impact assessment;
- · Electromagnetic fields;
- · Radiological emissions; and
- Public health emergency management of toxic exposure events.
- 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.

#### Not Applicable

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 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. What are the <u>key issues</u> 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: Key Issues to inform decision-making* to respond to this question.

- 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. Clarifications or additional information the Proponent could include in the Detailed Project Description or in the response to Summary of Issues to respond to this question.

8. For departments with information about local context<sup>2</sup>

Health Canada has no additional information to provide about the local context at this time.

I. Provide contact details for local organizations or institutions, including municipal government officials, with expertise on economic and social issues in the local area

Name of Contact	Organization	Email Address	Area of Expertise (provide a brief explanation, including website)

II. Provide a list of reports or other sources of evidence (such as municipal plans, development plans) that might inform the Agency's understanding of the situational context of the region in which the Project is being proposed

Title of Report/Source of Information	Organization	Email address of key Contact (where available even if already listed in the table above)	Overview of the information that might be contained in the report/source of information (including website)

<sup>&</sup>lt;sup>2</sup> This section is particularly important for departments that offer direct programs and services to local communities, non-government organizations, institutions etc. that could be viewed as complementary measures. Complementary measures, which are initiatives undertaken under federal programs or under the authority of a federal Minister or department, beyond those stated in the *Impact Assessment Act*, may also be considered by decision-makers, as applicable. Complementary measures may be used to address issues outside of the care and control of a proponent, for cross-cutting issues requiring an integrated response, or to accommodate impacts to section 35 rights held by Indigenous peoples. Examples of complementary measures may include skill development and training programs, social programs, etc.

III. Provide any key programs administered by your department (e.g. Fed/Nor or Fed/Dev) in the area that may constitute complementary measures that the proponent may consider to resolve issues associated with its Project

Name of Fed/Nor or Fed/Dev Program	Purpose of Program	Key Contact	Web link(s)

IV. Provide any projects funded or likely to be funded by your department (e.g. Fed/Nor or Fed/Dev) in the area during the lifespan of the Project being proposed by the proponent.

Name of Project	Purpose of Project	Email Address of Recipient	Email address of Fed/Nor or Fed/Dev Project Administrator

Julie Boudreau
Name of Departmental / Agency Responder
Impact Assessment Specialist
Title of Responder
June 14, 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.	<ul> <li>Provide a brief description of the issue and rationale for being a key issue.</li> <li>Include, where relevant: <ul> <li>the pathway of effects;</li> <li>social, economic or environmental context which are relevant to it being a key issue;</li> <li>key uncertainties that should be addressed in the impact assessment;</li> <li>Indigenous or public concerns or perspective;</li> <li>potential for differential effects among diverse subgroups;</li> <li>scientific evidence or traditional knowledge, including from past project experience, which supports inclusion as a key issue.</li> </ul> </li> </ul>	<ul> <li>Where applicable, briefly identify solutions to address the potential issue or effects including</li> <li>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;</li> <li>Any powers, duties or functions that your department or agency has that may mitigate, manage, or set conditions related to the effect;</li> <li>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</li> <li>Commitments the proponent could make to respond to the issue.</li> </ul>	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.
HC-01	Human Health, including Indigenous Health	The Initial Project Description (IPD) lists the preliminary summary of potential environmental effects for the project (Table 5-2, pgs. 104-113). Health and Safety is the only health-specific environmental component included. Although impacts to noise, air quality, surface water and groundwater are noted, they are not directly linked to potential impacts on human health, including Indigenous health. Additionally, potential impacts to country foods quality (any food that is trapped, fished, hunted, harvested or grown for subsistence or medicinal purposes, outside of the commercial food chain¹) as they relate to human health, including Indigenous health, are not mentioned.	Health Canada recommends that the Proponent:  Consider potential impacts on human health, including Indigenous health, from project-related changes to environmental [quality of air, country foods, drinking (e.g., private wells or source water intakes) and recreational water sources, and to the noise environment], social (including cultural), and economic conditions. Use Health Canada's Environmental Assessment Guidance <sup>1, 2, 3, 4, 5</sup> for further detail.	Consideration of project-related environmental impacts to human health, including Indigenous health, is recommended in accordance with Health Canada's Environmental Assessment Guidance for: Air Quality², Noise³, Country Foods¹, Drinking and Recreational Water⁴ and Interim Guidance on Health Impact Assessment⁵.

<sup>1</sup> Health Canada. 2018. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Country Foods. Available at: https://publications.gc.ca/collections/collection 2018/sc-hc/H129-54-5-2018-eng.pdf

<sup>&</sup>lt;sup>2</sup> Health Canada. 2016. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Air Quality. Available at: https://publications.gc.ca/collections/collection 2017/sc-hc/H129-54-1-2017-eng.pdf

<sup>&</sup>lt;sup>3</sup> Health Canada. 2017. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Noise. Available at: https://publications.gc.ca/collections/collection 2017/sc-hc/H129-54-3-2017-eng.pdf

<sup>&</sup>lt;sup>4</sup> Health Canada. 2016. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Drinking and Recreational Water Quality. Available at: <a href="https://publications.gc.ca/collections/collecti

<sup>&</sup>lt;sup>5</sup>Health Canada, 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: <u>ia-ei@hc-sc.gc.ca</u>)

Key issues raised from Indigenous Engagement activities (Table 1-4, pgs. 14-18) include impacts to surface and groundwater quality, impacts on traditional land use including wild rice in Crowe River and, use of the open pit for swimming and potential impacts on hunting/harvesting/fishing/trapping.

Additionally, the IPD (Section 3.9.3, pg. 95) indicates that "[i]nformation regarding community safety and well-being or social determinants of health was not publicly available at the time of the desktop review."

In addition to not being able to provide desktop data on the social determinants of health, the IPD does not describe the linkages or effect pathways between the Project's potential changes to economic, social, and cultural conditions and human health, including Indigenous health. The absence of such information precludes the undertaking of a health impact assessment (HIA) if required.

With respect to potential effects on Indigenous peoples, the IPD (Section 5.3.3, pg. 100) states that "[n]egative impacts to health are not anticipated as a result of the Project,". However, without consideration and assessment of the potential biophysical and socio-cultural effects listed above, it is premature to make this conclusion.

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  .	<ul> <li>Provide recommended clarification or additional information to be included in the Detailed Project Description to address the issue, concern or uncertainty, for example</li> <li>Clarifications to project description (e.g. components, activities, locations or alternatives);</li> <li>Project design changes that could avoid effects;</li> <li>Evidence that could be presented to demonstrate there is no effect pathway or that effects will be negligible;</li> <li>Evidence that standard mitigations will address potential effects;</li> <li>Commitments the proponent could make to respond to the issue, including the implementation of federal operational policies or guidance documents.</li> </ul>	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-02	N/A	The IPD does not provide information on identity factors (e.g., age, gender, occupation) or other disaggregated information of human receptors that may be impacted by the Project to understand how the project could potentially produce differential impacts on the health of diverse groups of people. Assessing health effects from an equity perspective is an essential component of the HIA process. The practice of Gender Based Analysis plus offers a valuable tool through which to apply an equity lens to the assessment of a project's potential health impacts, which may include the analysis of any differential distribution of benefits across diverse population groups <sup>5</sup> . For example on women, children and other vulnerable groups, including from a cumulative effects perspective.	Health Canada recommends that the Proponent:  Provide additional information on the identity factors (e.g., age, gender, occupation) of human receptors that may be impacted by the Project. Determine whether and how these identity factors may result in some receptors being impacted differently from a health-perspective by Project-associated changes to economic and social (including cultural) conditions <sup>5</sup> .	Additional information on human receptor identity characteristics (e.g., age, gender, occupation) and on economic and social (including cultural) effects, which may influence health conditions, is recommended.
HC-03	Table 2-3: Summary of Preliminary Environmental Investigations, pg. 36  Table 3-3: Distance to Reserve Lands, pg. 60  Table 3-6: Water Well Records in Proximity of the Open Pit, pg. 69	The IPD (Table 2-3) indicates that air and noise sensitive receptors will be listed along with their location and distance from the project. However, no detail is provided on the characterization of sensitive receptors. From a health perspective, "sensitive receptors and vulnerable populations [are those] that may be exposed to increased levels of risk due to physiology, health status, behaviour, and/or lifestyle <sup>6*</sup> . These receptors may be present at hospitals, schools, daycare centres and assisted care homes.  Although the nearest First Nation reserve is listed as 43 km from the project (Table 3-3), this does not preclude the presence of Indigenous peoples in closer proximity to the project who may use the lands for traditional land and resource use activities. The location of potential traditional land and resource use locations could be included, ensuring information is shared with consent from (and/or to the satisfaction of) the indicated Nation(s). To help inform the effects assessment and facilitate review, the location and labelling of sensitive receptors, traditional land and resource use activities, along with permanent receptors could be provided.	Health Canada recommends that the Proponent:  Include a map(s) showing the location and labelling of potentially sensitive receptors (e.g., hospitals, daycares centres, schools and assisted care homes), as well as permanent receptors and approximate locations of traditional land and resource use activities. Also include a map showing the location of potential drinking water sources (e.g., residential supply wells and/or source water intake areas).	<ul> <li>Maps are recommended showing:</li> <li>Receptor locations (permanent and traditional land and resource use activities);</li> <li>Identification of sensitive receptors; and,</li> <li>Location of drinking and recreational water sources.</li> </ul>

<sup>&</sup>lt;sup>6</sup> Health Canada. 2019. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Human Health Risk Assessment. Available at: <a href="https://publications.gc.ca/collections/collection\_2019/sc-hc/H129-54-6-2019-eng.pdf">https://publications.gc.ca/collections/collection\_2019/sc-hc/H129-54-6-2019-eng.pdf</a>

	The IPD (Table 3-6) indicates there are domestic water supply wells within the vicinity of the project. It would be beneficial to show the location of these wells on a map with distance from the proposed project to inform the assessment of potential impacts to human health. Additionally, there is no discussion on potential source water (e.g., groundwater) intakes in the area. As the proposed discharge location has not yet been confirmed, any surrounding source intake locations should be clearly marked on a map to inform potential impacts to drinking water sources and associated potential human health impacts.  As mentioned in HC-01, based on feedback during Indigenous Engagement, the pit water may be used for swimming. Incidental ingestion of and dermal contact with water may occur during swimming. Any surface water body used for swimming within and surrounding the project area should be clearly shown on a map to inform potential impacts to human health, including Indigenous health.		
Table 3-1: Summary of Relevant Information from Previous Studies, pgs. 51, 52, 54, 55  Section 5.5.2: Emissions, pgs. 102, 103  Section 2.4.2.3: Project Phases – Construction, pgs. 37, 38  Table 2-3: Summary of Preliminary Environmental Investigations, pgs. 34, 35, 36	Issue a) The 2007 Golder Phase 1 Environmental Site Assessment (Table 3-1) indicates that the site was historically registered as a highlevel polychlorinated biphenyls (PCB) storage site, had both underground and aboveground storage tanks, and that the Canadian National Railway Line and Canadian Pacific Railway line were formally located on the site. The proponent has indicated this information will be used to "inform the soils conditions and potential contamination land use moving forwards". However, details on the management of potentially contaminated soil is not included for review.  Additionally, the 2009 Hatch Preliminary Site investigation (Table 3-1) found elevated levels of some metal parameters, including arsenic, boron and copper, in the waste rock and tailings samples. The proponent has indicated that this information will be used to "inform the long-term water quality trends moving forward". However, details on the management of potentially impacted groundwater is not included for review.  Issue b) The 2013 More Than Engineering Preliminary Dewatering Impact Assessment (Table 3-1) indicates that open pit and mud lake samples were collected. Although some metal parameters were listed as exceeding the applied standards, a comprehensive list of parameters sampled, and their results were not provided for review. Details of the pit water quality would be useful in understanding potential impacts to surface water during planned discharge events. This information may then be used to inform a human health risk assessment <sup>5</sup> (HHRA).  Issue c) The IPD (Section 5.5.2) lists air and noise emissions during construction including: "atmospheric emissions (SO <sub>2</sub> , NOx, CO <sub>2</sub> ) resulting from the simultaneous operation of vehicles, equipment and machinery with internal combustion engines" as well as "temporary dust generationfrom rock blasting works". It is not clear why additional air substances have not been included to capture combustion emission [e.g., fine particulate matter (DPM)].  The IPD (Section 5.5.2)	Health Canada recommends that the Proponent:  a) Provide additional detail on the identification and management of potentially contaminated soil and/or groundwater from previous mining activities.  b) Include a summary of historical environmental quality data (e.g., soil, groundwater, surface water and pit water) to supplement baseline environmental quality data and to inform potential impacts to human health.  c) Include a complete inventory of all predicted environmental emissions listed by parameter (e.g., PM2.5, NO2), environmental media (e.g., air¹, water⁴, noise²), activity and/or source (e.g., transmission line construction and construction traffic along haul routes) for all project phases (e.g., construction and operations) to inform potential human health effects assessment.  d) Provide details on baseline environmental media (i.e., surface water, groundwater, pit water, noise, air quality) monitoring plans including parameters to be monitored, timing, frequency and duration of monitoring, and monitoring locations.	Additional detail on the identification and management of potentially contaminated soil/water, if found, is recommended.  A summary of past environmental quality data is recommended.  A complete list should be provided of predicted environmental emissions (e.g., contaminants to air, water; noise emissions) from the Project, along with their sources/related activity(ies) and associated Project phase.  Details on baseline environmental monitoring plans are requested.

		drilling machines". Further, the IPD (Section 2.4.2.3) provides a list of activities that are anticipated to occur during the construction phase. However, increased traffic along construction routes has not been included. Construction traffic may result in increased air and noise emissions to human receptors along these traffic routes.		
		Finally, the IPD (Section 5.5.2) goes on to say "[n]o emissions to water or soil are expected". As there will be discharges of pit water during dewatering and at planned events throughout operations, it is unclear why no emissions to water are expected.		
		<b>Issue d)</b> The IPD (Table 2-3) indicates that baseline air, noise, pit water, surface water and groundwater quality monitoring are being completed. However, details on the baseline monitoring programs, including parameters being monitored, has not been provided for review. Additionally, it is indicated that the air quality and noise baseline monitoring will be completed in 2023 but the duration of monitoring (e.g., to capture seasonal variations) and the locations of the monitors (e.g., to be representative of receptor locations) have not been provided for review.		
HC-05	Table 5.2: Preliminary Summary of Potential Environmental Effects	The IPD only lists potential effects to human health from injury due to equipment or activities under the Health and Safety environmental component. As mentioned in HC-01, there may also be pathways of effects to human receptors from changes to air quality, noise, drinking and recreational water and country foods. A HHRA is a tool used to assess multi-media environmental risks to human health and could be considered for this project.	Health Canada recommends that the Proponent:  Consider conducting an HHRA including potential pathways from air quality, drinking and recreational water quality and country foods using Health Canada's guidance <sup>6</sup> . A conceptual site model, accompanied by justification for why any transport and exposure pathways are excluded, may be included in the detailed project description (DPD) as a starting point.	A HHRA is recommended using Health Canada's guidance <sup>6</sup> .
HC-06	Table 5.2: Preliminary Summary of Potential Environmental Effects	Consideration of accidents and malfunctions appears to be limited to spills. However, a detailed quantitative or qualitative discussion of potential impacts from spills at human receptor locations has not been included. Additionally, other accidents may occur, such as those during transportation, storage, or handling of other hazardous materials and should be evaluated for their potential effects to human health.	Health Canada recommends that the Proponent:  Include a quantitative or qualitative discussion of potential accidents and malfunctions scenarios, including their likelihood and severity and the associated effects on environmental, health, social and economic conditions. If a qualitative discussion is presented, include proposed risk management/mitigation measures. Health Canada's guidance <sup>7</sup> on responding to crude oil incidents may be useful to inform emergency response planning, if it is determined that an Impact Assessment is required.	Additional information is recommended on potential health effects from accidents and malfunctions.

Please insert additional rows as necessary.

<sup>&</sup>lt;sup>7</sup> Health Canada. 2018. Guidance for the Environmental Public Health Management of Crude Oil Incidents: A Guide Intended for Public Health and Emergency Management Practitioners. Available at: <a href="https://publications.gc.ca/collections/coll