

Federal Authority Advice Record (FAAR)**FAAR Response must be submitted by January 27, 2006**

Flipi Gas-Fired Generation Project – TransAlta Corp

Registry File: 90120

Department/Agency	Health Canada
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1. Will your department or agency exercise a **power, perform a duty or function**, or provide **financial assistance**, related to the project to enable it to be carried out in whole or in part? As relevant,
 - a) Specify the power, duty or function, or financial assistance, and the likelihood that it will be required to construct the project, based on the Initial Project Description, as either Required, Potential, Likely, Unlikely or Not Required
 - b) Describe any associated Indigenous or public consultation, including timelines
 - c) Describe any associated information requirements (e.g., alternative means assessment, habitat offsetting), and specify those that may be coordinated with the impact assessment process, if an impact assessment is required
 - d) Identify any associated project-specific guidance or issues of which the proponent should be aware, or information the proponent should provide
 - e) Indicate whether your department or agency has identified any power that it will not be exercising or may not be able to exercise to allow the project to be carried out, in whole or in part.
[Health Canada will not exercise a power, perform a duty or function, or provide financial assistance related to the Project.](#)

2. **Using Table 1**, identify project- and context- specific **key issues**, based on the expertise within your mandate¹ and the information in your possession, including the Initial Project Description, any exchanges with the proponent or others related to the project and known means to address the effects of the project. For each key issue:
 - a) Specify the key issue (e.g., specific species and location)
 - b) Specify the project component or activity linked to the key issue
 - c) Explain why it's a key issue based on:
 - i. biophysical effect pathway(s) from the specific project component or activity
 - ii. concern unique to the project or a priority within your mandate
 - iii. the issue being material² to decision making under the *Impact Assessment Act*
 - d) Identify how the issue could be resolved, including through means other than an impact assessment
 - e) Identify additional information the proponent could provide including to give confidence on how the issue can be addressed through other means.

[Claudia Schiocchet](#)Name and title of Departmental /
Agency ResponderJanuary 27th 2006

Date

¹ Refer to the [Memoranda of Understanding with IAAC](#).² An issue is material to decision making if its analysis is anticipated to affect the conclusions on (1) whether adverse effects within federal jurisdiction or direct and incidental adverse effects (collectively adverse federal effects) are likely not significant, or of low, medium or high significance; (2) appropriate mitigation measures for significant adverse federal effects; or (3) justification in the public interest.

Table 1: Key Issues to inform the impact assessment process

This table should outline key issues to inform the impact assessment process, including whether an impact assessment is required and, if so, the scope of the assessment and tailoring of the Tailored Impact Statement Guidelines.

Key issues are the major concerns directly related to a project component or activity, the analysis of which is anticipated to be material to decision-making under the *Impact Assessment Act*.

Federal authorities' advice should be guided by the identification and resolution of key issues. If an impact assessment is required, it will be focused on key issues.

Comment ID	a) Key issue	b) Project component or activity	c)(i) Biophysical effect pathway(s)	c)(ii) Concern unique to the project or a priority within your mandate	c)(iii) Material to federal decision-making	d) Means for issue resolution	e) Additional information from the proponent
<p><i>Identify comments by organization and comment number.</i></p> <p><i>e.g.: IAAC-01</i></p>	<p><i>Specify the key issue (e.g., specific species and location).</i></p>	<p><i>Identify the project component or activity linked to the key issue.</i></p> <p><i>Be specific about the nature, scale, novelty and complexity or the component or activity.</i></p>	<p><i>Identify the specific biophysical effect pathway between the project component or activity and the affected environmental or human receptor (including Indigenous Peoples).</i></p>	<p><i>Describe why it's a key issue within the mandate of your department or agency, including in terms of priorities of the federal government and in terms of anticipated likelihood, severity or uncertainty of effects.</i></p> <p><i>Identify if the key issue is common for projects of this nature or in this sector, or whether it's unique to this project due to its complexity, size or novelty; a sensitive or rare receiving environment; and/or proximity of sensitive environmental or human receptors (including Indigenous Peoples).</i></p>	<p><i>Describe why the key issue is material to decision-making as either:</i></p> <ul style="list-style-type: none"> • <i>an adverse effect within federal jurisdiction, or a direct or incidental adverse effect, that may be significant based on available evidence including:</i> <ul style="list-style-type: none"> ○ <i>federal experts' knowledge and experience with past project assessments;</i> ○ <i>presence of sensitive species, habitats or human receptors (including Indigenous Peoples);</i> ○ <i>novel or complex project activities, components or technologies;</i> ○ <i>high uncertainties in effects or in the effectiveness of mitigation measures;</i> ○ <i>unknown or unproven mitigation; or</i> • <i>a factor for the justification in the public interest anticipated to be material to decision-making such as a likely positive effect contributing to sustainability, to Canada's environmental obligations or climate change commitments or in supporting governmental priorities, such as reconciliation with Indigenous Peoples.</i> 	<p><i>Describe how the key issue could be resolved or addressed by:</i></p> <ul style="list-style-type: none"> • <i>Any means, including powers, duties, functions, frameworks, policies or guidance that your department or agency has;</i> • <i>Any means, including powers, duties, functions, frameworks, policies or guidance from another jurisdiction, including the province;</i> • <i>Common, proven, well-understood or standard mitigation measures to mitigate the effect or effect pathway(s); or</i> • <i>Commitments made by the proponent (e.g., in the Initial Project Description).</i> 	<p><i>Describe information the proponent can provide, or commitments the proponent can make, in their Response to the Summary of Issues that would provide confidence that the issue can be resolved by existing means.</i></p> <p><i>Consider whether information, studies, analyses or collaborative work with other authorities would be required to address the issue beyond existing means.</i></p>
<p>HC-01</p>	<p>Potential effects on the availability of potable water sources and effects on aquatic resources that contribute to Indigenous cultural heritage, resulting from water withdrawal from the Medicine River, Welch Creek, or from groundwater sourcing.</p>	<p>Construction and operation of the 460 MW natural gas-fired power generation facility may require various water withdrawal options, which includes sourcing from the Medicine River, the Welch Creek, and groundwater tables as well as permanent subsurface infrastructures.</p>	<p>Water withdrawal from Medicine River or Welch Creek may result in changes to water availability.</p> <p>Water withdrawal from groundwater tables and installation of permanent subsurface infrastructures may result in changes to water availability and quality.</p> <p>Changes to surface and groundwater sources have the</p>	<p>Under the <i>Impact Assessment Act</i> (IAA), Health Canada (HC) provides specialist or expert information and knowledge to support the assessment of impacts on the health of Indigenous peoples.</p> <p>The water source for the Project is currently under evaluation. Options being considered include groundwater, surface water, and water trucking.</p>	<p>As per <i>Impact Assessment Act</i> Sections 2(e) and 2(f), non-negligible adverse effects on the health of Indigenous peoples related to the Project falls within federal jurisdiction.</p> <p>The Project site is located 18 km from the Town of Rimbey with 6.5% of its population identifying as Indigenous. The Town of Rocky Mountain House is located 33km southwest of the Project Area and 11.1% of its population identifies as Indigenous (iPD page 51).</p> <p>The nearest Indigenous community is Buck Lake First Nation Reserve #133C, located 35 km north-northwest of the Project.</p>	<p>The iPD indicates that once a water source choice has been confirmed, it will comply to the applicable conditions in the required licenses and any other regulatory requirements attributed to the water sourcing activity.</p> <p>Future management plans could include notification to Indigenous water users of potential changes in water quality/ quantity during Project activities, and any necessary mitigations that will be employed, to mitigate any potential risks to Indigenous health.</p>	<p>The Proponent may consider providing water use descriptions, potential exposure pathways to Indigenous users for the chosen sourcing option, and any planned mitigation measures.</p> <p>HC supports the ongoing communication, transparency, and opportunities for continued input from Indigenous</p>

			<p>potential to impact Indigenous health and/or cultural heritage through recreational use and ingestion of these waters.</p>	<p>The Project will require an estimated anticipated initial water volume of 6,000 m³ using air-cooled condensers in a closed loop system.</p> <p>The iPD notes that surface water, if required, would be sourced from the Medicine River or Welch Creek. Groundwater withdrawal options are also being considered, however the iPD does not provide locations of Indigenous water uses in the area.</p> <p>The Proponent's engagement efforts with Indigenous groups have identified concerns about the ongoing burden on the water table in the area, and impacts to their drinking water sources.</p>			<p>communities throughout Project development.</p>
HC-02	<p>Potential exposure of Indigenous peoples to Contaminants of Potential Concern (CoPCs) as a result of Project activities</p>	<p>The Project's construction, operation and reclamation activities will result in air pollutant emissions from combustion of natural gas and dust production from heavy machinery use and transportation.</p>	<p>Air emissions from the Project have the potential to impact the health of Indigenous receptors via inhalation of CoPCs.</p>	<p>Air emissions are expected from Project activities which might lead to impacts on Indigenous health, an area of federal jurisdiction.</p> <p>For non-threshold air pollutants (e.g., fine particulate matter [PM_{2.5}] and nitrogen dioxide [NO₂]), air quality criteria and guidelines should not be used as 'pollute-up-to levels', since any increase in exposure will result in an incremental population risk.</p>	<p>The iPD states that based on existing access restrictions associated with private land, use of the land within the Project Area for cultural practices is currently not occurring. However, based on information provided by Indigenous communities through the Alberta Utilities Commission application process, Indigenous harvesters have been granted permission to harvest deer, elk, and moose on agricultural lands surrounding the Project (at the request or invitation of landowners). Indigenous communities have documented traditional practices, including hunting, throughout Indigenous Ancestral Territory on the boundaries of agricultural lands and timberlands in areas near Highway 53, in areas immediately north of the Project and southeast of Buck Lake, along with privately held lands northwest of the town of Rimbey near Highway 20.</p> <p>Given this information, Indigenous peoples may be present within the Project's surrounding</p>	<p>HC notes that the Project is in compliance with Provincial objectives, however, this does not, on its own, preclude the potential for human exposure, particularly for non-threshold contaminants.</p> <p>HC supports the use of the latest CAAQS as the most stringent criteria for air quality; however, it should be noted that some CAAQS values are not entirely "health-protective". When pollutant levels approach or exceed applicable Canadian or provincial standards, the Proponent is encouraged to compare against solely health-based guidelines. For a quantitative risk assessment, HC recommends using the World Health Organization (WHO) global air quality guidelines³ for fine particulate matter (PM_{2.5}) and nitrogen dioxide (NO₂) (24-hour and annual</p>	<p>HC recommends comparing the air dispersion modelling results against solely health-based guidelines, supports the consideration of a cumulative air quality effects assessment and, encourages identifying any monitoring/adaptive management commitments as needed.</p> <p>HC recommends implementing all economically and technologically feasible mitigation measures to limit emissions of non-</p>

³ World Health Organization. (2021). WHO global air quality guidelines: particulate matter (PM2.5 and PM10), ozone, nitrogen dioxide, sulphur dioxide and carbon monoxide. World Health Organization. <https://iris.who.int/handle/10665/345329>.

				<p>The air quality assessment in the iPD provides baseline context and dispersion modelling results for Maximum Ground Level Concentrations (MGLC) of contaminants but does not include discussion of receptor-based acute or chronic exposure.</p> <p>HC does not have knowledge of the receiving environment being sensitive or rare.</p>	<p>airshed during harvesting activities. These activities may involve extended periods of time spent outdoors, including during Project operation, resulting in the potential for inhalation exposure to project-related air contaminants.</p> <p>The iPD does not include a discussion on potential inhalation and exposure to CoPCs by Indigenous peoples, as it states that no inhalation pathways are anticipated. However, the presence of Indigenous harvesters on lands surrounding the Project indicates that inhalation exposure pathways cannot be ruled out.</p> <p>The iPD's air quality assessment (Appendix E) notes that all emitted CoPCs fall below the Alberta Ambient Air Quality Objectives and Guidelines (AAAQO/G). The iPD's Emissions Intensity Report (Appendix O) references compliance with the Canadian Ambient Air Quality Standards (CAAQS) values from 2020. However, dispersion modelling results for nitrogen dioxide (NO₂) and fine particulate matter (PM_{2.5}) indicate exceedances of the currently applicable CAAQS values (i.e., 2025 and 2020, respectively) for these non-threshold substances.</p>	<p>averaging periods). These guidelines have been set at the lowest exposure level to an air pollutant above which the WHO is confident that there is an increase in adverse health effects.</p> <p>Health Canada recommends consideration of keeping clean areas clean and continuous improvement. Any mitigative efforts undertaken as a result of the planned air quality assessment should be undertaken in keeping with these principles. Consequently, the applicable air quality standards, such as the CAAQS, should not be considered as "pollute up-to" levels and the Proponent is encouraged to strive for continuous improvement.</p>	<p>threshold air contaminants to the extent possible.</p>
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Please insert additional rows as necessary.