

**Federal Review Team – Comment Form – draft Integrated Tailored Impact Statement Guidelines and draft Permitting Plan**

**Deep Geological Repository (DGR) for Canada’s Used Nuclear Fuel Project**

**Response required by: May 10, 2026**

Please submit the completed form by May 10, 2026, via email to [NuclearWaste-DechetsNucleaires@iaac-aeic.gc.ca](mailto:NuclearWaste-DechetsNucleaires@iaac-aeic.gc.ca). In order to be posted on the Registry, and to align with the Official Languages Act, IAAC is requiring that your submission be provided in French and English. Please note that this is your opportunity to tailor the draft Integrated Tailored Impact Statement Guidelines.

Department/Agency:	Environment and Climate Change Canada		
IA Contact:	Dan McDonell,	Telephone:	
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**Section 1 – Draft Permitting Plan:**

1. Confirm that all applicable legislative and regulatory oversight that may apply to the project, under the authority of your department or agency, is accurately listed in the draft Permitting Plan.

**Insert response here:**

ECCC does not recommend any changes to the draft Permitting Plan.

2. Indicate whether your department or agency has identified any power that it will be unable to exercise to allow the project to proceed, in whole or in part. For more information, please refer to subsection 17(1) of the IAA.

**Insert response here:**

Based on the limited information currently available, ECCC has not identified any power that it will be unable to exercise to allow the Project to proceed at this time.

**Section 2 – Draft Integrated Tailored Impact Statement Guidelines:**

1. Please review the [draft Integrated Tailored Impact Statement Guidelines](#) (the Integrated Guidelines) sections that are applicable to your department’s or agency’s mandate.
2. Using the table below, given the context of the project, please provide any comments and include your recommendation for how the final Integrated Guidelines should be adapted to address your comments.
  - Please indicate any corrections, additions or deletions that should be made to the text including considerations of submissions from First Nations and other Indigenous communities that are relevant to your departmental expertise. Please provide a clear context and rationale for your recommendations, including how their implementation would help focus the assessment on, and resolve, key issues relevant to federal decision-making.
  - Federal expert advice should be solution oriented and commensurate to the context of the project. Advice should be informed by risk-based prudence and evidence in the proponent’s [Initial Project Description](#), [Summary of Issues](#) (along with supplemental [Consolidated Information on Transportation of Used Fuel – Plain Language](#)), Response to the Summary of Issues, and publicly available information, with a strong reliance on well-understood mitigation measures, existing guidance, and regulatory instruments that will manage effects. Advice should also be informed by a clear understanding of the project and the local biophysical and socio-economic context. In doing so, departments and agencies are encouraged to ensure that information requirements are proportionate, clearly justified, and practicable within the context of the impact assessment process and associated timelines (i.e., GoC 3-year target for nuclear projects). Advice should focus on outcomes and the information necessary to support sound decision-making, while maintaining flexibility in how requirements may be met. Departments and agencies are also encouraged to avoid duplication with existing regulatory instruments and to identify opportunities to streamline the draft Integrated Guidelines, including proposing the removal or consolidation of requirements where effects can be effectively addressed through existing legislative, policy, or permitting frameworks.
3. *Strategic Questions to Inform Advice*
  - *What knowledge/information does your department have in relation to the key issue? Does your department have any ongoing or upcoming relevant studies/initiatives? What information/action might support mitigating/resolving issues?*
  - *Do we have a good understanding of the pathways of effects? Which key VCs or pathways of effects are missing? Do we have common ground on what the key issues are?*
  - *What federal and provincial tools can be leveraged to resolve issues and avoid duplicating efforts? How can we use existing regulatory frameworks to build confidence in predictions and outcomes?*

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ECCC-01	Section 1.3 - Preparing the Impact Statement, pg. 5. Line 166  Document referenced within the TISG:	Within the Project-specific “ <i>Technical Considerations and References for the Preparation of an Impact Statement’s – Deep Geological Repository for Canada’s Used Nuclear Fuel Project (April 10, 2026)</i> ” Table of	It is recommended that the linkage to section 11 (Effects of the Environment on the Project) for reference #74 be corrected.



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	<i>Considerations and References for the Preparation of an Impact Statement– Deep Geological Repository for Canada’s Used Nuclear Fuel Project (April 10, 2026)”</i>	<p>The PSL2 includes releases of radionuclides from nuclear facilities (impact on non-human biota) as one of 25 substances or groups of substances placed on the PSL2.</p> <p>It is missing from the Project-specific “<i>Technical Considerations and References for the Preparation of an Impact Statement – Deep Geological Repository for Canada’s Used Nuclear Fuel Project (April 10, 2026)”</i>”</p>	
ECCC-04	Section 5.5 - Atmospheric, acoustic and visual environment (5.5.1 and 5.5.2), pg.18 - 20	<p>Baseline conditions (Section 5.5.1) and the Effects to the Atmospheric Environment (Section 5.5.2) did not include volatile radionuclides that are the result of fission reactions and may be released by used fuel including tritium, carbon 14, noble gases, iodine-129, Krypton 85 and radioactive particulates such as Cesium 137.</p> <p>Volatile radionuclides that have accumulated in used fuel storage containers may be released during the transfer of used fuel from the current dry storage containers to the DGR containers. Baseline conditions will provide a reference point for monitoring during used fuel container transfer operations as well as post-emplacment of the used fuel in the DGR underground cells to assess the potential effects of emissions of volatile radionuclides.</p>	<p>It is recommended that relevant volatile radionuclides be added among the atmospheric environment parameters for Baseline Conditions and Effects to the Atmospheric Environment as part of the atmospheric environment assessment. These should include but not be limited to the following:</p> <ul style="list-style-type: none"> <li>• <b>tritium</b></li> <li>• <b>carbon 14</b></li> <li>• <b>iodine-129</b></li> <li>• <b>noble gases (e.g. Krypton-85)</b></li> <li>• <b>radioactive particulates (e.g. Cs-137)</b></li> </ul> <p>As appropriate, include the potential radiological dose effects on terrestrial biota as a result of the release of volatile and particulate radionuclides with a particular focus on used fuel container transfers above ground.</p>
ECCC-05	Section 5.5 - Atmospheric, acoustic and visual environment (5.5.1, 5.5.2), pg. 19. Line 597	A newer 2030 Canadian Ambient Air Quality Standard (CAAQS) for PM2.5 is available for 24-hour and annual averaging time, and all CAAQS	Change “2020 and 2025” to “2025 and 2030” (indicated in bold) in the following text on page 19 :

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		standards (PM2.5, O <sub>3</sub> , NO <sub>2</sub> , and SO <sub>2</sub> ) are based on 2025 or later. Therefore, the TISG text referring to the 2020 and 2025 CAAQS standards should be updated to reflect the 2025 and 2030 standards.	<i>standards include: Canadian Ambient Air Quality Standards (CAAQS), National Ambient Air Quality Objectives (NAAQO) or relevant provincial standards. The proponent must refer to the new CAAQS established by the Canadian Council of Ministers of the Environment (CCME) for PM2.5, O3, SO2 and NO2 for <b>2025 and 2030</b>;</i>
ECCC-06	Section 5.5 - Atmospheric, acoustic and visual environment (5.5.1, 5.5.2), pg. 19	Radon is a naturally occurring radioactive gas and would contribute to background radiation. Including a description of existing radon conditions would help provide better context for interpreting potential radiological effects and background atmospheric conditions. This information has consistently been requested in TISGs for other nuclear projects.	ECCC recommends adding the following bullet point under Section 5.5.1: <ul style="list-style-type: none"> <li>• <b>describe existing radon gas conditions;</b></li> </ul>
ECCC-07	Section 5.6 - Groundwater and surface water, pg.22  Document referenced within the TISG:  Project-specific “ <i>Technical Considerations and References for the Preparation of an Impact Statement– Deep Geological Repository for Canada’s Used Nuclear Fuel Project (April 10, 2026)</i> ”	The Federal Environmental Quality Guidelines (FEQGs) provides the latest chemicals/constituents thresholds. It is missing from the Project-specific “ <i>Technical Considerations and References for the Preparation of an Impact Statement – Deep Geological Repository for Canada’s Used Nuclear Fuel Project (April 10, 2026)</i> ”	ECCC suggests adding the FEQGs under water quality as references to the Project-specific “ <i>Technical Considerations and References for the Preparation of an Impact Statement – Deep Geological Repository for Canada’s Used Nuclear Fuel Project (April 10, 2026)</i> ”  <a href="https://www23.international.gc.ca/feqgs/feqgs-eng.aspx">Federal Environmental Quality Guidelines (FEQGs) - Canada.ca</a>
ECCC-08	Section 5.6 - Groundwater and surface water; pg. 22  Section 5.6.1 – Baseline conditions; pg. 22 - Line 690	Description of (presumably project) water requirements do not fall under a characterization of baseline conditions.	ECCC recommends that Line 690 be deleted <ul style="list-style-type: none"> <li>• <del>“describe the expected water requirements for each phase of the project life cycle;”</del></li> </ul>

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		If the presumption is correct, this line is duplicated in Section 5.6.2 Line 817.	
ECCC-09	Section 5.6.2 – Effects to groundwater and surface water; pg. 25 - Line 819	<p>Line 817 requires groundwater and surface water withdrawal requirements, but section 5.6.2 does not explicitly specify that proponent show locations of intake or diversions.</p> <p>Knowing these locations provides a basis to request a more detailed analysis of areas directly affected by those proposed intake / effluent points in relation to the project and can reduce concern for areas far from those points of withdrawal/diversion. The project effects vary based on whether the water body is upstream or downstream of an intake, for example.</p>	<p>ECCC recommends that two sub-bullets be added to Line 817 (bolding added to indicate new wording): “indicate the groundwater and surface water withdrawal requirements during all phases and specify:”</p> <ul style="list-style-type: none"> <li>• <b>“the location of water intakes and water diversions, including the name of the waterbody that this intake or diversion will withdraw water from”</b></li> <li>• <b>“The location of proposed and potential water releases to the receiving environment, including the name of the waterbody that this water will be released to; “</b></li> </ul>
ECCC-10	Section 5.6.2 – Effects to groundwater and surface water; pg. 25 - Line 820	<p>Line 820 describes the conditions under which water is released into the receiving environment, but does not specify what conditions means, as it could be operational conditions (throughput of water process or facility water storage capacity), or environmental conditions (receiving waterbody flow, presence of ice, etc.)</p> <p>The volume of water already present in the receiving water body affects the mixing zone and concentration of COPC and therefore should also affect the quantity of effluent discharge.</p>	<p>ECCC recommends that the following sub-bullet “the conditions under which this water is released into the receiving environment;” be changed to (edited text highlighted in bold)</p> <ul style="list-style-type: none"> <li>• <b>“the operational conditions and environmental conditions under which this water is released into the receiving environment;”</b></li> </ul>
ECCC-11	Section 6 - Biological Environment, pg. 28	Mitigations and Enhancement measures sections are missing from the Draft Integrated Guidelines, specifically the Biological Environment section.	ECCC recommends that mitigation and enhancement measures be added to the Biological Environment Section. The Impact Statement must identify mitigation measures that are technically and economically feasible

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			and that would eliminate, reduce, control or offset adverse effects within federal jurisdiction, and direct or incidental adverse effects.
ECCC-12	<p>Section 6.1 - Terrestrial, riparian and wetland environments -</p> <p>Section 6.1.1 - Baseline conditions; pg. 28. Line 894-896</p>	<p>The Draft Integrated Guidelines states</p> <p><i>“The Impact Statement must:</i></p> <p>... </p> <ul style="list-style-type: none"> <li>• <i>species at risk, including those listed in Schedule 1 of the SARA, provincially listed or assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) [43] to be ‘at risk,’ including species of concern;</i></li> <li>• <i>critical habitat as described in final or draft recovery strategies or action plans for species at risk;”</i></li> </ul> <p>Migratory birds and their habitat are missing from this list.</p>	<p>ECCC recommends the following bullet be added (indicated in bold):</p> <ul style="list-style-type: none"> <li>• <b>migratory birds and their habitat, including those listed under Schedule 1 of Migratory Bird Regulations, 2022;</b></li> </ul>
ECCC-13	<p>Section 6.5 - Species at risk and their habitat –</p> <p>Section 6.5.1 - Baseline conditions; pg. 37-38</p>	<p>The Draft Integrated Guidelines states</p> <p><i>“The Impact Statement must:</i></p> <ul style="list-style-type: none"> <li>• <i>provide a list of all species at risk that are likely to be in the project area, including:</i> <ul style="list-style-type: none"> <li>○ <i>species listed in Schedule 1 of SARA; and</i></li> <li>○ <i>species assessed by COSEWIC as extirpated, endangered, threatened or of special concern. It is recommended to refer to the most recent COSEWIC annual report for the list of assessed wildlife species posted on its website;”</i></li> </ul> </li> </ul>	<p>ECCC recommends that the list of species at risk be expanded to also include species likely present in the local study area (LSA) and regional study area (RSA) as direct and indirect effects can extend beyond the project area.</p> <p><b><i>The Impact Statement must:</i></b></p> <ul style="list-style-type: none"> <li>• <b><i>provide a list of all species at risk that are likely to be in the LSA and RSA, including:</i></b> <ul style="list-style-type: none"> <li>○ <b><i>species listed in Schedule 1 of SARA; and</i></b></li> <li>○ <b><i>species assessed by COSEWIC as extirpated, endangered, threatened or of special concern. It is recommended to refer to the most recent COSEWIC annual report for the list of assessed wildlife species posted on its website;</i></b></li> </ul> </li> </ul>

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		<p>The list for species at risk appears to be limited to the project area (PA), whereas the section on terrestrial wildlife species and their habitat (Sec. 6.4.1) refer to study areas, that likely extend beyond the project area; and the section on birds and their habitat (Sec. 6.3.1) refers to both a local study area (LSA) and regional study area (RSA).</p>	
ECCC-14	Section 9.2 - Mitigation measures. Pg. 63	<p>Section 9 of the TISG addresses the effects of potential accidents or malfunctions, incorporating the key pillars of a comprehensive risk assessment. Although Section 2.5 of the <i>Generic Requirements for Impact Statements</i> instructs the Proponent to consider residual adverse federal effects, as well as impacts on Indigenous Peoples and their rights, the Integrated Guidelines do not explicitly reference the assessment of residual effects.</p> <p>Mitigation measures reduce the likelihood and impacts of adverse effects but there will always be effects remaining – Residual effects.</p>	<p>ECCC recommends including a bullet point on the assessment of residual effects, as the other key aspects of a comprehensive risk assessment, including those already part of the <i>Generic Requirements for Impact Statements</i> are already reflected in the section addressing accidents or malfunctions.</p> <p>ECCC proposes adding the following bullet to section 9.2 (refer to bolded text):</p> <p><b>“Describe the anticipated residual adverse environmental, health, social and economic effects, including impacts on Indigenous Peoples and their rights, arising from the identified scenarios once technically and economically feasible mitigation measures have been taken into account.”</b></p>
ECCC-15	Section 11 – Effects of the Environment on the Project, p.69, lines 2259-2260	This final bullet of Section 11 is about seismic events but contains a reference to climate change resilience assessments and the SACC.	It is recommended that IAAC move the final sentence of this bullet to earlier in this section where climate change resilience is discussed.

*Insert as many rows as applicable*