

1 Concordance Tables

Concordance tables have been generated between the Environmental Impact Statement (EIS) for the Wheeler River Project and the following documents:

- Canadian Nuclear Safety Commission (CNSC) Generic Guidelines for the Preparation of an Environmental Impact Statement Pursuant to the *Canadian Environmental Assessment Act* (CEAA), 2012 (version: March 23, 2021); and
- Denison Mines Wheeler River Terms of Reference (version: May 2019).



Canadian Nuclear Safety Commission – Generic Guidelines for the Preparation of an Environmental Impact Statement Pursuant to the *Canadian Environmental Assessment Act*, 2012

Section in CNSC Guidelines	Requirement ¹	Section in the EIS
PART 2 – Content	of the Environmental Impact Statement	
	Presentation and Organization The title page of the EIS and related documents contain the following information: • project name and location;	Front covers for each section and in Section 1
	 title of the document, including the term "environmental impact statement"; subtitle of the document; proponent name and contact information; and 	
3. Introduction and	• date.	
Section 1.0	The EIS will include: a glossary of technical terms; a list of acronyms and abbreviations; and charts, diagrams, tables, maps and photographs where appropriate to clarify the text.	Within each section of the EIS
Section 2.0	 Executive Summary The summary of the EIS is to be provided in English and French, is encouraged to be made available in the language(s) spoken by Indigenous communities (e.g., Cree and Dene) and will include: a concise description of all key components and related activities; a summary of the consultation conducted with Indigenous groups, the public, and government agencies, including a summary of the issues raised and the proponent's responses; an overview of the key environmental effects of the project and proposed technically- and economically-feasible mitigation measures; the proponent's conclusions on the residual environmental effects of the project after taking mitigation measures into account and the significance of those effects; and sufficient details for the reader to learn about and understand the project, its potential environmental effects, mitigation measures, the significance of the residual effects and the follow-up program. 	Executive Summary
Section 3.1	About the Proponent In the EIS, the proponent will: • provide contact information (e.g., name, address, phone, fax, email); • identify itself and provide the name of the legal entity or entities that would develop, manage and operate the project; • describe corporate and management structures; and	• 1.2



Section in CNSC Guidelines	Requirement ¹	Section in the EIS
Guidelines	 identify key personnel, contractors and/or sub-contractors responsible for preparing the EIS. 	
Section 3.2	Project Overview Describe the project, key project components and associated activities, scheduling details, the timing of each phase of the project and other key features	Executive SummarySection 1Section 2
Section 3.3	Project Location The EIS will contain a description of the geographical setting where the project will take place.	Executive SummarySection 1
Section 3.4 4. Project Descript	Regulatory Framework and the Role of Government The EIS should identify: • the environmental and other regulatory approvals and legislation, including CEAA 2012, that are applicable to the project at the federal, provincial, regional and municipal levels; • government policies, resource management plans, planning or study initiatives pertinent to the project and/or Environmental Assessment (EA) and their implications; • any treaty or self-government agreements with Indigenous groups that are pertinent to the project and/or EA; • any relevant land use plans, land zoning, or community plans; and • regional, provincial and/or national objectives, standards or guidelines that have been used by the proponent to assist in the evaluation of any predicted environmental effects.	 1.2; 1.7 4.3; 4.4; 4.5; 4.7
Section 4.1	Propose of the Project Provide the rationale for the project, explaining the background, the problems or opportunities that the project is intended to satisfy and the stated objectives from the perspective of the proponent.	• 1.3
Section 4.2	Alternative Means of Carrying Out the Project Identify and consider the effects of alternative means of carrying out the project that are, from the perspective of the applicant, technically and economically feasible. Conduct an environmental effects analysis where final decisions have not been made about the placement of project infrastructure, the technologies to be used, or if several options exist for various project components.	2.10Appendix 2-C
Section 4.3	Scope of the Project The proponent will consider all phases, components, activities and federal decisions identified in the scope of project as part of the effects assessment. The EIS will include: • a summary of the changes that have been made to the project since originally proposed, including	Section 2
	 the benefits of these changes to the environment, Aboriginal peoples, and the public; and a schedule including time of year, frequency and duration for all project activities. 	



Section in CNSC Guidelines	Requirement ¹	Section in the EIS
5. Scope of the en	vironmental assessment	
Section 5.1	Factors to be Considered The EA of the designated project must take into account the following factors, as listed in subsection 19(1) of the CEAA 2012: a) the section 5 environmental effects of the designated project (such as changes to fish and fish habitat, aquatic species, migratory birds), including the environmental effects of malfunctions or accidents that may occur in connection with the designated project, and any cumulative environmental effects likely to result from the designated project in combination with other physical activities that have been or will be carried out;	 6.1.4 to 6.1.7; 6.2.4 to 6.2.7 7.4 to 7.7 8.1.4 to 8.1.7; 8.2.4 to 8.2.7; 8.3.4 to 8.3.7; 8.4.4 to 8.4.7; 8.5.4 to 8.5.7 9.1.4 to 9.1.7; 9.2.4 to 9.2.7; 9.3.4 to 9.3.7; 9.4.4 to 9.4.7 10.1.4 to 10.1.7; 10.2.3 to 10.2.6 11.1.4 to 11.3.7 12.1.4 to 12.1.7; 12.2.4 to 12.2.7; 12.3.4 to 12.3.7 13.3 to 13.6
b) the significance of those environmental effects;		 6.1.6; 6.2.6 7.6 8.1.6; 8.2.6; 8.3.6; 8.4.6; 8.5.6 9.1.6; 9.2.6; 9.3.6; 9.4.6 10.1.6; 10.2.5 11.1.6; 11.2.6; 11.3.6 12.1.6; 12.2.6; 12.3.6 13.5
	c) comments from the public that are received in accordance with the CEAA 2012;	• 4.3; 4.4; 4.5; 4.6; 4.7
	d) mitigation measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the designated project;	 6.1.5; 6.2.5 7.5 8.1.5; 8.2.5; 8.3.5; 8.4.5; 8.5.5 9.1.5; 9.2.5; 9.3.5; 9.4.5 10.1.5; 10.2.4 11.1.5; 11.2.5; 11.3.5 12.1.5; 12.2.5; 12.3.5 13.4
	e) the requirements of the follow-up program in respect of the designated project;	 6.1.8; 6.2.8 7.8 8.1.8; 8.2.8; 8.3.8; 8.4.8; 8.5.8 9.1.8; 9.2.8; 9.3.8; 9.4.8 10.1.8; 10.2.7 11.1.8; 11.2.8; 11.3.8 12.1.8; 12.2.8; 12.3.8



Section in CNSC Guidelines	Requirement ¹		Section in the EIS
	f) the purpose of the designated project;	•	13.7 1.3
	g) alternative means of carrying out the designated project that are technically and economically feasible and the environmental effects of any such alternative means; and	•	2.10
	h) any changes to the designated project that may be caused by the environment. ²	•	Section 15
	In conjunction with subsections 4.1 and 4.4 of REGDOC-2.9.1, Environmental Protection: Environmental Policy, Assessments and Protection Measures, the CNSC requires an environmental risk assessment (ERA) and a human health risk assessment (HHRA) as part of the EIS.	•	Appendix 10-A 10.1.6.1
	• identifies facility- or activity-specific characteristics and site-specific environmental characteristics		
	 identifies interactions between those characteristics 		
	 assesses the likelihood and significance of these interactions and the resulting potential effects on the environment and the public 		
	Where there is a reliable and feasible methodology for calculating upstream greenhouse gas emissions that are linked to the project, the proponent will be required to provide sufficient information to estimate these types of emissions.	•	2.5
Section 5.2	Valued Components to be Examined	•	• 5.3 • 6.1.1; 6.2.1 • 7.1.1 • 8.1.1.1; 8.1.1.2; 8.2.1.1; 8.2.1.2; 8.3.1.1; 8.3.1.2; 8.4.1.1; 8.4.1.2; 8.5.1.1; 8.5.1.2
	• The EIS will identify the VCs linked to section 5 of the CEAA 2012, including those identified in section 9.2 (part 2) that may be affected by changes in the environment, as well as species at risk and their critical habitat as per the requirement outlined in section 79 of the <i>Species at Risk Act</i> (SARA).	•	
	 The final list of VCs to be presented in the EIS will be completed according to the evolution and design of the project and reflect the knowledge about the environment acquired through public consultation and Indigenous engagement. 	•	
	 VCs will be described in sufficient detail to allow the reviewer to understand their importance and to assess the potential for environmental effects arising from the project activities. 	•	9.1.1.1; 9.1.1.2; 9.2.1.1; 9.2.1.2; 9.3.1.1; 9.3.1.2; 9.4.1.1; 9.4.1.2 10.1.1.1; 10.1.1.2;10.2.1.1; 10.2.1.2
	 The EIS will provide a rationale for selecting specific VCs and for excluding any VCs or information specified in these guidelines. 	•	11.1.1; 11.2.1.1 12.1.1.1; 12.2.1.1; 12.3.1.1 13.1.1
Section 5.2.2	Spatial and Temporal Boundaries The EIS will describe the spatial boundaries, including local and regional study areas, of each VC to be used in assessing the potential adverse environmental effects of the project and provide a rationale for each boundary. a) the physical extent of the proposed project, including any off-site facilities or activities b) the extent of aquatic and terrestrial ecosystems potentially affected by the project c) the extent of potential effects arising from noise, light and atmospheric emissions d) the extent to which traditional land use or treaty rights could potentially be affected by the project	•	4.3.2; 4.4.1 5.3.3; 5.3.4 6.1.1.3; 6.2.1.3 7.1.3.1; 7.1.3.2 8.1.1.3; 8.2.1.3; 8.3.1.3; 8.4.1.3; 8.5.1.3 9.1.1.3; 9.2.1.3; 9.3.1.3; 9.4.1.3



Section in CNSC Guidelines	Requirement ¹	Section in the EIS
	e) current land and resource use for residential, commercial, industrial, recreational, cultural and aesthetic purposes by communities whose areas include the physical extent of the project f) the size, nature and location of past, present and reasonably foreseeable projects and activities which could interact with items (b), (c), (d) and (e) g) community and Indigenous traditional knowledge, and ecological and technical considerations	 12.1.1.3; 12.2.1.3; 12.3.1.3 13.1.3
6. Public and Stake	pholder Consultation	
Section 6	Public and Stakeholder Consultation In accordance with CNSC's REGDOC-99.3, Public Information and Disclosure, the EIS will describe the ongoing and proposed participation activities that the proponent will undertake or that it has already conducted on the project. It will describe efforts made to distribute project information, and describe the information and materials that were distributed during the public consultation process. The EIS will indicate the methods used, where the consultation was held, the persons and organizations consulted, the concerns voiced and the extent to which this information was incorporated in the design of the project as well as in the EIS. The EIS will provide a summary of key issues raised related to the Project and its potential environmental effects, as well as describe any outstanding issues and ways to address them.	 3.4 4.3; 4.4; 4.5; 4.7 5.4 6.1.2; 6.2.2 7.2 8.1.2; 8.2.2; 8.3.2; 8.4.2; 8.5.2 9.1.2; 9.2.2; 9.3.2; 9.3.3.1.2; 9.3.3.2.2; 9.3.3.3.2; 9.4.3.1.2; 9.4.3.2.2; 9.4.3.3.2 10.1.2; 10.2.2 11.1.2; 11.2.2 12.1.2; 12.2.2; 12.3.2 13.1.4
7. Indigenous Enga		
Section 7.	Indigenous Engagement In accordance with the CNSC's REGDOC-3.2.2, Indigenous Engagement, the EIS will describe the proponent's engagement activities with potentially affected Indigenous groups. The EIS will include, and the proponent should consider engaging with potentially affected Indigenous groups to obtain their views on the following: • the objectives of Indigenous engagement and methods used; • each Indigenous group's potential or established rights including geographical extent, nature, frequency, timing and maps and data sets when this information is provided by a group to the proponent or available through public records; • comments, specific issues and concerns raised by Indigenous groups and how the key concerns were responded to or addressed;	 3.4 4.3; 4.4; 4.7 5.4 6.1.2; 6.2.2 7.2 8.1.2; 8.2.2; 8.3.2; 8.4.2; 8.5.2 9.1.2; 9.2.2; 9.3.2; 9.3.3.1.2; 9.3.3.2.2; 9.3.3.3.2; 9.4.2; 9.4.3.1.2; 9.4.3.2.2; 9.4.3.3.2 10.1.2; 10.2.2 11.1.2; 11.2.2
	 the potential adverse impacts of the project on potential or established Indigenous or treaty rights; the effects of changes to the environment on Indigenous peoples (health and socio-economic conditions; physical and cultural heritage, including any structure, site or thing that is of historical, archaeological, paleontological or architectural significance; and current use of lands and resources for traditional purposes) pursuant to paragraph 5(1)(c) of the CEAA 2012; 	• 12.1.2; 12.2.2; 12.3.2 • 13.1.4



Section in CNSC Guidelines	Requirement ¹	Section in the EIS
	 VCs suggested by Indigenous groups for inclusion in the EIS, whether they were included, and the rationale for any exclusions; and measures identified to mitigate or accommodate potential adverse impacts of the project on the potential or established Indigenous or treaty rights and effects of changes to the environment on Indigenous peoples, including suggestions raised by Indigenous groups. 	
8. Description of th	ne Environment	
Section 8.1	Baseline Environment The EIS will include a description of the environment, including the components of the existing environment and environmental processes, their interrelations and interactions as well as the variability in these components, processes and interactions over time scales appropriate to the EIS. In characterizing the environmental effects of the project, the proponent will consider the current baseline environment and environmental trends within the project area. The description of the existing baseline and the environmental trends should include a consideration of past projects and activities carried out by the proponent and/or others within the project area. The EIS will present baseline information in sufficient detail to enable the identification of how the project could affect the VCs and an analysis of those effects. The baseline description should include results from studies done prior to any physical disruption of the environment due to initial project activities. As a minimum, the EIS will include a description of the following biophysical and human (health/socioeconomic) environmental components:	 4.3; 4.4; 4.5; 4.6; 4.7 5.5
8.2	Baseline - atmospheric environment;	• 6.1.3; 6.2.3
8.3	Baseline - surface water environment;	• 8.1.3
8.4	Baseline - aquatic environment;	• 8.2.3; 8.3.3; 8.4.3; 8.5.3
8.5	Baseline - geological and hydrogeological environment;	• 7.3.1; 7.3.2;
8.6	Baseline -terrestrial environment;	• 9.1.3; 9.2.3; 9.3.3; 9.4.3
8.7	Baseline - ambient radioactivity;	• 6.1.3
8.8	Baseline - human health; and	• 10.1.3; 10.2.3
8.9	Baseline - Indigenous land and resource use.	• 11.1.3; 11.2.3



Section in CNSC Guidelines	Requirement ¹	Section in the EIS
		12.1.3; 12.2.3; 12.3.313.2
9. Effects Assessm Section 9.1	Predicted Changes to the Physical Environment The assessment will include a consideration of the predicted changes to the environment as a result of the project being carried out or as a result of any powers, duties or functions that are to be exercised by the federal government in relation to the project. These predicted changes to the environment are to be considered in relation to each phase of the project (i.e., construction, operation, decommissioning) and are to be described in terms of magnitude; geographic extent; duration and frequency; and whether the environmental changes are reversible or irreversible. As changes to various parts of the physical environment may be inter-related as part of an ecosystem, the EIS will explain and describe the connections between the changes described.	 4.3; 4.4; 4.5; 4.6; 4.7 5.6; 5.8 6.1.6; 6.2.6 7.4.2.1; 7.4.2.2; 7.4.2.3; 7.4.2.4; 7.4.2.5; 7.4.2.6 8.1.6; 8.2.6; 8.3.6; 8.4.6; 8.5.6 9.1.6; 9.2.6; 9.3.6; 9.4.6 10.1.6; 10.2.5 11.1.6; 11.2.6 12.1.6; 12.2.6; 12.3.6 13.5
Section 9.2	Predicted Effects on Valued Components The proponent is to assess the environmental effects of the project on the VCs identified as per section 5.2.1 (part 2). All interconnections between VCs and between changes to multiple VCs will be described The proponent will use the information in appendix C of the CNSC's REGDOC-2.9.1, Environmental Protection: Environmental Policy, Assessments and Protection Measures and CEAA 2012 guidance documents listed on the Impact Assessment Agency's website for guidance on assessing the environmental effects of the.	 5.6; 5.8 6.1.4; 6.1.6; 6.2.4; 6.2.6 7.4.2; 7.4.2.1; 7.4.2.2; 7.4.2.3; 7.4.2.4; 7.4.2.5; 7.4.2.6 8.1.4; 8.1.6; 8.2.4; 8.2.6; 8.3.4; 8.3.6; 8.4.4; 8.4.6; 8.5.4; 8.5.6 9.1.4; 9.1.6; 9.2.4; 9.2.6; 9.3.4; 9.3.6; 9.4.4; 9.4.6 10.1.4; 10.1.4.1; 10.1.4.2; 10.1.6; 10.2.4; 10.2.5 11.1.4; 11.1.6; 11.2.4; 11.2.6; 11.3.4; 11.3.6 12.1.4; 12.1.6; 12.2.4; 12.2.6; 12.3.4; 12.3.6 13.3; 13.5
Section 9.3	The EIS will describe the standard mitigation practices, policies and commitments that constitute technically and economically feasible mitigation measures and that will be applied as part of standard practice regardless of location (including the measures directed at mitigating adverse socioeconomic effects). The EIS will describe the project's environmental protection plan and its environmental management system, through which the proponent will deliver this plan.	 2.8; 2.9 4.6 5.7 6.1.5; 6.2.5 7.5.1 8.1.5; 8.2.5; 8.3.5; 8.4.5; 8.5.5 9.1.5; 9.2.5; 9.3.5; 9.4.5 10.1.5; 10.2.5 11.1.5; 11.2.5



Section in CNSC	Requirement ¹	Section in the EIS
Guidelines		
	 The EIS will further discuss the mechanisms the proponent would use to require its contractors and sub-contractors to comply with these commitments and policies and with auditing and enforcement programs. The EIS will describe mitigation measures that are specific to each environmental effect identified. Measures will be written as specific commitments that clearly describe how the proponent intends to implement them and the environmental outcome the mitigation is designed to address. The EIS will describe mitigation measures in relation to species and/or critical habitat listed under the SARA. These mitigation measures will be consistent with any SARA permit, applicable recovery strategy and/or action plan. The EIS will specify the actions, works, minimal disturbance footprint techniques, best available technology, corrective measures or additions planned during the project's various phases to eliminate or reduce the significance of potential adverse effects. The impact statement will also present an assessment of the effectiveness of the proposed technically and economically feasible mitigation measures. The basis used to determine whether the mitigation measure reduces the significance of a potential adverse effect will be made explicit. The proponent is also encouraged to identify mitigation measures for effects that are adverse although not significant. The EIS will indicate what other technically and economically feasible mitigation measures were considered, and explain why they were rejected. Trade-offs between cost savings and effectiveness of the various forms of mitigation will be justified. The EIS will identify who is responsible for the implementation of these measures and the system of accountability. For proposed mitigation measures for which there is little experience or that have questionable effectiveness, the potential environmental risks and effects – should those measures not be effective – will be clearly and concisely described. In add	 12.1.5; 12.2.5; 12.3.5 13.4
	The EIS will document specific suggestions raised by Indigenous groups for mitigating the effects of changes to the environment on Indigenous peoples (section 5(1)(c) of CEAA 2012). For the mitigation measures intended to address the effects of changes to the environment for Indigenous peoples, the proponent must discuss the residual effects with the Indigenous groups prior to submitting the EIS.	
Section 9.4	Other Effects to Consider	Section 14
	9.4.1 Accidents and Malfunctions	Appendix 14-A
	 The applicant should provide an assessment of potential health and environmental effects resulting from postulated radiological and conventional malfunctions or accidents. The EIS should also include any mitigation measures, such as monitoring, contingency, clean-up or restoration work in the surrounding environment that would be required during or immediately following the postulated malfunction and accident scenarios. 	



Section in CNSC Guidelines	Requirement ¹	Section in the EIS
Guidelines	 The EIS should provide a description of postulated malfunction and accident sequences leading to a radiological or non-radiological release considering, as appropriate, internal events, external events and human-induced events, including their frequency, an explanation of how these events were identified and any modeling that was performed. The EIS should include the source, quantity, mechanism, pathway, rate, form and characteristics of contaminants and other materials (physical and chemical) likely to be released to the surrounding environment during the postulated malfunctions and accidents. 	
	9.4.2 Effects of the Environment on the Project	Section 15
	 The EIS shall take into account how the environment could adversely affect the project and how this in turn could result in effects on the project. The applicant shall also take into account any potential effects of climate change on the project, including an assessment of whether the project might be sensitive to changes in climate conditions during its lifecycle. The EIS will provide details of planning, design and construction strategies intended to minimize the potential environmental effects of the environment on the project. 	 6.1.7.1; 6.2.7.1 7.7.1 8.1.7.5; 8.2.7.4; 8.3.7.6; 8.4.7.6. 8.5.7.6 9.1.7.1.1; 9.1.7.2.1; 9.1.7.3.1; 9.2.7.1; 9.3.7.4; 9.4.7.5 10.1.7.1 11.1.7; 11.2.7 12.1.7.1; 12.2.7.1; 12.3.7.1 13.6.1
	9.4.3 Cumulative Effects	• 5.9
	The applicant shall assess any residual adverse environmental effects of the project in combination with other past, present or reasonably foreseeable projects and/or activities within the study area.	 6.1.7; 6.2.7 7.7.1 8.1.7; 8.2.7; 8.3.7; 8.4.7; 8.5.7 9.1.7; 9.2.7; 9.3.7; 9.4.7 10.1.7; 10.2.7 11.1.7; 11.2.7 12.1.7; 12.2.7; 12.3.7 13.6
10. Conclusion on S	Significance of Residual Effects	
10	Conclusion on Significance of Residual Effects The applicant shall assess the significance of any residual effects that persist, taking into consideration the proposed mitigation measures. Some specific criteria to be assessed are: magnitude of the effect spatial extent of the effect duration and frequency of the effect degree to which the effect can be reversed or mitigated ecological importance	 5.8 6.1.6.2.1; 6.2.6.2.1 7.6.1; 7.6.2; 7.6.2.1; 7.6.2.2 8.1.6.3; 8.2.6.3; 8.3.6.3; 8.4.6.3; 8.5.6.3 9.1.6.4; 9.2.6.5; 9.3.6.6; 9.4.6.5 10.1.6.2; 10.1.6.3; 10.2.6 11.1.6.4; 11.2.6.4 12.1.6.3; 12.2.6.3; 12.3.6.3 13.5.3



Section in CNSC Guidelines	Requirement ¹	Section in the EIS
11	Follow-up Program The EIS shall include a framework or preliminary program upon which EA follow-up actions will be managed throughout the life of the project. Where applicable, the proponent will describe how the follow-up program relates to the project's environmental protection plan and environmental management system. Environmental assessment effects predictions, assumptions and mitigation actions that are to be tested in the follow-up program must be converted into field-testable monitoring objectives. The monitoring design must include a statistical evaluation of the adequacy of existing baseline data to provide a benchmark for testing project effects, and the need for any additional pre-construction or pre-operational monitoring to establish a firmer project baseline. The proponent will propose a schedule for the follow-up program. The schedule should indicate the timing, frequency and duration of effect monitoring. This schedule would be developed after statistical evaluation of the length of time needed to detect effects given estimated baseline variability, probable environmental effect size and desired level of statistical confidence in the results (type 1 and type 2 errors). The EIS should provide discussion on the follow-up program's requirements, and include:	 4.7 5.10 6.1.8; 6.2.8 7.8.1; 7.8.2; 8.2.8; 8.3.8; 8.4.8; 8.5.8 9.2.8; 9.3.8; 9.4.8 10.1.8; 10.2.8 11.1.8; 11.2.8 12.1.8; 12.2.8; 12.3.8 13.7 Appendix 16-C
	 objectives and structure of the follow-up program and the VCs targeted by the program; tabular summary and explanatory text of the main components of the program including: a description of each monitoring activity under that component; which of the two generic program objectives the activity is relevant to (e.g., verify EA predictions, determine effectiveness of mitigation measures); the specific statement from the EA that goes along with that generic objective and will be the focus for that activity (e.g., program objective: verify predicted effects; environmental assessment effect: no potential adverse effects); the specific monitoring objective for that activity; and planned schedule. 	
	 roles and responsibilities to be played by the proponent, regulatory agencies, Indigenous people, local and regional organizations and others in the design, implementation and evaluation of the program results; possible involvement of independent researchers; program funding sources; information management and reporting (reporting frequency, methods and format); and possible opportunities for the proponent to include the participation of the public and Aboriginal groups, during the development and implementation of the program. 	

¹ Canadian Nuclear Safety Commission (CNSC). 2021. Generic Guidelines for the Preparation of an Environmental Impact Statement – Pursuant to the *Canadian Environmental Assessment Act*, 2012. Dated: March 2021.

² Conditions i and j of subsection 19(1) of CEAA 2012, as listed in CNSC 2021, do not apply to this EA as per CNSC (2019). Request for a Commission Decision on the Scope of an Environmental Assessment CMD: 19-H111. November 29, 2019.



Denison Mines Wheeler River Terms of Reference (May 2019)¹

Section in Terms of Reference	Requirement	Section in EIS
1.0	Executive Summary For efficiency and to improve communication with Stakeholders, Denison Mines Corp. (Denison) will prepare a summary of the Environmental Impact Statement (EIS) for the Wheeler River Project (i.e., Wheeler or the Project) in other languages if requested by Stakeholder groups (i.e., French, Cree and Dene). This will include:	Executive Summary
	 a concise description of all key components of the Project and related activities; a summary of the consultation conducted with Indigenous groups, the public, and government agencies, including a summary of the issues raised and Denison's responses; an overview of the key environmental effects of the Project and proposed technically and economically feasible mitigation measures; and Denison's conclusions on the residual environmental effects of the Project after taking mitigation measures into account and the significance of those effects. 	
2.0	Environmental Assessment Requirements The provincial and federal environmental assessment requirements will be outlined in the EIS.	• 1.7
3.0	Project Introduction and Overview Denison will summarize the Project's key components and associated activities, scheduling details, the timing of each phase of the Project and other key features. The Project Introduction and Overview will identify the Project's key components; a detailed description of the Project will follow in Section 4 Project Description.	Executive SummarySection 1Section 2
3.1	Project Proponent A profile of Denison will be provided, including the name of the legal entity, the Project contact person(s), and their contact information, including a mailing address. A discussion of Denison's qualifications and expertise will be outlined.	• 1.2
3.2	Project Location A description of the geographical setting where the Project will take place including: maps of the Project location at various relevant scales; current land use in the area; distance of the Project to any federal lands; distance of the Project to nearby communities; distance of the Project to other past, present or reasonably foreseeable future projects in the area; environmental significance of the area; identification of any environmentally sensitive areas; description of local and Indigenous communities; and traditional Indigenous territories, reserve lands and harvesting regions.	 5.9 11.1.1.3; 11.2.1.3 12.1.1.3; 12.2.1.3; 12.3.1.3 13.1.3
3.3	Regulatory Framework Denison will identify environmental and other regulatory approvals and legislation applicable to the Project at the federal, provincial, and regional levels. A list of anticipated permits, approvals and licences for the Project	• 1.7



Section in Terms of Reference	Requirement	Section in EIS
	will be provided along with a list of guidelines, policies, and standards used in the development of the Environmental Impact Assessment (EIA).	
4.0	 Project Description The Project will be described in the appropriate sections of the EIA, and at a minimum will include: detailed descriptions of all Project components including both on-site and off-site infrastructure and other facilities or activities. appropriately-scaled maps and/or drawings of the Project components and activities; all the activities associated with Wheeler will be covered for the life of the Project from construction through decommissioning with an appropriate level of detail; describe the construction phase and provide a Project schedule, in years; and describe the benefits of the Project, including jobs created, local training, employment and business opportunities. 	Section 2
4.1	Purpose of the Project The EIS will describe the purpose of the Project by providing the rationale for the Project, explaining the background, the problems or opportunities that the Project is intended to satisfy and the stated objectives from Denison's perspective.	1.3;2.1; 2.10.1
4.2	Scope of the Project	Section 2
	4.2.1 Project Components In the EIS Denison will describe the Project by presenting the Project components, associated and ancillary works, and other characteristics that will assist in understanding the potential environmental effects.	• 2.2; 2.4
	4.2.2 Project Activities The Wheeler EIS will include descriptions of each phase associated with the proposed Project, including descriptions of the activities to be carried out during each phase, the location of each activity, expected outputs and an indication of the activity's magnitude and scale The EIS will include a summary of the changes that have been made to the Project since originally proposed, including the benefits of these changes to the environment and to Project Stakeholders. The EIS will include a schedule including time of year, frequency, and duration for all Project activities.	• 2.3
	4.2.2.1 Decommissioning, Reclamation and Abandonment The EIA will provide a conceptual decommissioning plan that incorporates the following decommissioning objectives: • preferred procedures for decommissioning; • target decommissioning objectives for the mining area; • alternative procedures for decommissioning the site facilities, if applicable; • decommissioning, reclamation and closure of all related works and surface disturbance; • identification of acceptable post-operational land-use options for the Project site; • post-operational landforms and hydrology; • environmental impact mitigation and reclamation measures;	• 2.3.3



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Section in Terms of Reference	Requirement	Section in EIS
	 proposed monitoring to determine if species will re-occupy the site; and proposed contingency measures. As part of the licensing process, Denison commits to completing a preliminary cost estimate for decommissioning and reclamation based upon the conceptual decommissioning plan presented in the EIA. Denison will also outline criteria for acceptance of the Project into the provincial institutional control 	
4.3	program including commitments to monitor for decommissioning success prior to final closure. Project Alternatives The following will be included: • a brief description of the alternatives considered that were technically and economically feasible for mining and processing and placement of site infrastructure; • the key issues considered in evaluating the alternatives; • an analysis of the Project alternatives; and • a justification for the preferred alternatives.	2.10 and Appendix 2-C
4.4	Ancillary Projects The EIS will provide a general description of ancillary projects associated with Wheeler, including timelines and identifying any major environmental and socio-economic implications.	• 2.4
5.0	Stakeholder Engagement and Consultation In the EIS, Denison will provide a summary of the engagement undertaken with local and regional Indigenous communities, regulatory agencies and the general public. This summary will include feedback, issues, questions and concerns raised, and how these issues and concerns were addressed through design of the Project and incorporated into various aspects of the assessment.	 3.4 4.2; 4.3; 4.4; 4.5; 4.6; 4.7 Appendix 4-A Appendix 2-A; Appendix 6-B; Appendix 7-B; Appendix 8-A; Appendix 9-A; Appendix 10-B; Appendix 11-A; Appendix 12-A; Appendix 13-A; Appendix 14-A; Appendix 15-A.
6.0	Scope of the Environmental Assessment	Section 5
6.1	Factors to be Considered Denison's assessment for Wheeler will take into account the factors listed in subsection 19(1) of CEAA 2012.	Section 5
6.2	Valued Components The EIS will provide rationale for selecting VCs and will describe VCs in sufficient detail to allow reviewers to understand their importance and assess potential effects from Project activities. Justification will be provided for excluding any biophysical or human components identified in provincial and federal EIA guides, such as species of conservation concern. Similarly, Denison will also provide rationale for excluding any biophysical or human components as VCs in the assessment where the component was identified to be of concern from stakeholder engagement.	 4.3.2; 4.3.4; 4.4.1; 4.4.2 5.3.1 6.1.1; 6.2.1; 7.1.1; 7.1.1.1 8.1.1.1; 8.1.1.2; 8.2.1.1; 8.2.1.2; 8.3.1.1; 8.3.1.2; 8.4.1.1; 8.4.1.2; 8.5.1.1; 8.5.1.2 9.1.1.1; 9.2.1.1; 9.3.1.1; 9.3.1.2; 9.4.1.1; 9.4.1.2 10.1.1.1; 10.1.1.2; 10.2.1.1; 10.2.1.2



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		 11.1.1.1; 11.2.1.1 12.1.1.1; 12.2.1.1; 12.3.1.1 13.1.1
6.3	In the EIS there will be a description of spatial boundaries related to potential impacts or influences scaled accordingly within the appropriate sections.	 4.3.2; 4.3.4 5.3.3 6.1.1.3; 6.2.1.3 7.1.3.1 8.1.1.3; 8.2.1.3; 8.3.1.3; 8.4.1.3; 8.5.1.3 9.1.1.3; 9.2.1.3; 9.3.1.3.1; 9.4.1.3.1 10.1.1.3; 10.2.1.3 11.1.1.3; 11.2.1.3 12.1.1.3; 12.2.1.3; 12.3.1.3 13.1.3
6.4	In the EIS, the temporal boundaries will be described as appropriate for each activity and cumulatively will cover the life of the Project	 4.3.2 5.3.4 6.1.1.3; 6.2.1.3 7.1.3.2 8.1.1.3; 8.2.1.3; 8.3.1.3; 8.4.1.3; 8.5.1.3 9.1.1.3; 9.2.1.3; 9.3.1.3.2; 9.4.1.3.2 10.1.1.3; 10.2.1.3 11.1.1.3; 11.2.1.3 12.1.1.3; 12.2.1.3; 12.3.1.3 13.1.3
7.0	Effects Assessment Denison has completed a comprehensive baseline program and commits to providing a transparent examination of potential effects to the identified VCs following the typical EIA analysis. The effects assessment section will be completed for each part of the biophysical and human environments.	 4.2.2; 4.3.2; 4.3.4; 4.4.1; 4.4.2 6.1; 6.2 7.3; 7.4 8.1; 8.2; 8.3; 8.4; 8.5 9.1; 9.2; 9.3; 9.4 10.1; 10.2 11.1.3; 11.2.3 12.1.3; 12.2.3; 12.3.3 13.2



Section in Terms Requirement Section		Section in EIS
of Reference	Requirement	Section in Els
7.1	Baseline Environment Denison commits to gathering enough baseline information on the identified VCs to describe the existing environment and fully support the assessment of potential impacts.	 6.1.3; 6.2.3; 7.3.1; 7.3.2; 7.3.2.1; 7.3.2.2; 7.3.2.3; 7.3.2.4; 7.3.3; 7.3.3.1; 7.3.3.2.1; 7.3.3.2.2; 7.3.3.3 8.1.3; 8.2.3; 8.3.3; 8.4.3; 8.5.3 9.1.3; 9.2; 9.2.3; 9.3.3; 9.3.4; 9.3.6; 9.3.7; 9.4.3 10.1.3; 10.2.2 11.1.3; 11.2.3 12.1.3; 12.2.3; 12.3.3 13.2.3
7.2	Impact Assessment: Project-specific, Regional and Environmental Influence Denison commits to examining the interactions between the Project and the environment in a comprehensive manner to identify areas of potential concern. This assessment will look at the potential impacts through the life stages of the Project from construction through operation to decommissioning and reclamation. The assessment will consider the ability of the environment to handle the proposed changes (resiliency) by developing a risk profile that considers the basic elements of risk, magnitude and probability of occurrence, with respect to its likely geographic extent, duration, frequency and reversibility. The EIA will also require consideration of the potential impacts in a regional context and Denison commits to completing a cumulative effects assessment as part of the EIA (Section 7.7). This cumulative assessment will include other projects past, present or future where there is a reasonable chance of project overlap and appropriate data is available to complete analysis.	 Section 5 6.1.6; 6.1.7; 6.2.6; 6.2.7 7.4.1; 7.4.2.1; 7.4.2.2; 7.4.2.3; 7.4.2.4; 7.4.2.5; 7.2.4.6; 7.7; 7.7.1 8.1.4; 8.1.6; 8.1.7; 8.2.4; 8.2.6; 8.2.7; 8.3.4; 8.3.6; 8.3.7; 8.4.4; 8.4.6; 8.4.7 9.1.4; 9.1.6; 9.1.7; 9.2.4; 9.2.6; 9.2.7; 9.3.4; 9.3.6; 9.3.7; 11.4.4; 9.4.6; 9.4.7 10.1; 10.2; Appendix 10-A 11.1.4; 11.1.6; 11.1.7; 11.2.4; 11.2.6; 11.2.7 12.1.4; 12.1.6; 12.1.7; 12.2.4; 12.2.6; 12.2.7; 12.3.4; 12.3.6; 12.3.7 13.3; 13.5; 13.6
7.3	Denison will outline the mitigations proposed to avoid or minimize potential effects.	 2.8 4.6; 4.7 5.7 6.1.5; 6.2.5; 7.5.1 8.1.5; 8.2.5; 8.3.5; 8.4.5; 8.5.5 9.1.5; 9.2.5; 9.3.5; 9.4.5 10.1.5; 10.2.4 11.1.5; 11.2.5 12.1.5; 12.2.5; 12.3.5 13.4



Section in Terms of Reference	Requirement	Section in EIS
7.4	Monitoring In the EIS, Denison will describe monitoring programs for assessing any impacts to VCs and proposed methods for measuring the effectiveness of mitigation measures.	 4.6 5.10 6.1.8; 6.2.8 7.8.1; 7.8.2 8.1.8; 8.2.8; 8.3.8; 8.4.8; 8.5.8 9.1.8; 9.2.8; 9.3.8; 9.4.8 10.1.8; 10.2.7 11.1.8; 11.2.8 12.1.8; 12.2.8; 12.3.8 13.7 Appendix 16-C
7.5	Significance of Residual Impacts The EIA will document any significant residual impacts, and any monitoring programs required to monitor them. The significance of residual impacts will be defined in the same context as the unmitigated impacts through a risk profile that considers the basic elements of risk, magnitude and probability of occurrence, with respect to its likely geographic extent, duration, frequency and reversibility.	 5.8 6.1.6.2.1; 6.2.6.2.1 7.6.1; 7.6.2 8.1.6; 8.2.6; 8.3.6; 8.4.6; 8.5.6 9.1.6; 9.2.6; 9.3.6; 9.4.6 10.1.6; 10.2.5 11.1.6; 11.2.6 12.1.6; 12.2.6; 12.3.6 13.5
7.6	Prediction Confidence and Uncertainty This section will describe how the EIA process will address prediction confidence and uncertainties. Denison will identify the main sources of uncertainty and discuss how uncertainty was addressed to increase the level of confidence in predicted effects. The monitoring programs will be designed to address the identified uncertainty and provide mitigation if necessary.	 5.8.1.2 6.1.6.2.2; 6.2.6.2.2 7.6.2.2.3 8.1.2.6; 8.2.2.6; 8.3.2.6; 8.4.2.6; 8.5.2.6 9.1.6; 9.2.6; 9.3.6.1.2; 9.4.6.1.2 10.1.6; 10.2.6 11.1.6; 11.2.6; 12.1.6; 12.2.6; 12.3.6 13.5
7.7	Cumulative Impacts Denison commits to including an assessment of how other developments or activities in the area may impact the proposed development, its potential impacts on VCs, and whether they contribute to any cumulative environmental impacts. This will take the form of a cumulative environmental effects assessment as part of the description of project impacts and mitigations that describes the net cumulative impact of the Project. The assessment would also include an assessment of potential impacts due to reasonable emergency or upset conditions.	 5.9 6.1.7; 6.2.7 7.7; 7.7.1 8.1.7; 8.2.7; 8.3.7; 8.4.7; 8.5.7 9.1.7; 9.2.7; 9.3.7; 9.4.7 10.1.7; 10.2.7 11.1.7; 11.2.7 12.1.7; 12.2.7; 12.3.7 13.6



Section in Terms of Reference	Requirement	Section in EIS
8.0	Accidents and Malfunctions The EIS will provide a description of: • potential credible malfunction and accident sequences leading to a radiological or non-radiological release considering applicable internal, external and human-induced events. Denison will examine each potential accident and malfunction according to frequency and consequence to assign an associated risk ranking for the potential event. Denison will explain of how these events were	Section 14Appendix 14-A
	 identified, and describe any modeling that was performed; the source, quantity, mechanism, pathway, rate, form and characteristics of contaminants likely to be released to the surrounding environment during the potential accidents and malfunctions; and any mitigation measures such as monitoring, contingency, clean-up or restoration work in the surrounding environment that would be required during or immediately following the postulated malfunction and accident scenarios. 	
9.0	Effects of the Environment on the Project Denison will provide a description of the potential effects of the environment on the Project. Denison will also take into account any potential effects of climate change on the Project, including an assessment of whether the Project might be sensitive to changes in climate conditions (as they are best understood) during its lifecycle.	 Section 15 6.1.7.1; 6.2.7.1 7.7.1 8.1.7.5; 8.2.7.4; 8.3.7.6; 8.4.7.6. 8.5.7.6 9.1.7.1.1; 9.1.7.2.1; 9.1.7.3.1; 9.2.7.1; 9.3.7.4; 9.4.7.5 10.1.7.1 11.1.7; 11.2.7 12.1.7.1; 12.2.7.1; 12.3.7.1 13.6.1
10.0	Commitments Register and Follow up Program A commitments register will be provided in the EIS that outlines each commitment made to prevent or mitigate the environmental impacts of the preferred alternative and to meet any regulatory requirements. The commitments register will also include specific commitments for monitoring. Denison commits to outlining the scope of a follow-up program in the EIA and incorporating the elements of the follow-up plan within an appropriate management system to ensure it is completed.	To be provided with the Final EIS



Section in Terms of Reference	Requirement	Section in EIS
11.0	Summary and Conclusions This section will provide a concise, complete statement of the anticipated net environmental effects (both positive and negative). It will also include:	Section 16
	 a concise description of all key components of the Project and related activities; an overview of the consultation conducted with stakeholders (including Indigenous and non-Indigenous communities and government agencies), along with a summary of the issues raised and Denison's responses; an overview of the key environmental effects of the Project and proposed technically and 	
	 economically feasible mitigation measures; and Denison's conclusions on the residual environmental effects of the Project after taking mitigation measures into account and the significance of those effects. 	

1. Denison Mines Corp. 2019. Denison Mines Wheeler River Terms of Reference. Dated: May 2019.