



**CMD 25-H12-Ref18**

Date: 2026-01-12

**Reference from  
NexGen Energy Ltd.**

**Référence de  
NexGen Eenergy Ltd**

In the matter of

À l'égard de

**NexGen Energy Ltd.**

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Licence application to prepare a site for  
and construct its Rook 1 uranium mine  
and mill project

**NexGen Energy Ltd.**

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Demande de permis concernant la  
préparation de l'emplacement et la  
construction de son projet de mine et  
d'usine de concentration d'uranium Rook I

**Commission Public Hearing  
Part 2**

**Audience publique de la Commission  
Partie 2**

February 9-12, 2026

Les 9 - 12 février 2026

## Volume 3, Part 3: Rook I Project Federal Commitments Report

Document Title	Document Date	CNSC Reference Number (e-Doc)
<i>Part 1 – Federal-Indigenous Review Team Technical Review</i>		
▪ Annex 1 Responses: Federal Indigenous Review Team Information Requests	October 2023	153499E
▪ Annex 2 Responses: Federal Indigenous Review Team Advice to Proponent	August 2023	1553534E
▪ Annex 1 Responses: Federal Indigenous Review Team Information Request – Round 2	April 2024	157851E
▪ Annex 2 Responses: Federal Indigenous Review Team Advice to Proponent – Round 2	April 2024	157852E
▪ Rook I Project EIS Information Requests - Supplemental Information	November 2024	159687E
▪ Rook I Project EIS Advice to Proponent - Supplemental Information - November 2024	November 2024	159686E
▪ Letter of acceptance from the CNSC: Results of the Federal-Indigenous Review Team technical review of NexGen's May 22, 2024, revised draft EIS for the proposed Rook I Project	18 November 2024	7408522
<i>Part 2 – Federal Public Review</i>		
▪ Responses from NXE-Responses from NexGen: Consolidated comments from Indigenous Nations and Communities and the Public on the draft environmental impact statement (EIS) for the proposed Rook I Project	November 2024	160634E
▪ Responses from CNSC: Consolidated Comments from Indigenous Nations and Communities and the Public on the Rook I Draft EIS	February 2025	160835E
<i>Part 3 – Federal Commitments Report</i>		
▪ Rook I Project Federal Commitments Report	November 2024	-
<i>Part 4 – Letter of acceptance from the CNSC: Rook I Project– Acceptance of the Final EIS and Supporting Documents</i>		
▪ Rook I Project– Acceptance of the Final EIS and Supporting Documents	28 January 2025	7452567

**Part 3 – Federal Commitments Report**  
**Rook I Project Federal Commitments Report**

# Rook I Project

## Federal Commitments Report

**Submitted to:**  
Canadian Nuclear Safety Commission

**Submitted by:**  
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November 2024

## Abbreviations and Units of Measure

Abbreviation	Definition
AER	Alberta Energy Regulator
CNSC	Canadian Nuclear Safety Commission
COPC	constituent of potential concern
CRDN	Clearwater River Dene Nation
CVMPP	Community Vitality Monitoring Partnership Process
DFO	Fisheries and Oceans Canada
EA	Environmental Assessment
ECCC	Environment and Climate Change Canada
EEM	environmental effects monitoring
EIS	Environmental Impact Statement
ENV	Saskatchewan Ministry of Environment
ERA	environmental risk assessment
GHG	greenhouse gas
LED	light emitting diode
LSA	local study area
MDMER	Metal and Diamond Mining Effluent Regulations
NexGen	NexGen Energy Ltd.
NPAG	non-potentially acid generating
PAG	potentially acid generating
Project	Rook I Project
RMZ	regulatory mixing zone
RSA	regional study area
UGTMF	underground tailings management facility
WRSA	waste rock storage area

Unit	Definition
%	percent
L <sub>dn</sub>	day-night sound level
L <sub>eq,day</sub>	energy equivalent sound levels for each daytime period
L <sub>eq,night</sub>	energy equivalent sound levels for each nighttime period
m	metre



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# 1 Federal Commitments Report – Overview

This Federal Commitments Report document has been developed by NexGen Energy Ltd. (NexGen) at the request of the Canadian Nuclear Safety Commission (CNSC) as part of the federal Environmental Assessment (EA) process for the Rook I Project (Project). Table 1 provides a listing of all mitigation measures, follow-up programs, and commitments (collectively referred to as “commitments”) proposed or made by NexGen for the Project as referenced in EA documentation, including: the Project Environmental Impact Statement (EIS), correspondence with the public and First Nation and Métis Groups (collectively referred to as Indigenous Groups) and communities, responses to information requests received as part of the federal EA review process, and additional commitments made in any documentation to members of the public and Indigenous Groups and communities and to whom these commitments apply.

Commitments are presented in Table 1 in a tabular format and include information on the details of the commitment (“Commitment Description”), the phase(s) of the Project where the commitment will be carried out (“Project Phase”), where the commitment is referenced in the EIS (“Discipline or Other Reference”), and how the commitment will be tracked (“How the Commitment will be Tracked”). Also included in Table 1 is information on the scope of the commitment (“Type [Site-wide or Specific Application of Commitment]”) and contextual information (“Comment”), where applicable.

For ease of reference, commitments in Table 1 are organized in the following groupings (“Category”):

- high-level overarching programs and plans that would be included in the Project Integrated Management System<sup>1</sup> developed by NexGen, in part, to fulfill aspects of federal licensing requirements for the Project (i.e., “Management Programs and Plans”);
- general mitigations (“General Measures”);
- mitigations pertaining to air, noise, and climate change (“Air, Noise, and Climate Change”);
- mitigations pertaining to water and aquatic resources (“Water and Aquatic Resources”);
- mitigations pertaining to terrestrial resources (“Terrestrial Resources”);
- socio-economic mitigations (“Socio-economics”);
- commitments made as part of regulatory approval processes (“Regulatory Condition”); and
- follow-up monitoring programs<sup>2</sup> proposed for the Project as part of the EA (“Follow-up Program”).

In describing commitments, phrasing such as ‘to the extent practical’ and ‘where feasible’ is required to allow for consideration of on-site conditions, weather conditions, environmental factors, construction factors, and health

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<sup>1</sup> Information for federal licence applications generally address design, process, and safety and control mechanisms to provide for the safety of workers and the public and protection of the environment. This information is generally supported and managed through implementation of management systems and the development of licence programs. The programs developed form the basis against which a licence would be issued and ongoing compliance evaluated. The Rook I Integrated Management System would outline the management system policy, programs, and processes that would provide a common framework for performing Project activities, including processes for implementing compliance measures, enabling continual improvement, and fostering a culture in which protecting the health and safety of workers and preserving the environment are principal considerations guiding decisions and actions. The Rook I Integrated Management System would include program-level documents that are organized into categories that reflect the Canadian Nuclear Safety Commission safety and control areas and other matters of regulatory interest.

<sup>2</sup> Follow-up monitoring programs are designed to test the accuracy of effects predictions, reduce or address uncertainties, determine the effectiveness of mitigation, or provide appropriate feedback to operations for modifying or adopting new mitigation designs, policies, and practices (e.g., implementation of adaptive management). Results from these programs can be used to increase the certainty of predictions in future Environmental Assessments. Follow-up programs and plans presented in this table are considered preliminary in nature and will be refined as the Project advances and in consideration of provincial and federal regulatory processes (e.g., permitting, licensing). Follow-up programs and plans would be managed under the Project’s Integrated Management System.

and safety considerations in determining the appropriate mitigation. In such situations, NexGen personnel (e.g., design engineers, environmental monitors/advisors, construction managers), subject matter experts retained by NexGen, and other members of NexGen's construction or operational management team would determine an appropriate approach to mitigation.

It is noted that circumstances may arise in which a site-specific and/or one-time variance may be required to address site conditions, environmental or safety risks, or other factors. Variances to management programs and plans must be approved by the owner (i.e., NexGen) and will be tracked, including rationale for the variance, to support effective contractor oversight and compliance management.



Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
1.	Management Programs and Plans	Implement a Project-specific <b>Environmental Protection Program</b> .	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x Section x.7 Monitoring, Follow-up, and Adaptive Management <ul style="list-style-type: none"><li>Air Quality (Section 7.2.4, Table 7.2-10, and Section 7.2.8)</li><li>Hydrogeology</li><li>Hydrology (Section 9.5, Table 9.5-2, and Section 9.9)</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Terrain and Soils</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Human Health (Section 15.4, Table 15.4-1, and Section 15.8)</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use (Section 16.4, Table 16.4-1, and Section 16.8)</li><li>Other Land and Resource Use (Section 17.4, Table 17.4-1, and Section 17.8)</li></ul> Table 21.6-2: Bounding Scenarios Considered in the Accidents and Malfunctions Assessment and Associated Mitigations	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li><li>Annual reporting</li></ul>	Site-wide	n/a
2.	Management Programs and Plans	Implement site water management procedures under an <b>Environmental Protection Program</b> that include monitoring seepage from waste rock storage area and applying adaptive management, if necessary.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1 Potential Effects Pathways for x <ul style="list-style-type: none"><li>Terrain and Soils</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li><li>Annual reporting</li></ul>	Water management infrastructure	n/a
3.	Management Programs and Plans	Implement a Project-specific <b>Environmental Protection Program</b> , which includes actions to prevent, detect, and control areas with prohibited, noxious, and nuisance weed / invasive species (e.g., along the access road, airstrip, and loading or staging site), following best practice guidance.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1 Potential Effects Pathways for x <ul style="list-style-type: none"><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li><li>Annual reporting</li></ul>	All areas to be cleared	n/a
4.	Management Programs and Plans	Implement an <b>Environmental Protection Program</b> that includes <b>no harassing, feeding, or approaching wildlife</b> .	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1 Potential Effects Pathways for x <ul style="list-style-type: none"><li>Wildlife and Wildlife Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li><li>Annual reporting of wildlife incidents</li></ul>	Worker and visitor training and conduct	n/a

Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
5.	Management Programs and Plans	Implement an <b>Environmental Protection Program</b> with restricted activity periods to limit effects on denning animals and nesting migratory birds during sensitive time periods (e.g., per Nesting Zone B6 [ECCC 2018] guidelines and the <i>Migratory Birds Convention Act, 1994</i> ). If sensitive periods cannot be avoided, pre-clearing wildlife sweeps will be completed by qualified professionals and buffers applied, as required.	Mainly Construction, but applicable in all phases	Section x.4 Project Interactions and Mitigations Table x.4-1 Potential Effects Pathways for x <ul style="list-style-type: none"><li>Wildlife and Wildlife Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li><li>Annual reporting on clearing activities timing.</li><li>Permit compliance reporting.</li></ul>	Site-wide: all areas to be cleared	n/a
6.	Management Programs and Plans	Implement an <b>Environmental Protection Program</b> , which includes the following mitigation measures to minimize the risk of injury or mortality to wildlife: <ul style="list-style-type: none"><li><b>advising workers (e.g., staff contractors) and visitors</b> to take all reasonable precautions to avoid wildlife collisions;</li><li><b>providing wildlife with the right-of-way;</b></li><li><b>identifying wildlife use areas and migration corridors/crossings</b> along the access road and providing appropriate signage in high wildlife use areas (including consideration of Canadian toad);</li><li>maintaining gaps in the road berms and snowbanks to facilitate wildlife crossing and escape routes;</li><li><b>stopping and reporting/communicating when wildlife is observed on or adjacent to the road</b> and allow animals to move away before continuing to drive;</li><li><b>reporting any wildlife collisions</b> observed along any road immediately; and</li><li><b>adjusting speed limit</b> in accordance with conditions (e.g., wildlife use of road, road conditions, grade, weather, and loads on vehicle).</li></ul>	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1 Potential Effects Pathways for x <ul style="list-style-type: none"><li>Wildlife and Wildlife Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li><li>Annual reporting of wildlife incidents.</li></ul>	Worker and visitor training and conduct	n/a
7.	Management Programs and Plans	Implement a Project-specific <b>Environmental Protection Program</b> , which includes processes for the following: <ul style="list-style-type: none"><li>prohibition against feeding wildlife;</li><li>lined contact water ponds either fenced or fit with animal egress matting or ramps;</li><li>other measures for deterring wildlife from site where needed for human and wildlife protection; and</li><li>conducting regular monitoring to evaluate effectiveness of deterrents and water quality, and applying adaptive management, as necessary.</li></ul>	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1 Potential Effects Pathways for x <ul style="list-style-type: none"><li>Wildlife and Wildlife Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li><li>Annual reporting of wildlife incidents.</li></ul>	Site-wide	n/a

Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
8.	Management Programs and Plans	Implement a Project-specific <b>Environmental Protection Program</b> that would include process for wildlife and bird deterrents around contact water ponds (e.g., fences, cannons, sonic guns).	All phases	Section 14.4 Project Interactions and Mitigations Table 14.4-1 Potential Effects Pathways for Wildlife and Wildlife Habitat	<ul style="list-style-type: none"><li>Annual reporting of wildlife incidents</li></ul>	Water management infrastructure	n/a
9.	Management Programs and Plans	Implement a Project-specific <b>Environmental Monitoring Plan</b> that includes monitoring for hydrology, water quality, benthic invertebrates, fish, and wildlife.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x Section x.7 Monitoring, Follow-up, and Adaptive Management <ul style="list-style-type: none"><li>Hydrology (Section 9.5, Table 9.5-2, and Section 9.9)</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use (Section 16.4, Table 16.4-1, and Section 16.8)</li><li>Other Land and Resource Use (Section 17.4, Table 17.4-1, and Section 17.8)</li></ul>	<ul style="list-style-type: none"><li>Environmental Monitoring Plan and updates</li><li>Annual reporting</li></ul>	Environmental monitoring program extents	n/a
10.	Management Programs and Plans	Implement a Project-specific <b>Environmental Monitoring Plan</b> that includes monitoring in the receiving environment in the vicinity of the Project, as required, in accordance with licence requirements and the federal Metal and Diamond Mining Effluent Regulations to monitor the potential effects of Project discharges on water and sediment quality, and on the fish population and benthic invertebrate community.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x Section x.7 Monitoring, Follow-up, and Adaptive Management <ul style="list-style-type: none"><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use (Section 16.4, Table 16.4-1, and Section 16.8)</li><li>Other Land and Resource Use (Section 17.4, Table 17.4-1, and Section 17.8)</li></ul>	<ul style="list-style-type: none"><li>Environmental Monitoring Plan and updates</li><li>Annual reporting</li></ul>	Environmental monitoring program extents	n/a
11.	Management Programs and Plans	Implement a Project-specific <b>Environmental Monitoring Plan</b> that includes monitoring for soil quality to determine if Project activities (e.g., dust generation and other air particular generation) are influencing soil chemistry.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Terrain and Soils</li><li>Vegetation (plus Section 13.7 Monitoring, Follow-up, and Adaptive Management)</li></ul>	<ul style="list-style-type: none"><li>Environmental Monitoring Plan and updates</li><li>Annual reporting</li></ul>	Environmental monitoring program extents	n/a
12.	Management Programs and Plans	Implement a Project-specific <b>Effluent and Emissions Plan</b> .	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Surface Water Quality (plus Section 10.7 Monitoring, Follow-up, and Adaptive Management)</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Effluent and Emissions Plan and updates</li><li>Annual reporting</li></ul>	All effluent discharge sites	Commitment specific to effluent discharge

Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
13.	Management Programs and Plans	Implement a Project-specific <b>Effluent and Emissions Plan</b> .	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Air Quality (Section 7.2.4, Table 7.2-10, and Section 7.2.8 Monitoring, Follow-up, and Adaptive Management)</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li><li>Terrain and Soils</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use (Section 16.4, Table 16.4-1, and Section 16.8)</li><li>Other Land and Resource Use (Section 17.4, Table 17.4-1, and Section 17.8)</li></ul>	<ul style="list-style-type: none"><li>Effluent and Emissions Plan and updates</li><li>Annual reporting</li></ul>	All air emission sources	Commitment specific to air emissions
14.	Management Programs and Plans	Implement a Project-specific <b>Environmental Monitoring Plan</b> .	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Hydrogeology (plus Section 8.7 Monitoring, Follow-up, and Adaptive Management)</li><li>Surface Water Quality</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Environmental Monitoring Plan and updates</li><li>Annual reporting</li></ul>	Environmental monitoring program extents	n/a
15.	Management Programs and Plans	Implement an <b>Indigenous and Public Engagement Program</b> to share information on Project plans and activities. Summaries of relevant Project information will be translated and provided in audio format for sharing with Indigenous Groups, as relevant, and use of these additional communication methods will be based on discussions with Indigenous Groups.	All phases	<ul style="list-style-type: none"><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Indigenous and Public Engagement Program and updates</li><li>Annual reporting on information shared</li></ul>	Management and Indigenous relations staff	n/a
16.	Management Programs and Plans	Implement an <b>Indigenous and Public Engagement Program</b> that includes, among other activities, sharing monitoring results with local communities, engagement of trappers and Indigenous land users to share Project information and address any issues as they arise, and sharing of environmental monitoring results with local communities.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x Section x.5 Residual Effects Analysis Section x.8 Monitoring, Follow-up, and Adaptive Management <ul style="list-style-type: none"><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li><li>Community Well-being</li></ul>	<ul style="list-style-type: none"><li>Indigenous and Public Engagement Program and updates</li><li>Annual reporting on information shared</li></ul>	Management and Indigenous relations staff	n/a

Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
17.	Management Programs and Plans	Implement an <b>Indigenous and Public Engagement Program</b> to effectively engage with communities on Project activities, effects, mitigation, and monitoring to keep people informed and provide opportunities to provide feedback for continual improvement through a grievance mechanism.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x Section x.5 Residual Effects Analysis Section x.8 Monitoring, Follow-up, and Adaptive Management <ul style="list-style-type: none"><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li><li>Community Well-being</li></ul>	<ul style="list-style-type: none"><li>Indigenous and Public Engagement Program and updates</li><li>Annual reporting of grievances following confidentiality requirements</li></ul>	Management and Indigenous relations staff	n/a
18.	Management Programs and Plans	Implement a Project-specific <b>Health and Safety Program</b> .	All phases	Section 7.3.4 Project Interactions and Mitigations Table 7.3.4-1: Potential Effects Pathways for Noise	<ul style="list-style-type: none"><li>Health and Safety Program and updates</li><li>Annual reporting of incidents</li></ul>	Site-wide	n/a
19.	Management Programs and Plans	Implement a <b>Security Program</b> to provide safe and coordinated access via the access road to locations where other land and resource use is practiced.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x Section x.5 Residual Effects Analysis Section x.8 Monitoring, Follow-up, and Adaptive Management <ul style="list-style-type: none"><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Security Program and updates</li><li>Annual reporting of incidents</li></ul>	Access road	n/a
20.	Management Programs and Plans	<b>Identify Indigenous land users</b> in <b>Security Program</b> and supporting documentation and outline the process to allow continued access to areas of importance.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Security Program and updates</li><li>Annual reporting of incidents and grievances following confidentiality requirements</li></ul>	Site-wide	n/a
21.	Management Programs and Plans	Implement a <b>Radiation Protection Program</b> to keep worker and visitor radiological exposures as low as reasonably achievable.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Radiation Protection Program and updates</li><li>Annual compliance reporting</li></ul>	Site-wide	n/a
22.	Management Programs and Plans	Implement a Project-specific <b>Conventional Waste Management Plan</b> .	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Climate Change (Section 7.4.4 and Table 7.4-7)</li><li>Wildlife and Wildlife Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Conventional Waste Management Plan and updates</li></ul>	Site-wide	n/a
23.	Management Programs and Plans	Implement a Project-specific <b>Waste Management Program</b> .	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Adverse Effects Pathways for x <ul style="list-style-type: none"><li>Climate Change (Section 7.4.4 and Table 7.4-7)</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Waste Management Program and updates</li></ul>	Site-wide	n/a

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ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
24.	Management Programs and Plans	Implement a Project-specific <b>Mine Waste Management Plan</b> .	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Hydrogeology</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Terrain and Soils</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Mine Waste Management Plan and updates</li></ul>	Site-wide	n/a
25.	Management Programs and Plans	Implement a Project-specific <b>Mine Waste Management Plan</b> and site water management procedures.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Surface Water Quality</li><li>Hydrology (Section 9.5 and Table 9.5-2)</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Mine Waste Management Program and updates</li></ul>	Site-wide	n/a
26.	Management Programs and Plans	Develop and implement a <b>Preliminary Decommissioning and Reclamation Plan</b> .	All phases	Section 5.3.2 Design Objectives and Guiding Principles Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x Section x.7 Monitoring, Follow-up, and Adaptive Management <ul style="list-style-type: none"><li>Hydrogeology</li><li>Hydrology (Section 9.5, Table 9.5-2, and Section 9.9)</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Vegetation</li><li>Terrain and Soils</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use (Section 16.4, Table 16.4-1, Section 16.5, and Section 16.8)</li><li>Other Land and Resource Use (Section 17.4, Table 17.4-1, Section 17.5, and Section 17.8)</li><li>Community Well-Being (Section 19.4, Table 19.4-1, Section 19.5, and Section 19.8)</li></ul> Section 22.6 Assessment of Effects of Natural Hazards	<ul style="list-style-type: none"><li>Preliminary Decommissioning and Reclamation Plan and updates</li></ul>	Site-wide	n/a
27.	Management Programs and Plans	Develop a <b>Ground Transportation Emergency Response Plan</b> to address traffic safety on the access road, including education of workers (e.g., staff contractors).	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li><li>Community Well-Being</li></ul>	<ul style="list-style-type: none"><li>Ground Transportation Emergency Response Plan and updates</li><li>Emergency reporting of traffic incidents.</li></ul>	Workers and visitor driver training and conduct	n/a



Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
28.	Management Programs and Plans	Develop an <b>Emergency Response Assistance Plan</b> for the transportation of uranium concentrate from the mine site.	Operations	Section 17.4 Project Interactions and Mitigations Table 17.4-1: Potential Effects Pathways for Other Land and Resource Use	<ul style="list-style-type: none"><li>Emergency Response Assistance Plan</li><li>Emergency reporting of incidents</li></ul>	Uranium concentrate transportation	n/a
29.	Management Programs and Plan	Implement a Project-specific <b>Environmental Protection Program</b> and a Project-specific <b>Environmental Monitoring Plan</b> that includes adaptive management, if necessary.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Hydrogeology</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li><li>Environmental Monitoring Plan and updates</li></ul>	Environmental monitoring program extents	n/a
30.	Management Programs and Plans	Implement <b>Environmental Protection Program</b> , and <b>Caribou Mitigation and Offsetting Plan</b> .	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Wildlife and Wildlife Habitat (plus Section 14.7 Monitoring, Follow-up, and Adaptive Management)</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use (plus Section 16.5 Residual Effects Analysis)</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and Caribou Mitigation and Offsetting Plan and updates</li><li>Annual reporting</li></ul>	Environmental monitoring program / caribou mitigation and offsetting program extents	n/a
31.	Management Programs and Plans	Controls would be implemented, and their effectiveness monitored to <b>prevent accidents and malfunctions via management system processes</b> defined in topic-specific programs which include, but may not be limited to the following: <ul style="list-style-type: none"><li>Integrated Management System</li><li>Integrated Management System Manual;</li><li>Health and Safety Program;</li><li>Radiation Protection Program;</li><li>Environmental Protection Program;</li><li>Waste Management Program;</li><li>Emergency Preparedness and Response Program;</li><li>Fire Protection Program;</li><li>Security Program;</li><li>Training Program;</li><li>Contractor Management Program;</li><li>Indigenous and Public Engagement Program;</li><li>Construction Management Program;</li><li>Commissioning Management Program; and</li><li>Asset Management Program.</li></ul>	All phases	Section 21 (Accidents and Malfunctions); applies to all disciplines Sections 7 to 19	<ul style="list-style-type: none"><li>All management programs and updates</li><li>Incident reporting</li></ul>	Site-wide	n/a

Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
32.	Management Programs and Plans	Develop a <b>Ground Transportation Emergency Response Plan</b> to mitigate safety risks related to the transportation of materials and equipment to and from the Project site. The Ground Transportation Emergency Response Plan would specifically include: <ul style="list-style-type: none"><li>▪ transportation planning and management;</li><li>▪ driver training;</li><li>▪ traffic control, such as speed limits and signage;</li><li>▪ radiation exposure monitoring and protection;</li><li>▪ spill and emergency response;</li><li>▪ environmental monitoring;</li><li>▪ regulatory notification and external communication;</li><li>▪ transportation emergency response; and</li><li>▪ provisions for mitigating the impacts effects of surface water, terrestrial, and atmospheric release emergencies as well as remediation and recovery provisions.</li></ul>	All phases	<ul style="list-style-type: none"><li>▪ Section 17.4 Project Interactions and Mitigations</li><li>▪ Table 17.4-1: Potential Effects Pathways for Other Land and Resource Use</li><li>▪ Section 21 (Accidents and Malfunctions)</li></ul>	<ul style="list-style-type: none"><li>▪ Ground Transportation Emergency Response Plan and updates</li><li>▪ Incident Reporting</li></ul>	All ground transportation	n/a
33.	Management Programs and Plans	Develop a <b>Fire Protection Program</b> that, in accordance with <b>Section 35 of The Wildfire Act</b> , includes frequently checking mobile equipment or machinery throughout its daily use for any accumulation of combustible material, with any accumulation found being removed and disposed of safely.	All phases	Section 21.1 Introduction (Accidents and Malfunctions)	<ul style="list-style-type: none"><li>▪ Fire Protection Program and updates</li></ul>	Site-wide	n/a
34.	General Measures	<b>Limit the Project footprint</b> to the extent practical using practices such as: <ul style="list-style-type: none"><li>▪ designing an efficient infrastructure footprint (i.e., buildings clustered together);</li><li>▪ optimizing the use of cleared areas for Project activity;</li><li>▪ using existing road infrastructure, including existing access road and bridge crossing;</li><li>▪ storing tailings underground; and</li><li>▪ maximizing water diversion away from site facilities through design and the establishment of berms and grading.</li></ul>	Planning	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>▪ Hydrology (Section 9.5 and Table 9.5-2)</li><li>▪ Surface Water Quality</li><li>▪ Fish and Fish Habitat</li><li>▪ Terrain and Soils</li><li>▪ Vegetation</li><li>▪ Wildlife and Wildlife Habitat</li><li>▪ Human Health</li><li>▪ Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>▪ Other Land and Resource Use</li><li>▪ Community Well-Being</li></ul>	<ul style="list-style-type: none"><li>▪ Design in the EIS</li></ul>	Site-wide	n/a



Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
35.	General Measures	<b>Minimize areas of vegetation clearing</b> and soil disturbance.	Mainly Construction, but applicable in all phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Hydrology (Section 9.5 and Table 9.5-2)</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Terrain and Soils</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li><li>Community Well-Being</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li><li>Annual reporting on disturbed and reclaimed areas</li></ul>	Site-wide	n/a
36.	General Measures	Implement <b>progressive reclamation and revegetation</b> of disturbed areas no longer required.	Construction, Operation	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Hydrology (Section 9.5 and Table 9.5-2)</li><li>Surface Water Quality</li><li>Terrain and Soils</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li><li>Community Well-Being</li></ul>	<ul style="list-style-type: none"><li>Preliminary Decommissioning and Reclamation Plan and updates</li><li>Annual reporting on disturbed and reclaimed areas</li></ul>	Site-wide	n/a
37.	General Measures	<b>Reclaim and revegetate areas</b> where non-permanent Project facilities have been decommissioned.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Hydrology (Section 9.5 and Table 9.5-2)</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Terrain and Soils</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li><li>Community Well-Being</li></ul>	<ul style="list-style-type: none"><li>Preliminary Decommissioning and Reclamation Plan and updates</li><li>Annual reporting on disturbed and reclaimed areas</li></ul>	Site-wide	n/a
38.	General Measures	<b>Install fire breaks</b> at the Project site that would both align with fire break requirement assessments that would be completed for the Project and consider any input provided by the Saskatchewan Public Safety Agency.	Mainly Construction, but applicable in all phases	Section 22.6.1 Wildfire	<ul style="list-style-type: none"><li>Fire Protection Program and updates</li></ul>	Site-wide	n/a

Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
39.	Air, Noise, Climate Change	<b>Limit idling of vehicles and equipment</b> to the extent practical.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Air Quality (Section 7.2.4 and Table 7.2-10)</li><li>Climate Change (Section 7.4.4 and Table 7.4-7)</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Terrain and Soils</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li></ul>	Site-wide: worker and visitor training and conduct	n/a
40.	Air, Noise, Climate Change	<b>Limit vehicle speed</b> on unpaved site roads to reduce fugitive dust during Construction and Operations.	Construction, Operations	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Surface Water Quality</li><li>Terrain and Soils</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li></ul>	Site-wide: worker and visitor training and conduct	n/a
41.	Air, Noise, Climate Change	Evaluate opportunities to <b>reduce fuel combustion requirements</b> of infrastructure and equipment, to the extent practical, during detailed design.	Planning	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Air Quality (Section 7.2.4 and Table 7.2-10)</li><li>Climate Change (Section 7.4.4 and Table 7.4-7)</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Terrain and Soils</li><li>Human Health</li></ul>	<ul style="list-style-type: none"><li>Report on fuel reduction provisions in detailed design</li></ul>	Site-wide	Practicality to be determined by design engineers
42.	Air, Noise, Climate Change	<b>Use Tier 4 diesel mobile equipment for underground operations</b> , whenever practical, with applicable mine ventilation airflow rates specified by Canada Centre for Mineral and Energy Technology, when available.	Planning, Construction, Operations	Section 7.2.4 Project Interactions and Mitigations Table 7.2-10: Potential Effects Pathways for Air Quality	<ul style="list-style-type: none"><li>Purchase records and decision memorandum when not purchased</li></ul>	Procurement	Practicality to be determined through procurement process
43.	Air, Noise, Climate Change	<b>Recover heat from the liquified natural gas power plant</b> exhaust and use to heat other process and ancillary buildings, to the extent practical.	Planning	Section 7.2.4 Project Interactions and Mitigations Table 7.2-10: Potential Effects Pathways for Air Quality Section 7.4.4 Project Interactions and Mitigations Table 7.4-7: Potential Adverse Effects Pathways for Climate Change Valued Components	<ul style="list-style-type: none"><li>Report on heat recovery provisions detailed design</li></ul>	Heating system	Practicality to be determined by design engineers

Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
44.	Air, Noise, Climate Change	Use and maintain emissions control devices on combustion-based equipment.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Air Quality (Section 7.2.4 and Table 7.2-10)</li><li>Climate Change (Section 7.4.4 and Table 7.4-7)</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Terrain and Soils</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Maintenance records</li></ul>	Site-wide	n/a
45.	Air, Noise, Climate Change	Use pollution control technology on process plant exhaust stacks with preventative maintenance and stack testing, as well as adaptive management, if necessary.	Planning, Operations	Section 7.2.4 Project Interactions and Mitigations Table 7.2-10: Potential Effects Pathways for Air Quality	<ul style="list-style-type: none"><li>Maintenance and testing records</li></ul>	Process Plant	n/a
46.	Air, Noise, Climate Change	Identify and implement procurement criteria to confirm stationary and mobile engines meet applicable performance standards.	Planning	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Air Quality (Section 7.2.4 and Table 7.2-10)</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Terrain and Soils</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li></ul>	<ul style="list-style-type: none"><li>Design criteria reports and procurement records</li></ul>	Procurement	n/a
47.	Air, Noise, Climate Change	Maintain mobile mining equipment and vehicles and operate the equipment within parameters for engine exhaust system design.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Air Quality (Section 7.2.4 and Table 7.2-10)</li><li>Climate Change (Section 7.4.4 and Table 7.4-7)</li><li>Surface Water Quality</li><li>Terrain and Soils</li><li>Vegetation</li><li>Human Health</li></ul>	<ul style="list-style-type: none"><li>Maintenance records</li></ul>	Site-wide	n/a
48.	Air, Noise, Climate Change	Install noise dampening structures in power plant generator facilities; install silencers in surface and underground large vent fans.	Planning	Section 7.3.4 Project Interactions and Mitigations Table 7.3-8: Potential Effects Pathways for Noise Section 16.5 Residual Effects Analysis	<ul style="list-style-type: none"><li>Detailed design drawings</li></ul>	Power plant	n/a

Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
49.	Air, Noise, Climate Change	Implement procedures to <b>reduce noise, dust, and light</b> levels such as: <ul style="list-style-type: none"><li>enclose or dampen equipment in process buildings where the total sound power level is expected to be more than approximately 80 A-weighted decibels, where feasible;</li><li>use noise suppression (mufflers) on vehicles and inspect regularly to make sure they are functioning properly; and</li><li>limit light pollution to the extent practical for built infrastructure.</li></ul>	Planning, all phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Noise (Section 7.3.4 and Table 7.3-8)</li><li>Wildlife and Wildlife Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use (plus Section 16.5 Residual Effects Analysis)</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Detailed design drawings</li><li>Monitoring and inspection records</li></ul>	Site-wide	Practicality to be determined by design engineers
50.	Air, Noise, Climate Change	<b>Maintain roads to minimize ruts</b> and consequently reduce noise emissions from vehicles.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Noise (Section 7.3.4 and Table 7.3-8)</li><li>Wildlife and Wildlife Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use (plus Section 16.5 Residual Effects Analysis)</li></ul>	<ul style="list-style-type: none"><li>Maintenance records and inspection reporting</li></ul>	Road maintenance	n/a
51.	Air, Noise, Climate Change	Primarily <b>use liquified natural gas for power generation</b> .	Planning	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Air Quality (Section 7.2.4 and Table 7.2-10)</li><li>Climate Change (Section 7.4.4 and Table 7.4-7)</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Terrain and Soils</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Power plant design specifications</li><li>Procurement records</li></ul>	Power plant	n/a
52.	Air, Noise, Climate Change	<b>Optimize haul routes</b> to reduce fuel consumption and emissions from equipment.	Planning	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Air Quality (Section 7.2.4 and Table 7.2-10)</li><li>Climate Change (Section 7.4.4 and Table 7.4-7)</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Terrain and Soils</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Design documents</li></ul>	Site-wide	n/a
53.	Air, Noise, Climate Change	<b>Use excess steam generated from the acid plant</b> to heat other process buildings, to the extent practical.	Planning	Section 7.4.4 Project Interactions and Mitigations Table 7.4-7: Potential Effects Pathways for Climate Change Valued Components	<ul style="list-style-type: none"><li>Report on heat recovery provisions during detailed design</li></ul>	Heating system	Practicality to be determined by design engineers

Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
54.	Air, Noise, Climate Change	Use energy efficient LED lighting and other similar efficiencies to reduce electrical demand, where practical.	All phases	Section 7.4.4 Project Interactions and Mitigations Table 7.4-7: Potential Effects Pathways for Climate Change Valued Components	<ul style="list-style-type: none"><li>Procurement records</li></ul>	Site-wide	Practicality to be determined by design engineers
55.	Air, Noise, Climate Change	Where required, remove merchantable trees and the majority of the woody debris with soils that are salvaged, to maintain the carbon stocks and avoid release of carbon through decomposition.	Construction, Operations	Section 7.4.4 Project Interactions and Mitigations Table 7.4-7: Potential Effects Pathways for Climate Change Valued Components	<ul style="list-style-type: none"><li>Clearing procedures</li><li>Annual reporting</li></ul>	Site-wide	n/a
56.	Air, Noise, Climate Change	Conduct regular equipment maintenance.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Air Quality (Section 7.2.4 and Table 7.2-10)</li><li>Climate Change (Section 7.4.4 and Table 7.4-7)</li><li>Fish and Fish Habitat</li><li>Terrain and Soils</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Maintenance records</li></ul>	Site-wide	n/a
57.	Air, Noise, Climate Change	Implement energy management strategy for measuring and evaluating thermal and electrical energy use.	All phases	Section 7.4.4 Project Interactions and Mitigations Table 7.4-7: Potential Effects Pathways for Climate Change Valued Components	<ul style="list-style-type: none"><li>Energy management strategy and reporting</li></ul>	Site-wide	n/a
58.	Air, Noise, Climate Change	Implement a net-zero framework and periodically re-assess alternative technologies and practices to responsibly manage energy use and GHG emissions.	Planning	Section 7.4.2.2.3 Assessment Endpoints <ul style="list-style-type: none"><li>Climate Change</li></ul>	<ul style="list-style-type: none"><li>Net-zero framework and updates</li><li>Annual reporting</li></ul>	Site-wide	n/a
59.	Air, Noise, Climate Change	Implement greenhouse gas management strategy to reduce emissions to the extent practical.	All phases	Section 7.4.4 Project Interactions and Mitigations Table 7.4-7: Potential Effects Pathways for Climate Change Valued Components	<ul style="list-style-type: none"><li>Greenhouse gas management strategy</li><li>Annual reporting on GHG emissions</li></ul>	Site-wide	Practicality to be determined by project management and engineers
60.	Air, Noise, Climate Change	Continue to evaluate monitoring and mitigation measures to track and minimize air pollution and, where practical, implement any newly identified mitigation measures that are technically and economically feasible.	All phases	Section 23 Appendix A Summary Mitigation Measures Table 23A-3: Summary of Environmental Design Features and Mitigation Measures Proposed for the Rook I Project Pertaining to Air, Noise, and Climate Change.	<ul style="list-style-type: none"><li>Monitoring and inspection records</li><li>Annual reporting</li></ul>	Site-wide	n/a
61.	Water and Aquatic Resources	Isolate mine workings from groundwater inflows that could occur through high permeability strata with a hydrostatic liner in the shaft.	Planning, all phases	Section 8.4 Project Interactions and Mitigation Table 8.4-1: Potential Effects Pathways for Hydrogeology	<ul style="list-style-type: none"><li>Mine geotechnical records</li><li>Mine water management records</li></ul>	Mine	n/a

Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
62.	Water and Aquatic Resources	<b>Design and maintain a mine dewatering system</b> to manage the flow of <b>groundwater inflow</b> .	Planning, all phases	Section 8.4 Project Interactions and Mitigation Table 8.4-1: Potential Effects Pathways for Hydrogeology Section 8.5 Residual Effects Analysis Section 13.4 Project Interactions and Mitigation Table 13.4-1: Potential Effects Pathways for Vegetation	<ul style="list-style-type: none"><li>▪ Mine dewatering system</li></ul>	Mine	n/a
63.	Water and Aquatic Resources	Use <b>engineered cemented paste backfill and tailings</b> to control source concentrations.	Construction, Operations	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>▪ Hydrogeology</li><li>▪ Surface Water Quality</li><li>▪ Fish and Fish Habitat</li><li>▪ Vegetation</li><li>▪ Wildlife and Wildlife Habitat</li><li>▪ Human Health</li></ul>	<ul style="list-style-type: none"><li>▪ Paste backfill and tailings management records</li></ul>	Mine and UGTMF	n/a
64.	Water and Aquatic Resources	<b>Apply binder</b> to reduce permeability in cemented paste backfill and tailings.	Construction, Operations	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>▪ Hydrogeology</li><li>▪ Surface Water Quality</li><li>▪ Fish and Fish Habitat</li><li>▪ Vegetation</li><li>▪ Wildlife and Wildlife Habitat</li><li>▪ Human Health</li></ul>	<ul style="list-style-type: none"><li>▪ Paste backfill and tailings management records</li></ul>	Mine and UGTMF	n/a
65.	Water and Aquatic Resources	<b>Segregate PAG material</b> from NPAG material and store separately.	Construction, Operations	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>▪ Hydrogeology</li><li>▪ Surface Water Quality</li><li>▪ Fish and Fish Habitat</li><li>▪ Terrain and Soils</li><li>▪ Vegetation</li><li>▪ Wildlife and Wildlife Habitat</li><li>▪ Human Health</li></ul>	<ul style="list-style-type: none"><li>▪ Mine Waste Management Plan and updates</li></ul>	Waste Rock Storage Areas	n/a
66.	Water and Aquatic Resources	<b>Contain and divert runoff and seepage from PAG</b> waste rock, special waste rock, and ore to the effluent treatment plant.	Construction, Operations, Closure	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>▪ Hydrogeology</li><li>▪ Surface Water Quality</li><li>▪ Terrain and Soils</li><li>▪ Vegetation</li><li>▪ Human Health</li></ul>	<ul style="list-style-type: none"><li>▪ Site water management procedures under the Environmental Protection Program and updates</li></ul>	Water management infrastructure	n/a



Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
67.	Water and Aquatic Resources	Install <b>engineered cover system</b> on PAG and NPAG material during reclamation.	Operations, Closure	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Hydrogeology</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li></ul>	<ul style="list-style-type: none"><li>Preliminary Decommissioning and Reclamation Plan and updates</li></ul>	Waste Rock Storage Areas	n/a
68.	Water and Aquatic Resources	Use <b>engineered containment and conveyance of PAG waste rock runoff</b> and seepage to the PAG Runoff Collection Area.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Hydrology (Section 9.5 and Table 9.5-2)</li><li>Wildlife and Wildlife Habitat</li></ul>	<ul style="list-style-type: none"><li>Site water management procedures under the Environmental Protection Program and updates</li></ul>	Water management infrastructure	n/a
69.	Water and Aquatic Resources	Implement <b>sedimentation and erosion control</b> best practices and standard mitigation (e.g., temporary sediment ponds, silt curtains, sediment traps) during all Project phases.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Hydrology (Section 9.5 and Table 9.5-2)</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li></ul>	Site-wide	n/a
70.	Water and Aquatic Resources	Use <b>erosion control measures</b> as required.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Hydrology (Section 9.5 and Table 9.5-2)</li><li>Fish and Fish Habitat</li><li>Vegetation</li><li>Terrain and Soils</li><li>Wildlife and Wildlife Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li></ul>	Site-wide	n/a
71.	Water and Aquatic Resources	<b>Avoid placing soil stockpiles near waterbodies</b> (i.e., maintaining a 150 m buffer from waterbodies and watercourses), and near natural drainage features, unless required for temporary storage.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Hydrogeology</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Terrain and Soils</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li></ul>	Site-wide	n/a
72.	Water and Aquatic Resources	<b>Minimize steepness and length of slopes of disturbed areas</b> and stockpiled soils.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Hydrology (Section 9.5 and Table 9.5-2)</li><li>Fish and Fish Habitat</li><li>Vegetation</li><li>Terrain and Soils</li><li>Wildlife and Wildlife Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li></ul>	Site-wide	n/a

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ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
73.	Water and Aquatic Resources	<b>Recycle and reuse process water</b> to reduce fresh water intake and release to Patterson Lake, to the extent practical.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Hydrology (Section 9.5 and Table 9.5-2)</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Human Health</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Process plant detailed design</li><li>Water use records</li></ul>	Process plant	n/a
74.	Water and Aquatic Resources	Provide <b>adequate contact water storage capacity</b> to allow controlled rate of release during both routine and non-routine operation scenarios.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Hydrology (Section 9.5 and Table 9.5-2)</li><li>Fish and Fish Habitat</li><li>Terrain and Soils</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li></ul>	<ul style="list-style-type: none"><li>Site water management procedures under the Environmental Protection Program and updates</li></ul>	Water management infrastructure	n/a
75.	Water and Aquatic Resources	Perform maintenance of <b>water containment and conveyance structures</b> (i.e., roadside ditches and culverts) to limit the risk of road wash-out or sediment release to the environment.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Hydrology (Section 9.5 and Table 9.5-2)</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Terrain and Soils</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li></ul>	<ul style="list-style-type: none"><li>Site water management procedures under the Environmental Protection Program and updates</li></ul>	Water management infrastructure	n/a
76.	Water and Aquatic Resources	Provide <b>adequate contact water storage capacity</b> to manage runoff and seepage from Project infrastructure and disturbed areas.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Surface Water Quality</li><li>Human Health</li></ul>	<ul style="list-style-type: none"><li>Site water management procedures under the Environmental Protection Program and updates</li></ul>	Water management infrastructure	n/a
77.	Water and Aquatic Resources	To the extent practical, <b>work in sensitive areas</b> (i.e., erosive soils, wetland features, and fish habitats) would be scheduled to <b>avoid periods that may result in high flow volumes and/or increase erosion and sedimentation</b> (e.g., spring freshet).	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Terrain and Soils</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li></ul>	Site-wide	n/a
78.	Water and Aquatic Resources	To the extent practical, construct work areas to <b>avoid critical or sensitive habitat</b> (e.g., riparian zones) following best practices and regulatory requirements.	Construction	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Fish and Fish Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li></ul>	Site-wide	n/a



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ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
79.	Water and Aquatic Resources	<b>Apply DFO's Measures to Avoid Causing Harm to Fish and Fish Habitat</b> (DFO 2019) to minimize potential adverse effects on aquatic resources.	All phases	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Procedures for working in and around water in the Environmental Protection Program and updates</li></ul>	Site-wide	n/a
80.	Water and Aquatic Resources	Design and <b>install appropriate site drainage</b> and water containment and conveyance structures on site.	Planning, all phases	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Detailed design drawings</li><li>Site water management procedures under the Environmental Protection Program and updates</li></ul>	Water management infrastructure	n/a
81.	Water and Aquatic Resources	<b>Install and operate an effluent treatment plant and a sewage treatment plant</b> to reduce release of constituents of potential concern (e.g., major ions, metals, radionuclides) to the environment and discharge treated effluent and treated sewage to Patterson Lake.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Human Health</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Effluent and sewage treatment plant design reports</li></ul>	Effluent and sewage treatment plants	n/a
82.	Water and Aquatic Resources	Design new roads such that road alignments <b>minimize the number of water features crossed and avoid sensitive areas</b> to the extent feasible.	Planning	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Feasibility design report</li></ul>	Site roads	Feasibility to be determined by design engineers
83.	Water and Aquatic Resources	<b>Maintain mobile mining equipment and vehicles</b> and monitor for leaks.	All phases	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Asset Management Program</li><li>Maintenance records</li></ul>	Mobile equipment and vehicle maintenance	n/a
84.	Water and Aquatic Resources	Confirm <b>heavy equipment (e.g., crane) used on site is properly maintained</b> and is free of leaks. <ul style="list-style-type: none"><li>Inspect loads to be moved across the Clearwater River for leaks.</li></ul>	All phases	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Asset Management Program</li><li>Maintenance records</li></ul>	Heavy equipment maintenance	n/a
85.	Water and Aquatic Resources	Establish <b>appropriate site drainage</b> : <ul style="list-style-type: none"><li>where feasible, preserve natural drainage features to minimize alteration to drainage conditions in the area; and</li><li>minimize interaction between the surface water system and erodible soils.</li></ul>	All phases	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Site water management and erosion prevention procedures under the Environmental Protection Program and updates</li></ul>	Site-wide	n/a
86.	Water and Aquatic Resources	Where possible, <b>schedule in-water activities</b> to avoid work during DFO's <i>Saskatchewan Restricted Activity Timing Windows for the Protection of Fish and Fish Habitat</i> (DFO 2013). Restricted activity periods for fish are as follows: <ul style="list-style-type: none"><li>all/winter spawning fish in northern Saskatchewan with lake trout present (1 September to 15 July); and</li><li>spring spawning fish in northern Saskatchewan within lake sturgeon (1 May to 15 July).</li></ul>	All phases	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li></ul>	In-water activities in Clearwater River road crossing and Patterson Lake	n/a

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ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
87.	Water and Aquatic Resources	<b>Design in-water developments so that the structures minimize adverse effects</b> on fish and fish habitat and avoid a harmful alteration disruption or destruction of fish habitat, as defined by the federal <i>Fisheries Act</i> , to the extent practical. <b>If required, develop a fish habitat offsetting plan</b> in consultation with DFO and with engagement of the local Indigenous communities.	Planning	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Detailed design of conveyance pipes, associated infrastructure, and water crossings</li><li>Fish habitat offsetting plan, if applicable</li></ul>	Water crossings, intake and discharge conveyance pipes, and associated infrastructure	n/a
88.	Water and Aquatic Resources	<b>Design in-water components</b> of site water management infrastructure (i.e., proposed fresh water intake, treated effluent diffuser, and treated sewage outfall) to minimize the potential for adverse effects on the aquatic environment and such that discharged flow does not interact with sediment, to the extent practical.	Planning	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li></ul>	<ul style="list-style-type: none"><li>Detailed design reports</li></ul>	Intake and discharge conveyance pipes and associated infrastructure	n/a
89.	Water and Aquatic Resources	Design and locate shoreline developments (e.g., site roads, shoreline infrastructure, physical footprints of the conveyance pipes for the fresh water intake, treated effluent diffuser, and treated sewage outfall) to <b>minimize riparian vegetation loss and/or disturbance</b> , to the extent practical. Revegetate temporarily disturbed areas with suitable, native species after construction activities are complete.	Planning, all phases	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Detailed design of shoreline infrastructure</li><li>Preliminary Decommissioning and Reclamation Plan</li></ul>	Shoreline infrastructure	n/a
90.	Water and Aquatic Resources	The <b>final treated effluent diffuser design</b> would avoid effects on ice cover.	Planning	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Wildlife and Wildlife Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Detailed design report</li></ul>	Effluent diffuser	n/a
91.	Water and Aquatic Resources	<b>Minimize the physical footprint of in-water developments</b> (i.e., fresh water intake, treated effluent diffuser, and treated sewage outfall) to the extent practical.	Planning	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Detailed design reports</li></ul>	Intake and discharge conveyance pipes and associated infrastructure	n/a
92.	Water and Aquatic Resources	Employ construction methods that <b>avoid or minimize the potential to cause injury or mortality to fish or disturb nearby habitats</b> , to the extent practical. Assemble in-water structures on shore, where practical, and float into position in Patterson Lake, and then submerge and anchor to the lake bottom.	Construction	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Construction Management Program</li><li>Environmental Protection Program</li></ul>	Intake and discharge conveyance pipes and associated infrastructure	n/a
93.	Water and Aquatic Resources	<b>Locate the fresh water intake</b> in an area and depth of water that avoids sensitive or unique fish habitats, to the extent practical.	Planning	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Detailed design report</li></ul>	Fresh water intake infrastructure	n/a

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ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
94.	Water and Aquatic Resources	Design and <b>install a fish screen</b> on the fresh water intake in Patterson Lake to avoid or reduce entrainment or impingement of fish. Pump intake screens would be designed in accordance with DFO's <i>Freshwater Intake End-of-Pipe Fish Screen Guideline</i> (DFO 1995).	Planning, Construction	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Detailed design report</li></ul>	Fresh water intake infrastructure	n/a
95.	Water and Aquatic Resources	<b>Use existing roads</b> , where feasible. Development of new public roads would not be required; the existing road from Highway 955 would be upgraded (i.e., widened to a surface width of 8 m) to support increased traffic volume and heavy vehicle/equipment use, allow for two-way traffic travel, and improve safety.	Planning, Construction	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Detailed design report</li></ul>	Access road	n/a
96.	Water and Aquatic Resources	Transport employees and contractors to site by aircraft, or by bus from La Loche until the on-site airstrip is operational, to <b>limit the opportunity for people to fish along the access road for the Project</b> .	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Fish and Fish Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Employee policies</li><li>Annual reports</li></ul>	Site transportation	n/a
97.	Water and Aquatic Resources	<b>Install a gate at the site entrance</b> (i.e., gatehouse) to control public access.	Construction	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Fish and Fish Habitat</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Detailed design report</li></ul>	Gatehouse	n/a
98.	Water and Aquatic Resources	Work with local Indigenous Groups and communities to <b>develop fishing policies</b> that consider both fisheries protection and traditional use activities.	All phases	Section 16.4.2 Secondary Pathways (Cultural and Heritage Resources and Indigenous Land and Resource Use) Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Fish and Fish Habitat</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Employee policies</li></ul>	Site-wide	n/a
99.	Water and Aquatic Resources	Confirm discharge (i.e., contact water, treated effluent, treated sewage) meets <b>discharge quality criteria</b> prior to release to the environment.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Hydrology (Section 9.5 and Table 9.5-2)</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Vegetation</li><li>Wildlife and Wildlife Habita</li><li>Human Health</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Effluent and Emissions Plan and updates</li><li>monitoring reports</li></ul>	Water management infrastructure	n/a

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ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
100.	Water and Aquatic Resources	Locate proposed treated effluent diffuser <b>away from sensitive or unique habitats</b> , to the extent practical.	Planning, Construction	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>▪ Surface Water Quality</li><li>▪ Fish and Fish Habitat</li><li>▪ Vegetation</li><li>▪ Wildlife and Wildlife Habita</li><li>▪ Human Health</li><li>▪ Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>▪ Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>▪ Detailed design reports</li></ul>	Discharge infrastructure	Practicality to be determined by design engineers
101.	Water and Aquatic Resources	Design the treated effluent diffuser and treated sewage outfall to <b>provide effective mixing and dilution of the effluent</b> to limit the area of the receiving environment affected by mine discharge.	Planning, Construction	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>▪ Surface Water Quality</li><li>▪ Fish and Fish Habitat</li><li>▪ Vegetation</li><li>▪ Wildlife and Wildlife Habita</li><li>▪ Human Health</li><li>▪ Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>▪ Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>▪ Detailed design report</li></ul>	Discharge infrastructure	n/a
102.	Water and Aquatic Resources	Adhere to guidance from regulators such as DFO as to the <b>allowable rate and timing of water withdrawals from the point of supply</b> .	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>▪ Hydrology (Section 9.5 and Table 9.5-2)</li><li>▪ Fish and Fish Habitat</li></ul>	<ul style="list-style-type: none"><li>▪ Compliance monitoring reports</li></ul>	Water management system	n/a
103.	Water and Aquatic Resources	<b>Design cross-drainage structures</b> to provide a conveyance for the maximum instantaneous flow resulting from a 1:100-year 24-hour storm event.	Planning, all phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>▪ Hydrology (Section 9.5 and Table 9.5-2)</li><li>▪ Fish and Fish Habitat</li></ul>	<ul style="list-style-type: none"><li>▪ Detailed design reports</li></ul>	Site-wide	n/a
104.	Water and Aquatic Resources	Break drainage areas into <b>smaller catchment areas</b> to limit large areas of runoff and reduce the potential erosive energy.	Planning, all phases	Section 9.5 Project Interactions and Mitigations Table 9.5-2: Potential Effects Pathways for Hydrology	<ul style="list-style-type: none"><li>▪ Detailed design reports</li></ul>	Water management system	n/a
105.	Water and Aquatic Resources	Base <b>ditch geometry and erosion protection</b> on analysis of predicted peak flows and incorporate climate change effects so that the channels have sufficient capacity.	Planning, all phases	Section 9.5 Project Interactions and Mitigations Table 95-2: Potential Effects Pathways for Hydrology	<ul style="list-style-type: none"><li>▪ Detailed design reports</li></ul>	Site-wide	n/a
106.	Water and Aquatic Resources	Discharge <b>water that meets acceptable discharge criteria</b> to Patterson Lake.	All phases	Section 9.5 Project Interactions and Mitigations Table 9.5-2: Potential Effects Pathways for Hydrology	<ul style="list-style-type: none"><li>▪ Compliance monitoring reports</li></ul>	Water management system	n/a
107.	Water and Aquatic Resources	<b>Monitor the flows before and after</b> Construction at the outlet of Patterson Lake to quantify the change of flow and its effects on the aquatic environment.	All phases	Section 9.5 Project Interactions and Mitigations Table 95-2: Potential Effects Pathways for Hydrology	<ul style="list-style-type: none"><li>▪ Environmental Protection Program and updates</li><li>▪ Compliance monitoring reports</li></ul>	Patterson Lake outlet	n/a

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ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
108.	Water and Aquatic Resources	Inspect and maintain <b>road embankments, ditches, ponds, and cross-drainage structures.</b>	All phases	Section 9.5 Project Interactions and Mitigations Table 9.5-2: Potential Effects Pathways for Hydrology	<ul style="list-style-type: none"><li>Compliance monitoring reports</li></ul>	Site-wide	n/a
109.	Water and Aquatic Resources	<b>Discharge water</b> to the watershed of origin, to the extent practical.	All phases	Section 9.5 Project Interactions and Mitigations Table 9.5-2: Potential Effects Pathways for Hydrology	<ul style="list-style-type: none"><li>Feasibility report</li></ul>	Site-wide	Practicality to be determined by design engineers
110.	Water and Aquatic Resources	Treat sewage to <b>appropriate release limits</b> in accordance with provincial standards and licence/permit conditions.	All phases	Section 10.4 Project Interactions and Mitigations Table 10.4-1: Potential Effects Pathways for Surface Water Quality	<ul style="list-style-type: none"><li>Compliance monitoring reports</li></ul>	Sewage treatment system	n/a
111.	Water and Aquatic Resources	<b>Revegetate</b> NPAG and PAG waste rock storage areas during reclamation to limit total suspended solids in surface runoff.	Operations, Closure	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li><li>Annual reporting on disturbed and reclaimed areas</li></ul>	Waste rock storage areas	n/a
112.	Water and Aquatic Resources	<b>Employ a crane to move heavy equipment and infrastructure across the Clearwater River</b> in instances where loads exceed the legal rating or capacity of the bridge and options for reducing load size/weight are not feasible or practical (e.g., dismantling equipment, breaking down a load into smaller units).	All phases	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Annual reports</li></ul>	Clearwater River bridge	n/a
113.	Water and Aquatic Resources	<b>Minimize the footprint</b> of work areas adjacent to the Clearwater River and associated ingress/egress to limit the area of disturbance. Fording of the Clearwater River, or activities that could result in a direct disturbance to the bed or banks of the river, would not occur.	All phases	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Annual reporting on disturbed and reclaimed areas</li></ul>	Clearwater River bridge	n/a
114.	Water and Aquatic Resources	If an upgrade to the existing Clearwater River bridge is required, <b>avoid any permanent disturbance</b> below the high-water mark of the Clearwater River.	Planning, Construction	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Detailed design report</li></ul>	Clearwater River bridge	n/a
115.	Water and Aquatic Resources	<b>Monitor water flows</b> in the downstream aquatic environment at the outlet of Patterson Lake and apply adaptive management if changes in flows are larger than predicted and are affecting fish habitat.	All phases	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li><li>Compliance monitoring reports</li></ul>	Patterson Lake outlet	n/a
116.	Water and Aquatic Resources	<b>Minimize timeframes for site clearing</b> and activities that expose soils, to the extent practical.	All phases	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Annual reporting on disturbed and reclaimed areas</li></ul>	Site-wide	n/a
117.	Water and Aquatic Resources	Construct in-water developments in <b>adherence with the conditions of any permits or authorizations</b> that may be issued for the Project from the appropriate regulatory agencies.	All phases	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	<ul style="list-style-type: none"><li>Compliance monitoring reports</li></ul>	Water management infrastructure	n/a



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ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
118.	Water and Aquatic Resources	<b>Locate the intake screen above the bottom</b> of the waterbody to prevent entrainment of sediment and aquatic organisms associated with the bottom area.	Planning, Construction	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	▪ Detailed design report	Water intake infrastructure	n/a
119.	Water and Aquatic Resources	<b>Limit seepages</b> from the special waste storage area with double liner and leak detection system.	Planning, Construction	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	▪ Detailed design reports	Waste rock storage area	n/a
120.	Water and Aquatic Resources	Design stream crossing structures to <b>limit the area disturbed</b> and in a manner that protects the banks from erosion and maintains the flows.	Planning, Construction	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	▪ Detailed design reports	Water management infrastructure	n/a
121.	Water and Aquatic Resources	<b>Inspect culverts regularly and perform maintenance</b> , as required, to prevent blockages from forming and causing ponding or backwater effects.	All phases	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	▪ Annual reports	Water management infrastructure	n/a
122.	Water and Aquatic Resources	<b>Follow DFO's Guidelines for the Use of Explosives in or Near Canadian Fisheries Waters</b> (Wright and Hopky 1998) for setback distances from Patterson Lake. If setback distances are approached, develop site-specific operating mitigations in consultation with DFO.	All phases	Section 11.4 Project Interactions and Mitigations Table 11.4-1: Potential Effects Pathways for Fish and Fish Habitat	▪ Environmental Protection Program and updates	Blasting	n/a
123.	Terrestrial Resources	As part of reclamation activities, complete <b>contouring of disturbed areas</b> to minimize erosion, re-establish drainage, and encourage the growth of vegetation.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x ▪ Vegetation ▪ Wildlife and Wildlife Habitat	▪ Preliminary Decommissioning and Reclamation Plan	Site-wide	n/a
124.	Terrestrial Resources	Use stockpiled overburden and NPAG mine rock as fill to meet decommissioning requirements. Fill and <b>contour the site to blend with the natural surrounding topography</b> , to the extent practical.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x ▪ Vegetation ▪ Wildlife and Wildlife Habitat	▪ Preliminary Decommissioning and Reclamation Plan	Site-wide	n/a
125.	Terrestrial Resources	Use <b>native species</b> or non-aggressive, non-native species appropriate for the conditions for revegetation.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x ▪ Vegetation ▪ Wildlife and Wildlife Habitat	▪ Preliminary Decommissioning and Reclamation Plan	Site-wide	n/a
126.	Terrestrial Resources	Adhere to the <i>Federal Policy on Wetland Conservation</i> (Government of Canada 1991) to have <b>no net loss of wetland functions</b> .	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x ▪ Vegetation ▪ Wildlife and Wildlife Habitat	▪ Environmental Protection Program and updates	Site-wide	n/a
127.	Terrestrial Resources	Implement best management practices and mitigation such as <b>spill prevention</b> .	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x ▪ Vegetation ▪ Wildlife and Wildlife Habitat	▪ Environmental Protection Program and updates	Site-wide	n/a

Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
128.	Terrestrial Resources	<b>Promote natural propagation and regeneration</b> to enhance reclamation along the access road and other Project rights-of-way.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li></ul>	<ul style="list-style-type: none"><li>Preliminary Decommissioning and Reclamation Plan</li></ul>	Site-wide	n/a
129.	Terrestrial Resources	<b>Work with government and Indigenous communities to develop caribou mitigation and offsetting actions.</b>	Planning, Construction	Section 14.4 Project Interactions and Mitigations Table 14.4-1: Potential Effects Pathways for Wildlife and Wildlife Habitat	<ul style="list-style-type: none"><li>Caribou mitigation and offsetting plan</li></ul>	Site-wide	n/a
130.	Terrestrial Resources	Where practical, <b>maintain overflight altitudes of &gt;300 m above ground level.</b>	All phases	Section 14.4 Project Interactions and Mitigations Table 14.4-1: Potential Effects Pathways for Wildlife and Wildlife Habitat	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li></ul>	Air transportation	Practicality to be determined by air transportation service providers
131.	Terrestrial Resources	<b>Do not allow hunting by employees</b> in areas within the Project footprint.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Wildlife and Wildlife Habitat</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Employee policies</li></ul>	Site-wide	n/a
132.	Terrestrial Resources	<b>Apply water and/or suppressants to site roads, access road, and airstrip</b> , as necessary. Use dust suppressants that minimize environmental risk and are government-approved for use.	All phases	A Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Air Quality</li><li>Surface Water Quality</li><li>Fish and Fish Habitat</li><li>Terrain and Soils</li><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li><li>Human Health</li><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li></ul>	Site-wide: roads and airstrip	n/a
133.	Terrestrial Resources	<b>Snow clearing along the access road to incorporate road pull-outs</b> at regular intervals to provide refuge for wildlife.	All phases	Section 14.4 Project Interactions and Mitigations Table 14.4-1: Potential Effects Pathways for Wildlife and Wildlife Habitat	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li></ul>	Access road	n/a
134.	Terrestrial Resources	Align the fibre optic line <b>right-of-way adjacent to existing highway and access road.</b>	Planning	A Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li></ul>	<ul style="list-style-type: none"><li>Detailed design reports</li></ul>	Optic line	n/a
135.	Terrestrial Resources	<b>Inspect construction equipment</b> prior to arriving at site and clean, if required. <ul style="list-style-type: none"><li>Utilize maintenance shop to support cleaning, once constructed and as required.</li></ul>	Construction	A Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Vegetation</li><li>Wildlife and Wildlife Habitat</li></ul>	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li></ul>	Site-wide	n/a

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ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
136.	Terrestrial Resources	<b>Site access road</b> between gatehouse and mine terrace <b>realigned</b> during Project design to avoid a wetland.	Planning	A Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>▪ Terrain and Soils</li><li>▪ Vegetation</li><li>▪ Wildlife and Wildlife Habitat</li></ul>	<ul style="list-style-type: none"><li>▪ Design in the EIS</li></ul>	Site road to mine terrace	n/a
137.	Terrestrial Resources	<b>Use clearing equipment that minimizes surface disturbance, soil compaction, and topsoil loss</b> (e.g., equipment with low ground pressure tracks or tires, blade shoes, brushes), where feasible.	Construction	A Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>▪ Terrain and Soils</li><li>▪ Vegetation</li><li>▪ Wildlife and Wildlife Habitat</li></ul>	<ul style="list-style-type: none"><li>▪ Environmental Protection Program and updates</li></ul>	Site-wide: all areas to be cleared	n/a
138.	Terrestrial Resources	Where soils are prone to wind erosion, <b>tackify, cover, seed, and/or apply water during periods of high erosion potential</b> (e.g., summer and fall).	All phases	Section 12.4 Project Interactions and Mitigations Table 12.4-1: Potential Effects Pathways for Terrain and Soils	<ul style="list-style-type: none"><li>▪ Environmental Protection Program and updates</li><li>▪ Preliminary Decommissioning and Reclamation Plan</li></ul>	Site-wide	n/a
139.	Terrestrial Resources	<b>Design slopes for long-term stability.</b>	Planning	Section 12.4 Project Interactions and Mitigations Table 12.4-1: Potential Effects Pathways for Terrain and Soils	<ul style="list-style-type: none"><li>▪ Detailed design reports</li></ul>	Site-wide	n/a
140.	Terrestrial Resources	Mark clearly with an applicable <b>set-back distance and avoid known rare plants</b> , where feasible. Where disturbance to rare plants is unavoidable, compensation would be considered following discussion with and guidance from regulators.	All phases	Section 13.4 Project Interactions and Mitigations Table 13.4-1: Potential Effects Pathways for Vegetation	<ul style="list-style-type: none"><li>▪ Environmental Protection Program and updates</li></ul>	Site-wide	n/a
141.	Terrestrial Resources	Procure clean construction materials and procure seed mixes that work to <b>avoid the introduction of noxious weeds.</b>	All phases	Section 13.4 Project Interactions and Mitigations Table 13.4-1: Potential Effects Pathways for Vegetation	<ul style="list-style-type: none"><li>▪ Environmental Protection Program and updates</li></ul>	Site-wide	n/a
142.	Terrestrial Resources	Design to <b>meet avian-safe standards</b> in compliance with applicable laws, regulations, and permits, to prevent electrocutions (e.g., cover jumper wires, conductors, and equipment), discourage perching and prevent collisions (e.g., install markers to enhance the visibility of lines in key movement corridors and staging areas).	Planning	Section 14.4 Project Interactions and Mitigations Table 14.4-1: Potential Effects Pathways for Wildlife and Wildlife Habitat	<ul style="list-style-type: none"><li>▪ Environmental Protection Program and updates</li><li>▪ Detailed design reports</li></ul>	Site-wide	n/a
143.	Terrestrial Resources	To avoid and limit attraction of wildlife to the Project site, <b>collect domestic (e.g., food) and industrial (e.g., used oil and lubricants) waste</b> and temporarily store in wildlife-proof containers, incinerated on site, transported off site for recycling, or disposed at a licensed disposal facility, as appropriate.	All phases	Section 14.4 Project Interactions and Mitigations Table 14.4-1: Potential Effects Pathways for Wildlife and Wildlife Habitat	<ul style="list-style-type: none"><li>▪ Wildlife protection measures in the Environmental Protection Program and updates</li></ul>	Site-wide	n/a
144.	Terrestrial Resources	<b>Conduct wildlife patrols regularly during waterbird nesting periods</b> (Zone B6: late April to mid-August; ECCC 2018) to monitor effectiveness of deterrents and apply adaptive management, as necessary.	All phases	Section 14.4 Project Interactions and Mitigations Table 14.4-1: Potential Effects Pathways for Wildlife and Wildlife Habitat	<ul style="list-style-type: none"><li>▪ Wildlife protection measures in the Environmental Protection Program and updates</li></ul>	Site-wide	n/a



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ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
145.	Terrestrial Resources	<b>Implement source control</b> (i.e., construction using engineered layers) and installation of liner for the PAG waste rock storage area.	Planning, all phases	Section 14.4 Project Interactions and Mitigations Table 14.4-1: Potential Effects Pathways for Wildlife and Wildlife Habitat	▪ Detailed design reports	Waste rock storage areas	n/a
146.	Terrestrial Resources	<b>Design above-ground infrastructure so that the need for wildlife crossing structures is minimized</b> (e.g., small to moderate diameter pipeline conveyance systems directly along the ground, often through low points such as small ditches).	Planning, all phases	Section 14.4 Project Interactions and Mitigations Table 14.4-1: Potential Effects Pathways for Wildlife and Wildlife Habitat	▪ Detailed design reports	Site-wide	n/a
147.	Terrestrial Resources	If sensitive species are confirmed in the Project footprint, <b>apply activity restriction guidelines for sensitive species</b> established by the Government of Saskatchewan (ENV 2017) to the Project as required.	All phases	Section 14.4 Project Interactions and Mitigations Table 14.4-1: Potential Effects Pathways for Wildlife and Wildlife Habitat	▪ Wildlife protection measures in the Environmental Protection Program and updates	Site-wide	n/a
148.	Terrestrial Resources	If in specific situations where the setback distance(s) cannot practically be applied, contact the ENV early in the planning stage to <b>minimize effects on sensitive species</b> .	All phases	Section 14.4 Project Interactions and Mitigations Table 14.4-1: Potential Effects Pathways for Wildlife and Wildlife Habitat	▪ Environmental Protection Program and updates	Site-wide	n/a
149.	Terrestrial Resources	<b>Minimize habitat creation and human-bat interactions</b> for the Project through design; specifically, evaluate opportunities to include screening on vents and entranceways to rafters/attics.	Planning, all phases	Section 14.4 Project Interactions and Mitigations Table 14.4-1: Potential Effects Pathways for Wildlife and Wildlife Habitat	▪ Bat protection measures in the Environmental Protection Program and updates	Site-wide	Practicality to be determined by design engineers
150.	Terrestrial Resources	If bats or are observed nesting, roosting, or hibernating, <b>do not disturb</b> them, to the extent practicable. <b>Contact the ENV and Environment and Climate Change Canada (ECCC) to discuss measures for the removal/relocation</b> and to identify further measures that could prevent future access. Damage or danger permits may be obtained, if required.	All phases	Section 14.4 Project Interactions and Mitigations Table 14.4-1: Potential Effects Pathways for Wildlife and Wildlife Habitat	▪ Wildlife protection measures in the Environmental Protection Program and updates	Site-wide	n/a
151.	Terrestrial Resources	For worker protection and prevention of the spread of rabies and white nose syndrome, <b>contact the ENV and ECCC if any sick, injured, or dead bats are observed</b> . Only trained and rabies-vaccinated staff or contractors would be allowed to handle bats. Submit bat carcasses for testing of rabies and/or white nose syndrome, as appropriate, based on communications with the ENV and ECCC.	All phases	Section 14.4 Project Interactions and Mitigations Table 14.4-1: Potential Effects Pathways for Wildlife and Wildlife Habitat	▪ Wildlife protection measures in the Environmental Protection Program and updates	Site-wide	n/a
152.	Terrestrial Resources	To the extent practical, <b>skirt buildings and stairs to the ground</b> to limit opportunities for use as shelter by wildlife.	Planning, all phases	Section 14.4 Project Interactions and Mitigations Table 14.4-1: Potential Effects Pathways for Wildlife and Wildlife Habitat	▪ Wildlife protection measures in the Environmental Protection Program	Site-wide	Practicality to be determined by design engineers
153.	Terrestrial Resources	To minimize habitat loss, <b>locate the communications tower</b> away from wetlands and other high suitability habitats for species at risk.	Construction	Section 14.4 Project Interactions and Mitigations Table 14.4-1: Potential Effects Pathways for Wildlife and Wildlife Habitat	▪ Detailed design reports	Communications tower	n/a

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154.	Terrestrial Resources	To <b>minimize bird and bat collisions</b> with the communication tower: <ul style="list-style-type: none"><li>▪ limit the tower lighting to only what is required for aviation safety (e.g., flashing light on the top of the tower);</li><li>▪ minimize guy wires on the communication tower and install markers to enhance the visibility of any guy wires that may be required; and</li><li>▪ follow avian-safe standards in compliance with applicable laws, regulations, permits, and best management practices to prevent electrocution (e.g., cover jumper wires, conductors, equipment) and avoid attraction by lights.</li></ul>	All phases	Section 14.4 Project Interactions and Mitigations Table 14.4-1: Potential Effects Pathways for Wildlife and Wildlife Habitat	<ul style="list-style-type: none"><li>▪ Bird and bat protection measures in the Environmental Protection Program and updates</li></ul>	Site-wide	n/a
155.	Terrestrial Resources	Other than where required to comply with regulatory guidelines (e.g., aviation safety) or worker health and safety, the <b>following guidance will be used for Project lighting</b> design when migratory birds may be present: <ul style="list-style-type: none"><li>▪ limit the use of decorative lighting and solid burning or slow pulsing warning lights;</li><li>▪ to the extent possible, orient lights downward or use shielded fixtures and limit light use to areas where Project activities are occurring (Dick 2016);</li><li>▪ to the extent feasible, use the amber light [spectrum &gt;500 nanometre], limit blue spectral light, and do not use white light, (Dick 2016); and</li><li>▪ turn off lights when not in use (e.g., use timers, motion sensors) (Dick 2016).</li></ul>	Planning, all phases	Section 14.4 Project Interactions and Mitigations Table 14.4-1: Potential Effects Pathways for Wildlife and Wildlife Habitat	<ul style="list-style-type: none"><li>▪ Wildlife protection measures in the Environmental Protection Program and updates</li></ul>	Site-wide	Feasibility to be determined by design engineers
156.	Terrestrial Resources	If vegetation removal is required during the black bear denning/hibernation periods, conduct bear den presence/absence surveys and wildlife tree surveys prior to clearing activities.	Mainly Construction, but applicable in all phases	Section 14.4 Project Interactions and Mitigations Table 14.4-1: Potential Effects Pathways for Wildlife and Wildlife Habitat	<ul style="list-style-type: none"><li>▪ Wildlife protection measures in the Environmental Protection Program and updates</li></ul>	Site-wide	n/a
157.	Socio-economics	Implement <b>Benefit Agreements</b> , including: <ul style="list-style-type: none"><li>▪ funding and human resources to support community-related initiatives including but not limited to cultural and traditional values; and</li><li>▪ the establishment of an Implementation Committee to communicate regularly and to reach early resolution of issues and/or disputes that may arise.</li></ul>	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x Section x.5 Residual Effects Analysis <ul style="list-style-type: none"><li>▪ Cultural and Heritage Resources and Indigenous Land and Resource Use (plus Section 16.8 Monitoring, Follow-up, and Adaptive Management)</li><li>▪ Other Land and Resource Use</li><li>▪ Community Well-Being (plus Section 16.8 Monitoring, Follow-up, and Adaptive Management)</li></ul>	<ul style="list-style-type: none"><li>▪ Annual reports</li><li>▪ Socio-economic Capacity Building Framework</li></ul>	Local priority area	Would apply to primary Indigenous Groups (i.e., CRDN, MN-S, BNDN, BRDN)

Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
158.	Socio-economics	Establish an <b>Environmental Committee</b> to monitor environmental performance of the Project.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x Section x.5 Residual Effects Analysis <ul style="list-style-type: none"><li>Cultural and Heritage Resources and Indigenous Land and Resource Use (plus Section 16.6.2 Significance Determination)</li><li>Other Land and Resource Use (plus Section 17.8 Monitoring, Follow-up, and Adaptive Management)</li><li>Community Well-Being</li></ul>	<ul style="list-style-type: none"><li>Annual reports</li></ul>	Local priority area	Would apply to primary Indigenous Groups (i.e., CRDN, MN-S, BNDN, BRDN)
159.	Socio-economics	Provide funding for <b>full-time independent Indigenous Monitors</b> to enable unrestricted environmental monitoring, subject to the Indigenous Monitor complying with appropriate health safety and other reasonable site-specific requirements.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x Section x.5 Residual Effects Analysis Section x.8 Monitoring, Follow-up, and Adaptive Management <ul style="list-style-type: none"><li>Cultural and Heritage Resources and Indigenous Land and Resource Use</li><li>Other Land and Resource Use</li></ul>	<ul style="list-style-type: none"><li>Annual reports</li><li>Socio-economic Capacity Building Framework</li></ul>	Local priority area	Would apply to primary Indigenous Groups (i.e., CRDN, MN-S, BNDN, BRDN)
160.	Socio-economics	<b>Implement a chance find procedure</b> during land clearing activities.	All phases	Section 16.4 Project Interactions and Mitigation Table 16.4-1 Potential Effects Pathways for Cultural and Heritage Resources and Indigenous Land and Resource Use	<ul style="list-style-type: none"><li>Annual reports</li></ul>	Site-wide	n/a
161.	Socio-economics	Develop and maintain a <b>business opportunities workplan</b> that describes the steps NexGen and each primary Indigenous Group would take to achieve the desired outcomes of the respective Benefit Agreement.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Economy</li><li>Community Well-Being</li></ul>	<ul style="list-style-type: none"><li>Annual reports</li><li>Socio-economic Capacity Building Framework</li></ul>	Local priority area	Would apply to primary Indigenous Groups (i.e., CRDN, MN-S, BNDN, BRDN)
162.	Socio-economics	Implement provisions of <b>Benefit Agreements</b> related to culture, traditional values, employment, training, and economic development.	All phases	Section 19.4 Project Interactions and Mitigations Table 19.4-1: Potential Effects Pathways for Community Well-Being Section 19.5 Residual Effects Analysis	<ul style="list-style-type: none"><li>Annual reports</li><li>Socio-economic Capacity Building Framework</li></ul>	Local priority area	Would apply to primary Indigenous Groups (i.e., CRDN, MN-S, BNDN, BRDN)
163.	Socio-economics	Establish an <b>Implementation Committee</b> to provide a forum for regular communication and information exchange between NexGen and communities for effective management of the Benefit Agreement commitments and for the early resolution of issues and/or disputes that may arise.	All phases	Section 19.4 Project Interactions and Mitigations Table 19.4-1: Potential Effects Pathways for Community Well-Being Section 19.5 Residual Effects Analysis	<ul style="list-style-type: none"><li>Annual reports</li></ul>	Local priority area	Would apply to primary Indigenous Groups (i.e., CRDN, MN-S, BNDN, BRDN)
164.	Socio-economics	Develop and implement <b>pre-Construction communications process</b> to raise public awareness in communities of potential Project opportunities and effects.	Planning	Section 19.4 Project Interactions and Mitigations Table 19.4-1: Potential Effects Pathways for Community Well-Being	<ul style="list-style-type: none"><li>Annual reports</li><li>Socio-economic Capacity Building Framework</li></ul>	Regional focus	n/a
165.	Socio-economics	Provide <b>advance notice</b> of business opportunities.	All phases	Section 18.4 Project Interactions and Mitigations Table 18.4-1: Potential Effects Pathways for Economy	<ul style="list-style-type: none"><li>Socio-economic Capacity Building Framework</li></ul>	Regional focus	n/a

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ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
166.	Socio-economics	Provide a <b>first preference to local businesses</b> that meet or exceed procurement process requirements.	All phases	Section 19.4 Project Interactions and Mitigations Table 19.4-1: Potential Effects Pathways for Community Well-Being	▪ Socio-economic Capacity Building Framework	Local priority area	n/a
167.	Socio-economics	Work with local communities to <b>maintain a local business registry</b> .	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x ▪ Economy ▪ Community Well-Being	▪ Socio-economic Capacity Building Framework	Local priority area	n/a
168.	Socio-economics	Establish a long-term aspirational target of <b>30% of external spending</b> being awarded to LSA and RSA businesses.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x ▪ Economy ▪ Community Well-Being	▪ Socio-economic Capacity Building Framework	Local priority area	n/a
169.	Socio-economics	<b>Design procurement practices</b> to increase involvement of local businesses within the LSA and RSA including providing information to communities on the size and timing of contracting opportunities.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x ▪ Economy ▪ Community Well-Being	▪ Socio-economic Capacity Building Framework	Local priority area	n/a
170.	Socio-economics	<b>Pre-qualify</b> each Indigenous business listed in the business registry and provide feedback to any Indigenous business that does not successfully pre-qualify.	All phases	Section 18.4 Project Interactions and Mitigations Table 18.4-1: Potential Effects Pathways for Economy	▪ Procurement policies in Socio-economic Capacity Building Framework	Regional focus	n/a
171.	Socio-economics	Develop and implement a <b>single source process and a preferred competitive bid process</b> to facilitate the success of capable and suitably qualified Indigenous businesses.	All phases	Section 18.4 Project Interactions and Mitigations Table 18.4-1: Potential Effects Pathways for Economy	▪ Socio-economic Capacity Building Framework	Regional focus	n/a
172.	Socio-economics	Use best efforts to provide qualified local residents with a <b>first preference for employment and training opportunities</b> .	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x ▪ Economy ▪ Community Well-Being	▪ Socio-economic Capacity Building Framework	Local priority area	n/a
173.	Socio-economics	Support and promote Indigenous community <b>participation and employment</b> in the traditional economy.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x ▪ Economy ▪ Community Well-Being	▪ Socio-economic Capacity Building Framework	Regional focus	n/a
174.	Socio-economics	Work with local communities to <b>develop culturally sensitive employment policies</b> to address both recruitment and retention barriers.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x ▪ Economy ▪ Community Well-Being	▪ Socio-economic Capacity Building Framework	Local priority area	n/a
175.	Socio-economics	Work with local communities to <b>develop culturally sensitive employment policies</b> to facilitate involvement in resource harvesting activities.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x ▪ Economy ▪ Community Well-Being	▪ Socio-economic Capacity Building Framework	Local priority area	n/a

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ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
176.	Socio-economics	Set a long-term aspirational target of <b>75% of the Project's workforce</b> being composed of LSA residents.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Economy</li><li>Community Well-Being</li></ul>	<ul style="list-style-type: none"><li>Socio-economic Capacity Building Framework</li></ul>	Local priority area	n/a
177.	Socio-economics	Prioritize <b>advancement</b> of qualified local residents into increasingly senior positions.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Economy</li><li>Community Well-Being</li></ul>	<ul style="list-style-type: none"><li>Socio-economic Capacity Building Framework</li></ul>	Local priority area	n/a
178.	Socio-economics	Implement a tailored <b>local workforce recruitment strategy</b> to confirm that LSA residents are fully aware of and understand access to Project employment opportunities.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Economy</li><li>Community Well-Being</li></ul>	<ul style="list-style-type: none"><li>Socio-economic Capacity Building Framework</li></ul>	Local priority area	n/a
179.	Socio-economics	Develop and implement <b>human resource policies</b> (e.g., employee and family assistance program) to assist workers in finding information and referral services for family-related resources, as required.	All phases	Section 19.4 Project Interactions and Mitigations Table 19.4-1: Potential Effects Pathways for Community Well-Being	<ul style="list-style-type: none"><li>Socio-economic Capacity Building Framework</li></ul>	Regional focus	n/a
180.	Socio-economics	Provide <b>employment readiness training</b> for employees.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Economy</li><li>Community Well-Being</li></ul>	<ul style="list-style-type: none"><li>Socio-economic Capacity Building Framework</li></ul>	Regional focus	n/a
181.	Socio-economics	Establish a <b>mentoring program</b> to support long-term participation of LSA residents in the Project workforce.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Economy</li><li>Community Well-Being</li></ul>	<ul style="list-style-type: none"><li>Socio-economic Capacity Building Framework</li></ul>	Local priority area	n/a
182.	Socio-economics	Work with relevant training institutions to facilitate delivery of <b>certified and accredited training and recruitment programs for construction and mining-related skills</b> targeted at employment opportunities for LSA residents and continue to provide scholarship and summer student opportunities.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Economy</li><li>Community Well-Being</li></ul>	<ul style="list-style-type: none"><li>Socio-economic Capacity Building Framework</li></ul>	Local priority area	n/a
183.	Socio-economics	Provide <b>dedicated space for Elders</b> to be available to support employees to assist with employee retention.	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Economy</li><li>Community Well-Being</li></ul>	<ul style="list-style-type: none"><li>Socio-economic Capacity Building Framework</li></ul>	Regional focus	n/a
184.	Socio-economics	Hold discussions, as required, with the Government of Saskatchewan on <b>provincial road use, maintenance, and upgrades to inform provincial planning purposes</b> .	All phases	Section 19.4 Project Interactions and Mitigations Table 19.4-1: Potential Effects Pathways for Community Well-Being	<ul style="list-style-type: none"><li>Annual reporting</li></ul>	Regional focus	n/a
185.	Socio-economics	If required, develop a <b>fish habitat offsetting plan</b> in consultation with DFO and with engagement of the local Indigenous Groups	Planning	Fish and Fish Habitat	<ul style="list-style-type: none"><li>n/a</li></ul>	Local priority area	Related to Commitment 86; information in Commitment 183 reflective of socio-economic component of commitment



Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
186.	Socio-economics	Maintain ongoing communication with employees and contractors about future workforce and contracting needs and the schedule for Decommissioning and Reclamation (i.e., Closure).	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Economy</li><li>Community Well-Being</li></ul>	<ul style="list-style-type: none"><li>Socio-economic Capacity Building Framework</li></ul>	Regional focus	n/a
187.	Socio-economics	Implement a workforce transition plan to address reduction in employment and training opportunities during slowdowns and shutdowns associated with care and maintenance and Closure.	Operations, Closure	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Economy</li><li>Community Well-Being</li></ul>	<ul style="list-style-type: none"><li>Socio-economic Capacity Building Framework</li></ul>	Regional focus	n/a
188.	Socio-economics	Establish a Project feedback and grievance mechanism to record and action issues identified by local priority area residents (or other members of the public).	All phases	Section x.4 Project Interactions and Mitigations Table x.4-1: Potential Effects Pathways for x <ul style="list-style-type: none"><li>Indigenous Land and Resource Use</li><li>Other Land and Resource use</li><li>Community Well-Being</li></ul>	<ul style="list-style-type: none"><li>Grievance mechanism</li></ul>	Regional focus	n/a
189.	Socio-economics	A perception survey draft questionnaire will be compiled and input requested from Indigenous Groups.	Planning	TSD I, Table 4 (CRDN)	<ul style="list-style-type: none"><li>Perception study plan</li></ul>	Local priority area	Added based on additional review of EIS text
190.	Regulatory Condition	As part of the Permit to Operate a Pollutant Control Facility, NexGen will provide an analysis showing the predicted noise effects (after the incorporation of design features and mitigations) on workers staying in the on-site Project camp.	Planning	n/a	<ul style="list-style-type: none"><li>Permit applications</li></ul>	Camp	Commitment made as part of provincial EA technical review process
191.	Regulatory Condition	NexGen shall develop a road maintenance and upgrade cost-sharing agreement in collaboration with the Ministry of Highways. The agreement, approved by the Ministry of Highways, shall be submitted to the Saskatchewan Ministry of Environment prior to initiating construction of the Project.	Planning, Construction	n/a	<ul style="list-style-type: none"><li>Cost-sharing agreement</li></ul>	Access highway	Commitment made as part of provincial EA technical review process
192.	Follow-up Program	An Effluent and Emissions Plan would be implemented that sets out criteria for emission monitoring and reporting (e.g., reporting to the National Pollutant Release Inventory).	All phases	Section 7.2.8 Monitoring Follow-up and Adaptive Management	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li><li>Environment Monitoring Plan and updates</li><li>Effluent and Emissions Plan and updates</li><li>Annual reports</li></ul>	Site-wide	Monitoring activities would include: <ul style="list-style-type: none"><li>incinerator stack testing;</li><li>calciner stack testing;</li><li>acid plant stack testing;</li><li>ongoing passive or active monitoring for sulphur dioxide, nitrogen dioxide, radon, particulates, radionuclides; and</li><li>ongoing meteorological monitoring.</li></ul>
193.	Follow-up Program	Monitor noise emissions from Project equipment and activities during Construction and Operations.	Construction, Operations	Section 7.3.8 Monitoring Follow-up and Adaptive Management	<ul style="list-style-type: none"><li>Discipline-specific follow-up study</li></ul>	Site-wide	<ul style="list-style-type: none"><li>Follow-up noise monitoring would be conducted in accordance with methods from AER Directive 038 (AER 2007)</li><li>Noise levels would be measured at a minimum of three receptors for a period of not less than 24 hours using integrating sound level meters. Monitoring data would be post-processed to obtain representative Leq,day, Leq,night, and Ldn values for each receptor</li><li>Representative Leq,day, Leq,night, and Ldn values would be compared to model predictions from the EIS and to regulatory thresholds. If noise monitoring shows compliance with regulatory thresholds, then additional noise monitoring would not be required unless and until there were substantial changes to noise-emitting activities (e.g., addition of new equipment that was not modelled or assessed in the EIS)</li></ul>

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ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
194.	Follow-up Program	Monitor greenhouse gas emissions from Project components and activities that would contribute to climate change for all Project phases.	All phases	Section 7.4.8 Monitoring Follow-up and Adaptive Management	<ul style="list-style-type: none"><li>Environmental Protection Program</li><li>Energy management strategies</li><li>Waste Management Program</li><li>Conventional Waste Management Plan</li><li>Annual reports</li></ul>	Site-wide	<ul style="list-style-type: none"><li>Project GHG emissions would be quantified annually.</li><li>Project GHG emissions would be reported annually to applicable regulatory reporting program, which is Canada's Greenhouse Gas Reporting Program (ECCC 2019).</li></ul>
195.	Follow-up Program	Monitor groundwater quantity and quality as a part of the Project, including continued monitoring of background wells located upgradient of the Project footprint.	All phases	Section 8.7 Monitoring Follow-up and Adaptive Management	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li><li>Environmental Monitoring Plan and updates</li><li>Mine Waste Management Plan and updates</li><li>Annual reports</li></ul>	Monitoring program extents	<p>Provisions of the Environmental Monitoring Plan would include:</p> <ul style="list-style-type: none"><li>groundwater elevation measurements to determine groundwater flow direction and gradients; and</li><li>sampling to confirm groundwater quality to detect potential releases of COPCs and to support continued refinement of the conceptual site model (e.g., risk of effects from the Project).</li></ul> <p>A focus of the Environmental Monitoring Plan would be the establishment of monitoring systems to evaluate the effectiveness of groundwater protection controls. Groundwater monitoring targets would be selected under the plan to achieve the identified monitoring objectives. These targets would include monitoring of groundwater elevations and groundwater quality in the bedrock and overburden to monitor the effects of the following:</p> <ul style="list-style-type: none"><li>dewatering during construction and development of the shaft, underground mine, and UGTMF;</li><li>seepage from the WRSAs;</li><li>seepage from the process and mine terrace areas, including the fuel and reagent storage areas and equipment such as diesel fuel generators; and</li><li>seepage from the area of the effluent treatment ponds.</li></ul>
196.	Follow-up Program	Continue hydrometric monitoring and data collection initiated for baseline studies.	All phases	Section 9.9 Monitoring Follow-up and Adaptive Management	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li><li>Environmental Monitoring Plan and updates</li></ul>	Monitoring Program extents	<p>Selected hydrometric stations would also be monitored during the Project phases using remotely operated telemetry stations, which could be used to verify the receiving environment predictions of minimal changes in flows and water levels during the proposed Project duration in the future. Proposed remotely operated stations being considered include the following:</p> <ul style="list-style-type: none"><li>Clearwater River below Patterson Lake;</li><li>Clearwater River below Beet Lake;</li><li>Clearwater River below Naomi Lake;</li><li>Clearwater River above the confluence with the Mirror River; and</li><li>Clearwater River below Broach Lake.</li></ul>

Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
197.	Follow-up Program	Conduct site contact water and operational discharge monitoring and surface water quality monitoring in the receiving environment.	All phases	Section 10.7 Monitoring Follow-up and Adaptive Management	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li><li>Environmental Monitoring Plan and updates</li><li>Effluent and Emissions Plan and updates</li><li>Annual reports</li></ul>	Monitoring program extents	<p>Site contact water monitoring would be described in documentation for the Environmental Protection Program, along with the controls and monitoring of the on-site water management infrastructure. This monitoring would also generate information regarding water quality from each of the sources that contribute to site water to be managed and the effectiveness of mitigation to manage the water quality of site contact water.</p> <p>The Effluent and Emissions Plan would include the sampling and analysis of treated effluent in ponds and confirmation that these waters meet release targets prior to release to the environment. The monitoring in the Effluent and Emissions Plan would also include monitoring components to meet MDMER requirements at the final point of discharge as well as other release criteria that are derived through licensing.</p> <p>Water quality monitoring would be required prior to release of non-mineralized contact water, treated contact water (i.e., treated effluent), and treated sewage to the environment.</p> <p>The Environmental Monitoring Plan would include surface water quality monitoring at the edge of the RMZ. This monitoring would meet MDMER requirements in the receiving environment where water is exposed to effluent (i.e., the exposure area; RMZ monitoring in Patterson Lake North Arm – West Basin). Surface water quality receiving environment monitoring would take place at Broach Lake and data collected would be used as reference for where waters are not exposed to the discharge. Sediment quality monitoring would also be conducted at the RMZ stations to confirm EIS predictions and to inform EEM requirements per the MDMER.</p> <p>Surface water quality monitoring would be conducted at four small lakes (i.e., Lake C, Lake D, Lake E, Unnamed Lake 1, and Unnamed Lake 2) to evaluate effects of the deposition of air emissions.</p> <p>Surface water quality receiving environment monitoring would take place seasonally (i.e., four times per year), with the frequency of monitoring at the exposure/reference stations for MDMER as prescribed in the regulations. Sediment quality monitoring would be conducted once a year, most likely in late summer or fall. A comprehensive list of water quality and sediment quality constituents would be measured in samples collected from the field and submitted for laboratory analyses, including general parameters, the identified COPCs, and constituents prescribed by the MDMER for metal and mining EEM.</p> <p>NexGen would conduct water level, water quality, and sediment quality sampling and monitoring of wetlands within and adjacent to the Project footprint and representative wetlands within the LSA.</p>



Table 1: Rook I Project Federal Commitments Table

ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
198.	Follow-up Program	Monitor effects on fish and fish habitat during the Project lifespan and apply adaptive management, where necessary.	Construction Operations and Active Closure	Section 11.7 Monitoring Follow-up and Adaptive Management	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li><li>Environmental Monitoring Plan and updates</li><li>Annual reports</li></ul>	Monitoring program extents	<p>The Environmental Monitoring Plan would be implemented to monitor effects on fish and fish habitat during the Project lifespan and apply adaptive management, where necessary. Monitoring results would be used to adjust or adapt mitigation measures or reclamation approaches used to minimize Project effects on fish.</p> <p>The key components of the aquatic ecology elements of the Environmental Monitoring Plan are expected to include monitoring of benthic invertebrates and fish. Monitoring during the Project lifespan is proposed to be undertaken every three years and would be carried out in accordance with the MDMER, EEM requirements (Environment Canada 2012), and with conditions identified through the licensing processes. The monitoring program for benthic invertebrates and fish would be designed to integrate the requirements of an EEM biological monitoring study (Environment Canada 2012), as required under the MDMER.</p> <p>Monitoring stations for benthic invertebrates and fish would be strategically located within the LSA, and especially in Patterson Lake, to capture any potential effects in receiving waters as well as in reference waters. These stations would be identified under guidance of MDMER, Saskatchewan Ministry of Environment, and Canadian Nuclear Safety Commission within the licensing process, and would be co-located with water and sediment quality sampling stations.</p> <p>To the extent possible, monitoring and sampling techniques and analysis procedures would be consistent with methods used during the baseline survey period.</p> <p>In compliance with MDMER, the federal <i>Fisheries Act</i>, the CNSC operating licence, and the ENV operating licence requirements, results of biological monitoring in the receiving environment would be reported in EEM reports on the schedule required by licences and regulations.</p>
199.	Follow-up Program	Monitor alteration of soil and terrain conditions (i.e., quantity, quality, and distribution) that may adversely affect soil productivity and the types of ecosystems that can be reclaimed on the landscape.	All phases	Section 12.7 Monitoring Follow-up and Adaptive Management	<ul style="list-style-type: none"><li>Environmental Protection Program and updates</li></ul>	Site-wide	<p>Slope monitoring to assess terrain stability would be completed during land clearing, site preparation works, and the construction of facilities.</p> <p>To minimize disturbances of soil quality and quantity, soils would be monitored during site clearing, contouring, and excavation activities for signs of admixing, compaction, and erosion.</p>
200.	Follow-up Program	Monitor Project effects on vegetation, including the effectiveness of environmental protection measures and mitigation.	All phases	Section 13.7 Monitoring Follow-up and Adaptive Management	<ul style="list-style-type: none"><li>Noxious and nuisance weeds surveillance follow-up study</li><li>Rare and tracked vascular plants surveillance follow-up study (if required)</li><li>Environmental Protection Program and updates</li><li>Environmental Monitoring Plan and updates</li><li>Detailed Decommissioning and Reclamation Plan and updates</li><li>Wetland function surveys (if required)</li></ul>	Monitoring program extents	<p>Surveillance would be completed to identify and manage new occurrences of species designated by the <i>Weed Control Act</i> as prohibited, noxious, and nuisance weeds within the Project footprint.</p> <p>Monitoring and follow-up during Construction would be required to delineate potential activity restriction guideline setbacks (ENV 2017; 30 m setback) to mitigate direct disturbance to provincially tracked vascular plants (if any). Where disturbance to rare plants is unavoidable, the Saskatchewan Ministry of Environment would be consulted to determine the most appropriate course of action.</p> <p>Monitoring requirements for reclamation would be outlined in the Detailed Decommissioning and Reclamation Plan and would include details on reclamation treatments to be used during revegetation, schedules for the frequency of monitoring, and action levels where adaptive management may be required.</p> <p>To confirm the prediction of negligible effects on wetlands, NexGen would conduct water level, water quality, and sediment quality sampling and monitoring of wetlands within and adjacent to the Project footprint and representative wetlands within the LSA. From the results of these surveys, a detailed recommendation for follow up monitoring during the life of the Project would be developed, if necessary.</p>

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ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
201.	Follow-up Program	Monitor Project effects on wildlife with respect to habitat availability, habitat distribution, and survival and production, including the effectiveness of environmental protection measures and mitigation.	All phases	Section 14.7 Monitoring Follow-up and Adaptive Management	<ul style="list-style-type: none"><li>Environmental Protection Program</li><li>Caribou Mitigation and Offsetting Plan</li></ul>	Monitoring program extents	<p>Wildlife surveillance completed as part of the Environmental Protection Program would be used to determine the efficacy of mitigation measures and to guide any future measures that should be implemented in subsequent Project phases. For example, waste management and site surveillance would be completed to avoid attraction of wildlife to the Project and associated risks of adverse human-wildlife interactions. Wildlife surveillance monitoring of the mine site and access road would include a wildlife observation log and wildlife incident log.</p> <p>A Caribou Mitigation and Offsetting Plan would be developed and implemented for the Project, whereby offsets would be used to reduce the residual effects on woodland caribou and provide a net increase in functional caribou habitat. Monitoring would be defined in the Caribou Mitigation and Offsetting Plan through engagement with regulatory agencies and local Indigenous communities.</p>
202.	Follow-up Program	Conduct monitoring to verify predictions made in the Environmental Risk Assessment, support ongoing management of Project activities to protect human health, and refine risk assessment models to inform future management and mitigation.	All Project phases	Section 15.8 Monitoring Follow-up and Adaptive Management	<ul style="list-style-type: none"><li>Environmental Protection Program</li><li>Environmental Monitoring Plan</li><li>Effluent and Emissions Plan</li><li>Traditional Foods follow-up study</li><li>Annual reports</li></ul>	Monitoring program extents	<p>The Environmental Monitoring Plan and Effluent and Emissions Plan would include collection of air quality, surface water, sediment, soil, fish tissue, benthic invertebrate tissue, and country food (e.g., blueberries) samples.</p> <p>Monitoring would focus on collecting data to verify ERA model predictions, as well as provide data to improve model predictions and refine the ERA, where required. Monitoring would support NexGen's adaptive management framework with the objective of reducing uncertainty over time through an iterative process.</p> <p>NexGen would work with local Indigenous Groups in an effort to complete a targeted Traditional Foods study to help validate or modify the dietary assumptions made in the human health risk assessment.</p>
203.	Follow-up Program	Conduct monitoring to evaluate the effectiveness of mitigation measures and identify unanticipated negative effects to contribute to the overall continual improvement of Project socio-economic aspects.	All Project phases	Section 16.8 Monitoring Follow-up and Adaptive Management	<ul style="list-style-type: none"><li>CVMPP</li><li>Environmental Monitoring Plan</li><li>Ground Transportation Emergency Response Plan</li><li>Emergency Response Assistance Plan</li><li>Security Program</li><li>Independent Indigenous monitoring program</li><li>Indigenous and Public Engagement Program</li></ul>	Local priority area	<p>Regular meetings with potentially affected Indigenous land users, as applicable, independently and as part of the Indigenous and Public Engagement Program, to review the previous season and understand any issues or concerns that could be addressed. Conduct follow up, as needed.</p> <p>Evaluate the results of the monitoring conducted by the independent Indigenous Monitors and suggest modifications to monitoring plans, as required, to conduct adaptive management and foster continual improvement.</p> <p>Implementation success of the commitments made under Benefit Agreements would be tracked.</p> <p>Evaluate how the objectives of the Security Program were met using measurable indicators and modify the plan as needed to foster continual improvement.</p> <p>Establishment of a Project feedback and grievance mechanism to record and action issues identified by local priority area residents. Indigenous land and resource use issues would be tracked and addressed as they arise and periodically analyzed through management reviews.</p> <p>Monitoring success of regional mitigation strategies.</p> <p>Participation in the CVMPP, a multi-stakeholder group that includes mine operators, health authorities, and the provincial government. Participation in research initiatives on topics related to quality of life in northern Saskatchewan as defined through the CVMPP.</p> <p>Completion of perception surveys to better understand local priority area residents' thoughts and understanding of uranium mining.</p>

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ID	Category	Commitment Description	Project Phase	Discipline or Other Reference	How Commitment will be Tracked	Type (Site-Wide or Specific Application of Commitment)	Comments
204.	Follow-up Program	Monitor changes to access to and area available for and quality of land and resource use.	All Project phases	Section 17.8 Monitoring Follow-up and Adaptive Management	<ul style="list-style-type: none"><li>▪ CVMPP</li><li>▪ Ground Transportation Emergency Response Plan</li><li>▪ Emergency Response Assistance Plan</li><li>▪ Security Program</li><li>▪ Independent Indigenous Monitoring Program</li><li>▪ Indigenous and Public Engagement Program</li></ul>	Local priority area	<p>Conduct meetings with community members, commercial trappers, outfitters, and other potentially affected land users, as applicable, both independently and as part of the Indigenous and Public Engagement Program to review land use activities conducted and understand if land users experienced any issues or concerns that could be addressed. Conduct follow-up, as needed.</p> <p>Conduct discussions and/or agreements with potentially affected lodge and outfitting operations and continue ongoing communications on an as-needed basis. The focus of discussions is anticipated to include access management, safety, and management of other potential interactions with the Project.</p> <p>Evaluate the results of the monitoring conducted by the independent Indigenous Monitors and suggest modifications to monitoring plans, as required, to conduct adaptive management and foster continual improvement.</p> <p>Evaluate how the objectives of the Security Program were met using measurable indicators and modify the plan as needed to foster continual improvement.</p> <p>Participation in the CVMPP, a multi-stakeholder group that includes mine operators, health authorities, and the provincial government. Participation in research initiatives on topics related to quality of life in northern Saskatchewan as defined through the CVMPP.</p> <p>Meet with other mining operations active in the region to collaboratively identify concerns and develop effective responses to mitigate identified concerns.</p>
205.	Follow-up Program	Monitor changes to employment, training, business opportunities, traditional economy participation, population dynamics, and benefits for local residents.	All Project phases	Section 18.7 Monitoring Follow-up and Adaptive Management	<ul style="list-style-type: none"><li>▪ CVMPP</li><li>▪ Human Resources Development Plan</li><li>▪ Business opportunities workplan</li></ul>	Local priority area	<p>It is anticipated the Project's Mineral Surface Lease Agreement would include a Human Resources Development Agreement and a rolling Annual Human Resources Development Plan that would require reporting on efforts to meet socio-economic commitments. Typically, mining operations report to the province on indicators including the following:</p> <ul style="list-style-type: none"><li>▪ total employment and employment of residents of the RSA;</li><li>▪ employment by gender and Indigenous identity;</li><li>▪ total wages (i.e., in dollars) and percentage of the total wages for residents of the RSA;</li><li>▪ external training partnerships and in-house employee development;</li><li>▪ northern procurement volumes (i.e., in dollars) and percentages of total procurement; and</li><li>▪ community involvement including school awards, scholarships, outreach, and information sharing with northern residents (Government of Saskatchewan 2018).</li></ul> <p>Participation in the CVMPP, a multi-stakeholder group that includes mine operators, health authorities, and the provincial government. Participation in research initiatives on topics related to quality of life in northern Saskatchewan as defined through the CVMPP.</p>
206.	Follow-up Program	Monitor community well-being associated with access restrictions and participation in the worker rotation system.	All Project phases	Section 19.8 Monitoring Follow-up and Adaptive Management	<ul style="list-style-type: none"><li>▪ CVMPP</li><li>▪ Ground Transportation Emergency Response Plan</li><li>▪ Emergency Response Assistance Plan</li><li>▪ Security Program</li><li>▪ Indigenous and Public Engagement Program</li><li>▪ Perception Surveys</li><li>▪ Traditional Diet Surveys</li></ul>	Local priority area	<p>Work with local Indigenous Groups and communities to develop and implement a community well-being monitoring program that addresses the various elements that make up community well-being. The specific indicators would be developed in consultation with Indigenous Groups and stakeholders.</p> <p>NexGen would track usage of on-site programs related to health and wellness (e.g., Elder counsellors, mentors) and conduct periodic surveys to determine if on-site services and programs are meeting employee needs.</p> <p>Participation in the CVMPP, a multi-stakeholder group that includes mine operators, health authorities, and the provincial government. Participation in research initiatives on topics related to quality of life in northern Saskatchewan as defined through the CVMPP.</p>

AER = Alberta Energy Regulator; COPC = constituent of potential concern; CRDN = Clearwater River Dene Nation; CVMPP = Community Vitality Monitoring Partnership Process; DFO = Fisheries and Oceans Canada; ECCC = Environment and Climate Change Canada; EEM = environmental effects monitoring; EIS = Environmental Impact Statement; ENV = Saskatchewan Ministry of Environment; ERA = environmental risk assessment; GHG = greenhouse gas; L<sub>dn</sub> = day-night sound level; L<sub>eq,day</sub> = energy equivalent sound levels for each daytime period; L<sub>eq,night</sub> = energy equivalent sound levels for each nighttime period; LED = light emitting diode; LSA = local study area; MDMER = Metal and Diamond Mining Effluent Regulations; n/a = not applicable; NPAG = non-potentially acid generating; PAG = potentially acid generating; RMZ = regulatory mixing zone; RSA = regional study area; UGTMF = underground tailings management facility; WRSA = waste rock storage area.

## 2 References

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