

**Consolidated Comments from Indigenous Nations and Communities and the Public on the NexGen Rook 1 Project Draft EIS
For CNSC Response**

Number	Source	Reference to EIS, appendix, or TSD	<p align="center">Comment Summary (all original submissions can be found on Canadian Impact Assessment Registry reference: 80171)</p>	CNSC Response
1.	Clearwater River Dene Nation (CRDN) (November 11, 2022)		<p>Quantifying Stress Traditional environmental assessments (EA) failed to effectively consider these health concerns, “new assessment is needed attending to linked issues of equity, sustainability and Indigenous food sovereignty” (Jonasson, 2019). In particular, First Nation communities are becoming more concerned about the impacts and risk of industrial development and incidents on Indigenous health and wellness and current EA guidelines have ineffectively considered these impacts (Shandro J. J., 2018). In 2021, new guidelines were published to support impact assessment professionals and indigenous communities to help address these gaps during conventional assessments (Salerno, 2021). Impact assessment (IA) “practitioners have therefore tended to ignore mental health impacts to focus on more easily observable or readily quantifiable impacts, such as sensory disturbance. However, the often-intangible nature of mental health does not make the impacts of project development on mental health any less real” (Salerno, 2021). “Health Impact Assessment (HIA) is a voluntary and unstandardized process ... has navigated the limitations of current EAs in which there is a tendency to focus on regulatory thresholds and quantitative measurements of risk” (Jones, 2015).</p>	
2.	CRDN (November 11, 2022)		<p>Perception of Risk Being a subjective mix of both social and psychological factors, risk perception influences how harmful and chemical or exposure is perceived (Keller A, 2012). This report indicates that levels of stress and perception of stress affect health independently and were shown to increase the likelihood of worse health and mental health outcomes (Keller A, 2012). Without clear federal or provincial guidelines on the acceptable level of risk during project development, it raises the question; what is an acceptable level of risk, or perception of risk, that is acceptable for the CRDN to tolerate for what seems an interminable future during the largest development-stage</p>	

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			uranium project in Canada? • CRDN needs to develop it’s own standards/thresholds in order to understand the risks they are bearing.	
3.	CRDN (November 11, 2022)	Section 23.5, Summary p. 192	There is a need for government to create a regional monitoring body to manage impacts of this mine and other proposed mines in order to manage cumulative effects, conduct monitoring and recommend adaptive management techniques as concerns raised. This body must be codeveloped with First Nations and provide for formal advisory and monitoring functions for First Nations. Comment: • Who determines the changes or ‘adaptations’ during the project • Create body to provide CRDN advise to government • CRDN should be involved in co-development of management plans	
4.	Birch Narrows Dene Nation (BNDN) (October 12, 2022)	Section 18.4 Project Interactions, Mitigations and Benefit Enhancements Section 19.4 Project Interactions and Mitigation	Throughout Section 18.4 and in Section 19.4, NexGen identifies that a key project characteristic that will contribute to potential effects on the economy includes an aspirational long-term target of 75% of the Project’s workforce being composed of LSA residents. However, as the section goes on, the EIS makes the following statements that call into question if this “aspirational” target is in fact realistic: <ul style="list-style-type: none"> • “NextGen would make best efforts to recruit LSA residents, however, due to the specialized nature of some of the construction work and the associated technical employment qualification requirements, <i>a substantial portion of the Construction workforce is anticipated to be sourced from outside the LSA</i>” (18-73) • “It is likely that the long-term target of 75% of the workforce being residents of the LSA <i>would not be achieved in the early stages of Project Operations</i>” (18-76) • “The opportunity to employ residents of the LSA on the Project <i>may be reduced in the event the Fission Patterson Lake South Property proceeded</i> due to competition for workers and the limited number of qualified personnel from which to draw on” (18-30) 	

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			<p>Additionally, NexGen concludes, based on Figure 18.4-3 which provides an illustration of the potential typical operations year labour requirements, that filling 75% of the illustrative leverage peak operating jobs in each education category “may require hiring 38% of the 2016 LSA population over the age of 15 with a high school, college, or university certificate who were unemployed or not in the labor force in 2016 and 45% of the LSA population over the age of 15 with an apprenticeship or trades certificate or diploma who were unemployed or not in the labor force in 2016” (18-76).</p> <p>However, BNDN notes that no research or engagement has been completed to date to verify if hiring this proportion of the population for jobs in the mining sector is possible or desirable to members of the LSA’s workforce</p> <ul style="list-style-type: none"> a) To justify these targets being cited in Section 18.4 and used to characterize the potential benefits of the Project in the EIS’s analysis of the effects of the Project on the Economy in Section 18.8, much more substantiated evidence is required in the EIS to support the feasibility of these targets and much more specific commitments are required than the generalized measures currently set out on p. 18-81. b) It must also be a condition of the EIS’s approval that the mutually agreed upon terms of an LSA workforce recruitment and retention strategy are established prior to EA approval, and Indigenous groups in the LSA provide confirmation that appropriate features of Benefit Agreements have been established to meet these targets prior to final EA approval or the commencement of construction. c) If substantial evidence cannot be provided to meet this “aspirational” target, NexGen must also provide a more realistic and concrete target based on the evidence that is available so that the effects of the Project on the Economy and Community Well-Being can be accurately assessed and understood by regulators and Indigenous groups. Commitments must also be set out in the EIS for measures that will be taken if NexGen’s targets for employment are not met. 	

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5.	BNDN (October 12, 2022)	Section 18.7 Monitoring, Follow-Up and Adaptive Management	<p>BNDN notes that no specific management or monitoring plan has been included in the EIS documentation related to the verification of residual socio-economic impacts, both positive and negative, for the local economy.</p> <ul style="list-style-type: none"> a) NexGen must develop a Socio-Economic Monitoring Plan for the life of the Project to verify the effects assessment included in the EIS and to be included in the Project’s approach to adaptive management. This Plan would include an approach, co-developed with Indigenous groups in the LSA, to monitoring the realization of the benefits and impacts of the Project (e.g., employment and procurement targets, training and capacity building, community investments, etc.) as mitigation and enhancement measures are implemented. Monitoring and subsequent regular evaluation would allow for the real-time adjustment of targets and/or an approach to adjusting enhancement measures or identifying offsetting benefits where targets are not met. b) The Crown must include the development of a Socio-Economic Monitoring Plan as a condition of approval for the Project 	
6.	BNDN (October 12, 2022)	General Comment	<p>General Comment. In our review of the surface water and groundwater components of the EIS we found many of the assumptions, interpretations and conclusions to be inadequate. Amongst other concerns, we found that:</p> <ul style="list-style-type: none"> i. Waste rock permanently stored on surface is far more likely to be acid generating than NexGen previously indicated to BNDN ii. Patterson Lake itself has limited buffering capacity and is very sensitive to acid rock drainage from the project iii. Sulphur dioxide emissions from the Alberta oil sands will continue to cause acidic precipitation at the Rook 1 project site. This is a cumulative effect that has not been considered in the EIS iii. NexGen water quality modelling assumptions overlook a number of important considerations that result in an overly optimistic assessment of Project impacts to surface water quality Despite these inadequacies in the current assessment, NexGen still expects water quality to be permanently and irreversibly impaired in Patterson 	

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			<p>Lake.</p> <p>In light of these factors, we believe that NexGen has significantly understated the potential impacts of the Project on the environment and on BNDN Treaty and Aboriginal rights and interests. If the Crown intends to approve this Project, the Crown must work with BNDN to ensure that the identified potential impacts are avoided, mitigated and/or accommodated.</p> <ul style="list-style-type: none"> a) BNDN requests that CNSC and SOME establish regular meetings with our Nation to discuss these concerns and the findings of regulators and other Indigenous groups in detail. These meetings will be used to identify meaningful measures that the Crown can take to avoid, mitigate, accommodate or compensate for the significant adverse impacts to our constitutionally protected Treaty and Aboriginal rights and interests. b) BNDN requests that NexGen work collaboratively with our Nation to resolve the concerns raised prior to submission of the Final EIS. 	
7.	BNDN (October 12, 2022)	EIS Table 10.5-8 and EIS Table 8.5-3	<p>In Table 10.5-8 (Classification of Residual Effects on Surface Water Quality Indicators for the Application Case and Reasonably Foreseeable Development Case in the Far Future; p. 10-119), NexGen provides their assessment that water quality in Patterson Lake will be negatively impacted by the project for hundreds of years from waste rock seepage and for thousands of years from groundwater (effectively permanently) through the continued loading of elevated concentrations of copper and cobalt to Patterson Lake.</p> <p>BNDN is very concerned with this impact of the Project, which will result in permanent, continuous adverse impacts to our ability to exercise our Treaty and Aboriginal rights. As documented in our IKTLU study, our members frequently fish in Patterson Lake, Forrest Lake and in the Clearwater River system. The Clearwater River system is an extremely important waterway to BNDN that our members have traveled since time immemorial. The fact that Patterson Lake will be permanently impaired is a serious impact on our</p>	

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			<p>members who may never be able to trust the water quality and fish health in Patterson Lake for many generations into the future (long after NexGen has left our Territory). The fact that our members will need to rely on fish and water testing and analyses in perpetuity to have confidence (from a western science perspective) that we can consume fish from Patterson Lake is a significant adverse impact to our Treaty and Aboriginal rights.</p> <p>In the EIS, the Proponent has provided very vague and general measures to monitor these serious permanent impacts to Patterson Lake and the downstream environment which are wholly inadequate to address the magnitude of impact on BNDN. If the Crown intends to approve of the project as described, the Crown and NexGen must avoid, mitigate and/or accommodate this impact to BNDN Treaty and Aboriginal rights.</p> <ul style="list-style-type: none"> a) BNDN requests that NexGen undertake an assessment of alternatives to address the long-term loading of cobalt and copper into Patterson Lake from the Project. This assessment must be done collaboratively with BNDN, or preferably led by BNDN with capacity support provided by NexGen. b) BNDN requests that NexGen and the Crown work with BNDN to develop a mitigation or accommodation measure that effectively addresses this impact to BNDN Aboriginal and Treaty rights. c) BNDN requests that NexGen commit to developing a trust fund with the purpose of covering the costs of ongoing monitoring of water and fish quality in Patterson Lake in perpetuity. d) BNDN requests that the Proponent obtain consent from BNDN for the surface water quality monitoring programs at the Project for all phases of the Project, including post closure. e) BNDN requests that the Crown require NexGen to obtain BNDN approval and written consent for the surface water and groundwater quality monitoring plans as a condition of approval for the Project. 	
8.	BNDN (October 12, 2022)	TSD XVII: Waste Rock and Underground	In the Waste Rock subsection of EIS Section 5.3.3.5 (Geochemical Conditions), the Proponent notes that mine waste rock that will be stored on the surface of the mine site will have both non-acid generating (NAG) and	

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		<p>Wall Rock Source Term Predictions Figures 3-1 and 3-2</p>	<p>potentially acid generating (PAG) rock. The Proponent has provided limited information on the expected relative proportions of NAG to PAG, the magnitude of acid generation potential from the PAG rock and the buffering capacity of the NAG rock. Figures 3-1 and 3-2 of TSD XVII display analytical results of the acid generation potential of waste rock from the underground tailings management facility (UGTMF) and mine workings. Both Figure 3-1 and 3-2 indicate that that a relatively high proportion of mine workings and UGTMF samples analyzed are PAG rock, a significant proportion of which has a very low neutralization potential ratio indicating a very high potential for acid generation.</p> <p>While very limited baseline information is provided in the EIS and in the supporting documents, Table 3-3 of TSD XVII shows that approximately 40% of waste rock expected to be permanently stored on surface is expected to be PAG. This is quite a high proportion and indicates a very significant risk of acid generation from the waste rock, especially considering that the NAG waste rock generally has low buffering capacity to neutralize acid rock drainage from the PAG waste rock. Considering the obvious potential for acid generation from the limited information provided by NexGen upon which their assumptions and interpretations are based, BNDN is very concerned that NexGen is significantly underestimating the risk of acid rock drainage from the waste rock. BNDN notes that the available information indicates that the waste rock at Rook 1 has a relatively high likelihood of generating acid rock drainage. It is not acceptable for BNDN to have to take NexGen's modelled interpretations of their data on faith. By constructing the Project, NexGen is permanently altering BNDN's Traditional Territory and is asking BNDN to assume the risks to our Treaty and Aboriginal rights associated with this permanent change. The generation of acid in the waste rock would dramatically increase the loading of metals to Patterson Lake and the Clearwater River system and would be a truly disastrous outcome. BNDN must have an exceptional level of confidence that the waste rock will not generate acid rock drainage in the short term or in the far future, and both the Proponent and the Crown must develop conditions and commitments during</p>	

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			<p>the EA phase of the Project to give BNDN certainty that this outcome will be avoided.</p> <ul style="list-style-type: none"> a) BNDN requests that NexGen make all of their baseline geochemical data publicly available to facilitate BNDN review. b) The Crown must not make a decision on the Project prior to a thorough and rigorous review and analysis of the geochemical baseline data and the modeling results developed from the geochemical baseline data c) Given the high and permanent risk to the environment, the Crown must work with BNDN to develop conditions of approval for the Project that give BNDN confidence that NexGen will be held to stringent environmental protection measures. This must at a minimum include a requirement for NexGen to obtain explicit consent from BNDN for their relevant management and monitoring plans. d) The Crown must work with BNDN to develop measures to mitigate and accommodate impacts to BNDN Treaty and Aboriginal rights from the permanent, irreversible risk that our Nation is assuming by the waste rock stockpile being built. e) NexGen must commit to developing and funding an independent third-party waste rock management review board (similar in format and conception to an independent tailings review board) for the life of mine. BNDN recommends that this independent third-party waste rock management review board be a Crown condition of approval for the Project. 	
9.	BNDN (October 12, 2022)	EIS Section 10 Appendix 10A Table 6 (Summary Parameters for Sampled Lakes)	In EIS Section 10 Appendix 10A Table 6 (Summary Parameters for Sampled Lakes), NexGen reports the pH range of many of the lakes within the Project LSA and RSA, including Patterson Lake. While the lakes are generally circumneutral, NexGen has occasionally measured pH values as low as 5.8, including in Patterson Lake. These relatively low pH measurements are often gathered at the same sampling events where elevated metal concentrations (such as arsenic and nickel) have been observed. These occasional low pH	

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			<p>measurements and coincident elevated metals concentrations reflect the fact that Lakes in and around the Project area have a low buffering capacity against acid generation (Cathcart, Aherne, Jefferies, & Scott, December 2016). In fact, according to modelling by Cathcart et al (2016), the Project is within an area of Saskatchewan where lakes are particularly sensitive to acidity and Patterson Lake may already be above its critical load of acidity. The Cathcart study was written in the context of the potential for emissions from the oil sands operations in Alberta causing acidic deposition from sulphur dioxide deposition through rainfall and snowfall. Impacts of the estimated 116,000 kT annual sulphur dioxide emissions from the oil sands are expected to most acutely impact lakes within 100 km east and north of the oil sands operations. The Rook 1 Project is less than 110 km as the crow flies east-northeast of the Kearns oil sands operations. The ongoing emissions from the oil sands operations are likely already contributing acidity to the Rook 1 Project area. This, coupled with the very limited natural buffering capacity of Patterson Lake, must be considered cumulatively along with the potential contribution of acidity to Patterson Lake from the Rook 1 Project.</p> <p>NexGen and the Crown have not considered the potential cumulative impacts from sulphur dioxide emissions in the oil sands region on Patterson Lake and on the Rook 1 Project in general. Considering the proposed expansions to existing oil sands operations, it is conceivable that this further negatively impacts the already limited buffering capacity of the waste rock in the Rook 1 Project area and accelerates the onset of acid generation from the waste rock stockpiles.</p> <ul style="list-style-type: none"> a) NexGen must include the impacts of sulphur dioxide emissions from the Alberta oil sands operations in their cumulative effects assessment for the project. b) NexGen must revise their waste rock seepage and overall water quality model to consider the potential contribution of acidity from rainfall and snowfall in the region. c) NexGen must undertake an assessment of the buffering capacity of lakes and rivers impacted by the Project. The study design must be 	

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			<p>approved by BNDN and must be completed in collaboration with BNDN.</p> <p>d) Based on the findings of the assessment of buffering capacity in lakes and rivers impacted by the Project and the impacts of acidic precipitation, NexGen must revise their surface water assessments of impacts of the project.</p> <p>e) NexGen must develop mitigation and monitoring measures to prevent acidification of Patterson Lake, and the Crown must add a condition of approval to the project that includes protecting lakes impacted by the Project from acidification by the project</p>	
10.	BNDN (October 12, 2022)	EIS TSD XVII Waste Rock and Underground Wall Rock Source Term Predictions Section 3.2.1 (Method Overview)	<p>In the equilibration modelling subsection of EIS TSD XVII Waste Rock and Underground Wall Rock Source Term Predictions Section 3.2.1, NexGen reports that geochemical speciation and mass transfer was modelled using PHREEQC, and that water quality was equilibrated using the MinteqV4 thermodynamic database file (TDF). Lu et al (2022) reported that the TDF that is selected for equilibration modelling can have very significant effects on the outcomes of the model (Lu, Zhang, Apps, & Zhu, February 2022). While MinteqV4 is a frequently used TDF for modelling in the mining industry, the Proponent has provided no rationale for why this database was selected, and what results would be obtained by substituting different TDF files.</p> <p>While the selection of TDF is an important primary consideration of the water quality modeling, other assumptions in the equilibration modelling can also have a dramatic effect on the modelled outcomes, such as oxidation reduction potential (ORP) and pH. NexGen has interpreted their water quality model results with static pH and ORP values that they have somewhat arbitrarily selected and have not modeled their results in a way in which the pH and ORP evolve with the seepage chemistry over time.</p> <p>The Proponent also has provided limited information on the types of calculations that they utilized to calculate their modeled results. Highly differing outcomes can be reasonably expected depending on whether</p>	

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			<p>NexGen utilized an initial speciation calculation or one of the more complex batch-reaction calculations. Considering the limited buffering capacity available in the waste rock, opting for pH to remain fixed for the modelling is a questionable assumption that may have very serious implications in that they dramatically underestimate the potential for acid rock generation from the waste rock stockpiles.</p> <p>As previously mentioned, NexGen has not provided their baseline geochemical data upon which their modelling assumptions were based. BNDN is being asked to take many modeled assumptions for granted without any rationale to justify the assumptions. NexGen has also not provided any alternative reasonably conceivable modelled results based on different real-world assumptions (pH or ORP) or different modelling input variables (TDF or modelling calculations). It is entirely conceivable that NexGen is dramatically understating the potential for acid rock generation and metal leaching from the project, and thus understating the potential impacts from the Project in general.</p> <p>This has major implications for the potential impacts to BNDN Treaty and Aboriginal rights and interests which will already be adversely impacted within NexGen's assumptions. Acid rock drainage is widely understood to be self-perpetuating once initiated, and it is very difficult and costly to remediate. BNDN expects that both the Proponent and the Crown will take appropriate risk management and avoidance measures to prevent acid rock drainage. BNDN also expects that the CNSC will require the project closure bonding to include the costs associated with potential acid rock drainage and the consequent downstream consequences to the already very sensitive receiving environment.</p> <p>a) BNDN requests that NexGen provide a rationale for their chosen TDF and re-run their modelling results with at least 3 other TDFs. The Proponent must provide the modeled results from all 4 TDFs and provide a rationale for the TDF upon which their surface water quality impact assessment for the project is based upon.</p>	

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			<ul style="list-style-type: none"> b) BNDN requests that NexGen clarify the types and sequences of calculations used in PHREEQC to simulate modeled outcomes c) BNDN requests that NexGen re-run their 4 TDF modelled results through at least 3 different types and sequences of calculations. NexGen must provide a rationale and assumptions within the selected sequences. Note that these assumptions must consider the possibilities discussed in previous comments that precipitation at the project site often has elevated acidity due to sulphur dioxide emissions from oil sands operations in Alberta. d) The Crown must require the closure bonding for the project to include the costs to remediate acid rock drainage from the project. BNDN must be collaboratively involved in determining the assumptions used to inform the closure bonding estimates 	
11.	BNDN (October 12, 2022)	IS Section 5.4.3.3 (Underground Tailings Storage)	<p>In Section 5.4.3.3 of the EIS (Underground Tailings Storage), NexGen describes the storage of tailings underground at the Rook 1 Project. While BNDN generally prefers this method of tailings disposal to the alternatives, there are some questions related to project sequencing and temporary tailings storage that raise the risks and potential environmental liabilities from the Project. Specifically, BNDN is unclear on the maximum volume of tailings that will be stored on surface on an interim basis at any given time, and how it will be stored. The sequencing of the project may have significant implications on the volume of tailings stored on surface at any given time, which may vary widely throughout the life of mine. BNDN requires a detailed understanding of how tailings will be managed on surface to minimize risk to the environment.</p> <p>BNDN also recognizes the possibility that the Project could temporarily cease operations throughout the life of mine, and that this could potentially leave some tailings materials on surface with inadequate storage capacity underground and no appropriate facility for storage on the surface. If project sequencing resulted in excess tailings on surface requiring disposal when the mine owner declares bankruptcy, it is possible that it could be prohibitively</p>	

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			<p>expensive to dispose of tailings on site within the funds available in the closure bonding for the Project.</p> <p>a) The CNSC must require NexGen to provide sufficient closure bonding to properly dispose of tailings stored on surface with inadequate storage. The calculation must be based on the moment of the mine life when there is expected to be the most unfavourable ratio of tailings disposed of on the surface and storage capacity for tailings underground.</p> <p>b) BNDN requests that NexGen clarify the maximum volume of tailings that could be stored on surface on an interim basis, and how it will be handled and stored to ensure that it does not negatively impact the environment, including during a temporary shutdown of the mine</p>	
12.	BNDN (October 12, 2022)	EIS Section 8.2.1	<p>In Section 8.2.1 of the EIS (Incorporation of Indigenous and Local Knowledge - Hydrogeology) the Proponent discusses the importance of groundwater to Indigenous Nations and references the importance of groundwater to BNDN in particular. BNDN wishes to note that the Project will change groundwater quality and surface water quality permanently. While some of these changes may not be considered harmful from a western science perspective, the permanent changes to the environment (especially the water) affects our Nation's relationship to the land. Considering the significant permanent change to the earth where the mine workings will be and the consequent permanent changes to groundwater, our relationship with the land will forever be altered.</p> <p>BNDN wishes to remind NexGen and the Crown that our Aboriginal rights are defined by BNDN alone. These changes, regardless of the extent to which they are assessed in the EIS as adverse from an environmental perspective, will have adverse impacts on our rights and interests that must be accommodated by the Crown and avoided and mitigated by the Proponent to the maximum extent possible.</p>	

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			<p>a) BNDN requests that the Proponent provide a presentation to the community on how groundwater will change from baseline conditions from a western science perspective. At the meeting, the Proponent must work with the community to better understand BNDN’s experience of the impacts of the Project on our Nation, especially as it pertains to groundwater and surface water.</p> <p>b) BNDN requests that the Crown work with BNDN to accommodate the impacts on our rights imposed by the permanent changes to surface water and groundwater induced by the mine.</p>	
13.	BNDN (October 12, 2022)	TSD XIX Table 7 and TSD XVIII Appendix H Table 7	<p>Table 7 of EIS TSD XIX (Treated Effluent Source Term Data of Rook 1) and Appendix H Table 7 of EIS TSD XVIII (preliminary Effluent Discharge Concentration Limits Calculation Results) shows NexGen’s anticipated effluent quality to be discharged to Patterson Lake. While the numbers differ somewhat between the two tables, both tables show that NexGen expects the final effluent to exceed water quality objectives for a number of parameters and thus will require a mixing zone to achieve water quality objectives. BNDN notes that a number of metals expected to be elevated in the final effluent may be discharged at the threshold for acute toxicity, including uranium and zinc. Furthermore, many of the final effluent objectives that NexGen has proposed are lower than what has been found to be achievable and cost effective elsewhere in Canada.</p> <p>BNDN has a number of concerns with NexGen’s proposed effluent treatment objectives, including:</p> <ul style="list-style-type: none"> • <i>Acute toxicity of some elements presenting a risk to fish and aquatic life in the immediate presence of the effluent discharge point</i> • <i>The potentially synergistic effects between the numerous metals elevated in final effluent</i> • <i>The fact that the proposed effluent guidelines are not as stringent as found to be achievable elsewhere in Canada</i> 	

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			<p>Given that BNDN members frequently harvest fish in Patterson Lake, the relatively relaxed standards and unnecessary risks created through the proposed effluent quality objectives is a serious impact to the exercise of our Treaty and Aboriginal rights. The proposed water quality objectives fall short of what is reasonably achievable and would constitute minimizing adverse impacts to BNDN Treaty and Aboriginal rights.</p> <p>To minimize risk to the receiving environment, BNDN would strongly prefer that all contaminants achieve water quality objectives at the point of discharge with no mixing zone required, especially for mercury, cadmium, cobalt, uranium selenium, copper and arsenic. Note that achieving water quality objectives at the point of discharge is much less stringent than achieving background conditions at the point of discharge, which would be BNDN's preference.</p> <ul style="list-style-type: none"> a) BNDN requests that the Crown impose a condition of approval on the Project that NexGen must obtain explicit written consent from BNDN for the final permitted effluent quality objectives for the Project b) BNDN requests that the Proponent undertake a study of water quality objectives at other mining operations in Canada to assess what is both economically and technically achievable at this time c) BNDN requests that NexGen commit to revising their effluent quality objectives on a regular basis (for example every 5 years) to assess any improvements in water treatment technology that could improve effluent quality at the project. d) BNDN requests that effluent discharge permits issued for the Project by the Federal Government and Saskatchewan expire in 5 years to require NexGen to reassess their effluent quality objectives 	
14.	BNDN (October 12, 2022)	EIS Figure 10.5-18 and 10.5-19	As BNDN has previously noted, NexGen expects water quality in Patterson Lake to be adversely impacted by the Project irreversibly and in perpetuity. While BNDN has raised a number of concerns in our review that indicate that many more elements are likely to be a concern and to a much greater extent than modeled by NexGen, NexGen has acknowledged that copper and cobalt	

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			<p>will be elevated in Patterson Lake in perpetuity and likely will exceed CCME water quality objectives.</p> <p>BNDN notes that the Project will have adverse impacts to Patterson Lake and that the EIS is inadequate in addressing how water quality in Patterson Lake will be protected during the operations, closure and post closure phases of the mine. BNDN wishes to remind NexGen that our land users will be permanently impacted by this Project, long after NexGen has closed the mine and left our Territory. Our Nation needs confidence that both the Proponent and regulatory agencies will take the long-term impacts to Patterson Lake and the Clearwater Lake seriously by committing to stringent but appropriate avoidance, mitigation and accommodation measures to protect Patterson Lake, especially into the far future.</p> <ul style="list-style-type: none"> a) BNDN requests that NexGen develop a trust fund that will fund the treatment of contaminated seepage from the project in perpetuity. b) BNDN requests that the Crown include a condition of approval for the Project that NexGen's will not be released from their license to operate the Project without explicit written consent from BNDN c) BNDN requests that NexGen, the Crown and BNDN work together to develop a condition of approval for the Project that will ensure that effluent and seepage from the Project will minimize long-term adverse effects to Patterson Lake from the Project. 	
15.	BNDN (October 12, 2022)	EIS TSD XVIII Section 5.1.1	In Section 5.1.1 of EIS TSD XVII Application Case for Effects Assessment), NexGen has noted that they will withdraw 4,300,000 L/day from Patterson Lake on average during the operations phase of the mine. While NexGen does not anticipate that the water level in Patterson Lake will change significantly, any substantial project induced increases or decreases to water levels in Patterson Lake are likely to have significant impacts to aquatic life in the downstream environment and consequently to BNDN Aboriginal and Treaty rights, which must be avoided.	

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			<p>BNDN requests that the Crown include a condition of approval for the project that NexGen does not significantly change water levels in Patterson Lake or in the Clearwater River system. The Crown must develop the details of the condition in collaboration with BNDN.</p>	
16.	Canadian Environmental Law Association (CELA) (October 12, 2022)		The 4-Step process identified by the CEA Agency for considering the alternative means for this project should be used in the EIS.	
17.	CELA (October 12, 2022)		The EA process for this Project should be paused until a more accurate cumulative effects assessment is conducted for the vegetation VC, following the revised baseline study within the vegetation RSA.	
18.	CELA (October 12, 2022)		The EIS document should be uploaded into multiple PDFs, broken down by section (in addition to uploading the EIS as one whole document).	
19.	CELA (October 12, 2022)		Upload a “Master Index” so that interested parties can have an overview of where certain topics are covered throughout the EIS.	
20.	CELA (October 12, 2022)		Upload a document that provides hyperlinks to the various Technical Study Documents referenced throughout the EIS. This simplifies the process of locating these documents in the EA registry for the Rook I Project.	
21.	CELA (October 12, 2022)		PDFs uploaded by the proponent should not be “locked,” prohibiting the copying and pasting of text.	
22.	CELA (October 12, 2022)		The CNSC must refrain from delaying the assessment of issues to the postregulatory phase; the fundamental scoping and planning processes must be carefully considered before making an EA decision on this project.	
23.	CELA (October 12, 2022)		The CNSC must carefully consider the critiques and recommendations within this submission to ensure the Draft EIS and its future iteration accurately reflect the necessary factors that must be assessed to protect the environment and human health from significant adverse environmental effects that may arise from the proposed Rook I Project.	
24.	SES (October 12, 2022)		SES recommends that NexGen be required to incorporate, into the cumulative effects component of the final EIS, the implications of its ongoing and planned additional efforts to expand and extend uranium exploitation activity beyond the Arrow Deposit.	

Number	Source	Reference to EIS, appendix, or TSD	<p align="center">Comment Summary (all original submissions can be found on Canadian Impact Assessment Registry reference: 80171)</p>	CNSC Response
25.	SES (October 12, 2022)		Which body of the federal government will be reviewing the cumulative GHG emission effects of historical, existing, and future projects?	
26.	SES (October 12, 2022)		How will that review be included the current EA process for the Rook 1 Project?	
27.	SES (October 12, 2022)		SES recommends that Canada now focus on achieving its 2030 GHG emission reduction target, recognising that new, more ambitious reductions will be required after that date.	
28.	Ya'thi Néné Lands and Resources (YNLR) (October 2022)	Section 1.2.3 Section 2.4	The Athabasca Denesų́liné have a well-established relationship with the CNSC. We have been developing a relationship with NexGen since 2019. Both should be aware of our Treaty and Traditional Territory	
29.	YNLR (October 2022)	Section 1.2.3	<p>YNLR is a not-for-profit organization established by the Black Lake Denesų́liné First Nation, Fond du Lac Denesų́liné First Nation, and Hatchet Lake Denesų́liné First Nation (collectively known as Athabasca Denesų́liné) and the municipalities of Camsell Portage, Uranium City, Stony Rapids and Wollaston Lake. YNLR has the authority to represent the communities in this EIS regulatory process. The three First Nations are also members of the Prince Albert Grand Council.</p> <p>It is unknown what specific guidance was provided by provincial and federal regulatory agencies to NexGen with regards to identifying primary Indigenous Groups, but a comparison situation with the stated identification criteria clearly shows that we should be considered a primary Indigenous group. The key Athabasca Denesų́liné considerations should have been well known by both NexGen and CNSC given materials provided and discussions undertaken.</p>	
30.	YNLR (October 2022)	Section 1.3.2	The Athabasca Denesų́liné remind all parties that the consideration of the impacts of the NexGen project on our rights and interests is incomplete.	
31.	YNLR (October 2022)	Section 2.5.2	Mistakenly, the Athabasca Denesų́liné were categorized as “other” Indigenous Group rather than a “primary” Indigenous Group due to the engagement process followed and 26 were thus relegated to an “inform” designation along the spectrum of engagement. Following the provision of detailed information in our 2020 report and in discussions with NexGen and the CNSC, it was expected that our participation would evolve to reflect our situation, rights, and interests and be moved into the primary Indigenous	

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			<p>Group category and to move further along the spectrum of engagement. Unfortunately, any increased consultation and engagement efforts and consideration were limited.</p>	
32.	YNLR (October 2022)	Section 2.6.1.2.2	<p>We are pleased that there is some reference to the Athabasca Denesųliné, but we believe the summary is incomplete. The 2020 Report - Provision of Athabasca Denesųliné Traditional Knowledge, Land Use and Occupancy Information for the NexGen Rook 1 Project Environmental Assessment – provided an overview of Athabasca Denesųliné (AD) culture, history, Treaties, way of life, and Nuhenéné (AD traditional territory).Further, it provided information on traditional (including contemporary) land use and knowledge, provided thematic maps of cultural and land use activities including big game harvesting, small game and fur bearers harvesting, fish and bird harvesting, overnight sites and travel routes, traditional plants, special areas, and Dene names. The report also identified primary concerns of the Athabasca Denesųliné, and potential impacts related to the NexGen Rook 1 Project and industrial development in general that include:</p> <ol style="list-style-type: none"> 1.wildlife harvest and habitat 2.water resources, 3.the continued ability to exercise Treaty and Aboriginal Rights and the protection of Athabasca Denesųliné rights. <p>Any reference to economic activities in the ADKLUO report was indirect, though important. To be clear, there was no reference to the wider Athabasca Basin. Further Athabasca Denesųliné Treaty and Aboriginal Rights and their protection seemed to be excluded from the NexGen summary.</p> <p>These issues and concerns along with others were raised during meetings between AD and NexGen and/or the CNSC.</p> <p>Again, we note that more meetings and engagement mean more detail. While fewer meetings and engagement mean less detail. Clearly more engagement with primary Indigenous groups lead to a greater elaboration and understanding of their issues. Less engagement with the YNLR lead to less</p>	

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			elaboration and less understanding and appreciation of Athabasca Denesųliné issues.	
33.	YNLR (October 2022)	Section 6	YNLR will be interested to see how indigenous knowledge is incorporated into this standard EA approach, together with how it is integrated with knowledge derived from more conventional scientific methods	
34.	YNLR (October 2022)	Section 6	Given the binary, and therefore somewhat subjective application of significance, YNLR wonders whether the precautionary principle was applied in this exercise? Furthermore, why only binary? Why not additional degrees of significance?	
35.	YNLR (October 2022)	Section 6	YNLR questions the statement that a single project seldom causes an environmentally significant effect on its own. Surely this is a scale dependent question, depending on the extent of the spatial and temporal boundaries selected?	
36.	YNLR (October 2022)	Section 18.4	The estimated annual payments by the mine to the Provincial and Federal Governments are \$288.5M and \$103.9M respectively. The economic output also noted that individual Benefit Agreements would include payments to Indigenous Groups although the terms of the agreements will be confidential. There is increased opportunity for the two levels of Government to increase community programs in the local area as part of receiving the increased income tax/royalty revenue.	
37.	Métis Nation – Saskatchewan (MN-S) (October 19, 2022)	10107, p.1-14	<p>Disciplined Planning</p> <p>“Identification, presentation, and due consideration of local Indigenous Groups’ input through early and ongoing engagement processes has validated, informed, and influenced aspects of Project design.”</p> <p>This statement seems to be an accurate reflection of NexGen’s approach, and potentially meets the standard of CEAA 2012. However, CEAA 2012 is 10 years out of date and well behind the national conversation on Indigenous rights, which has since expanded to include UNDRIP and the TRC Calls to Action, among other things. Terms such as "consideration of input" and "Indigenous Groups" (rather than “Indigenous Nations”) does not align with an understanding of MN-S as a rights holder, nor with current good practice related to Projects that drives toward not just collaboration but consent</p>	

Number	Source	Reference to EIS, appendix, or TSD	<p align="center">Comment Summary (all original submissions can be found on Canadian Impact Assessment Registry reference: 80171)</p>	CNSC Response
38.	MN-S (October 19, 2022)	4.4.2, p. 4-10 Assessment Criteria	<p>"The comparison between alternative options was presented in relative terms and is not intended as a definitive statement of Treaty or Aboriginal rights as they pertain to the proposed Project. Such an evaluation is the responsibility of the Crown in consultation with the potentially affected Indigenous Groups."</p>	
39.	ACFN (October 28, 2022)	Section 3.2.1	<p>ACFN is highly active in the project area and practices our treaty rights within the territory and will be affected by the proposed Project. Though the above-mentioned regulatory bodies (CNSC, Government of Saskatchewan) have not identified ACFN as a primary Indigenous group it still does not excuse the lack of adequate consultation.</p> <p>Please provide further references to the selection of priority Indigenous Groups</p>	