



# **Red Chris Block Cave Project - Production Phase**

## **Application for an Amendment to Environmental Assessment Certificate #M05-02**

### **Public Engagement Report**

Submitted by:

**Newcrest Red Chris Mining Limited**

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## Acronyms and Abbreviations

Amendment Application	Application for an Amendment to Environmental Assessment Certificate #M05-02
Application Development Stage	Amendment Application Initiation and Engagement Stage and Information Requirements and Scoping Stage
Application Review Stage	Amendment Application Review Stage
BC	British Columbia
Block Cave Project	Transition from open pit mining to underground mining using the Block Cave method, developed using a phased approach.
Consent Agreement	<i>Declaration Act</i> Consent Decision-Making Agreement for Red Chris Porphyry Copper Gold Mine Project between the Tahltan Central Government and the province of British Columbia, entered into agreement on November 1, 2023.
EA	Environmental Assessment
EAC	Environmental Assessment Certificate
EAO	Environmental Assessment Office
Effects Assessment	Valued Components Effects Assessment of the Application for an Amendment to Environmental Assessment Certificate #M05-02 – Chapter 11
IBCA	Impact, Benefit, and Co-Management Agreement <i>Amended and Restated Impact, Benefit and Co-Management Agreement dated as of August 15, 2019, between Newcrest Red Chris Mining Limited, Tahltan Central Government, Tahltan Band and Iskut Band</i>
km	kilometre
Mine/the Mine (also Red Chris)	Red Chris Porphyry Copper-Gold Mine
Newmont	Newmont Corporation
NGO	Non-governmental organization



NRCML	Newcrest Red Chris Mining Limited
Project	Production Phase of the Block Cave Project
Province	Province of British Columbia
RCDC	Red Chris Development Company Ltd.
Red Chris (also Mine/the Mine)	Red Chris Porphyry Copper-Gold Mine
Tahltan	Tahltan Nation
Tahltan Territory	The traditional territory of the Tahltan People, covering 93,500 square kilometres of northern British Columbia.
TCG	Tahltan Central Government
TIA	Tailings Impoundment Area
TRA	Tahltan Risk Assessment
TSKLH	Tsetsaut/Skii km Lax Ha Nation
VOH	Virtual Open House



## 1.0 Introduction

Newcrest Red Chris Mining Limited (NRCML) is the operator of the Red Chris Porphyry Copper-Gold Mine (Red Chris [also Mine/the Mine]) and holds Environmental Assessment Certificate (EAC) #M05-02. Red Chris is owned 70% by NRCML and 30% by the Red Chris Development Company Ltd. (RCDC) through an unincorporated joint venture. NRCML is wholly owned by the Newmont Corporation (Newmont), headquartered in Denver, Colorado, United States of America, while the RCDC is owned by Imperial Metals Corporation of Vancouver. Newmont's purpose is to improve lives and create value through sustainable and responsible mining.

Red Chris has operated under the conditions in EAC #M05-02 and other permits and approvals since 2015. Red Chris is an open pit mine producing a mineral flotation concentrate of copper and gold. In the fiscal year ending June 30, 2023, Red Chris produced approximately 18 thousand tonnes of copper, 39 thousand ounces of gold, and 94 thousand ounces of silver as a mineral concentrate product.

Red Chris is situated on the Todagin Plateau in northwest British Columbia (BC), entirely within the traditional territory of the Tahltan People, covering 93,500 square kilometres of northern British Columbia (Tahltan Territory). The nearest regional communities located south of Red Chris are Smithers (450 kilometres [km]), Terrace (368 km), and Stewart (200 km). Communities north of Red Chris include the community of Iskut, Dease Lake, and Telegraph Creek.

NRCML proposes to change the mining method at Red Chris to an underground mining technique known as block cave mining. The change in mining method will allow NRCML to access higher grade ore known to exist below the permitted Open Pit shell. As described in this document, the Production Phase of the Block Cave Project (Project) will support continued operation of the Mine for approximately 12 years, by which time the existing Tailings Impoundment Area (TIA) will reach its currently permitted capacity.

NRCML's transition from open pit mining to underground mining using the Block Cave method, developed using a phased approach (Block Cave Project), includes exploration, pre-production, camp expansion, and production phases.

On November 29, 2024, NRCML submitted an Application for an Amendment to Environmental Assessment Certificate #M05-02 (Amendment Application) to enable the Project to proceed to permitting and ultimate development, should all approvals be received. In addition to the Environmental Assessment Office (EAO) requirements, the Amendment Application is subject to the requirements of the Tahltan Risk Assessment (TRA) process. Tahltan Nation (Tahltan) consent is required in line with the *Declaration Act* Consent Decision-Making Agreement for Red Chris Porphyry Copper Gold Mine Project between the Tahltan Central Government and the Province of British Columbia, entered into agreement on November 1, 2023 (Consent Agreement).

This Public Engagement Report has been prepared to support NRCML's Amendment Application for the Project, as detailed in the requirements of the Amendment Procedures issued on August 29, 2024, and the Amendment Workplan dated July 24, 2024 (EAO 2024). The Amendment Procedures require that NRCML submit a Public Engagement Report to the EAO within 30 days of the close of the public comment period, which was held from March 11 to April 10, 2025.



## **2.0 Approach to Public and Stakeholder Engagement**

Gaining and maintaining the trust of stakeholders impacted by a business is an ongoing effort. NRCML uses a methodical approach to managing stakeholder relationships and earning social acceptance. NRCML aims to build enduring relationships based on respect and mutually beneficial and sustainable development outcomes by understanding and managing the impacts of business activities on communities and involving local stakeholders when making decisions that affect them.

### **2.1 Summary of Public and Stakeholder Engagement**

This Public Engagement Report discusses engagements with the public and stakeholders on the Project, as well as issues raised and NRCML's response. NRCML has been communicating with the public and stakeholders on the Block Cave Project since 2019. NRCML's public and other stakeholder engagements completed prior to December 2022 that were submitted as part of the Project Description (NRCML 2023) can be found in Appendix 4.6-A of Chapter 4 of the Amendment Application.

This report covers engagements that have occurred between December 2022 and April 2025 as part of the Amendment Application Initiation and Engagement Stage, Information Requirements and Scoping Stage (Application Development Stage), and Amendment Application Review Stage (Application Review Stage).

#### **2.1.1 Overview**

During the Application Development Stage and Amendment Application Review Stage, NRCML has engaged with potentially affected community members, including Tahltnan community members, the public, and specific stakeholder groups such as youth and Elders in the communities nearest to Red Chris, including Iskut, Telegraph Creek, Dease Lake, in addition to Stewart, BC, and Whitehorse, Yukon. NRCML has also engaged with non-governmental organizations (NGOs), and industry professionals for the Project between December 2022 and April 2025.

NRCML has communicated with members of the public and stakeholders on the Project through community and public events, conferences, meetings, emails, letters, print and social media, and the [Project's Virtual Open House](#) (VOH). A summary of these activities completed during the Application Development Stage and Application Review Stage are presented below.

#### **2.1.2 Summary of Public and Stakeholder Engagement During Application Development Stage and Application Review Stages**

During the Application Development Stage, NRCML held three series of community meetings in the communities nearest to Red Chris, including Iskut, Telegraph Creek, Dease Lake, in June, November and December 2023, and March 2024 that were open to the public, specifically Tahltnan community members. NRCML provided information on the Project to the public at open house events in Whitehorse, Yukon, in March 2024 and Stewart, BC, in August 2024.



NRCML also presented on the Project at three conferences across BC in 2023 and 2024 to broaden the public audience receiving information about the Project. Additional engagement activities included a tour of the Mine for high school students from Dease Lake, where the Project was discussed, and the launch of the VOH on the Project in August 2024, which was shared on Newmont's website and the Newmont Canada Facebook page.

On November 29, 2024, the Project Environmental Assessment (EA) process moved into the Application Review Stage for 180 days. This stage included a legislated 30-day public comment period during which communities and interested parties had the opportunity to provide feedback to the EAO. The public comment period took place from March 11 to April 10, 2025. NRCML advertised the public comment period through digital and print advertisements in the Terrace Standard and Smithers Interior News, as well as posting on the Newmont Canada Facebook page.

A Virtual Information Session (VIS) was hosted by the EAO during the public comment period, which included presentations on the provincial EA process and the TRA, as well as a presentation by NRCML on the Project and the Amendment Application. Fourteen members of the public attended. After the presentation, NRCML, the EAO, and the Tahltan Central Government (TCG) responded to questions from attendees. The EAO also collected public feedback through an engagement website, by mail and email, and shared feedback received with NRCML at the close of the public comment period.

Along with the EAO-led public comment period and associated VIS and feedback channels, NRCML continued additional public engagement during the Application Review Stage. This included three series of community meetings in Iskut, Telegraph Creek, and Dease Lake, in December 2024, February 2025, and April 2025 that were open to the public, including Tahltan community members. These meetings focussed on informing the public and Tahltan community members on the Valued Components Effects Assessment of the Application for an Amendment to Environmental Assessment Certificate #M05-02 – Chapter 11 (Effects Assessment), as well as providing updates on Red Chris; in particular, environmental management at the Mine. Additionally, NRCML held a meeting with an NGO on environmental management at the Mine, including for the Project (Table 2). NRCML also posted two letters to Tahltan community members and the public on its Newmont Canada Facebook page about the Project and the Mine. The VOH continued to be a regularly updated public source of information on the Project during the Application Review Stage.

An overview of NRCML's public and stakeholder engagements on the Project during the Application Development Stage and Applications Review Stage are presented in Tables 1 and 2.





**Table 1: Summary of Public Engagement During Application Development Stage**

Topic	Date	Location	Type	Engagement With	Summary of Engagement
Minerals North Conference	May 26, 2023	Quesnel, BC	Conference	Public	NRCML presented on the Red Chris and Brucejack operations, including an overview of the planned Project.
Red Chris operational update	June 6, 2023	Dease Lake, BC	Community meeting	Tahltan community and public	Provided Red Chris operational update and discussed TIA, environmental stewardship, the block cave mining technique, the future potential of Red Chris, and community investment. 25 community members participated.
Red Chris operational update	June 7, 2023	Telegraph Creek, BC	Community meeting	Tahltan community and public	Provided Red Chris operational update and discussed TIA, environmental stewardship, the block cave mining technique, the future potential of Red Chris, and community investment. 34 community members participated.
Red Chris operational update	June 8, 2023	Iskut, BC	Community meeting	Tahltan community and public	Provided Red Chris operational update and discussed TIA, environmental stewardship, the block cave mining technique, the future potential of Red Chris, and community investment. 19 community members participated.
Introduction of Newmont	November 29, 2023	Telegraph Creek, BC	Community meeting	Tahltan community and public	Introduced Newmont as NRCML's new owner, and discussed the company's plans in BC, including the Project, with community members.
Introduction of Newmont	November 30, 2023	Iskut, BC	Community meeting	Tahltan community and public	Introduced Newmont as NRCML's new owner, and discussed the company's plans in BC, including the Project, with community members.
Introduction of Newmont	December 1, 2023	Dease Lake, BC	Community meeting	Tahltan community and public	Introduced Newmont as NRCML's new owner and discussed new ownership and the company's plans in BC, including the Project with community members.



Topic	Date	Location	Type	Engagement With	Summary of Engagement
The Project	March 6, 2024	Telegraph Creek, BC	Community meeting	Tahltan community and public	Introduced community members to the Project, including how block caving works, environmental benefits, workforce transition, and the approvals process. 37 community members participated.
The Project	March 7, 2024	Iskut, BC	Community meeting	Tahltan community and public	Introduced community members working at Red Chris to the Project, including how block caving works, environmental benefits, workforce transition, and the approvals process. 30 community members participated.
TCG Lands Open House	March 23, 2024	Whitehorse, BC	Open house	Public	NRCML provided information on the Project to members of the public, including a Project video, in an open house format. 20 community members participated.
Minerals North Conference	May 10, 2024	Kitimat, BC	Conference	Public	Presented on Newmont's vision for northwestern BC, including the Project.
Dease Lake school tour of Red Chris	June 7, 2024	Red Chris, BC	Site tour	Youth	Site tour of Red Chris for grade 11 and 12 students from the Dease Lake School. Students learned about Red Chris and NRCML, careers on site, and the Project.
VOH	August 12, 2024	n/a	Website	Public	A website available for public viewing containing key information on the Project. Newmont posted links to the VOH on its website and social media platforms (LinkedIn and Facebook).
Stewart Library Open House	August 30, 2024	Stewart, BC	Open house	Public	Provided information to community members on Newmont, including its operations in BC, with a focus on the Project. 45 community members participated.
Resource Breakfast Forum	September 17, 2024	Vancouver, BC	Conference	Public	Presented on Newmont's vision for northwestern BC, including the Project.



**Table 2: Summary of Public Engagement During Application Review Stage**

Topic	Date	Location	Type	Engagement With	Summary of Engagement
The Project	December 8, 2024	Telegraph Creek, BC	Community meeting and Open House	Tahltan community and public	Provided an update on the Project and the Amendment Application to community members, including the EA process, key project components, and workforce transition. 15 community members participated.
The Project	December 9, 2024	Iskut, BC	Community meeting and Open House	Tahltan community and public	Provided an update on the Project and the Amendment Application to community members, including the EA process, key project components, and workforce transition. 18 community members participated.
The Project	December 10, 2024	Dease Lake, BC	Community meeting and Open House	Tahltan community and public	Provided an update on the Project to community members, including the EA process, key project components, and workforce transition. 23 community members participated.
The Project	February 24, 2025	n/a	Letter	Tahltan community and public	Shared a letter on the Newmont Canada Facebook page emphasizing NRCML's commitment to the Section 7 Joint Decision-Making Agreement between the Tahltan and the Province of British Columbia (Province) regarding the Project.
The Project	February 25, 2025	Iskut, BC	Community meeting and Open House	Tahltan community and public	Provided an update on the Project to community members, including the Effects Assessment, key project components, and workforce transition. 20 community members participated.
The Project	February 26, 2025	Dease Lake, BC	Community meeting and Open House	Tahltan community and public	Provided an update on the Project to community members, including the Effects Assessment, key project components, and workforce transition. 25 community members participated.
The Project	March 11, 2025	n/a	Facebook Post	Public	Posted a notification of the Project's 30-day public comment period on Newmont Canada's Facebook page.



Topic	Date	Location	Type	Engagement With	Summary of Engagement
The Project	March 11-April 10, 2025	n/a	Digital Advertisement	Public	Deployed web ads on the Terrace Standard and Smithers Interior News websites to notify members of the public on the dates of the public comment period and the VIS for the Project.
The Project	March 12, 2025	n/a	Print Media	Public	Deployed printed ads in the Terrace Standard and Smithers Interior News to notify members of the public on the dates of the public comment period and the VIS for the Project.
TCG Lands Open House	March 21-22, 2025	Whitehorse, BC	Open house	Public	Provided information on the Project to members of the public, including a Project video, in an open house format. 48 Tahltan community members and members of the public participated.
Skeena Wild Engagement	March 21, 2025	n/a	Virtual meeting	NGO and TCG Lands Department	Discussed Skeena Wild's draft report on environmental management at Red Chris. NCRML shared information on collaborative work taken place between NCRML and the TCG since acquisition of the Mine in 2023 to improve environmental management and commit to industry-leading standards.
Elders' luncheon and community visits	April 8, 2025	Telegraph Creek	Community engagement	Tahltan community and public	Provided an update on Red Chris including on topics such as environmental management and the Project. 75 community members participated.
The Project and Environmental Management of Red Chris	April 9, 2025	n/a	Letter	Tahltan community and public	Shared a letter on the Newmont Canada Facebook page with information on NCRML's approach to environmental management at Red Chris, including information on the Project.



Topic	Date	Location	Type	Engagement With	Summary of Engagement
Elders' luncheon and community visits	April 9, 2025	Iskut, BC	Community engagement	Tahltan community and public	Provided an update on Red Chris, including topics such as environmental management and the Project. 40 community members participated.
Elders' luncheon and community visits	April 10, 2025	Dease Lake, BC	Community engagement	Tahltan community and public	Provided an update on Red Chris, including topics such as environmental management and the Project. 40 community members participated.



### 3.0 Outcomes of Engagement

The common interests and concerns raised by members of the public during the public comment period in the Application Review Stage, as expressed in the information sessions and feedback received by the EAO, are summarized in Table 3. The complete list of comments submitted during the public comment period to the EAO through the Project website, letters, or emails, as well as NRCML's responses can be found in Appendix A, with accompanying comment sources in Appendices B through G. Note that 13 of the comments received were provided to the EAO for them to address.

**Table 3: Summary of Interests and Concerns Raised by the Public During Application Review Public Comment Period Virtual Information Session and Submitted Comments**

Topic	Interest/Concern
Fish and Fish Habitat	Concerns about selenium bioaccumulation in fish, as well as downstream impacts to salmon populations. Additionally, concerns around terrain instability related to block cave mining (i.e., landslides) and potential impacts to fish habitat were raised.
Tailings	Concerns about water management issues with the Red Chris TIA, tailings dam stability, emergency response planning in the case of a tailings dam failure, downstream water quality impacts from tailings, and tailings inundation studies to depict potential impacts to downstream communities. The public also has questions about future plans for the TIA after it reaches its permitted capacity.
Culture	Interest about how NRCML considered impacts to multiple generations of people impacted by potential effects of the Project.
Climate Change	Concerns about how the Amendment Application assesses potential effects of the Project on the physical environment, including impact of climate change.
Employment	Interest in the workforce transition required for the shift to block cave mining, as well as retention of local and regional employees.
Critical Minerals	Concerns about the amount the amount of gold being produced by the Mine, which is not a critical mineral, versus copper, which is a critical mineral.
Approvals process	Concerns about the approvals process for the Amendment Application, and communication from the Province about 'fast-tracking' mineral development projects in BC.
Human/Community Well-Being	Concerns about negative impacts to salmon populations, which could result in negative economic impacts to communities. Concerns about bioaccumulation of metals in fish, mammals and birds that are consumed by humans. Concerns about disruptions to wildlife populations traditionally hunted by the Tahltan (moose grizzly bears, goats, etc.). Concerns about increased negative social impacts from the Project and the resulting increase in workforce, including violence against Indigenous women, crime, and drug trafficking.
Transboundary Effects	Concerns about cumulative and downstream effects on Alaskan Tribes and communities.



Topic	Interest/Concern
Surface Water	Concerns regarding the potential risks of the Project on water resources (Quarry Creek to Klappan River watershed, and Trail Creek to Kluea Lake watershed), including associated habitats of cultural significance. Concerns about exceedances in water quality parameters in surface water around the Mine. Concerns about the current Trigger Action Response Plan and impacts to surface water. Concerns about seepage from the Rock Storage Area in Red Rock and White Rock Canyons.
Groundwater	Concerns about impacts to selenium and nitrate concentrations in groundwater due to Project activities. Concerns about seepage from the TIA and the current seepage management at Red Chris.
Soil/Terrain	Concerns about increased terrain instability due to the Project, including potential for landslides. Concerns about sources used for subsidence modelling included in the Amendment Application
Closure	Concerns about the cost of water-treatment post-closure modelling. Interest in closure plans for the Project, including whether the underground will be filled with water.
Mine life	Interest in the life of mine and future planned mine expansions at Red Chris, including whether there will be additional block caves.

In addition to public comments received during the Application Review Stage through the EAO, NRCML received comments directly from the Tsetsaut/Skii km Lax Ha Nation (TSKLH) on the Amendment Application and how the Project impacts TSKLH interests. NRCML worked directly with TSKLH to respond to the comments raised.

Concerns raised by members of the public and community members prior to the Application Review Stage were related to workforce transition, local employment and training, wildlife management, community investment and benefit sharing, local contracting and business opportunities, food security, availability of target species, air quality monitoring, closure and reclamation planning, local infrastructure, tailings management, ground and surface water, community health and well-being, road traffic, and outmigration.

Table 4 summarizes interests and concerns raised up until the end of the Application Development Stage and the associated approach/response from NRCML.



**Table 4: Public Interests and Concerns Up Until the End of Application Development**

Topic	Description	Interest/Concern	Approach/Response
Approvals process	Collaborative engagement process/ community engagement	Specific interest in an inclusive and transparent engagement process for the Project.	NRCML has continued its collaborative engagement planning process with the TCG throughout the Project's approval process.
Approvals process	Consent decision-making process	Concern regarding the implementation of the Consent Agreement (BC Gov and Tahltan Nation 2023) in place for the Project approvals process.	NRCML has continued collaborative engagement efforts with the TCG to keep the Tahltan apprised of the approvals process.
Local economy	Community investment	Interest in NRCML's community investment program.	For non-Tahltan communities, the implementation of the Project will allow NRCML and Newmont to continue to support community investment programs. Additional response(s)/approach(es) to similar Tahltan community interest(s) are addressed in the Amendment Application Chapter 4.0 Tahltan Risk Assessment.
Employment and local economy	Workforce transition	Concern about potential job losses due to the change in mining method.	It is anticipated that the change in mining method will support the maintenance and creation of new, more highly skilled jobs, training programs, and contracting opportunities. Additional response(s)/approach(es) to similar Tahltan community interest addressed in the Amendment Application Chapter 4.0 Tahltan Risk Assessment.
Employment and local economy	Workforce transition	Concern regarding potential job losses due to the change in mining method (e.g., concern regarding the implications of increased automation).	It is anticipated that the change in mining method will support the maintenance and creation of new, more highly skilled jobs, training programs, and contracting opportunities. Workforce transition specific to the Tahltan will be undertaken collaboratively. Employment and economy considerations are captured in Amendment Application Section 11.11 Employment and Economy.





Topic	Description	Interest/Concern	Approach/Response
Employment	Rotational work schedule	Concern regarding the potential negative impacts of a rotational (fly-in fly-out) work schedule on family cohesion (e.g., missing cultural events).	NRCML is committed to continuing dialogue to understand and manage potential impacts; reflected in the Social Baseline Report (Amendment Application Appendix 11.11-B). Rotational work schedule considerations are captured in Amendment Application Section 11.15 Culture.
Employment	Local employment/training	Interest in training programs and other supports to ensure that Tahltan members can benefit/be employed by the Project.	The total number of jobs currently onsite and predicted during block cave operations is comparable; however, the types of jobs are anticipated to change. The potential for job reductions will be minimized to those who elect not to pursue re-training. The development of a transition plan is underway and slated for completion in late 2025/early 2026; engagement with the Tahltan will be included in this process. Employment and economy considerations are captured in Amendment Application Section 11.11 Employment and Economy.
Local employment and economy	Local contracting/business opportunities	Interest in expanding programs/partnerships around local employment and Tahltan professional development.	Local employment programming is currently in development in partnership with the Tahltan Nation Development Corporation. One component of this program is maximizing Tahltan employment through a leadership program, skills assessment, and a 'Mining 101' program that is not contingent on prior experience. A program currently in place, which is supported by NRCML, is the Heavy Equipment Operators program, which will be integrated into the Project. Employment and economy considerations are captured in Amendment Application Section 11.11 Employment and Economy.



Topic	Description	Interest/Concern	Approach/Response
Local economy	Community investment/benefit sharing	Interest in expanding benefit-sharing (through the Impact, Benefit, and Co-Management Agreement, <i>Amended and Restated Impact, Benefit and Co-Management Agreement dated as of August 15, 2019, between Newcrest Red Chris Mining Limited, Tahltan Central Government, Tahltan Band and Iskut Band</i> (IBCA) in relation to the Project.	The implementation of the Project will support the current benefit-sharing arrangement under the IBCA, as it will with the existing community investment programs. The terms of the IBCA are confidential.
Culture	Food security	Concern about the potential for the Project to negatively impact local food security.	NRCML is committed to continuing dialogue and support through mechanisms such as the existing community investment program to understand and manage potential impacts. Food security considerations are captured in Section 11.15 Culture.
Wildlife	Availability of target species	Concern about the potential impacts of the Project on wildlife (and their movements/migration); availability of target species.	The transition of mining method is anticipated to generally improve noise, vibration, and air quality outcomes. The Project is primarily contained within the existing Mine disturbed area. Wildlife considerations are captured in Section 11.10 Wildlife and Wildlife Habitat.
Dust	Air quality monitoring	Concern regarding dust and air contaminants in and around Iskut.	Air monitoring stations have been placed around Iskut in collaboration with the Iskut Band. It is anticipated that air quality will improve with the implementation of the Project. Air quality considerations are captured in Section 11.3 Air Quality.
Closure	Closure and reclamation planning	Concern regarding the subsidence zone; how deep it will go, how long it will take to fill with water following closure, and how long will the fence need to be around it.	The existing pit and subsidence zone will take 70–75 years to fill with water following the cessation of Mine operations. A barrier (fence or berm) will be installed at Closure for public safety and to prevent accidental access to the lake. Closure is discussed in Section 1.5 Description of the Project.



Topic	Description	Interest/Concern	Approach/Response
Housing	Local infrastructure	Concern related to the Project reducing the availability of in-territory housing.	NRCML is committed to continuing dialogue and support through mechanisms such as the existing community investment program to understand and manage potential impacts. Housing considerations are captured in Section 11.12 Infrastructure and Services.
Health and Well-Being	Community health and well-being (including mental health)	Interest in the Project supporting local community health and well-being programming, including mental health and youth.  Additional interest in developing programs to be available for youth in local schools (e.g., art, music, dance).	NRCML offers employees and their family an employee assistance program. NRCML is committed to continuing dialogue and support through mechanisms such as the existing community investment program to understand and manage potential impacts. Community well-being considerations are captured in Section 11.13.2 Community Well-being.
Services and Infrastructure / Culture / Employment and Economy	Out-migration	Concern related to perceived out-migration of Tahltan membership from local community, particularly young adults and families, and associated negative impacts on community cohesion.	NRCML is committed to continuing dialogue to understand and manage potential impacts. Out-migration considerations are captured in Section 11.11 Employment and Economy, Section 11.12 Infrastructure and Services, and Section 11.15 Culture.
Water	Groundwater/surface water	Concern regarding the potential risks of the Project on water resources (Quarry Creek to Klappan River watershed, and Trail Creek to Kluea Lake watershed), including associated habitats of cultural significance.	Red Chris operates a large surface and groundwater monitoring network that includes monitoring onsite and at locations offsite; results are reported annually. NRCML has committed to increasing direct information sharing with the local communities on this topic. Surface water considerations are captured in Section 11.5 Surface Water. Groundwater considerations are captured in Section 11.6. Groundwater.
Water	Tailings management	Concern regarding the TIA; long-term tailings management, and the potential risk to downstream communities.	The Project does not propose increasing the capacity of the TIA beyond its currently permitted capacity. The Project enables continued operations that will increase the amount of time available to identify the best approach to long-term closure.



Topic	Description	Interest/Concern	Approach/Response
Safety	Road traffic	Concern related to Project-induced road traffic and community safety.	Project-related traffic is anticipated to increase during the construction stage and then subsequently return to current levels. The Tahltan Industry Working Group, of which Newmont is a member, was successful in recently securing \$195 million in funds for the Stewart-Cassiar Provincial Highway improvements. Road traffic considerations are captured in Section 11.12 Infrastructure and Services.



## 4.0 Future Engagement Plans

Newmont and NRCML are committed to working collaboratively with the Tahltan in a way that fosters an understanding and awareness of our respective interests.

As the Amendment Application advances to the Amendment Effects Assessment and Recommendations Stage followed by the Referral and Decision Stage, NRCML will continue engagement with the public on the Project. Currently planned engagements between May and September 2025 include further rounds of public community meetings in Iskut, Telegraph Creek, and Dease Lake, presentations at conferences across BC, and a regional tour for Tahltan community members and other interested parties in key locations across BC, Yukon, and Alberta.

The VOH will stay updated during this time and serve as a consistent source of information on the project. Additionally, NRCML will continue to engage with NGOs and other interested groups on the Project.

## 5.0 References

- BC Gov and Tahltan Nation. 2023. Declaration Act Consent Decision-making Agreement for the Red Chris Porphyry Copper-Gold Mine Project. Ministry of Environment and Climate Change Strategy, Ministry of Indigenous Relations and Reconciliation, and Tahltan Nation. [https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/consulting-with-first-nations/agreements/declaration\\_act\\_consent\\_agreement\\_for\\_red\\_chris\\_with\\_tahltan.pdf](https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/consulting-with-first-nations/agreements/declaration_act_consent_agreement_for_red_chris_with_tahltan.pdf).
- NRCML. 2023. Block Cave Project: Production Phase Project Description. Newcrest Red Chris Mining Ltd. February 17, 2023.
- EAO. 2024. Schedule C - Amendment Application Information Requirements for the Red Chris Porphyry Copper-Gold Mine Project Block Cave Amendment. Environmental Assessment Office. November 19, 2024.

# **Appendix A    Public Comments Received During Application Review Public Comment Period and Newmont Red Chris Mining Limited Responses**

**Red Chris Block Cave Project - Production Phase**

**Public Engagement Report**

Aconex Submission Number: 401-8311-EN-REP-0023

May 9, 2025





Table A-1: Public Comments Received During Application Review Public Comment Period and Newmont Red Chris Mining Limited Responses

Comment ID	Comment Source	Public Comment	NRCML Response
EAC - 1850	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated effects to Fisheries and Aquatic Resources.</p> <p>Comment: Our organization, United Southeast Alaska Gillnetters, are concerned that amending a permit that will allow an additional 12 years of extraction of lower grade material will result in more tailings. We are satisfied that the distance from the Stikine will allow for adequate dilution regarding seepage, we are concerned that a catastrophic event at the tailings dam could cause a prolonged exposure of tailings that could affect the life cycles of chinook, sockeye, and coho salmon that we rely on to make our livings. Even a short time period of water quality degradation could affect up to two brood years for all of the above-mentioned species. In the case of coho, it could actually terminate the species altogether.</p>	<p>To clarify, the Amendment Application is for a change in mining method and not a mine expansion. As described in Section 1.5.6.2 Rock Storage Area, the area used will be reduced as low-grade material stored in the RSA is depleted. As described in Section 1.5.6.4 Tailings Impoundment Area, the change in mining method and the process plant modifications associated with Project development will not result in any fundamental changes to tailings and water management at Red Chris. The TIA final permitted configuration does not change.</p> <p>Section 11.7.11 Assessment of Negative Effects describes potential residual negative effects to Fisheries and Aquatic Resources. The risk of negative residual effects to surface water quality that affect Fish Health and/or Fish Productivity over time are low, because even though there will be continuous seepage of contact water into the downstream receiving environment there will be negligible effects of the Project water quality.</p> <p>Following the EAO Effects Assessment Policy, catastrophic events are not evaluated within a Valued Component effects assessment, but rather, are considered within the assessment contained within the Accidents and Malfunctions Chapter (Chapter 13.0).</p> <p>Project related failure mode for accidents and malfunctions excluded TIA embankment failure given that the final configuration of the TIA will remain unchanged from what has already been permitted. NRMCL has reviewed the Project influences on the TIA operation (increased tailings deposition rate) and has found that these changes do not generate any increased risk to TIA embankments (Section 13.4.2 Tailings Impoundment Area Emergency Preparedness and Response). Further, NRCML manages TIA operations using best industry practices to monitor and assess the integrity of dam structures to prevent and mitigate potential failure events, which are detailed in Section 13.4.2 Tailings Impoundment Area Emergency Preparedness and Response. NRMCL has met the AAIR requirements by providing relevant information regarding a catastrophic dam failure as previously presented publicly and with the Tahltan. As documented with the AAIR, reassessment of this information was outside the scope of this amendment.</p>
EAC - 1851	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated effects to Fisheries and Aquatic Resources.</p> <p>Comment: The Application fails to address the documented physical degradation and elimination of productive fish habitat caused by the mine. As an example, Kluea Lake rainbow trout spawn, rear, and forage in Trail Creek where they are exposed to increasingly elevated concentrations of several metals, including aluminum, chromium, and copper. However, these fish are not assessed for contaminant loadings for any of these metals. Instead, tissue samples are acquired from Kluea Lake, where those metals have yet to show evidence of an increase in the water or sediment monitoring. The AIR at 11.7.3 requires the Application to examine fish health and tissue chemistry, specifically those that could relate to bioaccumulation concerns. Selenium bioaccumulation was evaluated using dissolved selenium concentrations in surface water, sediments, periphyton and benthic invertebrates but not compared to tissue levels measured in the fish. This requirement in the Application is incomplete. Tissue samples must be taken where contamination in the waters has been observed.</p> <p>The Amendment Application also fails to provide a detailed description of the methods used to assess negative cumulative effects to fisheries and aquatic resources that are anticipated because of the Project.</p> <p>Adverse effects are occurring without any clear plans to mitigate them. A comparison of muscle tissue selenium concentrations in Rainbow Trout against background concentrations in 2012 showed concentration had increased in 2023. Total selenium concentrations in Rainbow Trout muscle tissue between 2003 and 2023 in Kluea Lake and both reference lakes were above the BC WQG.</p> <p>Concentrations of fish ovary selenium were higher in Kluea Lake compared with the reference lakes in 2023 and with background conditions accessed in 2015. Similarly,</p>	<p>The issues that are covered in the comment are understood to be the following:</p> <ol style="list-style-type: none"><li>Effects of the existing operational Mine on fish health specifically as it relates to:<ol style="list-style-type: none"><li>Selenium</li><li>Mercury</li><li>Natural mineralization</li></ol></li><li>Effects Assessment methodology required by the AAIR<ol style="list-style-type: none"><li>Potential Effects</li><li>Effects Management (Mitigation and Monitoring)</li><li>Characterization of Negative Residual Effects</li><li>Cumulative Effects</li></ol></li><li>Alternatives Assessment (Project Overview)<ol style="list-style-type: none"><li><b>Effects of Red Chris existing open pit operations on fish health, specifically as it relates to selenium, mercury and natural mineralization.</b></li></ol></li></ol> <p>While the issues discussed in this comment are valid, it is important to note that the purpose of the environmental assessment in the Amendment Application was not to assess the effects of the existing conditions, but rather to compare and assess the effects of the Project Case vs Existing Conditions. What this means is that the environmental effects of the existing mine (Existing Conditions) were not the focus of the assessment, but rather the assessment focused on the difference between the existing conditions and the proposed amendment (Project Case).</p> <p>Existing Condition data, including the site context as presented in the 2004 Original EAC Application, and current conditions data (2016-2023) presents an adequate understanding of current conditions at Red Chris, and presents a longer time horizon for the purposes of an environmental effects assessment than many new/proposed greenfield projects. The observed trends that indicate an increasing trend of selenium and other present contaminants have informed the effects assessment accordingly.</p>





Comment ID	Comment Source	Public Comment	NRCML Response
		<p>ovary selenium concentrations in Kluea Lake in 2023 were higher than background conditions in in Kluea Lake assessed in 2015. Between 2015 and 2023, ovary selenium concentrations were generally greater than those measured in muscle tissue.</p> <p>An increasing trend in median muscle mercury concentrations was observed in female Rainbow Trout from Kluea Lake. Results from 2023 investigation conducted for the Mine indicated that statistically increasing trends in both mercury and selenium concentrations in muscle tissue were observed in Rainbow Trout from Kluea Lake. See Application at 11.13-49. Given the potential for these metals to bioaccumulate and bio-magnify, and the increasing trends observed in fish tissue, the Application recommends that mercury and selenium should be considered in the on-going site-wide human health risk assessment as part of a “Follow-Up Strategy”. Oddly enough, as stated under the Ground Water section, ground water is discounted as having human health implications.</p> <p>Increasing trends also are not compatible with the proponent’s assertion that the observed concentrations of these elements are due to natural conditions. Natural erosion of local mineralized material would produce a steady rate of concentration, not an increasing concentration. If increasing trends are due to natural processes occurring for millions of years, Kluea Lake would be a pool of pure mercury and selenium by now. However, given the increasing trends and the duration of the effects over perpetuity, the Application concludes that “no residual cumulative effects are reasonably foreseeable in based on the naturally elevated levels of these contaminants in the local assessment area.</p> <p>The Application fails to distinguish between the source of the observed levels as either due to mine operations or natural mineralization, but an increasing trend does not lend itself to the natural erosion of mineralized rock in the assessment area. The Application also fails to consider that where metal water concentrations may be naturally elevated, the aquatic system should be considered as already under stress and having a lower tolerance to further contaminant inputs from mining.</p> <p>The conclusion of no residual effects to fish and fish habitat is unsupported and inaccurate.</p> <p>The AIR for the Application (at 10.9) requires a description of the magnitude, geographic extent, duration, reversibility, frequency, affected populations, and the measured level of risk and uncertainty in the predictions. In addition, AIR at 10.8 requires the Application to identify assumptions used in analytical methods, and the nature and degree of uncertainty or conservatism related to the data, modelling, and methods used for the analysis. Where a quantitative description is not possible, an explanation will be provided as to why it is not feasible, and the effects will be described qualitatively. The Application is incomplete in these regards.</p> <p>The AIR also mandates a description in the Application on how the mine will manage the effects applying the hierarchy of avoid, minimize, and restore onsite where existing plans and policies require change, and what mitigation measures will be achievable, measurable, and verifiable in a manner that avoids ambiguity. This Application is also incomplete in this regard.</p> <p>The AIR (at 10.10) requires a cumulative effects assessment based on past, present, and reasonably foreseeable future projects and activities that have been or that are likely to be carried out that could interact cumulatively with each selected VC including fish and</p>	<p>The scope of the effects assessment has been completed in accordance with the Amendment Application Information Requirements and presents the assessment of effects for the incremental changes to Valued Components that may result from the Project.</p> <p>It is noted that the increasing trends of selenium and other present contaminants are considered existing operational concerns and are outside the scope of this assessment. That said, re-design of the Aquatic Effects Monitoring Program is ongoing and was most recently identified in the 2023 AEMP report (see Section 5.0; WSP, April 30, 2024). Section 6.0 of the same report notes the AEMP "is meant to be dynamic in nature and follow an adaptive management strategy based on the results of ongoing monitoring." This process of review and identification of key updates is completed in consultation with provincial regulators and THREAT via the mine's Annual Red Chris Monitoring Committee (RCMC) meetings, typically held in June of each year. Prior to re-design, supplementary studies may be initiated to inform the scope of the changes to the AEMP. For example, a surface water quality review and source study for potential parameters of concern in Kluea Lake has been initiated by NRCML with completion anticipated in 2025. Outcomes from this study are planned to be presented at the 2025 RCMC where the scope of the planned re-design will be discussed with the added benefit of the 2024 AEMP results. Following this, NRCML anticipates that the study re-design will be completed in 2026 and be reviewed during the 2026 RCMC meetings.</p> <p><b>2. Concerns around EA methodology and adherence to the AAIR, specifically in regards to cumulative effects assessment, mitigation and monitoring, and alternatives assessment</b></p> <p>As discussed in Section 11.7 of the Amendment Application, the existing conditions were described and the potential effects (Section 11.7.8) of the Project on fish and aquatic resources were assessed. As described in section 11.7.9 Effects Management, approaches for managing potential effects of the Project activities on fisheries and aquatic resources within the LAA adhere to known management practices. The effects management approach follows the Environmental Mitigation Procedures for B.C. (BC Gov. 2014). NRCML acknowledges the commentor's concerns regarding mitigation efficacy, without knowing which specific mitigations the concerns are linked to limits the ability to provide specific information in response to these concerns. As described throughout the Valued Component Effects Assessment (11.X.14.1 Adaptive Management), NRCML employs an adaptive management approach to manage potential residual effects at Red Chris.</p> <p>Where negative residual effects were identified, they were characterized according to the criteria defined in the Amendment Application Information Requirements. It is noted that the severity of a potential residual effect is categorized as the "magnitude" which "refers to the expected scale and/or severity of the residual effect."</p> <p>Section 11.7.11 Assessment of Negative Effects describes potential residual negative effects to Fisheries and Aquatic Resources. The risk of negative residual effects to surface water quality that affect Fish Health and/or Fish Productivity over time are low, because even though there will be continuous seepage of contact water into the downstream receiving environment there will be negligible effects of the Project water quality. In accordance with the AAIR and methodological requirements, Table 11.7 27: Summary of Potential Residual Effects on Fisheries and Aquatic Resources presents the characterization of the residual effects for magnitude, geographic extent, duration, reversibility, frequency, affected populations, and risks and uncertainty.</p> <p>As described in Sections 11.5.14.3 Adaptive Management of the Amendment Application, NRCML has identified existing mitigations (new mitigations for the project) that have not yet been implemented for hydrology, groundwater, and surface water. Fisheries and aquatics resources are monitored under the existing Aquatic Effects Management Program which includes fish tissue analysis. The Trigger Action Response Plan was updated in December 2024 and will continue to be updated based on results from the ongoing monitoring programs, as per the existing permit requirements in BC <i>Environmental Management Act</i> Effluent Permit 105017 (PE-105017; Condition 5.2). It should be noted that the existing Site Performance Objectives (SPO) are approved under PE-105017 and that the SPO for selenium in Trail Creek (TRL-0.8 and TRL-0.1) is equivalent to the BC Water Quality Guideline for the Protection of Aquatic Life (BC FWAL). Additionally, PE-105017 requires that BC FWAL guidelines are met within the receiving environment (Conditions 1.3.4 and 5.2.2).</p> <p>The assessment of cumulative effects was completed for the identified potential residual effects. Given that the residual effects identified are attributable to differences in the timing of effect, when compared to the Permitted Case, and informed by the findings of the Surface Water VC Cumulative Effects assessment, no cumulative effects are anticipated with the Project.</p> <p><b>3. Alternatives Assessment (Project Overview)</b></p>





Comment ID	Comment Source	Public Comment	NRCML Response
		<p>aquatic habitat. Cumulative effects also must describe the mitigation measures that are technically and economically feasible to eliminate or reduce adverse cumulative effects and a mechanism to disseminate follow-up results among interested parties.</p> <p>As stated elsewhere, it is reasonably foreseeable that mining will continue past this permit under a new one. This possibility needs to be included in an environmental effects analysis for all VC's. Given that the dam structure maintenance and active water treatment will have to be conducted forever (goes to duration), the analysis of cumulative effects is incomplete.</p> <p>The AIR for this Application at 1.7 states that the Application must identify and consider technically and economically feasible alternative means to carrying out the Project that were considered in developing the Project, including the use of Best Available Technologies (BAT), and the potential effects, risk and uncertainties of those alternatives. The Amendment Application must: identify the preferred alternative and discuss how best available technologies have been considered in identifying the preferred alternative.</p> <p>Mitigation alternatives such as dry stack tailings storage was dismissed without adequate analysis or transparency to the public. The reason given to dismiss dry tailings storage was stated at the April 2, 2025, Virtual Information Session was that dry tailings storage was not feasible due to the heavy precipitation in the area. However, as pointed out at the virtual information session, the Greeks Creek Mine in Alaska has employed dry stack technology for over 35 years in an area that receives as much as 760cm of rain annually, greater than what occurs at the site of the Red Chris. No technical or economic data on dry stack is presented in the Application. These requirements under the AIR have not been met.</p> <p>Dewatered tailings should be aggressively pursued at this project. This approach must be prioritized despite any additional costs. This recommendation aligns with those made by the Mount Polley Independent Expert Engineering Investigation and Review Panel and the Global Industry Standard on Tailings Management (Global Tailings Review 2020) to minimize the volume of water stored in tailings facilities.</p> <p>The Application should include monitoring of fish egg to fry ratios, population and diversity studies, size tracking and levels of parasites that all indicate stress to the fishery due to the mine's activities.</p> <p>Significant gaps exist in data transparency, understanding of mine site conditions, environmental monitoring, and mitigation thresholds for preventing negative aquatic impacts. This entire section is incomplete.</p>	<p>NRCML acknowledges that even without the proposed change in mining method, addressing ongoing operational concerns as they relate to water management and mitigations at Red Chris remain a priority. NRCML is continuing to address the existing water management concerns within the appropriate operational forums, which are outside of the Amendment Application process.</p> <p>With regards to the Alternatives Assessment completed in Section 1.7 of the Project Overview, it is important to recognize that the Amendment Application is for a change in mining method and not a mine expansion. As described in Section 1.5.6.4 Tailings Impoundment Area, the change in mining method and the process plant modifications associated with Project development will not result in any fundamental changes to tailings and water management at Red Chris. Given that the final configuration of the TIA will remain unchanged from what has already been permitted, evaluation of alternatives to this component of Red Chris and alternative means of tailing storage were excluded from the assessment.</p>
EAC - 1852	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated effects to Fisheries and Aquatic Resources.</p> <p>Comment: This project has and will continue to negatively impact sacred fish habitat. The proponent's suggestion that it will not is inaccurate. The application lacked detail regarding assessments for heavy metals within fish from waterbodies with documented water quality contamination.</p>	<p>The Amendment Application seeks to authorize a change in mining method from open pit to block cave mining. The existing and approved water management and mitigation strategies for Red Chris are considered to be operational concerns and are outside of the scope of this assessment.</p> <p>NRCML has provided an assessment which aligns with the requirements described in the Amendment Application Information Requirements (AAIR). The AAIR for this application was informed by engagement and represents a comprehensive and rigorous framework reflecting both regulatory and local community priorities. It is important to note that the purpose of the environmental assessment in the Amendment Application was not to assess the effects of the existing conditions, but rather to compare and assess the effects of the Project Case vs Existing Conditions. What this means is that the environmental effects of the existing mine (Existing Conditions) were not the focus of the assessment, but rather the assessment focused on the incremental change between the existing conditions and the proposed amendment (Project Case).</p>



Comment ID	Comment Source	Public Comment	NRCML Response
			NRCML is continuing to implement the relevant monitoring programs to comment, specifically, the Trigger Action Response Plan, the Seepage Effects Monitoring Program, and the Aquatics Effects Monitoring Program. As described in Sections 11.5.14.3 Adaptive Management, NRCML has identified existing mitigations (new mitigations for the project) that have not yet been implemented for hydrology, groundwater, and surface water. Fisheries and aquatics resources are monitored under the existing Aquatic Effects Management Program which includes fish tissue analysis. The Trigger Action Response Plan was updated in December 2024 and will continue to be updated based on results from the ongoing monitoring programs, as per the existing permit requirements in BC <i>Environmental Management Act</i> Effluent Permit 105017 (PE-105017; Condition 5.2). It should be noted that the existing Site Performance Objectives (SPO) are approved under PE-105017 and that the SPO for selenium in Trail Creek (TRL-0.8 and TRL-0.1) is equivalent to the BC Water Quality Guideline for the Protection of Aquatic Life (BC FWAL). Additionally, PE-105017 requires that BC FWAL guidelines are met within the receiving environment (Conditions 1.3.4 and 5.2.2).
EAC - 1853	Public Comments - EPIC.engage (website)	<p>EAO Question: What impacts to Community well-being as a result of changes proposed in the Amendment Application have not been reflected, are inaccurate or incomplete? Please be as specific as possible.</p> <p>Comment: The communities of Wrangell and Petersburg, which lie near the terminus of the Stikine, would be heavily impacted economically by negative impacts to chinook, sockeye, and coho salmon. Between the two towns, there are around 130 permit holders who rely on healthy salmon returns to feed their families. The reduction of salmon due to habitat degradation would mean smaller catches, and less time and area than we would have with healthy returns. Both towns receive revenue sharing raw fish tax from the state for fish processed in their communities, and there is a heavy reliance on those funds to provide infrastructure and depreciation costs.</p>	<p>NRCML has provided an assessment which aligns with the requirements described in the Amendment Application Information Requirements (AAIR). The AAIR for this application was informed by engagement and represents a comprehensive and rigorous framework reflecting both regulatory and local community priorities. NRCML has engaged, and will continue to engage, on the findings of this assessment in terms of its predicted effects and the effective implementation of mitigation measures.</p> <p>Potential residual effects on fisheries and aquatic resources (Table 11.7-27) were determined to stay within the local drainage basin and not extend to adjacent drainage basins (i.e. the Klappan River Catchment downstream of its confluence with the Stikine River, and the Iskut River catchment upstream of the outlet of Kinaskan Lake).</p> <p>As stated in Section 11.7 Fisheries and Aquatic Resources, the existing mitigation measures established for the Fisheries and Aquatics VC will mitigate additional residual effects from the Project. As a result, no new or unproven mitigation measures have been proposed for the Fisheries and Aquatic Resources VC. The operating mine has an existing Aquatics Effects Monitoring Program which is administered under the EMA permit and with existing technical oversight committees. The program is designed by qualified professionals and implemented on a day-to-day basis by the NRCML operations team. The effectiveness of the program is reviewed annually through the Annual Aquatic Effects Monitoring Report and the Red Chris Monitoring Committee that facilitates adaptive management. This approach to adaptive management is detailed in Section 11.13.2.14 Follow-up Strategy.</p>
EAC - 1854	Public Comments - EPIC.engage (website)	<p>EAO Question: What impacts to Community well-being as a result of changes proposed in the Amendment Application have not been reflected, are inaccurate or incomplete? Please be as specific as possible.</p> <p>Comment: Same as expressed in the Human Health section.</p>	<p>NRCML has provided an assessment which aligns with the requirements described in the Amendment Application Information Requirements (AAIR), including for the VCs identified (fish, wildlife, human health). The AAIR for this application was informed by engagement and represents a comprehensive and rigorous framework reflecting both regulatory and local community priorities. NRCML has engaged, and will continue to engage, on the findings of this assessment in terms of its predicted effects and the effective implementation of mitigation measures. This approach to adaptive management is detailed in Section 11.13.2.14 Follow-up Strategy.</p> <p>It is noted that the impacts described by the commenter are related to existing operational concerns. NRCML has committed to completing a Site-Wide Human Health Risk Assessment (HHRA) for the existing Red Chris operations. The data included within the Amendment Application as relevant to human health modeling will be included to evaluate potential human health effects pathways, including those relevant to the Project.</p> <p>Section 11.13.1.8.2.5 Country Foods (Wildlife, Fish, Vegetation) provides an updated discussion on country foods since the 2004 Original Application, including discussions on wildlife, fish, and vegetation, related to the Tahltan. The Site-Wide HHRA uses traditional foods consumption rates from FNFNES (Chan et al., 2021) based on information obtained from both the local communities. To facilitate further discussion, the parallel SW HHRA and Detailed HIA process has been initiated and will continue, and issues will be tracked in a parallel process tracking tool. Therefore, this comment in the current forum is considered closed.</p> <p>Reference: Chan L, Batal M, Sadik T, Tikhonov C, Schwartz H, Fediuk K. 2021. FNFNES Final Report for Eight Assembly of First Nations Regions: Comprehensive Technical Report – Supplemental Data. Assembly of First Nations, University of Ottawa, Université de Montréal.</p>
EAC - 1855	Public Comments - EPIC.engage (website)	<p>EAO Question: What impacts to Community well-being as a result of changes proposed in the Amendment Application have not been reflected, are inaccurate or incomplete? Please be as specific as possible.</p>	<p>NRCML, and the Tahltan Central Government, Iskut First Nation, and Tahltan Band have solidified commitments to local employment in the Impact Benefit and Co-Management Agreement (IBCA) with the Tahltan Nation. The IBCA is in effect for the life of mine at Red Chris, which includes the Block Cave Project. The specific provisions included in the IBCA are confidential and will not be publicly shared.</p>



Comment ID	Comment Source	Public Comment	NRCML Response
		Comment: Newmount says that the jobs are going to need to be more advanced skill - is there still a commitment to local and regional employment retention?	Furthermore, an important mitigation measure identified in the EAC Amendment Application is a Workforce Transition Plan that will have an objective to support a transition for current employees in roles impacted by a shift to block cave mining to the extent possible.
EAC - 1856	Public Comments - EPIC.engage (website)	<p>EAO Question: What impacts to Community well-being as a result of changes proposed in the Amendment Application have not been reflected, are inaccurate or incomplete? Please be as specific as possible.</p> <p>Comment: The 70,000 people who live downstream of the Red Chris mine were not taken into consideration. Water quality degradation, whether real or feared, does not result in well-being.</p>	<p>Under British Columbia's <i>Environmental Assessment Act</i> the environmental assessment process is administered within the jurisdictional boundaries of the Province of British Columbia.</p> <p>The assessment boundaries for all VCs, and specifically Community Well-Being, were developed to support and included in the Application Information Requirements (AAIR). The AAIR was subject to regulatory review and issued for the Project in November 2024. The Regional Assessment Areas (RAAs) for surface water, groundwater and fisheries and aquatic resources encompasses the maximum geographical extent in which potential effects on water quality and quantity are anticipated. The RAA for the Community Well-Being subcomponent of Human Health includes the Local Assessment Area (LAA) and specific communities beyond the LAA that may experience Project-related effects associated with the workforce and transportation aligning with assessment on Employment &amp; Economy and Infrastructure and Services. The downstream effects of the Project on Community Well-Being were assessed at a regional scale appropriate for the Project.</p> <p>It is noted that the Fisheries and Aquatic Resources Valued Component (VC) is linked to the Human Health Community Well-Being Subcomponent assessment, which did not identify residual effects to community well-being. Further, the potential residual effects on fisheries and aquatic resources (Table 11.7-27) were determined to stay within the local drainage basin and not extend to adjacent drainage basins (i.e. the Klappan River Catchment downstream of its confluence with the Stikine River, and the Iskut River catchment upstream of the outlet of Kinaskan Lake).</p>
EAC - 1857	Public Comments - EPIC.engage (website)	<p>EAO Question: You've indicated that you have some information to demonstrate that mitigation measures as proposed will not work as intended, create unintended consequences, or otherwise have negative effects. Please tell us more about your concerns, and please be as specific as possible.</p> <p>Comment: We see no mitigation measures that would address the economic loss our fishery will likely suffer, should there be a catastrophic event that results in loss of habitat critical to healthy salmon stocks.</p>	<p>Following the EAO Effects Assessment Policy, catastrophic events are not evaluated within a Valued Component effects assessment, but rather, are considered within the assessment contained within the Accidents and Malfunctions Chapter (Chapter 13.0).</p> <p>Project related failure mode for accidents and malfunctions excluded TIA embankment failure given that the final configuration of the TIA will remain unchanged from what has already been permitted. NRMCL has reviewed the Project influences on the TIA operation (increased tailings deposition rate) and has found that these changes do not generate any increased risk to TIA embankments (Section 13.4.2 Tailings Impoundment Area Emergency Preparedness and Response). Further, NRCML manages TIA operations using best industry practices to monitor and assess the integrity of dam structures to prevent and mitigate potential failure events, which are detailed in Section 13.4.2 Tailings Impoundment Area Emergency Preparedness and Response. NRMCL has met the AAIR requirements by providing relevant information regarding a catastrophic dam failure as previously presented publicly and with the Tahltan. As documented with the AAIR, reassessment of this information was outside the scope of this amendment.</p>
EAC - 1858	Public Comments - EPIC.engage (website)	<p>EAO Question: You've indicated that you have some information to demonstrate that mitigation measures as proposed will not work as intended, create unintended consequences, or otherwise have negative effects. Please tell us more about your concerns, and please be as specific as possible.</p> <p>Comment: Overall, the Application lacks adequate description of mitigation measures. As described in Section 11.5 Surface Water VC, mitigations which have not yet been implemented or constructed, but are part of the future Mine configuration for both the Project and the Permitted Case are considered the be "existing" mitigations as they are not unique to the Project. While there are several important mitigations that are relevant to the Surface Water VC, these mitigations are inherent components of the Mine design in both the Permitted Case and the Project Case. These mitigations include the use of management plans, monitoring programs, and adaptive management (e.g., Trigger Action Response Plan) as described for existing conditions for surface water (Section 11.5 Surface Water VC). These statements conveniently ignore that these existing mitigations measures have failed to avoid or minimize the spread of toxins through the ground and surface waters.</p> <p>Many of the mitigation measures are reactive rather than preventative and only triggered after a problem is identified through monitoring. Trigger levels are set above</p>	<p>NRCML has provided an assessment which aligns with the requirements described in the Amendment Application Information Requirements (AAIR). The AAIR for this application was informed by engagement and represents a comprehensive and rigorous framework reflecting both regulatory and local community priorities. NRCML has engaged, and will continue to engage, on the findings of this assessment in terms of its predicted effects and the effective implementation of mitigation measures.</p> <p>Existing operational concerns are managed under the existing mechanisms described and are outside the scope of this assessment. However, as you note, Red Chris is an operating mine that has an adaptive management strategy with various existing mitigation and management plans in place, which are administered under the <i>Mines Act</i> and EMA permits and with existing technical oversight committees. The plans are designed by qualified professionals and implemented on a day-to-day basis by the NRCML operations team. The plans have a process of annual review through the Annual Reclamation Report and the Red Chris Monitoring Committee that facilitates adaptive management. As described in Section 11.5.14.3 Adaptive Management, ongoing enhancement of the TARP (NRCML 2024), which will occur with or without the Project, will consider additional triggers for protection of surface water quantity as part of adaptive management measures for the Mine.</p> <p>The adaptive management strategy and existing regulatory mechanisms as outlines above, will continue to be employed for the Project.</p>



Comment ID	Comment Source	Public Comment	NRCML Response
		<p>the effects range for aquatic species; therefore, damage will be done prior to the beginning of any mitigation efforts. The mitigation measures lack any consideration of multigenerational effects due to sub-lethal or sub-chronic levels of contamination.</p> <p>Mitigations must be designed before environmental effects thresholds are exceeded. These plans must be reviewed and updated annually as monitoring collects new data and monitoring is expanded to track the underground seepage plumes. Guidelines described in the permit must become legally enforceable. Trigger levels in surface waters should be assigned below provincial guideline for the protection of aquatic life to allow sufficient buffer in case mitigations fail to work as planned. The Precautionary Principle must be evoked at every step.</p> <p>Mitigative actions must be enacted immediately in response to increasing selenium in rainbow trout tissue in Kluea and Ealue Lakes. Actions must be taken immediately to mitigate seepage out of the TIA and enforceable legal limits placed on concentration levels, duration and flow.</p> <p>Now is also a critical time to address outstanding problems at Red Chris' existing operations prior to any amended application.</p>	
EAC - 1859	Public Comments - EPIC.engage (website)	<p>EAO Question: You've indicated that you have some information to demonstrate that mitigation measures as proposed will not work as intended, create unintended consequences, or otherwise have negative effects. Please tell us more about your concerns, and please be as specific as possible.</p> <p>Comment: Proposed mitigation measures are not preventative or proactive. Mitigation measures must be taken immediately to address ongoing contamination.</p>	<p>NRCML acknowledges the commentor's concerns regarding mitigation efficacy, without knowing which specific mitigations the concerns are linked to limits the ability to provide specific information in response to these concerns. As described throughout the Valued Component Effects Assessment (11.X.14.1 Adaptive Management), NRCML employs an adaptive management approach to manage potential residual effects at Red Chris.</p> <p>Existing and proposed new mitigations will be subject to ongoing monitoring. Monitoring activities support ongoing evaluation of the adequacy and effectiveness over time of the mitigations and inform potential enhancements, expansions, and optimization opportunities. Environmental management and monitoring plans have a process of annual review through the Annual Reclamation Report and the Red Chris Monitoring Committee (RCMC) that facilitates adaptive management. The RCMC was formed in 2012 as a requirement of the Red Chris <i>Mines Act</i> permit to provide a regular forum for interaction and advice among the TCG, NRCML, and provincial regulatory agencies on matters about the environmental management of Red Chris and its alignment with Tahltan sustainability requirements. Collectively, these processes are currently and will continue to be used to evaluate and respond to changing environmental conditions at Red Chris.</p>
EAC - 1860	Public Comments - EPIC.engage (website)	<p>EAO Question: Thank you very much for providing your feedback. Your responses to these specific questions will help the EAO conduct a more thorough amendment assessment. Is there anything else you would like to share with the EAO?</p> <p>Comment: Or organization understands the economic benefits associated with resource extraction. We are generally supportive of such endeavors but watch carefully that it doesn't interfere with ours. If there was a mitigation plan to provide economic relief through enhancement and restoration, we would be less concerned. Unfortunately, BC has shown either an inability or are apathetic when it comes to mine reclamation, as shown by their action so far with the Chief Tulsequah mine on the Taku River.</p>	<p>The assessment of the Employment and Economy valued component evaluated economic benefits and potential adverse effects within British Columbia (BC), in alignment with BC's jurisdictional boundaries and the requirements of the Amendment Application Information Requirements. The Project is not anticipated to result in transboundary economic effects.</p> <p>NRCML is committed to meeting applicable reclamation and closure requirements under BC's regulatory framework and will continue to adhere to the relevant permitting requirements. The current site-wide reclamation and closure plan that has been approved by MCM and forms the basis of the closure discussion in the Amendment Application. The Project does not significantly change that Plan. An update to the 5 Year Mine Plan and Reclamation and Closure Plan will be completed by December 2026 as per condition E.14 of <i>Mines Act</i> permit M-240.</p>
EAC - 1861	Public Comments - EPIC.engage (website)	<p>EAO Question: Thank you very much for providing your feedback. Your responses to these specific questions will help the EAO conduct a more thorough amendment assessment. Is there anything else you would like to share with the EAO?</p> <p>Comment: This was submitted on behalf of the Southeast Alaska Indigenous Transboundary Commission, a consortium of 14 sovereign Tribal governments located in southeast Alaska. As our traditional territory extends across the colonial border and</p>	<p>Under British Columbia's <i>Environmental Assessment Act</i> the environmental assessment process is administered within the jurisdictional boundaries of the Province of British Columbia. Public and/or Indigenous comments from any interested party, including those outside British Columbia, are accepted and considered as part of the public record. The SEITC is therefore welcome to review and comment on the application materials and supporting documentation submitted during the public comment period.</p>





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		we are downstream of the project, we request the right to review and comment on the Draft Application Decision as well.	<p>It is noted that potential residual effects on fisheries and aquatic resources (Table 11.7-27) were determined to stay within the local drainage basin and not extend to adjacent drainage basins (i.e the Klappan River Catchment downstream of its confluence with the Stikine River, and the Iskut River catchment upstream of the outlet of Kinaskan Lake).</p> <p>Regarding the Draft Assessment Report and Recommendations, the regulatory process does not provide for a formal public or external Indigenous review of these documents. However, comments submitted during the Application Review stage, such as SEITC's, can help inform the content of the assessment report and the decision.</p>
EAC - 1862	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated effects to Surface Water.</p> <p>Comment: The effects of implementing this application on each Valued Component (VC) is supposed to measure the magnitude, extent, duration, reversibility, frequency, affected population, risk and level of uncertainty of the effects of the project on the various VC's. The analysis of surface water effects is incomplete and fails to address every measurement listed.</p> <p>The Application fails to address the on-going and increasing seepage rates from the both the Rock Storage Area (RSA) and the Tailings Impoundment Area (TIA).</p> <p>Seepage from the RSA appears to be affecting nearby surface water systems in Red Rock Canyon Creek and White Rock Canyon Creek. Surface water concentrations are increasing in nitrate, copper and selenium. Copper and selenium in these creeks frequently exceed BC Water Quality Guidelines for the protection of aquatic life. Mine reporting also notes that seepage from the RSA is a potential source of some of the observed increasing levels of copper in Lost Creek sediments and benthic invertebrate tissue and is contributing to elevated selenium levels in Lost Creek's periphyton and benthic invertebrate tissue.</p> <p>As with seepage from the TIA, waste rock seepage is expected to worsen in quality and increase in volume as the mine progresses and generates further waste. The RSA is expected to be a long-term source of acid rock drainage that will significantly impair site water quality. Leachable selenium in waste rock may also increase as ore extraction progresses to deeper deposits. To make matter worse, surface water monitoring in receiving areas near the RSA is insufficient. The site lacks adequate background (1995-2004) data, is not sampled frequently enough and monitoring is not extensive enough (lacks enough monitoring locations) to detect effects or project future adverse surface water quality effects. Surrogate waterbodies not influenced by mine activities should be incorporated where baseline data is lacking.</p> <p>The Application Information Requirements (AIR) at 11.5.3 require a description of existing and background conditions for surface water quality and quantity. The Application's description of current and background conditions fails to adequately address the magnitude, extent, duration, reversibility, frequency, affected population, risk and level of uncertainty associated with the RSA given that the effects will be in perpetuity.</p> <p>Seepage from the TIA has resulted in increased levels of numerous contaminants, such as selenium, copper, nitrate, and sulphate in surrounding creeks and lakes and are often high enough to negatively affect aquatic life. Selenium concentrations in local fish tissues are increasing in two lakes affected by the mine, and this may negatively affect both the fish and the humans consuming them. Based on the screening of surface water results against BC Water Quality Guidance, exceedances were identified for the</p>	<p>As described in Table 11.5-52: Summary of Potential Residual Effects on Surface Water Quantity, and Table 11.5-53 Summary of Potential Residual Effects on Surface Water Quality, the potential residual effects of the Project have been characterized according to each of the categorization criteria required by the AIR, namely magnitude, geographic extent, duration, reversibility, frequency, affected population, risk and uncertainty. It is not a requirement of the AIR to use the characterization criteria to describe existing or current conditions.</p> <p>The Amendment Application seeks to authorize a change in mining method from open pit to block cave mining. The need for changes to the existing and approved water management and mitigation strategies to facilitate the transition have not been identified in the assessment. The Amendment Application included Surface Water effects assessment based on modelled predictions for water quality and quantity in the approved open pit mine plan, which is well characterized through the mine's existing surface and groundwater monitoring and metal leaching and acid rock drainage programs, and the predictions for the proposed transition to the block cave mining method. The effects assessment determined that predicted water quality and quantity effects associated with the block cave mining method are similar to those of the approved open pit operation, and do not result in changes to existing water management strategy throughout the operations and closure/post-closure period. Additionally, transitioning from open pit mining to block caving will result in less waste rock being stored in the RSA when compared to the approved open pit operation.</p> <p>NRCML is continuing to implement the relevant monitoring programs, specifically, the Trigger Action Response Plan, the Seepage Effects Monitoring Program, and the Aquatics Effects Monitoring Program. As described in Sections 11.5.14.3 Adaptive Management, NRCML has identified existing mitigations (new mitigations for the project) that have not yet been implemented for hydrology, groundwater, and surface water. The Trigger Action Response Plan was updated in December 2024 and will continue to be updated based on results from the ongoing monitoring programs, as per the existing permit requirements in BC <i>Environmental Management Act</i> Effluent Permit 105017 (PE-105017; Condition 5.2). Additionally, PE-105017 requires that BC FWAL guidelines are met within the receiving environment (Conditions 1.3.4 and 5.2.2). The environmental assessment is one step in permitting the change in mining method at Red Chris. Following the completion of the Environmental Assessment process, the Red Chris Five-Year Mine Plan and Reclamation and Closure Plan will be updated during the permitting stage as per the <i>Mines Act</i> Permit M-240.</p> <p>NRCML acknowledges that even without the proposed block cave, addressing ongoing issues regarding water management and mitigations at Red Chris remains a priority. NRCML is continuing to advance addressing the existing water management concerns within the appropriate operational forums, which include input from Tahltan, outside of the Amendment Application process.</p>



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		<p>Quarry Creek, Trail Creek (Kluea Watershed), Kluea Lake, Ealue Lake Watershed, and the Klappan River.</p> <p>It is well documented that the mine will generate widespread acid rock drainage from the RSA, open pit and more than likely the exposed tailings above the water cover due to the identified issues maintain the water balance within the TIA. Effective water treatment plans to protect the downstream environment have not been developed. The assessed treatment technology only focuses on removing sulphate and metals and is not suitable as a treatment for selenium. The proposed water treatment plan for Red Chris will rely on dilution of mine effluent in a fish-bearing creek at levels which could be acutely lethal and will not address selenium contamination of the mine's receiving environments.</p> <p>De-watering the open pit and eventual underground workings and having the water report to the TIA intercepts large quantities of water, significantly reducing flows to what remains of Trail Creek south of the facility. Areas of upper Trail Creek (i.e., closer to the tailings facility) are now completely dry, and, in some years, lower Trail Creek (i.e., closer to Kluea Lake) experiences water flow only during peak freshet and heavy autumn rains. Importantly, wetland areas associated with lower Trail Creek, which likely provides nursery, foraging, and spawning habitat for fish, has also dried up, prompting the government to highlight mine-reduced flows to Trail Creek as an issue of immediate concern. For example, one consequence of the mine's unexpected water deficit is that Red Chris has consumed more clean water than predicted to support its milling operations and maintain its tailings pond; thus, less clean water has been diverted downstream to Trail Creek.</p> <p>Failure to account for the performance of past predictions permeates the entire Application. The failure to address the causes of underpredicting seepage and overall project water balance leaves these issues unresolved only to carry over and adding uncertainty to the predictions given in this Application. The mine is releasing significantly more contaminated seepage from its tailing's facility and waste rock pile to the environment than was predicted. A key problem arising from this data gap has been an underprediction of the mine site's water balance, which has resulted in an unexpected water deficit. Many aspects of the mine's water management and interactions with the environment have not functioned as planned.</p> <p>Yet predictions in the current Application continue to underplay the possibility of adverse effects. "All negative effects to Surface Water quality are noted to reflect temporary differences relative to the Permitted Case in that the predicted conditions occur in both the Project and Permitted Case but occur in different years due to differences in model-assumed timing of events" (at 11.13-134). No precautionary principle, no adjustments based on the abject failure of previous positions. The statement quoted above also lacks any uncertainty analysis.</p> <p>The statement "the Surface Water Quality VC determined that no anticipated potential negative effects to surface water quality from the Project are associated with model prediction nodes within Red Rock Canyon, White Rock Canyon, Lost Creek, Ealue Lake, and Coyote Creek" is inaccurate as shown above and lack context without any calculation of uncertainty. Furthermore, the idea of reversibility based on the observation that "all negative effects to Surface Water quality are noted to reflect temporary differences relative to the Permitted Case in that the predicted conditions</p>	



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		<p>occur in both the Project and Permitted Case but occur in different years due to differences in model-assumed timing of events” is also inaccurate. The long-term trend is increasing concentrations of pollutants in the surface waters. Effects must be measured against Baseline data not the conditions under the current permit. The information and conclusions in this section are inaccurate and incomplete.</p> <p>Extrapolating the weak predictability of the model into the future finds that concentrations greater than WQGs for persistent organic pollutants will increase in the long-term overall, but at some locations may decline during or near the end of the closure/post-closure stage (an infinite amount of time) does not support the conclusion that the effects can be partially reversible within the level of uncertainty of this prediction. See 11.13-134. As indicated in the Application, post closure plans are still incomplete, there is too much variability between surface waters to allow for a global comparison, and post-closure active water treatment will have to last forever. No predictions can be made about effects over an infinite amount of time.</p>	
EAC - 1863	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated effects to Surface Water.</p> <p>Comment: The project site is already failing to manage water uses and contain seepage from its tailings, resulting in increased contaminant concentrations in the surrounding environment, including surface waters. The proposed amendment will increase the amount of waste which will ultimately result in increased water use and seepage from both the RSA and TIA, with increased acid mine drainage predicted at the RSA. Not only does the site lack adequate historical baseline data, plans to mitigate downstream impacts have not been completed for this proposed project.</p>	<p>NRCML is proposing a change in mining method that results in a reduction to the total quantity of waste rock being deposited to the RSA, with no change in total tailings deposition to the TIA when compared to the approved open pit. The conclusions of the effects assessment as they relate to groundwater seepage from the TIA indicate that changes to groundwater quantity and quality are due to the accelerated rate of tailings deposition (as noted in the reviewer comment) when compared to the open pit operation. NRCML acknowledges the concerns related to ongoing seepage management for the currently approved operation; however, the issues identified in the comment are present with or without the proposed change in mining method.</p> <p>Existing Condition data, including the site context as presented in the 2004 Original EAC Application, and current conditions data (2016-2023) presents an adequate understanding of current conditions at Red Chris, and presents a longer time horizon for the purposes of an environmental effects assessment than many new/proposed greenfield projects. The Effects Assessment met the AAIR Requirements in that the potential Project effects have been identified, mitigations have been described/applied (Effects Management) and potential residual effects for the Project have been characterized and carried through a cumulative effects assessment, as required.</p> <p>NRCML acknowledges that even without the proposed change in mining method, addressing ongoing operational concerns as they relate to water management and mitigations at Red Chris remain a priority. NRCML is continuing to address the existing water management concerns within the appropriate operational forums, which are outside of the Amendment Application process.</p>
EAC - 1864	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated effects to Groundwater.</p> <p>Comment: The mine is releasing significantly more contaminated seepage from its tailing’s facility and waste rock pile to the environment than was predicted. Plumes of tailings seepage containing highly elevated and increasing concentrations of sulphate and chloride have been identified in all groundwater aquifers north and south of the tailing’s facility and an additional cadmium seepage plume identified in the South Valley shallow aquifer. Mapping as of late 2022 indicates tailings seepage has extended far beyond the mine site and is increasing with sulphate plumes in aquifers within the Quarry Creek drainage extending up to 1,000 m beyond the North Reclaim Dam, and increasing trends and/or elevations of sulphate, cadmium, selenium, and nitrate in aquifers south of the tailings facility that extend beyond the South Reclaim Dam into the area of upper Trail Creek. In some instances, the plumes have passed the monitoring wells, so the true extent is unknown.</p> <p>At least some portions of the plumes are interpreted to be migrating at a rate of ~350–450 m/year, suggesting its maximum extent of ground water contamination may markedly expand in coming years.</p>	<p>To clarify, the Amendment Application is for a change in mining method and not a mine expansion. NRCML is proposing a change in mining method that results in a reduction to the total quantity of waste rock being deposited to the RSA, with no change in total tailings deposition to the TIA when compared to the approved open pit. As described in Section 1.5.6.2 Rock Storage Area, the area used will be reduced as low-grade material stored in the RSA is depleted. As described in Section 1.5.6.4 Tailings Impoundment Area, the change in mining method and the process plant modifications associated with Project development will not result in any fundamental changes to tailings and water management at Red Chris. The TIA final permitted configuration does not change.</p> <p>The conclusions of the effects assessment as they relate to groundwater seepage from the TIA indicate that changes to groundwater quantity and quality are due to the accelerated rate of tailings deposition (as noted in the reviewer comment) when compared to the open pit operation. NRCML acknowledges the concerns related to ongoing seepage management for the currently approved operation; however, the issues identified in the comment are present with or without the proposed change in mining method and are considered an operational issue. NRCML remains committed to addressing these challenges, as required under the current <i>Mines Act</i> and Environmental Management permits, regardless of the proposed transition to the block cave mining method.</p>



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		<p>There are also early indications that the sulphate plume in the South Valley has spread to the area of lower Trail Creek. Sulphate from the TIA in groundwater is positively correlated with heavy metals such as cadmium and copper, meaning these contaminants are likely to increase in groundwater surrounding the tailings facility as tailings seepage plumes progress.</p> <p>Recent studies estimate that approximately 23% of the total water is lost from the facility each year due to seepage into the ground water. Because groundwater aquifers ultimately discharge to downstream surface water systems, these groundwater quality trends will impact surface water and aquatic life in connected surface waters.</p> <p>“Evidence of potential effects from RSA seepage and/or influence of mining activities were observed based on elevated concentrations (relative to background) of sulphate, nitrate, calcium, sodium, selenium, and/or strontium in the areas northwest, west, southwest, southeast, and east of the RSA footprint, and in Thurston’s Trickle Valley in 2023.” See: Red Chris Block Cave Project - Production Phase Application for an Amendment to Environmental Assessment Certificate #M05-02 at 11.13-28. In addition, trends of increasing sulphate concentrations were observed in 2023 at monitoring wells in the shallow aquifer, and along the center of the valley in the deep aquifer within the TIA itself. Groundwater quality monitoring results suggest continued migration of TIA seepage in the shallow and deep aquifers in 2023.</p> <p>Groundwater quality results in the South Valley for 2023 continued to indicate the migration of TIA seepage in the shallow aquifer, with TIA seepage also indicated in the deep aquifer. In addition to seepage from tailings, contaminated seepage has also occurred from the RSA since at least 2017 and is spreading into surrounding groundwater to the southwest, west, and potentially to the north of the facility. None of the seepage from the RSA was expected or planned for, and it was initially characterized as an unauthorized discharge and an issue of immediate concern by the BC government.</p> <p>The TIA has lost containment of its hazardous material. It is not functioning as intended. The spatial extent of all tailing’s seepage plumes must be fully delineated, and all mine loading sources to waterways downstream of the tailing’s facility must be identified and groundwater monitoring must be expanded to track the progress of the plumes as a condition of this authorization.</p> <p>The proponent claims that the negative effects to surface water flow were identified in the TIA during operations, but that the current Project described in the Application will not cause an increase in overall seepage, merely a shift in timing. The Proponent claims that the potential negative effects to fish health and/or fish productivity related to water quality are defined as decreases in water quality for the Project Case relative to the Permitted Case. The decrease in water quality for dissolved copper and total selenium (according to the proponent) are due to the accelerated rate of tailings deposition and consequent earlier termination of the operations stage under this Amended Application. The differences for sulphate are due to the earlier completion of pit flooding and consequent discharge of treated pit water to the TIA.</p> <p>This conclusion suffers from the same lack of predictability accuracy as the predictions given in the original permit and design and is unsupported by current observations. The rate and timing of seepage from the TIA was vastly underestimated originally regardless of the timing of the physical works of the mine plan. The proponent offers no evidence</p>	





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		<p>that things will be different or that any lessons were learned from the previous failures in design and planning.</p> <p>The Application make the connection between ground water and surface water. The potential effects assessed for Groundwater Quality included anticipated changes in groundwater quality. Changes in groundwater quality was selected as a potential effect because of the potential for groundwater to convey POPCs to environmental receptors in surface water.</p> <p>Surprisingly, as part of the Human Impact Assessment, it was determined that groundwater was an incomplete exposure pathway for human health due to the distance of the nearest community (offsite) potable wells, and the local hydrogeology of the area. Therefore, effects management associated with groundwater quality is not warranted for the protection of human health and will not be carried forward in this assessment. See Application at 11.13-129.</p> <p>This conclusion falsely limits the exposure pathway to drinking water while ignoring the consumption of fish and other aquatic, bioaccumulation in wildlife species harvested for food such as geese and exposure through contact (i.e., swimming).</p> <p>Furthermore, citing local hydrology ignores the fact that the local hydrology is not well understood. Sub-standard hydrology monitoring equipment at numerous stations has been an issue since installation, resulting in limited and often very uncertain site data. Despite early identification of data issues in 2005 during the EA permitting process, poor hydrological data quality for Red Chris has persisted throughout mine construction and operations and was identified as an issue of immediate concern by the Government in 2019.</p> <p>The conclusion that a reduction in ground water quality will have no impacts to human health is unsupported and is an example of how the Proponent continues to underestimate negative effects.</p> <p>Another problem arising from the lack of accurate hydrological data has been the underprediction of the mine site's water balance, which has resulted in an unexpected water deficit. Many aspects of the mine's water management and interactions with the environment have not functioned as planned.</p> <p>The Application Information Requirements (AIR) require the Application to address the existing conditions compared with the background conditions pre-mining as presented in the original Application (See: AIR at 11.6.3) and update the conditions. The current Application is supposed to address possible groundwater-surface water interactions, the current state and trend of groundwater quality, the cause(s) for these groundwater impacts, any mitigation activities planned or on-going and what indicators that will be used to measure these effects.</p> <p>The Application fails to adequately address the magnitude, extent, duration, reversibility, frequency and uncertainty in every aspect of these required parameters. The BC Government itself has concluded that "infiltration of mine water from the [tailings facility] to ground is occurring at a rate that is likely to increase the risk of adverse effect to surface and groundwater resources" (See ENV 2019c at pg. 2).</p> <p>The Application also fails to address the cumulative effects of the groundwater seepage. The Application only addresses the exploitation of one orebody out of many nearby accessible orebodies. At the end of this Application period around 2038, 30% of</p>	



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		<p>the proven reserves would remain untouched and this one ore body is still open in two different directions. The reasonably foreseeable conclusion is that mining will occur using the same infrastructure as described in the original and Amended Application long after the term of this permit. This further development must be accounted for in the analysis of residual effects to ground (and surface) waters now. Not to do so would be allowing the incremental destruction of the VCs through a false compartmentalization of connected activities. Either a multi-decade analysis of the effects of mining on all VC's should be done now, or the authorization of this Application must require complete closure of the Project at the end of its term as a condition of the permit.</p> <p>Potential cumulative effects from future mine expansion phases must be rigorously assessed during the review of the mine's current expansion application. All pre-existing challenges and risks associated with the existing tailings facility on ground water must be addressed and managed prior to any consideration of mine changes that could increase the facility's size or add additional tailings storage at the site.</p> <p>The entire ground water section of the Application is inaccurate and incomplete.</p>	
EAC - 1865	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated effects to Groundwater.</p> <p>Comment: This does not appear well studied or mitigated with this new method. There are already water impacts and seepage - how were existing issues addressed in proposal to expand and change mining method?</p>	<p>To clarify, the Amendment Application is for a change in mining method and not a mine expansion.</p> <p>As discussed in the Groundwater Valued Component Section 11.6 of the Amendment Application, the existing conditions were described and the potential effects of the Project on groundwater quantity and quality were assessed. Where negative residual effects were identified, they were characterized according to the criteria defined in the Amendment Application Information Requirements. It is noted that the severity of a potential residual effect is categorized as the "magnitude" which "refers to the expected scale and/or severity of the residual effect."</p> <p>As described in Table 11.6-16: Summary of Potential Residual Effects on Groundwater, the magnitude of the potential residual effects of the Project ranges from negligible to moderate, with the predicted residual effects being contained within bounds of the local assessment area. The assessment for groundwater examined compared the Project to Permitted conditions at Red Chris to discern which potential effects, and their associated categorization were attributable to the Project. Specifically, residual effects to groundwater quality are attributable to the increased rate of tailings deposition and the earlier termination of mining operations in the Project Case when compared to the Permitted Case, which results in earlier completion of pit flooding and discharge of treated pit water to the TIA. Although differences are predicted in specific years due to the sequence of Mine activities, the peak predicted concentrations above BC WQGs are the same or less than in the Permitted Case for all POPCs. These specific years correspond to a medium-term duration and the magnitude of effects to groundwater quality is anticipated to be low. Potential residual effects associated with the increased drawdown of the water table surrounding the Block Cave (when compared to the permitted open pit operation) may result in base flow reductions in surface water, however, as the block cave will be flooded at closure, the water table is predicted to rebound to the approximate pre-development levels once flooding is complete. Therefore, the changes in groundwater and surface water quantity are considered fully reversible and partially reversible, respectively.</p>
EAC - 1866	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated effects to Groundwater.</p> <p>Comment: The project site is already failing to manage water uses and contain seepage from its tailings, resulting in increased contaminant concentrations in the surrounding environment, including groundwater. The proposed amendment will increase the amount of waste which will ultimately result in increased water use and seepage from both the RSA and TIA, with increased acid mine drainage predicted at the RSA. Plans to mitigate downstream impacts have not been completed for this proposed project. Furthermore, the conclusions made by the proponent that there will be no human health impacts by way of groundwater are suggestive that the proponents do not</p>	<p>To clarify, the Amendment Application is for a change in mining method and not a mine expansion. NRCML notes that the Project will result in less waste rock being deposited at the RSA when compared to the approved open pit operation, and that the total quantity of tailings to be produced and deposited in the TIA do not change. As described in Section 1.5.6.2 Rock Storage Area, the area used will be reduced as low-grade material stored in the RSA is depleted. As described in Section 1.5.6.4 Tailings Impoundment Area, the change in mining method and the process plant modifications associated with Project development will not result in any fundamental changes to tailings and water management at Red Chris. The TIA final permitted configuration does not change.</p> <p>The Amendment Application includes assessment of the potential impacts, and cumulative effects, to groundwater, surface water, and fisheries and aquatics that may result from the proposed change in mining method. The results of the assessment indicate that there are no negative residual effects predicted for fish in the receiving environment beyond the LAA. Further, salmon have not been identified within the LAA.</p>



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		understand the connection between the harvesting of shared resources in the river, including but not limited to migratory species within the watershed (including salmon) that are of traditional and customary import to Indigenous peoples. Once again, cumulative impacts are not considered, and those of us downstream are expected to be okay with a "death by a thousand cuts."	NRCML is committed to implementing an adaptive management approach to seepage mitigation that is informed by the ongoing monitoring programs, Trigger Action Response Plan, and Seepage Effects Management Plan, to evaluate the effectiveness of the existing mitigations. This process allows facilitates continuous improvement of mitigation efforts.
EAC - 1867	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated effects to Soil, Landscape and Terrain.</p> <p>Comment: Exceedances were identified in soil and sediment for existing conditions when compared to health-based screening criteria. At this time, several soil constituents (chromium, cobalt, iron, lithium and manganese) and sediment constituents (arsenic and iron) were identified as exceedances for the Existing Conditions Case. Soil projections (offsite) were unavailable for the Project Case. Trail Creek is experiencing changes in other aquatic indicators. Sediment is increasing in copper and nickel concentrations in upper and lower Trail Creek, respectively and several parameters are also elevated in Trail Creek sediment, including mercury, selenium, manganese, zinc, and sulphate. Many of these contaminants, particularly copper and selenium, exceed BC Sediment Quality Guidelines for the protection of aquatic life.</p> <p>The Application fails to assess the magnitude, complete geographical extent, expected duration of the effects, reversibility and level of uncertainty about the Projects Existing Case Model of soil and sediment effects, let alone the implementation of this Application.</p> <p>The Application also lacks a clear plan to avoid, minimize, and restore adverse effects onsite or describe where existing plans and policies may require change, and what mitigation measures will be achievable, measurable, and verifiable in a manner that avoids ambiguity.</p> <p>This section is incomplete.</p>	<p>NRCML has provided an assessment which aligns with the requirements described in the Amendment Application Information Requirements (AAIR). It is important to note that the purpose of the environmental assessment in the Amendment Application was not to assess the effects of the existing conditions, but rather to compare and assess the effects of the Project Case vs Existing Conditions. What this means is that the environmental effects of the existing mine (Existing Conditions) were not the focus of the assessment, but rather the assessment focused on the incremental change between the existing conditions and the proposed amendment (Project Case).</p> <p>The AAIR and assessment methodology did not require characterization of existing conditions (Existing Case), but rather, the assessment was required to characterize the potential residual negative effects of the Project. Please refer to Table 11.8-12 Summary of Potential Residual Effects on Soil, Landscape and Terrain for the characterization of potential negative effects on Soil, Landscape and Terrain. It is noted that characterizations for each magnitude, complete geographical extent, expected duration of the effects, reversibility and level of uncertainty are included.</p> <p>Section 11.8.9 Effects Management presents an effects management approach that follows the Environmental Mitigation Procedures for B.C. (BC Gov. 2014). By prioritizing the avoidance of effects, minimizing unavoidable effects, restoring affected areas, and offsetting residual effects, the Project can minimize potential negative effects and enhance potential positive outcomes where possible. The Amendment Application provides commentary on mitigation of effects as they relate to the proposed activities, as well as references relevant to existing environmental management frameworks. These frameworks inform how potential adverse effects are anticipated to be addressed and include existing plans, policies, and applicable regulatory mechanisms. Further clarification of these aspects may be provided through ongoing review processes as appropriate.</p>
EAC - 1868	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated effects to Wildlife and Wildlife Habitat.</p> <p>Comment: Wildlife tissue concentrations (mammals and birds) are considered directly relevant to the consumption of wildlife as a country food. Given that wildlife tissue quality associated with human consumption was not assessed under the Wildlife VC, it is considered as part of the Follow-Up Strategy Red Chris Block Cave Project. See: Application at 11.13-43.</p> <p>Since the Red Chris Mine has been in production for 10 years, it is probably too late to identify baseline data on wildlife tissue. Given the observed increases in metal concentrations in area plants and benthic organisms, a reasonable estimate could be conducted using food web modeling and standard bioaccumulation rates for upper trophic-level organisms. Alternatively, tissue samples could be taken from areas not affected by mining activities for use in comparison with tissues collected in the local assessment area. There is no rational reason this had not been done starting in 2015 and there is no rational reason is should not be done in support of this Application.</p> <p>This section is incomplete.</p>	<p>Section 11.10 Wildlife and Wildlife Habitat was completed in accordance with the Amendment Application Information Requirements (AAIR) for the Project (November 2024). Completing an assessment of the existing Red Chris operations, as permitted, is outside the scope of this assessment. Section 11.10.2 Linkage with Other Valued Components notes the linkage between wildlife and human health.</p> <p>As part of the Follow-Up Strategy for the Human Health VC, and outside the scope of the Project's Amendment Application process, NRCML is completing a Site-Wide Human Health Risk Assessment (SW HHRA) and a Detailed Health Impact Assessment (HIA) for the Red Chris Mine. These assessments are being conducted under what is known as "the parallel process," as the commitment to carry them out, which includes the Pre-Mining, Closure, and Post-Closure phases, was made prior to the Amendment Application. As such, they have a broader scope than the Amendment Application itself.</p> <p>Although wild game data were not collected specifically for the SW HHRA, tissue samples from wild game were gathered as part of the First Nations Food, Nutrition and Environment Study (FNFNES) in the Boreal Cordillera ecozone, where members of the community participated. Therefore, where available, wild game data for British Columbia reported in the FNFNES (Chan et al. 2011; 2021) will be used to characterize existing conditions. Where such data are not available, concentrations will be estimated using food chain modeling.</p> <p>References: Chan L, Batal M, Sadik T, Tikhonov C, Schwartz H, Fediuk K, et al. 2021. FNFNES Final Report for Eight Assembly of First Nations Regions: Comprehensive Technical Report – Supplemental Data. Assembly of First Nations, University of Ottawa, Université de Montréal.</p>



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			Chan L, Receveur O, Sharp D, Schwartz H, Ing A, and Tikhonov C. 2011. First Nations Food, Nutrition and Environment Study (FNFNES): Results from British Columbia (2008/2009). Prince George: University of Northern British Columbia.
EAC - 1869	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated effects to Wildlife and Wildlife Habitat.</p> <p>Comment: Baseline data regarding impacts to wildlife or wildlife habitat was not required prior to BC permitting Red Chris mine to begin operation. Without background information, we can only assume that increased production and the scope of project site will increase negative impacts to wildlife and their corridor of the Mighty Stikine.</p>	<p>Assessing the potential effects for Red Chris, as permitted, is outside the scope of this assessment. The Original 2004 Environmental Assessment did include background data relevant to Wildlife and Wildlife Habitat. This Amendment Application considered both current conditions and background conditions, as presented in the 2004 EA, as Existing Conditions. Refer to Section 11.10.6.1 for Background Conditions which presents a summary of the existing conditions information provided in the Original Application (AMEC 2004), as well as updated reports presenting information representative of the pre-Red Chris development. The summary focuses on the information that is most relevant to the assessment in this Amendment Application.</p> <p>The effects assessment for wildlife has considered the potential effects of the Project on the VC and associated subcomponents. As outlined in Section 11.10.7 Assessment Cases of the Amendment Application, the Existing Conditions, Early Closure, and Permitted Cases were considered in the effects assessment for the Wildlife and Wildlife Habitat VC. The two potential effects of the Project on the Wildlife and Wildlife Habitat VC, as identified in the AAIR are:</p> <ul style="list-style-type: none"><li>• Potential Effect 1: loss or alteration of wildlife habitat; and</li><li>• Potential Effect 2: mortality risk.</li></ul> <p>The effects assessment for Wildlife and Wildlife Habitat has met the requirements of the Application Information Requirements. As outlined in Section 11.10.8.1 Project Interactions, no interactions for the Wildlife and Wildlife Habitat VC were carried forward for further analysis or characterization of negative residual effects. Given this Amendment Application is associated with an active, operating mine, it is recognized that all interactions identified either currently occur, or would occur under permitted activities, and that the objective of the Amendment Application is to evaluate any new interactions. The Mine also has mitigations and monitoring measures in place that address the potential interactions. While an incremental increase in the loss or alteration of wildlife habitat, and mortality risk, may occur from the Project, no additional mitigation measures are proposed to manage the potential effects. Since there are no new interactions identified, and the interactions that will occur can be managed to acceptable levels through known management practices, per the methods defined for this Environmental Assessment, no further assessment is warranted for the two potential effects.</p>
EAC - 1870	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated effects to Archaeological and Heritage Resources.</p> <p>Comment: The AIR (at 11.14.3) states that the Amendment Application must: Describe available Indigenous or local knowledge related to archaeological and heritage resources and that the Application must include an assessment of cumulative effects on archaeological and heritage resources and identify additional mitigation measures where relevant.</p> <p>The Stikine Tlingit that have shared this watershed since time immemorial have not been consulted. None of their knowledge of heritage resources is included in the application. Recognized Stikine territory extends to the confluence of the Stikine and Iskut Rivers well into BC territory. Therefore, the southeast Alaska Tribes, as modern-day successors to the clans that occupied and used these lands, have rights that must be recognized and protected. This section is incomplete and inaccurate.</p>	<p>The assessment of Archaeological and Heritage Resources is in section 11.14 in the Amendment Application and meets the requirements of the Application Assessment Information Requirements (AAIR), approved by the EAO. The Archaeological and Heritage Resources section assesses that the Project is located hundreds of kilometres upstream from Alaska, and that a mechanism by which the proposed amendment could generate effects on heritage resources outside the regional assessment area. The regional assessment area was in the AAIR, which was issued by the EAO. The assessment area is defined as the maximum area within which potential direct and indirect effects on heritage resources are reasonably expected to occur in relation to the Project.</p>
EAC - 1871	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated effects to Culture.</p> <p>Comment: The AIR for the Application at 17.0 states that the Amendment Application must describe how input from engagement related to effects on current and future generations was incorporated and how the Project has changed as a result, provide mitigation measures proposed to distribute positive and negative effects more equitably over time (e.g., across generations), and discuss the potential outcome that residual effects to VCs and Indigenous interests will have on both current and future</p>	<p>The assessment of effects presented in the Culture Valued Component (VC) has been confirmed by the BC EAO that it aligns with the approved Application Assessment Information Requirements (AAIR). The AAIR requires the assessment of potential effects on the cultural practices and interests of Participating Indigenous Nations, as identified through the regulatory process, and within specified, relevant geographic extents (including Regional Assessment Areas). The Amendment Application describes the ancient and historic conditions, and the potential for impacts to cultural practices within the specified geographic extents.</p>





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		<p>generations. "The section of the Amendment Application under Ancient and Historic Context must provide the context for the ancient and historic conditions. The context of this section will remain at a regional scale to provide general site context. See, AIR at 1.3.1.</p> <p>The Application omits any reference or consultation with the Tlingit. It is well documented that the Tahltan and Tlingit peoples had a complex relationship that involved trade networks, intermarriage, and some overlapping territories. See: The Museum of History and Industry archives available at <a href="https://mohai.org/">https://mohai.org/</a>.</p> <p>The Stikine and Iskut watershed creates one of the only natural passages through the Coast Mountains, and for thousands of years it has been used as a trade route by Indigenous peoples. Tahltan and Tlingit lands met around the confluence of the Stikine and Iskut rivers. See map below. The navigable section of Stikine between the Grand Canyon and the Iskut River was shared by the Tlingit and Tahltan on a seasonal basis. See: Boardman, Mary (2012-10-16). "Stikine – The Great River". Watershed Sentinel. Retrieved 2022-06-11. Tlingit and Tahltan are linked throughout history. The Nanyiee (Wolf) clan, also represented by the brown bear, killer whale and the shark, originated near the headwaters of Taku River and migrated towards the ocean and settling among the Stikine Tlingit. Later they ascended the Stikine River and became a family of the Tahltan.</p> <p>In protohistoric times Tahltan shared the lower Stikine River below Telegraph Creek with Tlingit who ascended in summer to dry salmon and berries in the drier interior climate. "Close trading relations were maintained with several Tlingit clans who ascended the Stikine from the coast in large canoes to trading camps located between Telegraph Creek and Tahltan River." See The Tahltan People SFU Archaeology Press. Available at: <a href="https://archpress.lib.sfu.ca/index.php/archpress/catalog/download/61/31/1272?inline=1">https://archpress.lib.sfu.ca/index.php/archpress/catalog/download/61/31/1272?inline=1</a></p> <p>It is not surprising then that the Tahltan language has been noticeably affected by Tlingit. Much of the Tahltan language is rooted in Tlingit including many semantic and morphological properties of Tlingit-derived vocabulary. Historical sources indicate that the principal forces driving transfer of vocabulary from Tlingit to Tahltan are trade-and culture-related contact, migrations, remigrations, and intermarriage. See, Language Contact in the Northernmost Regions of the Pacific Northwest. Hank Nater Anthropological Linguistics. Vol. 60, No. 1 (Spring 2018), pp. 44-59.</p> <p>Considering the Tahltan as separate from the Stikine Tlingit for the purposes of this Application is another false compartmentalization that has no basis in fact. It is a residual effect of the colonial suppression of indigenous peoples through divide and conquer.</p> <p>Even considering the Tahltan and Tlingit separately, it is apparent that Stikine Tlingit territory extends to the confluence of the Iskut with the Stikine River several miles on the BC side of the border. Therefore, the Stikine Tlingit have rights that must be respected including the right to free, prior and informed consent on a Project such as this that has the potential for adverse impacts to their rights.</p> <p>The United Nations (UN) and the Committee on Economic, Social and Cultural Rights (CESCR) articulated in General Comment No. 21 a comprehensive interpretation of prior and informed consent. Concerning cultural rights, the Committee stresses that indigenous peoples have the right to partake in cultural life, including the right to the</p>	



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		<p>return or restitution of lands, territories and resources traditionally used by them. The Committee also urges States Parties to “respect the principle of free, prior and informed consent of indigenous peoples in all matters concerning their special rights,” seeking their consent when safeguarding cultural resources tied to their way of life and cultural expression that are at risk.</p> <p>The Amended Application is incomplete until this consultation with the Stikine Tlingit occurs.</p>	
EAC - 1872	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated effects to Culture.</p> <p>Comment: Whether as a result from cumulative impacts or catastrophic failure, this project and others in our shared rivers present risks to our way of life - to Tlingit culture.</p>	<p>NRMCL has met the AAIR Requirements. As described in Table 9-1 Valued Components Based on Proposed Project Changes, Tahltan Culture was the only subcomponent of the Culture VC that required an effects assessment. The Cumulative Effects Assessment was thus focused on Tahltan Culture for the Culture VC, as presented in Section 11.15.13 Cumulative Effects Assessment. As described in Section 11.15.2, Linkages with Other Valued Components, the assessment of effects on Tahltan Culture is informed by the predicted residual effects from other VCs, including Wildlife and Wildlife Habitat as well as Fish and Aquatic Resources. Neither of these linked VCs predict residual effects to the Stikine River.</p> <p>Project related failure mode for accidents and malfunctions excluded TIA embankment failure given that the final configuration of the TIA will remain unchanged from what has already been permitted. NRMCL has reviewed the Project influences on the TIA operation (increased tailings deposition rate) and has found that these changes do not generate any increased risk to TIA embankments (Section 13.4.2 Tailings Impoundment Area Emergency Preparedness and Response). Further, NRCML manages TIA operations using best industry practices to monitor and assess the integrity of dam structures to prevent and mitigate potential failure events, which are detailed in Section 13.4.2 Tailings Impoundment Area Emergency Preparedness and Response. NRMCL has met the AAIR requirements by providing relevant information regarding a catastrophic dam failure as previously presented publicly and with the Tahltan. As documented with the AAIR, reassessment of this information was outside the scope of this amendment.</p>
EAC - 1873	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated effects to Accidents and Malfunctions.</p> <p>Comment: Under the currently permitted mine plan, the prevention of Acid Rock Drainage (ARD) and metal mobilization from the tailings will be attempted through the use of a permanent water cover over the acid-generating tailings. This strategy is complicated over the long term at Red Chris by an increase in evaporation and periods of drought with the advance of climate change, and the high rate of losses through seepage which pose challenges to maintaining sufficient water cover.</p> <p>Additionally, the unanticipated ARD generated from mine’s Waste Rock Storage Area (RSA) and Open Pit must continue to be captured and diverted to the TIA. This flow is expected to become increasingly acidic within currently permitted mine operations (existing conditions). Acid rock drainage will be long-lasting once it occurs and is expected to heighten metal concentrations in mine-affected water by several orders of magnitude.</p> <p>Since the rate of seepage was underestimated and the ARD from the RSA was not expected in the previous permit, these occurrences must be considered malfunctions. The AIR on accidents and malfunctions specify that the Application provide a risk-based approach for the assessment of impacts to the VCs and Indigenous interests identified for the Project. This has not occurred.</p> <p>The Amendment Application must provide referenced information regarding a catastrophic dam failure (see: 13.0). The Application does not do this but considers any reassessment as outside the scope of this amendment. Dam failure would presumably be an accident, so the requirements in the AIR apply.</p>	<p>The Amendment Application seeks to authorize a change in mining method from open pit to block cave mining. The existing and approved water management and mitigation strategies for Red Chris are considered to be operational concerns and are outside of the scope of this assessment.</p> <p>To clarify, the effects assessment determined that predicted water quality and quantity effects associated with the block cave mining method are similar to those of the approved open pit operation, and do not result in changes to existing water management strategy throughout the operations and closure/post-closure period. Additionally, transitioning from open pit mining to block caving will result in less waste rock being stored in the RSA when compared to the approved open pit operation. The results of the assessment preclude these from being considered a malfunction within in the Red Chris Amendment Application Information Requirements, which was accepted by EAO and the Tahltan in November 2024.</p> <p>NRCML acknowledges that even without the proposed block cave, addressing ongoing operational concerns regarding water management and mitigations at Red Chris remains a priority. NRCML is continuing to advance addressing the existing water management concerns within the appropriate operational forums, which include input from Tahltan, outside of the Amendment Application process.</p>



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		<p>Th Application also must provide an overview of failure modes, and response plans, associated with existing activities attributed to the Mine over all existing failures modes and associated response plans including the likelihood, frequency, consequence and extent of each incident identified. This must also include detailed information on proposed mitigation measures to reduce the likelihood and consequence to VCs and Indigenous interests for incidents carried forward.</p> <p>Ground water seepage limiting the feasibility of maintaining a water cover over potentially acid-generating tailings post closure must be added as a malfunction to the assessed.</p> <p>Construction and operation of the TIA has repeatedly failed to meet construction targets and severally underestimated the loss of water due to seepage, which may increase the likelihood of a dam failure or ARD tailings exposed air increasing acid generation. A major tailings dam failure at Red Chris would significantly destroy or harm critical fish or wildlife habitat and could result in the loss of human life. Multiple shortcomings in dam failure modelling and emergency planning at Red Chris increase risks to downstream human populations and the environment.</p> <p>These issues must be addresses in the Application and until they are, this section is inaccurate and incomplete.</p>	
EAC - 1874	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated effects to Accidents and Malfunctions.</p> <p>Comment: The tailings storage is already failing and it was not addressed in the application. This must be fixed before this application is considered. Landslides are happening at a greater rate of frequency in this region and block cave mining creates more instability. Tailings dams are failing at a greater rate of frequency. BC should require project proponents to fully insure tailings dams in transboundary rivers, or ultimately, BC taxpayers will remain on the hook for catastrophic and / or cumulative failures.</p>	<p>Following the EAO Effects Assessment Policy, catastrophic events are not evaluated within a Valued Component effects assessment, but rather, are considered within the assessment contained within the Accidents and Malfunctions Chapter (Chapter 13.0).</p> <p>Project related failure mode for accidents and malfunctions excluded TIA embankment failure given that the final configuration of the TIA will remain unchanged from what has already been permitted. NRCML has reviewed the Project influences on the TIA operation (increased tailings deposition rate) and has found that these changes do not generate any increased risk to TIA embankments (Section 13.4.2 Tailings Impoundment Area Emergency Preparedness and Response). Further, NRCML manages TIA operations using best industry practices to monitor and assess the integrity of dam structures to prevent and mitigate potential failure events, which are detailed in Section 13.4.2 Tailings Impoundment Area Emergency Preparedness and Response. NRCML has met the AAIR requirements by providing relevant information regarding a catastrophic dam failure as previously presented publicly and with the Tahltan. As documented with the AAIR, reassessment of this information was outside the scope of this amendment.</p> <p>Relevant known landslide complexes, such as the Kluea Lake Landslide Complex (KLLC), predates any mining activity and is a result of natural processes. The Amendment Application acknowledges that it is unknown if Project-induced seismicity may reach or have an effect on the stability of the KLLC but also indicates that the latest modelling suggests that the KLLC is outside of the cave influence zone. With this in mind, NRCML has committed to the implementation of a regular monitoring program for the KLLC as a mitigative measure for potential hazards during block cave mining operations.</p>
EAC - 1875	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated Effects of the Environment on the Project.</p> <p>Comment: The AIR (at 14.0) states the Application must address the effects of the Project on the physical environment including potential changes such as wildfire, drought, seismic events, flooding, and landslides. This analysis must be done through the lens how climate change might increase the likelihood and severity of the above-mentioned environmental factors and increase the uncertainty in any projection of effects. The Application must provide practical mitigation measures, including design strategies, environmental contingency plans, and climate risk plans to avoid or minimize the likelihood and consequence of the negative effects of the environment on the Project.</p>	<p>In Chapter 14.0 Effects of the Environment on the Project, the magnitude, extent, duration, reversibility, frequency of potential effects are included in the consequence rating and description levels. The assessment specifically considered the effects of climate change on the hazards identified in the question. Where possible, the likelihood ratings provide descriptions around the certainty of occurrence for these events.</p> <p>With regard to the concerns on human health, Section 11.13.1 Human Health presents information from an assessment approach required by the AAIR. Where uncertainties and limitations were found, NRCML has identified the separate site-wide HHRA process as an appropriate means to address those. As stated in Section 16.2 Mitigation and Residual Effects, NRCML is addressing those uncertainties and limitations related to the proposed Project within the Site Wide HHRA and Detailed HIA in parallel with the review of the Amendment Application. Please refer to Section 11.13.1.16.1.1 Additional Details on the Site-Wide HHRA and Detailed HIA.</p> <p>NRCML acknowledges the reviewer's perspective on residual effects of the Project.</p> <p>Should additional mining be contemplated in the future, beyond the Project as currently proposed, it would require a separate complex amendment to the Environmental Assessment Certificate M05-02 and corresponding assessments. Mining of the additional resources</p>



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		<p>The Application does not give adequate information as to the magnitude, extent, duration, reversibility, frequency and uncertainty levels associated with these changes to the environment of any of the requirements under 14.0 of the AIR.</p> <p>Shortcomings in the Application have been identified for biophysical VCs linked to the protection of human health. These shortcomings have contributed to a high degree of uncertainty in the assessment, and the several exceedances of health-based environmental criteria have been identified relevant to Existing, Permitted, and Project Cases.</p> <p>Based on the risk assessment, low-to-material-risks were identified for the Project VCs anticipated to be affected by changes in environmental and climate conditions in conjunction with Project activities, including Surface Water; Groundwater; Soil, Landscape, and Terrain; Vegetation and Terrestrial Ecosystems; Wildlife and Wildlife Habitat; and Culture. The unexpected water deficit has complicated site water management and amplified many of these impacts. This risk assessment likely underestimates the adverse environmental effects of the Project as has past assessments.</p> <p>Again, environmental concerns are underestimated and the conclusions reached through false compartmentalization of effects and false restraint of cumulative effects. “Overall, the Project is deemed resilient to the current and future effects of the environment and climate change based on the design of the Project and identified mitigation measures” at F-22. Apparently future effects do not include mining after the term of this permit in 2038. The current ore body subject to the Amended Application remains open at depth and to the east.</p> <p>The ore body identified for block cave mining extends past the volume included in this Amendment Application; an estimated 300 MT of ore reserves will remain at depth at the end of the operations stage of the Project. See, A.6.4 Future Potential Condition Context. Not only may mining continue after the term of the current permit under other authorizations, but the effects of the current permit will persist and evolve forever during which active water treatment will be required. Therefore, the statement that the Project is deemed resilient is not factual.</p> <p>This section is inaccurate and incomplete.</p>	<p>are outside of the scope of the Project and are not considered a reasonably foreseeable project at this time, and consequently not included in the cumulative effects assessment.</p>
EAC - 1876	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated Effects of the Environment on the Project.</p> <p>Comment: I don't think the project adequately assesses climate change impacts on the project. This region is experiencing warming faster and more extreme. We've already seen wildfires, droughts, and many landslides in the region. How is the project going to adapt to these within the expected life of the project, how will risks be mitigated, and how are extremes included in tailings management and water treatment needed at the site?</p>	<p>Chapter 14.0 Effects of the Environment on the Project assesses the impacts of climate change and potential effects on the Project and provides corresponding mitigation measures, including the reviewers specific interest in wildfire, drought, and landslides. Impacts on water management, including the tailings impoundment area and water treatment, are also considered in the assessment.</p>
EAC - 1877	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated Effects of the Environment on the Project.</p> <p>Comment: Impacts to the environment and human health have been underestimated and therefore, mitigation plans are incomplete.</p>	<p>Chapter 14.0 Effects of the Environment on the Project presents a risk assessment which considered the likelihood and consequences of identified natural environmental events and climate hazards on activities and components of the Project. The assessment identifies linked Valued Components that may also be affected by the changing climate. The proposed change in mining method will be supported by the existing infrastructure, upgrades to the existing infrastructure, and new infrastructure. Impacts to environment and human health have been considered and mitigations strategies identified for each of the medium to material risks identified for the project, as outlined in Section 14.6 of the Amendment Application. Practical mitigation measures have been developed for the Project</p>





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			<p>through the Mine design and operational controls. Mitigation measures that were developed as part of the Original Application for Red Chris in most instances remain valid and limit effects to the Project and VCs identified as part of the Amendment Application (AMEC 2004d). The scope of the assessment within this Chapter is not intended to identify and assess potential effects on human health and has been completed to meet the requirements of the Amendment Application Information Requirements (AAIR).</p> <p>The effects assessment for the Human Health Valued Component is presented in Section 11.13 Human Health. Potential Project effects have been identified based on interactions between the potential effect and the Project activities and components. Where potential effects warranted further consideration, they were carried through the effects assessment, described, mitigations considered, and where appropriate potential residual effects have been characterized in accordance with the AAIR.</p>
EAC - 1878	Public Comments - EPIC.engage (website)	<p>EAO Question: You've indicated that you have some information to demonstrate that not all potential effects from the changes to the project are listed in the Amendment Application. Please tell us more about your concerns, and please be as specific as possible.</p> <p>Comment: Mitigation measures</p> <p>Overall, the Application lacks adequate description of mitigation measures. As described in Section 11.5 Surface Water VC, mitigations which have not yet been implemented or constructed, but are part of the future Mine configuration for both the Project and the Permitted Case are considered the be "existing" mitigations as they are not unique to the Project. While there are several important mitigations that are relevant to the Surface Water VC, these mitigations are inherent components of the Mine design in both the Permitted Case and the Project Case. These mitigations include the use of management plans, monitoring programs, and adaptive management (e.g., Trigger Action Response Plan) as described for existing conditions for surface water (Section 11.5 Surface Water VC).</p> <p>These statements conveniently ignore that these existing mitigations measures have failed to avoid or minimize the spread of toxins through the ground and surface waters.</p> <p>Many of the mitigation measures are reactive rather than preventative and only triggered after a problem is identified through monitoring. Trigger levels are set above the effects range for aquatic species; therefore, damage will be done prior to the beginning of any mitigation efforts. The mitigation measures lack any consideration of multigenerational effects due to sub-lethal or sub-chronic levels of contamination.</p> <p>Mitigations must be designed before environmental effects thresholds are exceeded. These plans must be reviewed and updated annually as monitoring collects new data and monitoring is expanded to track the underground seepage plumes. Guidelines described in the permit must become legally enforceable. Trigger levels in surface waters should be assigned below provincial guideline for the protection of aquatic life to allow sufficient buffer in case mitigations fail to work as planned. The Precautionary Principle must be evoked at every step.</p> <p>Mitigative actions must be enacted immediately in response to increasing selenium in rainbow trout tissue in Kluea and Ealue Lakes. Actions must be taken immediately to mitigate seepage out of the TIA and enforceable legal limits placed on concentration levels, duration and flow.</p> <p>Now is also a critical time to address outstanding problems at Red Chris' existing operations prior to any amended application.</p> <p>Application Accuracy</p>	<p>With regards to the commentor's note around mitigation measures: Please see response to EAC-1858.</p> <p>With regards to the commentor's note around application accuracy: Please see response to EAC-1883.</p> <p>With regards to the commentor's note on the lack of consultation with Alaska local governments: Under British Columbia's <i>Environmental Assessment Act</i> the environmental assessment process is administered within the jurisdictional boundaries of the Province of British Columbia (BC). The Amendment Application Information Requirements (AAIR) issued by the BC Environmental Assessment Office for the Project identified four Indigenous Nations in BC with whom NRCML was required to engage with: the Tahltan Nation (whose territory Red Chris is located on), the Nisga'a Nation, the Gitanyow Nation and Tsetsaut/Skii Km Lax Ha Nation. Public and/or Indigenous comments from any interested party, including those outside BC, are accepted and considered as part of the public record.</p> <p>With regards to the commentor's note on Human Health and Community Well-Being: Please see response to EAC-1880.</p>



Comment ID	Comment Source	Public Comment	NRCML Response
		<p>“Block caving is proposed as the new method because it requires very limited modifications to surface disturbance, which, in turn, is expected to lead to limited environmental effects.” This statement is inaccurate. Project plans include structures requiring maintenance and active water treatment forever. The environmental effects cannot be calculated in perpetuity.</p> <p>Understanding of the mine site is still limited by a lack of robust data regarding streamflow and groundwater/surface water interactions, leading to uncertainty in predictions of block-caving effects on both surface water quantity and quality, effects to aquatic life and human health.</p> <p>The Application contains inaccuracies throughout.</p> <p>No consultation with Alaska local governments</p> <p>The Amendment Application must document the methods used to consult the public, where the consultation was held, the views expressed, and the extent to which this information was incorporated in the design of the Amendment Application. If the information was not incorporated into the Application, a description of why must be provided.</p> <p>The Amendment Application must provide a summary of key issues related to the Project that were raised through engagement with local government and the potential environmental, economic, social, cultural, and health effects, including disproportionate effects on distinct human populations and effects to current and future generations.</p> <p>The Amendment Application must describe ways to address the issues raised, such as alternative means, specific mitigation measures or specific monitoring programs and adaptive management to deal with uncertainty.</p> <p>This has not been done for Alaskan communities and Tribal governments that share the Stikine/Iskut watershed. The Application should be halted until such time as this consultation occurs.</p> <p>Human Health and Community Well-being.</p> <p>The regional Assessment Area includes what the Tahltan describe as a ‘breadbasket’, with moose, grizzly bears, mountain goats, and other sought-after wildlife. Tahltan members continue to hunt and trap, though disruptions to wildlife and access have impacted these practices, including from the Mine.</p> <p>The AIR at 16.0 requires the Application to identify how the Project and its potential impacts interact differently with distinct human populations and identify key measures proposed to manage potential effects on human and community well-being.</p> <p>This analysis is incomplete and has been falsely constrained, the analysis of negative effects to surface water quality that affect fish health was not based on the assessment of concentrations of metals and organic pollutants in fish tissue, which is relevant to human health via the consumption of country foods or was it based on contamination in ground water.</p> <p>Fish consumption is only recommended for further consideration within the proposed Follow-Up Strategy. Again, there is no rational reason this analysis has not occurred in the 10 years of operation and offers no predictability of future conditions or effects. This analysis must be a condition of the Authorization, not a recommendation.</p> <p>Furthermore, as noted elsewhere, there were no wildlife tissue data or health-based screening criteria for wildlife (tissues and organs) therefore no risk characterization can</p>	



Comment ID	Comment Source	Public Comment	NRCML Response
		<p>be conducted for the Project let alone an avoidance or mitigation strategy created to avoid adverse effects to human health. In addition, there is no risk characterization for the Project related to ingestion of, and dermal contact with, surface water.</p> <p>The effects of seepage into the groundwater are also discounted. The Application states that it has was determined that potential changes in environmental quality associated with groundwater exposure are not expected to impact human health because this exposure pathway has been determined to be incomplete within the Local Assessment Area because there are no drinking water wells there. The pathway for potential effects to surface water quality and fish tissue accumulation from ground water impacted by seepage is ignored.</p> <p>The AIR (at 11.13.9) states that the Amendment Application must include an assessment of cumulative effects on human health following the methods outlined Section 10.10 and identify additional mitigation measures where relevant. The Application is incomplete in this regard.</p> <p>This section cites but does not comply with many aspects outlined in the Guidelines for a Just Transition Towards Environmentally Sustainable Economies and Societies for All (Guidelines).</p> <p>The Guidelines cite the need to avoid pollution and manage natural resources sustainably. Sustainable development is defined as meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. Thus, sustainability is a human health issue. Sustainable development has three dimensions – economic, social and environmental – which are interrelated, of equal importance and must be addressed together.</p> <p>The guidelines recommend that these goals be implemented by regulating and incentivizing companies to reduce, minimize, and, where possible, eliminate hazardous materials (26(i)) and take appropriate steps to mitigate adverse impacts on health and safety and, where applicable, the wider environment, throughout the life cycle of products and processes (26(j)).</p> <p>By creating the need for water treatment and dam maintenance in perpetuity and ignoring the reasonably foreseeable effects of mining past the duration of this Application, nothing about this project fits the definition of sustainable. Future generations will have to spend resources long after the benefits of the Project have vanished. All future generations may be left to wonder how safe are the foods coming out of this watershed. All future generations (at least until it happens) will wonder about the TIA not having enough water to cover the tailings to prevent acid generation or the dam catastrophically failing.</p> <p>The requirements for operating the mine must not be merely aspirational especially given the record of underestimating the seepage rates and inability to correctly manage the water balance. Unless these goals are enforceable conditions to the permit, including these Guidelines is inaccurate.</p> <p>Regulators must also ensure that addressing the mine's existing problems and rigorously assessing future risks—including trade-offs between social and environmental risks in exchange for producing non-essential commodities like gold—is prioritized over fast-tracking the mine's expansion.</p> <p>This entire section is incomplete.</p>	



Comment ID	Comment Source	Public Comment	NRCML Response
		Anything else? The mine and the government have acted on inaccurate predictions and is already not adequately addressing existing mine impacts of the mine on the environment. The proponent and decision-makers must more thoroughly evaluate the risks, uncertainties, and potentially	
EAC - 1879	Public Comments - EPIC.engage (website)	EAO Question: You've indicated that you have some information to demonstrate that not all potential effects from the changes to the project are listed in the Amendment Application. Please tell us more about your concerns, and please be as specific as possible.  Comment: Fast-tracking projects like this with new mining methods and existing issues is putting the environment and community at risk, and undermining confidence in BC as a regulator that does anything but green light every project. Nobody wins when things are fast-tracked. There is also no proof yet provided that BC's regulatory regime creates delays in projects moving forward	This comment has been provided to the EAO for a response.
EAC - 1880	Public Comments - EPIC.engage (website)	EAO Question: What impacts to human health as a result of changes proposed in the Amendment Application have not been reflected, are inaccurate or incomplete? Please be as specific as possible.  Comment: Human Health and Community Well-being.  The regional Assessment Area includes what the Tahltan describe as a 'breadbasket', with moose, grizzly bears, mountain goats, and other sought-after wildlife. Tahltan members continue to hunt and trap, though disruptions to wildlife and access have impacted these practices, including from the Mine.  The AIR at 16.0 requires the Application to identify how the Project and its potential impacts interact differently with distinct human populations and identify key measures proposed to manage potential effects on human and community well-being.  This analysis is incomplete and has been falsely constrained, the analysis of negative effects to surface water quality that affect fish health was not based on the assessment of concentrations of metals and organic pollutants in fish tissue, which is relevant to human health via the consumption of country foods or was it based on contamination in ground water.  Fish consumption is only recommended for further consideration within the proposed Follow-Up Strategy. Again, there is no rational reason this analysis has not occurred in the 10 years of operation and offers no predictability of future conditions or effects. This analysis must be a condition of the Authorization, not a recommendation.  Furthermore, as noted elsewhere, there were no wildlife tissue data or health-based screening criteria for wildlife (tissues and organs) therefore no risk characterization can be conducted for the Project let alone an avoidance or mitigation strategy created to avoid adverse effects to human health. In addition, there is no risk characterization for the Project related to ingestion of, and dermal contact with, surface water.  The effects of seepage into the groundwater are also discounted. The Application states that it has been determined that potential changes in environmental quality associated with groundwater exposure are not expected to impact human health because this exposure pathway has been determined to be incomplete within the Local Assessment Area because there are no drinking water wells there. The pathway for potential effects	As discussed in the Amendment Application, as part of a pre-existing commitment, NRCML is completing a Site-Wide Human Health Risk Assessment (SW HHRA) and a Detailed Health Impact Assessment (HIA) for Red Chris. These assessments are being conducted under what is known as "the parallel process," as the commitment to carry them out, which includes the Pre-Mining, Closure, and Post-Closure phases, was made prior to the Amendment Application. As such, they have a broader scope than the Amendment Application itself. This parallel process fulfills both the requirements of the AAIR and aligns with the Follow-Up Strategy in the Human Health VC, (Section 11.13.1.16, Follow-Up Strategy) that was recommended from the Rapid HIA (i.e., an inhalation risk assessment, multimedia exposure assessment, and risk characterization (HQ/ILCR) for the Project). The parallel process also includes a pre-existing commitment to complete a Detailed HIA, which will include consideration of both biophysical determinants of health (via the SW HHRA results) and social determinants. The Detailed HIA is still in progress and will include the results from the SW HHRA and will rely on findings from relevant sections of the Amendment Application, including Section 11.13.2, Community Well-Being, and Section 11.15, Culture, which have already been completed with specific consideration of the Project.  Although wild game data will not be collected specifically for the SW HHRA, tissue samples from wild game were gathered as part of the First Nations Food, Nutrition and Environment Study (FNFNES) in the Boreal Cordillera ecozone, where members of the community participated. Therefore, where available, wild game data for British Columbia reported in the FNFNES (Chan et al. 2011; 2021) will be used to characterize existing conditions. Where such data are not available, concentrations will be estimated using food chain modeling.  References:  Chan L, Batal M, Sadik T, Tikhonov C, Schwartz H, Fediuk K, et al. 2021. FNFNES Final Report for Eight Assembly of First Nations Regions: Comprehensive Technical Report – Supplemental Data. Assembly of First Nations, University of Ottawa, Université de Montréal.  Chan L, Receveur O, Sharp D, Schwartz H, Ing A, and Tikhonov C. 2011. First Nations Food, Nutrition and Environment Study (FNFNES): Results from British Columbia (2008/2009). Prince George: University of Northern British Columbia.



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		<p>to surface water quality and fish tissue accumulation from ground water impacted by seepage is ignored.</p> <p>The AIR (at 11.13.9) states that the Amendment Application must include an assessment of cumulative effects on human health following the methods outlined Section 10.10 and identify additional mitigation measures where relevant. The Application is incomplete in this regard.</p> <p>This section cites but does not comply with many aspects outlined in the Guidelines for a Just Transition Towards Environmentally Sustainable Economies and Societies for All (Guidelines).</p> <p>The Guidelines cite the need to avoid pollution and manage natural resources sustainably. Sustainable development is defined as meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. Thus, sustainability is a human health issue. Sustainable development has three dimensions – economic, social and environmental – which are interrelated, of equal importance and must be addressed together.</p> <p>The guidelines recommend that these goals be implemented by regulating and incentivizing companies to reduce, minimize, and, where possible, eliminate hazardous materials (26(i)) and take appropriate steps to mitigate adverse impacts on health and safety and, where applicable, the wider environment, throughout the life cycle of products and processes (26(j)).</p> <p>By creating the need for water treatment and dam maintenance in perpetuity and ignoring the reasonably foreseeable effects of mining past the duration of this Application, nothing about this project fits the definition of sustainable. Future generations will have to spend resources long after the benefits of the Project have vanished. All future generations may be left to wonder how safe are the foods coming out of this watershed. All future generations (at least until it happens) will wonder about the TIA not having enough water to cover the tailings to prevent acid generation or the dam catastrophically failing.</p> <p>The requirements for operating the mine must not be merely aspirational especially given the record of underestimating the seepage rates and inability to correctly manage the water balance. Unless these goals are enforceable conditions to the permit, including these Guidelines is inaccurate.</p> <p>Regulators must also ensure that addressing the mine’s existing problems and rigorously assessing future risks—including trade-offs between social and environmental risks in exchange for producing non-essential commodities like gold—is prioritized over fast-tracking the mine’s expansion.</p> <p>This entire section is incomplete.</p>	
EAC - 1881	Public Comments - EPIC.engage (website)	<p>EAO Question: What impacts to human health as a result of changes proposed in the Amendment Application have not been reflected, are inaccurate or incomplete? Please be as specific as possible.</p> <p>Comment: Country foods - moose populations have already declined in the area due to mining activity. The selenium levels in fish are concerning - the local population was told not to eat the fish out of Ealau lake when Red Chris got started - has this been properly monitored?</p>	<p>1. Country foods -</p> <p>Red Chris Mine has an existing Wildlife Management Plan which includes robust monitoring of wildlife since the start of mining operations. Monitoring programs include remote wildlife cameras and aerial surveys conducted to determine occurrence and relative abundance. Personnel documented 1,536 moose observations in the Project area from 2012–2023. The greatest frequency of observations occurred in May and June, then decreased steadily until December, annually. The number of moose observations increased since the program began, from 12 in 2012 (Hatler 2012) to 297 in 2017 (Hatler and Beal 2017). Observations then steadily declined to 173 in 2020 (Hatler and Beal 2020), followed by a decrease to 70 in 2023 (EDI 2024b). The overall decline in moose incidental observations seems to be consistent with the regional population trend (Klappan Population Management Unit, MacLean 2023) but</p>





Comment ID	Comment Source	Public Comment	NRCML Response
		Doesn't block cave mining require more blasting? It's unclear how this results in less noise.	<p>inconsistent with results from a broader management unit perspective (GMZ-6e) (Hatler 2022). Additional detail related to the updated conditions specific to moose is provided in Chapter 11.10 (Section 11.10.6.2.3.1) of the Amendment Application.</p> <p>2. Aquatic Effects -</p> <p>The operating mine has an existing Aquatics Effects Monitoring Program (AEMP) which is administered under <i>Environmental Management Act</i> permit (PE-105017) and with existing technical oversight committees. The program is designed by qualified professionals and implemented by the NRCML operations team. This program includes monitoring of three watersheds adjacent to Red Chris Mine including Kluea, Todagin, and Ealue lakes. The monitoring program is conducted annually to evaluate whether potential mine-related changes to the aquatic environment may be occurring, and to guide the development and implementation of effective adaptive management. The AEMP evaluates the following environmental components: surface water quality, sediment quality, stream tissue chemistry in periphyton, macrophytes, and benthic invertebrates, lake plankton community, lake tissue chemistry in zooplankton and fish, benthic invertebrate community, and lake fish health. The effectiveness of the program is reviewed annually through the Annual Aquatic Effects Monitoring Report and the Red Chris Monitoring Committee that facilitates adaptive management.</p> <p>3. Acoustics -</p> <p>As described in Chapter 1.0 (Section 1.5.3) block caving is an efficient means of extracting ore at depth. The method involves undercutting the rock mass, creating an artificial void within an undercut level. The undercutting of rock mass to generate the void is completed via drilling and blasting. The same technique is then used to break the rock, causing it to drop into and fill the undercut level. The broken rock mass is directed in a controlled manner into a series of funnel-shaped drawbells created in the rock, transferring the material from the undercut level to the extraction level. The efficiency of the method comes from the use of gravity and ground stresses rather than chemical and mechanical means to fragment the ore (e.g. perpetual blasting), and the use of gravity rather than equipment to move and collect ore.</p> <p>Furthermore, with the shift to block cave mining, open pit operations will cease, surface operations are predicted to decrease in surface-level sound and vibration during operations. The cessation of activities associated with open pit mining, such as drilling, blasting, and heavy equipment movement, is anticipated to result in a reduction of sound levels in some areas of the Mine site, and at some receptors (R2c Ealue Lake Cultural Camps (-0.2 dB) and Todagin Lake Seasonal Hunting Cabin (-1.2 dB), and a negligible increase in sound levels at other locations (highest being 1.1 dB at the Red Chris camp but offsite receptors will be less than 1 dB).</p>
EAC - 1882	Public Comments - EPIC.engage (website)	<p>EAO Question: What impacts to human health as a result of changes proposed in the Amendment Application have not been reflected, are inaccurate or incomplete? Please be as specific as possible.</p> <p>Comment: Impacts from existing groundwater contamination to fish and wildlife consumed by downstream communities was not adequately considered. Water quality degradation, whether real or feared, does not result in well-being.</p>	<p>NRCML has provided an assessment which aligns with the requirements described in the Amendment Application Information Requirements (AAIR), including for the VCs identified (fish, wildlife, human health). The AAIR for this application was informed by engagement and represents a comprehensive and rigorous framework reflecting both regulatory and local community priorities. NRCML has engaged, and will continue to engage, on the findings of this assessment in terms of its predicted effects and the effective implementation of mitigation measures. This approach to adaptive management is detailed in Section 11.13.2.14 Follow-up Strategy.</p> <p>It is noted that the impacts described by the commenter are related to existing operational concerns. NRCML has committed to completing a Site-Wide Human Health Risk Assessment (HHRA) for the existing Red Chris operations. The data included within the Amendment Application, as relevant to human health, will be included to evaluate potential human health effects pathways, including those relevant to the Project.</p> <p>Section 11.13.1.8.2.5 Country Foods (Wildlife, Fish, Vegetation) provides an updated discussion on country foods since the 2004 Original Application, including discussions on wildlife, fish, and vegetation, related to the Tahltan. The Site-Wide HHRA uses traditional foods consumption rates from FNFNES (Chan et al., 2021) based on information obtained from the Tahltan communities. To facilitate further discussion, the parallel SW HHRA and Detailed HIA process has been initiated and will continue, and issues will be tracked in a parallel process tracking tool. Therefore, this comment in the current forum is considered closed.</p> <p>Reference: Chan L, Batal M, Sadik T, Tikhonov C, Schwartz H, Fediuk K. 2021. FNFNES Final Report for Eight Assembly of First Nations Regions: Comprehensive Technical Report – Supplemental Data. Assembly of First Nations, University of Ottawa, Université de Montréal.</p>



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EAC - 1883	Public Comments - EPIC.engage (website)	<p>EAO Question: With as much detail as possible, please describe the inaccuracies in the Amendment Application.</p> <p>Comment: Application Accuracy</p> <p>“Block caving is proposed as the new method because it requires very limited modifications to surface disturbance, which, in turn, is expected to lead to limited environmental effects.” This statement is inaccurate. Project plans include structures requiring maintenance and active water treatment forever. The environmental effects cannot be calculated in perpetuity.</p> <p>Understanding of the mine site is still limited by a lack of robust data regarding streamflow and groundwater/surface water interactions, leading to uncertainty in predictions of block-caving effects on both surface water quantity and quality, effects to aquatic life and human health.</p> <p>The Application contains inaccuracies throughout.</p>	<p>In accordance with the Application Information Requirements an Alternatives Assessment was completed for the Project. Both the assessment of Alternatives to the Project and Alternative Means of Carrying Out the Project determined that in a comparative assessment, the Project had lesser potential negative environmental effects.</p> <p>The Amendment Application is for a change in mining method and not a mine expansion. As described in Section 1.5.6.2 Rock Storage Area, the area used will be reduced as low-grade material stored in the RSA is depleted. As described in Section 1.5.6.4 Tailings Impoundment Area, the change in mining method and the process plant modifications associated with Project development will not result in any fundamental changes to tailings and water management at Red Chris. The TIA final permitted configuration does not change.</p> <p>It is further acknowledged that the Mine has established comprehensive monitoring programs, supported by a robust database of surface water and groundwater quality and quantity. This monitoring is complemented by ongoing aquatic effects assessments, which reflect baseline and operational conditions, and supports ongoing water management practices throughout the life of the Project. Residual effects and corresponding follow-up strategies, and uncertainties and risks relating to the effects assessment of the Project on surface water, groundwater, and linked valued components are included in Sections 11.5 Surface Water and 11.6 Groundwater. NRCML has prepared these sections in accordance with the Amendment Application Information Requirements (Nov, 2024).</p> <p>NRCML is required to review, and potentially make revisions, to the site-wide closure plan as part of the Five-Year Mine Plan and Reclamation and Closure Plan review stipulated by the current <i>Mines Act</i> Permit conditions. The future reviews of the Red Chris Five-Year Mine Plan and Reclamation and Closure Plan will take into consideration Tahltan Sustainability requirements through the initiation of a multi-year study to assess alternative closure techniques for the Mine and identify an alternative Life of Mine plan that will reduce long-term risks and liabilities associated with closure.</p>
EAC - 1884	Public Comments - EPIC.engage (website)	<p>EAO Question: With as much detail as possible, please describe the inaccuracies in the Amendment Application.</p> <p>Comment: A lack of data and an existing failing mine were not considered when concluding that water quality degradation and impacts to fish and wildlife would not impact human health.</p>	<p>The scope of the effects assessment has been completed in accordance with the Amendment Application Information Requirements (AAIR) and presents the assessment of effects for the incremental changes to Valued Components (VCs) that may result from the Project. The Existing Conditions sections, and more specifically the Current Conditions sections presented for each of the VCs presents an overview of conditions from before Red Chris Mine was operational to 2023 and within the assessment areas as defined in the AAIR - including for Fish and Aquatic Resources, Wildlife and Wildlife Habitat and Human Health.</p> <p>There are robust water quality, aquatic effects, and wildlife monitoring plans and programs in place at the Mine that support the datasets used in the Amendment Application. As presented in the Amendment Application, Red Chris is required to complete updates to the existing site-wide groundwater and water balance/water models every three years (BC <i>Environmental Management Act</i> Effluent Permit 105017). These model updates incorporate the results of ongoing hydrometeorological, surface water, and groundwater quality/quantity monitoring (among other key updates such as approved changes to permitted mine plans) and are intended, in part, to track deviations from the predictions used to inform the approvals process. This process of continuous performance monitoring measured against previous predictions informs the potential need for additional mitigations that may not have been identified in the initial environmental assessment and permitting process. Further, the existing Red Chris permit requirements include a condition for a Trigger Action Response Plan (TARP) which describes the actions that the mine must implement in response to trigger levels (i.e., site performance objectives (SPOs) for water quality parameters) being exceeded. The TARP is supported by a series of management plans (i.e., the Water Management Plan, Seepage Effects Mitigation Program, among others) that outline the overall strategy to address surface water and groundwater quantity and quality mitigations. These regulatory mechanisms, which are already in place for the current open pit operation, are reviewed annually based on the results of the mine's monitoring programs, and serve to address the potential for unanticipated effects, should they arise. The adaptive management strategies, as described for current operations at Red Chris, will continue to be implemented for the Project, as described in Section 11.5 Surface Water.</p> <p>Further, the Rapid Health Impact Assessment (HIA) was prepared as part of the Human Health Valued Component (VC) for the Amendment Application. Outside of the Project's Amendment Application process, NRCML is completing a Site Wide Human Health Risk Assessment (SW HHRA) and a Detailed HIA for Red Chris Mine. These assessments are being completed under what is referred to as “the parallel process” as the commitment to complete these assessments that incorporate Pre-Mining, Closure and Post-Closure Mine phases was made prior to the Amendment Application and thus they incorporate a scope broader than that specific to the Project.</p>



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EAC - 1885	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated effects to Employment and Economy.</p> <p>Comment: For those of us downstream, we have nothing to gain and everything to lose - including our ways of life, and our salmon economy.</p>	<p>Section 11.11 Employment and Economy assesses the potential effects of the Project on the Western wage-based economy. The Employment and Economy VC discussed potential effects from the Project in Section 11.11.8.2, Potential Effects to Employment, and Section 11.11.8.3 Potential Effects to Economy; where the assessment found limited anticipated effects in relation to normal Project operations (e.g., approximately the same level of employment between the Project and operations).</p> <p>Traditional economy and traditional economic practices, such as fishing, were considered in the revised version of Chapter 4.0 Tahltan Risk Assessment (in final preparation) and in Section 11.15 Tahltan Culture. These sections were informed by Section 11.07 Fisheries and Aquatic Resources, which assessed the potential effects of the Project on fish health and productivity as well as fish habitat. Chapter 4.0 Tahltan Risk Assessment (in final preparation) also considers the potential impact of the Project on land and resource use for the exercise of Tahltan rights, social and cultural relationship to the land and each other, and peaceful enjoyment of the land. These sections are intended to consider the potential effects of the Project holistically.</p>
EAC - 1886	Public Comments - EPIC.engage (website)	<p>EAO Question: Please describe in detail how the proposed amendment would change the severity of anticipated effects to Infrastructure and Services.</p> <p>Comment: Data suggests that increases at these project sites increases risks to nearby communities, including increased rates of missing and murdered Indigenous peoples, increased crime, increased drug trafficking. Increased security and protective measures for the communities must be a condition prior to permit issuance to expand the scope of the project / worker site.</p>	<p>The details of the changes to the severity of anticipated effects on infrastructure and services are outlined in the Section 11.12 Infrastructure. It should be noted that the proposed changes to the sites involve one year less of production and a change in mining method. The mining is proposed to go from above ground to underground. There are minimal additional workers required. The assessment of these changes concluded that the current measures to manage and mitigate these effects were adequate and thus would continue to be required.</p>
EAC - 1887	Public Comments - CSP2 (Appendix B)	<p>General Comments.</p> <p>Taking a broad view of this project, in order to better understand both the context and potential impacts, is difficult because the application discussion and documentation assumes the reviewer has either full knowledge of the previously permitted project elements, or has access to the project documentation, including technical support reports. Neither is true for this reviewer, and I suspect that it is also the case for many other reviewers/commenters.</p> <p>I am aware that many elements of this mine have already been through the permitting process. However, perhaps by wishing to move this proposal forward by eliminating reports from previous permitting rounds, some information essential to the new proposal is being left out.</p> <p>Water quality modeling is necessary, and the predictions of this modeling for the block cave project predict that conditions will remain close to present conditions. However, the initial water quality modeling failed to predict the existing problems with selenium contamination in most of the surface waters adjacent to the mine.</p> <p>An outcome of this Amendment should be to reduce the amount of contamination reaching surface waters downgradient from the mine, but there is no discussion in the Application about reducing seepage, and/or improving the seepage collection. One has a tendency to think that if the amount of waste to be placed on the surface doubles, then the level of contaminants is likely to increase. No additional seepage collection systems or approaches are being proposed, nor any changes to the existing waste disposal approaches discussed.</p> <p>This Amendment could, and should, be used to try to fix some of the unanticipated problems that resulted from the initial mine approval.</p>	<p>To clarify, the Amendment Application is for a change in mining method and not a mine expansion. It should be noted that the proposed Project does not increase the quantity of waste to be disposed on surface. As described in the Amendment Application, transitioning from open pit operations to block cave mining methods will result in less waste rock production, and that the quantity of tailings to be deposited in the Tailings Impoundment Area (TIA) does not increase from what is currently authorized. As described in Section 1.5.6.2 Rock Storage Area, the area used will be reduced as low-grade material stored in the RSA is depleted. As described in Section 1.5.6.4 Tailings Impoundment Area, the change in mining method and the process plant modifications associated with Project development will not result in any fundamental changes to tailings and water management at Red Chris. The TIA final permitted configuration does not change.</p> <p>The scope of the effects assessment has been completed in accordance with the Amendment Application Information Requirements and presents the assessment of effects for the incremental changes to Valued Components that may result from the Project. The existing and approved water management and mitigation strategies for Red Chris are considered to be operational concerns and are outside of the scope of this assessment.</p> <p>That said, Red Chris is required to complete updates to the existing site-wide groundwater and water balance/water models every three years (BC <i>Environmental Management Act</i> Effluent Permit 105017). These model updates incorporate the results of ongoing hydrometeorological, surface water, and groundwater quality/quantity monitoring (among other key updates such as approved changes to permitted mine plans) and are intended, in part, to track deviations from the predictions used to inform the approvals process. This process of continuous performance monitoring measured against previous predictions informs the potential need for additional mitigations that may not have been identified in the initial environmental assessment and permitting process. Further, the existing Red Chris permit requirements include a condition for a Trigger Action Response Plan (TARP) which describes the actions that the mine must implement in response to trigger levels (ie, water quality guidelines) being exceeded. The TARP is supported by a series of management plans (ex, the Seepage Effects Management Program, among others) that outline the overall strategy to address surface water and groundwater quantity and quality mitigations. These regulatory mechanisms, which are already in place for the current open pit operation, are updated annually based on the results of the mine's monitoring programs, and serve to address the potential for unanticipated effects, should they arise. The adaptive management strategies, as described for current operations at Red Chris, will continue to be implemented for the Project, as described in Section 11.5 Surface Water.</p> <p>The comment notes that model predictions indicate that the proposed change in mining method results in similar predictions to those of the current, approved open pit operation. This outcome supports maintaining the existing water quantity and quality management strategies for the transition to block cave mining.</p>





Comment ID	Comment Source	Public Comment	NRCML Response
EAC - 1888	Public Comments - CSP2 (Appendix B)	<p>Subsidence Modeling</p> <p>It is noted that advanced modeling techniques were utilized in subsidence prediction models to predict the extent and magnitude of subsidence. There is no reference given to the subsidence modeling studies, and there is no subsidence modeling report provided on the BC EAO project website (<a href="https://projects.eao.gov.bc.ca/p/588510c4aaecd9001b8155e3/documents">https://projects.eao.gov.bc.ca/p/588510c4aaecd9001b8155e3/documents</a>). The subsidence modeling report(s) are obviously new information relevant to the Amendment application. They should be included in the project documents.</p>	<p>The subsidence modeling is incorporated into the Amendment Application and supporting information. This information has been provided to the EAO who will post it on EPIC.</p>
EAC - 1889	Public Comments - CSP2 (Appendix B)	<p>Financial Assurance for Post-Closure</p> <p>In Section7: Summary (Newmont 2024a), it is noted:</p> <p>“In Closure, collected seepage from the TIA is anticipated to require treatment ... The combined average daily pumping rate between 2040 and 2104 is ~13,600 m3/day. Effluent from the WTP is simulated to discharge to the TIA.” and; “Water treatment is assumed to begin at the start of Closure in July 2040.”</p> <p>Treating 13,600 m3/day (approximately 3 million gallons per day) will require a large water treatment plant. If water treatment is to be accomplished with a conventional lime treatment, the operating cost alone would be several million dollars per year. (There is no discussion of water treatment, other than it will take place, so it is not clear what water treatment technology(s) will be employed.)</p> <p>The financial assurance for post-closure water treatment is typically tens to hundreds of millions of dollars. There is no certainty, or ability to predict with existing modeling, that water treatment will no longer be required if water treatment is required beyond 10-years post closure. Water quality prediction models, like weather forecasting models, are not reliable for long periods of time. As a result, if post closure water treatment is predicted, then it must generally be presumed that the period for treatment is perpetuity, in order to protect the financial and environmental liability of the public.</p> <p>The financial assurance for the block cave project is not discussed in the application documents, but the financial assurance is definitely different than for the Permitted Project, so the change in amount is relevant to the Amendment.</p> <p>With tens of millions of dollars in question, the public should know how the post-closure financial surety for the block cave project is being calculated.</p>	<p>The proposed Project is not a proposed expansion but a transition in mining method from open pit mining to underground. There is no expansion proposed to the currently permitted Tailings Impoundment Area or the Rock Storage Area. Updated triennial water balance and water quality modeling (Lorax 2024) conducted for the current operation (Existing Conditions Case) indicates that seepage from the Tailings Impoundment Area will require collection and treatment at closure. The Project's potential effects have been assessed as documented in the Amendment Application. NRCML maintains an existing closure bond with the B.C. government as financial assurance. The value of this bond will be reviewed as part of the required <i>Mines Act</i> Amendment.</p> <p>Reference:</p> <p>Lorax Environmental. 2024. Red Chris Mine Block Cave Project Site-wide Water Balance and Water Quality Model Development Report. Prepared for: Newmont Red Chris Mine. Prepared by: Lorax Environmental Services.</p>
EAC - 1890	Public Comments - CSP2 (Appendix B)	<p>Waste Rock (1 of 3).</p> <p>It was noted in the Surface Water section (Newmont 2024a) that:</p> <p>“As of November 2024, laboratory analysis of samples collected for geochemical analysis from the proposed block cave mining zone is in progress and associated results will be incorporated into the upcoming Joint Mines Act and Environmental Management Act permit amendment application.”</p> <p>This suggests geochemistry analysis of the rock from the block caving zone might not yet be completed. This could be problematic, because the project could be permitted before all of the information relevant to potential impacts to water are available.</p> <p>I was not able to locate the amount of waste rock to be produced from block cave mining, and the chemical composition of this material (by volume).</p>	<p>As noted in Section 11.5.6.2.5.5 Block Cave Mine Lithologies, the geochemical characteristics of materials associated with the proposed block cave at the Mine are expected to be generally consistent with those of materials extracted from existing open pit mining zones and underground declines with respect to each lithology as the lithologies are vertically continuous. Geochemical and Metal Leaching / Acid Rock Drainage (ML/ARD) characterization of block cave materials is ongoing, and the Amendment Application was completed and assessed assuming that block cave material will be similar to that of the open pit which has been characterized extensively through the mine's ongoing ML/ARD Prediction and Prevention Plan. This assumption is supported by an analysis of geochemical characteristics presented in Appendix 11.5-B using the geochemical database for the existing Mine, and the exploration database for the underground mining zone to identify differences in lithologies, mineralogy, and alteration zones which are likely to control geochemical behaviour of materials extracted from the underground mine.</p> <p>The open pit is situated above the proposed block cave and includes the same lithologies present in the block cave, as they form part of the same ore body. The pyrite content of the host lithologies and alteration types is linked to the parameters identified in the comment, as both copper and selenium are understood to be associated with sulphur minerals (chalcopyrite for copper, and pyrite for selenium). Therefore, the sulphur content of each lithology and alteration type, and how they are managed (i.e., mobilized zone is processed in the</p>



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		As mining proceeds deeper into the ore body, the chemical composition of the ore, and the waste rock adjacent to the ore, will change. It has been noted that the amount of pyrite decreases as the ore depth increases (Newcrest 2023). Copper, selenium, and nitrate are predicted to be of particular concern, but it is noted (Newmont 2024a, Appendix 11.5-A, 4.3 Base Case Results for Receiving Stream Stations) that there are also additional contaminants that could exceed BC WQS, especially in Red Rock and White Rock Canyons, which receive contaminants from waste rock seepage. The potential increase in these contaminants is a more appropriate focus than on the pyrite content, which is more than sufficient to liberate these contaminants at any of the levels noted.	mill) and how/where they are deposited/managed throughout the life of mine are key drivers for water quality predictions in the receiving environment. With respect to nitrate, nitrogen residues from blasting will typically remain on the waste rock which would be transported to the Rock Storage Area. The block cave mining method will result in a reduced need for production and development blasting (use of explosives), as the ore is gravity fed through the block cave. Open pit mining, by comparison, requires continuous blasting to develop the open pit and to mine the ore.
EAC - 1891	Public Comments - CSP2 (Appendix B)	<p>Waste Rock (2 of 3).</p> <p>In the Front Matter (Newmont 2024b), it is stated:</p> <p>“Development of the Project is anticipated to result in improvements in certain water quality parameters at certain locations relative to the Permitted Case. Due to the reduced volume of waste rock generated through development of the Project and stored in the RSA during closure and post-closure, and because RSA runoff is directed to the TIA, reduced chemical loadings in RSA runoff contribute to reduced concentrations in TIA seepage.” (emphasis added) and; “Positive effects to fish health and/or fish productivity related to water quality are attributed to the improvements in water quality in the Project Case relative to the Permitted Case. Due to the reduced volume of waste rock generated through the Project Case and stored in the RSA during closure/post closure, reduced chemical loadings in the RSA runoff contribute to reduced concentrations in TIA seepage.” (emphasis added)</p> <p>While these statements are accurate, it would be more reassuring to know that the block cave amendment would assure that water quality guidelines would not be exceeded (which in not the case presented in the water quality modelling), and that the increasing trends of selenium and other present contaminants would be reversed.</p>	It is noted that the increasing trends of selenium and other present contaminants are considered existing operational concerns and are outside the scope of this assessment. That said, re-design of the Aquatic Effects Monitoring Program is ongoing and was most recently identified in the 2023 AEMP report (see Section 5.0; WSP, April 30, 2024). Section 6.0 of the same report notes the AEMP "is meant to be dynamic in nature and follow an adaptive management strategy based on the results of ongoing monitoring." This process of review and identification of key updates is completed in consultation with provincial regulators and THREAT via the mine's Annual Red Chris Monitoring Committee (RCMC) meetings, typically held in June of each year. Prior to re-design, supplementary studies may be initiated to inform the scope of the changes to the AEMP. For example, a surface water quality review and source study for potential parameters of concern in Kluea Lake has been initiated by NRCML with completion anticipated in 2025. Outcomes from this study are planned to be presented at the 2025 RCMC where the scope of the planned re-design will be discussed with the added benefit of the 2024 AEMP results. Following this, NRCML anticipates that the study re-design will be completed in 2026 and be reviewed during the 2026 RCMC meetings.
EAC - 1892	Public Comments - CSP2 (Appendix B)	<p>Waste Rock (3 of 3).</p> <p>Finally, one statement in the Front Matter (Newmont 2024b) is a bit misleading and could warrant some revision:</p> <p>“Development of the Project is anticipated to result in improvements in certain water quality parameters at certain locations relative to the Permitted Case. The Project reduces the volume of waste rock generated and stored in the RSA, which in turn reduces chemical loadings in RSA runoff that contribute to TIA seepage.”</p> <p>Taking this statement literally one would conclude that the amount of waste rock in the RSA would actually decrease as a result of the block cave mining. This would, of course, not be possible with block caving, but to the reader unfamiliar with mining it sounds very environmentally beneficial.</p>	<p>As described in Section 1.5.6.2 Rock Storage Area, the area used will be reduced as low-grade material stored in the RSA is depleted. Transitioning from open pit mining to block cave mining methods will result in reduced waste rock production, as the block cave method does not require further development of infrastructure to access the lower depths of the deposit. This means that the footprint of the open pit does not need to be expanded to accommodate safe haul road construction to eliminate hazards associated with rockfall and haul road inclines. Block caving allows for ore production to be established by gravity feed at the extraction level, and waste rock production is limited to the establishment of underground access/conveyer declines, as well as the extraction level where ore is collected.</p> <p>It should be noted that runoff from the RSA is planned to be captured via an adaptive management approach as per the mine's Seepage Effects Mitigation Program during operations.</p>
EAC - 1893	Public Comments - Rivers without Borders (Appendix C)	We are particularly concerned that the Red Chris expansion will result in the concentrations of selenium, copper, and sulphate peaking earlier downstream in the Stikine River than is currently the case. This is particularly concerning, especially since selenium accumulation in resident fish is already documented. More detailed studies are needed to understand how accelerated contamination could increase selenium bioaccumulation in fish.	To clarify, the Amendment Application is for a change in mining method and not a mine expansion. As described in Section 1.5.6.2 Rock Storage Area, the area used will be reduced as low-grade material stored in the RSA is depleted. As described in Section 1.5.6.4 Tailings Impoundment Area, the change in mining method and the process plant modifications associated with Project development will not result in any fundamental changes to tailings and water management at Red Chris. The TIA final permitted configuration does not change.



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			Monitoring of selenium concentrations in fish tissue is completed through the Mine's Aquatic Effects Monitoring Program (AEMP). As noted in the comment, transitioning from open pit to block cave mining methods is predicted to result in peak downstream concentrations of some parameters to occur sooner when compared to the predictions for the approved open pit operations. This change in timing is attributed to the increased production rate and tailings deposition rate proposed for the Project. As the difference between current, approved operations and that of the Project is due to the timing of tailings deposition, and that the predicted trends in selenium concentrations in the downstream environment do not change between mining methods, NRCML will continue to monitor bioaccumulation of selenium and the relation to mine activities through the established monitoring programs (i.e., the AEMP). Results of the AEMP are used to continuously improve the mine's mitigation programs.
EAC - 1894	Public Comments - Rivers without Borders (Appendix C)	RWB also has concerns about already identified conditions that must be addressed before approving any mine expansions. These include but are not limited to 1) tailings and waste rock seepage, 2) physical impacts of chemical contamination on fish, fish habitat and 3) issues threatening the stability of the tailings dams and increasing the risks to people and aquatic resources in the event of a dam failure.	<p>Thank you for the comment, please find a response to each of your concerns below.</p> <p>1) To clarify, the Amendment Application is for a change in mining method and not a mine expansion. As described in Section 1.5.6.2 Rock Storage Area, the area used will be reduced as low-grade material stored in the RSA is depleted. As described in Section 1.5.6.4 Tailings Impoundment Area, the change in mining method and the process plant modifications associated with Project development will not result in any fundamental changes to tailings and water management at Red Chris. The TIA final permitted configuration does not change.</p> <p>2) The Red Chris mine is continuing to implement the relevant monitoring programs to comment, specifically, the Trigger Action Response Plan, the Seepage Effects Monitoring Program, and the Aquatics Effects Monitoring Program. As described in Sections 11.5.14.3 Adaptive Management, NRCML has identified existing mitigations (new mitigations for the project) that have not yet been implemented for hydrology, groundwater, and surface water. Fisheries and aquatics resources are monitored under the existing Aquatic Effects Management Program which includes fish tissue analysis. The Trigger Action Response Plan was updated in December 2024 and will continue to be updated based on results from the ongoing monitoring programs, as per the existing permit requirements in BC <i>Environmental Management Act</i> Effluent Permit 105017 (PE-105017; Condition 5.2). It should be noted that the existing Site Performance Objectives (SPO) are approved under PE-105017 and that the SPO for selenium in Trail Creek (TRL-0.8 and TRL-0.1) is equivalent to the BC Water Quality Guideline for the Protection of Aquatic Life (BC FWAL). Additionally, PE-105017 requires that BC FWAL guidelines are met within the receiving environment (Conditions 1.3.4 and 5.2.2).</p> <p>3) Project related failure mode for accidents and malfunctions excluded TIA embankment failure given that the final configuration of the TIA will remain unchanged from what has already been permitted. NRMCL has reviewed the Project influences on the TIA operation (increased tailings deposition rate) and has found that these changes do not generate any increased risk to TIA embankments (Section 13.4.2 Tailings Impoundment Area Emergency Preparedness and Response). Further, NRCML manages TIA operations using best industry practices to monitor and assess the integrity of dam structures to prevent and mitigate potential failure events, which are detailed in Section 13.4.2 Tailings Impoundment Area Emergency Preparedness and Response. NRMCL has met the AAIR requirements by providing relevant information regarding a catastrophic dam failure as previously presented publicly and with the Tahltan. As documented with the AAIR, reassessment of this information was outside the scope of this amendment.</p>
EAC - 1895	Public Comments - Rivers without Borders (Appendix C)	<p>RWB does recognize the possibility that the shift to underground mining at Red Chris could somewhat lessen the overall future environmental impacts compared to the current open-pit mining employed at Red Chris. However, many environmental risks and uncertainties remain, and new ones could arise that need more thorough consideration and assessment.</p> <p>The shift to underground mining will also transfer the mine's focus from copper to gold. Gold is a luxury material not a critical material needed for the transition to a low carbon future. Given the lack of public benefit from increased gold production and considering the large number of massive open-pit gold mines currently under construction or proposed, the Province's fast-tracking the Red Chris expansion seems unnecessary and highly questionable. The lack of acknowledgement of this detail in the mine project application is an omission that must receive additional consideration by EAO. The downstream residents of both British Columbia and Southeast Alaska need assurances</p>	<p>As described in Section A.4 of the Amendment Application, the rationale for the proposed transition to block cave mining includes the continued and increased production of copper and gold. Copper is classified as a critical mineral by the Federal Government of Canada based on the need to address global industrial demand needed to support the global energy transition to low-carbon societies. The proposed block cave mine at Red Chris would be the largest of its kind in Canada and is estimated to increase Canada's annual copper production by over 15% annually. Following the transition to block cave mining, copper will continue to be the primary metal targeted by the mine's production.</p> <p>While NRCML, and its parent company, are committed to sustainable operations and supplying a raw resource to enable transition to a low-carbon society, the company does not have capability to refine its product to a point where it can be used directly in industrial purposes, nor does it have the ability to dictate what industrial users acquire the refined product.</p>



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		that the risks to water, fish, and communities are not traded for short-term economic gain before the application is approved.	
EAC - 1896	Public Comments - SkeenaWild Conservation Trust (Appendix D)	<p>1. Important risks and uncertainties with the Application remain (1 of 4).</p> <p>We acknowledge that underground mining will reduce key environmental risks compared to open pit mining by reducing acid-generating waste production, thereby reducing contaminated mine seepage and acid rock drainage (ARD) potential. We understand the option for early mine closure is available; however, we also see the benefit in maximizing ore extraction from an already disturbed site. However, after reviewing the Application, we have identified several risks and uncertainties with the expansion proposal that require further assessment.</p> <p>a. Subsidence from block cave mining may induce seismic events and mobilize landslides in geohazard risk areas surrounding the mine, such as the landslide complex near Kluea Lake. The Application acknowledges multiple uncertainties related to project effects on terrain instability, including whether or not project-induced seismicity will reach the Kluea Lake landslide complex. The Application has not addressed the possibility for landslides or debris slides to affect fish habitat in the vicinity of unstable terrain areas. The EAO must require Newmont to provide additional information on the block cave expansion's potential seismic hazards and potential effects of terrain instability (i.e., landslides and debris slides) on fish and fish habitat.</p>	<p>To clarify, the Amendment Application is for a change in mining method and not a mine expansion.</p> <p>The Kluea Lake Landslide Complex (KLLC) predates any mining activity and is a result of natural processes. The Amendment Application acknowledges that it is unknown if existing Open Pit operations, or Project-induced seismicity may reach or have any effect on the stability of the KLLC, but also indicates that the latest modelling suggests that the KLLC is outside of the cave influence zone. With this in mind, NRCML has committed to the implementation of a regular monitoring program for the KLLC and mitigate potential hazards during mining operations.</p> <p>Further, Chapter 13.0 Accidents and Malfunctions identified "caving induced landslides" as a credible failure mode with potential for fish habitat loss and environmental degradation. Table 13-10 Mitigation Measures for Surface Instability identifies the mitigation measures to prevent and reduce the risk of surface instability in a credible failure mode scenario.</p>
EAC - 1897	Public Comments - SkeenaWild Conservation Trust (Appendix D)	<p>1. Important risks and uncertainties with the Application remain (2 of 4).</p> <p>b. The mine's demand for water during the expansion's operations will increase to support increased ore production rates. If the addition of the tailings thickener and other proposed water recycling techniques are insufficient, this may lead to additional freshwater extractions from groundwater or surface water. The EAO must require Newmont to provide additional information describing contingency water supply plans and the impacts to aquatic ecosystems of those plans might be.</p>	<p>Sustainable yields of the South Valley and North Valley deep aquifer have been evaluated, and the results of the water balance modelling included in the Amendment Application (Appendix 11.5-A) indicate that the Project process water requirements for the Project are met with or without the tailings thickener, for both the approved open pit operation and the proposed block cave. NRCML continues to advance water use efficiency studies and implementation, informed by ongoing water use performance monitoring.</p> <p>As stated in Section 11.7 Fisheries and Aquatic Resources, the existing mitigation measures established for the Fisheries and Aquatics VC will mitigate additional residual effects from the Project. As a result, no new or unproven mitigation measures have been proposed for the Fisheries and Aquatic Resources VC. The operating mine has an existing Aquatics Effects Monitoring Program which is administered under the EMA permit and with existing technical oversight committees. The program is designed by qualified professionals and implemented on a day-to-day basis by the NRCML operations team. The effectiveness of the program is reviewed annually through the Annual Aquatic Effects Monitoring Report and the Red Chris Monitoring Committee that facilitates adaptive management. This approach to adaptive management is detailed in Section 11.13.2.14 Follow-up Strategy.</p>
EAC - 1898	Public Comments - SkeenaWild Conservation Trust (Appendix D)	<p>1. Important risks and uncertainties with the Application remain (3 of 4).</p> <p>c. Accelerated ore production and tailings deposition under the block cave expansion will lead to sulphate, copper, and selenium levels peaking earlier in the Quarry Creek and Trail Creek watersheds, with concentrations exceeding BC Water Quality Guidelines for the protection of aquatic life (WQGs). The SkeenaWild Report and Red Chris' own Aquatic Effects Monitoring Reports finds that mine environmental monitoring data indicate selenium accumulation is already occurring in the tissues of resident fish in mine-affected lakes (WSP 2023; Berchtold &amp; Tuzlak 2025). Additionally, previous assessments have predicted impacts will occur to fish in the mine's receiving environment even before selenium water concentrations reach the WQG of 0.002 mg/L (Golder 2019). Therefore, a hastened timeline of water contamination from the block cave expansion, especially of selenium, could have negative consequences for fish health. The EAO must require Newmont to provide additional information describing potential impacts to resident fish of accelerated downstream water contamination,</p>	<p>To clarify, the Amendment Application is for a change in mining method and not a mine expansion. Additionally, NRCML has provided an assessment which aligns with the requirements described in the Amendment Application Information Requirements (AAIR). The AAIR for this application was informed by engagement and represents a comprehensive and rigorous framework reflecting both regulatory and local community priorities. NRCML has engaged, and will continue to engage, on the findings of this assessment in terms of its predicted effects and the effective implementation of mitigation measures.</p> <p>It is acknowledged that 95th percentile predictions of total selenium at TRL-0.8 are greater than the site performance objective during operations (seasonally) and closure/post-closure. Per <i>Environmental Management Act</i> Permit 105017, the site performance objective for selenium at TRL-0.8 must not be exceeded at any time; accordingly, actions will be taken as discussed below to prevent exceedance of acute guideline values and corresponding effects.</p> <p>NRCML acknowledges that even without the proposed block cave, addressing ongoing operational concerns regarding water management and mitigations at Red Chris remains a priority. NRCML is continuing to advance addressing the existing water management concerns within the appropriate operational forums, outside of the Amendment Application process. . As noted in Section 11.6.12.2 Residual Effect 2 - Interactions with Surface Water, maximum predicted seepage rates are not anticipated to substantively change due to a transition to block cave mining. Further, in Section 11.7.12.1 Residual Effects 2 - Changes to Fish Health and/or Fish Productivity, it is noted that even with the continuous seepage of contact water into the downstream receiving environment there will</p>





Comment ID	Comment Source	Public Comment	NRCML Response
		<p>specifically including an assessment of project effects on selenium bioaccumulation that takes into account the site-specific effects thresholds presented in Golder (2019).</p> <p>Berchtold AE &amp; Tuzlak D. 2025. Key Risks and Lessons at the Red Chris Mine: Charting a path forward for responsible mining development in northwest British Columbia. Report prepared for SkeenaWild Conservation Trust. Terrace, BC.</p> <p>Golder Associates Ltd. 2019. Evaluation of Selenium Risk for Trail Creek, Quarry Creek, and Kluea Lake — Red Chris Mine. Prepared for Red Chris Development Company Ltd. 31 January 2019.</p> <p>WSP Canada Inc. 2023. 2022 Aquatic Effects Monitoring Program — Newcrest Red Chris Mine. Prepared for Newcrest Red Chris Mining Ltd. 26 April 2023.</p>	<p>be negligible effects of the Project on water quality, compared with the Permitted Case, and therefore the risk of negative residual effects to surface water quality that affect Fish Health and/or Fish Productivity over time are low. Section 11.5.9.2 Proposed New Mitigation, also notes that NRCML is committed to continued monitoring and investigation to support the continual improvement in TIA seepage management, and to expansion of a seepage management system, as appropriate, based on the continued data collection in advance of block cave tailings generation.</p> <p>As noted in Section 11.5.9.1 Existing Mitigation, Seepage Interception System (SIS) performance monitoring is conducted through activities associated with the existing Site Wide Water Management Plan, TIA Seepage Management Plan, Surface and Groundwater Monitoring Plan, and Trigger Action Response Plan (TARP). The TARP facilitates the development of response triggers for specific parameters and locations within the Mine site and receiving environment. Monitoring results that are greater than trigger values may trigger action for additional investigation or mitigation and are reviewed by a Qualified Professional to determine appropriate next steps.</p> <p>These monitoring activities support ongoing evaluation of the adequacy and effectiveness over time of the SISs, and inform potential enhancements, expansions, and optimization of mitigations. The plans have a process of annual review through the Annual Reclamation Report and the Red Chris Monitoring Committee (RCMC) that facilitates adaptive management. The RCMC was formed in 2012 as a requirement of the Red Chris <i>Mines Act</i> permit to provide a regular forum for interaction and advice among the TCG, NRCML, and provincial regulatory agencies on matters pertaining to environmental management of Red Chris and its alignment with Tahltan sustainability requirements. Collectively, these processes are currently and will continue to be used to evaluate and respond to changing environmental conditions at Red Chris.</p>
EAC - 1899	Public Comments - SkeenaWild Conservation Trust (Appendix D)	<p>1. Important risks and uncertainties with the Application remain (4 of 4).</p> <p>d. Several gaps and uncertainties in the Application may result in inaccurate or underpredicted effects of a shift to block cave mining. Understanding of the mine site is still limited by a lack of robust data regarding streamflow and groundwater-surface water interactions, leading to uncertainty in predictions of block-caving effects on both surface water quantity and quality. The geochemical properties of the deeper ore in the block cave are not well understood and the Application does not account for the likelihood that the natural attenuation currently reducing nitrate and selenium concentrations in groundwater will cease at some point, particularly when acid generation commences (SRK 2021), leading to higher loads of these contaminants reaching the receiving environment. Lastly, the Application does not mention whether or how block cave mining could impact Camp Creek water quality, which the SkeenaWild Report points out is a potentially mine-influenced source of downstream water contamination to Trail Creek that has not been properly characterized. The EAO must require Newmont to provide additional information describing: i) an improved understanding of groundwater-surface water interactions, ii) a water quality effects assessment considering scenarios in which natural attenuation of nitrate and selenium is reduced or ceases to occur, and iii) assessment of project effects on surface water in Camp Creek and how these might affect Trail Creek and Kluea Lake.</p> <p>SRK Consulting Inc. 2021. Red Chris Mine 2021 site-wide water quality model. Prepared for Newcrest Red Chris Mining Ltd. September 2021.</p>	<p>The scope of the effects assessment has been completed in accordance with the Amendment Application Information Requirements and presents the assessment of effects for the incremental changes to Valued Components that may result from the Project. The existing and approved water management and mitigation strategies for Red Chris are considered to be operational concerns and are outside of the scope of this assessment.</p> <p>As noted in Section 11.5.6.2.5.5, the geochemical characteristics of materials associated with the proposed Project are expected to be generally consistent with those of materials extracted from existing open pit mining zones and underground declines with respect to each lithology as the lithologies are vertically continuous. Geochemical and Metal Leaching / Acid Rock Drainage (ML/ARD) characterization of block cave materials is ongoing, and the Amendment Application was completed and assessed assuming that block cave material will be similar to that of the open pit which has been characterized extensively through the mine's ongoing ML/ARD Prediction and Prevention Plan. This assumption is supported by an analysis of geochemical characteristics presented in Appendix 11.5-B using the geochemical database for the existing Mine, and the exploration database for the underground mining zone to identify differences in lithologies, mineralogy, and alteration zones which are likely to control geochemical behaviour of materials extracted from the underground mine.</p> <p>NRCML is continuing to advance geochemical and metal leaching / acid rock drainage (ML/ARD) characterization of block cave materials and the results of the characterization program will be used to update the source term and Site-Wide Water Balance and Water Quality (SW WB/WQ) predictions during the next Triennial model update due in 2026. Similarly, NRCML will be updating the numerical groundwater model in the next Triennial model update (also 2026) based on more recent hydrogeological and hydrological data to improve the predictive capabilities of the model pertaining to surface-groundwater interactions and streamflow. These model updates are required under the mine's existing Effluent Permit (PE-105017) administered through the BC <i>Environmental Management Act</i> and provide the opportunity to validate and review the assumptions and results of the predictions throughout the life of mine.</p> <p>NRCML notes that Camp Creek, including flow and loadings to Trail Creek, are included in the water balance and water quality modelling presented in Amendment Application (Appendix 11.5-B), and therefore, the potential effects of the block cave to Camp Creek have been assessed in the Amendment Application. Additional flow and load accretion studies in Camp Creek were completed in 2023 and 2024 and the results of these studies will also be incorporated in the next Triennial model updates.</p> <p>Additionally, the source referenced in the comment (SRK, 2021) is outdated, and superseded by the 2024 Triennial SW WB/WQ model and the Block Cave SW WB/WQ model (Appendix 11.5-B).</p>



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EAC - 1900	Public Comments - SkeenaWild Conservation Trust (Appendix D)	<p>2. Pre-existing issues relating to mine pollution and tailings risks must be addressed (1 of 5).</p> <p>Significant pre-existing issues exist at the Red Chris Mine, many of which are detailed at length the SkeenaWild Report. Broadly, these issues include: i) seepage from waste rock and tailings, ii) physical and chemical effects to fish and fish habitat, and iii) issues with tailings dam stability and preparations for a potential dam failure. The SkeenaWild Report demonstrates that Red Chris Mine has historically suffered from inaccurate predictions and has not been required by BC regulators to adequately address existing mine risks and impacts. Additionally, the Red Chris Independent Tailings Review Board stated that the pursuit of mine expansion “could be a distraction to the [tailings engineering team] and dilute the resources available to focus on the significant and high priority challenges that are currently facing the design and operation of the existing [tailings impoundment]” (Newcrest 2022, pg. 12). Such concern is also relevant for the mine’s current challenges related to waste rock seepage and downstream aquatic ecosystem impacts. This expansion proposal is a critical opportunity to change this trend and ensure that existing mine issues are addressed. Accordingly, the EAO must require Newmont to address the following issues as a condition of expansion approval:</p> <p>a. Uncertainties related to the mine’s water balance and seepage patterns, including quantifying the distance that tailings and waste rock seepage has spread into the receiving environment.</p> <p>Newcrest Red Chris Mining Ltd. 2022. Activity Report of the Red Chris TIA Independent Engineering Review Panel for 2021. 30 March 2022.</p>	<p>i) To clarify, the Amendment Application is for a change in mining method and not a mine expansion. As described in Section 1.5.6.2 Rock Storage Area, the area used will be reduced as low-grade material stored in the RSA is depleted. As described in Section 1.5.6.4 Tailings Impoundment Area, the change in mining method and the process plant modifications associated with Project development will not result in any fundamental changes to tailings and water management at Red Chris. The TIA final permitted configuration does not change.</p> <p>ii) Red Chris is continuing to implement the relevant monitoring programs to comment, specifically, the Trigger Action Response Plan, the Seepage Effects Monitoring Program, and the Aquatics Effects Monitoring Program. As described in Sections 11.5.14.3 Adaptive Management, NRCML has identified existing mitigations (new mitigations for the project) that have not yet been implemented for hydrology, groundwater, and surface water. Fisheries and aquatics resources are monitored under the existing Aquatic Effects Management Program which includes fish tissue analysis. The Trigger Action Response Plan was updated in December 2024 and will continue to be updated based on results from the ongoing monitoring programs, as per the existing permit requirements in BC <i>Environmental Management Act</i> Effluent Permit 105017 (PE-105017; Condition 5.2). It should be noted that the existing Site Performance Objectives (SPO) are approved under PE-105017 and that the SPO for selenium in Trail Creek (TRL-0.8 and TRL-0.1) is equivalent to the BC Water Quality Guideline for the Protection of Aquatic Life (BC FWAL). Additionally, PE-105017 requires that BC FWAL guidelines are met within the receiving environment (Conditions 1.3.4 and 5.2.2).</p> <p>iii) Project related failure mode for accidents and malfunctions excluded TIA embankment failure given that the final configuration of the TIA will remain unchanged from what has already been permitted. NRCML has reviewed the Project influences on the TIA operation (increased tailings deposition rate) and has found that these changes do not generate any increased risk to TIA embankments (Section 13.4.2 Tailings Impoundment Area Emergency Preparedness and Response). Further, NRCML manages TIA operations using best industry practices to monitor and assess the integrity of dam structures to prevent and mitigate potential failure events, which are detailed in Section 13.4.2 Tailings Impoundment Area Emergency Preparedness and Response. NRCML has met the AAIR requirements by providing relevant information regarding a catastrophic dam failure as previously presented publicly and with the Tahltan. As documented with the AAIR, reassessment of this information was outside the scope of this amendment.</p> <p>NRCML recognizes that the concerns about the management of the Tailing Impoundment Area (TIA) at Red Chris and impacts to the environment, in particular water quality. Over the past 18 months, NRCML has been working in close collaboration with the Tahltan Central Government Lands and Regulatory Affairs Department to co-manage the mine responsibly, including updating the TIA dam safety review, risk assessment, breach analysis, and emergency response plan, and maintaining the work of the Independent Tailings Review Board to provide expert oversight, ensure regulatory compliance, and conformance with Engineers Canada guidelines. With respect to the request to quantify the extents of seepage migration from the tailings and waste rock facilities, this work is completed annually under the mine's existing groundwater monitoring and reporting program required under the BC <i>Mines Act</i> and <i>Environmental Management Act</i> Effluent Permit (PE-105017), specifically Condition 6.4.1.e).</p>



Comment ID	Comment Source	Public Comment	NRCML Response
EAC - 1901	Public Comments - SkeenaWild Conservation Trust (Appendix D)	<p>2. Pre-existing issues relating to mine pollution and tailings risks must be addressed (2 of 5).</p> <p>Accordingly, the EAO must require Newmont to address the following issues as a condition of expansion approval:</p> <p>b. Gaps in environmental monitoring and mitigation thresholds, including the need to:</p> <p>i. increase the spatial extent and temporal replication of sampling for hydrology, groundwater, surface water, sediment, and other aquatic indicators</p> <p>ii. perform tissue chemistry analysis of fish tissue samples collected in the mine receiving area for all metals, and</p> <p>iii. reduce mitigation thresholds (i.e., Site Performance Objectives and Trigger Response Plan thresholds) to be closer to background levels and/or proven no-effect thresholds.</p>	<p>The Amendment Application seeks to authorize a change in mining method from open pit to block cave mining. The existing and approved water management and mitigation strategies for Red Chris are considered to be operational concerns and are outside of the scope of this assessment.</p> <p>NRCML acknowledges that even without the proposed block cave, addressing ongoing operational concerns regarding water management and mitigations at Red Chris remains a priority. NRCML is continuing to advance addressing the existing water management concerns within the appropriate operational forums, which include input from Tahltan, outside of the Amendment Application process.</p> <p>As described in Sections 11.5.14.3 Adaptive Management of the Amendment Application, NRCML has identified existing mitigations (new mitigations for the project) that have not yet been implemented for hydrology, groundwater, and surface water. Fisheries and aquatics resources are monitored under the existing Aquatic Effects Management Program which includes fish tissue analysis. The Trigger Action Response Plan was updated in December 2024 and will continue to be updated based on results from the ongoing monitoring programs, as per the existing permit requirements in BC <i>Environmental Management Act</i> Effluent Permit 105017 (PE-105017; Condition 5.2). It should be noted that the existing Site Performance Objectives (SPO) are approved under PE-105017 and that the SPO for selenium in Trail Creek (TRL-0.8 and TRL-0.1) is equivalent to the BC Water Quality Guideline for the Protection of Aquatic Life (BC FWAL). Additionally, PE-105017 requires that BC FWAL guidelines are met within the receiving environment (Conditions 1.3.4 and 5.2.2).</p>
EAC - 1902	Public Comments - SkeenaWild Conservation Trust (Appendix D)	<p>2. Pre-existing issues relating to mine pollution and tailings risks must be addressed (3 of 5).</p> <p>Accordingly, the EAO must require Newmont to address the following issues as a condition of expansion approval:</p> <p>c. Mine-related aquatic impacts in Trail Creek, White Rock Canyon Creek, Kluea Lake, and Ealue Lake, such as impacts to water quality, sediment quality, and invertebrate and fish tissues. This should specifically include addressing potential mine impacts to Trail Creek via Camp Creek, and selenium accumulation in rainbow trout tissue in Ealue Lake and Kluea Lake.</p>	<p>To clarify, the Amendment Application is for a change in mining method and not a mine expansion. As described in Section 1.5.6.2 Rock Storage Area, the area used will be reduced as low-grade material stored in the RSA is depleted. As described in Section 1.5.6.4 Tailings Impoundment Area, the change in mining method and the process plant modifications associated with Project development will not result in any fundamental changes to tailings and water management at Red Chris. The TIA final permitted configuration does not change.</p> <p>The scope of the effects assessment has been completed in accordance with the Amendment Application Information Requirements and presents the assessment of effects for the incremental changes to Valued Components that may result from the Project. The existing and approved water management and mitigation strategies for Red Chris are considered to be operational concerns and are outside of the scope of this assessment.</p> <p>As described in Sections 11.5.14.3 Adaptive Management of the Amendment Application, NRCML has identified existing mitigations (new mitigations for the project) that have not yet been implemented for hydrology, groundwater, and surface water. Fisheries and aquatics resources are monitored under the existing Aquatic Effects Management Program which includes fish tissue analysis. The Trigger Action Response Plan was updated in December 2024 and will continue to be updated based on results from the ongoing monitoring programs, as per the existing permit requirements in BC <i>Environmental Management Act</i> Effluent Permit 105017 (PE-105017; Condition 5.2). It should be noted that the existing Site Performance Objectives (SPO) are approved under PE-105017 and that the SPO for selenium in Trail Creek (TRL-0.8 and TRL-0.1) is equivalent to the BC Water Quality Guideline for the Protection of Aquatic Life (BC FWAL). Additionally, PE-105017 requires that BC FWAL guidelines are met within the receiving environment (Conditions 1.3.4 and 5.2.2).</p> <p>NRCML acknowledges that even without the proposed block cave, addressing ongoing operational concerns regarding water management and mitigations at Red Chris remains a priority. NRCML is continuing to advance addressing the existing water management concerns within the appropriate operational forums, which include input from Tahltan, outside of the Amendment Application process.</p>
EAC - 1903	Public Comments - SkeenaWild Conservation Trust (Appendix D)	<p>2. Pre-existing issues relating to mine pollution and tailings risks must be addressed (4 of 5).</p> <p>Accordingly, the EAO must require Newmont to address the following issues as a condition of expansion approval:</p> <p>d. Water discharge and long-term treatment plans, including identifying water treatment technologies that will be appropriate for selenium removal prior to discharge.</p>	<p>To clarify, the Amendment Application is for a change in mining method and not a mine expansion. It should be noted that the proposed Project does not increase the quantity of waste to be disposed on surface. As described in the Amendment Application, transitioning from open pit operations to block cave mining methods will result in less waste rock production, and that the quantity of tailings to be deposited in the Tailings Impoundment Area (TIA) does not increase from what is currently authorized. As described in Section 1.5.6.2 Rock Storage Area, the area used will be reduced as low-grade material stored in the RSA is depleted. As described in Section 1.5.6.4 Tailings Impoundment Area, the change in mining method and the process plant modifications associated with Project development will not result in any fundamental changes to tailings and water management at Red Chris. The TIA final permitted configuration does not change.</p>





Comment ID	Comment Source	Public Comment	NRCML Response
			<p>The scope of the effects assessment has been completed in accordance with the Amendment Application Information Requirements and presents the assessment of effects for the incremental changes to Valued Components that may result from the Project. The existing and approved water management and mitigation strategies for Red Chris are considered to be operational concerns and are outside of the scope of this assessment.</p> <p>The conceptual water treatment technology proposed to support closure and post-closure water management for the Project is described in Appendix F of Appendix 11.5-A Site-wide Water Balance and Water Quality Model Reports in the Amendment Application. This information also relates to commitments, and subsequent obligations, expected as part of the separate permitting processes.</p>
EAC - 1904	Public Comments - SkeenaWild Conservation Trust (Appendix D)	<p>2. Pre-existing issues relating to mine pollution and tailings risks must be addressed (5 of 5).</p> <p>Accordingly, the EAO must require Newmont to address the following issues as a condition of expansion approval:</p> <p>e. Issues related to tailings dam construction, failure modelling, and emergency preparations, including the need to:</p> <p>i. further assess any dam stability risks related to the presence of glaciolacustrine layers in the dam foundations,</p> <p>ii. address challenges related to obtaining sufficient construction materials to achieve target dam raises, especially considering the currently proposed increases to tailings deposition rates,</p> <p>iii. address challenges related to potential downstream water quality impacts from the use of cyclone sand to construct tailings dams, including the implementation and activation of seepage capture systems,</p> <p>iv. address dam stability risks related to greater-than-expected tailings seepage,</p> <p>v. ensure water modelling and contingency planning accounts for the high uncertainties associated with the mine’s water balance predictions,</p> <p>vi. improve dam inundation modelling to more accurately depict the potential impacts to downstream communities and populations at risk, and quantifies the extent and effects of tailings runout and chemical effects of potentially acid-generating tailings to the extent current technology allows, and</p> <p>vii. increase the level of detail in the mine’s emergency response plans related to a tailings dam failure, including discussing and preparing these plans with downstream communities, mine workers, first responders, and relevant government agencies.</p>	<p>The Project will not impact the configuration of the Tailings Impoundment Area (TIA) or its component dams. As such, previous work to describe the risk of a potential tailings dam and subsequent response has not been reassessed. Please see Section 13.4.2 Tailings Impoundment Area Emergency Preparedness and Response (pages 13-14 to 13-15) for a summary of relevant information and previous assessments.</p> <p>Additionally, Chapter 13.0 Accidents and Malfunctions, assesses the potential accidents and malfunctions of the Project and provides risk ratings, mitigations, and monitoring measures. This includes, to a certain extent, some existing infrastructure.</p>
EAC - 1905	Public Comments - SkeenaWild Conservation Trust (Appendix D)	<p>3. Additional public engagement opportunities are needed.</p> <p>Red Chris is located in close proximity to creeks and lakes where people camp and fish. Local communities consume rainbow trout from these mine-affected lakes, and a large-scale tailings failure could impact wild salmon habitat in the Stikine River. However, public engagement on the Red Chris Mine block cave expansion has been limited to a single opportunity to comment on the Application, with no opportunity provided to engage on what issues are addressed by the application (i.e., the Application Information Requirements) or on the EAO’s interpretation and recommendations following review of the Application (i.e., the Amendment Assessment Report). This is an inappropriate level of public engagement given the scale, complexity, and existing and potential future environmental risks of the project. The EAO must provide the following additional public engagement opportunities: i) a public comment period on the</p>	<p>This comment has been provided to the EAO for a response.</p>



Comment ID	Comment Source	Public Comment	NRCML Response
		Amendment Assessment Report and ii) the opportunity to form a Community Advisory Committee.	
EAC - 1906	Public Comments - SkeenaWild Conservation Trust (Appendix D)	4. Cumulative effects of future mine expansions must be considered. Approval of this initial block cave expansion will open the door to additional phases of underground mining at Red Chris that would require additional tailings storage and result in cumulative environmental effects that are challenging to predict. The cumulative effects of such a phased development approach must be considered during assessments of the current expansion proposal. The EAO must require Newmont to provide additional information assessing the potential cumulative effects of phased mine expansion.	This comment has been provided to the EAO for a response.
EAC - 1907	Public Comments - SkeenaWild Conservation Trust (Appendix D)	5. The expansion must not be “fast-tracked” at the expense of preventing mine impacts. The BC government’s plan to expedite, or “fast-track”, the Red Chris block cave expansion risks overlooking the multiple pre-existing challenges facing the mine as well as risks and uncertainties associated with the Application. Assessment and approvals of the proposed expansion must not be expedited at the expense of robust consideration and precautionary planning related to existing and future environmental risks.	This comment has been provided to the EAO for a response.
EAC - 1908	Public Comments - SkeenaWild Conservation Trust (Appendix D)	6. Public benefits and risks related to critical vs. precious metals mining must be considered. Though not acknowledged in the Application, the mine’s block cave Pre-Feasibility Study (Stewart et al. 2021) describes that the block cave ore reserves at Red Chris contain marginally increased copper grades but markedly increased gold grades compared to the open pit reserves, indicating that the mine will produce an increasing ratio of gold to copper as it expands. Gold is a luxury commodity, not a critical mineral; therefore, it provides less public benefit than copper. The job of the EAO is to weigh the public benefits and risks of proposed projects, of which the relative benefits and risks related to ore distribution of a project is a relevant consideration. In its evaluation of this Application and all other proposed mine projects, the EAO must consider the reduced public benefit of gold and other precious metals compared to critical minerals production.  Stewart R, Swanson B, Sykes M, et al. 2021. Red Chris Operations, British Columbia, Canada, NI 43-101 Technical Report. Prepared for Newcrest Mining Ltd and Imperial Metals Corporation. 30 June 2021.	This comment has been provided to the EAO for a response.



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EAC - 1909	Public Comments - SkeenaWild Conservation Trust (Appendix D)	<p>7. Mechanisms to confirm the project contributes to renewable energy must be required.</p> <p>We understand that despite increasing gold grades in the underground ore, Newmont plans to maintain the focus of the Red Chris processing mill on copper extraction. The Application states that one of the primary rationales of the project is the “Continued and increased production of copper, a critical mineral, to address global industrial demand needed to support the global energy transition to low-carbon societies” (SLR 2024, pg. A-7). The BC government also points to domestic production of critical minerals to support the renewable energy transition as a rationale to “fast-track” this and other mining development projects. The EAO will undoubtedly consider the public benefits of critical mineral production in its assessment of the Application; however, the Application does not describe any mechanisms by which the end use of the copper produced at Red Chris will be traced to ensure that it is indeed put toward renewable energy technologies. In fact, most of BC’s mined materials get shipped overseas for refining and can then be sold anywhere for any use. The EAO and the Province must develop mechanisms by which to hold Newmont and other mining proponents of “critical minerals” mines accountable to the end use of their products.</p> <p>SLR Consulting (Canada) Ltd. 2024. Red Chris Block Cave Production Phase Application for an Amendment to Environmental Assessment Certificate #M05-02. Prepared for Newcrest Red Chris Mining Ltd. 13 December 2024.</p>	This comment has been provided to the EAO for a response.
EAC - 1910	Public Comments - Central Council of the Tlingit and Haida Indian Tribes of Alaska (Appendix E)	<p>The proposed amendment lacks the necessary technical documentation and transparency to justify approval. Most immediately, we are alarmed by reports of ongoing seepage at the Red Chris site and the failure to contain contaminated surface waters. This is an urgent matter that demands enforcement action—not expansion. We urge the Province of British Columbia (B.C.) to require Newmont to correct these failures before any new project phases are even considered.</p>	This comment has been provided to the EAO for a response.
EAC - 1911	Public Comments - Central Council of the Tlingit and Haida Indian Tribes of Alaska (Appendix E)	<p>Equally concerning for our downstream communities is the continued pattern of B.C. permitting industrial-scale tailings facilities at the headwaters of major salmon rivers that flow into our traditional territories. The block cave expansion application fails to include adequate financial assurances for post-closure water treatment and reclamation. This absence is unacceptable and reinforces the growing distrust many Alaska Tribes and downstream communities feel toward B.C.’s environmental permitting process. This proposed amendment is an expansion and modification of operation, warranting its own environmental assessment, one that is transparent and available for public and Tribal review.</p>	<p>The proposed Project is not a proposed expansion but a transition in mining method from open pit mining to underground. There is no expansion proposed to the currently permitted Tailings Impoundment Area or the Rock Storage Area. The project’s potential effects have been assessed as documented in the Amendment Application. NRCML maintains an existing closure bond with the B.C. government as financial assurance. The value of this bond will be reviewed as part of the required <i>Mines Act</i> Amendment.</p>
EAC - 1912	Public Comments - Northern Confluence (Appendix F)	<p>1. Transparency around "Fast Tracking" (1 of 3).</p> <p>To preface, the province has listed the Red Chris Mine expansion as one of the projects listed to “fast-track approval”. Can the EAO clarify what this means, and if “not approving” the application is still an option? Is there a new, shorter timeline for processing this expansion plan?</p>	This comment has been provided to the EAO for a response.



Comment ID	Comment Source	Public Comment	NRCML Response
EAC - 1913	Public Comments - Northern Confluence (Appendix F)	<p>1. Transparency around "Fast Tracking" (2 of 3).</p> <p>As per the Amendment Application Summary, Newmont points out: "On November 1, 2023, the Province of BC (Province) and the TCG signed the Declaration Act Consent Decision-Making Agreement for Red Chris Porphyry Copper-Gold Mine Project between the Tahltan Central Government and the province of BC, entered into agreement on November 1, 2023 (Consent Agreement). The Consent Agreement states that a Substantial Change to the EAC within the Consent Area must receive the consent of the Tahltan, who hold the rights to the lands and surrounding territory of the Mine." (B-1)</p> <p>After the announcement with the list to fast-track approvals, the Tahltan Central Government put out a media release surprised and dismayed by not having received information prior to the announcement. Could the regulator (and BC Government) please clarify its intention to honour the Consent Decision-Making Agreement for the Red Chris project with the Tahltan and confirm that Tahltan consent is required before approving this expansion?</p>	This comment has been provided to the EAO for a response.
EAC - 1914	Public Comments - Northern Confluence (Appendix F)	<p>1. Transparency around "Fast Tracking" (3 of 3).</p> <p>Lastly, we need a robust regulatory process to ensure adequate assessment of impacts, risks to watersheds and communities, alternatives to the project and public transparency. As shown in this study published in Facets, BC's environmental assessment process is rarely cause for project delays. We also know that evading EAs often results in harms and disasters, such as the Banks Island Gold mine on Gitxaala territory. Can the EAO provide evidence otherwise that justifies fast-tracking?</p>	This comment has been provided to the EAO for a response.
EAC - 1915	Public Comments - Northern Confluence (Appendix F)	<p>2. Precautionary approach to block cave mining (1 of 2).</p> <p>My understanding is that the only other block cave mine in B.C. is New Afton Gold. I saw in their 2023 Annual Dam Safety Inspection report, that there were emerging issues with the tailings dam stability due to block cave mining that were not necessarily urgent but developing and needing to be addressed. Given this relatively new type of mining in the province, I'm wondering what lessons learned from monitoring and inspections have occurred from the New Afton site, how are these being implemented into the regulator's ability to adequately assess Red Chris' mine plans for safety and risk reduction, and what additional issues need to be assessed (based on other block cave mines) that are not included in this application?</p>	This comment has been provided to the EAO for a response.
EAC - 1916	Public Comments - Northern Confluence (Appendix F)	<p>2. Precautionary approach to block cave mining (2 of 2).</p> <p>It certainly seems as though block cave mining is likely to increase terrain instability. Are the risks and potential impacts adequately understood for this site location? With climate change, we are also seeing more landslides in the northwest (including one near Brucejack mine and another near Tulsequah Chief). Both because of the region and due to the type of mining proposed, there should be more assessment with regards to terrain stability and the monitoring and mitigation measures taken.</p>	<p>NRCML has provided an assessment which aligns with the requirements described in the Amendment Application Information Requirements (AAIR). The AAIR for this application was informed by engagement with the Tahltan Central Government and represents a comprehensive and rigorous framework. The assessment identified existing mitigation measures at Red Chris are sufficient to manage the potential effects on landscape features, except in the event of a block cave-induced seismic event resulting in destabilization of slopes. As a result, NRCML has proposed the implementation of a Cave Management Plan to minimize seismicity and cave propagation. This plan details the use of regular monitoring to detect changes in unstable terrain, including the known Kluea Lake Landslide Complex. NRCML will continue to monitor the findings of this assessment in terms of its predicted effects and the effective implementation of mitigation measures as described in Section 11.8.14 Follow-up Strategy.</p> <p>In addition, the effects of a changing climate on terrain stability have been addressed in Chapter 14.0 Effects of the Environment on the Project. Chapter 13.0 Accidents and Malfunctions has considered the mitigation measures to prevent and reduce the risk of surface instability (Table 13-10 Mitigation Measures for Surface Instability).</p>
EAC - 1917	Public Comments -	<p>3. Seepage and existing and potential impacts on fish and fish habitat.</p>	To clarify, the Amendment Application is for a change in mining method and not a mine expansion. As described in Section 1.5.6.2 Rock Storage Area, the area used will be reduced as low-grade material stored in the RSA is depleted. As described in Section 1.5.6.4 Tailings



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	Northern Confluence (Appendix F)	<p>There were early signs of high selenium concentrations found in fish samples in Ealue Lake after Red Chris started operations. Local residents were told to stop eating fish from there and Eddontenajon Lake as a precautionary measure. In a more recent report, seepage from Red Chris mine waste was leading to increased concentrations of selenium and copper in nearby creeks and lakes. Both of these can impact fish and bioaccumulate. In Red Chris' application, "negative residual effects are deemed "low to moderate"" (F-7). The company does not seem to adequately address existing issues around selenium and seepage from the tailings dam in their application, nor impacts to fish. Conditions should be imposed to manage for these issues before any expansion is allowed to proceed. The EAO should also require additional studies to better understand selenium bioaccumulation (and ensure that measures are taken to learn from the high selenium pollution and bioaccumulation problems and attempted remedies from the Elk River).</p> <p>Addressing existing issues at the mine site, including tailings and waste rock seepage, physical and chemical effects on fish, fish habitat, and other aquatic resources, and issues around tailings dam stability, are imperative before approving mine expansion.</p>	<p>Impoundment Area, the change in mining method and the process plant modifications associated with Project development will not result in any fundamental changes to tailings and water management at Red Chris. The TIA final permitted configuration does not change.</p> <p>NRCML has provided an assessment which aligns with the requirements described in the Amendment Application Information Requirements (AAIR). The AAIR for this application was informed by engagement and represents a comprehensive and rigorous framework reflecting both regulatory and local community priorities. It is important to note that the purpose of the environmental assessment in the Amendment Application was not to assess the effects of the existing conditions, but rather to compare and assess the effects of the Project Case vs Existing Conditions. What this means is that the environmental effects of the existing mine (Existing Conditions) were not the focus of the assessment, but rather the assessment focused on the incremental change between the existing conditions and the proposed amendment (Project Case).</p> <p>NRCML is continuing to implement the relevant monitoring programs, specifically, the Trigger Action Response Plan, the Seepage Effects Monitoring Program, and the Aquatics Effects Monitoring Program. As described in Sections 11.5.14.3 Adaptive Management, NRCML has identified existing mitigations (new mitigations for the project) that have not yet been implemented for hydrology, groundwater, and surface water. Fisheries and aquatics resources are monitored under the existing Aquatic Effects Management Program which includes fish tissue analysis. The Trigger Action Response Plan was updated in December 2024 and will continue to be updated based on results from the ongoing monitoring programs, as per the existing permit requirements in BC <i>Environmental Management Act</i> Effluent Permit 105017 (PE-105017; Condition 5.2). It should be noted that the existing Site Performance Objectives (SPO) are approved under PE-105017 and that the SPO for selenium in Trail Creek (TRL-0.8 and TRL-0.1) is equivalent to the BC Water Quality Guideline for the Protection of Aquatic Life (BC FWAL). Additionally, PE-105017 requires that BC FWAL guidelines are met within the receiving environment (Conditions 1.3.4 and 5.2.2).</p> <p>Project related failure mode for accidents and malfunctions excluded TIA embankment failure given that the final configuration of the TIA will remain unchanged from what has already been permitted. NRMCL has reviewed the Project influences on the TIA operation (increased tailings deposition rate) and has found that these changes do not generate any increased risk to TIA embankments (Section 13.4.2 Tailings Impoundment Area Emergency Preparedness and Response). Further, NRCML manages TIA operations using best industry practices to monitor and assess the integrity of dam structures to prevent and mitigate potential failure events, which are detailed in Section 13.4.2 Tailings Impoundment Area Emergency Preparedness and Response. NRMCL has met the AAIR requirements by providing relevant information regarding a catastrophic dam failure as previously presented publicly and with the Tahltan. As documented with the AAIR, reassessment of this information was outside the scope of this amendment.</p>
EAC - 1918	Public Comments - Northern Confluence (Appendix F)	<p>4. Labour shift and monitoring commitments.</p> <p>As Newmont raises, the types of jobs will change at the mine as it shifts to the block cave method. They say there will be a need for a new, more highly skilled workforce. In response to the concerns raised by the District of Stewart concerning this and increased automation at mine sites, Newmont has responded that it is developing a transition plan. This should be mandatory and reviewable by both Tahltan and the province to ensure regional benefits and employment are part of any expansion. Annual reporting on job numbers (including Tahltan and regional employment) should then also be required to monitor the success of the transition plan and accuracy of estimated job numbers if this is approved. Many mines overstate the number of jobs. While the province often accepts environmental harms as a trade-off for economic benefits, it then does nothing to monitor those promised benefits (jobs, tax revenue). Annual reporting should include monitoring employment commitments.</p>	<p>A Workforce Transition Plan will be developed to support the transition from open pit mining to block cave mining and work to maximize employee retention. Strategies to maximize employee retention include implementing expression of interest interviews with employees, employee skill gap assessment identification, and subsequently developing role-specific training packages. Retention will also be supported by NRCML's existing suite of programs such as ongoing skill development and workforce readiness initiatives, competitive compensation packages, career progression support (e.g., education funding), and an environment conducive to learning and growing. The development of the Workforce Transition Plan will include engagement with Tahltan.</p> <p>Under the existing Impact Benefit Co-Management Agreement (IBCA) with the Tahltan Nation, there are already provisions for reporting and monitoring Tahltan employment. While the IBCA remains confidential, it does provide a mechanism for the co-management of Red Chris such as maximizing Tahltan employment. The Project will continue to be subject to this agreement.</p>
EAC - 1919	Public Comments - Northern	<p>5. Less critical.</p> <p>The company indicates that the mine will be shifting toward more gold production and less copper, although the application does not adequately address this shift. Gold is not a critical mineral and absent from Canada and B.C.'s lists. The majority of gold is used</p>	<p>As described in Section A.4 of the Amendment Application, the rationale for the proposed transition to block cave mining includes the continued and increased production of copper and gold. Copper is classified as a critical mineral by the Federal Government of Canada based on the need to address global industrial demand needed to support the global energy transition to low-carbon societies. The proposed block cave mine at Red Chris would be the largest of its kind in Canada and is estimated to increase Canada's annual copper</p>





Comment ID	Comment Source	Public Comment	NRCML Response
	Confluence (Appendix F)	for currency and jewellery, with only 8% for technological purposes (of which there is enough to be sourced through recycling and urban mining). Given the justification to “fast-track critical mineral projects” by the province, the EAO must consider the reduced public benefit of gold mining when evaluating the risks of this project.	production by over 15% annually. Following the transition to block cave mining, copper will continue to be the primary metal targeted by the mine's production.  While NRCML, and its parent company, are committed to sustainable operations and supplying a raw resource to enable transition to a low-carbon society, the company does not have capability to refine its product to a point where it can be used directly in industrial purposes, nor does it have the ability to dictate what industrial users acquire the refined product.
EAC - 1920	Public Comments - Received by EAO via Email (Appendix G)	Block cave mining may increase terrain instability, and the risks and impacts of this are not adequately understood. In particular, the potential for landslides and/or debris slides to affect nearby fish habitat must be assessed.	Relevant known areas of potential terrain instability, such as the Kluea Lake Landslide Complex, predate any mining activity and is a result of natural processes. The Amendment Application acknowledges that it is unknown if existing Open Pit operations, or Project-induced seismicity may have any effect on the stability outside of the modelled subsidence zone. Within the subsidence zone, there no anticipated impacts to creeks, and therefore no potential impact to fish. However, NRCML has committed to the implementation of a regular monitoring program for identified areas of potential terrain instability, and to mitigate potential hazards during mining operations.  Further, Chapter 13.0 Accidents and Malfunctions identified "caving induced landslides" as a credible failure mode with potential for fish habitat loss and environmental degradation. Table 13-10 Mitigation Measures for Surface Instability identifies the mitigation measures to prevent and reduce the risk of surface instability in a credible failure mode scenario.
EAC - 1921	Public Comments - Received by EAO via Email (Appendix G)	The prediction that selenium, copper, and sulphate concentrations will peak earlier in downstream watersheds is concerning, especially since selenium accumulation in resident fish is already documented. More detailed studies are needed to understand how accelerated water contamination could affect aquatic life, particularly selenium bioaccumulation in fish.	As stated in Section 11.7.14.1 Adaptive Management, the continued implementation of the identified existing management plans and mitigation measures are sufficient to monitor the accuracy of predicted changes to the Fisheries and Aquatic Resources VC and the effectiveness of mitigation measures, and to develop an adaptive management response to identified environmental changes. Ongoing enhancement of the Trigger Action Response Plan (TARP) (NRCML 2023b), which will occur with or without the Project, will consider additional triggers for protection of surface water quality as part of adaptive management measures for the Mine. The TARP was developed as a living document subject to continuous improvement to address evolving environmental conditions at the Mine.  Additionally, NRMCL is completing a Site-Wide Human Health Risk Assessment (HHRA), in a parallel and separate review process, which includes the assessment of bioaccumulation based on predicted changes in air, soil, surface water and foods. Certain contaminants that have bioaccumulation potential (e.g., selenium and mercury in fish) will be evaluated in the Site Wide HHRA. Within the Site Wide HHRA, contaminants of potential concern that are identified in environmental media (e.g., selenium in surface water) are carried forward for evaluation in the multimedia assessment.
EAC - 1922	Public Comments - Received by EAO via Email (Appendix G)	Significant pre-existing issues have been documented at the mine, including i) tailings and waste rock seepage, ii) physical and chemical effects on fish, fish habitat, and other aquatic resources, and iii) issues threatening the stability of the tailings dams and increasing risks to people and the environment in the event of a dam failure. These issues must be addressed before approving any mine expansion.	It is important to note that these issues relate to the Permitted Case and not the difference between the Permitted Case and the Project Case. As such, they are outside the scope of this assessment.  1) For clarity, the Amendment Application is for a change in mining method and not a mine expansion. As described in Section 1.5.6.2 Rock Storage Area, the area used will be reduced as low-grade material stored in the RSA is depleted. As described in Section 1.5.6.4 Tailings Impoundment Area, the change in mining method and the process plant modifications associated with Project development will not result in any fundamental changes to tailings and water management at Red Chris. The TIA final permitted configuration does not change.  2) A Project specific effects assessment was completed to meet the Amendment Application Information Requirements. Please refer to Section 11.7 Fisheries and Aquatic Resources.  3) Project related failure mode for accidents and malfunctions excluded TIA embankment failure given that the final configuration of the TIA will remain unchanged from what has already been permitted. NRMCL has reviewed the Project influences on the TIA operation (increased tailings deposition rate) and has found that these changes do not generate any increased risk to TIA embankments (Section 13.4.2 Tailings Impoundment Area Emergency Preparedness and Response). Further, NRCML manages TIA operations using best industry practices to monitor and assess the integrity of dam structures to prevent and mitigate potential failure events, which are detailed in Section 13.4.2 Tailings Impoundment Area Emergency Preparedness and Response. NRMCL has met the AAIR requirements by providing relevant information regarding a catastrophic dam failure as previously presented publicly and with the Tahltan. As documented with the AAIR, reassessment of this information was outside the scope of this amendment.



Comment ID	Comment Source	Public Comment	NRCML Response
EAC - 1923	Public Comments - Received by EAO via Email (Appendix G)	Underground mining at Red Chris will shift the mine's focus toward gold over copper production. This detail has been omitted from the mine's expansion application. Gold is a luxury commodity, not a critical mineral, providing far less public benefit than copper, which makes it even more essential that risks and uncertainties associated with the project are thoroughly evaluated and addressed. The EAO must consider the reduced public benefit of gold mining when evaluating the risks of this project.	<p>The proposed change in mining method will allow the additional ore beneath the pit to be economically mined. The purpose and rationale for the Project is continued and increased production of copper and gold which are both found in the ore body under the East Pit as described in Chapter 1.0 Project Overview.</p> <p>Copper is classified as a critical mineral by the Federal Government of Canada based on the need to address global industrial demand needed to support the global energy transition to low-carbon societies. The proposed block cave mine at Red Chris would be the largest of its kind in Canada and is estimated to increase Canada's annual copper production by over 15% annually. Following the transition to block cave mining, copper will continue to be the primary metal targeted by the mine's production.</p>
EAC - 1924	Public Comments - Received by EAO via Email (Appendix G)	The public engagement process for this expansion is insufficient, given the project's complexity, scale, and potential impacts. The current opportunity to comment on the mine's expansion application is vital; however, public opportunities must also be provided to i) comment on the EAO's Assessment Report and ii) form a Community Advisory Committee.	This comment has been provided to the EAO for a response.
EAC - 1925	Public Comments - Received by EAO via Email (Appendix G)	Approval of this expansion will pave the way for future mine expansions that will compound existing risks and create new risks, particularly by expanding the mine's tailings facility. The EAO must carefully consider the long-term environmental consequences of a phased expansion approach.	This comment has been provided to the EAO for a response.
<p>Note:</p> <p>For public comments received by EAO via Email regarding the Amendment Application, EAO received four separate emails, however, three of the four emails had the same comment. The fourth email contained the same type of comments but worded slightly differently. To avoid repetition in comments and responses, only one set of comments were included in this table. Copies of all four emails are provided in Appendix G.</p>			



# **Appendix B Letter Submitted to EAO by Center for Science in Public Participation During Application Review Public Comment Period**

**Red Chris Block Cave Project - Production Phase**

**Public Engagement Report**

Aconex Submission Number: 401-8311-EN-REP-0023

May 9, 2025



# CENTER for SCIENCE in PUBLIC PARTICIPATION

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*"Technical Support for Grassroots Public Interest Groups"*

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April 9, 2025

B.C. Environmental Assessment Office

[EAO.operations@gov.bc.ca](mailto:EAO.operations@gov.bc.ca)

## **Re: Red Chris Block Cave Project - Production Phase Application for an Amendment to Environmental Assessment Certificate #M05-02**

### **General Comments**

Taking a broad view of this project, in order to better understand both the context and potential impacts, is difficult because the application discussion and documentation assumes the reviewer has either full knowledge of the previously permitted project elements, or has access to the project documentation, including technical support reports. Neither is true for this reviewer, and I suspect that it is also the case for many other reviewers/commenters.

I am aware that many elements of this mine have already been through the permitting process. However, perhaps by wishing to move this proposal forward by eliminating reports from previous permitting rounds, some information essential to the new proposal is being left out.

Water quality modeling is necessary, and the predictions of this modeling for the block cave project predict that conditions will remain close to present conditions. However, the initial water quality modeling failed to predict the existing problems with selenium contamination in most of the surface waters adjacent to the mine.

An outcome of this Amendment should be to reduce the amount of contamination reaching surface waters downgradient from the mine, but there is no discussion in the Application about reducing seepage, and/or improving the seepage collection. One has a tendency to think that if the amount of waste to be placed on the surface doubles, then the level of contaminants is likely to increase. No additional seepage collection systems or approaches are being proposed, nor any changes to the existing waste disposal approaches discussed.

This Amendment could, and should, be used to try to fix some of the unanticipated problems that resulted from the initial mine approval.

### **Subsidence Modeling**

It is noted that advanced modeling techniques were utilized in subsidence prediction models to predict the extent and magnitude of subsidence. There is no reference given to the subsidence modeling studies, and there is no subsidence modeling report provided on the BC EAO project website (<https://projects.eao.gov.bc.ca/p/588510c4aaecd9001b8155e3/documents>).

The subsidence modeling report(s) are obviously new information relevant to the Amendment application. They should be included in the project documents.

## **Financial Assurance for Post-Closure**

In Section 7: Summary (Newmont 2024a), it is noted:

*“In Closure, collected seepage from the TIA is anticipated to require treatment ... The combined average daily pumping rate between 2040 and 2104 is ~13,600 m<sup>3</sup>/day. Effluent from the WTP is simulated to discharge to the TIA.”*

and;

*“Water treatment is assumed to begin at the start of Closure in July 2040.”*

Treating 13,600 m<sup>3</sup>/day (approximately 3 million gallons per day) will require a large water treatment plant. If water treatment is to be accomplished with a conventional lime treatment, the operating cost alone would be several million dollars per year. (There is no discussion of water treatment, other than it will take place, so it is not clear what water treatment technology(s) will be employed.)

The financial assurance for post-closure water treatment is typically tens to hundreds of millions of dollars. There is no certainty, or ability to predict with existing modeling, that water treatment will no longer be required if water treatment is required beyond 10-years post closure. Water quality prediction models, like weather forecasting models, are not reliable for long periods of time. As a result, if post closure water treatment is predicted, then it must generally be presumed that the period for treatment is perpetuity, in order to protect the financial and environmental liability of the public.

The financial assurance for the block cave project is not discussed in the application documents, but the financial assurance is definitely different than for the Permitted Project, so the change in amount is relevant to the Amendment.

With tens of millions of dollars in question, the public should know how the post-closure financial surety for the block cave project is being calculated.

## **Waste Rock**

It was noted in the Surface Water section (Newmont 2024a) that:

*“As of November 2024, laboratory analysis of samples collected for geochemical analysis from the proposed block cave mining zone is in progress and associated results will be incorporated into the upcoming Joint Mines Act and Environmental Management Act permit amendment application.”*

This suggests geochemistry analysis of the rock from the block caving zone might not yet be completed. This could be problematic, because the project could be permitted before all of the information relevant to potential impacts to water are available.

I was not able to locate the amount of waste rock to be produced from block cave mining, and the chemical composition of this material (by volume).

As mining proceeds deeper into the ore body, the chemical composition of the ore, and the waste rock adjacent to the ore, will change. It has been noted that the amount of pyrite decreases as the ore depth increases (Newcrest 2023). Copper, selenium, and nitrate are predicted to be of particular concern, but it is noted (Newmont 2024a, Appendix 11.5-A, 4.3 Base Case Results for Receiving Stream Stations) that there are also additional contaminants that could exceed BC WQS, especially in Red Rock and White Rock Canyons, which receive contaminants from waste rock seepage. The potential increase in these contaminants is a more appropriate focus than on the pyrite content, which is more than sufficient to liberate these contaminants at any of the levels noted.

In the Front Matter (Newmont 2024b), it is stated:

*“Development of the Project is anticipated to result in improvements in certain water quality parameters at certain locations relative to the Permitted Case. Due to the reduced volume of waste rock generated through development of the Project and stored in the RSA during closure and post-closure, and because RSA runoff is directed to the TIA, reduced chemical loadings in RSA runoff contribute to reduced concentrations in TIA seepage.” (emphasis added)*

and;

*“Positive effects to fish health and/or fish productivity related to water quality are attributed to the improvements in water quality in the Project Case relative to the Permitted Case. Due to the reduced volume of waste rock generated through the Project Case and stored in the RSA during closure/post closure, reduced chemical loadings in the RSA runoff contribute to reduced concentrations in TIA seepage.” (emphasis added)*

While these statements are accurate, it would be more reassuring to know that the block cave amendment would assure that water quality guidelines would not be exceeded (which in not the case presented in the water quality modeling), and that the increasing trends of selenium and other present contaminants would be reversed.

Finally, one statement in the Front Matter (Newmont 2024b) is a bit misleading, and could warrant some revision:

*“Development of the Project is anticipated to result in improvements in certain water quality parameters at certain locations relative to the Permitted Case. The Project reduces the volume of waste rock generated and stored in the RSA, which in turn reduces chemical loadings in RSA runoff that contribute to TIA seepage.”*

Taking this statement literally one would conclude that the amount of waste rock in the RSA would actually decrease as a result of the block cave mining. This would, of course, not be possible with block caving, but to the reader unfamiliar with mining it sounds very environmentally beneficial.

Thank you for the opportunity to comment on this proposal.

Sincerely;



David M. Chambers, Ph.D., P. Geop

### **About the Reviewer:**

David Chambers has 45 years of experience in mineral exploration and development – 15 years of technical and management experience in the mineral exploration industry, and for the past 30+ years he has served as an advisor on the environmental effects of mining projects both nationally and internationally. He has Professional Engineering Degree in physics from the Colorado School of Mines, a Master of Science Degree in geophysics from the University of California at Berkeley, and is a registered professional geophysicist in California (# GP 972). Dr. Chambers received his Ph.D. in Environmental Planning from Berkeley. His recent research focuses on tailings dam failures, and the intersection of science and technology with public policy and natural resource management.

## **References**

- Newcrest 2023. Block Cave Project Production Phase Project Description Submitted by: Newcrest Red Chris Mining Ltd., Prepared by: SLR Consulting (Canada) Ltd., February 17, 2023
- Newmont 2024a. Red Chris Block Cave Project - Production Phase Application for an Amendment to Environmental Assessment Certificate #M05-02, Valued Component Section 11.5, Surface Water, SLR Consulting (Canada) Ltd., November 29, 2024
- Newmont 2024b. Red Chris Block Cave Project - Production Phase Application for an Amendment to Environmental Assessment Certificate #M05-02, Front Matter, SLR Consulting (Canada) Ltd., December 13, 2024

# **Appendix C Letter Submitted to EAO by Rivers Without Borders During Application Review Public Comment Period**

**Red Chris Block Cave Project - Production Phase**

**Public Engagement Report**

Aconex Submission Number: 401-8311-EN-REP-0023

May 9, 2025







April 9, 2025

Via Email:

Environmental Assessment Office

David Grace, [David.Grace@gov.bc.ca](mailto:David.Grace@gov.bc.ca)

Jessica Warner, [Jessica.Warner@gov.bc.ca](mailto:Jessica.Warner@gov.bc.ca)

**Subject: Public Comment on Red Chris Mine Block Cave Expansion Application**

Rivers Without Borders (RWB) would like to thank you for the opportunity to provide input to the proposed block cave expansion of the Red Chris Mine.

Rivers Without Borders is a nonprofit conservation organization working in both Canada and the U.S. to raise awareness of the outstanding ecological values of the British Columbia – Alaska transboundary watersheds and to promote ecosystem-based stewardship throughout those watersheds.

RWB has several concerns with the Red Chris expansion application.

We are particularly concerned that the Red Chris expansion will result in the concentrations of selenium, copper, and sulphate peaking earlier downstream in the Stikine River than is currently the case. This is particularly concerning, especially since selenium accumulation in resident fish is already documented. More detailed studies are needed to understand how accelerated contamination could increase selenium bioaccumulation in fish.

RWB also has concerns about already identified conditions that must be addressed before approving any mine expansions. These include but are not limited to 1) tailings and waste rock seepage, 2) physical impacts of chemical contamination on fish, fish habitat and 3) issues threatening the stability of the tailings dams and increasing the risks to people and aquatic resources in the event of a dam failure.

RWB does recognize the possibility that the shift to underground mining at Red Chris could somewhat lessen the overall future environmental impacts compared to the current open-pit mining employed at Red Chris. However, many environmental risks and uncertainties remain, and new ones could arise that need more thorough consideration and assessment.

The shift to underground mining will also transfer the mine's focus from copper to gold. Gold is a luxury material not a critical material needed for the transition to a low carbon future. Given

the lack of public benefit from increased gold production and considering the large number of massive open-pit gold mines currently under construction or proposed, the Province's fast-tracking the Red Chris expansion seems unnecessary and highly questionable. The lack of acknowledgement of this detail in the mine project application is an omission that must receive additional consideration by EAO. The downstream residents of both British Columbia and Southeast Alaska need assurances that the risks to water, fish, and communities are not traded for short-term economic gain before the application is approved.

Thank you for considering our comments. We trust that the EAO will take our concerns into account and ensure any decisions made are in the best interest of the environment, local communities, and future generations.

Sincerely,



Brian Lynch  
Alaska Transboundary Watersheds Conservation Campaigner  
Rivers Without Borders  
Petersburg, Alaska

Contact Information:  
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CC: U.S. Senator Lisa Murkowski  
Alaska State Senator Jessie Kiel  
Southeast Alaska Indigenous Transboundary Commission  
SkeenaWild Conservation Trust  
Salmon Beyond Borders

# **Appendix D Letter Submitted to EAO by Skeena Wild Conservation Trust During Application Review Public Comment Period**

**Red Chris Block Cave Project - Production Phase**

**Public Engagement Report**

Aconex Submission Number: 401-8311-EN-REP-0023

May 9, 2025





April 9, 2025

David Grace, Project Assessment Director  
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**Re: Public Comment on the Red Chris Mine Block Cave Application for an Environmental Assessment Certificate Amendment**

Dear Environmental Assessment Office (EAO),

SkeenaWild Conservation Trust works throughout northwestern BC to conserve freshwater systems, salmon populations, and the human and animal communities that depend on these resources. SkeenaWild recently published an investigative report (the SkeenaWild Report) based on scientific and technical assessment of Red Chris Mine monitoring and technical reports and environmental data (Berchtold & Tuzlak 2025). Our report details numerous long-standing environmental risks and impacts at Red Chris Mine, largely caused by shortcomings in oversight by BC regulators during the mine's Environmental Assessment, permitting, and continued monitoring and enforcement. The SkeenaWild Report can be found at <https://skeenawild.org/new-report-highlights-red-chris-mines-impacts/> and will be referenced in our comments below.

Please find below our comments on Newmont's Application for an Amendment to the Red Chris Mine Environmental Assessment Certificate to allow a transition to block cave mining and an increase in ore production rate (the Application). Our recommendations to require additional information from, or consideration by, Newmont and/or the EAO are in bold.

*1. Important risks and uncertainties with the Application remain*

We acknowledge that underground mining will reduce key environmental risks compared to open pit mining by reducing acid-generating waste production, thereby reducing contaminated mine seepage and acid rock drainage (ARD) potential. We understand the option for early mine closure is available; however, we also see the benefit in maximizing ore extraction from an already disturbed site. However, after reviewing the Application, we have identified several risks and uncertainties with the expansion proposal that require further assessment.

- a. Subsidence from block cave mining may induce seismic events and mobilize landslides in geohazard risk areas surrounding the mine, such as the landslide complex near Kluea Lake. The Application acknowledges multiple uncertainties related to project effects on terrain instability, including whether or not project-induced seismicity will reach the Kluea Lake landslide complex. The Application has not addressed the possibility for landslides or debris slides to affect fish habitat in the vicinity of unstable terrain areas. **The EAO must require Newmont to provide additional information on the block cave expansion's potential seismic hazards and potential effects of terrain instability (i.e., landslides and debris slides) on fish and fish habitat.**

- b. The mine's demand for water during the expansion's operations will increase to support increased ore production rates. If the addition of the tailings thickener and other proposed water recycling techniques are insufficient, this may lead to additional freshwater extractions from groundwater or surface water. **The EAO must require Newmont to provide additional information describing contingency water supply plans and what the impacts to aquatic ecosystems of those plans might be.**
- c. Accelerated ore production and tailings deposition under the block cave expansion will lead to sulphate, copper, and selenium levels peaking earlier in the Quarry Creek and Trail Creek watersheds, with concentrations exceeding BC Water Quality Guidelines for the protection of aquatic life (WQGs). The SkeenaWild Report and Red Chris' own Aquatic Effects Monitoring Reports finds that mine environmental monitoring data indicate selenium accumulation is already occurring in the tissues of resident fish in mine-affected lakes (WSP 2023; Berchtold & Tuzlak 2025). Additionally, previous assessments have predicted impacts will occur to fish in the mine's receiving environment even before selenium water concentrations reach the WQG of 0.002 mg/L (Golder 2019). Therefore, a hastened timeline of water contamination from the block cave expansion, especially of selenium, could have negative consequences for fish health. **The EAO must require Newmont to provide additional information describing potential impacts to resident fish of accelerated downstream water contamination, specifically including an assessment of project effects on selenium bioaccumulation that takes into account the site-specific effects thresholds presented in Golder (2019).**
- d. Several gaps and uncertainties in the Application may result in inaccurate or underpredicted effects of a shift to block cave mining. Understanding of the mine site is still limited by a lack of robust data regarding streamflow and groundwater-surface water interactions, leading to uncertainty in predictions of block-caving effects on both surface water quantity and quality. The geochemical properties of the deeper ore in the block cave are not well understood and the Application does not account for the likelihood that the natural attenuation currently reducing nitrate and selenium concentrations in groundwater will cease at some point, particularly when acid generation commences (SRK 2021), leading to higher loads of these contaminants reaching the receiving environment. Lastly, the Application does not mention whether or how block cave mining could impact Camp Creek water quality, which the SkeenaWild Report points out is a potentially mine-influenced source of downstream water contamination to Trail Creek that has not been properly characterized. **The EAO must require Newmont to provide additional information describing: i) an improved understanding of groundwater-surface water interactions, ii) a water quality effects assessment considering scenarios in which natural attenuation of nitrate and selenium is reduced or ceases to occur, and iii) assessment of project effects on surface water in Camp Creek and how these might affect Trail Creek and Kluea Lake.**

2. *Pre-existing issues relating to mine pollution and tailings risks must be addressed*

Significant pre-existing issues exist at the Red Chris Mine, many of which are detailed at length in the SkeenaWild Report. Broadly, these issues include: i) seepage from waste rock and tailings, ii) physical and chemical effects to fish and fish habitat, and iii) issues with tailings dam stability and preparations for a potential dam failure. The SkeenaWild Report demonstrates that Red Chris Mine has historically suffered from inaccurate predictions and has not been required by BC regulators to adequately address existing mine risks and impacts. Additionally, the Red Chris Independent

Tailings Review Board stated that the pursuit of mine expansion “could be a distraction to the [tailings engineering team] and dilute the resources available to focus on the significant and high priority challenges that are currently facing the design and operation of the existing [tailings impoundment]” (Newcrest 2022, pg. 12). Such concern is also relevant for the mine’s current challenges related to waste rock seepage and downstream aquatic ecosystem impacts. This expansion proposal is a critical opportunity to change this trend and ensure that existing mine issues are addressed. **Accordingly, the EAO must require Newmont to address the following issues as a condition of expansion approval:**

- a. **Uncertainties related to the mine’s water balance and seepage patterns, including quantifying the distance that tailings and waste rock seepage has spread into the receiving environment**
- b. **Gaps in environmental monitoring and mitigation thresholds, including the need to:**
  - i. **increase the spatial extent and temporal replication of sampling for hydrology, groundwater, surface water, sediment, and other aquatic indicators**
  - ii. **perform tissue chemistry analysis of fish tissue samples collected in the mine receiving area for *all* metals, and**
  - iii. **reduce mitigation thresholds (i.e., Site Performance Objectives and Trigger Response Plan thresholds) to be closer to background levels and/or proven no-effect thresholds.**
- c. **Mine-related aquatic impacts in Trail Creek, White Rock Canyon Creek, Kluea Lake, and Ealue Lake, such as impacts to water quality, sediment quality, and invertebrate and fish tissues. This should specifically include addressing potential mine impacts to Trail Creek via Camp Creek, and selenium accumulation in rainbow trout tissue in Ealue Lake and Kluea Lake.**
- d. **Water discharge and long-term treatment plans, including identifying water treatment technologies that will be appropriate for selenium removal prior to discharge.**
- e. **Issues related to tailings dam construction, failure modelling, and emergency preparations, including the need to:**
  - i. **further assess any dam stability risks related to the presence of glaciolacustrine layers in the dam foundations,**
  - ii. **address challenges related to obtaining sufficient construction materials to achieve target dam raises, especially considering the currently proposed increases to tailings deposition rates,**
  - iii. **address challenges related to potential downstream water quality impacts from the use of cyclone sand to construct tailings dams, including the implementation and activation of seepage capture systems,**
  - iv. **address dam stability risks related to greater-than-expected tailings seepage,**
  - v. **ensure water modelling and contingency planning accounts for the high uncertainties associated with the mine’s water balance predictions,**
  - vi. **improve dam inundation modelling to more accurately depict the potential impacts to downstream communities and populations at risk, and quantifies the extent and effects of tailings runout and chemical**



- effects of potentially acid-generating tailings to the extent current technology allows, and
- vii. **increase the level of detail in the mine's emergency response plans related to a tailings dam failure, including discussing and preparing these plans with downstream communities, mine workers, first responders, and relevant government agencies.**

*3. Additional public engagement opportunities are needed*

Red Chris is located in close proximity to creeks and lakes where people camp and fish. Local communities consume rainbow trout from these mine-affected lakes, and a large-scale tailings failure could impact wild salmon habitat in the Stikine River. However, public engagement on the Red Chris Mine block cave expansion has been limited to a single opportunity to comment on the Application, with no opportunity provided to engage on what issues are addressed by the application (i.e., the Application Information Requirements) or on the EAO's interpretation and recommendations following review of the Application (i.e., the Amendment Assessment Report). This is an inappropriate level of public engagement given the scale, complexity, and existing and potential future environmental risks of the project. **The EAO must provide the following additional public engagement opportunities: i) a public comment period on the Amendment Assessment Report and ii) the opportunity to form a Community Advisory Committee.**

*4. Cumulative effects of future mine expansions must be considered*

Approval of this initial block cave expansion will open the door to additional phases of underground mining at Red Chris that would require additional tailings storage and result in cumulative environmental effects that are challenging to predict. The cumulative effects of such a phased development approach must be considered during assessments of the current expansion proposal. **The EAO must require Newmont to provide additional information assessing the potential cumulative effects of phased mine expansion.**

*5. The expansion must not be "fast-tracked" at the expense of preventing mine impacts*

The BC government's plan to expedite, or "fast-track", the Red Chris block cave expansion risks overlooking the multiple pre-existing challenges facing the mine as well as risks and uncertainties associated with the Application. **Assessment and approvals of the proposed expansion must not be expedited at the expense of robust consideration and precautionary planning related to existing and future environmental risks.**

*6. Public benefits and risks related to critical vs. precious metals mining must be considered*

Though not acknowledged in the Application, the mine's block cave Pre-Feasibility Study (Stewart et al. 2021) describes that the block cave ore reserves at Red Chris contain marginally increased copper grades but markedly increased gold grades compared to the open pit reserves, indicating that the mine will produce an increasing ratio of gold to copper as it expands. Gold is a luxury commodity, not a critical mineral; therefore, it provides less public benefit than copper. The job of the EAO is to weigh the public benefits and risks of proposed projects, of which the relative benefits and risks related to ore distribution of a project is a relevant consideration. **In its evaluation of this Application and all other proposed mine projects, the EAO must consider**



**the reduced public benefit of gold and other precious metals compared to critical minerals production.**

*7. Mechanisms to confirm the project contributes to renewable energy must be required*

We understand that despite increasing gold grades in the underground ore, Newmont plans to maintain the focus of the Red Chris processing mill on copper extraction. The Application states that one of the primary rationales of the project is the “Continued and increased production of copper, a critical mineral, to address global industrial demand needed to support the global energy transition to low-carbon societies” (SLR 2024, pg. A-7). The BC government also points to domestic production of critical minerals to support the renewable energy transition as a rationale to “fast-track” this and other mining development projects. The EAO will undoubtedly consider the public benefits of critical mineral production in its assessment of the Application; however, the Application does not describe any mechanisms by which the end use of the copper produced at Red Chris will be traced to ensure that it is indeed put toward renewable energy technologies. In fact, most of BC’s mined materials get shipped overseas for refining and can then be sold anywhere for any use. **The EAO and the Province must develop mechanisms by which to hold Newmont and other mining proponents of “critical minerals” mines accountable to the end use of their products.**

Thank you for receiving our comments. We look forward to an improved Amendment Assessment process for the Red Chris Mine Block Cave Expansion.

Sincerely,

Adrienne Berchtold, Ecologist & Mining Impacts Researcher  
SkeenaWild Conservation Trust  
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#### References Cited:

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# **Appendix E Letter Submitted to EAO by Central Council of the Tlingit & Haida Indian Tribes of Alaska During Application Review Public Comment Period**

**Red Chris Block Cave Project - Production Phase**

**Public Engagement Report**

Aconex Submission Number: 401-8311-EN-REP-0023

May 9, 2025





**Central Council of the Tlingit & Haida  
Indian Tribes of Alaska**

907.586.1432 • 800.344.1432

PO Box 25500 • Juneau, Alaska

99802 [www.tlingitandHaida.gov](http://www.tlingitandHaida.gov)

April 10, 2025

Tahltan Central Government

[president@tahtlan.org](mailto:president@tahtlan.org); [vicepresident@tahtlan.org](mailto:vicepresident@tahtlan.org); [fisheriesdirector@tahtlan.org](mailto:fisheriesdirector@tahtlan.org); [landsdirector@tahtlan.org](mailto:landsdirector@tahtlan.org)

B.C. Environmental Assessment Office

[EAO.operations@gov.bc.ca](mailto:EAO.operations@gov.bc.ca); [David.Grace@gov.bc.ca](mailto:David.Grace@gov.bc.ca)

**Re: Red Chris Block Cave Project – Production Phase Application for Amendment to  
Environmental Assessment Certificate #M05-02**

To Tahltan Central Government and B.C. Environmental Assessment Office,

The Central Council of the Tlingit & Haida Indian Tribes of Alaska (Tlingit & Haida) is the largest federally recognized Tribe in Alaska, serving 19 communities and representing more than 38,000 Tribal Citizens whose ancestral homelands span over 43,000 square miles of what is now known as Southeast Alaska. These lands and waters stretch across more than 500 miles of coastline and inland waterways, bordered on three sides by what is now called Canada, and on the west by the Gulf of Alaska.

Tlingit & Haida appreciates the opportunity to provide comments regarding Newcrest Red Chris Mining Limited's (Newmont) application to amend the failing Red Chris Porphyry Copper-Gold project, increasing production and expanding the on-site work camp on Tahltan territory.

We write today with respect and deep concern regarding the Red Chris Block Cave Project amendment application. As the regional Tribe of Southeast Alaska and a sovereign government with a strong interest in protecting the health of the transboundary Shtax'heén (Stikine River), we submit the following comments in solidarity with downstream communities and in defense of our shared and sacred salmon waters.

The proposed amendment lacks the necessary technical documentation and transparency to justify approval. Most immediately, we are alarmed by reports of ongoing seepage at the Red Chris site and the failure to contain contaminated surface waters. This is an urgent matter that demands enforcement action—not expansion. We urge the Province of British Columbia (B.C.) to require Newmont to correct these failures before any new project phases are even considered.

Equally concerning for our downstream communities is the continued pattern of B.C. permitting industrial-scale tailings facilities at the headwaters of major salmon rivers that flow into our traditional territories. The block cave expansion application fails to include adequate financial assurances for post-closure water treatment and reclamation. This absence is unacceptable and reinforces the growing distrust many Alaska Tribes and downstream communities feel toward B.C.'s environmental permitting process. This proposed amendment is an expansion

and modification of operation, warranting its own environmental assessment, one that is transparent and available for public and Tribal review.

Tlingit & Haida respectfully urges the Tahltan Central Government and the Province of British Columbia to reject Newcrest Red Chris Mining Limited's amendment application and immediately enforce compliance with existing regulations to prevent further contamination. We also call for formal, government-to-government consultation with the Wrangell Cooperative Association and the people of the Shtax'héen Kwáan, who rely on the health of the river for their way of life.

Our shared wild salmon rivers and our people – *past, present, and future* – depend upon the health of the Tl'ab'ne.

Sincerely,

A handwritten signature in blue ink, appearing to read "Richard J. Peterson", with a stylized, flowing script.

Richard J. Peterson,  
President



# **Appendix F Letter Submitted to EAO by Northern Confluence During Application Review Public Comment Period**

**Red Chris Block Cave Project - Production Phase**

**Public Engagement Report**

Aconex Submission Number: 401-8311-EN-REP-0023

May 9, 2025





# Northern Confluence

To: Environmental Assessment Office

[EAO.operations@gov.bc.ca](mailto:EAO.operations@gov.bc.ca)

David Grace, [David.Grace@gov.bc.ca](mailto:David.Grace@gov.bc.ca)

Jessica Warner, [Jessica.Warner@gov.bc.ca](mailto:Jessica.Warner@gov.bc.ca)

April 10, 2025

Re: *Public Comment on Red Chris Mine Block Cave Project – Application for Amendment*

Dear Environmental Assessment Office (EAO),

I am writing to share some environmental and social concerns about the Red Chris application for its block cave project that I feel are not adequately addressed in the application, or require clarification from the regulator.

## 1. Transparency around “Fast-tracking”

To preface, the province has listed the Red Chris Mine expansion as one of the projects listed to “fast-track approval”. Can the EAO clarify what this means, and if “not approving” the application is still an option? Is there a new, shorter timeline for processing this expansion plan?

As per the Amendment Application Summary, Newmont points out: *“On November 1, 2023, the Province of BC (Province) and the TCG signed the Declaration Act Consent Decision-Making Agreement for Red Chris Porphyry Copper-Gold Mine Project between the Tahltan Central Government and the province of BC, entered into agreement on November 1, 2023 (Consent Agreement). The Consent Agreement states that a Substantial Change to the EAC within the Consent Area must receive the consent of the Tahltan, who hold the rights to the lands and surrounding territory of the Mine.”* (B-1)

After the announcement with the list to fast-track approvals, the Tahltan Central Government put out [a media release](#) surprised and dismayed by not having received information prior to the announcement. Could the regulator (and BC Government) please clarify its intention to honour the Consent Decision-Making Agreement for the Red Chris project with the Tahltan and confirm that Tahltan consent is required before approving this expansion?

Lastly, we need a robust regulatory process to ensure adequate assessment of impacts, risks to watersheds and communities, alternatives to the project and public transparency. As shown in this study published in [Facets](#), BC's environmental assessment process is rarely cause for project delays. We also know that evading EAs often results in harms and disasters, such as the Banks Island Gold mine on Gitxaala territory. Can the EAO provide evidence otherwise that justifies fast-tracking?

## **2. Precautionary approach to block cave mining**

My understanding is that the only other block cave mine in B.C. is New Afton Gold. I saw in their 2023 Annual Dam Safety Inspection report, that there were emerging issues with the tailings dam stability due to block cave mining that were not necessarily urgent, but developing and needing to be addressed. Given this relatively new type of mining in the province, I'm wondering what lessons learned from monitoring and inspections have occurred from the New Afton site, how are these being implemented into the regulator's ability to adequately assess Red Chris' mine plans for safety and risk reduction, and what additional issues need to be assessed (based on other block cave mines) that are not included in this application?

It certainly seems as though block cave mining is likely to increase terrain instability. Are the risks and potential impacts adequately understood for this site location? With climate change, we are also seeing more landslides in the northwest (including one near Brucejack mine and another near Tulsequah Chief). Both because of the region and due to the type of mining proposed, there should be more assessment with regards to terrain stability and the monitoring and mitigation measures taken.

## **3. Seepage and existing and potential impacts on fish and fish habitat**

There were [early signs of high selenium concentrations](#) found in fish samples in Ealue Lake after Red Chris started operations. Local residents were told to stop eating fish from there and Eddontenajon Lake as a precautionary measure. In a more recent [report](#), seepage from Red Chris mine waste was leading to increased concentrations of selenium and copper in nearby creeks and lakes. Both of these can impact fish and bioaccumulate. In Red Chris' application, "negative residual effects are deemed "low to moderate"" (F-7). The company does not seem to adequately address existing issues around selenium and seepage from the tailings dam in their application, nor impacts to fish. Conditions should be imposed to manage for these issues before any expansion is allowed to proceed. The EAO should also require additional studies to better understand selenium bioaccumulation (and ensure that measures are taken to learn from the high selenium pollution and bioaccumulation problems and attempted remedies from the Elk River).

Addressing existing issues at the mine site, including tailings and waste rock seepage, physical and chemical effects on fish, fish habitat, and other aquatic resources, and issues around tailings dam stability, are imperative before approving mine expansion.

#### **4. Labour shift and monitoring commitments**

As Newmount raises, the types of jobs will change at the mine as it shifts to the block cave method. They say there will be a need for a new, more highly skilled workforce. In response to the concerns raised by the District of Stewart concerning this and increased automation at mine sites, Newmount has responded that it is developing a transition plan. This should be mandatory and reviewable by both Tahltan and the province to ensure regional benefits and employment are part of any expansion. Annual reporting on job numbers (including Tahltan and regional employment) should then also be required to monitor the success of the transition plan and accuracy of estimated job numbers if this is approved. Many mines overstate the number of jobs. While the province often accepts environmental harms as a trade off for economic benefits, it then does nothing to monitor those promised benefits (jobs, tax revenue). Annual reporting should include monitoring employment commitments.

#### **5. Less critical**

The company indicates that the mine will be shifting toward more gold production and less copper, although the application does not adequately address this shift. Gold is not a critical mineral and absent from Canada and B.C.'s lists. The majority of gold is used for currency and jewellery, with only 8% for technological purposes (of which there is enough to be sourced through recycling and urban mining). Given the justification to "fast-track critical mineral projects" by the province, the EAO must consider the reduced public benefit of gold mining when evaluating the risks of this project.

Given that Red Chris went through the older BC Environmental Assessment Act, it would be worthwhile for the EAO to consider forming a Community Advisory Committee to be able to follow more closely and recommend additional issues/gaps that should be addressed in considering this expansion proposal.

Thank you for responding to the issues raised above.

Sincerely,

Nikki Skuce  
Director, Northern Confluence Initiative

# **Appendix G    Emails Submitted to EAO during Application Review Public Comment Period**

## **Red Chris Block Cave Project - Production Phase**

### **Public Engagement Report**

Aconex Submission Number: 401-8311-EN-REP-0023

May 9, 2025



The Environmental Assessment Office received the following four public comments, submitted as emails, on the Red Chris Block Cave Amendment. Personal names and emails have been redacted to meet the Environmental Assessment Office's Public Comment Policy on personal information.

[REDACTED]  
Terrace BC  
[REDACTED]

April 10, 2025

Environmental Assessment Office  
David Grace, [David.Grace@gov.bc.ca](mailto:David.Grace@gov.bc.ca)  
Jessica Warner, [Jessica.Warner@gov.bc.ca](mailto:Jessica.Warner@gov.bc.ca)

Subject: Public Comment on Red Chris Mine Block Cave Expansion

Dear Environmental Assessment Office (EAO),

I am writing to express my perspective regarding the proposed block cave expansion of the Red Chris Mine. I understand the economic importance of mining and that a shift to underground mining presents an opportunity to reduce environmental impacts compared to open pit mining; however, environmental risks and uncertainties remain with the Red Chris proposal that must be more thoroughly evaluated. Specifically, I have concerns regarding the following issues:

1. Block cave mining may increase terrain instability, and the risks and impacts of this are not adequately understood. In particular, the potential for landslides and/or debris slides to affect nearby fish habitat must be assessed.
2. The prediction that selenium, copper, and sulphate concentrations will peak earlier in downstream watersheds is concerning, especially since selenium accumulation in resident fish is already documented. More detailed studies are needed to understand how accelerated water contamination could affect aquatic life, particularly selenium bioaccumulation in fish.
3. Significant pre-existing issues have been documented at the mine, including i) tailings and waste rock seepage, ii) physical and chemical effects on fish, fish habitat, and other aquatic resources, and iii) issues threatening the stability of the tailings dams and increasing risks to people and the environment in the event of



a dam failure. These issues must be addressed before approving any mine expansion.

4. Underground mining at Red Chris will shift the mine's focus toward gold over copper production. This detail has been omitted from the mine's expansion application. Gold is a luxury commodity, not a critical mineral, providing far less public benefit than copper, which makes it even more essential that risks and uncertainties associated with the project are thoroughly evaluated and

addressed. The EAO must consider the reduced public benefit of gold mining when evaluating the risks of this project.

5. The public engagement process for this expansion is insufficient, given the project's complexity, scale, and potential impacts. The current opportunity to comment on the mine's expansion application is vital; however, public opportunities must also be provided to i) comment on the EAO's Assessment Report and ii) form a Community Advisory Committee.

6. Approval of this expansion will pave the way for future mine expansions that will compound existing risks and create new risks, particularly by expanding the mine's tailings facility. The EAO must carefully consider the long-term environmental consequences of a phased expansion approach.

The Province has stated it is fast-tracking approvals of the Red Chris Mine expansion. This is concerning because provincial regulatory shortcomings have already exacerbated risks at this mine due to inadequate monitoring and mitigation requirements, lack of accountability to independent expert advice, and delays in assessing and managing environmental effects. It is vital that the Environmental Assessment process ensures that risks to water, fish, and communities are not traded for short-term economic gain. The Red Chris Mine expansion must not proceed without rigorous scrutiny, public transparency, and adherence to precautionary principles.

Thank you for considering my submission. I trust that the EAO will take these concerns into account and ensure any decisions made are in the best interest of the environment, local communities, and future generations.

Sincerely,

[REDACTED]

[REDACTED]  
Terrace BC  
[REDACTED]

April 10, 2025

Environmental Assessment Office  
David Grace, [David.Grace@gov.bc.ca](mailto:David.Grace@gov.bc.ca)  
Jessica Warner, [Jessica.Warner@gov.bc.ca](mailto:Jessica.Warner@gov.bc.ca)

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3. Significant pre-existing issues have been documented at the mine, including i) tailings and waste rock seepage, ii) physical and chemical effects on fish, fish habitat, and other aquatic resources, and iii) issues threatening the stability of the tailings dams and increasing risks to people and the environment in the event of

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The Province has stated it is fast-tracking approvals of the Red Chris Mine expansion. This is concerning because provincial regulatory shortcomings have already exacerbated risks at this mine due to inadequate monitoring and mitigation requirements, lack of accountability to independent expert advice, and delays in assessing and managing environmental effects. It is vital that the Environmental Assessment process ensures that risks to water, fish, and communities are not traded for short-term economic gain. The Red Chris Mine expansion must not proceed without rigorous scrutiny, public transparency, and adherence to precautionary principles.

Thank you for considering my submission. I trust that the EAO will take these concerns into account and ensure any decisions made are in the best interest of the environment, local communities, and future generations.

Sincerely,

A black rectangular box redacting the signature of the sender.

[REDACTED]  
Terrace, BC  
[REDACTED]

April 10, 2025

Environmental Assessment Office  
David Grace, [David.Grace@gov.bc.ca](mailto:David.Grace@gov.bc.ca)

Jessica Warner, [Jessica.Warner@gov.bc.ca](mailto:Jessica.Warner@gov.bc.ca)

Subject: Public Comment on Red Chris Mine Block Cave Expansion

Dear Environmental Assessment Office (EAO),

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the Red Chris Mine. I understand the economic importance of mining and that a shift to

underground mining presents an opportunity to reduce environmental impacts

compared to open pit mining; however, environmental risks and uncertainties remain with the Red Chris proposal that must be more thoroughly evaluated. Specifically, I

have concerns regarding the following issues:

1. Block cave mining may increase terrain instability, and the risks and impacts of this are not adequately understood. In particular, the potential for landslides and/or debris slides to affect nearby fish habitat must be assessed.
2. The prediction that selenium, copper, and sulphate concentrations will peak earlier in downstream watersheds is concerning, especially since selenium accumulation in resident fish is already documented. More detailed studies are needed to understand how accelerated water contamination could affect aquatic life, particularly selenium bioaccumulation in fish.
3. Significant pre-existing issues have been documented at the mine, including i) tailings and waste rock seepage, ii) physical and chemical effects on fish, fish habitat, and other aquatic resources, and iii) issues threatening the stability of the tailings dams and increasing risks to people and the environment in the event of a dam failure. These issues must be addressed before approving any mine expansion.
4. Underground mining at Red Chris will shift the mine's focus toward gold over copper production. This detail has been omitted from the mine's expansion application. Gold is a luxury commodity, not a critical mineral, providing far less public benefit than copper, which makes it even more essential that risks and uncertainties associated with the project are thoroughly evaluated and

addressed. The EAO must consider the reduced public benefit of gold mining when evaluating the risks of this project.

5. The public engagement process for this expansion is insufficient, given the project's complexity, scale, and potential impacts. The current opportunity to

comment on the mine's expansion application is vital; however, public opportunities must also be provided to i) comment on the EAO's Assessment Report and ii) form a Community Advisory Committee.

6. Approval of this expansion will pave the way for future mine expansions that will

compound existing risks and create new risks, particularly by expanding the mine's tailings facility. The EAO must carefully consider the long-term environmental consequences of a phased expansion approach.

The Province has stated it is fast-tracking approvals of the Red Chris Mine expansion.

This is concerning because provincial regulatory shortcomings have already

exacerbated risks at this mine due to inadequate monitoring and mitigation requirements, lack of accountability to independent expert advice, and delays in assessing and managing environmental effects. It is vital that the Environmental Assessment process ensures that risks to water, fish, and communities are not traded for short-term economic gain. The Red Chris Mine expansion must not proceed without rigorous scrutiny, public transparency, and adherence to precautionary principles. Thank you for considering my submission. I trust that the EAO will take these concerns into account and ensure any decisions made are in the best interest of the environment, local communities, and future generations. Sincerely,



Sent from [Outlook](#)



Dear Environmental Assessment Office (EAO),

I am writing to share my concerns regarding the proposed block cave expansion of the Red Chris Mine. While I recognize the economic significance of mining and the potential for underground operations to lessen environmental impacts compared to open pit mining, there are critical environmental risks and uncertainties associated with the Red Chris proposal that require more thorough evaluation. My specific concerns are as follows:

1. **Terrain Instability:** The potential for increased terrain instability due to block cave mining is concerning. The risks and impacts, particularly regarding landslides and debris slides affecting nearby fish habitats, need comprehensive assessment.
2. **Pollution Predictions:** The anticipated peak concentrations of selenium, copper, and sulphate in downstream watersheds raise alarm, particularly as selenium accumulation in resident fish has already been documented. More extensive studies are essential to understand the implications of accelerated water contamination on aquatic life, especially regarding selenium bioaccumulation.
3. **Existing Issues:** Significant pre-existing problems at the mine have been documented, including i) seepage from tailings and waste rock, ii) physical and chemical impacts on fish and aquatic resources, and iii) threats to the stability of tailings dams, which could pose risks to people and the environment in the event of a failure. These matters must be resolved before any mine expansion is approved.
4. **Shift in Focus:** The transition toward gold production over copper in the underground mining operations is a crucial detail that has not been adequately addressed in the expansion application. Gold is a luxury commodity, offering less public benefit than copper. It is vital that the risks and uncertainties related to this shift are thoroughly examined, and the EAO should consider the reduced public benefits of gold mining in its evaluation.
5. **Public Engagement:** The public engagement process for this expansion is insufficient given

the complexity, scale, and potential impacts of the project. While the opportunity to comment on the mine's expansion application is crucial, there should also be avenues for public input on the EAO's Assessment Report and the formation of a Community Advisory Committee.

6. Long-term Risks: Approving this expansion could lead to future mine expansions that exacerbate existing risks and introduce new ones, particularly concerning the expansion of the mine's tailings facility. The EAO must carefully consider the long-term environmental implications of a phased expansion approach.

The Province's decision to fast-track approvals for the Red Chris Mine expansion is troubling. Previous regulatory shortcomings have already heightened risks at this mine due to inadequate monitoring, insufficient mitigation requirements, and a lack of accountability to independent expert advice. It is crucial that the Environmental Assessment process prioritizes the protection of water, fish, and communities over short-term economic benefits. The Red Chris Mine expansion should not proceed without thorough scrutiny, public transparency, and adherence to precautionary principles.

Thank you for considering my comments. I trust that the EAO will take these concerns seriously and ensure that decisions made reflect the best interests of the environment, local communities, and future generations.

Sincerely,

[REDACTED]

Ontario, Canada

[Sent from Yahoo Mail for iPhone](#)