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Our file - Notre référence
GCDocs135141922

April 9, 2025

Industry and Public Stakeholders – Via uploads to both the Northwest Territories Online Review System and Nunavut Water Board Public Registry

Re: Crown-Indigenous Relations and Northern Affairs Canada's (CIRNAC) and Government of Northwest Territories' (GNWT) summary of feedback received by March 31, 2025 and invitation for further engagement on the updates to RECLAIM 8.0 and associated User Manual

Dear Parties,

Background

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) is currently undertaking an update of the RECLAIM 7.0 Model (update to RECLAIM 8.0) and associated User Manual. The Government of the Northwest Territories (GNWT) is collaborating with CIRNAC on this update, as it is the current version also used in the NWT. The purpose of the update is to more accurately reflect the actual costs and site specific activities as they relate to reclamation security estimates. This update will incorporate a process to account for inflation, and reflect the current standards and costs of remediation projects in the North. Updates have also been drafted to reflect land and water board practices and expectations that have emerged since the model was last updated in 2014, and the User Manual in 2017.

On January 23, 2025, an in-person and virtual engagement session, including a presentation on the potential updates to RECLAIM 8.0, was held in Vancouver at the Association for Mineral Exploration Conference. Working copies of the RECLAIM 8.0 Model, associated User Manual, and a summary report highlighting proposed changes, including rationale, were uploaded to both the Northwest Territories Online Review System and Nunavut Water Board Public Registry for public review on that date. During the engagement session, both CIRNAC and the GNWT committed to providing additional details on the information used in the development of Unit rates and the rationale used to support the



potential updates. Those details were uploaded to both the Northwest Territories Online Review System and Nunavut Water Board Public Registry for public review on February 19, 2025 and public feedback deadline was extended accordingly from March 3, 2025 to March 31, 2025.

First RECLAIM 8.0 public engagement and commenting period – March 31, 2025

Twenty written submissions, totaling 203 comments, were received by CIRNAC and the GNWT in the first RECLAIM 8.0 public engagement and commenting period. Comments pertained to the general themes of unit rates, policy, indirects, user manual, net present value, and contingency. CIRNAC and the GNWT heard in the January 23, 2025 engagement session the usefulness to hear other's public feedback and have the opportunity to augment their public feedback accordingly. CIRNAC and the GNWT summarized the written feedback received in the first RECLAIM 8.0 public engagement and commenting period in Appendix A and posted it on both public online review systems for further feedback. CIRNAC and the GNWT request further public feedback on the update to RECLAIM 8.0 and the associated User Manual be submitted **by May 30, 2025** via the Northwest Territories Online Review System or Nunavut Water Board Public Registry.

Further in-person engagement on the updates to RECLAIM 8.0 and associated User Manual

CIRNAC and GNWT committed to two additional in-person and virtual engagement sessions, including one in Iqaluit, Nunavut, and one in Yellowknife, NWT.

The 2025 Nunavut Mining Symposium is hosted by the Nunavut Mining Society in Iqaluit, Nunavut from April 7 – 10, 2025. CIRNAC will be available that week and plans to present a summary of the public feedback received to both online review systems thus far. CIRNAC will also be available for one-on-one meetings to further engage on the update.

If your organization will be attending the 2025 Nunavut Mining Symposium during the week of April 7-10 and would like to schedule an engagement session on the update to RECLAIM 8.0 with CIRNAC, please contact Andrew Keim at (867) 975-4550 or Andrew.Keim@rcaanc-cirnac.gc.ca to schedule.

The GNWT will be available for one-on-one meetings to further engage on the update during the week of May 12 – 16, 2025, in Yellowknife, NWT. The one-day workshop in Yellowknife will occur on May 14, 2025. Additional details on the scope of the workshop and agenda will circulated soon.

If your organization would like to schedule an engagement session with the GNWT the week of May 12 - 16, 2025, please contact Bill Pain at (867) 767-9234 ext. 53117 or bill_pain@gov.nt.ca to schedule an engagement session with the GNWT.

Public feedback response schedule

CIRNAC and the GNWT have heard multiple requests to provide more time for public feedback. As always, our door remains open to productive engagement and new or innovative ideas in the shaping of the RECLAIM tool. CIRNAC and the GNWT agreed to provide more time in this important review. CIRNAC and the GNWT commit to summarizing



all the feedback received by May 30, 2025 and posting it on both public online review systems **by June 16, 2025**, along with initial responses from CIRNAC and the GNWT. Responses to the first RECLAIM 8.0 public engagement and commenting period 20 written submissions cannot be included in this document due to CIRNAC being in the caretaker convention period for the upcoming federal election. CIRNAC and the GNWT request clarifications on the June 16, 2025 summary document be submitted via the Northwest Territories Online Review System or Nunavut Water Board Public Registry **by July 16, 2025**.

We thank you in advance for the feedback on the update. If there are any questions or concerns, please contact Andrew Keim at (867) 975-4550 or Andrew.Keim@rcaanc-cirnac.gc.ca or Bill Pain at (867) 767-9234 ext. 53117 or bill_pain@gov.nt.ca.

Sincerely,

Andrew Keim

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Manager
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Crown-Indigenous Relations and Northern Affairs Canada
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CC.

Spencer Dewar, A/Regional Director General -CIRNAC
Bill Pain, Manager, Water Regulatory, Regulatory and Permitting Division, GNWT-ECC



Engagement on the updates to RECLAIM 8.0 and associated User Manual

Important Dates:

Roll out of updated Reclaim 8.0 tool for public engagement	January 23, 2025
Initial public engagement and commenting period deadline	March 3, 2025
Revised public engagement and commenting period deadline	March 31, 2025
CIRNAC and GNWT feedback to public and further engagement	April 7-10, 2025 Iqaluit, Nunavut
CIRNAC and GNWT (a summary of feedback to date)(1)	April 22, 2025
GNWT and CIRNAC feedback to public and further engagement	May 12-16, 2025 Yellowknife, NWT
Second round of public feedback commenting deadline	May 30, 2025
CIRNAC and GNWT (a summary of feedback to date)(2)	June 16, 2025
Third round of public feedback commenting deadline	July 16, 2025
Expected date of implementation of RECLAIM 8.0 Tool	August 1, 2025

Appendix A: Written feedback received in the first RECLAIM 8.0 public engagement and commenting period

Reviewer	No.	Topic	Reviewer Comment	Reviewer Recommendation
Arctic Canadian Diamond Company Ltd. - Feyisetan Adebayo	1	Letter	Please see attached letter.	N/A
Arctic Canadian Diamond Company Ltd. - Feyisetan Adebayo	2	Origin of Unit Rates	<p>Burgundy Diamond Mines (Burgundy) and other proponents have been requesting that CIRNAC and GNWT provide the level of transparency and justification for RECLAIM unit rates that is demanded of proponents who put forward site-specific unit rates. This long-standing request remains wholly unsatisfied by the information provided with RECLAIM 8.0.</p> <p>For example, the proposed "load/haul/place" unit rates are described as being derived from "First Principles". However, simply referencing "First Principles" and listing a few assumptions under additional notes does not provide proponents with the information needed to adequately understand the unit rate or assess appropriateness for a specific site.</p>	RECLAIM 8.0 should be accompanied by clear, detailed data on the derivation of the proposed unit rates, ensuring proponents can adequately understand the rates and make a rational determination of their appropriateness for an individual site or closure activity.
Arctic Canadian Diamond Company Ltd. - Feyisetan Adebayo	3	Moving Mobilization and ICM to Capital Costs	Mobilization and ICM costs were previously included under Indirect Costs which excluded them from the indirect percentage calculations. The new approach introduces a compounding effect and will significantly inflate the overall security estimate. This would result in overestimations that do not accurately reflect actual closure and reclamation needs particularly for major operations such as Ekati Diamond Mine (Ekati) with substantial security requirements.	The Mobilization and ICM costs should be maintained under Indirect Costs where the existing indirect cost percentages can adequately account for variations. This would avoid the compounding effect introduced by their inclusion in Capital Costs while still ensuring these costs are adequately captured within the model.
Arctic Canadian Diamond Company Ltd. - Feyisetan Adebayo	4	Owner's Representative	A new line has been added under Indirect Costs for Owners Representative to ensure that project objectives are met, with a default percentage of 10% of the direct costs assigned. The assigned percentage appears excessively high particularly for licencees with substantial direct costs.	The assigned 10% default percentage should be reevaluated and a reduction considered to better align with actual project requirements and industry norms. Additionally, more information should be provided to clarify the methodology and rationale behind determining this percentage and to assess its applicability across different projects. An alternate approach, such as an estimated cost (rather than a percentage) should also be developed and evaluated.
Arctic Canadian Diamond Company Ltd. - Feyisetan Adebayo	5	HHERA and Final CRP Costs	<p>The cost to complete a Human Health and Ecological Risk Assessment (HHERA) and Final Closure and Reclamation Plan (FCRP) has been added to the model at 3% and 4% of Capital Costs, respectively. While it is acknowledged that FCRP costs may not have been explicitly included in RECLAIM 7.0, the regular review of security estimates has ensured their incorporation for operations like Ekati. The most recent review by the GNWT in 2022 determined a significantly lower FCRP rate of approximately 1% of direct costs. There is no rationale for applying these items as a percentage of total rather than an estimated cost. These items are well established and well defined in scope and cost such that actual estimates can readily be developed. A percentage of total as proposed provides a grossly over-costed estimate for large site such as Ekati.</p> <p>Moreover, the risks addressed by HHERA are already evaluated as part of the permitting process. Monitoring data is utilized to assess operational and closure risks, which are accounted for in interim CRPs that are mandatory and regularly updated. As such, the addition of these costs in the proposed model is deemed unnecessary and the proposed percentages appear excessively high.</p>	Burgundy recommends that HHERA and FCRP costs be excluded from the model. Alternatively, these percentages should not be based on Capital Costs given that risk evaluations and FCRP development will rely significantly on existing assessments and CRP plans developed during ongoing operations. A reduction or redefinition of these percentages is necessary to ensure they more accurately reflect the actual scope of work and associated costs. An alternate approach of an estimated cost (i.e., not a percentage) should be developed and evaluated.

Arctic Canadian Diamond Company Ltd. - Feyisetan Adebayo	6	Future Value Calculation	<p>The future value calculation has been introduced to capture the anticipated costs of activities based on when they are expected to occur. A default inflation rate of 3% is applied which corresponds to the Bank of Canada’s upper target for annual inflation. For example, a cost estimate developed in 2028 using RECLAIM 8.0 standard rates would undergo a 3% annual inflation increase over four years (2024 to 2028). However, applying a predetermined, singular inflation rate is not appropriate when actual data is available. It is also not always suitable to apply the same inflation rate across all work included in a closure estimate. RECLAIM 8.0 documentation acknowledges the existence of various inflation estimates beyond the broad-based consumer-oriented CPI, but it discounts these approaches. Since the majority of mine closure plan costs are not consumer-oriented, it may not be appropriate to apply the general CPI across the entire estimate. Ekati's security estimates already incorporate an inflation calculator developed with stakeholders' input. This calculator considers the development year of each unit cost and applies inflation rates accordingly, resulting in inflation rates of less than 2%.Applying the upper target of the Bank of Canada’s inflation range may lead to overestimations, given that average inflation rates have remained between 1.5% and 2%. This approach is not ideal for long-term mine closure costing, as it introduces inflation without accounting for interest. It assumes that the financial security is cash in hand, which does not accrue interest over time. By comparison, the Province of British Columbia uses a net discount factor (i.e., net of both inflation and interest) for recurring long-term costs. The approach proposed in RECLAIM 8.0 introduces a substantial cost factor that could significantly affect project viability. This issue requires detailed engagement and financial analysis by the government before any consideration for implementation.</p>	<p>1. RECLAIM 8.0 should provide a clear rationale for adopting a single pre-determined inflation factor and consider developing an alternative approach that utilizes inflation rates most appropriate to the specific work and costs within the closure cost estimate. The future value inflation rate should be revised to reflect a more accurate figure, such as the average of historical inflation data over a relevant timeframe, rather than defaulting to the upper target of 3%.This adjustment would result in a more balanced and accurate estimate, avoiding excessive conservatism in the model. Additionally, greater transparency is needed in how inflation rates are applied to different unit costs over time to ensure consistency and confidence.2. This cost item should not be implemented without specific, in-depth engagement and financial analysis including an evaluation of experiences in other regulatory jurisdictions.</p>
Arctic Canadian Diamond Company Ltd. - Feyisetan Adebayo	7	Incentivizing Progressive Reclamation	<p>The proposed updates to RECLAIM 8.0 emphasize increasing securities to address potential reclamation costs. It is equally important to incentivize progressive reclamation during operations. Progressive reclamation not only reduces overall closure liabilities but also demonstrates ongoing commitment to environmental stewardship. Models used in jurisdictions such as Quebec and the Alberta oilsands provide practical examples of incentivizing progressive reclamation by allowing operators to utilize existing securities during operations, thereby encouraging earlier action rather than deferring it until closure.</p>	<p>Burgundy recommends that the GNWT implement mechanisms to incentivize progressive reclamation activities during operations. This could include provisions that allow for the partial release or reallocation of securities to fund reclamation efforts. Such measures would enhance operational efficiency, reduce the financial burden of increasing securities and encourage operators to proactively incorporate reclamation into their operational plans. This approach would ultimately lead to more sustainable and cost-effective closure outcomes.</p>
Arctic Canadian Diamond Company Ltd. - Feyisetan Adebayo	1	Review Data Extension	<p>Agnico Eagle supports the letter issued by the NWT & Nunavut Chamber of Mines¹ which requested an extension to fulfill the review and provide comment on RECLAIM 8.0.</p> <p>As was apparent at the January 23, 2025 Engagement and Feedback Session, and echoed again in the NWT & Nunavut Chamber of Mines letter, there were many uncertainties and risks identified by Industry, including time to complete a detailed and adequate review of all the proposed changes under RECLAIM 8.0. As outlined in Section 2 of this letter, Agnico Eagle has undertaken an initial review and provided some comments and recommendations; however, a detailed fulsome review has not been executed at this stage.</p>	<p>Agnico Eagle supports the letter issued by the NWT & Nunavut Chamber of Mines¹ which requested an extension to fulfill the review and provide comment on RECLAIM 8.0.</p>
Agnico Eagle Mines Limited – Jamie Quesnel	2	Documents received	<p>This is a preliminary review due to the short timeline</p>	<p>More time is required to complete a comprehensive review of the documentation provided</p>
Agnico Eagle Mines Limited – Jamie Quesnel	3	Reclamation Policy	<p>As the reason is unknown why the Reclaim V8 was changed, plus we have an undefined process we are following, and this creates uncertainty.</p>	<p>Develop a policy update with a defined process of consultation, etc., and define the triggers for a material change.</p>

Agnico Eagle Mines Limited – Jamie Quesnel	4	FILE: (RECLAIM 8 Reference Tables_Working Copy.xlsx) TAB: Table 1 SECTION: 3 Unit Rate Development LINE: ""Only a day shift is considered" and ""Work week for earthwork (rock, soil, riprap excavation, hauling to waste dump is 7 days a week x 10 hours per day = 70 hours per week"	The example breakout of unit rate development, expanded on by FILE: (Attachment A to the Supplementary info provided Feb 18 2025.pdf) indicates that only 10 hours per day, on day shift, is used for unit rate development. No overnight work is considered.	Unit rates should be developed assuming 24 hour operation where practical. SUPPORTING RATIONALE: Operating Mines, particularly in the North, require round the clock operation for maximum equipment utilization and operation effectiveness. Haul trucks engines must be active around the clock to ensure operability and neglecting night shift utilization ignores real operating expenditures.
Agnico Eagle Mines Limited – Jamie Quesnel	5	FILE: (RECLAIM 8 Reference Tables_Working Copy.xlsx) TAB: Table 1 SECTION: 3 Unit Rate Development LINE: ""Only a day shift is considered"	The example breakout of unit rate development, expanded on by FILE: (Attachment A to the Supplementary info provided Feb 18 2025.pdf) indicates that only 10 hours per day, on day shift, is used for unit rate development. No night work is considered.	Operating Mines, particularly in the North require round the clock operation for maximum equipment utilization and operation effectiveness. SUPPORTING RATIONALE: Neglecting potential night shift work unnecessarily extends project schedule and therefore unnecessarily inflates overall project costs.
Agnico Eagle Mines Limited – Jamie Quesnel	6	FILE: (RECLAIM 8 Reference Tables_Working Copy.xlsx) TAB: Table 1 SECTION: 3 Unit Rate Development LINE: ""The labour cost included in the unit rates considered the following cost: ... - Indirect labour"	The battery limits for "indirect labour" included in unit rate development is not adequately defined. RECLAIM includes indirect activities such as Project Management and Engineering Design applied as a general percentage of direct costs.	Clarify what indirect labour is included in the calculated unit rates based on the data source (i.e. BC Blue Book, Alberta Equipment Rental Rates Guide, etc.) SUPPORTING RATIONALE: Consistent application of included cost is important to avoid applying blanket percentage based indirect cost to already existing indirect expenses.
Agnico Eagle Mines Limited – Jamie Quesnel	7	FILE: (RECLAIM 8 Reference Tables_Working Copy.xlsx) TAB: Table 1 SECTION: 3 Unit Rate Development LINE: "The labour cost included in the unit rates considered the following cost: ... - Site supervision and administration"	The labour cost included in the unit rates considered the following cost: Site supervision and administration	Clarify what site supervision and administration is included in the calculated unit rates based on the data source (i.e. BC Blue Book, Alberta Equipment Rental Rates Guide, etc.). SUPPORTING RATIONALE: Consistent application of included cost is important to avoid applying blanket percentage based indirect cost to already existing indirect expenses. Project management, Health and Safety Monitoring & QC as an indirect cost is applied as a blanket % to all costs.

Agnico Eagle Mines Limited – Jamie Quesnel	8	FILE: (RECLAIM 8 Reference Tables_Working Copy.xlsx) TAB: Table 1 SECTION: 3 Unit Rate Development LINE: "Exclusion ...- Project indirect cost"	The battery limits for "indirect cost" included in unit rate development is not adequately defined.	Clarify what indirect cost is included in the calculated unit rates based on the data source (i.e. BC Blue Book, Alberta Equipment Rental Rates Guide, etc.) SUPPORTING RATIONALE: Consistent application of included cost is important to avoid applying blanket percentage based indirect cost to already existing indirect expenses.
Agnico Eagle Mines Limited – Jamie Quesnel	9	FILE: (RECLAIM 8 Reference Tables_Working Copy.xlsx) TAB: Table 1 SECTION: 5 Exclusions LINE: "- First Fills"	First fills are excluded from unit cost build up.	Clarify which data source (i.e. BC Blue Book, Alberta Equipment Rental Rates Guide, etc.) is being used for each buildup that excludes first fills. SUPPORTING RATIONALE: Consistent application inclusions and exclusions are important for usability of RECLAIM. Suggest using one data source for all unit rate buildup.
Agnico Eagle Mines Limited – Jamie Quesnel	10	FILE: (RECLAIM 8 Reference Tables_Working Copy.xlsx) TAB: Table 1 SECTION: 4 Clarifications and Qualifications LINE: "- Freight for the bulk materials such as granular, concrete and HDPE pipes are included with the unit rates"	Proposed unit rate buildup includes freight for bulk materials. This necessitates site specific unit rate for all bulk materials as freight costs can vary substantially between sites. There is already a section within the RECALIM mobilization tab to capture freight cost.	Bulk material default unit rates should exclude freight. Freight for materials should be included separately based on a site specific unit cost for material mobilization, captured in the RECLAIM Mobilization tab.
Agnico Eagle Mines Limited – Jamie Quesnel	11	FILE: (RECLAIM 8 Reference Tables_Working Copy.xlsx) TAB: Table 1 SECTION: 4 Clarifications and Qualifications LINE: "- It is assumed there is no batch plant required. All concrete will be delivered to site to use"	The clarification that no batch plant will be required constricts operational planning. In some cases it is more cost effective to commission a batch plant and ship bulk concrete than to use premix product.	Freight of premix concrete products is not always practical for northern projects based on mobilization constraints and the use of a batch plant should be considered when operationally and financially advantageous.
Agnico Eagle Mines Limited – Jamie Quesnel	12	FILE: (Attachment A to the Supplementary info provided Feb 18 2025.pdf) SECTION: contractor indirects LINE: Mobilization/Demobilization 6.0%	Contractor indirects, specifically mobilization/demobilization, are shown as separate adders to the base rates for equipment and labour direct costs. RECLAIM considers mobilization and demobilization costs separately from operating unit rates as part of the Mobilization tab.	Exclude mobilization/demobilization cost from unit rate development. Clarify which data source (i.e. BC Blue Book, Alberta Equipment Rental Rates Guide, etc.) is being used for each buildup and if mobilization/demobilization cost has been accounted for with respect to the overall RECLAIM workbook.

Agnico Eagle Mines Limited – Jamie Quesnel	13	FILE: (Attachment A to the Supplementary info provided Feb 18 2025.pdf) SECTION: contractor indirects	A variety of sources for equipment operating costs as well as labour costs are indicated as being used as a basis for unit rate calculations. There are substantial differences in the factors included in each of the sources for equipment operating costs. For example, BC Blue Book and Alberta Equipment Rental Rates Guide are used interchangeably in FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Unit_Rates but BC Blue Book equipment operating rates do not explicitly include contractor overhead and profit whereas Alberta Equipment Rental Rates Guide does. The provided unit rate example in FILE: (Attachment A to the Supplementary info provided Feb 18 2025.pdf) SECTION: contractor indirects, if using Alberta Equipment Rental Rates Guide for equipment or manpower hourly rates is applying an additional 12.50% Mark-up & Profit on a rate that already includes Mark-up & Profit.	Default unit rates provided in RECLAIM 8 should use a consistent source reference for all equipment and manpower hourly rates with clearly defined buildup of direct and indirect components.
Agnico Eagle Mines Limited – Jamie Quesnel	14	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Unit_Costs ITEM: "Buildings - Remove" COST CODE: BRW, BRC, BRS1, BRS2	Cost Codes: BRW, BRC, BRS1, BRS2 have no default HIGH unit rate provided as part of RECLAIM 8.0 example. RECLAIM 7.0 provided a HIGH unit rate for these cost codes resulting in a 1:1 comparison between RECLAIM 8.0 default unit costs and RECLAIM 7.0 unit costs.	RECLAIM 8.0 should include a default HIGH unit rate for all default cost codes that have a defined HIGH unit rate in RECLAIM 7.0
Agnico Eagle Mines Limited – Jamie Quesnel	15	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Unit_Costs ITEM: "Excavate Rock - Low Spec (e.g. Stockpile Source, Bulk Fill)" COST CODE: RB1, RB2	The detail defining what activity COST CODES RB1 and RB2, refers to has been changed in RECLAIM 8.0 from RECLAIM 7.0. RECLAIM 7.0 defines RB1 as "drill/blast/load/short haul" RECLAIM 8.0 defines RB1 as "load/haul/place" RECLAIM 7.0 defines RB2 as "drill/blast/load/long haul" RECLAIM 8.0 defines RB2 as "RB1 + spread and compact" This respondent uses COST CODE RB2 to represent activities requiring "drill/blast/load/long haul" but NOT "spread and compact" To accommodate the change in COST CODE detail from RECLAIM 7.0 to RECLAIM 8.0 >\$10 million of activities on a single site would need to be recoded to avoid implying "spread and compact" is required for these activities.	Follow consistent database practice: cost code details and units should not change. New cost codes should be used for new activities. Existing cost codes should not be removed or modified.
Agnico Eagle Mines Limited – Jamie Quesnel	16	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Unit_Costs ITEM: "Excavate Rock - Low Spec (e.g. Stockpile Source, Bulk Fill)" COST CODE: RB3, RB4	COST CODE: RB3 and RB4 have been removed from RECLAIM 8.0 RECLAIM 7.0 COST CODE RB3 DETAIL: "RB1 + spread and compact" is the same as RECLAIM 8.0 CODE RB2 DETAIL: "RB1 + spread and compact" RECLAIM 7.0 COST CODE RB4 DETAIL: "RB2 + spread and compact" has no equivalent in RECLAIM 8.0 Where cost codes RB3 and RB4 are used in existing RECLAIM 7.0 a port of activities to RECLAIM 8.0 will result in an REF# error necessitating a custom unit rate to restore the value of previously evaluated activities.	Follow consistent database practice: cost code details and units should not change. New cost codes should be used for new activities. Existing cost codes should not be removed or modified.
Agnico Eagle Mines Limited – Jamie Quesnel	17	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Unit_Costs ITEM: "Excavate Rock - High Spec (i.e. Rip Rap, Screened)" COST CODE: RC3, RC4	COST CODE: RC3 and RC4 have been removed from RECLAIM 8.0 RECLAIM 7.0 COST CODE RC3 DETAIL: "RC1 + spread and compact" is the same as RECLAIM 8.0 CODE RC2 DETAIL: "RC1 + spread and compact" RECLAIM 7.0 COST CODE RC4 DETAIL: "RC2 + spread and compact" has no equivalent in RECLAIM 8.0 Where cost codes RC3 and RC4 are used in existing RECLAIM 7.0 a port of activities to RECLAIM 8.0 will result in an REF# error necessitating a custom unit rate to restore the value of previously evaluated activities.	Follow consistent database practice: cost code details and units should not change. New cost codes should be used for new activities. Existing cost codes should not be removed or modified.

Agnico Eagle Mines Limited – Jamie Quesnel	18	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Unit_Costs ITEM: "Excavate Soil - Low Spec (i.e. bulk fill and excavation)" COST CODE: SB1, SB2	The detail defining what activity COST CODES SB1 and SB2, refers to has been changed in RECLAIM 8.0 from RECLAIM 7.0. RECLAIM 7.0 defines SB1 as "excavate/load/short haul" RECLAIM 8.0 defines SB1 as "excavate/load/haul/place" RECLAIM 7.0 defines SB2 as "excavate/load/long haul" RECLAIM 8.0 defines SB2 as "SB1 + spread and compact" This respondent uses COST CODE SB2 to represent activities requiring "excavate/load/long haul" but NOT "spread and compact"	Follow consistent database practice: cost code details and units should not change. New cost codes should be used for new activities. Existing cost codes should not be removed or modified.
Agnico Eagle Mines Limited – Jamie Quesnel	19	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Unit_Costs ITEM: "Excavate Soil - Low Spec (i.e. bulk fill and excavation)" COST CODE: SB3, SB4	COST CODE: SB3 and SB4 have been removed from RECLAIM 8.0 RECLAIM 7.0 COST CODE SB3 DETAIL: "SB1 + spread and compact" is the same as RECLAIM 8.0 CODE SB2 DETAIL: "SB1 + spread and compact" RECLAIM 7.0 COST CODE SB4 DETAIL: "SB2 + spread and compact" has no equivalent in RECLAIM 8.0 Where cost codes SB3 and SB4 are used in existing RECLAIM 7.0 a port of activities to RECLAIM 8.0 will result in an REF# error necessitating a custom unit rate to restore the value of previously evaluated activities. This respondent would need to recode >\$35 million of activities at one site.	Follow consistent database practice: cost code details and units should not change. New cost codes should be used for new activities. Existing cost codes should not be removed or modified.
Agnico Eagle Mines Limited – Jamie Quesnel	20	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Unit_Costs ITEM: "Excavate Soil - High Spec (i.e. Engineered Covers, Spillway Clearing, etc.)" COST CODE: SC1, SC2	The detail defining what activity COST CODES SC1 and SC2, refers to has been changed in RECLAIM 8.0 from RECLAIM 7.0. RECLAIM 7.0 defines SC1 as "excavate/load/short haul" RECLAIM 8.0 defines SC1 as "excavate/load/haul/place" RECLAIM 7.0 defines SC2 as "excavate/load/long haul" RECLAIM 8.0 defines SC2 as "SC1 + spread and compact" This respondent uses COST CODE SC2 to represent activities requiring "excavate/load/long haul" but NOT "spread and compact"	Follow consistent database practice: cost code details and units should not change. New cost codes should be used for new activities. Existing cost codes should not be removed or modified.
Agnico Eagle Mines Limited – Jamie Quesnel	21	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Unit_Costs ITEM: "Excavate Soil - High Spec (i.e. Engineered Covers, Spillway Clearing, etc.)" COST CODE: SC3, SC4	COST CODE: SC3 and SC4 have been removed from RECLAIM 8.0 RECLAIM 7.0 COST CODE SC3 DETAIL: "SC1 + spread and compact" is the same as RECLAIM 8.0 CODE SC2 DETAIL: "SC1 + spread and compact" RECLAIM 7.0 COST CODE SC4 DETAIL: "SC2 + spread and compact" has no equivalent in RECLAIM 8.0 Where cost codes SC3 and SC4 are used in existing RECLAIM 7.0 a port of activities to RECLAIM 8.0 will result in an REF# error necessitating a custom unit rate to restore the value of previously evaluated activities.	Follow consistent database practice: cost code details and units should not change. New cost codes should be used for new activities. Existing cost codes should not be removed or modified.
Agnico Eagle Mines Limited – Jamie Quesnel	22	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Unit_Costs ITEM: "Pipes, small (<6in dia.)" COST CODE: PSS, PSI	COST CODES: PSS and PSI have been removed from RECLAIM 8.0 and have been replaced more precisely defined pipe sizes. For projects with established closure designs the new cost codes will allow for increased costing precision and where applicable existing projects should update their RECLAIM accordingly. The RECLAIM 7.0 cost codes are still applicable to projects without established closure designs and should be retained.	Follow consistent database practice: cost code details and units should not change. New cost codes should be used for new activities. Existing cost codes should not be removed or have details modified. RECOMMEND retain cost codes for RECLAIM 7.0 pipe size categories <6in dia. and preserve additional defined pipe size cost codes.

Agnico Eagle Mines Limited – Jamie Quesnel	23	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Unit_Costs ITEM: "Pipes, large (>6in dia.)" COST CODE: PPLR, PLS, PLI	COST CODES: PLR, PLS and PLI have been removed from RECLAIM 8.0 and have been replaced more precisely defined pipe sizes. For projects with established closure designs the new cost codes will allow for increased costing precision and where applicable existing projects should update their RECLAIM accordingly. The RECLAIM 7.0 cost codes are still applicable to projects without established closure designs and should be retained.	Follow consistent database practice: cost code details and units should not change. New cost codes should be used for new activities. Existing cost codes should not be removed or have details modified. RECOMMEND retain cost codes for RECLAIM 7.0 pipe size categories <6in dia. and preserve additional defined pipe size cost codes
Agnico Eagle Mines Limited – Jamie Quesnel	24	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Unit_Costs ITEM: "Pumps" COST CODE: PS	Pumps, Pump shipping COST CODE: PS unit changed from RECLAIM 7.0 lump sum (each) to, RECLAIM 8.0 percentage (%) of pump cost.Existing RECLAIM 7.0 projects have taken to account shipping of pumps, by lump sum (each) as part of the mobilization calculation. Shipping cost is generally site specific and existing calculations should remain valid. Shipping cost as a % of pump capital cost could be a useful default unit rate for establishing projects.	Follow consistent database practice: cost code details and units should not change. New cost codes should be used for new activities. Existing cost codes should not be removed or have details modified. RECOMMEND adding new cost code for shipping as a % of capital cost
Agnico Eagle Mines Limited – Jamie Quesnel	25	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Unit_Costs ITEM: "Pumps" COST CODE: POC	Pumps, Pump operating cost COST CODE: POC unit changed from RECLAIM 7.0 m3 (volume pumped) to, RECLAIM 8.0 kw-h (power cost).Pump operating cost is certainly predicated on site power cost but the relationship between pumped volume and power draw is based on site specific conditions. Volume of water is the unit of measure for reclamation activities and using a second unit of measure to determine cost would introduce additional complexity.	Follow consistent database practice: cost code details and units should not change. New cost codes should be used for new activities. Existing cost codes should not be removed or have details modified. RECOMMEND pump operation based on cost per volume pumped.
Agnico Eagle Mines Limited – Jamie Quesnel	26	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: ICM ITEM: Human Health and Ecological Risk Assessment (% Closure Costs)	Human Health and Ecological Risk Assessment (% Closure Costs): Cost to develop a site specific HHERA is warranted and should consider work already completed to capture the real effort and cost to achieve closure.	Implement a sliding scale for HHERA related costs similar to the already existing table for contingency cost based on project maturity, and the cost and effort required to achieve closure.
Agnico Eagle Mines Limited – Jamie Quesnel	27	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: ICM ITEM: Finalize Closure and Reclamation Plan (% Closure Costs)	Finalize Closure and Reclamation Plan (% Closure Costs): Cost to develop Final Closure and Reclamation plan is warranted and should consider work already completed to capture the real effort and cost to achieve closure.	Implement a sliding scale for Finalize Closure and Reclamation Plan related costs similar to the already existing table for contingency cost based on project maturity, and the cost and effort required to achieve closure.
Agnico Eagle Mines Limited – Jamie Quesnel	28	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Summary ITEM: Engineering Design	Indirect Costs: Engineering Design : Cost for engineering design is warranted and should consider work already completed to capture the real effort and cost to achieve closure	Implement a sliding scale for Engineering Design Indirect Costs similar to the already existing table for contingency cost based on project maturity, and the cost and effort required to achieve closure.
Agnico Eagle Mines Limited – Jamie Quesnel	29	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Summary ITEM: Project Management	Indirect Costs: Project Management : Cost for project management is warranted and should consider work already completed to capture the real effort and cost to achieve closure.	Implement a sliding scale for Project Management Indirect Costs similar to the already existing table for contingency cost based on project maturity, and the cost and effort required to achieve closure.

Agnico Eagle Mines Limited – Jamie Quesnel	30	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Summary ITEM: Health and Safety Plans/Monitoring & QC	Indirect Costs: Health and Safety Plans/Monitoring & QC : Cost for Health and Safety Plans/Monitoring & QC is warranted and should consider work already completed to capture the real effort and cost to achieve closure.	Implement a sliding scale to account for project maturity and the cost and effort required to achieve closure.
Agnico Eagle Mines Limited – Jamie Quesnel	31	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Summary ITEM: Bonding / Insurance	Indirect Costs: Bonding / Insurance : Cost for Bonding and Insurance is warranted and should consider work already completed to capture the real effort and cost to achieve closure. This cost should also account for the reliability and ease of use of the financial assurance instrument used by the mine owner as well as the financial reliability of the mine owner, represented by third party credit rating. Typical operating project bonding and insurance costs for third parties are historically <1% total project cost.	Implement a sliding scale to account for owner reliability, project maturity, and the cost and effort required to achieve closure. Established mining companies at low risk of becoming insolvent should have their efforts to achieve closure recognized.
Agnico Eagle Mines Limited – Jamie Quesnel	32	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Summary ITEM: Engagement and Regulatory Compliance	Indirect Costs: engagement and regulatory compliance cost is unwarranted and should not be borne by the mine owner. The addition of this indirect cost is inconsistent with the polluter pays principal that guides the development of closure security.	Mine owners operating in good faith to service their closure obligations, including through regulatory compliance and engagement, should not be made to bear burden of costs outside their influence.
Agnico Eagle Mines Limited – Jamie Quesnel	33	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Summary ITEM: Contingency	Indirect Costs: Contingency : Cost for contingency is warranted and should consider work already completed to capture the real effort and cost to achieve closure. There is currently a sliding scale for contingency, codified in the RECALIM 7.0 user manual, but the benchmarks set out are not representative of the level of contingency requested by CIRNAC and recommended by Brodie Consulting. The RECLAIM 8.0 contingency scale, based on AACE International Recommended Practice No. 10S- 90 representative of current industry practice and can be augmented with other factors such as owner financial strength, path to closure, and financial instrument of security.	Contingency sliding scale should reflect project lifecycle maturity, the financial strength of the owner, the financial instrument of closure security and the cost and effort required to achieve closure.
Agnico Eagle Mines Limited – Jamie Quesnel	34	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Summary ITEM: Owners Representative	Indirect Costs: Owners representative cost is unwarranted and should not be borne by the mine owner. The addition of this indirect cost is inconsistent with the polluter pays principal that guides the development of closure security.	Mine owners operating in good faith to service their closure obligations should not be made to bear burden of costs outside their influence. This line item addition represents a significant burden to all mining companies and it may impact the viability of future developments.
Agnico Eagle Mines Limited – Jamie Quesnel	35	FILE: (20250116_Reclaim_8.0_MineExample.xlsx) TAB: Summary ITEM: Site Specific Future Value Inputs	FILE: reclaim 8.0 User Manual_Working Copy.pdf affirms that the determination of future costs must include all parameters including the Net Present Value of those costs. The Site Specific Future Value Inputs projects a future cost without including for the future value of the security	If RECLAIM is to project factors such as inflation it should also account for the present value of money at the time of projection. A prescribed NPV calculation with appropriate discount rate should be applied alongside all Post-Closure costs and future projections.
B2G Back River Corp. Nunavut – Merle Keefe	1	Review Data Extension	B2Gold Nunavut is presently unable to meet the requested date for the submission of comments and therefore supports a recent request made by the NWT& Nunavut Chamber of Mines (Chamber) to extend the comment period deadline. B2Gold Nunavut also supports the request for an additional workshop or working session to support this collaborative review of the proposed updates to RECLAIM. The Chamber submission is attached to this letter.	Request for an additional workshop or working session to support this collaborative review of the proposed updates to RECLAIM

B2G Back River Corp. Nunavut – Merle Keefe	2	N/A	In Table A of the Supplementary Information on RECLAIM V8 February 18,2025, Comment from Technical Working Group only includes very high-level information with no supporting evidence for decisions made.	Provide detailed supporting evidence to support the Technical Working Group Comments, both in the nature of the decision (e.g., to include additional cost), as well as the magnitude associated with the decision (e.g., The default percentages for project management and engineering were both increased as per later recommendations).
B2G Back River Corp. Nunavut – Merle Keefe	3	N/A	In Table B of the Supplementary Information on RECLAIM V8 February 18,2025, the Rationale provided includes "actual cost for Mine Closure and Reclamation at various locations across Canada". No visibility is provided as to the size of these projects. While it is acknowledged that smaller projects could have a larger percent of Indirect Costs, no justification or evidence is provided to demonstrate the 58% of Indirect Costs of larger projects (i.e., greater than \$100M in Direct Costs) is justifiable.	Provide detailed supporting evidence to outline the significant increase in Indirect Costs is justified for projects greater than \$100M in Direct Costs.
B2G Back River Corp. Nunavut – Merle Keefe	4	N/A	Insufficient evidence was provided to justify the addition of Site Specific Future Value Inputs to the RECLAIM model. Insufficient instructions were provided on the Site Specific Future Value Inputs.	Provide detailed supporting evidence to justify the addition of the Site Specific Future Value Inputs. Provide detailed instructions and examples for use of Site Specific Future Value Inputs. Why are Site Specific Future Value Inputs included when the model currently includes the Market Factor Price Adjustment under Indirect Costs? How are Site Specific Future Value Inputs any different than Market Factor Price Adjustment and is there any discount factor applied to future value?
B2G Back River Corp. Nunavut – Merle Keefe	5	N/A	Under Owner's Representative in the Supplementary Information on RECLAIM V8 February 18,2025, it is stated "A review of recent projects where Owners Representative costs were incurred at mining closure and reclamation projects ranged from 12% to greater than 20%."	Provide detailed evidence to validate Owner's Representative costs "ranged from 12% to greater than 20%".
B2G Back River Corp. Nunavut – Merle Keefe	6	N/A	In Attachment A to the Supplementary info provided Feb 18 2025, the short load/haul/place unit rates includes approximately 59% of Indirect costs within this hourly rate. Once this unit rate is used, an additional 58% Indirect Costs would be applied to this value on the Summary tab of the RECLAIM model.	Provide detailed evidence to justify why the indirect costs built into the hourly rate are not duplicative of the Indirect Costs applied on the RECLAIM model summary tab.
B2G Back River Corp. Nunavut – Merle Keefe	7	N/A	Under Conclusion in the Supplementary Information on RECLAIM V8 February 18,2025, it is stated "Progressive reclamation activities should also be considered to minimize held securities and reduce overall contingencies." However no additional information is provided on progressive reclamation and the RECLAIM model includes no mechanism/system/guidance to allow owners to recover funds for reclamation work completed.	Include a formal mechanism within the RECLAIM model to calculate and account for progressive reclamation and include in the RECLAIM manual steps and guidance for how owner will recover funds for reclamation work completed.

Baffinland Iron Mines Corporation – Lou Kamermans	1	Procedural Fairness	<p>Due to the short timeline to review the proposed changes, Baffinland has not had a full opportunity to conduct an in-depth review of the technical information supporting the RECLAIM 8.0 update. Respectfully, the timeline that was provided to industry for this initial round of comments is not adequate given the importance of RECLAIM to the Nunavut mining industry and the very serious potential impacts that have already been identified through the minimal consultation that has occurred to date. We are concerned that RECLAIM 8.0 could be advanced further despite these procedural deficiencies and the serious concerns expressed by industry to date. Given the significance of these changes to the mining industry in Nunavut and the Northwest Territories, and the potential direct impacts that it will have on Baffinland, we are providing initial high-level comments and recommendations below. In providing these comments, we reserve the right to provide further and more detailed comments, following further industry engagement and once better information is shared by CIRNAC and GNWT.</p>	<p>A. CIRNAC should engage stakeholders and Inuit organizations in a meaningful consultation process before finalizing the changes. Respectfully, the process described in the letter to the Chamber of March 18, 2025 does not achieve this standard.B. Third public review and comment period should only occur after CIRNAC has produced a version of RECLAIM 8.0 revised based on comments. A further workshop may be necessary to review this revised RECLAIM 8.0 before any final comment period.C. The overall timelines suggested in the process letter of March 18 are inadequate. For example, with respect to the suggested expected date of implementation of RECLAIM 8.0 [August 1, 2025], it is apparent that there would be no meaningful opportunity for feedback provided during the third round of public feedback (due July 16, 2025).D. CIRNAC should advise how they intend to engage with NTI and RIOs on impacts to their rights resulting from this policy change, with associated timelines, before RECLAIM 8.0 is adopted. E. CIRNAC should advise how they intend to engage with GN resulting on impacts relating to devolution resulting from this policy change (including spinoff economic effects), with associated timelines, before RECLAIM 8.0 is adopted.</p>
Baffinland Iron Mines Corporation – Lou Kamermans	2	Economic impact of RECLAIM 8.0	<p>As Canada is trying to promote economic development and critical minerals development, which includes high grade iron ore, the additional security concepts and requirements proposed by CIRNAC in RECLAIM 8.0 will only make it harder to develop and maintain what we have. The changes proposed by CIRNAC will negatively impact mine financing and development by increasing security requirements and financial obligations without an adequate and corresponding industry consultation process. Any potential lack of engagement with industry and designated Inuit organizations undermines the legitimacy of these updates as a policy framework. Furthermore, as highlighted above, the RECLAIM 8.0 approach appears to disincentive projects with longer lifespans and greater water liability marks, which is in direct opposition to existing territorial and federal economic development policies and mandates. Without proper consultation, these changes will create uncertainty and deter investment in northern mining projects. Baffinland recommends that a comprehensive economic impact analysis be conducted to assess the implications of RECLAIM 8.0 on northern mining investment and development. Given the closure of major diamond mines in the North-West Territories and the absence of advanced stage projects in both the North-West Territories and Nunavut, apart from government funded infrastructure, the economic consequences of these changes should be thoroughly evaluated before implementation. An industry-commissioned economist could provide valuable insight into these potential impacts, and the results should be available before major policy decisions are finalized.</p>	<p>A. CIRNAC should conduct a comprehensive economic impact analysis to assess how RECLAIM 8.0 will affect mining investment and development in Nunavut. Industry and other stakeholders should be engaged on this question specifically as part of this analysis.</p> <p>B. As part of this analysis, CIRNAC should produce a third party expert prepared report on the potential economic impact of the proposed cost escalations on the mining industry in Nunavut. RECLAIM 8.0 has been provided without assessment of the negative economic impacts that could result from the significant policy change RECLAIM 8.0 represents. The independent economist selected for this task should have experience representing industry and have Northern expertise.</p>

Baffinland Iron Mines Corporation – Lou Kamermans	3	Rates and Cost Estimates	<p>The proposed updates to RECLAIM 8.0 introduce significant cost increases that could have long-term economic implications for mining projects in the North. These cost escalations require careful scrutiny to ensure they align with real-world reclamation expenditures and do not hinder responsible resource development.</p>	<p>A. Review and adjust cost estimates to ensure they are reasonable, justified, and do not include duplication in indirect costs.B. Develop specific guidance for reviewers and users of Reclaim 8.0 regarding appropriate selection of indirects and unit rates given project stage and lifecycle.</p>
Baffinland Iron Mines Corporation – Lou Kamermans	4	Rates and Cost Estimates	<p>The unit rates proposed for RECLAIM 8.0 are substantially higher than those in RECLAIM 7.0, often reflecting worst-case scenarios without adequate justification, despite the additional materials provided following the January Workshop in Vancouver. While CIRNAC states that proponents may propose alternative rates, industry experience suggests that the highest rates are typically applied in practice, unless a clear security policy is in place (see Section 3 – Security Policy).</p> <p>First principles derivations for these rates has not been provided (as is typical when justifying modifying rates in a security estimate) and the references are highly generalized, which hinders review, especially in light of the limited review timeline.</p>	<p>C. CIRNAC and GNWT must provide more detailed first principles derivations for rates, at a level that would be expected of a proponent justifying its own rates in an estimate. Specific references are required and generalized references provided to date are not adequate to provide expert feedback and advice.</p>
Baffinland Iron Mines Corporation – Lou Kamermans	5	Rates and Cost Estimates	<p>The increase in indirect percentages represents an overall 23% increase in costs, and several of these items overlap, resulting in duplication of costs (see Table 1). For example the increase in contingency seems to be duplicated by an increase in project management, engagement and regulatory compliance, and owner’s representative costs. These increases do not appear to be justified through a detailed cost analysis.</p>	<p>D. Justification must be provided by CIRNAC to address the duplication described in the comment, and a detailed cost analysis must be provided to justify these statements</p>
Baffinland Iron Mines Corporation – Lou Kamermans	6	Rates and Cost Estimates	<p>Upon initial review, the observations regarding indirect costs provided in the "Review of Mine Financial Security Estimates and RECLAIM" (Brodie, 2020) do not align with the proposed Reclaim 8.0 Indirect costing changes. For example, the report states “BCL recommends that the default percentage for Project Management be increased based upon CIRNAC’s experience. Whereas the default percentage for Engineering should be maintained but with the RECLAIM User Manual revised to be even more explicit as to what is and is not assumed to be covered in this amount.: Baffinland notes that the proposed Reclaim 8.0 changes include an increase in project management indirect percentages (an increase from 5% to 8%), an additional owners engineer indirect (an increase of 8%) and an increase in engineering design indirects (5% to 8%). This appears to be in contradiction to the recommendations of the review report.</p>	<p>E. CIRNAC should align observations re indirect costs in RECLAIM 8.0 with Brodie, 2020 (subject to adjustment based on further submissions in future on each of these categories)</p>

Baffinland Iron Mines Corporation – Lou Kamermans	7	Rates and Cost Estimates	<p>Within the proposed update, contingency has been increased to a maximum of 25%, which the Reclaim review report (Brodie, 2020) describes as appropriate for “Very basic engineering only and costs based upon typical unit costs”. This guidance is not provided in the proposed RECLAIM 8.0 documentation. As Baffinland has noted above, in its experience when Reclaim is applied by reviewers the highest level of contingency/indirect is used as a manner of course, as there is little specific guidance provided how to select an appropriate contingency/indirect within the provided model.</p> <p>For example, although Baffinland’s closure plan has advanced to the ICRP stage and has had significant engineering completed, a 20% contingency has been consistently applied by CIRNAC reviewers.</p> <p>Without specific risk based guidance regarding how to select indirect percentages based on project stage and level of engineering completed, Reclaim 8.0 could be used in an overconservative manner due to the lack of specific guidance, which could have a significant impact on Baffinland and other resource development projects in Nunavut.</p>	<p>F. 25% is not an appropriate contingency percentage for most advanced projects with current RECLAIM 8.0 guidance there is a risk this value is applied broadly, like 20% contingency is now. Adjust contingency percentage to reflect a range of risk based standards adjustable based on criteria, such as reductions below 20% where projects already have significant completion of engineering</p>
Baffinland Iron Mines Corporation – Lou Kamermans	8	Rates and Cost Estimates	<p>The future value calculation for water treatment and other long-term liabilities places a significant financial burden on mining companies, particularly in the absence of strong offsetting mechanisms, such as security discounting based on known reserves—an approach used in other jurisdictions like British Columbia (BC) and Quebec (Government of BC, 2022; Government of Quebec, 2017).For instance, in 2022, the BC Ministry of Energy, Mines and Low Carbon Innovation introduced the Major Mines Reclamation Security Policy, which considers a mine’s stage of development and promotes long-term operations by applying different security rates at various points in a mine’s lifespan based on default risk. The policy states that “mines that have been operating for more than five years, and that have economically viable reserves for at least the next ten years at the permitted production rate, will be eligible to secure up to 25% of the reclamation liability against a portion of the reserve value.” (Government of BC, 2022).Adopting a similar approach in Nunavut provide much-needed financial flexibility for long-term mining projects like Baffinland, reducing upfront security costs while maintaining strong environmental protection measures. This would enhance the economic viability of long-life mines, encourage continued investment, and support sustainable resource development in the region.Tying financial security to the mine life cycle would help mining companies spread out financial security payments over the mine’s life, which would increase investor confidence while supporting responsible mining development that considers the projected mine life.</p>	<p>G.RECLAIM 8.0 should be revised to provide a clear mechanism for discounting security based on reserves, similar to those adopted in other jurisdictions such as BC and Quebec.</p>

Baffinland Iron Mines Corporation – Lou Kamermans	9	Update of 2002 Mine Site Reclamation Policy for Nunavut (CIRNAC, 2002) is required.	<p>Before publishing a RECLAIM 8.0 model, Baffinland recommends that the 2002 Mine Site Reclamation Policy for Nunavut (CIRNAC, 2002) be revised to reflect current conditions in the mining industry.</p> <p>There has been no suggestion that current Nunavut production mines are undersecured – as an example, Baffinland’s security is reviewed annually in a comprehensive process. The investment decision for Mary River was made on the suite of government and Inuit approvals in place, including RECLAIM 7.0.</p>	<p>A. Before RECLAIM 8.0 is adopted for Nunavut projects, the 2002 Mine Site Reclamation Policy for Nunavut (CIRNAC, 2002) should be updated to reflect current conditions in the mining industry and best practices across Canada and globally.</p> <p>B. Current approved Nunavut projects should follow RECLAIM 7.0, unless the proponent consents to application of RECLAIM 8.0.</p>
Baffinland Iron Mines Corporation – Lou Kamermans	10	Misc.	No Comment	A. Only a simple markup of the updates to the User Manual has been provided. A detailed markup is requested as a simple markup does not clearly present the changes.
Baffinland Iron Mines Corporation – Lou Kamermans	11	Misc.	No Comment	B. With reference to the “proprietary civil rate tool” referenced at p. 20 of the User Manual for RECLAIM 8.0, if a tool is being adopted in a government policy, it must be made publicly available. If it is not publicly available, it should not be included in the policy. This is a matter of fairness and transparency.
Baffinland Iron Mines Corporation – Lou Kamermans	12	Misc.	No Comment	C. Costs relating to the Crown’s legal obligation to consult (which would be incurred in any event, whether the Crown steps in as director of reclamation or participates in review of closure plans led by a proponent) should not be included in RECLAIM 8.0, as this is a fixed government cost, not a cost of reclamation. The suggested 3% includes items that are fixed government obligations that do not belong in a reclamation estimate.
Baffinland Iron Mines Corporation – Lou Kamermans	13	Misc.	No Comment	D. How is RECLAIM 8.0 accounting for Nunavut devolution relating to lands and waters from CIRNAC to the GN?
Baffinland Iron Mines Corporation – Lou Kamermans	14	Misc.	No Comment	E. RECLAIM 8.0 should recognize reasonable salvage value where justified by the proponents estimate. The current position is unreasonably conservative and results in over bonding in many circumstances. This statement should be revised accordingly “GNWT/CIRNAC does not recognize salvage value because of the problems associated with creditors rights, sale of equipment and uncertainty as to the actual value at the time of insolvency”.

Baffinland Iron Mines Corporation – Lou Kamermans	15	Misc.	No Comment	F. Citation for precautionary principle definition should be to the CEPA not to the CEPA guide.
Baffinland Iron Mines Corporation – Lou Kamermans	16	Misc.	No Comment	G. Progressive reclamation should be credited in mine reclamation costs. This aligns with the following statement from the 2002 Nunavut Reclamation Policy – “Mining operators should be credited for approved progressive reclamation, and the value of financial security required should be adjusted in a timely fashion”
Baffinland Iron Mines Corporation – Lou Kamermans	17	Misc.	No Comment	H. RECLAIM 8.0 adds an additional owners representative indirect cost, which is in addition to the proposed project management indirect cost. The owners representative indirect has been insufficiently justifying in the provided accompanying documentation, and it should be noted that an owners representative is not required during proponent lead reclamation. This overly conservative indirect requirement could have significant implicants on mine financing and development.
Burgundy Diamond Mines Ltd – Sheila Chernys	1	Transparency of Unit Rates Derivation	The derivation of the proposed RECLAIM 8.0 unit rates remains unclear, which makes it challenging for proponents to assess their applicability to specific sites.	Provide detailed explanations and supporting data for these rates would enhance understanding and confidence in their application.
Burgundy Diamond Mines Ltd – Sheila Chernys	2	Mobilization and Indirect Cost Management (ICM) Costs	Reassigning these costs to Capital Costs introduces a compounding effect that significantly inflates estimates.	Retaining them under Indirect Costs would better account for site-specific variations without leading to overestimations.
Burgundy Diamond Mines Ltd – Sheila Chernys	3	Default Percentages for Costs	The percentages allocated for Owners Representative, HHERA, and Final CRP costs are high and do not align with typical closure project requirements in the region.	Revisiting these percentages and considering fixed cost estimates will ensure more balanced and accurate calculations.
Burgundy Diamond Mines Ltd – Sheila Chernys	4	Inflation Rate Methodology	Applying a fixed 3% inflation rate across all closure costs is not appropriate for all closure activities.	A more flexible approach based on historical inflation data and specific project conditions will better reflect actual cost variability.

Burgundy Diamond Mines Ltd – Sheila Chernys	5	Incentives for Progressive Reclamation	The updates focus on increasing securities but could also include measures to encourage progressive reclamation during operations. For example, allowing partial release of securities to execute reclamation activities would promote progressive reclamation, reduce liabilities and support sustainable closure outcomes.	Update should encourage progressive reclamation during operations.
NWT & Nunavut, Chamber of Mines – Karen Costello	1	Review Data Extension	The Chamber respectfully requests a 4-month review period (including potential options for a workshop) to fulfill the first step in the review process. We would also ask for access to the Review of Mine Financial Security Estimates dated March 2020 at your earliest convenience.	N/A
De Beers Canada Inc. - Gahcho Kue - Kurtis Trefry	1		De Beers is supportive extended engagement period granted to allow further opportunity for industry feedback to be considered into any changes. The initial deadline coincided with our annual reporting timelines, creating challenges in dedicating the necessary time and resources to this review. The additional time granted will allow us to prepare a thorough and well-considered submission that adequately addresses the updates. Given the potential for significant implications to the mining industry, the proposed changes to the RECLAIM model require significant time and resources to allow for a detailed review by all parties. De Beers looks forward to partaking in further engagement sessions and will provide more detailed comments following that period.	N/A
Fisheries and Oceans Canada (DFO) - Mr. Derek Donald	1	Financial security associated with Fisheries Offsetting Plans. Specified under Section 2 (1)(b) and Schedule 1, Section 16, of the Authorizations Concerning Fish and Fish Habitat Protection Regulations.	<p>Fisheries and Oceans Canada (DFO) would like to thank CIRNAC and the GNWT, for developing and updating the RECLAIM model and providing this opportunity for review and comment. The RECLAIM model can be an important part of the Fisheries Act authorization process in that the model is often used by proponents when developing an itemized list of costs for conducting the Offsetting work and monitoring the project to inform the Letter of Credit associated with an Offsetting Pan, and by DFO when reviewing the financial liability associated with these plans.</p> <p>Fisheries Act authorizations can follow the lifecycle of a mine from pre-operational permitting to post-closure Offsetting Project monitoring. Financial liability and associated security in the form of an irrevocable Letter of Credit, is a key component of the Fisheries Act and associated Regulations. Mine development in Nunavut and the Northwest Territories often necessitates activities that directly or indirectly result in the Death of Fish, the Harmful Alteration, Disruption or Destruction of fish habitat, and/or the deposit of deleterious substances in water frequented by fish, governed respectively by Section 34.4, 35, and 36 of the Fisheries Act.</p> <p>These activities can be authorized under the Fisheries Act so that the activity is carried out in accordance with conditions set out in the authorization and the Regulations. Section 2 (1)(b) and Section 16 of Schedule 1, of the Authorizations Concerning Fish and Fish Habitat Protection Regulations, requires the development of a Fish Offsetting Plan, including the financial liability and associated security, to cover the costs of implementing the fish Offsetting Plan.</p> <p>These Fish Offsetting Plans often include activities associated with general construction, ground and water works, culvert installation, long-term monitoring, etc. Costs associated with these Fish Offsetting Plan activities can be subject to individual cost estimates based on a proponent’s experience and can also be scrutinized with limited referenceable sources. This type of subjective cost estimation and review creates risk and introduces uncertainty, for both proponents and liable governmental parties (DFO and ECCC).</p> <p>DFO believes this update to the RECLAIM model is an excellent opportunity and the appropriate location to include constrained cost estimates for these types of activities. DFO would like to discuss this further with CIRNAC and the GNWT during the week of May 12 - 16, 2025. DFO would also be interested in hearing feedback from all interested parties.</p>	DFO recommends that the RECLAIM Model include in a Summary line item, and associated sheet in the Excel model specific to the implementation of a fish Offsetting Plan. This could include, but not limited to works associated with discipline specific construction, ground and water works, culvert installation, and long-term monitoring. Adding this to the model would reduce financial risk by providing a more predictable process of securing a Fish Offsetting Plan, which is ultimately tied to the final reclamations of a mine site that has impacted fish and fish habitat. DFO would like to discuss this possibility with CIRNAC, the GNWT, and all interested parties during this update of the RECLAIM model.

Diavik Diamond Mines (2012) Inc. - Sean Sinclair	1	General	DDMI appreciates the opportunity to take part in this important review process. Since receiving preliminary feedback at the January 23rd, 2025 engagement session, DDMI understands that on February 18th, 2025 and on March 11th, 2025 the RECLAIM v8.0 team uploaded additional information to explain the rationale for some proposed changes to the model. DDMI has not yet been able to review all posted materials. DDMI also understands the RECLAIM v8.0 team will be providing further additional information including but not limited to a jurisdictional scan to support this review process. This complete set of information will inform ongoing collaborative discussion on this proposed update.	Given the complexity and importance of this review process DDMI recommends that the review timeline allows for thorough review and analysis of all information. DDMI is pleased to see the initial extended engagement process proposed by CIRNAC and GNWT and DDMI recommends the next steps for the RECLAIM v8.0 review process are discussed in detail and agreed at the GNWT and CIRNAC in-person workshop the week of May 14th, 2025.
Diavik Diamond Mines (2012) Inc. - Sean Sinclair	2	General	An initial review of the proposed changes to the RECLAIM model suggest that its application could have a very significant increase on securities. Current proposed changes are focussed on: 1) increased unit rates, 2) increased indirect costs, 3) increased owners costs, 4) increases regulatory costs, 5) increased mobilization and ICM costs, and 6) a future value calculation without corresponding discounting.	DDMI recommends this review process also consider changes focussed on: 1) incentivizing progressive reclamation, 2) managing the return of security process, 3) managing the security holdback process, 4) consideration of financial mechanisms to provide security as a function of both the liability and asset value, and 5) risk associated with a proponents commitment to orderly closure of the site including its financial and technical capacity to carry it out.
Environmental Monitoring Advisory Board - EMAB	1	Evaluate RECLAIM estimates versus actual expenditures	EMAB's view is that the cost of mine closure should be borne by the proponent, not the taxpayer. The comment on p. 1 of the CIRNAC review that "However, it has been CIRNAC's experience with management of abandoned mines that the financial security held for these sites has fallen well short of actual expenditures." raises a major concern. Security should cover the entire cost of closure, and RECLAIM should calculate security that meets the full cost of closure.	CIRNAC/GNWT should carry out a quantitative evaluation of how much current RECLAIM estimates differ from actual expenditures.
Environmental Monitoring Advisory Board - EMAB	2	Depositing waste rock in open pit	Some mines have included depositing waste rock into open pits as a means of disposal. This activity does not appear to be addressed in the RECLAIM manual or tables.	Expand tables, and manual, to include placing waste rock and other materials, into open pits.
Environmental Monitoring Advisory Board - EMAB	3	Revegetation	The reference tables for vegetation include hydroseeding and tree planting. This is a good start, but the range of activities should be expanded to include all activities required for successful revegetation.	Reference tables for vegetation should also include application of amendments and planting of container forb seedlings as well as other activities required for successful revegetation.
Environmental Monitoring Advisory Board - EMAB	4	Long-term maintenance and monitoring	Traditional Knowledge Monitoring by members of Affected Communities is an important component of ensuring successful closure and future use of the area affected by the mine for cultural activities by the Indigenous people who live in the area and use it.	Add Traditional Knowledge Monitoring to the list of post-closure activities.
Environmental Monitoring Advisory Board - EMAB	5	Long-term maintenance and monitoring	EMAB was pleased to see the expansion of the Mobilization sheet to include construction and use of winter roads for both mobilization and demobilization. It is not clear whether this is intended to cover mob/demob for post-closure maintenance. Once the mine closes there is no guarantee that the winter road will continue to exist. If there is a significant maintenance requirement, there may be a need to build a winter road to mobilize heavy equipment etc., and to demobilize it after the maintenance is completed.	Include the cost of building a winter road to the mine as part of long-term maintenance, if this is the only means for mobilizing/demobilizing heavy equipment required for maintenance. Costing should include building the winter road for the following season to demobilize heavy equipment.
Environmental Monitoring Advisory Board - EMAB	6	Long-term maintenance and monitoring	Post-closure monitoring activities may require air transportation to and from the site, which could involve use of the airstrip. In order to use the airstrip it will need to be maintained until all monitoring is completed.	Include costs to maintain the airstrip until post-closure monitoring is completed.
Environmental Monitoring Advisory Board - EMAB	7	Long-term maintenance and monitoring	The scope of post-closure maintenance activities includes cover maintenance and spillway maintenance. Maintenance could include other components such as tailings dams, discharge channels, revegetation, or emergency or ongoing water treatment; so the list should be expanded to provide for these and other potential maintenance activities.	Expand the scope of post-closure maintenance activities to include dams and discharge channels, revegetation maintenance, and a category for other potential maintenance requirements.

Environmental Monitoring Advisory Board - EMAB	8	RECLAIM User Manual	The User Manual will need to be updated to reflect all changes and additions to the RECLAIM tables.	Ensure the RECLAIM User Manual is updated to provide clear explanations of all the activities and changes to the tables.
Independent Environmental Monitoring Agency - Jamie Mistry	1	Post Closure – Annual Requirements	The Post-Closure sheet requires an estimate of annual costs and the number of years of post closure activities. The overall sum of activities is then multiplied by the number of years to give a total cost. Some post-closure activities will likely occur less frequently than annually, and the spreadsheet calculation will not function correctly in these cases.	Revise the Post-Closure sheet to include columns that list the frequency of each activity, and the number of events expected over the post-closure period, rather than assuming that all costs are annual costs.
Independent Environmental Monitoring Agency - Jamie Mistry	2	ICM – Water Management	The ICM sheet does not include activities specifically focused on water management during interim care-and-maintenance. These costs are also not specifically addressed in the Water Management or Water Treatment sheets. However, water management is often (perhaps usually) a primary focus of interim care-and-maintenance activities at mine sites, including during temporary closures and in the early stages before active implementation of a closure and reclamation plan. Requirements for accessing security bonds typically arise when there is an early, unplanned mine closure. In these circumstances water management is likely to be a significant activity for maintaining water levels in tailings ponds, managing flood flows, managing runoff from disturbed areas, and dewatering of mines (pits and underground). It is not uncommon for dewatering of mines to continue during periods of interim care-and-maintenance, especially in the event of early/unplanned closure when there may be interest in selling the project – allowing mines to flood is often considered to devalue the “asset” and therefore is part of the necessary care-and-maintenance activities. While there are currently no heap leach projects in NWT, water and solution management at heap leach mines is likely to be the largest cost during periods of interim care-and-maintenance.	Revise the ICM sheet to include activities focused on water management that will be required during interim care-and-maintenance.
Independent Environmental Monitoring Agency - Jamie Mistry	3	Interim Care-and-Maintenance	The Supplementary Information states that the default interim care-and-maintenance period in RECLAIM is 2 years, but the Interim Care-and-Maintenance (ICM) sheet in the model sets the value at 3 years. Past experience indicates that, in the event of early/unplanned mine closure, interim care-and-maintenance periods can be lengthy because of the time required to sort out financial matters, explore sale/re-opening options, complete CRP development/permitting and procure contractors. 3 years should be the minimum period applied.	Clarify the default duration of interim care-and-maintenance as 3 years, as currently applied in the model.
Independent Environmental Monitoring Agency - Jamie Mistry	4	Water Management - Sediment/Erosion Management and Control	The Water Management sheet addresses closure and reclamation of operational sediment control facilities. However, it does not directly address the potential need for continued sediment control measures during reclamation activities, or after reclamation activities are complete. This could require construction of new sediment control facilities or improvement (e.g., expansion, armouring) of existing ones. It could also require ongoing operational activities to manage sediment.	Revise the Water Management sheet to include lines related to development and implementation of sediment control measures for the closure and post-closure periods.
Independent Environmental Monitoring Agency - Jamie Mistry	5	UG Mine – Contact Water Management	The UG (Underground) Mine sheet does not include costs for treatment of mine water. The sheet appears to assume that underground mines will be flooded but no treatment would be required. Some mines may fill and drain over time, with water quality that is not acceptable for discharge. In other cases, leakage from the mine through groundwater is possible, again raising possible water quality concerns. These conditions may require some measures for ongoing or periodic water management or water treatment, including possible active or passive treatment outside of the underground mine, or some form of mine-pool treatment within the mine.	Add water management and treatment as potential costs in the UG Mine sheet, linked as appropriate to additional content in the Water Treatment sheet.
Independent Environmental Monitoring Agency - Jamie Mistry	6	Chemicals – Soil Handling	The Chemicals sheet includes costs for excavating contaminated soils and transporting them to an onsite remediation facility, for example a land-farm. There will also be costs for rehandling these soils to a final disposal location at the conclusion of land-farming.	Revise the Chemicals sheet to include lines for final disposal of remediated soils.

Independent Environmental Monitoring Agency - Jamie Mistry	7	Post Closure – Maintenance	The scope of maintenance activities described in the Post Closure sheet is limited to covers, spillways and wetland treatment systems. For many mine sites, the maintenance requirements will be much more extensive. For example, tailings dams, diversions and sediment control facilities may all require maintenance. Passive treatment systems other than wetlands may also require maintenance or replacement. Wetlands may also require maintenance that is more extensive than what is described, including removal and replacement of substrates and vegetation after some period of time. In most cases, “passive” treatment systems require some periodic maintenance and operational activities, and are therefore better described as semi-passive.	Expand the maintenance components of the Post Closure sheet to address a broader scope of expected maintenance requirements.
Independent Environmental Monitoring Agency - Jamie Mistry	8	Rock Pile – Heap Leaching	According to the manual, the Rock Pile sheet is intended to address not only waste rock piles, but also heap leach facilities. Closure of heap leach facilities is usually substantially more complex than for rock piles. Heap leach facility closure entails continued solution circulation, heap rinsing, heap detoxification and associated water treatment, managed draindown, decommissioning of pumping and piping equipment, establishment of permanent drainage systems, among other things. The activities listed in the Rock Pile sheet are not adequate to address potential heap leach facility closure.	Incorporate specific activities and costing for heap leach facility closure in the model.
Independent Environmental Monitoring Agency - Jamie Mistry	9	Bldgs & Equip – Roads	The Bldgs & Equip sheet is missing some activities that may be common for closure and reclamation of roads. Reclamation frequently includes flattening of safety berms along the length of the road, and establishment of effective road blocks and any access points. Also, complete removal of roads back to the native landscape may be necessary in some cases, or overall re-grading of road embankments. Construction or upgrading of drainage works along road alignments may also be required.	Additional road reclamation and closure activities should be added to the Bldgs & Equip sheet.
Independent Environmental Monitoring Agency - Jamie Mistry	10	Mobilization – Annual Mobilization	The Mobilization sheet includes a column for quantity of mobilization with each type of equipment or supply. In some cases, mobilization/demobilization of equipment could be required annually through the closure and reclamation phase, or periodically during post-closure. For transparency, it would be useful to separate the quantity and the number of annual mobilization requirements – e.g., how many dump trucks have to be mobilized to site in each year. This would provide a better understanding of the equipment requirements and costs over time, and information about what equipment would be expected to remain on site year-round, versus mobilization each year.	Revise the Mobilization sheet to separately identify the annual mobilization requirements.
Independent Environmental Monitoring Agency - Jamie Mistry	11	Indirect Costs	The Summary Report and Supplementary Information describe the rationale for proposed changes in the default percentages for indirect costs. The rationale is consistent with experience from mine closure and reclamation projects and with current approaches to engineering. The Summary Report also notes that costs for mobilization and interim care-and-maintenance are now included in the base costs for calculating indirect costs. This also makes sense because both of these costs will be subject to the same indirect costs as the rest of the capital costs.	Retain the proposed default indirect costs percentages and the inclusion of mobilization and interim care-and-maintenance costs as part of the capital cost for calculating indirect costs.
Independent Environmental Monitoring Agency - Jamie Mistry	12	Summary – Indirect Costs	N/A	The updates to the recommended percentages for indirect costs appear to reflect the experience with mine closure and reclamation projects and should be retained.
Independent Environmental Monitoring Agency - Jamie Mistry	13	User Manual – Section 1	The final bullet in the list of principles in Section 1 of the User Manual states that financial security must retain its full value throughout the life of the mine and if applicable, beyond. The value of required security may vary through the life of the mine and the wording of the principle should be clarified	The final bullet in the list of principles should be reworded to clearly state that adequate security must be in place throughout the life of the mine and in post-closure to fully address the liabilities associated with the site.
Independent Environmental Monitoring Agency - Jamie Mistry	14	Summary – Future Value	The future value calculations appear to assume that the 3 year period of Interim Care-and-Maintenance starts immediately at the time the calculations are completed. This means that if the security amount is set based on today’s calculations, but unplanned closure begins 1 year later, the security will be 3% too low, or 16% too low if closure begins 5 years later.	The potential shortfall in liability estimates caused by assumptions about timing for the start of interim care-and-maintenance should be addressed in the model. One option is to establish requirements for frequent adjustments of security (e.g., every 2 years) to account for these shortfalls.

Independent Environmental Monitoring Agency - Jamie Mistry	15	Summary – Future Value	N/A	The addition of future value is a good idea and should be retained.
Independent Environmental Monitoring Agency - Jamie Mistry	16	Land Reclamation Activities	In response to a comment/recommendation to include a more comprehensive list of land reclamation activities in the model, the Supplementary Information responds that site-specific activities should be proposed based on end land use and the CRP. The response does not address the comment that was raised. Of course, site-specific closure activities should be defined in site-specific CRPs. However, the model is intended to provide a comprehensive tool for estimating costs of closure and reclamation activities, no matter what activities are selected for a specific site. As a result, the model should include a more comprehensive list of land reclamation activities and provide for estimating their costs, as suggested in the comment. The following comments below identify several specific instances where the model should be revised to include more comprehensive listings of activities. While this is likely not a complete list, it should be considered a starting point for more thoroughly identifying potential closure measures and activities.	Undertake a process to develop a more comprehensive list of possible closure and reclamation activities and incorporate these into the costing model.
Independent Environmental Monitoring Agency - Jamie Mistry	17	Water Management - Reclamation Quarries	The Water Management sheet includes costs for installing and removing pumping systems for managing water in a reclamation quarry. Other costs associated with both quarry development (e.g., material testing, land clearing, road development, etc.) and water management (e.g., diversions, sediment control) for reclamation quarries are not addressed. Reclamation activities often require development of new quarries (in undisturbed areas, or in waste [e.g., overburden] storage facilities) or expansion of existing ones to provide the materials necessary for closure and reclamation.	The Water Management sheet should be revised to include lines that address additional water management activities that may be associated with quarries. Costs for quarry development should also be addressed within the overall model.
Independent Environmental Monitoring Agency - Jamie Mistry	18	Water Management – Passive Treatment	The activities identified for passive treatment are all associated with construction of wetland treatment. There are other forms of passive treatment that may also be relevant, for example permeable reactive barriers, bioreactors or underground mine pool or groundwater treatment.	The Water Management sheet should be revised to include activities that may be associated with other forms of passive treatment that are not wetlands.
Independent Environmental Monitoring Agency - Jamie Mistry	19	User Manual – Section 4.2.5	Section 4.2.5 of the User Manual describes expectations for costing for interim care-and-maintenance activities. The description of a typical scenario states that open pit and underground mines would be allowed to flood. In cases of early or unplanned mine closures (i.e., where there are draws on security bonds), there are often lengthy periods of discussion about mine re-opening and sale. In these cases, mine dewatering often continues in order to avoid reducing the value of a potential asset. The assumption that mine dewatering would be discontinued may underestimate the actual costs that would be incurred.	The default assumption for interim care-and-maintenance costing should be that mine-dewatering will continue for this period.
Independent Environmental Monitoring Agency - Jamie Mistry	20	Future Value and Unit Cost Updates	<p>The Supplementary Information describes the new approach taken for estimating the future value for liability estimates. This approach is a positive addition and attempts to address the challenge that the security bonding regime and the forms of security do not allow for bond amounts to grow to address inflation and other escalation of costs. The User Manual defines “escalation” as “a provision in costs or prices for uncertain changes in technical, economic, and market conditions over time. Inflation (or deflation) is a component of escalation.”</p> <p>This acknowledges that inflation is only one component of escalation, with other components (e.g., labour market conditions in northern Canada, or availability of construction contractors) that may also lead to increases in costs. Nonetheless, the User Manual and model only rely on inflation as a cost escalator when calculating future value (Summary sheet) or for updating unit costs (Unit Cost sheet). Other than in the definition of “escalation” there is little further mention of other possible influences on cost escalation, though Section 4.5.1 of the User Manual does identify some other possible sources of information about escalation.</p>	Revise the User Manual and the model to require consideration of other factors for cost escalation. This should include requirements in the User Manual for proponents to provide rationale for selected escalation factors. In the model, it would be useful to include separate entries for inflation and other cost escalators so that there is a requirement to consider whether other escalators are relevant or not.

Independent Environmental Monitoring Agency - Jamie Mistry	21	General Comment – Site Management	The model lacks clear information about person-hours for ongoing administrative responsibilities at the site, for example security, health and safety, personnel management, etc. during the implementation of the closure. Some of these are addressed for interim care-and-maintenance (e.g., on-site caretaker), but would also be required throughout the implementation of closure and reclamation.	Costs for ongoing site management should be addressed either in the Summary sheet, or an additional Site Management sheet should be added.
Independent Environmental Monitoring Agency - Jamie Mistry	22	Water Treatment – Post Closure	The post-closure component of the Water Treatment sheet does not address major maintenance and equipment replacement activities. Water treatment facilities that have to operate in a long post-closure period will wear out and require refurbishment and replacement at some point in time. Costs and timing for these major capital expenditures need to be included.	Revise the Water Treatment sheet to include lines for costs related to major refurbishment or replacement of post-closure water treatment facilities.
Independent Environmental Monitoring Agency - Jamie Mistry	23	General	The Independent Environmental Monitoring Agency (Agency) has reviewed the proposed changes for RECLAIM v8.0 and associated user manual (RECLAIM) submitted by Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) and the Government of Northwest Territories (GNWT). The Agency submits the following comments for your consideration.	N/A
Independent Environmental Monitoring Agency - Jamie Mistry	24	User Manual – Section 1	Section 1 of the User Manual states a principle that costs should be based on having a third-party contractor carry out the reclamation work. On-site equipment including both mobile equipment and fixed facilities (e.g., water treatment plants) may not be owned by the proponent and costs would be incurred to access the equipment and facilities.	The principle that costs should be based on the cost of having work done by a third-party contractor should be expanded to clarify that the costs must also be estimated assuming that all equipment, supplies and facilities will be provided separately.
Independent Environmental Monitoring Agency - Jamie Mistry	25	Tailings – Water Treatment	The Tailings sheet refers to treatment of seepage, which may not be the only treatment that is required for a tailings facility. In some cases, treatment of tailings pond supernatant water may also be required, either during implementation of closure and reclamation, or post-closure.	Revise the water treatment references in the Tailings sheet to include broader references to types of treatment that may be required.
Independent Environmental Monitoring Agency - Jamie Mistry	26	Open Pit – Pit Closure Methods	The Open Pit sheet considers a narrow range of potential closure options for pits, focused on flooding of pits. There are other options for closure of pits that need to be addressed. For example, some pits may be closed in a dry condition, with associated water management, or some may be backfilled with waste and covered (e.g., Giant Mine Remediation Project).	Revise the Pits sheet to address a broader range of closure options for pits.
Independent Environmental Monitoring Agency - Jamie Mistry	27	Open Pit – Contact Water Management	The only water treatment option addressed in the Open Pit sheet is the possible addition of in-pit treatment during flooding – either by chemical or biological means. There is no water treatment line linked to the Water Treatment sheet. However, there are some instances where it may be necessary to actively pump and treat water that has accumulated in a pit, potentially before flooding, or to establish dry conditions.	Add active water treatment as a potential cost in the Open Pit sheet, linked as appropriate to additional content in the Water Treatment sheet.
Independent Environmental Monitoring Agency - Jamie Mistry	28	HHERA and Regulatory	The Summary Report states that the model was revised to include 3% indirect costs for Human Health and Ecological Risk Assessment (HHERA), and 4% indirect costs to finalize the Closure Reclamation Plan (CRP). These additions make sense, but it is unclear where they are included in the model. If they are already included in the Summary sheet calculations, they should be specifically identified.	Provide additional clarity about where the indirect costs for HHERA and CRP finalization are incorporated into the model.
Independent Environmental Monitoring Agency - Jamie Mistry	29	General Comment – Winter Road costs	The Water Treatment and Mobilization sheets include lines for costs associated with use of the winter road. In Water Treatment this appears to be related to site access and reagents, while in Mobilization it is related to equipment, fuel and accommodation (i.e., camp), with a focus on materials that must be brought to site. However, closure for some other components (e.g., buildings, hazardous wastes, contaminated soils) may require shipping off site. Also, it is not clear that winter road costs have been incorporated for all closure and reclamation supplies, for example liner construction materials. These activities may also incur winter road costs.	Where closure and reclamation activities will require off-site shipping or the delivery of supplies to site, sheets should be revised to include lines for winter road costs and other shipping costs.

Independent Environmental Monitoring Agency - Jamie Mistry	30	Summary – Future Value	The spreadsheet requires the user to enter timing for “when will post-closure begin”, by entering a number. Some additional clarity should be provided about what this number represents: Is it the number of years from the current time until post-closure, or the number of years between cessation of operations and post-closure, or the number of years after completion of interim care-and-maintenance before post-closure begins, or some other value? If the timing is intended to start at the time that the estimate is made, then the same shortfall issues identified above for the interim care-and-maintenance timing will also apply to the timing for start of post-closure.	Clarify the intended definitions of timing for when post-closure will begin.
Independent Environmental Monitoring Agency - Jamie Mistry	31	User Manual – Section 2	Section 2 of the User Manual describes special considerations for estimating costs for reclamation activities in northern settings. One important factor that appears to be missing is the potential cost implications of meeting requirements for northern participation in contracting and work opportunities.	The bullet list of factors that may affect costs for projects in northern settings should be expanded to include the potential for increased costs associated with meeting requirements for northern participation in reclamation activities.
Independent Environmental Monitoring Agency - Jamie Mistry	32	Buildings & Equipment (Bldgs & Equip) – Landfill	The Bldgs & Equip sheet addresses closure of landfills (e.g., placement of cover material) but it does not cover the cost of constructing a landfill. Even for non-hazardous materials, construction of landfills can be a substantial cost. Landfills developed and used during mine operations typically do not have capacity to contain all of the material arising from closure and reclamation. Costs for non-hazardous landfill construction can be substantial in some cases (e.g., Giant Mine).	Revise the Bldgs & Equip sheet to include costs for development and construction of landfills.
Imperial Oil Resources N.W.T. Limited - Mrs. Leanna Han	1	Owners Representative Cost	Costs for the Owners Representative are included at a rate of 8% of the total capital costs estimate. This appears to be a duplication of costs associated with Engineering Design (8%) and Project Management (10%).	Suggest removing the Owners Representative line item in the Indirect Costs summary or reducing the default factor to 2% of Capital Costs or providing a description and basis for this percentage and how it differs.
Imperial Oil Resources N.W.T. Limited - Mrs. Leanna Han	2	Human Health and Ecological Risk Assessment	Human Health and Ecological Risk Assessment (3% of Closure Costs) is added onto Interim Care and Maintenance and then factored again in the Indirect Costs summary.	This tasks should only be included in the Indirect Costs summary.
Imperial Oil Resources N.W.T. Limited - Mrs. Leanna Han	3	Finalize Closure and Reclamation Plan	Finalize Closure and Reclamation Plan (4% of Closure Costs) is added onto Interim Care and Maintenance and then factored again in the Indirect Costs summary.	This tasks should only be included in the Indirect Costs summary.
Imperial Oil Resources N.W.T. Limited - Mrs. Leanna Han	4	Unit Price Cost References are not Regional	There do not appear to be any references to NWT or Nunavut specific unit costs in UR-Short list in workbook RECLAIM 8 Reference Tables_WorkingCopy.xlsx	Suggest that V8 include reference to northern unit price equivalents.
Imperial Oil Resources N.W.T. Limited - Mrs. Leanna Han	5	Remediation	There are no referenced unit prices for remediation of any sort – bioremediation and landfill unit prices do not have any reference or backup.	Add unit prices for standard remediation techniques (e.g. biocell)
Imperial Oil Resources N.W.T. Limited - Mrs. Leanna Han	6	Land Ownership	The Reclaim Model Version 8.0 does not consider the value of owned land in determining (i.e., reducing) security.	Add consideration for land ownership as a reduction for overall security.
Imperial Oil Resources N.W.T. Limited - Mrs. Leanna Han	7	Identify Unit Components without a reference for unit price	Any unit components, for example "Remove Fuel Tanks" that do not have a corresponding unit price should be identified.	Any unit components, for example "Remove Fuel Tanks" that do not have a corresponding unit price should be identified.

Imperial Oil Resources N.W.T. Limited - Mrs. Leanna Han	8	Unit Prices different from Price Sources	The unit prices in the Reference Table (TABLE 2: RECLAIM v 8.0 Price Sources, Basis and References) do not always match the unit prices in the RECLAIM 8.0 Unit Cost Table. For example, see the unit rate SB1 for "excavate/load/short haul" \$16.27 vs \$17.00).	Consider integrating the unit prices basis/reference worksheet into the model to reduce inconsistencies and reduce standalone components.
Imperial Oil Resources N.W.T. Limited - Mrs. Leanna Han	9	Application of Mining RECLAIM Model feedback into the Oil and Gas RECLAIM Model.	Oil and Gas Producers utilize the "Oil and Gas RECLAIM Model". A similar consultation process should be facilitated for any proposed updates to the Oil and Gas RECLAIM Model.	Conduct a similar consultation and stakeholder engagement process for the Oil and Gas RECLAIM Model 8.0.
Kivalliq Inuit Association – Luis Manzo	1	General comment	The Kivalliq Inuit Association (KivIA), as the responsible DOI, through Security Management Agreement holds 50% of the financial security estimates for Meadowbank, Meliadine and Whale Tail mines Canada holds the other 50%. Therefore, any changes to the RECLAIM financial model must be reviewed and agreed by KivIA.	N/A
Kivalliq Inuit Association – Luis Manzo	2	General comment	The timeline and criteria for an advanced project or mine site changing from active to care & maintenance to a contaminated site needs to be explained.	The KivIA requests that CIRNAC explain the timeline and criteria for an advanced project or mine site changing from active to care & maintenance to a contaminated site.
Kivalliq Inuit Association – Luis Manzo	3	General comment	Project or mine’s asset value to a company. Will CIRNAC consider the asset value of an advanced project or mine as part of the initial financial security.	The KivIA requests that CIRNAC explain if there would be consideration of the asset value of an advanced project or mine as part of the initial financial security.
Kivalliq Inuit Association – Luis Manzo	4	General comment	What is the procedure for the return of financial security to the proponent?	The KivIA requests that CIRNAC explain the procedure for returning financial security to the proponent.
Kivalliq Inuit Association – Luis Manzo	5	RECLAIM 8 Model Working Copy – Excel Sheet; Summary Tab – Summary of Costs (2024 Dollars) – Direct Costs	The changes made to the direct costs need to reflect each individual project/mine site.	The KivIA requests that CIRNAC and their engineering consultants acknowledge that direct costs will need to be project specific versus “one cost fits all” with a range of costs being a more appropriate approach.
Kivalliq Inuit Association – Luis Manzo	6	RECLAIM 8 Reference Tables Working Copy – Excel Sheet – Table 2: RECLAIM v8.0 Price Sources, Basics and References -Excavation costs.	Excavation costs for load/haul/place for excavating and spreading rock and soil show significant increases from RECLAIM 7.0 to RECLAIM 8.0. Using known operating costs from a northern gold mine calculated in RECLAIM 7.0 and comparing these costs to the proposed rates in RECLAIM 8.0 the costs for load/haul/place for excavating and spreading rock and soil have increased by 50% to 430% (see Table 2 attached). In addition, the RECLAIM 7.0 costs included drill and blast which the RECLAIM 8.0 costs do not. However, without any detail provided on how the Civil Est. Tool calculates the RECLAIM 8.0 costs it is not possible to evaluate these cost differences.	The KivIA requests that CIRNAC and their engineering consultants provide the detail on how the Civil Est. Tool calculates the RECALIM 8.0 excavation costs.
Kivalliq Inuit Association – Luis Manzo	7	RECLAIM 8 Model Working Copy – Excel Sheet; Summary Tab – Summary of Costs (2024 Dollars) – Direct Costs	Will an inflation factor be used. Will this factor be applied to direct costs? Or to Indirect costs? Will an inflation factor be used on the direct costs? Or indirect costs? Over what time period will the inflation facto be reviewed.	The KivIA requests that CIRNAC and their engineering consultants respond to their proposed plan for an inflation factor.

Kivalliq Inuit Association – Luis Manzo	8	RECLAIM 8 Model Working Copy – Excel Sheet; Summary Tab – Summary of Costs (2024 Dollars) – Indirect Costs	The changes made to the percentages used for Indirect Costs from RECLAIM 7.0 (31%) to RECLAIM 8.0 (58%). Using the \$100M Direct Cost example in Table 2 the changes made to the percentages would result in an 87% increase to the Indirect Costs from \$31M to \$58M.	A cost increase of 87% is significant and will have a negative impact on the business model used to develop currently operating advanced projects and mines. In addition, a cost increase of this magnitude will have a negative impact on new investment “North of 60”. The KivlA’s comments on the recommended changes make up the remainder of this table (Table 1).
Kivalliq Inuit Association – Luis Manzo	9	RECLAIM 8.0 – User Manual – Indirect Costs – Engineering Design; Summary Report: Proposed Changes to RECLAIM Version 8.0 – Engineering Design	The percentage change made to the Engineering Design component of Indirect Costs from RECLAIM 7.0 (5%) to RECLAIM 8.0 (8%). This should be a range from 5% to 8% to be project specific instead of one cost fits all.	The KivlA requests that CIRNAC and their engineering consultants acknowledge that indirect costs will need to be project specific versus “one cost fits all” with a range of percentages being a more appropriate approach.
Kivalliq Inuit Association – Luis Manzo	10	RECLAIM 8.0 – User Manual – Indirect Costs – Project Management; Summary Report: Proposed Changes to RECLAIM Version 8.0 – Project Management	The percentage change made to the Project Management component of Indirect Costs from RECLAIM 7.0 (5%) to RECLAIM 8.0 (10%). This should be a range from 5% to 10% to be project specific instead of one cost fits all.	The KivlA requests that CIRNAC and their engineering consultants acknowledge that indirect costs will need to be project specific versus “one cost fits all” with a range of percentages being a more appropriate approach.
Kivalliq Inuit Association – Luis Manzo	11	RECLAIM 8.0 – User Manual – Indirect Costs – Engagement and Regulatory Compliance; Summary Report: Proposed Changes to RECLAIM Version 8.0 – Engagement and Regulatory Compliance	The Engagement and Regulatory Compliance component of Indirect Costs is a new addition from RECLAIM 7.0 (0%) to RECLAIM 8.0 (3%). The tasks listed under this new category are usually part of the project management tasks.	<p>The KivlA requests that CIRNAC and their engineering consultants provide:</p> <p>1)the rationale for separating these tasks out from the Project Management category.</p> <p>2)the cost information that was used to determined that this new category would cost \$3M per every \$100M of financial security.</p>
Kivalliq Inuit Association – Luis Manzo	12	RECLAIM 8.0 – User Manual – Indirect Costs – Contingency Management; Summary Report: Proposed Changes to RECLAIM Version 8.0 – Contingency	The percentage change made to the Contingency component of Indirect Costs from RECLAIM 7.0 (20%) to RECLAIM 8.0 (25%). This should be a range from 15% to 25% to be project specific instead of one cost fits all.	The KivlA requests that CIRNAC and their engineering consultants acknowledge that indirect costs will need to be project specific versus “one cost fits all” with a range of percentages being a more appropriate approach.

Kivalliq Inuit Association – Luis Manzo	13	RECLAIM 8.0 – User Manual – Indirect Costs – Owners Representative; Summary Report: Proposed Changes to RECLAIM Version 8.0 – Owners Representative	The Owners Representative component of Indirect Costs is a new addition from RECLAIM 7.0 (0%) to RECLAIM 8.0 (8%). The tasks listed under this new category are usually part of the project management tasks.	<p>The KivIA requests that CIRNAC and their engineering consultants provide:</p> <p>1) the rationale for separating these tasks out from the Project Management category.</p> <p>2) the cost information that was used to determine that this new category would cost \$8M per every \$100M of financial security.</p>
Kivalliq Inuit Association – Luis Manzo	14	RECLAIM 8.0 – User Manual – Future Value calculations: Summary Report: Proposed Changes to RECLAIM Version 8.0 – Future Value calculations	It states that the Future Value calculations will capture Closure and post-Closure activities and that a default inflation rate of 3% will be applied. Will there be an annual or a multi-year review of the inflation rate in order to adjust the financial security.	The KivIA requests that CIRNAC and their engineering consultants provide the timeline over which the inflation rate will be reviewed (ie. Annually review? Multi-year review?).
Kivalliq Inuit Association – Luis Manzo	15	RECLAIM 8 Reference Tables Working Copy – Excel Sheet; Table 1 – Basis of Unit Rates Development	<p>It states that “The below references are used in unit rates development -Published data sources”. All the published data sources used are from southern Canada.</p> <p>Are there any “North of 60” data sources? Are there any permafrost related data sources? Also, are these labour and contractor rates union or non-union rates?</p>	<p>The KivIA requests that CIRNAC and their engineering consultants provide:</p> <p>1) northern data sources or explain why these cannot be provided.</p> <p>2) Are the labour and contractor rates union or non-union rates.</p>
Kivalliq Inuit Association – Luis Manzo	16	RECLAIM 8 Reference Tables Working Copy – Excel Sheet – Table 2: RECLAIM v8.0 Price Sources, Basics and References – column Price Base/References	In the column for price Base/References several price references are either Civil Est. Tool or Historical Database. For transparency and ensuring a proper evaluation of costs by all intervenor’s full disclosure of all price references is necessary.	<p>The KivIA requests that CIRNAC and their engineering consultants provide:</p> <p>1) the details of the Civil Est. Tool.</p> <p>2) the Historical Database.</p>
Kivalliq Inuit Association – Luis Manzo	17	RECLAIM 8 Model Working Copy – Excel Sheet; Instruction Tab – Conditions of Use	It states that “This model is not intended to dictate how much should be spent on reclamation.” What is the purpose of this financial model if it is not supposed to dictate how much should be spent on reclamation by the proponent? Is it possible that if a proponent disagrees with CIRNAC’s final dollar amount created by this model that the proponent could set their own financial security?	The KivIA requests that CIRNAC: 1) provide clarity on the purpose of the RECLAIM financial model. 2) provide clarity on the proponents responsibility to adhere to the final dollar amount calculated by the RECLAIM financial model.
Kivalliq Inuit Association – Luis Manzo	18	RECLAIM 8 Model Working Copy – Excel Sheet; Unit Cost Tab – Fuel and Electricity	Fuel costs for gas and diesel are listed. No fuel costs for Jet A, Jet B or Av gas are included.	The KivIA requests that CIRNAC and their engineering consultants provide fuel costs for Jet A, Jet B and Av gas.

Kivalliq Inuit Association – Luis Manzo	19	RECLAIM 8 Model Working Copy – Excel Sheet; Unit Cost Tab – Mobilize Workers (round trip)	Hourly costs for small, medium and heavy helicopters. Are these hourly costs “dry” (do not include fuel cost) or “wet” (do included fuel cost).	The KivIA requests that CIRNAC and their engineering consultants determine if the hourly costs for small, medium and heavy helicopters are “dry” or “wet”.
Kivalliq Inuit Association – Luis Manzo	20	RECLAIM 8 Model Working Copy – Excel Sheet; Estimator Tab – Excavator Ratings	The cycle times and productivity for excavators are based on southern Canadian conditions (ie. digging in sandstone and caliche; non-Arctic conditions). There is no reference to permafrost or Arctic conditions for the cycle times and productivity for excavators.	The KivIA requests that CIRNAC and their engineering consultants determine what changes to the cycle times and productivity for excavators will occur in permafrost and Arctic conditions, in particular, metal fatigue under extremely cold conditions (ie. > -40oC).
Pine Point Mining Limited (PPML) - Ms. Veronica Chisholm	1	Increased Unit Costs	<p>Please see initial feedback in the attached letter. The justification for increased excavation and hauling costs (e.g., short-haul soil movement increasing from \$4.3/m³ to \$17/m³) lacks transparency on how these figures were derived. What specific contractor quotes, productivity rates, or haul distances were used in these calculations?</p> <p>Were regional variations considered, or was a blanket rate applied regardless of site-specific factors?</p> <p>Can industry propose alternative short-hauling costs based on regional/site-specific factors such as terrain, available borrow pits, road conditions, access to rail, and equipment availability? For example, a mine site with established all weather and paved road networks and short, efficient haul routes may have significantly lower hauling costs than a remote site requiring seasonal ice road access. Will proponents have flexibility in presenting alternative cost estimates to justify lower unit costs?</p>	N/A
Pine Point Mining Limited (PPML) - Ms. Veronica Chisholm	2	Higher Indirect Cost Percentages	<p>Questions Asked</p> <p>Contingency Increase (20% to 25%): While uncertainty exists in closure planning, what empirical data justifies a 25% contingency rather than the previous 20%? Can examples of cost overruns from past projects be provided to support this increase?</p> <p>Engineering Design (5% to 8%) & Project Management (5% to 10%): These increases suggest significantly greater complexity in closure execution. What historical data from northern mine sites demonstrate that these cost assumptions are necessary? Bonding/Insurance (1% to 3%): Can specific case studies or actuarial assessments be provided to validate this change?</p>	N/A
Pine Point Mining Limited (PPML) - Ms. Veronica Chisholm	3	Reclassification of Mobilization and Interim Care & Maintenance (ICM) as Capital Costs	<p>Moving these costs to Capital Costs now subjects them to contingency and indirect cost multipliers. How does this align with the principle of accurately reflecting third-party contractor costs?</p> <p>Industry projects varying durations of ICM depending on site conditions. How was the assumption of a minimum 3-year ICM period determined, and why is it being applied universally?</p>	N/A
Pine Point Mining Limited (PPML) - Ms. Veronica Chisholm	4	Owner’s Representative Cost (10% of Direct Costs)	<p>This is a new addition to RECLAIM. While we acknowledge the role of an Owner’s Representative in some government-managed projects, why is this now mandated for all projects, including those with active operator management?</p> <p>Can industry proponents provide alternative methodologies for project oversight rather than defaulting to a 10% additional cost?</p>	N/A

Pine Point Mining Limited (PPML) - Ms. Veronica Chisholm	5	Human Health and Ecological Risk Assessment (HHERA) Cost (3% of Capital Costs)	Industry already conducts environmental monitoring as part of regulatory requirements. What additional studies are being assumed under this cost, and how is the 3% figure justified? Given that mines with comprehensive monitoring programs may already demonstrate minimal risk, why is this cost not applied selectively based on site-specific needs? Can proponents outline their monitoring programs and propose a more phased cost-structure alignment with project-specific timelines?	N/A
Pine Point Mining Limited (PPML) - Ms. Veronica Chisholm	6	Future Value Calculation (3% Inflation Rate)	While inflation is a factor in cost projections, applying a fixed 3% escalation rate does not account for fluctuating economic conditions. Has any sensitivity analysis been conducted to assess alternative inflation scenarios? Can proponents propose their own escalation methodologies based on contractual arrangements and project-specific timelines?	N/A
Qikiqtani Inuit Association – Conor Goddard	1	Updated Unit Rates	Understanding unit rates are based on first principles; however further detail on unit rate development and assumptions is required. For Example. Load and haul costs have been split into ‘short haul’ and ‘long haul’; however, there is no detail on what haul distance constitutes a short vs. long haul. To provide greater accuracy in haulage costs, specific unit rates should be calculated based on the actual haul distance between stockpiles and the facility being reclaimed. Dozer equipment rates are classified as either ‘small’ or ‘large’ scale equipment; however, no detail is provided on what is classified as a large dozer. This results in greater uncertainty in which equipment rate should be used when calculating equipment costs.	N/A

Qikiqtani Inuit Association – Conor Goddard	2	Increased Indirect Percentages	An alternate methodology for calculating indirect costs should be provided. For example, engineering design could be estimated to be 8% of direct costs, or based on a cost estimate provided by an engineering firm to complete the activities outlined in the reclamation and closure plan. This would allow engineering costs to depend on the level of project definition and the work to be completed. This incentivises further project definition within closure designs earlier in the life of project.	An alternate methodology for calculating indirect costs should be provided.
Qikiqtani Inuit Association – Conor Goddard	3	Mobilization and Interim Care and Maintenance as Capital Costs	Mobilization / demobilization of equipment is typically considered as an indirect cost when it is being calculated as a percentage of direct costs. As RECLAIM calculates mobilization / demobilization costs directly, Okane supports its inclusion as a direct cost such that contingency can be applied. If mobilization / demobilization costs change to being calculated based on percentage, Okane does not support it being included as a direct cost.	Okane recommends mobilization / demobilization to be calculated via percentage of direct costs, similar to other Canadian jurisdictions. The quantity of equipment, and therefore the cost to mobilization / demobilization equipment, is tied to the reclamation timeframe and schedule. In the event of sudden closure, CIRNAC may implement closure activities on an alternate timeframe than what is outlined within the closure plan.
Qikiqtani Inuit Association – Conor Goddard	4	Owners Representative	Okane supports the costing of an Owners Representative within closure cost estimates. However, Okane is interested in the percentage used for determining this cost. In comparison, the updated project management cost of the entire reclamation phase is estimated to be 10% and includes costs for project coordination, accounting and project control, quality assurance/quality control and oversight, change orders and as-built reports. Is the level of effort of the Owners Representative comparable to the full project management for reclamation?	Is the level of effort of the Owners Representative comparable to the full project management for reclamation?
Qikiqtani Inuit Association – Conor Goddard	5	HHERA and Finalize CRP	An alternate methodology for calculating HHHERA and CRP costs should be provided. For example, finalizing the CRP could be estimated to be 4% of direct costs, or based on a cost estimate provided by an engineering firm to complete the activities outline in the reclamation and closure plan. This would allow the costs for finalizing the CRP depending on the level of project definition and the work to be completed.	An alternate methodology for calculating HHHERA and CRP costs should be provided.
Qikiqtani Inuit Association – Conor Goddard	6	Future Value Calculation	Okane supports the consideration of future valuation with respect to years associated with ICM; however, does not agree on how it is being represented within RECLAIM with respect to post closure activities and the removal of net present value calculations as outlined in the virtual engagement session. While inflation can add considerable costs to reclamation, solely accounting for inflation does not capture the true costs and value of money.	Okane would recommend included inflation within a real discount rate to be used within a net present value analysis
Qikiqtani Inuit Association – Conor Goddard	7	Detail for Unit Rates	Although RECLAIM provides a list of potential closure activities for each facility, it lacks the level of detail required to understand how these activities have been costed and relies strictly on unit rates and lump sum estimates.	To improve transparency and accuracy withing closure cost estimates, more inputs should be provided to show how that activity is being costed. Specifically, within post-closure activities such as monitoring the current RECLAIM model only provides an annual lump sum input for a monitoring activity. To improve transparency, it should provide more detail such as sampling/monitoring frequencies, number of sampling locations, analytic costs, reporting, etc.
Qikiqtani Inuit Association – Conor Goddard	8	Post-closure monitoring and maintenance contingency	Okane recommend that a contingency be applied to post-closure monitoring and maintenance activities. Post-closure maintenance activities are not excluded from having uncertainty and a contingency should be applied within this cost category. Specifically, activities such as long-term water treatment which is tied closely to geochemistry which typically carries large uncertainty.	Okane recommend that a contingency be applied to post-closure monitoring and maintenance activities.
Qikiqtani Inuit Association – Conor Goddard	9	Timeframe and Post-Closure Activities	Additional guidance is required within the revised RECLAIM model on the timeframe to be considered within the cost model associated with activities extending into perpetuity. There is potential for post-closure monitoring and maintenance activities to extend into perpetuity, such as DSIs, DSRs, and water treatment. What is the expected period of which these activities should be assessed over.	Additional guidance is required within the revised RECLAIM model on the timeframe to be considered within the cost model associated with activities extending into perpetuity.

Qikiqtani Inuit Association – Conor Goddard	10	Discount Rates	Further guidance should be provided within the revised RECLAIM model for discount rates to be applied within net present value calculations. Okane would welcome guidance on what ‘real’ discount rate should be applied to post-closure activities.	Further guidance should be provided within the revised RECLAIM model for discount rates to be applied within net present value calculations.
Teck Metals Ltd. - Dr. Bjorn Weeks	1	Feedback Letter	<p>Please see initial feedback in the attached letter.</p> <p>Inflation Application Without Discounting.</p> <p>The RECLAIM 8.0 update proposes incorporating inflation into cost estimates but does not address the standard practice of discounting to reflect the time value of money. Applying inflation without discounting leads to distorted financial obligations, potentially resulting in excessive and unrealistic financial security requirements.</p> <p>Without discounting, even minimal recurring annual costs (e.g., \$20,000 per year) would result in infinite bonding requirements, which contradicts financial principles and international best practices.</p> <p>Financial assurance practices that deviate substantially from international best practices may place the region at a competitive disadvantage, while failing to deliver real benefits</p>	N/A
Teck Metals Ltd. - Dr. Bjorn Weeks	2	Feedback Letter	<p>Please see initial feedback in the attached letter.</p> <p>Absence of Any Credit for Company Size and Environmental Performance</p> <p>We believe the bonding requirements should take into account both past environmental performance and the financial resources available to the company to meet its environmental liabilities.</p> <p>Teck is one of several International Council on Mining and Metals (ICMM) member companies operating in the region. No ICMM member company has ever defaulted on its closure obligations, nor would doing so be feasible in the context of maintaining a global social license to operate.</p>	N/A
Tlicho Government - Jessica Pacunayen	1	General	The Tłıchǫ Government reviewed CIRNAC and GNWT's proposed revisions to RECLAIM 8.0, the RECLAIM User Manual, and supporting documentation. These documents are used by the GNWT, CIRNAC, mining companies, and the Land and Water Boards to set mining security deposits. RECLAIM and the User Manual are also a resource for all parties reviewing security deposits. Tłıchǫ Government may also wish to use RECLAIM to estimate security deposits for future mines on Tłıchǫ Lands.	N/A

Tlicho Government - Jessica Pacunayen	2	Increased security deposits	<p>RECLAIM 8.0 includes numerous substantial increases. Most unit costs went up to varying degrees, and a few went down. On average unit costs appear to have more than doubled. Some key unit costs have increased far more than this, for example the lower estimate for winter road construction went up by more than 10 times. Indirect costs are now up to 58% of direct costs instead of 32%, plus there are new costs for a human health and ecological risk assessment and finalization of the closure plan (totaling 7% of capital costs). There is also a newly proposed cost for inflation during closure and post-closure. Post-closure monitoring and maintenance and mobilization/demobilization now have indirect costs (as percentages) added to them. These and other increases would result in very large increases to security deposits at existing mines. CIRNAC/GNWT explained that the increases are because the current unit costs (in RECLAIM 7) are more than 10 years old and because costs in the current RECLAIM spreadsheet (version 7.0) are too low compared to actual costs the government has incurred for actual reclamation projects. As noted in "Review of Mine Financial Security Estimates and RECLAIM": "it has been CIRNAC's experience with management of abandoned mines that the financial security held for these sites has fallen well short of actual expenditures." CIRNAC and its consultants are perhaps in the best position to provide actual costs of closure activities. There has been talk over the years that RECLAIM is dramatically underestimating closure costs. It is possible that even with the proposed revisions, RECLAIM 8.0 would continue to underestimate reclamation costs. For example, the Supplementary Information provided on Feb 18 says that the Owner's Representative costs are actually 12% to over 20% of costs, not the 8% adopted in the proposed revisions to RECLAIM. This is just one of several examples that may mean the RECLAIM 8.0 continues to underestimate reclamation costs. Others are in comments below.</p>	<p>RECLAIM should estimate the actual costs of closure and reclamation, even though it appears that the new estimates will likely be much greater than current security deposits. However, this does not mean that the Boards should immediately increase all security deposits in the North to reflect actual reclamation costs. This could have serious economic and social repercussions, and could undermine the objectives set for resource management under the modern treaties, to balance conservation and development for 'optimum benefit'. Instead, updating RECLAIM to reflect actual costs is a necessary first step to fixing some serious and far-reaching problems related to security deposits and more broadly to sustainable and responsible mining in the North. Actual reclamation costs must be known and on the table in order to have informed discussions about the impacts, benefits, and risks of mining, including the risk of having to pay for cleanup of abandoned mines. Underestimating security can also enable companies with insufficient financial resources to mine in the North, which poses a serious risk to the Northern economy and the environment. Greater attention should be given to a mining company's financial health and the risks for each project (e.g., risks from market conditions, remoteness, logistical issues, etc.) when weighing the impacts, benefits, and risks of approving a full-scale mine. Decisions about how much risk is acceptable and what the right balance are ultimately policy decisions to be made by Indigenous and public governments, informed by robust evidence and analysis, and input from citizens and residents. If the federal and territorial governments, or the Boards in working to achieve the treaty-based objectives for resource management, wish to offset the burden of posting security for actual reclamation costs, this should be done in a transparent, carefully considered manner informed by the actual costs of clean-up and the views of all parties. The Tłıchǫ Government would like to be involved in any such discussions, and as a treaty partner, must be involved in these discussions. Other topics raised in our comments are inextricably intertwined with the issue of RECLAIM estimates, for example relinquishment of liability, promoting progressive reclamation, and financial security for potential disasters. These issues should be discussed holistically along with RECLAIM updates. Some of these issues may need legislative amendments to properly address them in the long run.</p>
Tlicho Government - Jessica Pacunayen	3	Increased security deposits - incentives for progressive reclamation	<p>The RECLAIM Manual includes a policy that the security deposit cannot be reduced for progressive reclamation (reclamation completed during operations) until the mining company has completed the reclamation work. This is a sensible approach to ensure there is always enough money for reclamation if a company goes bankrupt. However, a more refined and strategic approach to this problem should be considered to enable work to proceed while limiting risks if a company goes bankrupt. This would allow more parts of a mine to be reclaimed early in the mine life, which benefits the environment, the taxpayer, and the company. A company's financial capacity, the financial and environmental risks of leaving parts of the mine unreclaimed, and other factors would need to be considered.</p>	<p>Financial mechanisms to promote progressive reclamation should be evaluated and discussed with all parties.</p>

Tlicho Government - Jessica Pacunayen	4	Increased security deposits - case studies	<p>Based on our participation at the meeting hosted by CIRNAC and GNWT during the PDAC conference in March 2025, we understand there may be disagreement over whether RECLAIM 8.0 is overestimating or underestimating closure costs. CIRNAC and the GNWT have actual cost data from abandoned mine reclamation in the North. Using this data to validate RECLAIM 8.0 is an indispensable step to deal with these opposing views and to ensure security deposits cover the full costs of reclamation without unduly burdening industry.</p> <p>The Discussion Paper says that CIRNAC and GNWT had originally intended to use historical data to help populate RECLAIM 8.0 (which is different than historical data for validation). However, the Discussion Paper says this did not happen because "contractor confidentiality, limited examples available to provide a sufficient range and average of costs (which can vary considerably depending on the size and scope), and the effort required to synthesize data." While these issues might make it challenging to use historical cost information to update RECLAIM 8.0's costs and assumptions, it should not prevent validation of the model. Validation is about running information from past projects through RECLAIM 8.0 and comparing this to the actual cost of the project. If confidentiality issues cannot be addressed, CIRNAC and GNWT should at least conduct this validation step internally and publicize whether the exercise validated the model. Further, "the effort required to synthesize data" may be a barrier, but it is arguably a relatively small price to pay compared to the benefits of improved cost estimates.</p> <p>In addition to this validation step, CIRNAC and GNWT should use historical cost data to improve RECLAIM. Based on the unit cost reference tables provided as supporting documentation, it appears this may have been done to some extent. If not, CIRNAC and GNWT should take advantage of historic cost data in ways that maintain confidentiality and account for limitations in the data.</p>	<p>1. Before finalizing RECLAIM 8.0, CIRNAC and GNWT should validate it, by running RECLAIM (i.e., entering actual quantities, selecting the appropriate unit costs, etc.) with information from actual reclamation projects at abandoned mine sites. The resulting RECLAIM 8.0 estimate should be compared to the actual cost. If these are substantially different, adjustments should then be made to RECLAIM 8.0 from lessons learned from this comparison.</p> <p>2. Historical cost data should also be used, to the extent possible, to update RECLAIM with actual cost information, without compromising confidentiality.</p>
Tlicho Government - Jessica Pacunayen	5	Internal government costs	RECLAIM does not include the substantial internal costs for CIRNAC and GNWT, for example government employee salaries. This means there is no transparency about what these costs are or what the actual costs are when a mine is abandoned.	Please explain why these costs are not considered when estimating the costs of reclaiming a mine.
Tlicho Government - Jessica Pacunayen	6	Calculating security annually	<p>The proposed RECLAIM Manual update includes a new requirement that "The total financial security for final reclamation required at any time during the life of the mine should be equal to the total outstanding reclamation liability for land and water combined (calculated at the beginning of the work year, to be sufficient to cover the highest liability over that time period)." This mirrors the Mine Site Reclamation Policy for the NT, which is well over 20 years old.</p> <p>It is not clear how this would be implemented. Is GNWT/CIRNAC anticipating that water licences would have a schedule with annual increases to security? This has not been recent practice. Or is a RECLAIM review anticipated each year? TG is concerned that this would place a big resource demand on all parties. Also, how would the common practice of increasing security at project milestones (e.g., commencement of construction, mining, or milling, percent of pit filled, etc.) fit into this approach?</p>	Clarify how this requirement would be implemented.

Tlicho Government - Jessica Pacunayen	7	Human health and ecological risk assessment	<p>The proposed revisions to RECAIM include the cost of a human health and ecological risk assessment (HHERA). The User's Manual notes that this is completed in accordance with federal risk assessment guidance. Modern mines are different than mines abandoned in the past in that they have approved closure objectives and in many cases, approved closure criteria. It is our understanding that, in the past, HHERAs at federal sites have been used to set the standard for cleanup, for example the water or soil contaminant thresholds that must be met. If a modern mine is abandoned during operations and is in compliance with its water licence, land use permit, and other authorizations, unexpected contamination (beyond what is addressed in the approved closure plan) may be less than in the past.</p> <p>Some mines may include an HHERA in their approved closure plan to confirm predicted risks. However, it is not clear what role an HHERA would play at an abandoned mine. We are concerned that use of HHERA's could lower the standard compared to approved closure criteria. Closure criteria have been publicly reviewed, vetted and debated in countless workshops, and represent substantial input from all parties. Closure criteria have been deliberated by the Boards and Board decisions on them have been transparently documented. Ignoring approved closure criteria after abandonment would be inconsistent with the land claim agreements that established the Land and Water Boards.</p>	<p>If an HHERA is part of an approved closure and reclamation plan, then the cost of it should be in RECLAIM. Also, if the GNWT and CIRNAC expect that new risks will emerge after abandonment of mines with modern, approved closure plans, then an HHERA should be a default cost in RECLAIM. However, the RECLAIM Manual should acknowledge that Board-approved closure criteria are the clean-up standard at abandoned mines, unless it is demonstrated that these cannot be achieved or that new criteria are needed for risks that developed after abandonment. An HHERA may play a role in this effort, but HHERA's should not be a replacement for closure objectives and criteria.</p>
Tlicho Government - Jessica Pacunayen	8	Monitoring	<p>The draft RECLAIM Manual says that monitoring will be conducted "with respect to the effectiveness of the mitigative measures, the accuracy of the environmental assessment and any unforeseen environmental impacts". Although true, this statement does not appear to reflect current practice. To our knowledge, all closure plans (and therefore security deposits) in the NT are founded on the MVLWB/AANDC Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories. Therefore, all mines have Board-approved modern closure plans that are based on closure goals, principles, closure objectives and closure criteria. This means closure criteria will dictate monitoring plans and duration. The effectiveness of mitigative measures and the accuracy of the environmental assessment will be reflected in the criteria. If there are unforeseen environmental impacts, closure criteria should be updated.</p>	<p>The RECLAIM Manual should state that monitoring will depend on closure criteria.</p>

Tlicho Government - Jessica Pacunayen	9	Relinquishment of liability	<p>The revised Manual states that "Following mine closure, mining companies or their future owners should continue to be responsible for the site , including the remediation of any additional environmental complications which develop." This raises questions about relinquishment of liability. For many years, many parties have been requesting clarity on how liability will be relinquished at mine closure. This is especially important with mines like Diavik approaching the end of operations. This gap creates uncertainty and may inhibit investment in sustainable and responsible mining in the North.</p>	<p>1. It is understood that additional policy, legislative, or regulatory amendments may be needed to address how and to what extent companies are released from liability once all closure criteria have been met. For example, will companies be required to leave funds for future monitoring, maintenance, or unforeseeable events at the closed mine? These funds may require supporting legislation and/or policy. Even if the GNWT cannot undertake an effort to better address relinquishment before the RECLAIM updates are finalized, the Manual (or another document) should include more information on this topic. This would assist all parties in understanding how GNWT and CIRNAC will approach relinquishment of liability under existing legislation. 2. The GNWT and CIRNAC should immediately begin the effort to outline the conditions and criteria that will allow relinquishment, establish how much money will be required for monitoring, maintenance and unforeseeable events, clarify the extent to which companies will be released from liability, and develop a relinquishment process. This effort will need to involve Indigenous Governments early on.</p>
Tlicho Government - Jessica Pacunayen	10	Performance holdback	<p>The revised Manual states that "If the company carries out progressive reclamation during operations as proposed, such as revegetation of disturbed areas during operations, then the closure cost estimate could be reduced by the associated costs for that component when the company demonstrates that the closure activity has been successfully completed and closure objectives and criteria have been met." It is our understanding that the LWB/GNWT/CIRNAC Guidelines for Closure and Reclamation Cost Estimates for Mines allows for some money to be refunded to companies, even if criteria have not been met. This is allowed so long as a performance holdback is set. The same Guidelines explain how a performance holdback could be set, including three different methods. The first method uses a simple percentage-based approach by mine component, the second method uses RECLAIM, and third uses a "factored risk" approach.</p>	<p>RECLAIM should reflect the CIRNAC/GNWT/LWB Guidelines as they relate to performance holdbacks. Calculations based on the Guidelines should be inserted into RECLAIM. This would include simple calculations supporting Table 1 of the Guidelines (the percentage-based approach). It could also include calculations to support the "factored risk" approach on page 19 of the Guidelines. Support for companies to estimate performance holdbacks will promote a quicker and more efficient security refund process.</p> <p>Although all regulators that use RECLAIM may not require performance holdbacks, those regulators could simply ignore the calculations, or the GNWT could develop them for use in the NT only. While it is beneficial to have only one version of the RECLAIM model across the North, add-ons to reflect jurisdictional differences could help to ensure that RECLAIM is useful everywhere while maintaining a core set of shared calculations and inputs.</p>
Tlicho Government - Jessica Pacunayen	11	Documentation of security refunds	<p>Similarly, security refunds for completed progressive reclamation or completed work during active closure is becoming more common and is an important way to promote and reward early closure work. Currently, RECLAIM does not document these refunds, which means there is no record of the original estimate, the refunds given, and what the refund was based on. This may make it difficult to determine refunds during active closure, since it may not be clear what has already been refunded and what is still being held as security.</p>	<p>RECLAIM should document all security refunds. For example, RECLAIM could include a refund summary sheet showing the original estimate, all refunds, and links to documentation supporting the refund (e.g., RECLAIM estimates used to calculate refunds, Board decisions, etc.)</p>

Tlicho Government - Jessica Pacunayen	12	Disasters	RECLAIM does not cover the costs of disasters. With numerous mines using the RECLAIM model across Canada's North, there is a significant risk that one or more of these mines will have an environmental disaster during the life of the mine. Currently, disaster clean-up costs would fall entirely to the taxpayer. The recent disaster at the Eagle Mine in Yukon is an excellent demonstration of how the taxpayer will be forced to carry the burden of disaster clean-up. Such costs could easily be in the hundreds of millions of dollars or more. The Mount Polley disaster in 2014 is another example of taxpayers covering significant costs for a mining disaster. Although this may be considered a policy decision that is outside of the scope of RECLAIM, RECLAIM by necessity houses many policy decisions by virtue of the costs it includes or excludes. RECLAIM unavoidably sets policy through its underlying principles and assumptions. Excluding disaster costs is as much a policy decision as including them.	Security for potential future disasters should be required. Since most mines are unlikely to experience a disaster, the amount held by any single mine should only be a fraction of potential disaster clean-up costs. This could be determined based on the risk profile of a project (e.g., potential for acid drainage, geotechnical failures, proximity to highly valued areas, etc.). If disaster costs are not included in RECLAIM, another mechanism is urgently needed to ensure that industry contributes towards a pot of money for future disasters.
Tlicho Government - Jessica Pacunayen	13	Revegetation	Revegetation of a site after closure is an important part of restoring the land, enabling long-term future cultural use, making the site look and feel like the surrounding area, and supporting wildlife. The revegetation unit costs in RECLAIM include seeding and tree planting. Planting cuttings, transplants, or plugs are other examples of revegetation, and likely have different costs than seeding and tree planting. Placement of stockpiled reclamation materials such as topsoil, till, lakebed sediments, etc. should also be included in direct costs for revegetation.	RECLAIM should include the cost for all types of revegetation, including cuttings, plugs, transplants, and spreading stockpiled dirt and soil.
Tlicho Government - Jessica Pacunayen	14	Traditional Knowledge monitoring	Traditional Knowledge (TK) Monitoring is a critical part of ensuring the closed site meets closure objectives and goals. TK Monitoring is also essential for building community confidence in the closed site to enable long-term future use of the site. (For example, we note that the WLWB requires Diavik to prepare a TK Monitoring Plan).	RECLAIM should include the costs of a Traditional Knowledge Monitoring Program. This would involve regular (e.g., initially annual) site visits from Elders, youth, and staff to evaluate water quality, wildlife safety and movement, vegetation, and more. It is important to note that this is not the same as engagement or regulatory costs. This TK Monitoring Program is similar to other monitoring programs and should be a line item in the Post Closure sheet along with the scientific monitoring programs.
Tlicho Government - Jessica Pacunayen	15	Net Present Value	To date, RECLAIM has included the ability to calculate the net present value. This was used for very long-term costs (e.g., more than 20 years) such as maintenance of constructed wetlands. This reduced the amount of security a company needed to post, without exposing the tax payer to increased risk. This is because the net present value accounted for the fact that money set aside for the future can be invested and will grow. The discount rate used in those calculations was generally an assumed modest growth in investment (e.g., 5%) minus an assumed inflation (e.g., 2%).	Why has the net present value function been removed from the draft RECLAIM?
Tlicho Government - Jessica Pacunayen	16	Interim Care and Maintenance	The RECLAIM model includes an estimate for interim care and maintenance, meaning the period after bankruptcy and abandonment and before active closure begins. The total cost is based on an annual cost (commonly a few million dollars) times the number of years the site is likely to be in interim care and maintenance. The draft RECLAIM 8.0 model includes a default of 3 years of interim care and maintenance. However, the supporting documentation for the RECLAIM updates (Review of Mine Financial Security Estimates and RECLAIM) says "Importantly, the duration of Interim Care and Maintenance is typically limited to two to three years. It is known that government experience has been much different than this, both in scope and duration. This is an obvious category for which government could be under secured". The same document provides some evidence that the actual period could be five to ten years.	The estimated time a site is in interim care should be based on the expected or average duration not the minimum.

Tlicho Government - Jessica Pacunayen	17	Unit costs - reference table and sources	During the public review, a reference table showing the source for unit cost assumptions was provided.	<p>1. This reference table is a significant improvement and should be included in the finalized model. It improves transparency and credibility of the unit costs and enables industry and decision-makers to discuss alternative site-specific unit costs.</p> <p>2. Unit costs adopted from projects in the South (e.g., Sudbury) should be increased if these costs are going to be higher in northern, remote conditions.</p>
Tlicho Government - Jessica Pacunayen	18	Fish habitat	The Open Pit tab does not explicitly include costs for building fish habitat (littoral zones), even though these may be required in pit lakes or pits that will be reconnected with larger lakes. Some of the activities in the tab may address fish habitat construction (e.g., placing fill), but it is not clear whether all activities required to build littoral zones are in RECLAIM. (Fish habitat construction may be required by the Department of Fisheries and Oceans and/or the Land and Water Boards. In either case the estimate should be included in RECLAIM. If DFO already holds security for this activity, it can be subtracted from the RECLAIM estimate. If it is only required by the Land and Water Boards, then it would remain in the final total.)	RECLAIM should include costs for construction of fish habitat in pits.
Tlicho Government - Jessica Pacunayen	19	Scientific and Traditional Knowledge research	Typically, the CRP will have several approved reclamation research plans. If a mining company abandons a mine, important reclamation research may not have been carried out. The results of this research will be needed to properly reclaim the site.	RECLAIM should include the costs of scientific and Traditional Knowledge reclamation research. As noted by BCL in their memo, this could result in mines not proposing research, in order to avoid higher security deposits. BCL proposed some alternatives to address this problem (page 18 and 19 of the BCL memo). These could be considered, provided the details of the approaches are publicly reviewed.
Tlicho Government - Jessica Pacunayen	20	Risk communication	The RECLAIM model does not include the costs of risk communication. In order to restore confidence in the mine site area so that closure objectives related to cultural use can be met, a good risk communication plan must be developed and carried out. This may involve public meetings, posters, online tools, social media, radio, newspapers, etc.	RECLAM should include the cost of risk communication. If this cost is lumped in with other costs (e.g., engagement and regulatory compliance costs), this should be mentioned in the User's Manual. This will ensure that the portion of security held for risk communication is not returned until it has been carried out. It will also inform any future disagreements about the percentage of direct costs that should be held for engagement and regulatory compliance.

A Member of the Public - Todd Slack	1	Model Utility - One Long Comment, Pt. 1	<p>Obviously an updated reclaim model is in the interests of all parties. Recent years have seen significant increases in costs and an adjustment to better reflect this is a valuable effort to protect taxpayers and ensure that the polluter pays principle is effectively applied. However, the operational modifications of the model are not the only step needed to ensure our territory is protected. A higher-level review focusing on the overall effectiveness of the bonding system should be undertaken using real world closure examples to test the predictive utility of the RECLAIM approach. No model is perfect and the review should be asking if this model meaningfully serves the polluter pays principle. Ground-truthing with real world examples is essential. For example, the MVLWB held approximately \$70M in security for Snap Lake (it isn't particularly easy to know exactly what the security amount was). According to public reporting, as of 2023 De Beers had spent \$135M. In that case, it seems that NWT taxpayers – with a government already seeking financial relief - were considerably exposed. Should this be an indicator of a larger trend, the risk is even larger as it seems a widely held belief that industry, already mobilized and familiar with their site, can complete a closure in a more cost effective manner. Yet, the final cost for this site, with a modern security bond, will be more than twice what was held.</p>	Starting with the NWT, publish real world examples of closed sites versus the reclaim estimates
A Member of the Public - Todd Slack	2	Model Utility - Pt. 2	<p>Other real world examples available to test the utility of RECLAIM estimates can be found in ongoing Strategic Oil abandonment and closure as well as the 2014 Snowfield property. Based on anecdotal information (as accounts have not been published, despite the expenditure of public monies), for the former, the GNWT has paid tens of millions for the reclamation, while the in the latter, the GNWT paid far in excess of the security held (nevermind the six-figure pre-existing debts that the company owed GNWT).</p> <p>Examples from Nunavut can be researched as well, extending back to Tahera/Jericho which was established with a modern regulatory regime and cost taxpayers more than the security that was held (as opposed to GIANT which is not appropriate as a test case). Yukon examples, over which there are a number of selections (Victoria, Wolverine, Minto) may provide further insight into the effective security estimates and bonding (considering the Yukon government has appropriated \$100M for early stages of the Victoria mine they've inherited, which was permitted in a modern system).</p> <p>To summarize, before undertaking minor adjustments to the mechanics of the model, the overall utility needs to be verified, confirming fit for purpose. Notwithstanding the financial limitations of GNWT means that they lack the robustness to absorb and large mine failures (noting the daily cost cutting measures that are occurring), more importantly, the citizens of the NWT should have confidence that those overseeing the accessing and sale of our public resources are ensuring that the closure is paid for and completed by those exploiting the resource.</p>	<p>1) Undertake analysis that looks at closure estimates versus the security held for sites across the NWT, Nunavut, and the Yukon.</p> <p>2) Search for similar examples in Southern Canada were the structures ensuring the protection of taxpayers and governments are similar to those employed in the north.</p>
Wek'èezhii Land and Water Board - Meghan Schnurr	1	Implementation of RECLAIM V8	<p>It may help reviewers if the authors could describe how they envision the updated model being implemented. For example: - Do the authors intend to start submitting closure cost estimates generated via RECLAIM V8 for all security-related reviews from the date of publication onward? Would this approach include existing projects that have previously had closure costs estimated using V7? Will the authors expect licensees and applicants to use RECLAIM V8 for all closure cost estimates from the date of publication onward?</p>	Please describe how the authors intend to implement RECLAIM V8.

Wek'èezhii Land and Water Board - Meghan Schnurr	2	Comparison against current estimates using RECLAIM V7	The proposed updates in RECLAIM V8 are noted. Based on the proposed updates, closure cost estimates will be higher than when estimated using RECLAIM V7. This could have implications to the mining industry in the north, so it may be helpful for reviewers to have examples of how closure cost estimates using RECLAIM V8 differ from those generated using RECLAIM V7.	Is there data available that compares how closure cost estimates generated using RECLAIM V8 differ from previous estimates generated using RECLAIM V7? If not, could this data be prepared and shared? Or perhaps the authors could estimate how different the closure cost estimates will be? What are the potential implications to the mining industry in the north?
Wek'èezhii Land and Water Board - Meghan Schnurr	3	Comparison against known costs to close and reclaim sites	Further to the comment and recommendation above, it may also help reviewers understand the purpose of the proposed changes to the RECLAIM model if data could be provided that compares actual costs to close and reclaim sites to estimates generated using RECLAIM V7 and V8, though, it is not apparent whether this data is available.	Have the authors undertaken an analysis that compares the actual costs to close and reclaim sites against closure cost estimates generated using RECLAIM V7 or V8? Can this data be provided?
Wek'èezhii Land and Water Board - Meghan Schnurr	4	RECLAIM Oil and Gas Model	It is noted this update pertains to the mining version of RECLAIM. Do the authors intend to update the oil and gas model as well?	Are there plans to update the RECLAIM Model for oil and gas? If so, are approximate timelines available, and would the process be similar to this update? If not, please explain why the oil and gas model will not be updated.
Wek'èezhii Land and Water Board - Meghan Schnurr	5	User Manual - Discussion throughout on the status of Closure and Reclamation Plans.	The User Manual speaks to the need for applicants and licensees to have CRPs in order to develop closure cost estimates. In some instances, these speak to the need for an approved CRP. For example: - Section 2 Considerations for Northern Settings, "To derive accurate closure cost estimates, it is imperative that the company have an approved CRP which demonstrates a comprehensive understanding..."; and - Section 4.3.1 Engineering Desing, "In preparing a closure cost estimate, it is typical to assume that there is an existing, approved Closure and Reclamation Plan that can be converted to contract ready documents for closure activities." While it is important to develop a CRP to the point where it can be fully approved, this can take years (specifically for projects that require a type A water licence). This means that closure cost estimates developed during the application phase (pre-construction), during construction, and for the majority of the operational lifespan will be based on CRPs that have not been fully approved. This seems to be acknowledged in Section 4.3.6 Contingency where it is discussed that most CRPs for mining and associated estimates are at the feasibility or advanced conceptual level until near the end of operations. While this helps, it may reduce confusion further if the entirety of the User Manual recognized that CRPs typically require years of development to receive full approval. And for closure cost estimating purposes, it may be more realistic to indicate the applicant/licensee should advance the CRP as early as possible in the project lifecycle.	Consider whether the User Manual should be updated to clarify that it typically requires years to get a CRP fully approved and that applicants/licensees are encouraged to advance closure planning as early as possible. Consider revising certain messages, for example Section 2, to indicate, for closure cost estimating purposes, it is imperative that the applicant/licensee advance the CRP as early as possible in the project lifecycle.
Wek'èezhii Land and Water Board - Meghan Schnurr	6	User Manual - Definition of Contingency	A definition for contingency is provided in the Definitions and Acronyms table on page 4. A reference is provided from AACE costing terminology which seems to indicate this definition has been accepted by the construction or engineering community for costing purposes. However, it is not clear whether this definition aligns with how the term contingency is used throughout the document (specifically Section 4.3.6. Contingency) as well as how it is used for the purpose of generating a closure cost estimate via RECLAIM. For example the definition indicates contingency is "Typically estimated using statistical analysis or judgment based on past asset or project experience." Section 4.3.6 does not speak to statistical analysis, rather, the description in this section states "The determination of the contingency percentage is a subjective and project-specific task that relies on the judgement of the estimator." This could create confusion for applicants and licensees in terms of what they are expected to do when proposing contingency percentages.	Review the definition of contingency and consider whether it appropriately speaks to how users of the model are expected to derive contingencies.

Wek'èezhii Land and Water Board - Meghan Schnurr	7	User Manual - Section 4.2.5	This section describes a worksheet within RECLAIM V8 for Interim Care and Maintenance. It states that this worksheet captures the costs from cessation of mining activities to when active remediation begins. Is this meant to only cover the time period from cessation until active remediation? What about the period up to executing closure activities - perhaps the use of the term remediation in this case is analogous to closure activities? Please note that remediation and reclamation in the general sense have different meanings.	Consider whether a revision is necessary to ensure this messaging covers the entirety of the intended period. For example, "the period between cessation of mining activities and when active remediation, or closure and reclamation begins."
Wek'èezhii Land and Water Board - Meghan Schnurr	8	User Manual - Section 4.2.6	This section states "These should reflect the monitoring and maintenance plans and commitments identified in the Closure and Reclamation Plan" and later that "it reflects the monitoring and maintenance commitments in the Closure and Reclamation Plan." The LWBs' Standard Water Licence Conditions include Post-Closure Monitoring and Maintenance Plans, and it is typical for LWBs to require these for projects that require a water licence. Post-Closure Monitoring and Maintenance Plans are the home for the licensee to describe their approach to post-closure monitoring and maintenance.	Consider whether this section should be updated to also reference Post-Closure Monitoring and Maintenance Plans.
Wek'èezhii Land and Water Board - Meghan Schnurr	9	User Manual - Section 4.3	The introductory sentence of this section speaks to indirect costs, indicating they are "typically allocated or spread across all activities on a predetermined basis." It is not clear what is meant by "predetermined basis," though, the final sentence in this section indicates indirect costs are calculated based on professional judgement. Either way, please note that this term / the way it is used could lead the user to think that they determine indirect costs, when, regulatory process-wise, the user proposes indirect costs, just like any other cost, and determinations are by the Land and Water Boards.	Consider clarifying the intent of the term "predetermined basis" and its usage, or whether another term could be used instead.
Wek'èezhii Land and Water Board - Meghan Schnurr	10	User Manual - Section 4.3	The introductory sentence to this section seems incomplete: "Costs not directly attributable to the completion of an activity, which are typically allocated or spread across all activities on a predetermined basis." Pending any revisions as per the above comment and recommendation, should this sentence read as follows?: "Indirect costs are costs that are not directly attributable to the completion of an activity. They are typically allocated or spread across all activities on a predetermined basis."	Consider revising the sentence to improve clarity.
Wek'èezhii Land and Water Board - Meghan Schnurr	11	User Manual - Section 4.3	RECLAIM V8 proposes an increase of 21% in indirect costs over RECLAIM V7, applied to the summary tab. The LWBs are responsible for setting the amount of security. Overall, it is challenging to consider what evidence is required to justify deviations from the "pre-determined" indirect costs when it is unclear how the "pre-determined costs" were derived. It is unclear what considerations went into deriving these percentages, except for the contingency indirect cost, and therefore how any deviations could be considered in the future.	Please clarify whether RECLAIM has considered deviations from the "pre-determined costs" proposed in section 4.3. Is additional information to support these pre-determined costs available? What evidence could be provided to support a deviation from these costs?
Wek'èezhii Land and Water Board - Meghan Schnurr	12	User Manual - Administrative Edits	It seems the hyperlinks in the User Manual do not work.	Review and insert links as necessary.
Wek'èezhii Land and Water Board - Meghan Schnurr	13	User Manual - Administrative Edits	Should Table 2 Column 3 be titled "Typical CRP Phase"?	For consideration.
Wek'èezhii Land and Water Board - Meghan Schnurr	14	Supplementary Information on RECLAIM V8 February 18,2025	The supplemental information document references a "Technical Work Group and review of actual cost for Mine Closure and Reclamation at various locations across Canada." Further information beyond this has not been provided. It may be helpful to understand the range of projects and range of costs/percentages considered as part of developing the proposed indirect cost percentages. For example, the supporting information for Owners Representative states "A review of recent projects where Owners Representative costs were incurred at mining closure and reclamation projects ranged from 12% to greater than 20%."	If possible, provide additional information to understand the range of projects (e.g. size of project, type of mine: open pit, underground, etc.) and range of costs/percentages that were considered as part of developing the proposed indirect cost percentages in RECLAIM V8.

Wek'èezhii Land and Water Board - Meghan Schnurr	15	RECLAIM V8 - New Line Item - Finalize CRP (% Closure Costs)	The ICM [Interim Care and Maintenance] tab of RECLAIM V8 includes a new line item titled, "Finalize Closure and Reclamation Plan (% Closure Costs)." This is calculated as 4% of direct costs with the exception of ICM and post-closure activities. It is unclear if there is a linear relationship between the cost of finalizing a CRP and the associated direct costs (i.e. closure work), and whether/how this considers how advanced the CRP is. This line item also does not seem to align with the text in section 4.3.1 of the Manual which states "In preparing a closure cost estimate, it is typical to assume that there is an existing, approved Closure and Reclamation Plan that can be converted to contract ready documents for closure activities (i.e. engineering is not required to develop a closure plan) and that there are no dramatic departures from the approved Closure and Reclamation Plan."	If possible, discuss how the 4% cost proposed was developed and whether/how this considers the varying degree of closure planning across different projects.
Wek'èezhii Land and Water Board - Meghan Schnurr	16	RECLAIM V8 - New Line Item -HHERA (% Closure Costs)	The ICM tab of RECLAIM V8 includes a new line item "Human Health and Ecological Risk Assessment (HHERA; % Closure Costs)." This is calculated as 3% of direct costs with the exception of ICM and post-closure activities. It is unclear if there is a linear relationship between these direct costs and the development of an HHERA, and how the percentage was derived.	Please provide further information as to how the 3% cost proposed for HHERA was derived.
Wek'èezhii Land and Water Board - Meghan Schnurr	17	Use of Historical Costs	The information provided indicates that costs to clean-up historical federal contaminated sites informed RECLAIM V8. It is noted that the regulatory context and expectations have changed significantly since some of those sites were operational/abandoned. It is unclear how/whether the change in regulatory regime and expectations was considered when reviewing these historical clean-up costs.	Please describe how/whether the change in regulatory expectations was considered when reviewing the historic clean-up costs of federally contaminated sites.
Wek'èezhii Land and Water Board - Meghan Schnurr	18	Owners Representative	The supplemental information provided to support the indirect cost associated with "Owners Representative" references support to CIRNAC and scrutiny of the Federal Contaminated Sites Program. Given that the GNWT would be responsible for clean-up for the majority of current projects in the Mackenzie Valley, it is unclear whether GNWT has adopted this same approach to the clean-up of abandoned sites.	Clarify whether the GNWT has adopted this same approach of hiring an Owners Representative.