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Qikiqtani Inuit Association

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Serving the communities of

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March 14, 2025

Elisabeth Luther
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RE: QIA 2025 Annual Security Determination for Baffinland's Mary River Project

On October 25, 2024, the Qikiqtani Inuit Association (QIA) received an extension request from Baffinland Iron Mines Corporation (Baffinland) to the Annual Adjustments to Reclamation Security process as required by Section 9 of the QIA-BIMC Commercial Lease Q13C301¹ (the Lease). This extension request was accepted by QIA on October 29, 2024, as outlined in Table 1 below.

Table 1.

Activity (Section 9.2 the Lease)	Party	Date (Section 9.2, the Lease)	BIMC Extension Request
9.2 b) Work Plan and Marginal Security Estimate	BIMC	November 1, 2024	January 15, 2025
9.2 d) Determination of Reclamation Security	QIA	December 31, 2024	March 15, 2025
9.2 e) Adjust and post amount of Reclamation Security	BIMC	January 31, 2025	April 15, 2025

The QIA received Baffinland's 2025 Work Plan² on January 17, 2025 and Baffinland's 2025 Marginal Closure and Reclamation Financial Security Estimate on February 28, 2025. Following the review of this information, QIA has determined that the appropriate security for Inuit Owned Land is \$133,302,831 for

¹ QIA and Baffinland (2013). Commercial Lease No. Q13C301. September 6, 2013.

² Baffinland (2023). 2024 Work Plan. December 1, 2023.



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2025. The full details of this determination are presented in the appended Mary River Project 2025 Security Estimate³ by M.A. O’Kane Consultants Inc.

QIA looks forward to discussing this determination with Baffinland, the NWB and Crown-Indigenous Relations and Northern Affairs Canada in the coming weeks.

Nakurmiik,

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cc. Jared Ottenhof, Lauren Perrin

³ MA. O’Kane Consultants Inc. (2025) Mary River Project 2025 Security Estimate. March 2025

Mary River Project 2025 Security Estimate

March 14, 2025



Integrated Mine Closure and Relinquishment Solutions

Mary River Project 2025 Security Estimate

955-221-R-004

March 2025

Prepared for:

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Rev. #	Status	Rev. Date	Author	Reviewer Sign-off	Major Changes
0	Draft	March 8, 2025	TP/GH	DC	
1	FINAL	March 14, 2025	TP/GH	DC	N/A

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EXECUTIVE SUMMARY

Okane Consultants (Okane) was retained by the Qikiqtani Inuit Association (QIA) to perform a detailed security estimate for the Mary River site, a high-grade iron ore mine located north of the Arctic Circle in the Qikiqtani region of North Baffin Island, Nunavut, Canada. The mine, operated by Baffinland, began operation in 2015 and is required to post financial security to complete closure activities for the current site disturbance. The security estimate is updated annually, relying on the structure of the original 2014 estimate. Annual security estimates are completed by Baffinland and QIA and compared to ascertain security accuracy.

The site consists of four main areas: Milne Port, Tote Road, Steensby Port, and the Mine Site. To date, major infrastructure has been developed at the Milne Port, Tote Road and the Mine site including an open pit, waste rock and overburden piles, quarries and ore/aggregate stockpiles, buildings and equipment, mining infrastructure, disposal areas and water management systems, all which must be removed or reclaimed upon closure of the Mary River site.

Okane utilized the RECLAIM 7.0 Model for Closure and Reclamation Cost Estimates (RECLAIM) (Brodie Consulting Ltd. 2017) to develop unit rates and costs associated with the security estimate. The RECLAIM model is specifically designed to manage the multiple components of mine site closure cost estimates. The security estimate provided is considered a Class 4 cost estimate in accordance with ISO, 21975, which is based on typical unit costs and has an expected accuracy range of -30% to +50% after contingency (ISO, 2021).

The security estimate was broken into two parts; direct costs, which were developed to reflect reclamation activities for each major project component and indirect costs which include post-closure monitoring and maintenance, mobilization and demobilization of workers, equipment and fuel, project administration, engineering, and contingency costs (Table ES.1).

Table ES.1: Security Estimate Total

	Cost (CAD \$)
Direct Costs	74,205,793
Indirect Costs	59,097,038
Security Estimate Total	\$133,302,831

Okane's security estimate of \$133,302,831 totals \$856,832 more than Baffinland's estimate (BIM 2025) due primarily to the discrepancy in methodology used to calculate the unit rate cost of NAG cover system placement on the Waste Rock Facility.

Additionally, four key areas of uncertainty (listed below) were identified during Okane's review of Baffinland's security estimate. Okane acknowledges that the inclusion of the items listed below in the

security estimate would be conservative, thus they were not included in the overall security, cost estimates were completed to demonstrate the potential liability to QIA. The four key identified items are:

- There is no provision for geochemical stabilization of pit-walls in the form of cover system placement. Baffinland states within their Interim Closure and Reclamation Plan that pit-wall stabilization will be analyzed to ensure long-term stability but has not undertaken this analysis. Placement of a cover system on exposed PAG pit-walls was estimated to cost \$7.7 million in direct costs and \$3.4 million in indirect costs. While BIM has committed to development of source terms and further geochemical modelling, the analysis has not yet been completed.
- Current climate change modelling of the WRF thermal cover system does not take into account multiple climate change scenarios, which has potential to increase the necessary thickness. Assuming a 50% increase in required cover system thickness would result in an estimated \$14.4 million in direct costs and \$4.9 million in indirect costs.
- Water quality modelling has not been updated since active mining began, which would provide clarity regarding water treatment timelines. Based on current water treatment volumes, extended water treatment is estimated to increase costs by approximately \$150,000 per year beyond the originally estimated three years. While BIM has committed to development of source terms and further geochemical modelling, the analysis has not yet been completed.
- Current geotechnical slope stability modelling of the WRF assumes strength parameters of the waste rock material that may not be reflective of in-situ conditions. This means there is potential that the current WRF configuration does not meet long term factors of safety and may need re-sloping prior to closure. Re-sloping of the WRF from the current 2H:1V to a hypothetical 2.5H:1V is estimated to cost \$5,000,000 in direct costs and \$2,200,000 in indirect costs.

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1 INTRODUCTION

The Mary River Project (MRP) is a high-grade iron ore mine owned and operated by Baffinland Iron Mines Corporation (Baffinland) located north of the Arctic Circle in the Qikiqtani region of North Baffin Island, Nunavut, Canada. The majority of MRP is located on Inuit-Owned Land (IOL) administered by the Qikiqtani Inuit Association (QIA). Under Section 6.1 of Commercial Lease No. Q13C301, Baffinland is required to provide annual assessments of reclamation security incorporating existing and planned future disturbances for the site. The reclamation security ensures funds are available to execute closure work and reclaim disturbed areas in the event of unplanned closure. To ensure accuracy within annual reclamation securities, Qikiqtani Inuit Association has retained Okane Consultants (Okane) to complete an annual environmental audit and financial security review for MRP.

1.1 Project Objectives and Scope

The overarching objective of the annual environmental audits and security estimate reviews is to provide QIA with a transparent, detailed understanding of closure obligations and liabilities associated with the MRP. Okane has developed the security estimate using spreadsheets within Microsoft Excel (Appendix B) which transparently provides unit costs and related quantities (e.g. areas and volumes) for each major site component. In completing the above, Okane hopes to enhance QIA's understanding of associated closure costs and inform on the current and possible future misalignments in security costs between Baffinland and QIA.

Okane's security estimate includes the cost for reclamation activities of major site components at Milne Porte, Mine Site and Tote Road to bring the areas into alignment with their respective closure configurations. Closure configurations for each site component have been outlined in the interim closure and reclamation plan (Baffinland, 2018) and is the basis of estimated reclamation activities. The main reclamation activities for final mine closure and reclamation include (Baffinland 2018):

- Filling the open pit with water to stabilize the pit walls and mitigate falling hazards.
- Installation of boulder fence and signage around the open pit to prevent inadvertent access.
- Removal of all mining and transportation infrastructure other than the Open Pit, Waste Rock Stockpile, Tote Road, and Milne Port Ore Dock. The Tote Road and Milne Port Ore Dock will be left in place after the project life, but not maintained.
- Demolition and removal of all buildings and foundations.
- All mining materials and equipment will either be removed from site or disposed of in on-site landfills/approved waste disposal areas.

- Removal of all hazardous materials and wastes to licensed disposal facilities.
- Storage of non-hazardous waste on site.
- Placement of a NAG cover system on the WRF.
- Removal of water management systems and infilling of mine water ponds.
- Re-contouring of roads, airstrips, and development areas as required.
- Removal of water crossings to restore natural drainage patterns.
- Scarification of disturbed areas of former mine infrastructure to encourage natural vegetation; and
- Monitoring during closure and post closure periods.

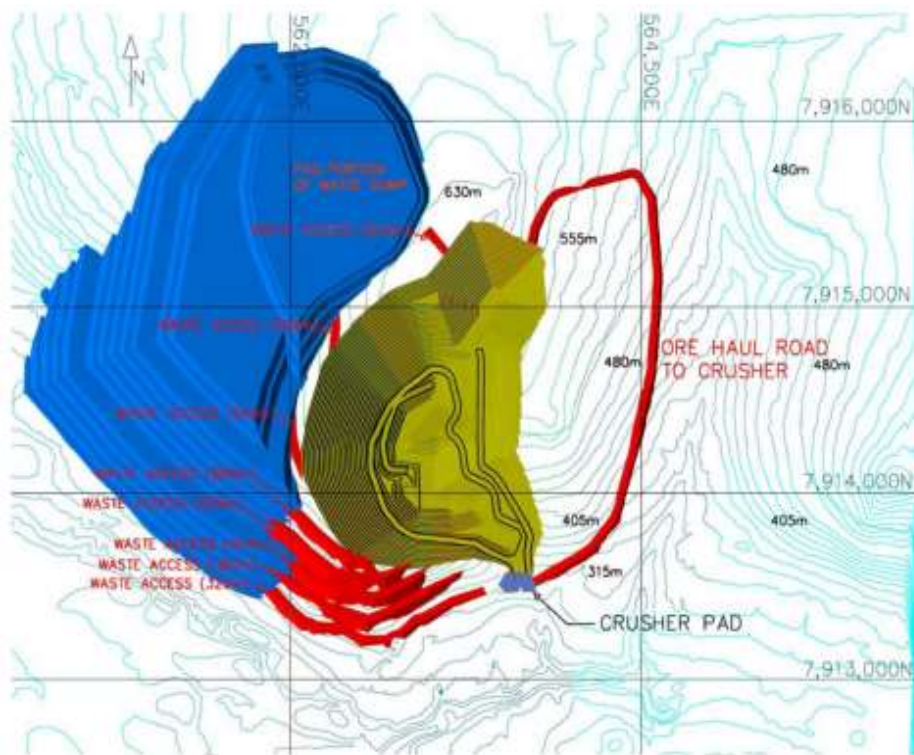
1.2 Report Organization

For convenient reference, this report has been divided into the following subsections:

- Section 2 – Presents the findings of Okane's background review and summarizes key takeaways.
- Section 3 – Describes the methodology used and basis of the security estimate.
- Section 4 – Summarizes the security estimate.
- Section 5 – Discusses uncertainties surrounding the security estimate.
- Section 6 – Presents recommendations from Okane to help refine security estimate costs in the future.
- Section 7 – Discusses Okane's conclusions and findings from the security estimate process.

The following sections provide a brief description of the various mine facilities, and the current plan for closure and reclamation.

Mining commenced on a hill crest outcrop and will progress until Year 10 to 12 of operation at full production volume (based on a nominal 21.5 Mtpa) before an open pit is formed. The mine plans call for conventional open pit mining methods utilizing 7.5 m benches. Ore is delivered to the primary crusher located south of the deposit via the east main haul road. The general configuration of the mine pit, haul road and waste rock dump is presented in Figure 2.2.



(Baffinland, 2018)

- Conducting an engineering stability analysis to confirm long-term stability.

- Barricading ramps, constructing perimeter boulder fence, and installation of hazard signage.
- Removal of dewatering infrastructure.
- Cleanup of contaminated soils.
- Flooding the open pit (either naturally or enhanced filling); and
- Spillway construction.

The pit lake will be filled either by natural flooding or enhanced pit filling (which uses pumps from nearby lake). The proposed closure scenario suggests the open pit to be naturally flooded and will take an estimated 85 to 150 years. However, if enhanced pit filling is selected, it is anticipated that pumping will occur from Mary River during the summer months (four months per year). The pumping system would operate 24 hours a day and could deliver 8,700 m³/hour, over approximately a 1 km distance and an approximate elevation head of 200 m (Baffinland 2018).

2.2.2 Waste Rock Facility and Overburden Piles

The waste rock disposal area is located north of the open pit. The Waste Rock Facility (WRF) has sufficient capacity to stockpile the entire volume of waste produced by the mine. At closure, the WRF will contain approximately 630 Mt of waste rock and overburden, with average side slopes of 2H: 1V. Waste within the WRF is characterized as potentially acid generating (PAG), non-potentially acid generating (NAG) and overburden. Potentially acid generating waste will be encapsulated within a minimum 4 m of NAG material to reduce environmental risks (WSP 2023). Based on current modelling and monitoring, 4 m is a sufficiently thick layer for underlying PAG material to remain frozen permanently; however, climate change effects have yet to be sufficiently accounted for in thermal modelling.

The main work items for closing the Waste Rock and Overburden Stockpiles are (Baffinland 2018):

- Clean up of any contaminated soils.
- Monitoring and confirming the freezing of the pile.
- Monitoring seepage water quality.
- Conducting an engineering stability analysis to confirm long-term stability; and
- Grading at associated water management structures to establish final drainage pathways.
- Placement of at least a 4 m layer of NAG material on the outer shell of the Waste Rock Facility

Based on the current state of the Mine Site prior to mining activities, the site is characterized by rugged rocky terrain with minimal vegetation. Therefore, a NAG rock cover system on the WRF is considered an appropriate closure configuration (Baffinland 2018). Runoff from the WRF will be monitored until runoff meets water quality objectives for closure. Once met, WRF ponds will be decommissioned, and runoff allowed to discharge directly to the environment.

2.2.3 Quarries and Ore/Aggregate Stockpiles

The quarries and borrow sources at the Mine Site and Milne Port that were developed to construct the site (Table 2.1) will be progressively reclaimed. At closure, re-contouring and filling with overburden may be required to ensure slope stability and restore natural drainage pathways. Ore/Aggregate stockpiles will be depleted upon closure. Contaminated soils below stockpiles will be treated if required. The ore/aggregate stockpile bases will be re-contoured and scarified to allow for natural re-vegetation. If ore/aggregate stockpiles remain at closure, they will be graded and re-contoured for long-term stability. There are no plans to place cover material at closure. Construction of a fill cover, and/or placement of residual ore as backfill will be assessed if water quality concerns are present (Baffinland 2018).

Table 2.1: Project Component Description

Main Area	Project Component	
Mine Site	Quarry D1Q1	Ore Stockpile
	Quarry D1Q2	ROM Stockpile
	Quarry QMR2	KM 97 Borrow Locations
Milne Port	MP-Q1-01	Quarry No. 1
	MP-Q1-02	Ore Stockpiles
	Borrow Source No. 1	
Tote Road	Extended cuts in bedrock along road corridor	

Closure of active quarry faces will involve removing all materials, equipment and infrastructure. Active quarry walls will be terraced during operation to closely manage issues related to drainage and will not be altered for closure. The quarry development will reduce the creation of pits and depressions to the degree practicable to reduce the potential for standing water. The quarry pit floor will be left as free draining. Quarry access roads will be removed to re-establish desired drainage. Reclamation of uncovered permafrost and ground/ice will involve removing any ponding water and backfilling the impacted permafrost and/or ground ice with available material.

2.2.4 *Buildings and Equipment*

At closure, buildings and infrastructure will be decommissioned and transported to the site landfill. Associated laydown areas will be re-graded to restore natural drainage patterns and scarified to allow for natural re-vegetation at closure.

The main work items for decommissioning building and equipment are (Baffinland 2018):

- Demolish buildings and haul refuse either to the mainland, onsite landfill or open pit.
- Demolish building foundations and concrete slabs.
- Relocate equipment to mainland for resale, dispose of on-site as refuse, or donated to local communities.
- Clean up of contaminated soil; and
- Re-grade and scarify footprints.

2.2.5 *Mining Infrastructure*

Mining infrastructure on site includes camp pads, laydown yards, airstrip, roads, water crossings, crushing and screening assemblies, etc. Remnants of mining infrastructure including buildings, culverts, and equipment will be removed and laydown areas re-graded to restore natural drainage patterns. Milne Port ore docks will remain in place at closure (Baffinland 2018).

2.2.6 *Waste, Landfills, and other Disposal Areas*

At closure the onsite landfill located at the Mine Site will be reclaimed by capping the landfill with 1.5 m of overburden to freeze the core of the landfill. The landfill site will be scarified to encourage natural re-vegetation. The explosives facility, incinerators, waste management buildings, fuels and tank farms will be decommissioned and removed from the site. The affected footprint will be re-graded and scarified to allow for natural re-vegetation. The hazardous waste containment areas will be evaluated for any remaining hazardous material/soils and addressed as per the Hazardous Materials and Hazardous Waste Management Plan. The area will be re-graded and scarified. Liners will be removed from polishing ponds and Polishing Waste Stabilization Ponds (PWSPs), and berms will be re-graded and levelled.

2.2.7 *Water Management Systems*

Sewage and water treatment plants will be decommissioned and either transported offsite or disposed of in the onsite landfill. Site water management ponds will be decommissioned as follows (Baffinland 2018):

- Impacted soils and sediment will be cleaned as necessary.
- Liners, where present, will be removed; and
- Ponds will be filled with clean material, re-graded and scarified to restore natural drainage patterns and re-vegetation.

2.3 Information Review Summary

Okane conducted a background review and summarized information (Appendix A) pertinent to the security estimate to gain familiarity with the Mary River site and assess details that may influence or alter assumptions and methodology.

3 BASIS OF SECURITY ESTIMATION

The following section outlines methodologies, assumptions, and inputs used when developing the security estimate.

3.1 Basic Statement of Methods and Assumptions

Okane utilized the RECLAIM 7.0 Model for Closure and Reclamation Cost Estimates (RECLAIM) (Brodie Consulting Ltd. 2017) to develop unit rates and costs associated with the security estimate. The RECLAIM model is specifically designed to help comprehend the multiple components of mine site closure cost estimates. These estimates are intended to cover government liabilities associated with authorized development project in Nunavut and the Northwest Territories. Additionally, the RECLAIM model is the recognized methodology for calculating reclamation costs for the purposes of financial security by the Land and Water Boards. Okane's security estimate has been developed based on the following assumptions, as outlined in the RECLAIM model:

- All equipment and assets are assumed to have no salvage value.
- Unit costs are based on third-party contractors conducting all reclamation work.
- Mobilization costs are included for all equipment required for completing reclamation work (i.e., does not assume existing mine equipment is available and in working condition); and
- A contingency is applied that reflects the degree of uncertainty in the ICRP.

3.1.1 ISO 21795 – Class 4 Estimate Routine

The security estimate provided by Okane is considered a Class 4 cost estimate in accordance with ISO 21795, which is typically associated with a conceptual or pre-feasibility level design. Class 4 estimates are based upon typical unit costs and have an expected accuracy range of -30% to +50% after contingency (ISO, 2021).

3.2 Unit Rates

Reclamation and closure cost estimates are developed based on an isolated volume price based on specific reclamation activities. Where possible, Okane has developed unit rates for each reclamation activity based on the RECLAIM model unit cost table and first principles. Due to the complex and specific nature of some reclamation activities, Okane was unable to develop select unit rates (e.g., bridge removal, air strip lighting removal). In these instances, Okane has utilized Baffinland's specified unit rates based on third party contractors. The following section outlines the methodology and summary of each reclamation activity.

3.2.1 Okane Developed Unit Rates

Okane utilizes the RECLAIM model unit cost table and first principles to develop unit rates for reclamation activities. To the extent possible, the RECLAIM model unit cost table is based on independent third-party costs that have been obtained from a review of northern reclamation projects. As specified in the RECLAIM model, unit rates are inclusive of equipment, labour, maintenance, fuel, consumables, and contractor profit. When necessary, Okane assumed the type and model of construction equipment that would be utilized to perform certain types of reclamation work, and subsequently referenced equipment manuals to develop production rates which could then be used in the security estimate.

3.2.2 Baffinland Unit Rates

In instances where Okane was unable to develop unit rates using the RECLAIM model, Okane reviewed and evaluated the validity of unit rates developed by Baffinland. Baffinland's 2018 unit rates were based on multiple third-party contractors and are considered to be an accurate representation of project specific costs unless otherwise noted. It is also noted that Baffinland unit costs include labour and fuel costs.

3.2.3 Inflation

Both unit rates developed from the RECLAIM model or taken from Baffinland rely on costs derived from previous contractor prices and as such are not reflective of 2024 costs. Unit costs taken from the RECLAIM model were last updated in March 2014, more than nine years ago, while Baffinland contractor quotes were developed in 2018. The RECLAIM model recommends adjusting unit costs for inflation based on national rates obtained from the Bank of Canada (<https://www.bankofcanada.ca/rates/related/inflation-calculator/>). Unit rates were adjusted for inflation to December 2024.

3.2.4 Summary of Unit Rates

Unit rates were developed for each reclamation activity following the above methodology (Table 3.1). Okane utilized other industry tools such as the Standard Reclamation Cost Estimator (Nevada Division of Environmental Protection 2023) and the B.C. Blue Book (BC Road Builders 2023), as a comparison to ensure that utilized unit rates are justifiable.

Table 3.1: 2025 Unit Rates

Reclamation Activity	Rate (\$)	Unit
Fill Application	55.65	m ²
Fill Application	37.70	m ³
NAG Waste Rock Cover	18.07	m ³
Grade & Recontour	1.71	m ²
Liner Removal	4.05	m ²
Culvert Removal	99.50	m
Modular Building Removal – Not Contaminated	52.07	m ²
Modular Building Removal –Contaminated	117.09	m ²
Foldaway Building Removal – Not Contaminated	82.55	m ²
Foldaway Building Removal –Contaminated	147.57	m ²
ISO Container Removal	92.56	m ²
Piping Removal	59.69	m
Cable Removal	32.39	m
Contaminated Soil Remediation	47.33	m ³
Drainage Channel Development	22.54	m ³
Drill and Blast Rock	13.54	m ³
Excavate, Load, Short Haul (1km)	6.02	m ³
Demolish Fence	56.60	m
Load, Short Haul Demolished Material	12.17	m ³
Light Equipment Removal	1,919.21	ea
Medium Equipment Removal	4,110.95	ea
Heavy Equipment Removal	39,228.05	ea
Light Mobile Equipment Removal	883.63	ea
Medium Mobile Equipment Removal	1,408.69	ea
Heavy Mobile Equipment Removal	2,514.44	ea
Light Tank Removal	2,072.52	ea
Medium Tank Removal	7,149.48	ea
Light Diesel Tank Removal (10,000 to 20,000 L)	3,574.74	ea
Medium Mobile Diesel Tank (3,000 to 500,000 L)	10,156.27	ea
Medium Diesel Tanks (500,000 to 750,000 L)	15,666.46	ea
Large Diesel Tanks Load & Transport (5,000,000 L)	103,191.90	ea
Large Diesel Tanks (10,000,000 to 12,000,000 L)	163,349.72	ea
Timber Cribbing	20.24	m ²
Precast Concrete Foundations	37.44	m ²

Reclamation Activity	Rate (\$)	Unit
Slab on Grade	36.35	m ²
Bridge Removal	196,192.51	ea
Conveyor Reclaim	1,545.02	m
Airstrip Lighting Removal	25.81	m
Open Pit Stabilization	7.54	m ³
Vendor Package – Incinerator	9,603.33	Lump Sum
Vendor Package – Potable Water	9,603.33	Lump Sum
Vendor Package – Sewage Treatment Plant	10,633.34	Lump Sum
Vendor Package – WRS Water Treatment Plant	74,827.23	Lump Sum
Vendor Package – Tower Removal	1,781.56	Lump Sum
Mobilization of Remote Workers	94.34	person-day
Mobilization of Local Workers	82.80	person-day
Worker Accommodation	239.06	person-day
Fuel Consumables	1.02	L
Mobilization of Fuel	0.44	L
Demobilization of Fuel	0.14	L
Water Treatment	1.21	m ³

3.3 Disturbance Area Analysis and Reclamation Volumes

Okane performed a disturbed area analysis based on aerial imagery of the site, provided by BIM in August 2023. Using the previously established standard operating procedure (BIM 2022c), Okane was able to verify each of the BIM reported disturbed areas without significant discrepancies. However, Okane did discover inconsistencies in previous year's work, where areas were removed from the security estimate as a result of being taken off that specific year's workplan and not included in subsequent security estimate when the area was again added to the workplan. For this reason, Okane chose to split the areas into two simpler categories, "Disturbed areas" and "Proposed Work areas".

The remaining reclamation volumes (equipment removal, sea can removal, building removal etc.) were verified using a combination of aerial imagery and shipment manifests for incoming/outgoing materials, or assumptions based on Okane's professional judgement and experience.

The Baffinland 2025 security estimate has estimated water treatment volumes based on lifetime seepage averages for the WRF and additional water treatment areas. It is Okane's opinion that this methodology underestimates the future volumes required for water treatment. As the footprint of WRF and contaminated areas expand throughout the life of mine, the total seepage volume will also increase due to the increased footprint area. For this reason, seepage from early operating years when facility

footprints were just beginning to expand are not representative of future years. Water treatment volumes within Okane's security estimate is based on removing the early operating years and averaging the four most recent seepage volumes.

Table 3.2: Water Treatment Discharge Volumes

Year	WRSF Water Treatment	Additional Water Treatment
	Annual Average Seepage (m ³)	
2019	117,000	3,231
2020	63,000	1,797
2021	63,919	1,772
2022	117,000	1,611
Overall Average	105,951	2,103

(Baffinland 2022b)

3.4 Security Estimate Structure

The security estimate was completed as a total cost calculation, the closure and reclamation for Inuit Owned Land (IOL) on the Mary River Project was calculated fully, rather than incrementally from previous year's estimates. The security estimate is broken into direct and indirect costs. Direct costs are expenses directly associated with completing reclamation activities (e.g., fill application, grade and recontour, liner removal). While indirect costs are those associated with maintaining and running reclamation operations. The following section outlines methodologies for developing direct and indirect costs within the security estimate.

3.4.1 Direct Costs

Direct costs were developed to reflect reclamation activities for each major project component: Milne Port, Tote Road, Mine Site, site equipment, and construction facilities and services. Direct costs were developed through unit rate application. By multiplying all unit rates by the total reclamation quantities an accurate estimation of project costs is calculated.

3.4.2 Indirect Cost Analysis

As outlined in the RECLAIM model, indirect costs include post-closure monitoring and maintenance, mobilization and demobilization of workers, equipment and fuel, project administration, engineering, and contingency costs. Indirect costs were developed either from unit cost estimations or as a percentage of direct costs.

Mobilization/demobilization of fuel and workers required to complete reclamation activities was developed utilizing unit rates and total person-days on site as outlined in Baffinland's 2024 security

estimate (Baffinland 2023b). The security estimate assumed that a 70/30 split of workers will be sourced from southern and local communities, respectively. Mobilization/demobilization of reclamation equipment has been assumed to be 10% of direct costs.

Project management, supervision, and control, and engineering costs were assumed to be 9.4% and 5% of total direct costs, respectively, as outlined in the Baffinland 2024 security estimate (Baffinland 2023b). Okane notes that the 5% engineering rate applied follows the RECLAIM model recommendations; however, 9.4% rate for project management, supervision, and control is greater than what is typically applied, but likely necessary for management in such a remote location.

A contingency has been added as an indirect cost to cover both the uncertainty in the cost estimate and the possibility that some aspects of the closure and reclamation activities may be more difficult to perform. Following the RECLAIM model contingency guidelines (Table 3.3), Okane has applied a 20% contingency to direct costs given the current project description and established security estimate process.

Table 3.3: RECLAIM model Guidelines for Contingency Percentage

Level of Project Description	Description	Contingency
Detailed or Project Control	Cost estimate based upon detailed engineering "take offs" and written quotes.	5%
Definitive or Construction Drawing Phase	Engineering mostly complete, some written quotes.	10%
Preliminary or Budget Level	Little detailed engineering and costs based upon verbal quotes	15%
Feasibility or Advanced Conceptual	Engineering may be 10% complete and costs based upon typical unit costs.	20%
Pre-feasibility, Conceptual or Trade-off Study	Very basic engineering only and costs based upon typical unit costs.	25%

(Brodie Consulting Ltd. 2017)

3.4.2.1 Post Closure Monitoring and Maintenance

Post closure monitoring costs outlined within the security estimate reflect the monitoring and maintenance frequencies and activities as outlined in the IRCP (Baffinland 2018). As recommended in the RECLAIM model, post closure monitoring and maintenance costs include all parameters required for performing the monitoring activities and include site access, monitoring, labour, fuel, power, and all supplies. Monitoring activity costs were developed by Okane based on previous project and professional experience (Table 3.4)

Table 3.4: Post Closure Monitoring and Reporting Requirements and Annual Cost

Monitoring Program	Year(s) Post Closure	Location(s)	Annual Cost	Comment
Geotechnical/Engineering Monitoring	18	Site Wide	\$166,146; \$66,146 ¹	Based on previous Okane experience
Aquatic Monitoring and Reporting	18	Site Wide Years 1-3, Mine Site Years 14-18	\$236,141; \$132,549 ²	Based on previous Okane experience
Environmental Site Assessment	1,4	Site Wide	\$117,462	Based on previous Okane experience
Terrestrial Environment Monitoring and Reporting	1-4, 6, 8	Site Wide	\$103,487	Based on previous Okane experience
Marine Environment Monitoring Reporting	5	Milne Port	\$109,802	Based on previous Okane experience
Safety Compliance Inspections	18	Site Wide Years 1-6, Tote Road and Mine Site Years 6-18	\$39,154	Based on previous Okane experience
Socio-economic Reporting	18	Site Wide	\$20,000	Assumed
Air Quality Monitoring and Reporting	5	Site Wide	\$30,000	Assumed

1 – Additional \$100,000 assumed in Year 1 for installation of monitoring equipment (thermistors, vibrating wire piezometers, etc.)

2- \$236,141 assumed for Years 1-3 post closure, \$132,549 assumed for Years 4-18

As outlined in the RECLAIM model, a discount rate is applied to long-term monitoring costs to calculate the net present value (NPV) of the future series of annual monitoring and maintenance costs. Okane performed a NPV analysis over the assumed 18-year closure period of the Mary River Project on indirect costs associated with monitoring and maintenance, water treatment, worker accommodation & consumables and mobilization for monitoring works to better evaluate the future cost implications to the security estimate. A real discount rate (discount rate minus inflation rate) of 2% percent annually was assumed for the NPV analysis.

4 SECURITY ESTIMATE

4.1 Security Estimate Summary

The cost to complete reclamation and closure work given the current and 2025 planned disturbances is estimated to be \$133,303.10 (Table 4.1). Costs are considered to be a feasibility or advanced conceptual level, with an accuracy of -30% to +50%. A detailed breakdown of specific reclamation activities for each major cost component is outlined in Appendix B. Okane's security estimate of \$133,302,831 totals \$856,832 more than Baffinland's estimate (BIM 2025) due primarily to the discrepancy in methodology used to calculate the unit rate cost of NAG cover system placement on the WRF.

Table 4.1: Security Estimate Summary

Item	Component/Activity	Cost Estimate¹
100	Milne Port	
101	Roads & Laydown Yards	\$4,202,300
102	Stockpile and Material Handling	\$7,669,400
103	Milne Port Infrastructure	\$2,727,700
200	Tote Road	
201	Road Embankments and Driving Surface	\$2,860,500
202	Water Crossing	\$928,500
300	Mine Site	
301	Roads & Laydown Yards	\$10,271,800
302	Waste Rock Storage Facility	\$6,502,400
303	Open Pit	\$13,800
304	Stockpile and Material Handling	\$2,829,200
305	Water Management Infrastructure	\$2,605,400
306	Mine Site Infrastructure	\$4,013,600
400	Site Equipment	
401	Demobilization of Baffinland Owned Equipment	\$7,963,000
500	Construction Facilities & Services	
501	Construction Facilities & Services	\$3,332,400
600	Monitoring and Maintenance (Indirect Cost)	
601	Monitoring and Maintenance	\$8,226,000
602	Water Treatment	\$1,363,700
603	Worker Accommodation & Consumables	\$3,024,600
604	Mobilization for Monitoring Works	\$5,671,700
700	Indirect Costs	
701	Worker Accommodation & Consumables	\$4,333,900
702	Mob/demobilization for Reclamation Work	\$26,767,600
703	Administration and Engineering (14.4% of direct costs)	\$8,052,500
704	Contingency (20% of direct costs)	\$19,943,100
Total		\$133,303.10

1. Costs rounded to nearest hundred.

5 SECURITY ESTIMATE UNCERTAINTIES

During Okane's site background review and previous Environmental Audits, several uncertainties were identified within the closure plan and security estimates that may have a material change to the security estimate. The following section summarizes the identified uncertainties and outlines the potential effects to security estimates. While all of these items have potential to substantially affect the security estimate total, Okane does not feel their inclusion at this point is warranted due to a lack of certainty in their requirement at closure. However, Baffinland has committed to the study of each of the items and is responsible for conducting appropriate analysis to provide confidence to all parties that they will not be necessary reclamation activities at closure. Key items of uncertainty carried over from the 2024 estimate included the Exposed PAG in the Pit-wall and Water Treatment Periods, while Climate Change Scenario Effects on the Thermal Cover System Configuration and Geotechnical Stability of the WRF were identified during the 2025 review.

Exposed PAG in Pit-wall: At closure, BIM plans to fill the open pit with water, which will act as both a physical and geochemical stabilizer. However, current conditions of the active mining area would not allow the plan as detailed in the ICRP to progress, as there is no open pit to fill. Baffinland's ICRP (BIM, 2018) commits to water treatment until site discharges are within acceptable ranges. Water quality predictions have not been updated using the site-specific data. An updated timeline has been provided by BIM, but until the necessary studies have been completed to ensure pit-wall stability and water quality objectives are met with the pit-wall left in its current state, there is uncertainty surrounding the covering of exposed PAG material. Okane estimates \$7,700,000 in direct costs and an additional \$3,400,000 in indirect costs would be necessary to complete this task.

Water treatment periods: Baffinland's estimate includes provision for treatment of water on site for three years post-closure, assuming that water quality objectives will be met within this timeline. This estimate is based on water quality predictions made in the original 2013 Environmental Impact Statement (BIM, 2013) and has not been updated to reflect current site data and conditions. In Okane's experience, if water treatment is necessary, the timeline often extends significantly longer than three years post-closure. An updated timeline for the modelling work as been proposed by BIM, however, a large degree of uncertainty exists surrounding the water treatment timelines until such modelling has been conducted. Okane estimates that \$150,000 per year should be allocated for this task, extending to Year 18 post-closure, totalling \$2,700,000.

Climate Change Scenario Effects on Thermal Cover System Configuration: There is uncertainty within the planned thermal cover systems of landfills on site and the effects climate change could have on the active zone depth. Okane notes that the 4 m NAG cover system requirement only takes into account the least conservative of climate change scenarios and does not accurately capture the environmental risk to the Mary River site. Assuming a 6 m NAG cover system is needed to account for climate change, it would result in an estimated \$14,425,000 increase in direct costs, as well as a \$4,962,000 increase in indirect costs.

Geotechnical Stability of the WRF: Current slope stability modelling of the WRF utilizes an internal angle of friction in the waste rock material of 40° , stating that this assumption is a conservative selection for waste rock material (Golder, 2021) without lab testing results to support the statement. While this internal angle of friction is a reasonable average value for waste rock, it does not take into account variability in the waste rock material and may not be considered a conservative value. During Okane's 2024 Environmental Audit (Okane 2024), evidence of finer-textured waste rock and local slope instability on the WRF were identified, presenting risk to QIA that the planned configuration of the WRF may not satisfy long-term factors of safety. Re-sloping of the WRF from the current 2H:1V to a hypothetical 2.5H:1V is estimated to cost \$5,000,000 in direct costs and \$2,200,000 in indirect costs.

6 RECOMMENDATIONS AND CONCLUSIONS

Okane recommends the following actions to provide a more accurate representation of closure costs for future security estimates:

- **Assessment of multiple climate change scenarios effects on WRF Thermal Cover System:** Current climate change modelling only accounts for the least conservative of climate change scenarios. In order to better understand the financial/environmental risk to QIA, a range of climate change scenarios should be evaluated. Without evaluating multiple scenarios, it is difficult to evaluate the effect of the climate change scenario selection itself.
- **Confirmation of strength parameters of waste rock through lab testing:** In Okane's opinion, the current slope stability analysis assumes a non-conservative angle of friction of 40°. Visual inspection of the WRF indicated that some of the waste rock comprising the WRF may exhibit a lower angle of friction, thus potentially lower the factor of safety in the WRF. Confirmatory lab testing should be completed to understand the range of strength parameters in the material comprising the WRF.
- **Annual Calculation and Reporting of Closure Costs:** To date, annual security estimate updates have been completed based on incremental adjustments for planned disturbed areas and reconciliation of work not completed the previous year. Okane recommends a holistic security estimate be completed annually to provide a transparent representation of closure costs.

7 REFERENCES

- Arktis Solutions. 2014. QIA 2014 Comprehensive Security Estimate for Baffinland Iron Mines Corporation's Mary River Project Activities occurring on Inuit Owned Lands. Final - December 12, 2014.
- Arktis Solutions. 2022. 2022 Mary River Reclamation Security Report, Final Signed – Baffinland 2022 Work Plan Addendum. June 8, 2022.
- Baffinland. 2018. Baffinland Iron Mines Corporation INTERIM CLOSURE AND RECLAMATION PLAN BAF-PH1-830-P16-0012 Revised Draft - Rev 5.
- Baffinland. 2022c. Disturbed Area Analysis Standard Operating Procedure DRAFT, October 2022.
- Baffinland. 2023a. 2024 Marginal Closure and Reclamation Financial Security Estimate, Rev 2. June 8, 2023.
- Baffinland. 2023b. 2024 Work Plan. December 15, 2023.
- Baffinland. 2024. Summary of 2024 Waste Rock Management Strategy. February 9, 2024.
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- Brodie Consulting Ltd. 2017. RECLAIM 7.0 USER MANUAL MINING VERSION Prepared for: Government of the Northwest Territories. Revised: November 2017.
- Golder Associates Ltd. 2021. Geotechnical Review of Existing Waste Rock Facility, Mary River Project, Baffin Island, Nunavut.
- Murray L Smith. 2020. Reclamation Security Arbitration Final Award. August 10, 2020.
- Nunami Stantec Limited (NSL). 2025. Basis of Estimate Baffinland Iron Mines Mary River Project 2025 Security Update. Feb 26, 2025
- Qikiqtani Inuit Association. 2013. Abandonment and Reclamation Policy for Inuit Owned Lands Qikiqtani Inuit Association - (Version 2.0).
- The International Organization for Standardization (ISO). 2021. 21795-2:2021 Mine closure and reclamation planning — Part 2: Guidance.
- Baffinland. 2013. Mary River Project Environmental Impact Statement, December 2010.
- WSP. 2023. Interim Closure Strategy for Waste Rock Facility. Doc No. 22521615-004-R-RevB interim Closure Strategy for the Waste Rock Facility.

8 CLOSURE

We trust information provided is satisfactory for your requirements. Please do not hesitate to contact the undersigned at tpolkinghorne@okaneconsultants.com for further information or questions.

Prepared by:



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Appendix A

Background Document Review Summary

Table A.1: Summary of Information Reviewed.

Document Name	Author (Year)	Description
Abandonment and Reclamation Policy for Inuit Owned Lands, Version 2.0.	Qikiqtani Inuit Association (2013)	The Abandonment and Reclamation Policy establishes guidelines for providing a financial security estimate. These guidelines include reporting results in a methodic and self-explanatory manner, providing evidence to support unit costs and quantities, outlining the limitations in obtaining costing accuracy, and proposing a contingency to account for unknowns and limitations.
QIA 2014 Comprehensive Security Estimate for Baffinland Iron Mines Corporation's Mary River Project Activities occurring on Inuit Owned Lands.	Arktis Solutions (Arktis) (2014)	Arktis completed a comprehensive financial security assessment for the Mary River site in 2014 using information provided by Baffinland Iron Minerals Corporation's (BIMC). The assessment included pre-2013, 2013, and 2014 activities occurring on IOL. The estimate does not address the Type B Exploration licence (2BE-MRY1421), nor does it include activities on Crown lands.
Interim Closure and Reclamation Plan. No. BAF-PH1-830-P16-0012.	Baffinland (2018)	Baffinland's 2018 interim closure and reclamation plan (ICRP) was developed to guide closure activities for each main area and includes both a temporary and permanent closure periods. The ICRP builds upon the Preliminary Closure and Reclamation Plan (PCRPP) developed in 2011. The ICRP considers the complete development of the Project and describes expected closure activities at the end of the Project Life (21-year mine life). The ICRP is thus a conceptual benchmark for the intended reclamation and closure activities associated with all components of the Mary River project. The ICRP will be updated as required throughout the life of the Project.
In the Matter of the Reclamation Security Arbitration. 200810 - QIA v. BIM Final Award.	Murray L Smith (2020)	<p>Between 2014 and 2019, the respective security estimates conducted by Arktis and Baffinland continued to diverge. In 2019 the difference was approximately \$27M, which was settled in arbitration between QIA and Baffinland.</p> <p>The arbitration was established to determine the appropriate amount of reclamation security for the 2019 Work Plan and to provide guidance for the appropriate methodology for calculating reclamation security including estimating the labour and equipment costs that will be incurred on closure. Under the terms of the Lease, reclamation costs must be estimated in accordance with QIA's Abandonment and Reclamation Policy.</p> <ul style="list-style-type: none"> • Fuel mobilization and demobilization. • Equipment mobilization and demobilization. • Contingency; and • Supervision, project management, and contract administration.
2022 Mary River Reclamation Security Report, Final Signed –	Arktis (2022)	The 2022 security estimates by Arktis (2022) builds upon the 2014 security estimate while also reflecting the decisions made in the 2020

Document Name	Author (Year)	Description
Baffinland 2022 Work Plan Addendum.		arbitration final award, as well as available outcomes from the 2022 Annual Security Review workshops and QIA direction. The report also reflects recent mine conditions by accounting for Baffinland's 2022 Work Plan Addendum and QIA's disturbed area analysis.
2024 Marginal Closure and Reclamation Financial Security Estimate, Rev 2.	Baffinland (2024)	The document provides a summary of the identified project components and activities that have materially changed since the 2024 Work Plan Addendum. Based on these identified material changes, the resulting associated security impacts (+/- \$) are incorporated into the 2022 Estimate to ensure accurate representation of the Project based on current planning. The 2022 Estimate represents Baffinland's proposed adjustment to reclamation security to account for work conducted on site to date and planned work to be completed as described in the 2022 Work Plan. The amount of security estimated to be required is based on an estimate of the highest reclamation liability in the upcoming year or 'worst case' scenario.
2024 Work Plan.	Baffinland (2023)	Baffinland has produced a detailed work plan for development activities planned for 2024. Activities outlined in the 2024 Work Plan represent planned works, improvements, infrastructure and equipment required to execute the currently approved phase of the project. Planned disturbance areas for the 2024 work plan are also detailed in the 2024 work plan and security estimate. Disturbance updates are based on the future years work plan and reconciled at the end of the year to ensure new additional work was completed or area left undisturbed. Updated disturbance area per landowner for the 2024 security estimate are based on the land owner, actual and proposed disturbance, and line and proposed lined areas.
Summary of 2024 Waste Rock Management Strategy	Baffinland (2024)	Baffinland has produced a waste rock management strategy to manage exposed PAG rock during 2024. Currently it is outlined that 399,154 m ² of the WRF would require a thermal cover system in the event on unexpected closure. During 2024, exposed PAG is planned to be covered with 3 m of NAG waste rock and PAG deposition cells will be constructed for strategic placement.

Appendix B

Cost Tables

Table B2: Security Estimate Costing Tables													
Log No.	Component/Activity	Length (m)	Width (m)	Height/Depth (m)	Area (m²)	Volume (m³)	Total Reclamation Quantity	Unit	Unit Rate	Total Reclamation Cost (CAN)	Subtotal (CAN)	NPV Reclamation Cost	Comment
100	Milne Port												
101	Roads and Laydown Yards												
	Grade and Recontour Roads and Yards				1,027,293		1,027,293	m²	\$1.74	\$1,788,818			
	Remove Culverts	240					240	m	\$101.32	\$24,317			
	Demolish Buildings - Modular (Not Contaminated)				16,894		16,894	m²	\$53.02	\$895,757			
	Demolish Buildings - Modular (Contaminated)				2,354		2,354	m²	\$119.24	\$280,646			
	Demolish Buildings - Foldaway (Not Contaminated)				2,475		2,475	m²	\$84.06	\$208,062			
	Demolish Buildings - Foldaway (Contaminated)				2,856		2,856	m²	\$150.27	\$429,176			
	Remove ISO Containers				1,439		1,439	m²	\$94.25	\$135,612			
	Remove Slab on Grade				9,766		9,766	m²	\$36.35	\$355,019			
	Remove Concrete Foundations				2,268		2,268	m²	\$37.44	\$84,919			
	Component Subtotal										\$4,202,326		
102	Stockpile and Material Handling												
	Remediate Contaminated Ore Stockpile Soils			0.3	338,693	101,608	101,608	m³	\$48.20	\$4,897,407			Assume 0.3 m surface soil contamination
	Grade and Recontour Ore Stockpile				338,693		338,693	m²	\$1.74	\$589,764			
	Reclaim Conveyor	854					854	m	\$1,545.02	\$1,319,443			
<div>Okane Consultants</div> <div>955-221-R-004</div>													
												14 March 2025	
												28	

Log No.	Component/Activity	Length (m)	Width (m)	Height/Depth (m)	Area (m²)	Volume (m³)	Total Reclamation Quantity	Unit	Unit Rate	Total Reclamation Cost (CAN)	Subtotal (CAN)	NPV Reclamation Cost	Comment
	Grade and Recontour Quarries and Borrow Areas				495,466		495,466	m²	\$1.74	\$862,751			
	Component Subtotal										\$7,669,365		
103	Milne Port Infrastructure												
	Liner Removal				45,318		45,318	m²	\$4.12	\$186,896			
	Grade and Recontour Lined Areas				45,318		45,318	m²	\$1.74	\$78,911			
	Tank Farm Liner Removal				24,048		24,048	m²	\$4.12	\$99,175			
	Grade and Recontour Tanks Farm				24,048		24,048	m²	\$1.74	\$41,874			
	Removal of Large Diesel Tanks						6	ea	\$166,349.72	\$998,098			
	Removal of Large Diesel Tanks Load and Transport						2	ea	\$103,191.90	\$206,384			
	Removal of Medium Diesel Tanks						5	ea	\$15,666.46	\$78,332			
	Removal of Medium Mobile Diesel Tanks						14	ea	\$10,156.27	\$142,188			
	Removal of Light Diesel Tanks						14	ea	\$3,574.74	\$50,046			
	Removal of Medium Tanks						8	ea	\$7,149.48	\$57,196			
	Remove Power Cables	14,700					14,700	m	\$32.98	\$484,771			
	Decommissioning Incinerator						3	Lump Sum	\$9,603.33	\$28,810			1 Additional planned for 2024
	Decommissioning Potable Water						2	Lump Sum	\$9,603.33	\$19,207			
	Decommissioning Sewage Treatment Plant						2	Lump Sum	\$10,633.34	\$21,267			

Log No.	Component/Activity	Length (m)	Width (m)	Height/Depth (m)	Area (m²)	Volume (m³)	Total Reclamation Quantity	Unit	Unit Rate	Total Reclamation Cost (CAN)	Subtotal (CAN)	NPV Reclamation Cost	Comment
	Removal of Sewage System Piping	3,858					3,858	m	\$60.78	\$234,498			
	Component Subtotal										\$2,727,653		
200	Tote Road												
201	Road Embankments and Driving Surface												
	Grade and Recontour Disturbance Areas				1,547,729		1,547,729	m²	\$1.74	\$2,695,050			
	Demolish Buildings - Modular (Contaminated)				141		141	m²	\$119.24	\$16,812			
	Demolish Buildings - Modular (Not Contaminated)				72		72	m²	\$53.02	\$3,818			
	Remove ISO Containers				1,273		1,273	m²	\$94.25	\$119,987			
	Remove Slab on Grade				682		682	m²	\$36.35	\$24,793			
	Component Subtotal										\$2,860,459		
202	Water Crossings												
	Remove Culverts	1,419					1,419		\$101.32	\$143,774			1,601m total: 1,419m IOL, 182m Crown Land
	Remove Bridges						4	ea	\$196,192.51	\$784,770			
	Component Subtotal										\$928,544		
300	Mine Site												
301	Roads and Laydown Yards												
	Grade and Recontour Roads and Yards				2,778,813		2,778,813	m²	\$1.74	\$4,838,728			
	Remove Culverts	565					565	m	\$101.32	\$57,246			
	Demolish Buildings - Modular (Not Contaminated)				26,746		26,746	m²	\$53.02	\$1,418,140			

Log No.	Component/Activity	Length (m)	Width (m)	Height/Depth (m)	Area (m²)	Volume (m³)	Total Reclamation Quantity	Unit	Unit Rate	Total Reclamation Cost (CAN)	Subtotal (CAN)	NPV Reclamation Cost	Comment
	Demolish Buildings - Modular (Contaminated)				2,810		2,810	m²	\$119.24	\$335,005			
	Demolish Buildings - Foldaway (Not Contaminated)				689		689	m²	\$84.06	\$57,930			
	Demolish Buildings - Foldaway (Contaminated)				16,275		16,275	m²	\$150.27	\$2,445,686			
	Remove ISO Containers				3,500		3,500	m²	\$94.25	\$329,890			
	Remove Slab on Grade				7,952		7,952	m²	\$36.35	\$289,065			
	Remove Concrete Foundations				13,357		13,357	m²	\$37.44	\$500,145			
	Component Subtotal										\$10,271,834		
302	Waste Rock Storage Facility												
	NAG Waste Rock Cover System			4	86,297	345,188	345,188	m³	\$18.40	\$6,352,771			
	Water Treatment Plant for WRF						1	Lump Sum	\$74,827.23	\$74,827			
	Water Treatment Plant for Sedimentation Pond						1	Lump Sum	\$74,827.23	\$74,827			
	Component Subtotal										\$6,502,426		
303	Open Pit												
	Rock Bolder Fence				0		0	m²	\$-	\$-			
	Perimeter Signage						1	Lump Sum	\$-	\$-			
	Drainage Channel Construction					600	600	m³	\$22.96	\$13,773			
	Component Subtotal										\$13,773		

Log No.	Component/Activity	Length (m)	Width (m)	Height/Depth (m)	Area (m²)	Volume (m³)	Total Reclamation Quantity	Unit	Unit Rate	Total Reclamation Cost (CAN)	Subtotal (CAN)	NPV Reclamation Cost	Comment
304	Stockpile and Material Handling												
	Grade and Recontour Quarries and Borrow Areas				424,532		424,532	m²	\$1.74	\$739,235			
	Remediate Contaminated Ore Stockpile Soils			0.3	128,999	38,700	38,700	m³	\$48.20	\$1,865,290			
	Grade and Recontour Ore Stockpile				128,999		128,999	m²	\$1.74	\$224,625			
	Component Subtotal										\$2,829,150		
305	Water Management Infrastructure												
	Liner Removal				139,445		139,445	m²	\$4.12	\$575,088			
	Grade and Recontour Lined Areas				139,445		139,445	m²	\$1.74	\$242,815			
	Remove Piping	22,215					22,215	m	\$60.78	\$1,350,279			
	KM105 Sedimentation Pond - Excavate Load, and Haul					58,800	58,800	m³	\$5.56	\$326,983			
	Km 105 Sedimentation Pond Drainage Channel					60	60	m³	\$13.79	\$827			
	KM 105 Sediment Pond Gablon Basket Removal					1,550	1,550	m³	\$8.84	\$13,700			
	KM 105 Sedimentation Pond Liner Removal				23,200		23,200	m²	\$4.12	\$95,679			
	Component Subtotal										\$2,605,372		
306	Mine Site Infrastructure												
	Remove Power Distribution Cables	23,255					23,255	m	\$32.98	\$766,895			Additional 2,155 m power cable planned for 2024

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	Decommissioning Incinerator						3	Lump Sum	\$9,603.33	\$28,810			1 Additional planned for 2024
	Decommissioning Potable Water						2	Lump Sum	\$9,603.33	\$19,207			
	Decommissioning Sewage Treatment Plant						2	Lump Sum	\$10,633.34	\$21,267			
	Decommissioning Communication Tower						1	Lump Sum	\$1,814.16	\$1,814			
	Decommissioning WRF Water Treatment Plant						1	Lump Sum	\$74,827.23	\$74,827			
	Decommissioning KM 105 Sedimentation Pond Water Treatment Plant						1	Lump Sum	\$74,827.23	\$74,827			
	Removal of Large Diesel Tanks						1	ea	\$166,349.72	\$166,350			
	Removal of Medium Diesel Tanks						4	ea	\$15,666.46	\$62,666			
	Removal of Medium Mobile Diesel Tanks						4	ea	\$10,156.27	\$40,625			
	Removal of Light Diesel Tanks						6	ea	\$3,574.74	\$21,448			
	Removal of Light Tanks						16	ea	\$2,072.62	\$33,162			
	Removal of Medium Tanks						13	ea	\$7,149.48	\$92,943			
	Landfill Cover System			1.5	44,370	66,555	66,555	m³	\$37.70	\$2,508,989			
	Airstrip Lighting Removal	2,100					2,100	m	\$25.81	\$54,203			
	Demolish Aerodrome Fence	788					788	m	\$56.90	\$44,839			

Log No.	Component/Activity	Length (m)	Width (m)	Height/Depth (m)	Area (m²)	Volume (m³)	Total Reclamation Quantity	Unit	Unit Rate	Total Reclamation Cost (CAN)	Subtotal (CAN)	NPV Reclamation Cost	Comment
	Load, Haul Demolished Aerodrome Fence					79	79	m³	\$8.84	\$697			0.1 m3/m demolished material
	Component Subtotal										\$4,013,569		
400	Site Equipment												
401	Demobilization of Baffinland Owned Equipment												
	Heavy Equipment						97	ea	\$39,928.05	\$3,873,021			
	Heavy Mobile Equipment						238	ea	\$2,514.44	\$598,436			
	Medium Equipment						554	ea	\$4,110.95	\$2,277,468			
	Medium Mobile Equipment						329	ea	\$1,408.69	\$463,459			
	Light Equipment						241	ea	\$1,919.21	\$462,530			
	Light Mobile Equipment						326	ea	\$883.63	\$288,063			
	Component Subtotal										\$7,962,977		
500	Construction Facilities and Services												
501	Construction Facilities and Services Infrastructure												
	Demolish Buildings - Modular (Not Contaminated)				2,021		2,021	m²	\$53.02	\$107,140			
	Demolish Buildings - Foldaway (Not Contaminated)				20,032		20,032	m²	\$84.06	\$1,683,904			
	Demolish Buildings - Foldaway (Contaminated)				5,899		5,899	m²	\$150.27	\$886,397			
	Remove ISO Containers				30		30	m²	\$94.25	\$2,803			
	Remove Slab on Grade				13,524		13,524	m²	\$36.35	\$491,647			

Log No.	Component/Activity	Length (m)	Width (m)	Height/Depth (m)	Area (m²)	Volume (m³)	Total Reclamation Quantity	Unit	Unit Rate	Total Reclamation Cost (CAN)	Subtotal (CAN)	NPV Reclamation Cost	Comment
	Remove Concrete Foundations				1,190		1,190	m²	\$37.44	\$44,543			
	Removal of Light Tanks						9	ea	\$2,072.62	\$18,654			
	Removal of Medium Tanks						7	ea	\$7,149.48	\$50,046			
	Temporary Warehouses and offices						2	ea	\$23,620.00	\$47,240			
	Component Subtotal										\$3,332,373		
600	Monitoring and Maintenance (Indirect Cost)												
601	Monitoring and Maintenance												
	Geotech/Engineering Monitoring						1	Lump Sum	\$1,312,415	\$1,312,415		\$1,312,415	
	Aquatic Monitoring and Reporting						1	Lump Sum	\$2,733,048	\$2,733,048		\$2,733,048	
	Environmental Site Assessment (Yr 0 and Yr3)						1	Lump Sum	\$239,223	\$239,223		\$239,223	
	Terrestrial Environment Monitoring and Reporting (Yr 0 and Yr 1-3)						1	Lump Sum	\$632,282	\$632,282		\$632,282	
	Safety Compliance Inspection						1	Lump Sum	\$717,670	\$717,670		\$717,670	
	Socio-economic Reporting						1	Lump Sum	\$366,588	\$366,588		\$366,588	
	Air Quality Monitoring Program						1	Lump Sum	\$152,745	\$152,745		\$152,745	
	Marine Environment Monitoring						1	Lump Sum	\$559,055	\$559,055		\$559,055	
	Regulatory Fees						1	Lump Sum	\$2,300,000	\$2,300,000		\$2,300,000	

Log No.	Component/Activity	Length (m)	Width (m)	Height/Depth (m)	Area (m²)	Volume (m³)	Total Reclamation Quantity	Unit	Unit Rate	Total Reclamation Cost (CAN)	Subtotal (CAN)	NPV Reclamation Cost	Comment
	Component Subtotal										\$9,013,026	\$8,225,965	
602	Water Treatment												
	WRSF Water Treatment						317,852	m³	\$1.21	\$385,165			
	KM 105 Sed Pond Water Treatment						815,510	m³	\$1.21	\$988,216			
	Additional Water Treatment						6,308	m³	\$1.21	\$7,644			
	Component Subtotal										\$1,381,025	\$1,363,685	
603	Worker Accommodation & Consumables for Monitoring												
	Worker Accommodations & Consumables						13,576	person-days	\$152.75	\$2,073,593			
	Heat and Power Generation						1,574,760	L	\$1.02	\$1,603,578			
	Component Subtotal										\$3,677,171	\$3,024,586	
604	Mobilization for Monitoring Works												
	Mobilization of Remote Workers for Reclamation Activities						9,503	person-days	\$94.34	\$896,456			
	Mobilization of Local Workers for Reclamation Activities						4,073	person-days	\$82.80	\$337,208			
	Mobilization of Fuel for Consumables						1,574,760	L	\$0.44	\$689,539			
	Demobilization of Fuel						41,050,000	L	\$0.14	\$5,726,766			50% total Capacity
	Component Subtotal										\$7,649,968	\$5,671,735	
700	Indirect Costs												
701	Worker Accommodation & Consumables												

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	Worker Accommodations & Consumables						16,000	person-days	\$152.75	\$2,443,920			
	Heat and Power Generation						1,856,000	L	\$1.02	\$1,889,965			116L per person per day for heat and power generation
	Component Subtotal										\$4,333,885		
702	Mob/Demobilization for Reclamation Works												
	Demobilization of Baffinland Site Equipment						163,063	m3	\$103.02	\$16,798,750			
	Demobilization of 3rd Party Site Equipment						1	Lump Sum	\$2,110,230.00	\$2,110,230			
	Mobilization of Remote Workers for Reclamation Activities						11,200	person-days	\$94.34	\$1,056,555			70% workforce sourced remote
	Mobilization of Local Workers for Reclamation Activities						4,800	person-days	\$82.80	\$397,430			30% workforce sourced local
	Mobilization of Fuel for Consumables						1,856,000	L	\$0.44	\$812,685			116L per person per day for heat and power generation
	Mobilization of Reclamation Equipment						77,563,769	Lump Sum	10%	\$5,591,982			10% of Direct Costs
	Component Subtotal										\$26,767,633		
703	Administration and Engineering												
	Engineering Fees						77,563,769	Lump Sum	5%	\$2,795,991			5% of Direct Costs

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	Supervision, Project Management, and Controls						77,563,769	Lump Sum	9%	\$5,256,463			9.4% of Direct Costs
	Component Subtotal										\$8,052,454		
704	Contingency												
	Contingency						77,563,769	Lump Sum	20%	\$19,943,066			20% of Direct Costs
	Component Subtotal										\$19,943,066		



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