



# 2021 Annual Security Review

**Summary Presentation** 

21 January 2021

## Presentation Overview

- Introduction
- 2019 Work Plan Arbitration Outcomes
- 2021 Work Plan Overview
- 2021 Security Review
- Questions







### Introduction

- Annual update to the reclamation security required under the Type 'A' Water Licence
   2AM-MRY1325, and Commercial Lease Q13C301
- Reclamation security intended to be inclusive of all closure and reclamation costs estimated for a 3rd Party Contractor to complete the work
- Estimate built up from direct cost unit rates, and indirect costs required to support reclamation work to ensure objectives are met
- Baffinland utilizes the Estimate Breakdown Structure (EBS) developed by Hatch in 2014 in the Complete Project Financial Security Estimate, and Unit Rate updates completed in 2018. Additional revisions required as a result of the 2019 Work Plan Arbitration outcomes.



## Current Holding of Reclamation Security

- In respect of the current Type A Water Licence 2AM-MRY1325, the value of reclamation security currently held is as follows;
  - QIA \$113,371,000
  - Crown \$1,591,000

	Authorization	Liability	Total Posted as of January 2021 (\$)
1		IOL <sup>2</sup>	113,371,000
2	Type A 2AM-MRY1325	Crown	1,591,000
3	1796 / 2/101 MIN 1525	Water	-
4		Land	-
5	Subtotal Type A		114,962,000
6		IOL	-
7	Type B Exploration 2BE-MRY1421 3	Crown	1,250,000
8		Water	-
9		Land	-
10	Subtotal Type B Exploration		1,250,000
11		IOL <sup>2</sup>	-
12	DEO Security Associated with Ore Dock	Crown	563,000
13	DFO Security Associated with Ore Dock	Water	563,000
14		Land	-
15		IOL <sup>2</sup>	-
16	-DFO Security Associated with Freight Dock	Crown	4,250,000
17		Water	4,250,000
18		Land	-
19	Subtotal DFO	4,813,000	
20		IOL <sup>2</sup>	-
21	-  A A N D C Land Loaco 47 ⊔ /16 1 2 °	Crown	4,975,000
22		Water	-
23		Land	4,975,000
24	Subtotal AANDC Land Lease		4,975,000
25	GRAND TOTAL		126,000,000





- The arbitration for the 2019 Work Plan proceedings concluded in August 2020.
- Following the release of the Final Award document, Baffinland and QIA held meetings to resolve each parties understanding of the outcome and set the global value for security relative to the 2019 Work Plan.
- In order for the 2021 Estimate to accurately reflect the total 'global' closure and reclamation security estimated to be required for the Project in 2021, the outcomes of the Arbitration between Baffinland and QIA were reconciled and a revised global estimate relative to the 2019 Work Plan established.



### Closure and Post Closure Monitoring

- The Baffinland position regarding the calculation methodology for the maintenance of the Tote Road was accepted.
- The Baffinland position regarding the calculation methodology for the Waste Rock Facility (WRF) Water Treatment Plant was accepted.
- The QIA position regarding the estimate for Regulatory Fees was accepted.

#### Worker Mobilization

• The costs associated with Worker Mobilization from the Baffinland 2014 Complete Project Financial Security Estimate was accepted.

### Inventory

- The count of sea containers presented by QIA was confirmed.
- Baffinland's position that the allocation for demobilization of equipment and materials is sufficient to include the demobilization of calcium chloride was accepted.
- Third party equipment demobilization costs were applied as an indirect cost in the global estimate, consistent with the QIA methodology.



#### Hazardous Substances

• Baffinland's position on removal of hazardous substances was accepted.

#### Inflation and Unit Rates

- Baffinland's position on unit rates was accepted.
- QIA's position on the application of inflation was accepted.

### Fuel Mobilization and Demobilization

- Parties both agree that it should be assumed that the total volume of fuel on Site in the event of closure is 50% of the available capacity.
- The QIA determination for fuel mobilization was confirmed (100% mobilization of fuel required), in that it cannot be assumed that fuel on Site in closure is available for use for reclamation activities.



### **Equipment Mobilization and Demobilization**

• The QIA's position on the cost for demobilization of the Phase 2 equipment was confirmed.

### Contingency

- The QIA's position on the application of contingency was accepted. A contingency factor of 20% was applied to direct costs, as well as the following indirect costs:
  - · Contaminated Soil Treatment; and
  - Post Closure Monitoring.

### Supervision, Project Management, and Contract Administration

• Baffinland position was uncontested.





### 2021 Work Plan Overview

- 2021 Work Plan scope focuses on improvements, infrastructure and equipment required to execute the currently approved phase of the Mary River Project.
- No Phase 2 activities are included in the 2021 Marginal Reclamation Security Estimate; activities
  listed in Table 3.2 of the 2021 Work Plan will only be undertaken following approval of the Project
  Certificate amendment and/or Type A Water Licence amendment, and the required posting of
  additional securities for Phase 2 related activities.
- At this time, no revisions to the 2021 Work Plan are anticipated, however changes in the 2021 sealift may occur as a result of the regulatory timeline for Phase 2.



## Carry Over from Prior Years

- A number of activities proposed in 2020 and prior, but not yet fully executed or initiated are included in the 2021 Work Plan. This list includes, but is not limited to;
  - Development of quarries, laydowns, and replacement of culverts along the Tote Road.
  - Mine site upgrades include the expansion of water management structures near Deposit 1, Haul Road upgrades, construction of a Run of Mine (ROM) Stockpile at KM 106, additional sedimentation ponds, additional laydowns, offices, mine dry and shops, hazardous waste cells, installation of a new incinerator unit and new landfarm.
  - Milne Port upgrades include expansion of the Milne Port Ore Stockpile and new water management structures, new PWSP and snow containment ponds, laydowns, installation of a new incinerator unit and relocation of the effluent discharge and marine manifold.



- Tote Road
  - Continue work to repair/replace culverts along the Tote Road, including those with identified fish passage issues.
  - Addition of washroom facilities/refuge stations at KM 26 and KM 80 IT Tower.



- Milne Port
  - Installation of new power and distribution cabling.
  - New warehouse facility on laydown LP2 (1,227 m²).
  - New offices and workshops at the Stockpile and Shiploader (208 m<sup>2</sup>).
  - Thaw and wash bay for mobile vehicle maintenance (1,250 m<sup>2</sup>).
  - Proposed desalination plant.
  - New quonset structure at Milne Port Fire Hall.



- Mine Site
  - Installation of power distribution cabling (Dyno Explosives Plant and Mary River E-House).
  - Expansion and new offices/trailers at the OHT Laydown (400 m<sup>2</sup>).
  - Construction of quonset hut and sea-can structure (1,127 m²) at the aerodrome.
  - Construction of concrete pad apron exterior to the HD Shop (1,020 m<sup>2</sup>).
  - Two maintenance facilities (60 m<sup>2</sup> and 120 m<sup>2</sup>), a concrete pad for tire maintenance (60 m<sup>2</sup>) and welding shop (540 m<sup>2</sup>) at the KM 110 laydown.
  - Development of Landfill Cell #4.
  - Modification to roadways within the ultimate pit limit of Deposit 1.



- Mine Site (cont'd)
  - Relocation of the Mine Site Complex sewage treatment plant to Sailiivik Camp.
  - Expansion of the area east of the Mine Site workshops and crushing area 104 to MSC (19,424 m²) and 104.5 to Crusher (18,308 m²).
  - Expansion of MSC laydown for vehicle parking (5,243 m²).
  - Construction of three laydown areas for road aggregate storage on the mine haul road 106 Km (4,843 m²), 107 Km (2,159 m²), 108 Km (3,703 m²).
  - Waste Rock Facility Expansion to approved footprint (265,000 m<sup>2</sup>).
  - Explosives plant secondary storage location.





## Responses to Intervenor Submissions - CIRNAC

#### Interim Closure and Reclamation Plan

- Concerns raised by CIRNAC regarding the Waste Rock Facility (WRF) and integration of the Phase 1 Waste Rock Management Plan (WRMP)
- The deposition strategy outlined in the Phase 1 WRMP is designed to ensure lift placement facilitates the required freezeback of material, which will be validated through on-going monitoring.

### **Unit Rates**

- CIRNAC has utilized unit rates for their estimate that differ from those presented by Baffinland.
- Baffinland's methodology to use site-specific contractor cost data in supporting the development of unit rates was accepted in the 2019 Arbitration.

### **Engineering Costs**

• Baffinland does not believe an increase to the percentage applied for engineering fees is warranted; complexity of the reclamation activities has not meaningfully increased.



## Responses to Intervenor Submissions - CIRNAC

#### **RECLAIM Estimate Review**

• Discrepancy between the CIRNAC and Baffinland estimates is based on Direct Costs in the 2020 Global estimate, while marginal costs for 2021 are closer to the Baffinland costs as estimated.

#### **Direct Costs**

- Unclear how Baffinland's Disturbed Areas Analysis was integrated.
- CIRNAC did not utilize site-specific contractor cost data in supporting the development of unit rates, this method was accepted in the 2019 Arbitration. Additionally, included an adjustment between years based on unit rates from out of date documentation. No justification provided for use of \$90/hr labour rate.

#### **Indirect Costs**

- Indirect costs for mobilization and demobilization as presented by land ownership are not accurate.
- Demobilization of 3rd party equipment (including Phase 2 modules) should entirely be attributed to IOL liability, as there is no 3rd Party Equipment located on Crown land.



## Responses to Intervenor Submissions - QIA

Key differences between the Baffinland and QIA estimates are the result of;

- Disturbed Areas / Grade & Re-Contour
  - QIA states that they were unable to complete a review as the imagery was not provided.
  - Baffinland provided all imagery and has clearly demonstrated where actual ground disturbance has occurred, and where
    proposed project activities are yet to take place to reconcile the total value of security associated with the grade and
    re-contour closure activity.
  - Baffinland is asking for feedback from QIA and CIRNAC on the implementation and utility of this methodology.
- Equipment Inventory
  - Evidence provided in the form of manifests for equipment mobilized in 2020 to be reconciled.
  - Baffinland has maintained that costs for equipment estimated to arrive on site, but have not, shall be removed from the estimate.



## Responses to Intervenor Submissions - QIA

Key differences between the Baffinland and QIA estimates are the result of;

#### Water Treatment

• QIA estimate identified the need to increase the allocation for water treatment based on the volumes of water discharged from the MS-08 (Waste Rock Facility) discharge point. Baffinland's estimate will be revised to reflect the average discharge volume from MS-08 up to and including the 2020 operating year.

### • Deposit 1

• Baffinland maintains that active mining at Deposit 1 remains a hilltop outcrop, and that development of a pit is not projected until year 10-12 of mining at full production rate (21.5 Mtpa). Baffinland has not adjusted the estimate for the development of a pit at Deposit 1.

#### Ammonium Nitrate

- QIA has developed an esoteric density for AN based on the quantity of AN that can be loaded into a sea container, with the intent to include the dead space. The result includes a disposal cost at the final receiving facility for the dead space in the shipping method.
- Baffinland maintains the existing unit rate is inclusive of demobilization and disposal costs and has not adjusted the volume of AN requiring backhaul for 2021. AN is to be treated similar to all other hazardous materials requiring backhaul and calculated on a m<sup>3</sup> basis.



## Responses to Intervenor Submissions - QIA

Key differences between the Baffinland and QIA estimates are the result of;

- Building Height
  - QIA incorrectly states that building reclamation is based on an assumed building height of 3 metres. Baffinland has maintained the building demolition unit rates.
- Contingency
  - QIA's current position differs from that put forward in the 2019 Estimate and on which the arbitration was to decide.
  - Baffinland has maintained a 20% contingency applied to Direct Costs, Contaminated Soil Treatment, and Care and Maintenance, Closure and Post Closure Monitoring.
- Engineering fees
  - QIA has proposed an increase to engineering fees due to the increase in the scale of the project.
  - However, Engineering Fees are presented as inverse to the scale of the project, and would therefore be reduced relative to 2014 rates. Baffinland has maintained 3.9% Engineering Fees and not sought a reduction.



## Security Estimate – Summary of Revisions

- Based on feedback during the 2021 ASR submissions, the following changes have been made;
  - 2019 Estimate Arbitration Outcomes
    - No Changes
  - 2020 Estimate Arbitration Outcomes & Reconciliation
    - No Changes
  - 2021 Estimate 2021 Work Plan
    - Increase to Care & Maintenance, Closure & Post Closure Monitoring costs for water treatment = \$70,800



# Security Estimate – Updated Table 5.3

Component	Global Estimate	Inuit Owned Land Allocation	Crown Land Allocation	Water Allocation	Land Allocation
DIRECT COST SUB-TOTAL	\$1,028,296	\$859,029	\$169,267	\$7,925	\$1,020,371
Off-Site Disposal of Waste & Material	-	-	-	-	-
Fuel	\$49,000	\$35,000	\$14,000	-	\$49,000
Ammonium Nitrate	-	-	1	1	-
Contaminated Soil Treatment	-	-	-	-	-
Mobilization of Workers Required for Reclamation	\$40,000	\$28,000	\$12,000	-	\$40,000
Worker Accommodation & Camp Operation	\$110,000	\$78,000	\$32,000	\$1,000	\$109,000
Demobilization of Phase 2 Modules	-	-	-	-	-
Demobilization of 3rd Party Equipment	-\$230,000	-\$230,000	-	-	-\$230,000
Mobilization and Demobilization of Equipment and Materials	\$103,000	\$86,000	\$17,000	\$1,000	\$102,000
Closure & Post Closure Monitoring	\$70,800	\$70,800	\$0		\$70,800
Engineering Fees	\$40,000	\$33,000	\$7,000	-	\$40,000
Supervision, Project Management & Contract Administration	\$103,000	\$86,000	\$17,000	\$1,000	\$102,000
Contingency	\$220,000	\$186,000	\$34,000	\$2,000	\$218,000
INDIRECT SUB-TOTAL	\$505,800	\$372,800	\$133,000	\$5,000	\$500,800
TOTAL	\$1,534,000	\$1,232,000	\$302,000	\$13,000	\$1,521,000
Inflation (0.006)	\$9,476	\$7,611	\$1,866	\$80	\$9,396
INFLATION ADJUSTED TOTAL	\$1,543,476	\$1,239,611	\$303,866	\$13,080	\$1,530,396



# Security Estimate – Updated Table 5.4

A	В	С	D	E	F	G	Н
Authorization	Liability	Global Estimate from 2019 with Arbitration Outcome	2020 Estimate Adjusted for Arbitration	2021 Estimate Including 2020 Reconciliation	Total 'Global' Estimated Security for 2021	Total Posted as of January 2021	Adjustment to be Posted
		(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
					C + D + E		F - G
1	IOL <sup>2</sup>	113,371,000	2,429,480	1,239,611	117,040,090	113,371,000	3,669,090
Type A 2AM-MRY1325	Crown	2,014,000	0	303,866	2,317,866	1,591,000	726,866
3 Type A ZAIVI-IVIKY 1323	Water	2,128,000	-12,158	13,080	2,128,923		-
4	Land	113,257,000	2,441,637	1,530,396	117,229,033		-
5 Subtotal Type A		115,385,000	2,429,480	1,543,476	119,357,956	114,962,000	4,395,956
6	IOL	165,000	-	-	165,000		165,000
7 Type B Exploration 2BE-MRY1421 3	Crown	1,082,000	-	-	1,082,000	1,250,000	-168,000
8	Water	18,000	-	-	18,000		-
9	Land	1,229,000	-	-	1,229,000		-
10 Subtotal Type B Exploration					1,247,000	1,250,000	-3,000
11	IOL <sup>2</sup>	-	-	-	-		-
DFO Security Associated with Ore Dock	Crown	563,000	-	-	563,000		
13	Water	563,000	-	-	563,000	563,000	-
14	Land	-	-	-	-		-
15	IOL <sup>2</sup>	-	-	-	-		-
DFO Security Associated with Freight Dock	Crown	4,250,000	-	-	4,250,000	4,250,000	-
17	Water	4,250,000	-	-	4,250,000	4,250,000	-
18	Land	-	-	-	-		-
19 Subtotal DFO		4,813,000			4,813,000	4,813,000	-
20	IOL <sup>2</sup>	-	-	-	-		-
21 AANDC Land Lease 47H/16-1-2 4	Crown	4,975,000	-	-	4,975,000	4,975,000	-
22 AANDC Land Lease 47H/16-1-2	Water	-	-	-	-		-
23	Land	4,975,000	-	-	4,975,000	4,975,000	-
24 Subtotal AANDC Land Lease		4,975,000	-	-	4,975,000	4,975,000	-
25 GRAND TOTAL	126,420,000	2,429,480	1,543,476	130,392,956	126,000,000	4,395,956	





Baffinland