



2017 Annual Security Review (ASR) Summary Presentation

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Agenda and Introductions



Agenda

1. Introductions
2. 2016/17 Reconciliation
3. 2017 Work Plan
4. Results
5. Questions



Objective

- ✚ Provide a summary of the closure and reclamation security estimated for the Mary River Project for 2017/18
- ✚ Based on activities required to meet reclamation objectives as outlined in the Interim Mine Closure and Reclamation Plan (BAF-PH1-830-P16-0012)
- ✚ Takes into consideration planned work in 2017 being conducted under:
 - ✚ Type “A” Water Licence 2AM-MRY1325, Amendment No. 1
 - ✚ Qikiqtani Inuit Association (QIA) Commercial Lease No. Q13C301

Key Global Assumptions

Scope

- Inclusive of all closure and reclamation costs estimated to be required for a 3rd Party Contractor to perform the work in a 'worst-case' scenario for all disturbed areas, project components and project activities existing on the Mary River Project site upon conclusion of the 2017 Work Plan.

Closure Scenario

- Assumes all planned activities described in respective Work Plans have taken place on-site unless noted otherwise (e.g. 2016/17 ASR Reconciliation). This includes remaining liabilities from the previous phases (Exploration Phase, Bulk Sampling Programs and previous Work Plans).

First Principles Approach

- Unit costs were developed from actual project-specific costs based on a detailed study of resources such as labour, equipment, fuel and materials required to complete a functional unit for that project component (e.g. m² for building footprint, m³ for earthworks, etc.).

Reclamation Objectives

- Assume all hazardous materials are removed from all structures/equipment and disposed of appropriately off site. Non hazardous materials and waste to be disposed of on-site. All disturbed areas undergo contouring of ground surfaces to re-establish natural drainage patterns as reasonably practical.



2016/17 ASR Reconciliation

2016/17 ASR Reconciliation

The purpose 2016/17 ASR Reconciliation was to identify Project components and activities that have materially changed from the previous positions presented by Baffinland in order for the 2017/18 ASR Estimate to accurately reflect the total 'global' closure and reclamation security estimated to be required

Changes relate to the following:

- ✚ Removal of quarries and borrow sources previously identified as being required that have not been developed and due to changes in project planning, are not anticipated to be required in 2017/18
- ✚ Re-classification of mobile and mechanical equipment across 'global' estimate

2016/17 ASR Reconciliation: Direct Costs

Quarry and Borrow Sources Removed

Description	Quantity (m ²)
Q9 Quarry	15,166
Q14 Quarry	13,440
Q15 Quarry	10,680
P5 Borrow Source	4,600
P6 Borrow Source	7,500
P7 Borrow Source	8,100
P8 Borrow Source	8,385
P10 Borrow Source	19,344
P13 Borrow Source	8,456
P14 Borrow Source	3,160
P15 Borrow Source	3,300
TOTAL	102,131

Equipment Reclassification

Equipment Classification	Equipment Example
Light Mechanical Equipment	Pumps, fuel dispenser, laboratory equipment, and sample bins
Medium Mechanical Equipment	Aerodrome equipment, generators, shop / maintenance equipment, screens, and chutes.
Heavy Mechanical Equipment	Crusher, feeder, power plant generators, large screens, conveyors, and stackers
Light Mobile Equipment	Forklifts, picks up, vehicles around five (5) tonnes and under, scissor lift, man lifts, and small bin trucks. NOTE: Weight thresholds not always determining factor. Examples of Light Mobile Equipment includes: Skid Steer P10000, and Ford F-350 Pick-Up Truck.
Medium Mobile Equipment	Vehicles around 10 tonnes, trailers, buses, tow trucks, large garbage bins and water trucks. NOTE: Weight thresholds not always determining factor. Examples of Medium Mobile Equipment include: D6 Dozer, Kenworth T800 Fuel/Lube Truck, CAT P20000, Passenger Buses, Secondary Drills, Rock Drills, D6 Wheel Dozer, and Dump Trailers.
Heavy Mobile Equipment	Vehicles over 10 tonnes, boom trucks, large front end loaders, dump trucks, graders and cranes. NOTE: Weight thresholds not always determining factor. Examples of Heavy Mobile Equipment include: D9 Dozer, CAT 740 EFLT Fuel/Lube Truck, CAT 824H Wheel Dozer, and Production Drills.

2016/17 ASR Reconciliation: Indirect Costs

Based on relative changes to direct costs/activities, corresponding changes to the following indirect cost allocations were made:

- ✚ On-Site Fuel Demobilization and Reclamation Fuel Mobilization
- ✚ Mobilization of Workers Required for Reclamation
- ✚ Worker Accommodation and Camp Operation
- ✚ Mobilization and Demobilization of Equipment and Materials
- ✚ Supervision, Project Management and Contract Administration
- ✚ Engineering Fees
- ✚ Contingency



2017 Work Plan

2017 Proposed Activities

- ✦ Operation of the mine, ore crushing and land transportation, stockpiling and marine shipment of ore.
- ✦ The continued development and construction of infrastructure required at Milne Port, the Mary River Mine Site and along the Tote Road for the Mary River Project.
- ✦ Mobilization of additional 49 person camp at Milne Port and continued operation of Mine Site and Milne Port Camps to support ongoing operations and construction activities.
- ✦ Operation of quarry and borrow sources.
- ✦ At Milne Port, vessels carrying fuel, equipment and supplies for use at the Mine Site and Milne Port will arrive during open water (approximately between mid-July and mid-October 2017).
- ✦ Geotechnical drilling will be required to support engineering, design and construction activities of Project.
- ✦ Ongoing environmental effects studies and baseline data collection.
- ✦ Continued environmental monitoring.
- ✦ On-going exploration activities including mapping, prospecting, sampling, and geophysics.
- ✦ Activities as defined by the Tote Road Earthworks Execution Plan (still to be determined)



Tote Road Earthworks Execution Plan

Baffinland prepared a Completion Report to respond to the Fisheries Act Direction received from Environment and Climate Change Canada (ECCC) and the Letter of Non-Compliance received from Indigenous and Northern Affairs Canada (INAC) on June 7, 2017 and June 16, 2017, respectively.

Completion Report was submitted September 29, 2016 and included a Dust Mitigation Action Plan and a Sedimentation Mitigation Action Plan.

Sedimentation Mitigation Action Plan included a commitment to develop a Tote Road Earthworks Execution Plan as part of the actions to address long term dust and sedimentation issues along the Tote Road.

The Tote Road Earthworks Execution Plan intends to address sedimentation issues from a root cause basis. Will identify and prioritize areas of Tote Road based on environmental concern and resource availability that require further earthworks activities.

Tote Road Earthworks Execution Plan is expected to include road re-surfacing, culvert replacement, ditch lining, and other road improvements.

Although no activities are expected to be included that would have a significant security implications along the Tote Road, there may be security impacts related to infrastructure required to support the work (i.e. fuel, quarries, accommodations).

The Tote Road Earthworks Execution Plan is expected to be completed February 15, 2017.

2017 Work Plan: Direct Costs

Direct cost allocations were applied to quantities as indicated in the 2017 Work Plan for:

- ✚ Building and foundations: 49 Person Camp, Tire shop, Truck Wash Building
- ✚ Mechanical and mobile Equipment: 108 total pieces
- ✚ Cabling: 6 to 8 km of lighting and cabling project wide
- ✚ Added site works: Q1, Q7, Q11, Q18, QMR2, Km 2, Km 97, Crusher Pad Expansion, Ore Stockpile Pad Expansion
- ✚ Consumables: additional allocation for marginal increase of 49 bed spaces

Unit rates consistent with the direct cost assumptions described in the 2014 Complete Project Financial Security Assessment (Hatch, H349000-1000-07-126-0018, Rev 1)

2017 Work Plan: Indirect Costs

Based on relative changes to direct costs/activities, corresponding changes to the following indirect costs were made:

- ✚ On-Site Fuel Demobilization and Reclamation Fuel Mobilization
- ✚ Mobilization of Workers Required for Reclamation
- ✚ Worker Accommodation and Camp Operation
- ✚ Mobilization and Demobilization of Equipment and Materials
- ✚ Supervision, Project Management and Contract Administration
- ✚ Engineering Fees
- ✚ Contingency

Updates Since Original Submission

Revisions were identified to be required to the 2017/18 ASR Estimate based on feedback received from interested parties. These include:

- ✚ 49-person camp unit rate was modified to apply 'Modular Building (non-contaminated)' rate instead of the previous 'Soft Wall (non-contaminated)' unit rate (based on INAC feedback)
- ✚ Truck wash equipment unit rate was modified to apply the 'Large Mechanical Equipment' rate instead of 'Medium Mechanical Equipment' rate (based on QIA feedback)
- ✚ Alignment with classifications of mobile and mechanical equipment decided during reconciliation phase (based on QIA feedback)



Results



2017 Marginal Reclamation and Closure Security Cost Summary

See Attached Tables A and B

	A	B	C	D	E	F	G	H	I	J	K
	Authorization	Liability	Original Global Estimate from 2016/17 ASR (\$)	Revised Global Estimate from 2016/17 ASR (\$)	Difference of Original vs. Revised from 2016/17 ASR (\$)	Original 2017/18 ASR Marginal Estimate (\$)	Revised 2017/18 ASR Marginal Estimate (\$)	Difference of Original vs. Revised 2017/18 ASR Marginal Estimate (\$)	Revised Total 'Global' Estimated Security for 2017/18 (\$)	Total Posted (\$)	Adjustment to be Posted (\$)
					D-C			G-F	D+G		I-J
1		IOL ²	45,055,000	46,053,000	998,000	1,880,000	2,019,000	139,000	48,072,000	48,846,000	(774,000)
2	Type A	Crown	1,210,000	1,199,000	(11,000)	-	-	-	1,199,000	1,210,000	(11,000)
3	2AM-MRY1325	Water	1,342,000	1,342,000	-	-	-	-	1,342,000	-	-
4		Land	44,923,000	45,910,000	987,000	1,880,000	2,019,000	139,000	47,929,000	-	-
5	Subtotal Type A		46,265,000	47,252,000	987,000	1,880,000	2,019,000	139,000	49,271,000	50,056,000	(785,000)
6	Type B	IOL ²	-	-	-	-	-	-	-	-	-
7	Construction	Crown	-	-	-	-	-	-	-	147,000	(147,000)
8	2BC-MRY1416	Water	-	-	-	-	-	-	-	-	-
9		Land	-	-	-	-	-	-	-	-	-
10	Subtotal Type B Construction		-	-	-	-	-	-	-	-	(147,000)
11	Type B	IOL ²	165,000	165,000	-	-	-	-	165,000	-	165,000
12	Exploration	Crown	1,082,000	1,082,000	-	-	-	-	1,082,000	1,250,000	(168,000)
13	2BE-MRY1421 ³	Water	18,000	18,000	-	-	-	-	18,000	-	-
14		Land	1,229,000	1,229,000	-	-	-	-	1,229,000	-	-
15	Subtotal Type B Exploration		1,247,000	1,247,000	-	-	-	-	1,247,000	1,250,000	(3,000)
16	DFO Security	IOL ²	-	-	-	-	-	-	-	-	-
17	Associated with	Crown	563,000	563,000	-	-	-	-	563,000	563,000	-
18	Ore Dock	Water	563,000	563,000	-	-	-	-	563,000	563,000	-
19		Land	-	-	-	-	-	-	-	-	-
20	Subtotal DFO		563,000	563,000	-	-	-	-	563,000	563,000	-
21	AANDC Land	IOL ²	-	-	-	-	-	-	-	-	-
22	Lease 47H/16-1-2	Crown	4,975,000	4,975,000	-	-	-	-	4,975,000	4,975,000	-
23	^{4,5}	Water	-	-	-	-	-	-	-	-	-
24		Land	4,975,000	4,975,000	-	-	-	-	4,975,000	4,975,000	-
25	Subtotal AANDC Land Lease		4,975,000	4,975,000	-	-	-	-	4,975,000	4,975,000	-
27	GRAND TOTAL		53,050,000	54,037,000	987,000	1,880,000	2,019,000	139,000	1,880,000	58,721,000	(935,000)

NOTES:

- 1) Totals rounded to nearest '000 in CAD
- 2) Security relating to IOL held by Qikiqtani Inuit Association (QIA) under Commercial Lease No. Q13C301
- 3) As per Mary River Exploration Project Closure and Reclamation Plan (BAF-PH1-830-P16-0038, Rev 1)
- 4) Posting process for security relating to AANDC Land Lease 47H/16-1-2 phased into a 2-step approach. Phase 1 to be posted November 2016.
- 5) As per Closure and Reclamation Strategy and Financial Security Estimate for Nunavut Lease #47H/16-1-2 (H349001-2000-07-126-0001, Rev.0)

Table A: Mary River Project 'Global' Closure and Reclamation Security Summary¹

	A	B	C	D	E	F	G	H	I	J	K
	Authorization	Liability	Original Global Estimate from 2016/17 ASR (\$)	Revised Global Estimate from 2016/17 ASR (\$)	Difference of Original vs. Revised from 2016/17 ASR (\$)	Original 2017/18 ASR Marginal Estimate (\$)	Revised 2017/18 ASR Marginal Estimate (\$)	Difference of Original vs. Revised 2017/18 ASR Marginal Estimate (\$)	Revised Total 'Global' Estimated Security for 2017/18 (\$)	Total Posted (\$)	Adjustment to be Posted (\$)
					D-C			G-F	D+G		I-J
1	Type A 2AM-MRY1325	IOL ²	45,055,000	46,053,000	998,000	1,880,000	2,019,000	139,000	48,072,000	48,846,000	-774,000
2		Crown	1,210,000	1,199,000	-11,000	-	-	-	1,199,000	1,210,000	-11,000
3		Water	1,342,000	1,342,000	-	-	-	-	1,342,000	-	-
4		Land	44,923,000	45,910,000	987,000	1,880,000	2,019,000	139,000	47,929,000	-	-
5	Subtotal Type A		46,265,000	47,252,000	987,000	1,880,000	2,019,000	139,000	49,271,000	50,056,000	-785,000
6	Type B Construction 2BC-MRY1416	IOL ²	-	-	-	-	-	-	-	-	-
7		Crown	-	-	-	-	-	-	-	147,000	-147,000
8		Water	-	-	-	-	-	-	-	-	-
9		Land	-	-	-	-	-	-	-	-	-
10	Subtotal Type B Construction		-	-	-	-	-	-	-	-	-147,000
11	Type B Exploration 2BE-MRY1421 ³	IOL	165,000	165,000	-	-	-	-	165,000	-	165,000
12		Crown	1,082,000	1,082,000	-	-	-	-	1,082,000	1,250,000	-168,000
13		Water	18,000	18,000	-	-	-	-	18,000	-	-
14		Land	1,229,000	1,229,000	-	-	-	-	1,229,000	-	-
15	Subtotal Type B Exploration		1,247,000	1,247,000	-	-	-	-	1,247,000	1,250,000	-3,000
16	DFO Security Associated with Ore Dock	IOL ²	-	-	-	-	-	-	-	-	-
17		Crown	563,000	563,000	-	-	-	-	563,000	563,000	-
18		Water	563,000	563,000	-	-	-	-	563,000	563,000	-
19		Land	-	-	-	-	-	-	-	-	-
20	Subtotal DFO		563,000	563,000	-	-	-	-	563,000	563,000	-
21	AANDC Land Lease 47H/16-1-2 ^{4,5}	IOL ²	-	-	-	-	-	-	-	-	-
22		Crown	4,975,000	4,975,000	-	-	-	-	4,975,000	4,975,000	-
23		Water	-	-	-	-	-	-	-	-	-
24		Land	4,975,000	4,975,000	-	-	-	-	4,975,000	4,975,000	-
25	Subtotal AANDC Land Lease		4,975,000	4,975,000	-	-	-	-	4,975,000	4,975,000	-
27	GRAND TOTAL		53,050,000	54,037,000	987,000	1,880,000	2,019,000	139,000	56,056,000	56,844,000	-935,000

NOTES:

1) Totals rounded to nearest '000 in CAD

2) Security relating to IOL held by Qikiqtani Inuit Association (QIA) under Commercial Lease No. Q13C301

3) As per Mary River Exploration Project Closure and Reclamation Plan (BAF-PH1-830-P16-0038, Rev 1)

4) Posting process for security relating to AANDC Land Lease 47H/16-1-2 phased into a 2-step approach. Phase 1 to be posted November 2016.

5) As per Closure and Reclamation Strategy and Financial Security Estimate for Nunavut Lease #47H/16-1-2 (H349001-2000-07-126-0001, Rev.0)

Table B: 2017 Estimated Closure and Reclamation Security Detailed Summary¹

Cost	Original Global Estimate from 2016/17 ASR (\$)	Revised Global Estimate from 2016/17 ASR (\$)	Difference of Original vs. Revised from 2016/17 ASR (\$)	Original 2017/18 ASR Marginal Estimate (\$)	Revised 2017/18 ASR Marginal Estimate (\$)	Difference of Original vs. Revised 2017/18 ASR Marginal Estimate (\$)	Revised Total 'Global' Estimated Security for 2017/18 (\$)
Direct Costs							
Project Wide	1,395,000	1,385,000	-10,000	83,000	87,000	4,000	1,472,000
Milne Port	5,670,000	5,673,000	3,000	591,000	628,000	37,000	6,301,000
Construction Facilities & Services	2,102,000	2,102,000	-	45,000	56,000	11,000	2,158,000
Mine Site	8,205,000	8,856,000	651,000	621,000	658,000	37,000	9,514,000
Tote Road	4,695,000	4,695,000	-	-166,000	-166,000	-	4,529,000
Mary River Exploration Activities	1,022,000	1,022,000	-	-	-	-	1,022,000
Subtotal	23,089,000	23,733,000	644,000	1,174,000	1,263,000	89,000	24,996,000
Indirect Costs							
Off-Site Disposal of Waste & Material	1,969,000	1,969,000	-	-	-	-	1,969,000
Fuel Mobilization and Demobilization	3,152,000	3,165,000	13,000	28,000	30,000	2,000	3,195,000
Ammonium Nitrate (explosive material)	2,537,000	2,537,000	-	-	-	-	2,537,000
Contaminated Soil Treatment	239,000	239,000	-	63,000	63,000	-	302,000
Mobilization of Workers Required for Reclamation	988,000	1,009,000	21,000	40,000	43,000	3,000	1,052,000
Worker Accommodation & Camp Operation	2,560,000	2,620,000	60,000	108,000	117,000	9,000	2,737,000
Mob/Demob of Equipment and Materials by Seallift	2,206,000	2,270,000	64,000	117,000	126,000	9,000	2,396,000
Short Term C&M, Closure Monitoring & Reporting	3,766,000	3,766,000	-	-	-	-	3,766,000
Supervision, PM & Contract Administration	2,256,000	2,317,000	61,000	116,000	125,000	9,000	2,442,000
Engineering Fees	861,000	887,000	26,000	46,000	49,000	3,000	936,000
Contingency	3,663,000	3,762,000	99,000	188,000	202,000	14,000	3,964,000
Mary River Exploration Activities	225,000	225,000	-	-	-	-	225,000
DFO Financial Security for Ore Dock	563,000	563,000	-	-	-	-	563,000
AANDC Land Lease	4,975,000	4,975,000	-	-	-	-	4,975,000
Subtotal	29,960,000	30,304,000	344,000	706,000	755,000	49,000	31,059,000
TOTAL	53,049,000	54,037,000	988,000	1,880,000	2,018,000	138,000	56,055,000

IOL	Crown Land	Water Liability	Land Liability
Direct Costs			
1,248,000	224,000	-	1,472,000
6,301,000	-	227,000	6,074,000
2,159,000	-	-	2,159,000
9,514,000	-	1,115,000	8,399,000
4,056,000	473,000	-	4,529,000
135,000	887,000	15,000	1,007,000
23,413,000	1,584,000	1,357,000	23,640,000
Indirect Costs			
1,969,000	-	-	1,969,000
3,195,000	-	-	3,195,000
2,537,000	-	-	2,537,000
302,000	-	-	302,000
1,021,000	31,000	-	1,052,000
2,655,000	82,000	-	2,737,000
2,326,000	70,000	-	2,396,000
3,657,000	110,000	-	3,766,000
2,374,000	68,000	-	2,442,000
909,000	27,000	-	936,000
3,851,000	113,000	-	3,964,000
30,000	195,000	3,000	222,000
-	563,000	563,000	-
-	4,975,000	-	4,975,000
24,826,000	6,234,000	566,000	30,493,000
48,239,000	7,818,000	1,923,000	54,133,000

NOTES:

1) All totals rounded to nearest '000 in CAD



Questions?

