Baffinland

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2015 Annual Security Review (ASR)

Summary Presentation

December 18, 2014

Agenda

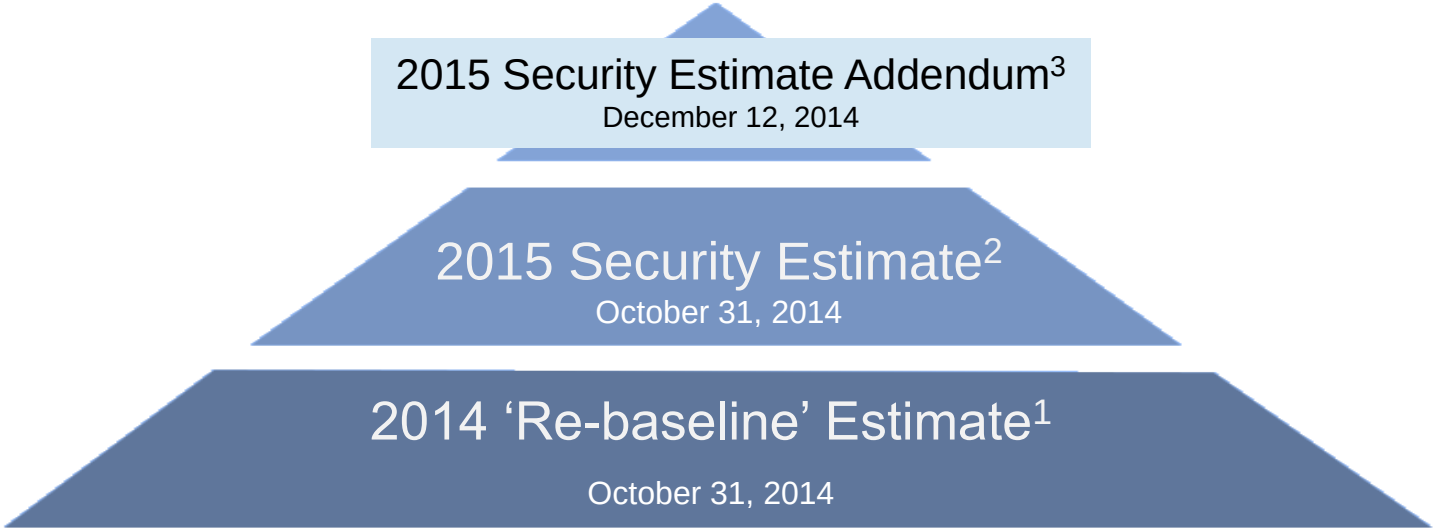
1. Introduction
2. 2014 'Re-Baseline' Efforts
3. 2015 Work Plan & Addendum
4. Proposed Net Distribution of Costs
5. Clarification Requests Received
6. Questions

Objective

- Provide a summary of the closure & reclamation security estimated for the Mary River Project taking into consideration planned work in 2015 being conducted under:
  - Qikqtani Inuit Association's Commercial Lease (No. Q13C301)
  - Type 'A' Water 2AM-MRY1325
  - Type 'B' Water Licence 8BC-MRY1416
  - Class A Crown Land Use Permit 47H16-1-2
  - DFO Authorization 14-HCAA-00525 No:1 (Ore Dock)

Background

The 'global' closure & reclamation costs that are presented are built by combining three (3) security estimates:



1. Refers to: 2014 Complete Project Financial Security Assessment, H349000-1000-07-126-0018, Rev. 1
2. Refers to: 2015 Marginal Closure and Reclamation Financial Security Estimate, H349000-1000-07-126-0019, Rev. 0
3. Refers to: 2015 Marginal Closure and Reclamation Financial Security Estimate Addendum, H349000-1000-07-126-0020, Rev. 0

Key Global Assumptions

(applicable to all estimates)

Scope

- Inclusive of all closure & 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 & project activities existing on the Mary River Project site upon conclusion of the respective Work Plan/estimate scope.

Closure Scenario

- Assumes all planned activities described in respective Work Plans have taken place on-site. For the purpose of the 2014 'Re-baseline', this includes remaining liabilities from the previous phases (Exploration Phase, Bulk Sampling Programs & previous Work Plan's).

First Principles Approach

- Unit costs were developed from actual project-specific costs based on a detailed study of the resources such as labour, equipment, fuel & materials required to complete a functional unit for that project component (e.g. m^2 for building footprint, m^3 for earthworks, etc.).

Reclamation Objectives

- Assume all hazardous materials are removed from all structures & equipment & 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 mimic the natural surrounding topography & to re-establish natural drainage patterns.

2014 ‘RE-BASELINE’ EFFORTS

2014 'Re-baseline' Estimate - Context

October 31, 2013 — Baffinland submits the 2014 Marginal Reclamation & Closure Security Estimate

December 18, 2013 — QIA 2014 Work Plan Financial Security Estimate (by Arktis Solutions), submitted representing QIA proposed closure & reclamation cost for both the 2013 & 2014 Work Plans. Differences from Baffinland estimate noted.

January 23, 2014 — Agreement was achieved on proposed additional amount to be posted for 2014. QIA and Baffinland agree to a good faith understanding that discrepancies still exist however & therefore further work to reconcile differences in 2014 required.

February to October, 2014 — Baffinland & QIA commence 2014 Complete Project Financial Security Assessment Process

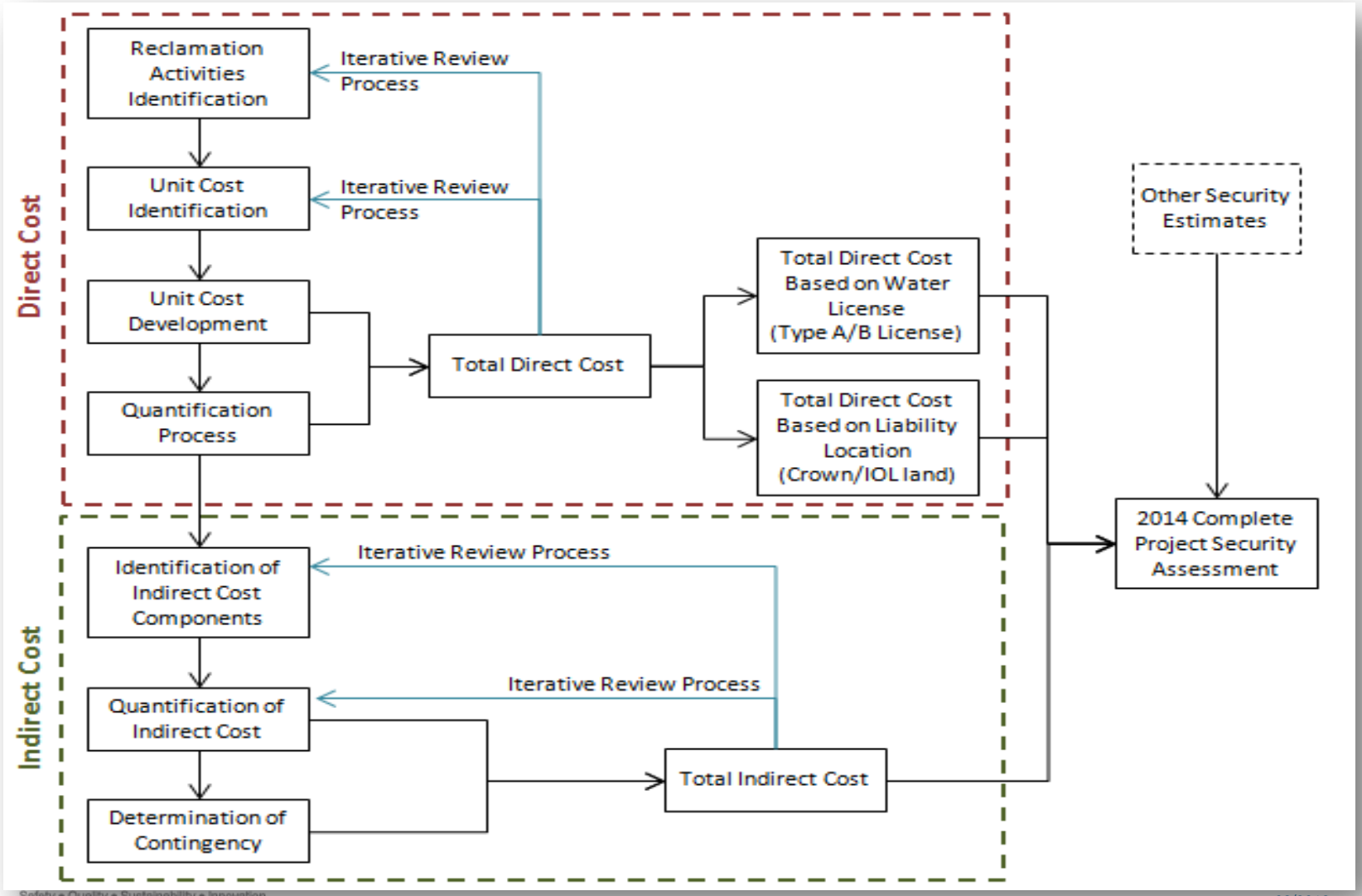
Goals of Re-Baseline Effort

1. Determine the estimating guidelines & assumptions for functional site specific unit costs, quantities, direct costs & indirect costs required

2. Facilitate understanding & transparency between all parties

3. Develop direct & indirect costs assumptions to be incorporated into future ASR processes

Process


Direct Cost
Reclamation Activities Identification
Iterative Review Process
Unit Cost Identification
Iterative Review Process
Unit Cost Development
Quantification Process
Total Direct Cost
Total Direct Cost Based on Water License (Type A/B License)
Total Direct Cost Based on Liability Location (Crown/IOL land)
Other Security Estimates
2014 Complete Project Security Assessment
Indirect Cost
Identification of Indirect Cost Components
Iterative Review Process
Quantification of Indirect Cost
Iterative Review Process
Determination of Contingency
Total Indirect Cost

Calculation of Unit Rates

Example: Modular Building (Not Contaminated)

The Process

Determine functional unit	•m^2
Determine scope of unit	•Footprint preparation, decommissioning of building utilities such as power & pipelines included in the unit cost
Estimate Demolition Productivity	•For every 480 ft^2 assume crew of one (1) for three (3) hours to empty and remove or secure items
Estimate Load & Secure Productivity	•For every 480 ft^2 assume crew of two (2) for 2.5 hours to load debris material onto truck
Estimate Travel Time	•For every 480 ft^2 assume crew of one (1) for two (2) hours to transport (round trip) materials
Estimate Loads per Functional Unit	•Assume one (1) trip will be required to transport the 480ft^2 non-contaminated modular building to a disposal location
Apply Fuel Costs per Functional Unit	•Fuel consumption (as dollar value) represents 10% of the equipment usage cost for reclamation activities
Apply Labour Costs per Functional Unit	•Labour cost was calculated based on productivity at a blended labour rate estimated as $100/h
Apply Equipment Costs per Functional Unit	•Equipment cost was calculated based on productivity at a blended equipment rate estimated as $150/h
Determine Total Costs per Functional Unit	•Total unit cost was calculated as the sum of labour, fuel consumption cost, & equipment for a 480 ft^2 modular building
Determine quantity	•See Master Building Matrix

Unit Rate: $59.38/$m^2$

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Developed Unit Rates

Unit Rate	Cost ($)	Unit	Unit Rates	Cost ($)	Unit
Disposal and Cover	89.54	m^2	Modular Building Not Contaminated	59.38	m^2
Fill Application	44.37	m^2	Modular Building Contaminated	143.42	m^2
Grade & Re-Contour	1.81	m^2	Fold Away Building Not Contaminated	41.57	m^2
Grade & Re-Contour with Liner	5.31	m^2	Fold Away Building Contaminated	142.41	m^2
Grade & Re-Contour - Significantly Disturbed	2.72	m^2	Soft Walled Building (tent) Not Contaminated	47.51	m^2
Culvert Removal	1,094.48	Ea	Soft Walled Building (tent) Contaminated	148.35	m^2
Liner Removal	3.50	m^2	ISO Container	29.69	m^2
Open Pit Stabilization	6.22	m^3	Timber Cribbing	20.78	m^2
Stockpile Removal	31.09	m^2	Precast Concrete Foundations	38.47	m^2
Light Equipment	1,980.80	Ea	Slab on Grade	33.11	m^2
Medium Equipment	4,261.34	Ea	Bridge Removal	201,838.77	Lot
Heavy Equipment	41,205.45	Ea	Steel Building Teardown	64,926.61	Ea
Light Mobile Equipment	941.09	Ea	VENDOR PKG - Incinerator	9,975.93	Lot
Medium Mobile Equipment	1,494.13	Ea	VENDOR PKG - Potable Water	9,975.93	Lot
Heavy Mobile Equipment	2,618.87	Ea	VENDOR PKG - Sewage Treatment Plant	11,035.58	Lot
Light Tanks	2,148.33	Ea	VENDOR PKG - Ship Loader	3,827,468.53	Lot
Medium Tanks	7,387.31	Ea	Reclaim Conveyor	1,329,441.31	ea
Light Fuel Tanks (10,000L to 20,000L)	3,693.66	Ea	Piping	66.23	m
Medium Diesel Tanks (500k L to 750k L)	16,166.40	Ea	Cable	26.49	m
Large Diesel Tanks Load and Transport (5M L)	106,338.74	Ea	Miscellaneous Items (Minor)	529.83	ea
Largest Diesel Tanks (10M L to 12M L)	171,468.15	Ea	Airstrip Lighting & Removal	26.49	m

Quantification of Unit Rates

Based on:

- Issued for Construction (IFC) Drawings
- Mechanical & Mobile Equipment List(s)
- Design Criteria & Vendor Bid Documents
- 2014 Master Building Matrix
- Site Layouts
- Physical ground truthing
- Etc.

Note: Financial security is estimated for a *complete* project component as designed prior to commencement of development to ensure conservatism & addresses concerns relating to project scheduling from a financial security perspective.

Indirect Cost Allocations (1/2)

Off-Site Disposal of Hazardous & Non-Hazardous Waste

- Peak amount of hazardous wastes/materials expect on site (5,500 m^3) at a disposal unit rate of \$358/m^3 inclusive of handling, transportation off-site, and freight & disposal fees

Explosive Material Reclamation

- Cost is based on explosives reclamation unit rate of \$2.37/kg and an assumption of a maximum of 369,620kg of explosive material on-site

On-Site Fuel Demobilization & Reclamation Fuel Mobilization

- Assume 50% of the maximum storage capacity of Type-1 fuel on-site will require reclamation (demobilization at \$0.10/L) & 50% of the fuel required for reclamation and closure activities requires mobilization at \$0.40/L

Contaminated Soil Treatment

- Cost is based on contaminated soil treatment unit rate of: \$14.78/m^3 & an assumption of 15,830 m^3 of contaminated soil on-site

Mobilization of Workers Required for Reclamation

- Assume 70% of hires are from southern communities & 30% from northern communities. Assume \$85.45/person-day on-site from southern communities & \$75.00/person-day on-site from northern communities

Worker Accommodation & Camp Operation

- Allocates \$225/person-day for camp operation, catering & housekeeping during reclamation activities

Indirect Cost Allocations (2/2)

Mobilization and Demobilization of Equipment and Materials by Sealift

- Equipment & material mobilization & demobilization cost are estimated as 10% of total direct costs

Closure and Post Closure Monitoring

- Estimated $1,091,000 for closure & post closure monitoring, follow-up inspections & reporting

Engineering Fees

- An engineering design & execution planning indirect cost allowance of 3.9% of the total direct costs

Supervision, Project Management and Contract Administration

- A project supervision/contract administration indirect cost allowance of 9.4% of total direct costs, contaminated soil treatment costs, & closure & post closure monitoring costs

Contingency

- Contingency rate of 12.5% of the total direct costs, contaminated soil treatment costs, mobilization & demobilization of equipment & materials by sealift costs, worker accommodation & camp operation costs, mobilization of workers required for reclamation costs, & closure & post closure monitoring costs.

Results of Re-Baseline Effort

Description	Prior to Re-Baseline ($)	Re-Baseline Total Cost ($)	Difference ($)
Direct Costs			
Mary River Project	25,253,000	24,248,000	(1,005,000)
Mary River Exploration Activities	1,007,000	1,007,000	-
Total Direct Costs	**26,260,000**	**25,255,000**	**(1,005,000)**
Indirect Costs			
Mary River Project	16,226,000	20,569,000	4,343,000
Mary River Exploration Activities	240,000	240,000	-
DFO Financial Security for Ore Dock	3,566,000	3,566,000	-
Total Indirect Costs	**20,032,000**	**24,375,000**	**4,343,000**
TOTAL COSTS	**46,292,000**	**49,630,000**	**3,338,000**

*Rounded to nearest '000

2015 WORK PLAN & ADDENDUM

Regulatory Status

- All works & activities proposed in the 2015 Work Plan (& Addendum) have been screened by the NIRB & are approved in the amended Project Certificate No. 005.
- Regulatory instruments that allow for 2015 Work Plan activities include:

- Commercial Lease Q13C301
- Type 'A' Water Licence (2AM-MRY1325)
- Construction Type 'B' Water Licence (8BC-MRY1416)
- Exploration Type 'B' Water Licence (2BE-MRY1421)
- Class A Crown Land Use Permit 47H16-1-2
- Quarry Tote Road Land Use Permit (LUP) N2014Q0016 and Quarry Permit 2014QP0023
- AANDC Land Use permits (Ore Dock, Milne Port Steensby and Bruce head)
- DFO Authorization 14-HCAA-00525 No.:1 (Ore Dock)
- DFO Authorization 06-HCAA-CA7-00084 (Crossings)

PROPOSED 2015 CONSTRUCTION ACTIVITIES

MILNE PORT

Milne Port (1/2)

- Continue to install & commission communication a & IT infrastructure (2014)
- Continue to construct remaining earth/rock fill for laydown areas, ore dock, ore stockpile pad, local site roads & pads for buildings (2014) (2015a)
- Expand the existing accommodation complex (2015a)
- Finalize assembly, installation & commissioning of ore stacking, reclaim & Shiploader (2014)
- Install mooring buoys or dolphins (2014)
- Incoming sea-lift equipment, materials & consumables (2015) (2015a)

Note:
(2014) Captured in Re-baseline
(2015) In Marginal (2015a) Addendum

Milne Port (2/2)

- Complete installation of buildings (maintenance, workshop & welding shop) (2014)
- Commence construction of new maintenance shop & retrofit existing warehouse into truck wash facility (2015a)
- Complete installation of power generation systems & power supply for buildings (2014)
- Upgrade existing sewage treatment plant (2015a)
- Modifications to existing potable water treatment plant (2015a)
- Install additional hazardous waste containment cell (2015a)
- Continued development of Quarry Q1 (2014)
- Develop km 2 Borrow sources (2015)

Note:

(2014) Captured in Re-baseline

(2015) In Marginal (2015a) Addendum

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TOTE ROAD

Tote Road (1/2)

- The upgrade of the road commenced late in 2013 & is expected to be completed in 2015. (2014)
- During 2015 the activities associated with the upgrade to the Tote Road include:
  - Continual improvements including realignment of road & offsetting of some culvert crossing locations (2014)
  - Reduce maximum slopes, increase turn radius (2014)
  - Increase road embankment width (2014)
  - Increase culvert sizes & install where required (2014)
  - Crush material as required, haul, place and compact new rock fill per design (2014)
  - Installation & maintenance of erosion control devices (2014)

Note:

(2014) Captured in Re-baseline

(2015) In Marginal (2015a) Addendum

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Tote Road (2/2)

- Construct ditches with rip rap as required (2014)
- If required, commence the development of Quarry Q7, Q11, Q19, Borrow Sources P1 & other approved borrow sources to provide access to aggregate for upgrades & sand for minor fill (2014)
- Removal of the 4 sea can bridges (abutments will remain in place) (2014)
- Install signs & reflective markers (2014)

Note:

(2014) Captured in Re-baseline

(2015) In Marginal (2015a) Addendum

MARY RIVER MINE SITE

Mine Site (1/3)

- Complete construction of buildings & associated equipment including maintenance shops, site services building, warehouse, waste management buildings, truck & ore haul truck wash facilities & truck weigh scale (2014) (2015) (2015a)
- Complete internal & external fit out (electrical & mechanical) of outstanding buildings (2015)
- Install offices, lunchrooms & washcars including maintenance office/washcar & pit office/washcar (2015)
- Complete installation of the power generating equipment (2015a), power distribution to e-houses & buildings (2015)

Note:

(2014) Captured in Re-baseline

(2015) In Marginal (2015a) Addendum

Mine Site (2/3)

- Install e-house at existing Weatherhaven Camp (2015)
- Construct waste oil & fuel containment berms (2015)
- Construct roads & lay-down pads (2015) (2015a)
- Construct, install & grade waste rock haul road, waste rock pad, drainage ditches, settling pond (2015)
- Extend crusher pad (2015a)
- Construct crusher pad settling pond (2014)
- Finish & improve grade of the airstrip (2014)
- Extend landfill to the approved design area (2015a)
- Landfarm construction (2015)

Note:
(2014) Captured in Re-baseline
(2015) In Marginal (2015a) Addendum

Mine Site (3/3)

- Expand the existing accommodation complex (2015a)
- Install additional sewage treatment plant in parallel with existing (2015a)
- Modifications to existing potable water treatment plant (2015a)
- Pit #1 Development (2015)
- Continued development of QMR2 quarry (2014)
- Develop km 97 borrow sources (2015)

Note:

(2014) Captured in Re-baseline

(2015) In Marginal (2015a) Addendum

PROPOSED ADJUSTMENTS TO BE POSTED

Table A: Baffinland 2015 Marginal Closure Cost - Security Bonding Summary

December 16, 2014

	A	B	C	D	E	F	G	H	I	J	K
	Authorization	Liability	Pre-baseline Est. Liability ($) Does not include ERP	Posted Liability ($)	Difference between Estimated & Posted Pre-baseline ($)	2014 Re-Baseline ($) Does include ERP	Difference ($)	2015 Marginal Estimate ($)	2015 Security Addendum ($)	Total Security Proposed for Mary River Project ($)	Adjustment to be posted for 2015 ($)
					D-C		F-D			F+H+I	J-D
1	Type A 2AM-MRY1325	IOL	39,787,000	39,793,000	6,000	38,886,000	(907,000)	2,236,000	4,248,000	45,370,000	5,577,000
2		Crown	166,000	166,000	-	-	(166,000)	-	-	-	(166,000)
3	**Subtotal Type A**		**39,953,000**	**39,959,000**	**6,000**	**38,886,000**	**(1,073,000)**	**2,236,000**	**4,248,000**	**45,370,000**	**5,411,000**
4	Type B Construction 8BC-MRY1416	IOL	147,000	-	(147,000)	*See note 4 below*	-	-	-	-	-
5		Crown	-	147,000	147,000		-	-	-	-	(147,000)
6	**Subtotal Type B Construction**		**147,000**	**147,000**	**-**		**-**	**-**	**-**	**-**	**(147,000)**
7	Type B Exploration 2BE-MRY1421	IOL	165,000	-	(165,000)	165,000	165,000	-	-	165,000	165,000
8		Crown	1,082,000	1,250,000	168,000	1,082,000	(168,000)	-	-	1,082,000	(168,000)
9	**Subtotal Type B Exploration**		**1,247,000**	**1,250,000**	**3,000**	**1,247,000**	**(3,000)**	**-**	**-**	**1,247,000**	**(3,000)**
10	DFO	IOL	-	-	-	-	-	-	-	-	-
11		Crown	3,566,000	3,566,000	-	3,566,000	-	-	-	3,566,000	-
12	**Subtotal DFO**		**3,566,000**	**3,566,000**	**-**	**3,566,000**	**-**	**-**	**-**	**3,566,000**	**-**
13	AANDC Land Lease 47H/16-1-2	IOL	-	-	-	-	-	-	-	-	-
14		Crown	-	-	-	5,931,000	5,931,000	-	-	5,931,000	5,931,000
15	**Subtotal AANDC Land Lease**		**-**	**-**	**-**	**5,931,000**	**5,931,000**	**-**	**-**	**5,931,000**	**5,931,000**
16	**GRAND TOTAL**		**44,913,000**	**44,922,000**	**9,000**	**49,630,000**	**4,855,000**	**2,236,000**	**4,248,000**	**56,114,000**	**11,192,000**

Notes:

[1] All totals rounded to nearest '000 in CAD

[2] **Column C:** Refers to 2014 Marginal Reclamation and Closure Security Estimate, H349000-1000-07-126-0017, Rev.0

[3] **Column F:** 2014 Re-baseline refers to 2014 Complete Project Financial Security Assessment, H349000-1000-07-126-0018, Rev. 1

[4] Rows 4-6: The reclamation costs associated to the Type 'B' Water Licence 8BC-MRY1416 was captured under 2014 Complete Project Financial Security Assessment. The current sum of $147,000 posted under this licence is proposed to be reallocated under Type 'A' Water licence 2AM-MRY1325 upon amendment (cell K6)

[5] **Rows 10-12:** Held in two (2) Letters of Credit: OSB7060TOR contains $3,003,159 and OSB7061TOR contains $562,500.

[6] **Cell C1:** The amount included in the 2014 Work Plan Marginal Closure Cost Estimate for this figure ($40,231,000) is $444,000 higher because it included $279,000 estimated to be required for ERP at the time and included $165,000 IOL liability from Exploration License (was double counting this, already accounted for under line item C7).

[7] **Cells F3 and F15:** Stated amount of $44,817,000 required to be posted under Type A Water Licence & Type B Construction Licence in 2014 Re-Baseline Report is a sum of $38,886,000 and $5,931,000.

[8] **Cells G1 and G14:** 2014 Re-baseline closure cost liability decreased for QIA by $907,000 and increased for Crown by $5,931,000 based on the 2014 Re-baseline Report

[9] **Cell G2:** 2014 Re-baseline assumed the *entire* Tote Road covered by QIA Tote Road reclamation costs, $166,000 previously attributed to P1 Borrow now captured under QIA based on 2014 Re-Baseline Report

[10] **Cells H1 and I1:** All activities of 2015 Marginal Closure Cost Estimate attributed to IOL.

[11] **Cells K1 and K5:** $147,000 held by the Crown under Type B Construction Licence, Baffinland is of the position this should be held by QIA. This amount is already accounted for in estimated security that should be held by QIA under Commercial Lease pending Type A Amendment (e.g. The estimated $38,886,000)

[12] **Cell K2:** $166,000 needs to be reallocated from Crown if entire Tote Road is under QIA reclamation contract. Already included in the $5,577,000 (Cell K1). Needs to be discussed.

[13] **Cells E4 and E5:** Baffinland is of the position Type B Construction Licence bonding should have been held by QIA, is currently held by Crown.

[14] **Cells E7, E8 and E9:** All of the Liability held under the Type B Exploration Licence is held by the Crown, $165,000 should be held by QIA. Posted amount was rounded up by $3,000.

[15] **Cell E16:** Overbonded by $9,000 in 2014 Work Plan due to $3,000 round up for Type B Exploration Licence and $6,000 extra posted under Type A Licence.

[16] **Cells H16 and I16:** Totals subject to change based on discussion and negotiation during this years ASR process

[17] **Cell K15:** Amount estimated to be posted under the Land Lease, principally for the Ore Dock.

[18] **Cell K16:** Total amount of Security proposed to be posted under the Project for all instruments.

CLARIFICATION REQUESTS

Clarification Requests (1/4)

AANDC

Clarification is requested on how the security estimates are allocated between the Crown and QIA in the site-specific EBS approach. Also, there appears to be discrepancies between BIMC Table 7.1 and 7.2 security estimates.

- **Response**: Allocation between Crown and IOL was based on geographic location for direct costs as is noted in the Estimate Breakdown Structure (EBS). Allocation of indirect costs is a function of the ratio of the *total* direct costs attributed to Crown Land or IOL. Table 7.1 and 7.2 have been corrected.

AANDC

Early Revenue Phase costs should be identified separately, as these reclamation costs remain tied to Water Licence No. 8BC-MRY1421, until the amendments to Water Licence No. 2AM-MRY1325 have been approved by the NWB.

- **Response**: Baffinland and the Qikiqtani Inuit Association (QIA) took the position during the 're-baseline exercise' and 2015 Marginal Financial Security Estimate process that all project components and activities occurring on IOL, including the approved works under the Early Revenue Phase (ERP), should be considered in an holistic approach.

Clarification Requests (2/4)

AANDC

The Proponent needs to confirm that the "2014 re-baseline" security estimate has accounted for the entire development of this infrastructure and that no additional security needs to be identified in the 2015 marginal security estimate.

- **Response**: Baffinland can confirm that the "2014 re-baseline" security estimate has accounted for the entire development of the infrastructure captured.

AANDC

Milne Port shiploaders are not fully accounted for in the EBS approach summary. The 2015 Work Plan references Shiploader 1 and Shiploader 2, only one Shiploader is costed.

- **Response**: Baffinland would like to clarify there is only one (1) shiploader associated with the Mary River Project. References to Shiploader #1 and Shiploader #2 are project vernacular which refers to the two (2) individual towers that comprise the single shiploader.

Clarification Requests (3/4)

AANDC

Borrow Pit P1 is located on Crown land. This should be accounted for in the security allocation to the Crown.

- **Response**: Financial security associated with the Tote Road was assumed to be entirely attributed to IOL though Baffinland does note a small portion occurs on Crown Land, including Borrow Pit P1. It was assumed that the contractor doing the reclamation work would commence reclamation from one end of the road & progress to the other end.

AANDC

The AANDC RECLAIM Model ver 7 components for estimating security are addressed in the EBS approach except the "interim care and maintenance".

- **Response**: Baffinland is of the position at the current stage of site development, legacy liability issues have not yet been demonstrated which require long term care or maintenance (e.g. perpetual treatment) and therefore interim care & maintenance is not currently included.

Clarification Requests (4/4)

AANDC

Clarification is requested on how the security estimates are allocated between the land and water.

- **Response**: All infrastructure and/or facilities designed to contain, withhold, or retain water (including ponds, water treatments plants, piping) were attributed to 'water'-related liability. All other direct costs were then attributed to 'land'-related liability. For indirect costs, post closure monitoring was attributed to 'water'-related liability. All other indirect costs were then attributed to 'land'-related liability.

THANK YOU - QUESTIONS?