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Project No. 1665556-6000

Cody Gagne / Adam Gyorffy, Mine Operations Superintendent  
Baffinland Iron Mines  
2275 Upper Middle Road East, Suite 300  
Oakville, ON, Canada  
L6H 0C3

## **INTERIM WASTE DEPOSITION PLAN – JANUARY 2018 THROUGH FEBRUARY 2018, BAFFINLAND MARY RIVER PROJECT**

Golder Associates Ltd. (Golder) has been retained by Baffinland Iron Mine Corporation (BIM) to conduct a series of work programs designed to assist with management of water and waste rock at (BIM)'s Mary River Project waste rock pile facility. Provided herein is a proposed interim waste deposition plan that will address mine rock deposition during January of 2018 weeks while a more detailed plan can be developed. The plan considers the expected amount of mine rock to be placed, the nature of the materials (potentially acid generating (PAG) vs. non potentially acid generating (Non-PAG)), the available and permitted footprint of existing materials.

### **BACKGROUND AND OBJECTIVES**

Baffinland Iron Mines (BIM) current waste rock deposition plan is contained in Section 3.3 of the LOM Waste Rock Management plan submitted to INAC in 2014. BIM and Golder are currently in the process of updating the 1 – 5 yr. waste rock management plan to make use of current field data and geochemical understanding. The updated 1 to 5 yr. plan is expected to be complete by the end of December 2018.

BIM and Golder are also working on an immediate waste management action plan to be completed by January 31<sup>st</sup>, 2018. The immediate plan will focus on specific actions to be taken in winter 2018 to help freeze the pile in place, limit acid generation, and limit release of acidic water.

From now through to Jan 31<sup>st</sup>, BIM and Golder have developed an interim waste rock deposition plan focused on using available space within the current dump footprint. This memo discusses the interim waste rock deposition plan to be implemented from now until the end of January 31<sup>st</sup>.

### **Waste Rock Dump Tonnages**

The latest six week plan (26<sup>th</sup> Dec to 6<sup>th</sup> Feb) estimates 228kt of Non-PAG waste and 63kt of PAG waste to be mined. The in-pit waste locations are identified in the Figure 1, below. Table 1 indicates the planned waste tonnages and dump capacity over the next 6 weeks. The planned waste dump locations have sufficient capacity for this material during this time period.



**Golder Associates Ltd.**

6925 Century Avenue, Suite #100, Mississauga, Ontario, Canada L5N 7K2  
Tel: +1 (905) 567 4444 Fax: +1 (905) 567 6561 www.golder.com

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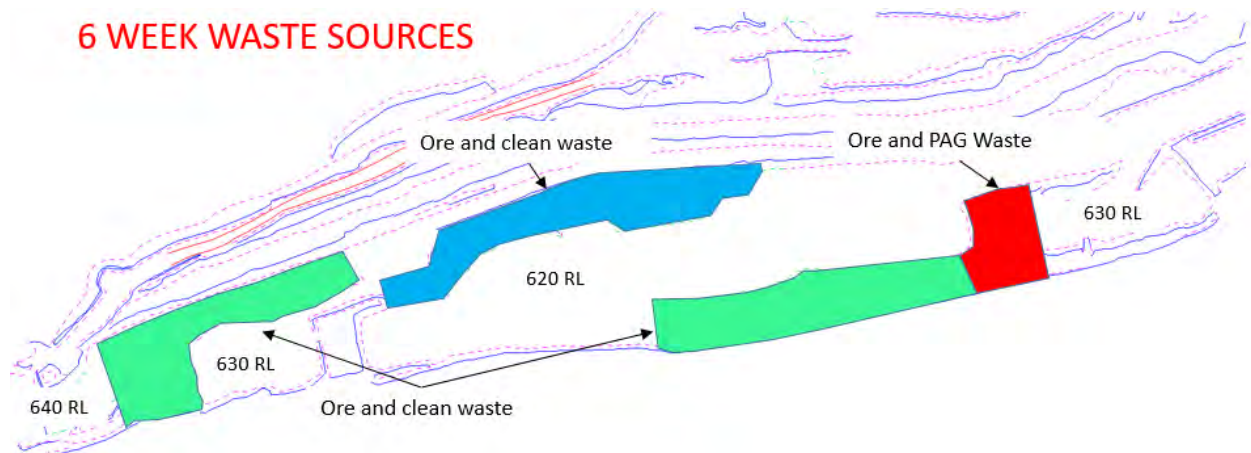


Figure 1: Location of Waste Sources (6 week outlook)

**Table 1: Dump Capacity and Waste Tonnage (6 week outlook)**

	Capacity (kt)	Waste Mined (kt)	Dump Elevation (RL)
PAG	110	63	600
Non-PAG	350	228	598

### Waste Rock Dump Locations and Construction (January 2018)

The interim waste rock plan for January 2018 uses the space available within the current dump footprint as follows:

- **PAG – 3m Lift – East side of dump** – for January 2018 a lift of PAG rock approximately 3 m in thickness will be placed within the current dump extents as identified in Figure 1. The PAG material will be field tipped over a defined, staked area by Cat 777 trucks within the dump. Once this area is dumped out, it will be flattened and levelled off by a Dozer to create a lift of approximately 3 m. The PAG tip area will be surveyed weekly to monitor the amount of material dumped and to confirm lift thickness. There is approximately 110kt of dump capacity in this area.
- **Non-PAG waste – North end of dump** – The interim plan involves dumping Non-PAG waste rock at the north end of the dump. An area extending greater than 50 m laterally outward from the north edge of the PAG rock must consist of non-PAG rock. This outer edge of non-PAG rock will be constructed in winter 2018 (January through April) and will consist of multiple lifts not to exceed 3 m vertically. Similar to the placement of PAG rock, within the outer 50 m, the lifts will be tipped within a defined area then leveled using a dozer. The thin lifts will help encapsulate the PAG rock and will create a barrier to help minimize potential for wind driven currents that may heat the pile and/or enhance oxidization. The Non-PAG tip area will be surveyed weekly to monitor the amount of material tipped and to confirm lift thickness. There is approximately 350kt of overall existing dump capacity in this area .

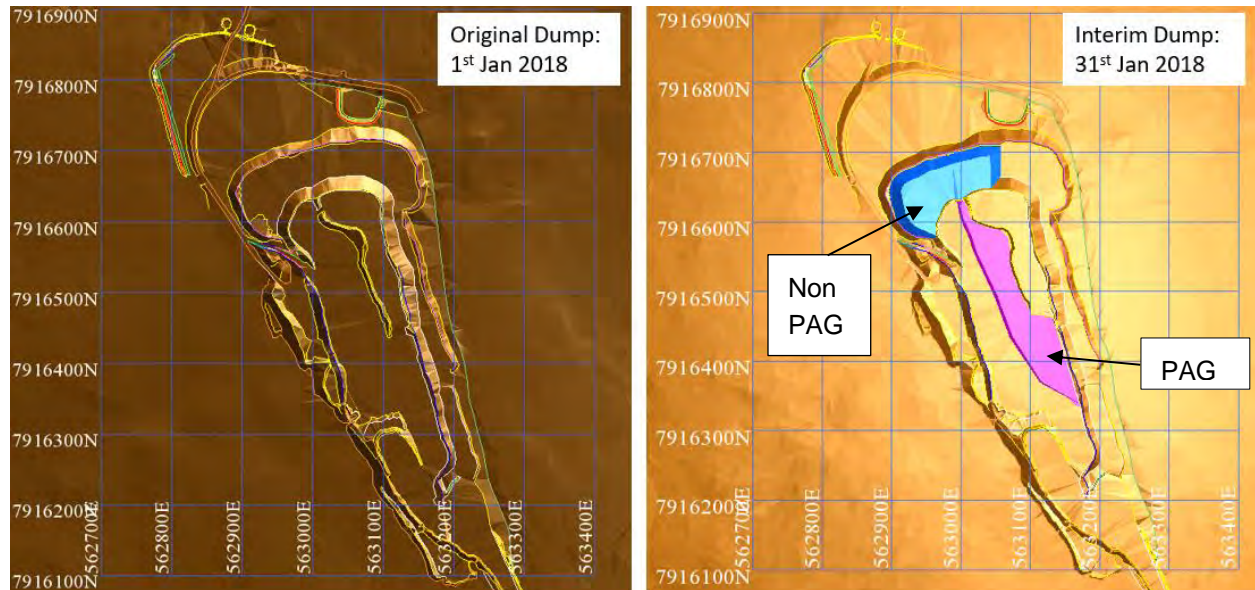


Figure 2a: Waste Rock Plan (January 2018) - Plan View

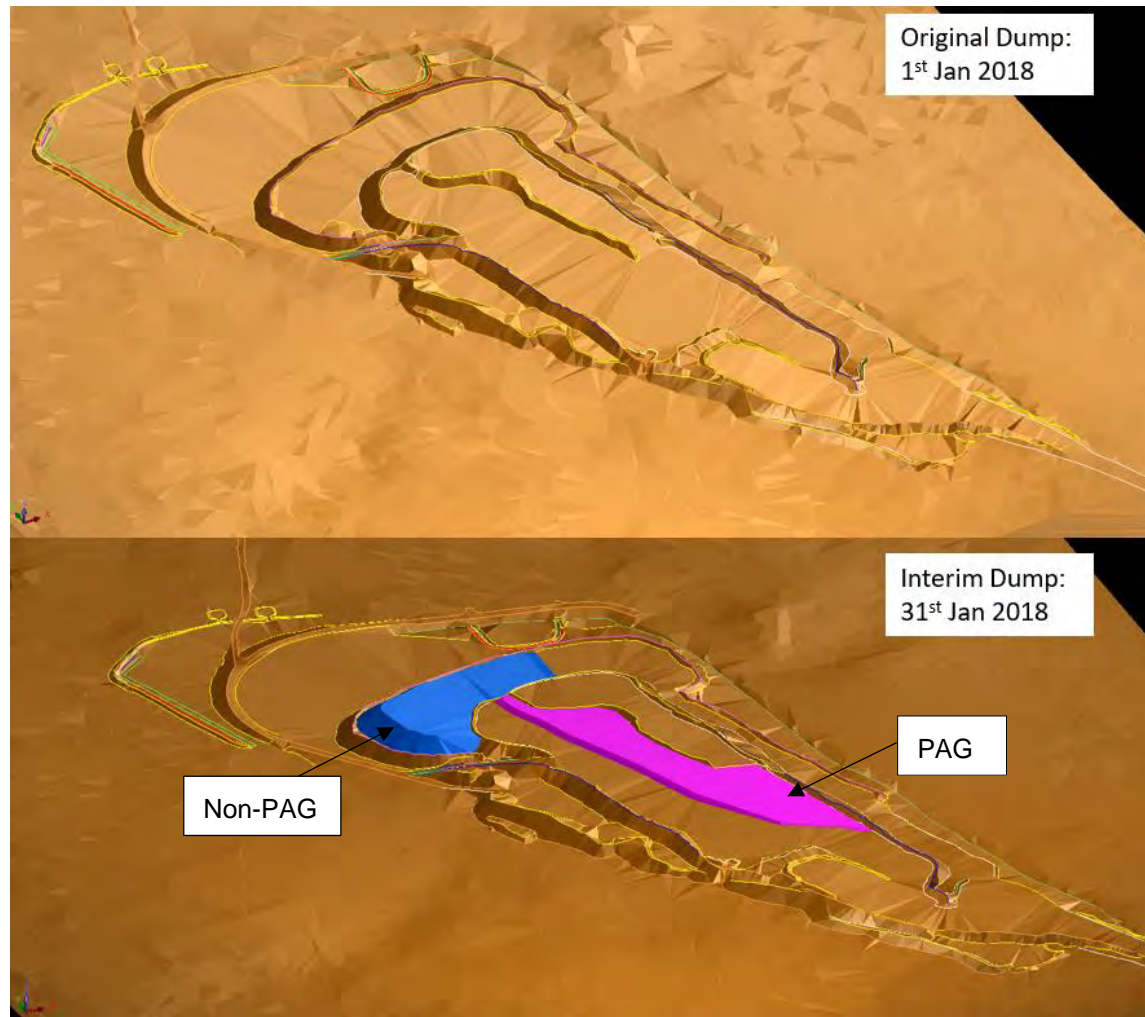


Figure 3b: Waste Rock Plan (January 2018) - Isometric View



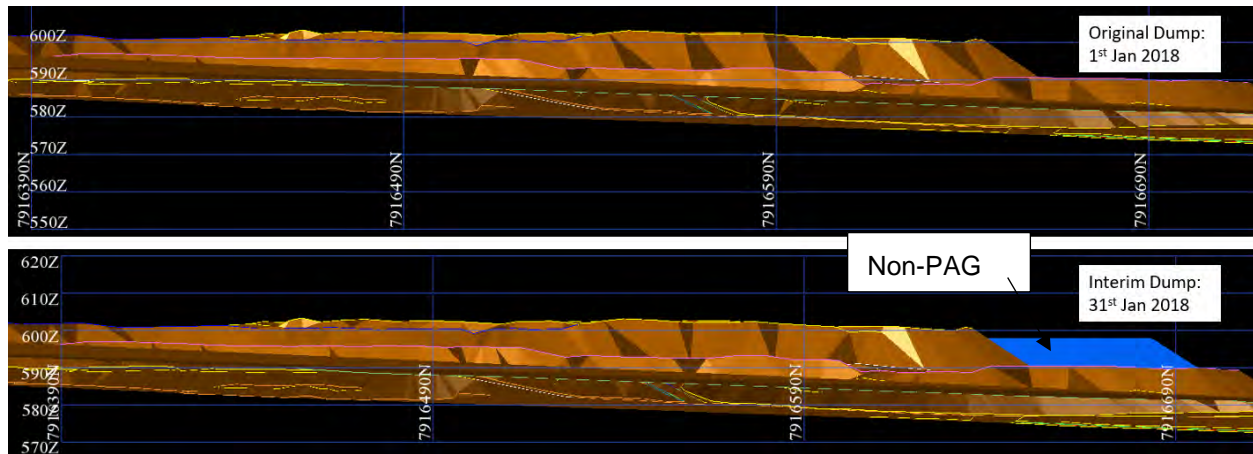


Figure 4c: Waste Rock Plan (January 2018) - Section View

We consider that the January 2018 interim waste rock management plan as proposed herein contains suitable mitigation strategies to be implemented while developing a more comprehensive interim (by January 31, 2018) and final (year 1 through 5) waste rock management plan in the coming months.

## CLOSURE

We look forward to providing further assistance at the BIM Mary River site. If you have any questions or comments concerning the contents of the work plan presented herein, please do not hesitate to contact the undersigned.

Yours very truly,

**GOLDER ASSOCIATES LTD.**

Michelle Tyldesley, P.Eng.  
Geotechnical Engineer

Ken DeVos, M.Sc., P. Geo.  
Geochemist, Principal

WR/MRG/KJD/dh/jl