


**Baffinland Iron Mines Corporation
Mary River Project**

**Construction Summary Report: Mine Site Waste Management
Package**

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HATCH LTD.	
Signature	
Date	6 FEB 15
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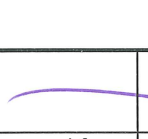
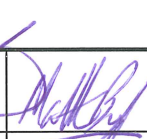
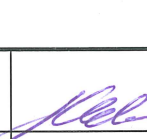
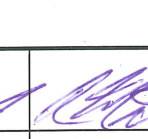

						
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1. Facility Description

1.1 Purpose and Design Basis

The Mine Site 2014 waste management package includes the incinerator and waste management building. The new hazardous waste containment area planned for construction east of the waste management building is scheduled for completion in 2015 and is therefore not included in this report.

The incinerator is used to dispose of the Mine Site facility's waste. The waste management building provides a heated indoor area for waste to be appropriately sorted to meet the incinerator's burning recipe requirements.

The incinerator equipment at Mine Site was moved to its permanent location and re-commissioned in September 2014. It had been temporarily setup to facilitate the required stack emissions testing scheduled for November 2013. The building pad was not constructed in time to facilitate this operational stack emission testing. Once installed, the incinerator equipment was commissioned and operated in the temporary location until it was moved to its permanent location in 2014.

For additional information on the control philosophy and operations of the incinerator equipment, see attachments in Appendix C.

1.2 Location and Base Elevations

The Mine Site incinerator equipment is housed within three sea containers attached to the rear of the waste management building. The waste management building is located between northing N7 914 777 and N7 914 763 and easting E558 419 and E558 441. The building foundation has EL. 175.1m.

The waste management package's permanent location was moved from the design location east of the accommodation facility to its current location west of the batch plant. This move allowed for installation of the new Toromont building on the maintenance pad and avoided the requirement of further permafrost excavation during the 2014 winter season to the east of the accommodation facility. The E-house powering the incinerator equipment moved with the waste management package to its current location west of the batch plant.

1.3 Geometry and Access

The incinerator is located on the north side (rear) of the waste management building. Each of the three sea containers housing the incinerator equipment have access ports that perforate the rear wall of the foldaway building. The waste management building is square in shape with a poured concrete floor and primary truck door access on the south side.

1.4 Earthworks Materials Details

The waste management building pad has been constructed using raised earthworks. The pre-cast concrete block foundation arrangement and poured concrete floor with sumps in

each half of the building serves as effluent containment. The building pad includes insulation to protect the permafrost.

2. Construction Activity Summary

Construction activities on the Mine Site waste management package in the permanent incinerator location started in July 2014. The waste management building handover certificate was completed in November 2014. The balance of the electrical, heating and HVAC fitout for the waste management building has been postponed until 2015.

The following summarizes the construction activities:

- a. Crushed blast rock and fill material was quarried, crushed, screened, and hauled from the Mine Site Quarry (QMR2).

2.1 Waste Management Building with Incinerator

- a. Areas were cleared and graded to prepare the sub-base for the containment area.
- b. Prepared sub base and granular cap.
- c. Placed pre-cast concrete foundation blocks.
- d. Installed pad/ floor insulation and rebar.
- e. Poured concrete slab on grade.
- f. Placed incinerator sea containers (equipment within).
- g. Installed fuel tank and required piping.
- h. Commissioned the incinerator equipment.
- i. Erected fold away building.
- j. Connected electrical power to the building and installed power distribution.

3. Photographic Records



Figure 1: Temporary 2013 Location for the Mine Site Incinerator: Placing equipment



Figure 2: Temporary 2013 Location for the Mine Site Incinerator: Setting up for stack testing



Figure 3: Pre-construction for permanent location of waste management building [west view]



Figure 4: Waste Management Building: Slab on grade installation in progress. Incinerator temporary location north-west of foundation as shown until foundation complete [south view]



Figure 5: Waste Management Building: Laying the insulation and rebar within the boundaries of the pre-cast foundation blocks, ready to pour the concrete slab on grade [north view]



Figure 6: Waste Management Building: Steel trowel finishing the concrete pad in the boundaries of the pre-cast foundation blocks [southwest view]



Figure 7: Completed waste management building from south side [north view]



Figure 8: Completed waste management building and incinerator sea container [west view]

4. As-Built Drawings

The as-built drawings incorporate contractor red line markups, field instructions, requests for information, field sketches, and all other inputs provided by the field engineering team. The as-built drawings are attached in Appendix A.