APPENDIX G.8.2

Waste Management Plan

Baffinland Iron Mines Corporation

BIM-5200-PLA-0013 WASTE MANAGEMENT PLAN

DOCUMENT REVISION RECORD

Issue Date MM/DD/YY	Rev #	Prepared By	Reviewed By	Approved By	Description of change and purpose of issue
04/13	0	A.G	A.G	S.P	Approved for Use
09/13	1	C.G	C.G	S.P	Approved for Use
03/25/14	2	NK	NK	JM	Issued for Use
03/20/15	3	NK	NK	JM	Issued for Use
03/07/16	4	LW	LW	JM	Issued for Use
03/29/17	5	AV	AV	WM	Issued for Use
03/29/18	6	CD	CD	GR	Issued for Use
09/25/18	7	AV	AV	FG	Issued for Use
03/31/20	8	CD	CD	BM	Issued for Use
03/31/23	9	AP	CD	FG	Issued for Use
04/30/24	10	GN	KB	FG	Issued for Use

TRACK CHANGES TABLE

Index of Major Changes/Modifications in Revision 10

Item No.	Description of Change	Relevant Section
1	Updated format and document numbers to reflect new document management system (CDMS) template and formatting	Entire Document
2	Added reference to CDMS and other relevant documents	2.2
3	Added abbreviations and definitions tables	3.1 and 3.2
4	Added list of waste management infrastructure constructed at the Project	4.0
5	Added Milne 380 Camp incinerator to Table 6	4.5
6	Expanded on data management workflow	5.3
7	Added roles and responsibilities table	7.0
8	Removed site policies from Appendix A	Appendices

TABLE OF CONTENTS

TABLE OF TABLES

TABLE OF APPENDICES

1. PURPOSE

As required by the Type 'A' Water Licence No. 2AM-MRY1325 Amendment No. 1 (Type 'A' Water Licence) and Type 'B' Water Licence No. 2BE-MRY1421 (Type 'B' Water Licence) that have been issued to Baffinland Iron Mines Corporation's (Baffinland) for the Mary River Project (Project), Baffinland has developed this Waste Management Plan (WMP; the Plan) to meet the conditions set out in the Type 'A' and 'B' water licences.

The purpose of this Plan is to identify Baffinland's framework for effective waste management by providing instruction and guidance in the development of processes and procedures for the management of wastes generated at Project sites. The Plan shall be assessed regularly and reviside based on changes to Project infrastructure, and waste management procedures and protocols. Updates and revision to this Plan shall be completed in accordance with the terms and conditions of Baffinland's Type 'A' Water Licence, Type 'B' Water Licence, the Commercial Lease – Q13C301 (Commercial Lease), Project Certificate No. 005 – Amendment No. 1 (Project Certificate), and any subsequent requirements which may be issued. Tables of concordance with the applicable regulatory approvals are provided in Appendix A.

2. APPLICATION

The Plan applies to all departments and to all Baffinland employees, contractors and visitors as generators of waste, and to all Baffinland employees and contractors involved in waste management activities.

The Plan identifies typical wastes types (i.e. Liquid, Solid, Organic – Petrusible, Recyclable, Hazardous (Liquid and Solid) , Industrial) that are expected to be generated at Project sites including solid inert and non-hazardous industrial wastes, construction and demolition wastes,includingdomestic wastes and outlines the roles and responsibilities of Baffinland employees and contractors. The Plan also includes procedures for handling, storing and disposing of solid wastes generated at Project sites to ensure waste management is conducted in a safe, efficient and environmentally compliant manner that minimizes the potential for adverse impacts to the environment. The Plan also identifies the various disposal methods or available options prescribed to waste types generated at the Project and includes the various monitoring control requirements and strategies for adaptive management and continuous improvement.

The management of hazardous wastes (e.g. used oils, contaminated fuel, used chemical products, biomedical waste, spill clean-up materials or explosives) is provided in Baffinland's Hazardous Materials and Hazardous Waste Management Plan (BIM-5200-PLA-0007). The management of liquid wastes including waste water treatment and sewage effluent and sludge as well as other effluents generated by the Project is provided in Baffinland's Fresh Water Supply, Sewage and Wastewater Management Plan (BIM-5200-PLA-0022).

2.1 REGULATORY REQUIREMENTS

The following Acts and Regulations provide specific requirements for the management of non-hazardous solid waste generated at the Project:

- Territorial Lands Act 1985;
- Territorial Land Use Regulations;
- Nunavut Waters and Nunavut Surface Rights Tribunal Act 2002;
- Canadian Environmental Protection Act;
- Safety Act, Occupational Health and Safety Regulations;
- National Fire Code;
- Public Health Act; and
- Fisheries Act.

Due to the complexities and the number of acts and regulations involved, the Government of Nunavut (GN) has published several guidelines to assist waste generators in effectively developing waste management plans for activities completed at Project sites. These guidelines, outlined in Section 9 (Related Documents), were used for the development of this Plan.

2.2 RELATIONSHIPS TO OTHER MANAGEMENT PLANS & POLICIES

The WMP is intended for use in conjunction with the following plans and policies:

- Air Quality and Noise Abatement Management Plan (BIM-520-PLA-0005)
- Diesel E2 Plan - Milne Port (BIM-5200-PLA-0017)
- Diesel E2 Plan - Mary River (BIM-5200-PLA-0019)
- Emergency Response Plan (BIM-5000-PLA-0005)
- Environmental Protection Plan (BIM-5200-PLA-0003)
- Explosives Management Plan (BAF-PH1-830-P16-0009)
- Fresh Water Supply, Sewage and Wastewater Management Plan (BIM-5200-PLA-0022)
- Hazardous Materials and Hazardous Waste Management Plan (BIM-5200-PLA-0007)
- Health, Safety and Environment Policy (BIM-5000-POL-0001)
- Interim Mine Closure and Reclamation Plan (BIM-5200-PLA-0026)
- Terrestrial Environmental Management and Monitoring Plan (BIM-5200-PLA-0010)
- Spill Contingency Plan (BIM-5200-PLA-0012)
- Surface Water and Aquatic Ecosystems Management Plan (BIM-5200-PLA-0009)
- Sustainable Development Policy
- Waste Sorting Guidelines (BIM-5200-GUI-0002)

Environmental Protection Plan (EPP) Operational Environmental Standards (OESs) that are relevant to this WMP are identified in Table 1. As required, where there is a modification to a relevant OES, this WMP will be revised to reflect that change.

TABLE 1 RELEVANT OPERATIONAL ENVIRONMENTAL STANDARDS

Section	Title/ Description
4.5	Geotechnical Drilling Operations
4.6	Equipment Operation and Mobilization
4.7	Fuel Storage and Handling
4.14	Solid Waste Management
4.15	Wastewater Treatment
4.16	Hazardous Materials and Waste Management
4.17	Road Construction and Borrow Development
4.19	Road Traffic Management
4.21	Exploration Drilling Operations
4.26	Concrete Production
Appendix N	Off-Site Waste Disposal Log

Baffinland's Sustainable Development Policy (BAF-PH1-800-POL-0002) identifies Baffinland's commitment internally and to the public to operate in a manner that is environmentally responsible, safe, fiscally responsible and respectful of the cultural values and legal rights of Inuit. Baffinland's Health, Safety and Environment Policy (BIM-5000-POL-0001) is the company's commitment to achieve a safe, healthy and environmentally responsible workplace. All employees and contractors are expected to comply with the contents of both above-mentioned policies. Plans and policies referenced in this Plan are available on Baffinland's Controlled Document Management System (CDMS) website portal (http://intranet.baffinland.com/sites/cdms/Pages/Home.aspx).

3. DEFINITIONS AND ABBREVIATIONS

3.1 ABBREVIATIONS

Statement	Definition
CCME	Canadian Council of Ministers of the Environment
CIRNAC	Crown-Indigenous Relations and Northern Affairs Canada
CWS	Canada Wide Standards
EPP	Environmental Protection Plan
FWSSWMP	Fresh Water Supply, Sewage and Wastewater Management Plan
GEVP	Group Executive Vice President
GN	Government of Nunavut
NWB	Nunavut Water Board

OES	Operational Environmental Standards
PPE	Personal Protective Equipment
QIA	Qikiqtani Inuit Association
SWAEMP	Surface Water and Aquatic Ecosystems Management Plan
TCLP	Toxicity Characteristic Leaching Procedure
WMP	Waste Management Plan

3.2 DEFINITIONS

Statement	Definition
Clean Wood Products	Clean untreated wood waste including wood or timber, not suitable for recycling or reuse, which is substantially free of glue, petroleum based materials, other chemicals or non-wood chemical products.
Hazardous Waste	Wastes generated that present a threat to the human health or the environment because they exhibit one or more of the following characteristics: corrosive, reactive, explosive, toxic, inflammable, or biologically infectious.
Incinerator Waste	Waste identified as suitable for incineration based on incineration technology used on-site, applicable regulations and project approvals. Includes: food waste, domestic waste, packaging waste, and wood waste.
Non-Hazardous Waste	Wastes generated that do not present a threat to human health or the environment.
Putrescible Waste (Domestic Waste)	Wastes that degrade very rapidly, i.e., plants, food scraps or animal remains. Household waste subject to rapid degradation or rapid biological breakdown. May contain food wastes.
Waste	Residual waste material (hazardous, non-hazardous or putrescible).

4. PROJECT WASTE MANAGEMENT

The following infrastructure has been constructed at Project sites to handle, store, transport and dispose of Project waste:

- Waste management facilities at the Mine Site and Milne Port to facilitate incineration, waste sorting and storage;
- Open burning facilities at the Mine Site and Milne Port;
- Landfill facility at the Mine Site;
- Landfarm facilities for the treatment of petroleum hydrocarbon contaminated soils at the Mine Site and Milne Port; and
- Polishing Waste Stabilizing Ponds (PWSPs) at the Mine Site and Milne Port.
- Hazardous waste containment berms at the Mine Site and Milne Port.

Baffinland has implemented, and continues to improve upon, a waste minimization program that focuses on the principles outlined in EHS Management System Framework Standard (BAF-PH1-830-STD-0001). The onsite source separation program is a component of Baffinland's waste minimization program whereby reusable and recyclable waste materials are

separated from other wastes to maximize waste diversion from landfill facilities. This is achieved through primary segregation at the point of origin and subsequent secondary separation activities at onsite waste management facilities. Remaining waste is disposed of in non-hazardous landfill facilities, incinerated, or shipped offsite to licenced waste disposal facilities.

Records of all backhauled wastes from Project sites are maintained onsite and confirmation of proper disposal through the use of waste manifest tracking systems is obtained from licenced waste disposal facilities. These records are provided in the Type 'A' Annual Report and made available upon request to CIRNAC or the NWB.

4.1 WASTE IDENTIFICATION

A summary of the types of wastes expected to be generated by the Project, and their respective disposal methods, is provided below. Table 2 and Table 3 summarize the waste types generated at the Project and the prescribed disposal method(s) by general location and waste type, respectively. Table 4 summarizes the Project's current waste management facilities.

4.2 WASTE MANAGEMENT METHODS

Waste remaining after application of waste minimization strategies is managed in a practical and environmentally responsible manner utilizing the following methods:

- Waste sorting at all waste generation points (Waste Sorting Guidelines; BIM-5200-GUI-0002);
- Incineration of non-hazardous combustible wastes (Incinerator Operation Procedure; BAF-PH1-320-PRO-0002);
- Authorized open burning of untreated wood, cardboard and paper products (Open Burning of Untreated Wood, Cardboard and Paper Products Procedure; BIM-5200-SOP-0020);
- Landfilling of inert non-combustible wastes at Project landfill facilities (Landfill Maintenance and Operation Manual, BIM-5200-MAN-0002);
- Temporary storage and off-site shipping of hazardous and recyclable waste materials (Hazardous Materials and Hazardous Waste Management Plan; BIM-5200-PLA-0007);
- Temporary storage and offsite shipping of used tires (On Site Tire Disposal Procedure; BAF-PH1-300-PRO-0020);
- On-site treatment of contaminated soil from hydrocarbon spills at Project landfarm facilities (Landfarm Operation Maintenance and Monitoring Manual; BIM-5200-MAN-0001); and
- On-site treatment of contaminated water and snow generated from hydrocarbon spills using a contaminated snow containment berm and oily water separator (FWSSWMP; BIM-5200-PLA-0022).

TABLE 2 WASTE DISPOSAL BY GENERATION LOCATION

Source	Waste Description	Waste Type	General Disposal Method
Offices	Electronic Wastes, printer ink/toner	Recycle	Off-site recycling or disposal
Offices	Waste paper, cardboard, domestic waste including food waste	Combustible/ non-hazardous	Incineration, open burning
Wastewater treatment facilities	Biological sludge (dried solids)	Combustible/ non-hazardous	Incineration or off-site disposal, possible landfarm application
Maintenance complexes	Used batteries, waste hydrocarbon products, , oil filters, glycols, aerosol cans, refrigerants, solvents, etc.	Hazardous	Off-site recycling or disposal, possible reuse of fuel and oil for heating and other uses
Maintenance complexes	Scrap metal, rubber, plastic	Inert	Onsite landfilling (small scrap metal) or off-site disposal
Laboratories	Chemical laboratory wastes, toxic substances	Hazardous	Off-site recycling or disposal
Domestic waste from accommodation facilities and kitchens/cafeterias	Accommodation facility garbage, food wastes	Combustible/ non-hazardous	Incineration
Inert waste from construction sites and materials from operations	Treated wood, plastics, cement, used inert construction materials, metal, pipes, glass, insulation, etc.	Inert	Onsite landfilling
Inert waste from construction sites and materials from operations	Untreated wood/cardboard	Combustible/ non-hazardous	Incineration/open burning
Medical facilities	Biomedical wastes	Hazardous	Biomedical off-site disposal or incineration
Incinerators	Ash	Inert	Onsite landfilling if non-hazardous, offsite disposal if hazardous
Fuel spills	Hydrocarbon-contaminated soil	-	On-site treatment using landfarm facilities/Offsite disposal if necessary
Fuel spills	Hydrocarbon-contaminated snow/water/ice	-	On-site treatment and reuse of product if practical

TABLE 3 WASTE HANDLING AND DISPOSAL BY WASTE TYPE

Waste Material	Waste Type	Classification	General Management Method	Final Disposal
Absorbents – and other similar spill response material	Petroleum	Hazardous if used for a spill clean-up. Not TDG regulated.	Collect in UN grade packaging. Store in the hazardous waste storage areas until final disposal.	Offsite disposal
Activated Carbon	Petroleum	Hazardous. Not TDG regulated.	Collect in white Quatrex bags. Store in the hazardous waste storage areas until final disposal.	Offsite disposal
Aerosol Cans	Hazardous Waste	Hazardous. TDG regulated as "Aerosol, Flammable, Class 2.1, UN 1950".	Disposal bins located at various locations inside the main facilities, and at the waste management building. Store in vented UN grade packaging in the hazardous waste storage areas.	Offsite disposal
Appliances	Inert/ Chemical	May be hazardous.	Appliances may contain ozone depleting substances (refrigerator) or electronic boards. May require removal of hazardous components before final disposal in the landfill. Manage accordingly. Store in contained location until approval is received by the Environment Department to dispose in landfill.	Onsite landfilling
Batteries, wet (lead - acid)	Chemical	Hazardous. TDG regulated as "Batteries, wet, filled with acid, Class 8, UN 2794"	Collect in wood crates with dunnage (i.e. loose wood or similar material) between the layers in workplace sorting areas. Vehicle batteries should be drained of power and terminals should be covered with electrical tape. Store full wood crates in the hazardous waste storage areas until final disposal.	Offsite disposal
Batteries, Lithium ion.	Hazardous Waste	Hazardous. TDG regulated as "Lithium Batteries, Class 9, UN 3090" and "Lithium Batteries Contained In Equipment; or Lithium Batteries Packed With Equipment, Class 9, UN 3091"	Collect and store batteries separately in water-tight containers with chalk (CaCO3), lime powder (CaO) or Vermiculite. Store in a sea container with proper identification away from other flammable and combustible materials. Batteries should be drained of power and terminals should be covered with electrical tape. Care must be taken to ensure that the batteries are not damaged while awaiting disposal.	Offsite disposal

Waste Material	Waste Type	Classification	General Management Method	Final Disposal
Batteries, rechargeable (NiCad, Mercury, Lithium, Silver-Oxide)	Hazardous Waste	Hazardous. Small household-type batteries are generally not TDG regulated.	Disposal bins (same as for alkaline batteries) are located at various locations inside the main accommodation facilities. Segregate per type and transfer to different 20L pails, then in open top drums. Store in the hazardous waste berm until final disposal. Computer batteries should be brought to the IT Department.	Offsite disposal
Batteries, dry (alkaline)	Hazardous Waste	Hazardous. Not TDG regulated.	Disposal bins (same as for rechargeable batteries) are located at various locations inside the main accommodation facilities. Segregate and transfer to different 20L pails, then in open top drums. Store in the hazardous waste storage areas until final disposal.	Offsite disposal
Biomedical Waste – sharps, human anatomical, blood, and body fluids	Biomedical	Biomedical hazard.	Contain and store in suitable biohazard containers at the medical office until disposal.	Offsite disposal
Calcium Chloride	Chemical	Hazardous. Not TDG regulated.	Collect and store in white Quatrex bags.	Offsite disposal or use as dust suppressant on roads (as authorized)
Cardboard	Inert	Non-hazardous.	Suitable for open burning, or incineration. Store accordingly in adequate container before final disposal. Incinerate if cardboard has come in contact with food.	Open burning/Incineration
Cement	Inert	Non-hazardous, inert waste.	May be used as a landfill cover if crushed.	Onsite landfilling
Chemicals – spent lab reagents	Chemical	Hazardous. Shipping TDG instructions should follow SDS recommendations.	Management method should follow SDS recommendations.	Offsite disposal

Waste Material	Waste Type	Classification	General Management Method	Final Disposal
Cigarette butts	Chemical	Hazardous. Not TDG regulated.	Collect in cigarette butts receptacles outside each main entrance.	Incineration
Compressed gas cylinders	Chemical	Hazardous. TDG regulation varies depending on gas.	Safely empty cylinders of all gases. Store away from sources of heat and ignition. Return containers to manufacturer for reuse following TDG procedures. When not shipped offsite, remove valves and purge cylinder with compressed air or inert gas. Dispose of as metal.	Offsite reuse/lLandfilling
Contaminated Soils	Petroleum	Hazardous. TDG regulated if contaminated with diesel (classified as flammable solid).	Store and remediate on site in landfarm facilities.	Onsite treatment/Offsite disposal if necessary
Contaminated snow, ice	Petroleum	Hazardous. Not TDG regulated.	Store at landfarm facilities (contaminated snow dump) and treat using onsite oil/water separator.	Onsite treatment
Contaminated water	Petroleum	Hazardous. Not TDG regulated.	Collected in trays, drums, or pumped via pipeline. Store in closed top drums or bladders in hazardous waste storage areas until treatment in oil/water separator or store at landfarm facilities (contaminated snow dump) and treat using onsite oil/water separator.	Onsite treatment/Offsite disposal if necessary
Diesel fuel	Petroleum	Hazardous. TDG regulated as “Diesel, Class 3, UN 1202, FP 39°C”	Collected in trays, drums, or pumped via pipeline. Store in closed top drums in hazardous waste storage areas until final disposal. Not a waste unless contaminated by a substance that makes it unusable as a fuel. Diesel not suitable as mobile fuel can be used for heating purposes.	Onsite recovery/ Offsite disposal
Drums – empty	Petroleum	Hazardous. Not TDG regulated.	Empty drums frequently contain residuals. Drain content of drum in adequate container. Crush and package drums on pallets.	Offsite disposal
Drums – residuals	Petroleum	Hazardous. Considered the same hazard as original product.	Drum residuals are to be collected in different containers for reuse (diesel, Jet A, oil) or disposal (antifreeze or other product). Reuse diesel and oil for heating and other uses.	Onsite recovery/ Offsite disposal

Waste Material	Waste Type	Classification	General Management Method	Final Disposal
Electronic Equipment	Hazardous Waste	Hazardous. Not TDG regulated. May contain heavy metals.	Typical electronic wastes consist of used computers, cell phones, cameras, TVs and monitor screens, media players, switches, and testing equipment. Electronic wastes shall be placed in E-waste bins located at the accommodations facilities or brought to the IT Department, or placed in a Quatrex bag in a contained storage facility until offsite shipment for recycling or final disposal. Batteries shall be removed from equipment and managed accordingly.	Offsite recycling or disposal
Fluorescent Lamps – bulbs and tubes	Hazardous Waste	Hazardous in large quantities (trace amount of mercury). Not TDG regulated.	Bulbs disposal bins are located at various locations inside the main accommodations facilities. Repack in original or reused boxes. Store tubes in recycling container. Store in designated location until offsite shipment for recycling.	Onsite processing/Off site disposal
Filters – Lube oil	Petroleum	Hazardous. Not TDG regulated.	Drain and crush filters. Collect in open top drums and store in the hazardous waste storage areas until final disposal offsite.	Offsite disposal
Food Waste /Putrescible	Domestic	Non-hazardous	Collect in plastic bags. Store in animal proof steel bins outside kitchens. Incinerate on a regular basis.	Incineration
Gasoline	Petroleum	Hazardous. TDG regulated as “Gasoline, Class 3, UN 1203, FP -39°C”	Collected in trays, drums, or pumped via pipeline. Store in closed top drums in the hazardous waste storage areas until final disposal. Not considered a waste unless contaminated by a substance that makes it unusable as a fuel.	Offsite disposal
Clean Glass	Inert	Non-hazardous, inert waste	Collect and store in landfill bins.	Onsite landfilling
Glycol	Chemical	Hazardous. Not TDG regulated.	Collected in trays, drums, or pumped via pipeline. Store in closed top drums or totes in the hazardous waste storage areas until final disposal.	Offsite disposal

Waste Material	Waste Type	Classification	General Management Method	Final Disposal
Grease	Petroleum	Non-hazardous	Store in resealable drums in the hazardous waste storage areas until final disposal.	Offsite disposal
Human Waste	Domestic	Hazardous. Not TDG regulated	Human waste that cannot be treated by onsite WWTPs (i.e. deposited in barrels at satellite camps – Bruce Head) will be stored in closed drums in the hazardous waste storage areas until final disposal.	Offsite disposal
Hydraulic fluid	Petroleum	Hazardous. Not TDG regulated.	Collected in trays, drums, or pumped via pipeline. Store in closed top drums in the hazardous waste storage areas until final disposal.	Offsite disposal
Incinerator Ash	Inert/ Chemical	Usually inert, if non-hazardous.	Composition of incinerator ash will depend on the wastes that were incinerated. Site Services Operators to place incinerator ash in designated metal bins for temporary storage until ash is characterized. Non-hazardous ash will be landfilled. Hazardous ash will be placed in Quatrax bags and shipped offsite for final disposal. Routine ash sampling and testing will be conducted to classify incinerator ash generated by the Project.	Onsite landfilling/ Offsite disposal (if hazardous)
Jet A Fuel	Petroleum	Hazardous. TDG regulated as “Aviation gas, UN 1863, FP 39°C”.	Collected in trays, drums, or pumped via pipeline. Store in closed top drums in the hazardous waste storage areas until final disposal. Not considered a waste unless contaminated by a substance that makes it unusable as a fuel. Jet A not suitable as aviation fuel can be used for heating purposes.	Onsite recovery/ Offsite disposal
Kitchen Grease/Oil	Domestic	Non-hazardous.	Collect in closed-top drums or 20L pails in a sea container outside the kitchen. Suitable for incineration or stored in sea cans until offsite disposal.	Incineration/Offsite disposal
Lube Oil	Petroleum	Hazardous. May be TDG regulated depending on composition.	Collected in trays, drums, or pumped via pipeline. Store in totes in the hazardous waste storage areas until final disposal.	Onsite reuse/ Offsite disposal

Waste Material	Waste Type	Classification	General Management Method	Final Disposal
			Possible reuse as heating oil or other uses in approved furnaces.	
Metal	Inert	Non-hazardous, inert waste	Collect and store in landfill bins.	Onsite landfilling
Methanol	Chemical	Hazardous. TDG regulated as "Methanol, Class 3, UN 1230, P.G. II"	Collect in UN certified container. Store in the hazardous waste storage areas until final disposal.	Offsite disposal
Oily rags and similar debris	Petroleum	Not hazardous if used for cleaning. Classified as absorbent if used to clean-up spills.	Suitable for incineration. Collect in drums at workplace sorting areas. Bring to incinerator and disperse between waste loads.	Incineration/ Offsite disposal if classified as absorbent
Ozone Depleting Substances (ODS, i.e. air conditioning and refrigerant gases)	Chemical	Hazardous.	ODS must be removed by certified technician before disposal of unit. ODS must be stored as per instructions from certified technician.	Offsite disposal
Paint	Petroleum	May be hazardous if oil based.	Collect in white Quatrex bags, or UN grade packaging if oil based. Store in the hazardous waste storage areas until final disposal.	Offsite disposal
Paper Products	Domestic	Non-hazardous	Collect in incinerator waste bins. If product is cardboard, manage accordingly.	Incineration
Plastics – food packaging, bags, etc.	Domestic	Non-hazardous	Collect in garbage bags.	Incineration
Plastics – oil/ hydrocarbon containers, contaminated berm liner	Petroleum	Hazardous. Not TDG regulated.	Drain fluid into appropriate tote or drum. Collect in white Quatrex bags. Store in the hazardous waste storage areas until final disposal.	Offsite disposal
Plastics – bulky	Inert	Non-hazardous	Collect and store clean containers or other clean component in landfill bins.	Onsite landfilling
Plastics – PVC	Inert	Non-hazardous	Collect and store in landfill bins.	Onsite landfilling
Plastics – Styrofoam	Inert	Non-hazardous	Collect and store in landfill bins.	Onsite landfilling

Waste Material	Waste Type	Classification	General Management Method	Final Disposal
Textiles	Inert	Non-hazardous	Collect and store in landfill bins. Incinerate if textiles came in contact with food.	Onsite landfilling/ Incineration
Tires	Inert	Non-hazardous	Collect and store in laydown until final disposal.	Offsite disposal
Unusual waste	To be determined	To be determined	Contact the Environment Department. Proper management and disposal will be determined on a case-by-case basis.	To be determined
Vehicles	Inert/ Petroleum/ Chemical	Non-hazardous if drained of all fluids.	Drain all fluids and dispose appropriately. Store in laydown area until approval is given by the Environment Department to landfill the vehicle.	Onsite landfilling
Wildlife Mortalities	-	-	Following confirmation from the Environment Department that the carcass can be disposed of.	Incineration
Wood - scraps	Inert	Non-hazardous, inert waste	Collect and store in landfill bins. Suitable for incineration if in small amount.	Onsite landfilling/ Incineration
Wood - treated	Inert	Non-hazardous, inert waste	Collect and store in landfill bins.	Onsite landfilling
Wood - untreated	Inert	Non-hazardous, inert waste	Collect and store in untreated wood bin.	Open burning

4.3 PROJECT WASTE FLOW

Waste flow block diagrams for Mine Site and Milne Port waste streams are provided in Appendix B. Project waste streams are illustrated by their storage and treatment paths.

4.3.1 Generation Points

Waste generated at Project sites is sorted at the point or origin and then collected for secondary separation activities at onsite waste management facilities. To facilitate efficient and effective waste management, waste is required to be disposed of in labelled receptacles based on the waste type, and disposal methods outlined in tables 2 and 3 above, and in Baffinland's Waste Sorting Guidelines (BIM-5200-GUI-0002).

Project waste is to be managed to ensure that it is prevented from entering nearby water bodies. Areas designated as waste disposal or storage locations are to be located at a

minimum distance of thirty-one (31) metres from the ordinary High Water Mark of nearby water bodies.

4.3.2 Waste Collection

Collection of wastes at Project sites, including permanent shelters along the Tote Road, is completed by trained personnel from the Site Services Department and transported to the appropriate waste management facility where it is sorted (via visual inspection) upon arrival to ensure proper segregation.

4.3.3 Waste Management Facilities

Waste management buildings at the Project are located at both the Mine Site and Milne Port. Each building is comprised of a heated all-season building and adjacent laydown areas that provide the following ancillary functions:

- A central depot where waste is managed, properly processed, packaged, labelled, inventoried, secured (e.g., on pallets) and stored for reuse onsite or shipment offsite;
- Incinerators (refer to Section 4.5);
- Concrete floors for containment;
- Large bay doors for transferring waste and equipment; and
- Drum crushing machine (at the Mine Site).

Waste oil storage tanks and oil filter draining and crushing equipment are located at Project Mobile Maintenance facilities.

In addition, a non-hazardous waste landfill is located at the Mine Site, and landfarm facilities are located at both the Mine Site and Milne Port. The Milne Port Landfarm Facility is equipped with a lined area for hydrocarbon contaminated snow and the Mine Site Landfarm Facility includes a fourth (lined) cell designated for storage and treatment of hydrocarbon contaminated snow. A summary of the waste management facilities at the Project is summarized in Table 4 below.

TABLE 4 MARY RIVER PROJECT WASTE MANAGEMENT FACILITIES SUMMARY

Location	Facility Type	Components	Function
Mine Site Milne Port	Waste Management Buildings	• Heated waste management building • Incinerator	Central depots where hazardous waste and waste suitable for incineration is managed, properly processed, packaged, labeled, inventoried, and treated prior to storage.
Mine Site Milne Port	Waste Storage Areas	• Secure lined and bermed secondary containment • Used tire storage area (seacans)	Central depots where hazardous waste, ash, and used tires are stored prior to final disposal.
Mine Site Milne Port	Landfarm Facilities/ Contaminated Snow Containment Ponds	• Engineered geomembrane lined containment cells	Engineered landfarm facilities for bio-treatment of contaminated soil. At Milne Port, the smaller east cell is used for the containment of hydrocarbon contaminated snow collected during winter operations. At the Mine Site, a fourth cell at the Landfarm Facility is designated for storage and treatment of hydrocarbon contaminated snow.
Mine Site	Landfill	• Non-hazardous waste landfill facility • Gated and locked area	Disposal of inert, non-combustible and non-hazardous wastes.
Mine Site Milne Port	Open Burn Areas	• Gated and locked area • Burn box (modified sea-can)	Disposal method for untreated wood, cardboard, and paper products generated onsite.

4.4 WASTE HANDLING AND MINIMIZATION BY CATEGORY

This Plan has been developed to ensure that Baffinland's waste management strategies focus on implementing the principles of reduction, recovery, reuse and recycling throughout the life of the Project. Current or planned initiatives to reduce, recover, and reuse waste materials include initiatives for the following materials:

- Grubbed organic soil material;
- Used oil;
- Non-hazardous waste – construction materials;
- Domestic waste from accommodations complexes;

- Sewage;
- Hazardous waste;
- Miscellaneous refuse; and
- Office paper.

4.4.1 Grubbed Organic Soil Material

During land disturbances required for Project operations, grubbed organic soil material is collected and stockpiled for future reclamation efforts following the decommissioning of facilities or closure of operations.

4.4.2 Used Oil Reuse

Used oil generated from mechanical equipment use and maintenance activities is collected and transported to secondary containment where it is stored in 1 m^3 totes. There is potential for use of used oil in waste oil burners. Oil that cannot be reused onsite is shipped offsite as described in the Hazardous Materials and Hazardous Waste Management Plan (BIM-5200-PLA-0007). Used oil used for fuel burner feedstock will comply with the GN's Environmental Guideline for Used Oil and Waste Fuel (GN, 2012) which specifies impurity levels. Table 5 summarizes the impurity levels for fuel burner feedstock outlined in the GN guideline.

TABLE 5 MAXIMUM LEVELS OF IMPURITIES IN USED OIL AND WASTE FUEL BURNER FEEDSTOCK

Impurity	Maximum Concentration (ppm)[1]	
	Used Oil	Waste Oil
Cadmium	2	2
Chromium	10	10
Lead	100	100
Total Organic Halogens (as chlorine)	1000	1500
Polychlorinated Biphenyls	2	2
Ash Content	-	0.6% by weight

[1] Values from Environmental Guideline for Used Oil and Waste Fuel (GN, 2012)

4.4.3 Non-Hazardous Waste – Construction Materials

Disposal of Project construction waste material including packing and building materials, cables and wiring and other miscellaneous items (e.g., used tools, equipment, etc.) generated during construction activities is completed according to waste type. Most construction waste is segregated into the following waste streams:

4.4.3.1 LUMBER

Lumber is generated by unpacking shipments and from the disposal of temporary supports/infrastructure. Where possible, shipments will be received on pallets that can be

reused onsite. Other clean lumber waste will be stacked and made available for reuse or burned onsite as per Baffinland's Open Burning of Untreated Wood, Cardboard and Paper Products Procedure (BIM-5200-SOP-0020) (refer to Section 4.6 Open Burning). Chemically treated lumber will be separated and, if it cannot be reused, will be disposed at the onsite Landfill Facility.

4.4.3.2 Plastics

Polyethylene film and other construction plastics include packaging (containers), insulation, pipelines, wire sheath and various other construction consumables. Ad-hoc opportunities for recycling these materials will be investigated and where practical materials will be reused; otherwise, plastics will be disposed of at the onsite Landfill Facility.

4.4.3.3 Steel and Scrap Metal

Steel and scrap metal waste will be separated from other solid waste produced during construction activities by those who generate it. If it is determined to be economically feasible, steel and other scrap metal waste will be shipped offsite for recycling; otherwise, small scrap metal will be disposed at the onsite Landfill Facility.

4.4.3.4 Unset Concrete and Concrete Waste

During construction periods, concrete is generated from batch plant operations located near construction laydown areas. Waste concrete will arise from off spec mixes, residual concrete at the end of a pour, and from wash down of equipment. A purpose built concrete wash water pond shall be used to receive all wash water from concrete related activities in order to allow for the settling of solids, decant analysis and pH adjustment as required. Wash water will be recycled back into concrete production to the fullest extent possible in order to reduce water use and the quantity of wastewater generated by concrete production. All concrete product waste shall be disposed in a concrete wash pond or at other Environment Department approved locations that have low potential for negative effects to the receiving environment. Lined containment areas will be used to wash concrete delivery trucks' drums and chutes on-site in order to minimize runoff of waste wash water. Waste hardened concrete will either be used as fill or disposed at the onsite Landfill Facility.

4.4.3.5 Miscellaneous Construction Waste

All other inert non-hazardous construction waste will be segregated at its source into categories, based on potential for reuse, such as metal containers and plastics. If these materials are not suitable for reuse onsite, they will be disposed of at the onsite Landfill Facility or other appropriate onsite disposal facility.

4.4.4 Domestic Waste from Accommodations Complexes

Accommodations complexes house Project personnel in addition to providing meals and other domestic support facilities (e.g. office and recreation facilities). Wastes generated from these

facilities will be similar in nature to general residential domestic waste, and will be comprised of a higher percentage of organic (food) wastes. Project domestic waste will be collected in secure containers and removed daily. All containers containing food waste or items potentially contaminated by food (e.g. food packaging) are required to be secured in animal-proof storage waste bins or secured sea cans to prevent access by wildlife. The Site Services Department maintains responsibility for waste management, including source separation and disposal, of waste generated at Project accommodation complexes in accordance with this Plan and Baffinland's Waste Sorting Guidelines (BIM-5200-GUI-0002).

4.4.5 Sewage

Sewage generated by Project activities will be managed by the principals and procedures provided in Baffinland's FWSSWMP (BIM-5200-PLA-0022). Sewage sludge generated from sewage treatment facilities is incinerated, or backhauled for off-site disposal. Sewage sludge may also be disposed of in the landfill with the appropriate approvals from authorities, and potentially applied to landfarm operations to enhance bio-treatment of contaminated soils.

4.4.6 Hazardous Waste

Hazardous waste generated by Project activities is managed by the principals and procedures provided in Baffinland's Hazardous Materials and Hazardous Waste Management Plan (BIM-5200-PLA-0007). The Hazardous Materials and Hazardous Waste Management Plan outlines Baffinland's framework for effective hazardous materials and hazardous waste management by providing instruction for the prevention, detection, containment, response, and mitigation of accidents that could result from handling hazardous materials. It also identifies procedures for handling, storing and disposing of hazardous materials and hazardous waste generated at Project sites to ensure that it is conducted in a safe, efficient and environmentally compliant manner that minimizes the potential for adverse impacts to the environment. Hazardous waste is stored in Hazardous Waste Berms (HWBs) until it is backhauled off-site for disposal.

4.4.7 Miscellaneous Refuse

Disposal of miscellaneous items (e.g., tools, equipment, electronics, clothing, etc.) requiring special handling is completed by the waste owner/generator under the direction of the Environment Department and Site Services. Large items containing components of variable waste types are required to be broken-down and disposed of in accordance with this Plan and Baffinland's Waste Sorting Guidelines (BIM-5200-GUI-0002).

Mechanical/equipment parts must be drained of oil or other fluids prior to disposal. Drained fluids are to be disposed of in accordance with Baffinland's Hazardous Materials and Hazardous Waste Management Plan (BIM-5200-PLA-0007).

4.4.8 Office Paper

White paper waste (e.g. printer paper) generated at the Project accommodations complexes and ancillary offices is collected for incineration. The following initiatives are implemented across site to reduce the amount of paper waste generated:

- Electronic distribution of forms and notifications is used wherever possible;
- When practical, documents are printed double–sided and double-sided printing is the default setting on all office copiers;
- Files are saved electronically and only pages of documents that have been revised are printed for hardcopy versions of documents, where possible, rather than reprinting the entire document;
- Rather than making numerous copies of memos or other site communications, Baffinland strives to route one hardcopy around office facilities or post one hardcopy in a centralized area; and
- Only qualified personnel are permitted to complete maintenance on copiers and printers.

4.5 INCINERATORS

Combustible non-hazardous wastes generated at the Project are incinerated to minimize the negative impacts of attraction vectors to wildlife. Incinerated waste is typically generated from the kitchen and personnel accommodations. Waste identified as suitable for incineration based on incineration technology used on-site, applicable regulations and project approvals includes food waste, domestic waste, packaging waste, wood waste, textiles and cigarette buts. All waste sent to Project incinerators is required to be sorted as per the Waste Sorting Guidelines (BIM-5200-GUI-0002). Only personnel trained in the Incinerator Operation Procedure (BAF-PH1-320-PRO-0002) are permitted to operate Project incinerators. Signage must be clearly posted at each incinerator facility in both English and Inuktitut to outline acceptable and unacceptable waste types for incineration, and copies of applicable procedures and manuals must be available at each facility for reference. Project incinerator units are located in waste management buildings at Milne Port and the Mine Site and are identified on the site layouts provided in Appendix C.

The incinerators are operated as required, using the Incinerator Operation Procedure (BAF-PH1-320-PRO-0002), developed in accordance with the manufacturers' recommendations. Each incinerator uses dual-chamber, variable-airflow design technology and is specifically designed for remote camp operations. Operation of the incinerator units is monitored using on-line instruments capable of continuous temperature monitoring of the combustion process in both chambers and stack emissions. The incinerator computer module is connected to Baffinland's network, enabling burns to be monitored remotely to assess efficacy and provide real-time improvements to incinerator burns. An incinerator is also present at the Steensby Port; it is only used during summer months when accommodations camps at Steensby Port are in use. A summary of Project incinerators, including incinerator type, and incinerator design capacity is provided in Table 6.

TABLE 6 INCINERATOR ALLOCATION

Site	Incinerators Type	Total Capacity (as per design basis)
Mine Site	ECO 2TN Mobile Incinerator	2 tonnes
Steensby Port[1]	Batch Incinerator	0.5 tonnes
Milne Port	ECO 2TN Mobile Incinerator	2 tonnes
Milne Port (380-Camp)[1]	Ketek CY-100-CA	1 tonne

1 – Not currently in use

Incinerator units at the Mine Site and Milne Port have the option of using a liquid waste system to burn waste petroleum products such as used oil or off-spec fuels. Larger or additional incinerators may be brought on-line as required to meet the Project's needs during construction or expansion.

Prior to operation of incinerators not currently in use; Baffinland will conduct a stack test to confirm incinerator units are operating within applicable air emission standards. Initial stack tests were conducted upon commissioning all camp incinerators to determine conformance with all applicable Air Quality regulations based on a 'typical' waste stream. Consistent with the Canadian Council of Ministers of the Environment (CCME, 2000) Canada-Wide Standards (CWS) for mercury emissions, and the CCME (2001)CWS for dioxins and furans, follow up stack tests will be competed every year for dioxins, furans and mercury for all Project incinerator units incinerating more than 26 tonnes of waste per year to confirm Project Incinerators continue to operate within the applicable air emission standards. Follow up stack tests will be completed every five (5) years for dioxins, furans and mercury at Project incinerators that burn less than 26 tonnes per year of waste.

Stack test results will be provided to the applicable regulatory agencies in the NIRB Annual Report, as required by the Project Certificate. All Project incinerator units will operate in accordance with the GN's Environmental Guideline for the Burning and Incineration of Solid Waste (GN, 2012), and will be maintained as per the manufacturer's recommendations (e.g. OEM manual).

Incinerator waste will be segregated according to the Incinerator Operation Procedure (BAF-PH1-320-PRO-0002) to ensure only suitable materials are incinerated to achieve a complete burn-cycle. Incineration of hazardous wastes, non-combustible materials, or treated wood products is prohibited. The incineration of plastics will be minimized to the maximum extent practicable. Incineration of some food-related and other plastics will be unavoidable;

however, best efforts will be made to reduce/prevent incineration of plastics containing chlorine molecules, which can generate dioxins and furans.

4.5.1 Air Emissions

Air emission standards establish limits on the levels of contaminants that can be released to the atmosphere. These standards are expressed as a concentration in the exhaust gases leaving the stack and are capable of being achieved using available technology or waste diversion practices. The following emission standards apply to solid waste incinerators operating in Nunavut and have been adopted from the CCME (2001) CWS for dioxins and furans, and CCME (2000) CWS for mercury emissions. For existing, new or expanding solid waste incinerators, the maximum concentration (corrected to 11% oxygen at the stack for reporting purposes) of dioxins, furans and mercury in the exhaust gases from the incinerator stack are summarized in Table 7.

TABLE 7 AIR EMISSIONS STANDARDS FOR SOLID WASTE INCINERATORS

Parameter	Numeric Standard[1]	Explanation
Dioxins and Furans	80 pg I-TEQ/cubic metre	Unit of measure is picograms of International Toxicity Equivalents per cubic metre of air
Mercury	20 µg/Rcubic metre	Unit of measure is micrograms per Reference cubic metre (the volume of gas adjusted to 25°C and 101.3 kilopascals)

[1] Values from Environmental Guideline for the Burning and Incineration of Solid Waste (GN, 2012)

Opacity, which measures the degree to which the exhaust gases reduce the transmission of light and obscure view, is expressed as a percentage of the extent to which an object viewed through the gases is obscured. Although not an emission standard, opacity provides an indication of the general performance of the incinerator during normal operation. Opacity in the incinerator stack should not exceed 5%. While it is not anticipated that opacity levels will exceed 1% to 2% under normal operation, values greater than 5% suggest the incinerator unit is not performing properly and additional performance evaluation and adjustments are required.

4.5.2 Ash Disposal

The incineration process produces bottom ash as a process residual. Several factors influence this process including the operating conditions in the burn chamber (i.e. temperature, holding time, air turbulence and waste compaction), and the wetness and chemical composition of the waste. Disposal of incinerator bottom ash and other unburned residue from incinerator operations will be completed with caution due to physical (e.g., glass, nails) and chemical hazards. Appropriate PPE will be required when operating the incinerator and handling the residual ash. Bottom ash will only be handled once it has completely cooled.

Non-hazardous ash from the incineration process will be buried at the onsite Landfill Facility. Prior to disposal, Toxicity Characteristic Leaching Procedure (TCLP) (Test method 1311; US EPA) analyses will be completed to determine suitability of incinerator ash for disposal at the Landfill Facility. Composite samples of incinerator bottom ash, as outlined in Baffinland's Incinerator Ash Sampling Procedure (BIM-5200-SOP-0004), will be collected as required (when the ash bin is full and prior to disposal of the ash at the Landfill Facility) for analyses and the laboratory results from the TCLP analyses will be compared to the guidelines for process residuals concentrations suitable for landfills, outlined in the GN's Environmental Guideline for Industrial Waste Discharges into Municipal Solid Waste and Sewage Treatment Facilities (GN, 2011). Table 8 outlines the guidelines stipulated by the GN for process residuals landfill disposal.

If laboratory results are below guidelines for process residuals, the ash will be considered suitable for landfill disposal. Closed or covered containers will be used when transporting bottom ash from the incinerator to Project Landfill Facility for disposal. The ash, once deposited in the landfill, will be promptly covered over with material to prevent migration. If monitoring indicates ash exceeds applicable guidelines and is not suitable for landfilling, an investigation will be undertaken to identify the cause and identify a solution. Ash that does not meet guidelines following TCLP analysis will be reprocessed onsite or transported offsite for disposal at a licenced waste disposal facility. Records of analytical results and volumes of ash will be maintained onsite, and will be made available upon request to CIRNAC or the NWB.

TABLE 8 GUIDELINES FOR PROCESS RESIDUALS SUITABLE FOR LANDFILL DISPOSAL

Parameter	Concentration maximum (mg/L)[1]
Arsenic	2.5
Barium	100
Cadmium	0.5
Chromium	5
Lead	5
Mercury	0.1
Selenium	1
Silver	5
Uranium	10
Zinc	500
Carbon Tetrachloride (tetrachloromethane)	0.5
Methyl Ethyl Ketone	200
Polychlorinated Biphenyls (PCBs)	50 (concentration by mass)
Polychlorinated Dibenzo Dioxins and Furans	0.0000015 (I-TEQ)
Tetrachloroethylene	3
Trihalomethanes (Total)	10
Vinyl Chloride	0.2

[1] Values from Environmental Guideline for Industrial Waste Discharges into Municipal Solid Waste and Sewage Treatment Facilities (GN, 2011)

4.5.3 Monitoring During Operations

Monitoring of Project incinerator units includes routine inspections for signs of leakage, corrosion or other physical defects. If defects are identified, an assessment of health, safety, and environment risk is required prior to further operation of the incinerator and, if significant risks are identified, repairs are required to be completed before the equipment is used again.

Operation of incinerator units at the Mine Site and Milne Port will be monitored using on-line sensors capable of continuous monitoring of combustion processes; including temperature in both the primary and secondary burn chambers, as well as in the stack. Temperature readings outside of the normal range provide warning to the incinerator operator that the system is not functioning properly. Incinerator combustion process monitors are equipped with visible alarms to warn operators of poor incinerator operation.

Incinerator operation records required to be maintained on-site and provided upon request to CIRNAC or the NWB include:

- Data from process monitoring instruments;
- Repairs and maintenance performed on the incinerator and monitoring instruments;
- Modifications to operation procedures;
- Quantity, condition and TCLP analysis results of collected bottom ash;
- Operator training; and,
- Incinerator logs recorded by operators, detailing waste volumes, waste type and date/time of burns.

4.6 OPEN BURNING

Untreated wood waste including wood or timber not suitable for recycling or reuse and substantially free of glue and other chemicals, cardboard, and paper products generated onsite will be disposed of by authorized open burning. Open burning disposal reduces the volume of inert waste directed to Project incinerators and the Project Landfill Facility. Only waste approved for open burning will be segregated for disposal by open burning. Baffinland's open burning authorization prohibits the burning of hazardous wastes, non-combustible materials, food waste, plastics, Styrofoam or treated wood products such as plywood. To ensure removal of prohibited wastes, secondary waste segregation is completed during the loading process at Project open burn facilities. Only personnel trained in the Open burning of Untreated Wood, Cardboard and Paper Products Procedure (BIM-5200-SOP-0020) will be permitted to operate Project open burn facilities. Project open burn facilities are identified in the Mine Site and Milne Port layouts provided in Appendix C.

Access to open burn facilities shall be restricted through the installation of locked gates to limit access to open burn facilities to authorized personnel only. The gates which control access to open burn facilities must remain closed and locked at all times when the burn area is not occupied by a Site Services Operator. Signage identifying the open burn facilities shall be clearly posted in both English and Inuktitut at the gate and maintained to be visible upon approach. Signage must be clearly posted at each Open Burn facility in both English and Inuktitut to outline acceptable and unacceptable waste types for open burning. Signage shall include but is not limited to the general Waste Sorting Guidelines (BIM-5200-GUI-0002), and the Waste Sorting Guidelines for Open Burning of Untreated Wood, Cardboard and Paper Products (BAF-PH1-830-P25-0001; Appendix B of the Open Burning of Untreated Wood, Cardboard and Paper Products Procedure) to outline acceptable and unacceptable waste types at open burn facilities. A copy of the Open Burning of Untreated Wood, Cardboard and Paper Products Procedure (BIM-5200-SOP-0020) must also be available at each open burn facility for reference.

4.6.1 Ash Disposal

Residual waste and bottom ash from the open burning operation shall be collected and disposed of in the Project's Landfill Facility in accordance with the conditions outlined in the in the Open Burning of Untreated Wood, Cardboard and Paper Products Procedure (BIM-5200-SOP-0020) . Ash is to be removed from Project open burn facilities weekly or as required.

4.6.2 Monitoring During Operations

On-going monitoring of open burning operations will be completed by Environment Department personnel to ensure operator compliance with Baffinland's Open Burning of Untreated Wood, Cardboard and Paper Products Procedure (BIM-5200-SOP-0020). Regular inspections of open burn facilities will be completed to ensure that wastes deposited remain in compliance with the established procedures. Operators are required to document waste type and volume (based on visual estimation of volume to nearest cubic meter) for each burn event. If environmental non-compliances are identified, authorization for open burning operations may be revoked and specified corrective actions to be implemented to achieve compliance will be provided to the Environment Department for review.

4.7 LANDFILL FACILITY OPERATIONS

All inert, non-combustible waste (i.e., hard plastics, cement, treated wood, rubber, insulation, small scrap metal, pipes, glass, etc.) generated by Project activities is disposed of at the non-hazardous solid waste Landfill Facility. Non-hazardous waste, including ash from incineration approved for disposal by the Environment Department and ash from open burning of clean wood processes, and non-hazardous waste which cannot be salvaged or incinerated, will also be deposited at the Project's Landfill Facility. Disposal of all domestic (food) waste, hazardous and biomedical materials at the Project Landfill Facility is prohibited. Only personnel trained in

the Landfill Maintenance and Operation Manual (BIM-5200-MAN-0002) will be permitted to operate the Project Landfill Facility. The non-hazardous solid waste Landfill Facility is identified on the Mine Site layout provided in Appendix C.

4.7.1 Landfill Facility Operations

The active Landfill Facility perimeter is fenced, accessible only by lock and key at the main gate. The main gate is the single point of access, and is to be kept locked at all times. Project Landfill Facility operation and management procedures are provided in Baffinland's Landfill Maintenance and Operation Manual (BIM-5200-MAN-0002). Signage identifying the Landfill Facility shall be clearly posted in both English and Inuktitut at the gate and maintained to be visible upon approach.

4.7.2 Monitoring During Operation

Routine inspections of landfill operations are completed regularly to monitor waste volume, type and source, water seepage and geotechnical stability, and to ensure operational conformance with this Plan and the Project's Waste Sorting Guidelines (BAF-BIM-5200-GUI-0002). The quarterly and annual volume of waste disposed of at the Project's Landfill Facility will be determined using established survey methods.

The Type 'A' Water Licence prescribes monitoring of surface runoff from the Project's Landfill Facility and provides water quality criteria that must be met. Refer to the Surface Water and Aquatic Ecosystem Management Plan (BIM-5200-PLA-0009) and Sampling Program – Quality Assurance and Quality Control Plan (BIM-5200-PLA-0004) for surface water sampling locations associated with the Project's Landfill Facility and surface water sampling procedures.

4.7.2.1 Ground Temperature Monitoring

It is anticipated that the active layer will advance into the landfill waste and cover material. Ground temperatures in the vicinity of the Project's Landfill Facility are not expected to increase based on the types of inert wastes disposed of at the facility. During regular landfill inspections, signs of ground warming are monitored by visually inspecting for evidence of soil creep, settling and slumping, and areas of melted snow.

4.7.2.2 Leachate Monitoring

Annual groundwater monitoring and sampling at the Project's Landfill Facility has been conducted since 2017, using drive-point piezometers and PVC standpipes and permanent monitoring wells, to monitor groundwater levels and quality. The purpose of the groundwater monitoring program is to gain a better understanding of natural groundwater chemistry and identify potential Project related effects, and to evaluate the significance of changes in water quality between up-gradient and down-gradient monitoring locations as additional water quality data is collected in future years. Results of the groundwater monitoring program will be provided to the applicable regulatory agencies in the Type 'A' and NIRB annual reports.

4.7.2.3 Inspection and Maintenance

Routine visual inspections are conducted for various components of the Project's Landfill Facility, including the berms, fencing, etc. Inspection of the Landfill Facility is also included in the biannual Geotechnical Inspections, prescribed by the Type 'A' Water Licence, conducted by a Professional Engineer. Based on the findings of the routine and geotechnical inspections, maintenance will be completed as required and follow-up actions will be implemented to correct any identified concerns. Results of the Geotechnical Inspections are submitted to the NWB within sixty (60) days of the inspection, as stipulated in the Type 'A' Water Licence, and also provided to the applicable regulatory agencies in the Type 'A' and NIRB annual reports. Inspection and maintenance records are to be maintained onsite and provided upon request to CIRNAC or the NWB.

4.8 HAZARDOUS WASTE STORAGE AND DISPOSAL

Project waste streams will be classified as hazardous wastes based on potential risk to human health and safety, property and the environment. Hazardous wastes generated onsite include, but are not limited to: used oils, solvents and paints, used and/or surplus chemicals, biomedical wastes, gas cylinders, electronic waste, batteries, light bulbs and smoke detectors.

Baffinland will ensure that all hazardous waste generated at the Project is effectively managed and disposed. Hazardous waste will be properly stored, transported, treated and disposed of as outlined in the Hazardous Materials and Hazardous Waste Management Plan (BIM-5200-PLA-0007) and in adherence to applicable federal and territorial regulations. All site personnel are responsible for managing the waste they generate and are required to comply with the procedures provided in this Plan and the Hazardous Materials and Hazardous Waste Management Plan (BIM-5200-PLA-0007) and will be subject to monitoring and enforcement.

4.9 ON-SITE TREATMENT OF HYDROCARBON CONTAMINATED MATERIAL

Soils contaminated by hydrocarbons from spills and Project decommissioning activities are salvaged and deposited at Project landfarm facilities for remediation through natural microbiological and evaporative processes. Soil that has reached acceptable levels of hydrocarbon biodegradation and meets remediation criteria provided in the Environmental Guideline for Contaminated Site Remediation (GN, 2009) can then be removed and transferred to the landfill or other appropriate use. The landfarm facilities are operated in accordance with GN guidelines and Baffinland's Landfarm Operation, Maintenance and Monitoring Manual (BIM-5200-MAN-0001). If the land farms are at capacity, any additional contaminated soil will be packaged accordingly and backhauled offsite to a licenced facility in southern Canada for treatment and/or disposal. Soils contaminated by hydrocarbons from spills and site decommissioning initiatives are managed as described in Baffinland's Hazardous Materials and Hazardous Waste Management Plan (BIM-5200-PLA-0007).

4.10 OILY WATER

Oily water at the Project site includes wash-water generated at the vehicle maintenance facilities, waste management building, emergency response garage and truck wash, as well as surface water that collects within the bulk fuel storage berms, hazardous waste storage berms, and landfarm facilities. Oily water generated by the Project shall be tested and treated if required at the oily water/wastewater treatment facilities to ensure compliance with effluent discharge quality criteria stipulated in the Type 'A' Water Licence prior to discharge to the receiving environment. Oily water generated by Project activities is managed as described in Baffinland's FWSWWMP (BIM-5200-PLA-0022).

4.11 SHIP WASTE MANAGEMENT

Baffinland will not accept waste originating from ships and/or vessels servicing Milne Port. Waste generated by ships and/or vessels servicing Milne Port will be disposed of at the receiving port.

4.12 HUNTER AND VISITOR WASTE MANAGEMENT

Baffinland is not responsible for waste originating from hunters and visitors staying at the HTO cabins. Visitors using the HTO cabins are responsible for collecting and removing any wastes they generate when they vacate the cabins.

4.13 USED TIRES

Project used tires will be sorted according to tire diameter and brought to designated storage areas. Tires greater than 44 inches in diameter will be stacked in piles in designated locations. Tires measuring 44 inches in diameter and less will preferably be stacked inside designated seacans in an orderly manner. If seacans are not available, tires measuring 44 inches in diameter and less can be stacked in the designated storage areas but are to be separated from tires that are greater than 44 inches in diameter. Used tires are to be managed as described in Baffinland's On Site Current Tire Disposal Procedure (BAF-PH1-300-PRO-0020).

Tires will be reused onsite in an environmentally and safe manner where possible, including reuse of tires for ballast along containment berms and for barriers along the Tote Road and Mine Haul Road. Baffinland will continue to implement additional options for tire reuse where possible that increase Project sustainability and allow for the reuse of tires at Project sites in an environmentally and safe manner. The reuse of tires onsite is not to be undertaken unless approval has been given by the Environment Department.

5. MONITORING AND REPORTING REQUIREMENTS

5.1 WASTE MONITORING

Waste monitoring at the Project will include the visual inspection of the main components of the waste management system, and the measurement and recording of wastes processed onsite and transported offsite for disposal. Table 9 summarizes the applicable section of this Plan where monitoring requirements are described for each waste management facility type, and references the manual, procedure, and/or management plan applicable to the facility.

TABLE 9 WASTE MANAGEMENT MONITORING REQUIREMENTS

Facility Type	Requirements
Incinerator	Monitoring of Project incinerators will be completed to ensure incinerators are functioning as designed and that appropriate wastes are being incinerated as described in Section 4.5 of this Plan and the Incinerator Operation Procedure (BAF-PH1-320-PRO-0002).
Open Burning	Monitoring of Project open burn activities will be completed as described in Section 4.6 of this Plan and the Open Burning of Untreated Wood, Cardboard and Paper Products Procedure (BIM-5200-SOP-0020).
Landfill	Landfill activities will be monitored as described in Section 4.7 of this Plan and the Landfill Maintenance and Operation Manual (BIM-5200-MAN-0002). Monitoring will involve visual inspections to ensure the disposal of inert wastes only, and that adequate cover is provided to contain waste and prevent wind dispersal.
Hazardous Waste	All hazardous waste will be monitored as described in the Hazardous Materials and Hazardous Waste Management Plan (BIM-5200-PLA-0007).
Landfarm	Landfarm activities will be monitored as described in the Landfarm Operation Maintenance and Monitoring Manual (BIM-5200-MAN-0001).

5.2 OPERATIONS MONITORING

Individual departments are responsible for maintaining clean, safe and environmentally acceptable work areas. Departments are expected to conduct and document regular inspections of their work areas and facilities to ensure commitments and expectations regarding health, safety and environment are being met or exceeded. Inspection documentation shall be made available to Environment Department personnel conducting periodic inspections or to external inspectors, regulators, and agencies conducting inspections under the terms and conditions of Baffinland's licences, permits, authorizations, leases, and other regulatory requirements.

In addition to departmental inspections, the Environment Department will conduct routine compliance inspections throughout the Project, including at the Project's waste management facilities, to confirm personnel are operating in accordance with Baffinland's water licences, permits and other regulatory requirements. Environment Department inspections will be conducted to confirm overall conformance with the requirements of this Plan, the EPP, and

standard operating procedures. Inspection forms will be used to document inspection findings and required corrective actions. Checklists will be used as internal operational monitoring and compliance tools to promote continuous improvement in Project environmental performance and stewardship initiatives. These checklists are integrated into the EPP and other operating procedures/work instructions. The Compliance Inspections Procedure (BIM-5200-SOP-0001) provides a set of operational standards that will ensure environmental compliance inspections are performed safely in all operational areas and is to be followed. The Compliance Inspections Procedure (BIM-5200-SOP-0001) outlines requirements to ensure compliance inspections are documented and that realized and potentially adverse environmental conditions are promptly identified and recorded for dissemination and corrective actions. Regular waste audits will also be completed by Environment Department personnel at facilities where waste is generated to ensure waste streams are properly segregated.

Biannual geotechnical inspections of engineered facilities designed to contain water or waste, including landfill and landfarm components of the waste management system, are conducted as prescribed by the Type 'A' Water Licence by a Professional Engineer. Based on the findings of the geotechnical inspections, maintenance will be completed as required and follow-up actions implemented to address any concerns identified through the geotechnical inspections.

5.3 DATA MANAGEMENT

The Environment Department is responsible for managing and reporting the data collected during Project waste management and monitoring activities. The Site Services Department is responsible for recording information and data related to waste management, including incinerator and open burn logs, and for managing the information and submitting logs to the Environment Department as per this Plan and/or as requested. Individual departments are responsible for maintaining documentation of their regular department inspections and for making that information available to Environment Department personnel and regulatory agencies on request.

5.4 REGULATORY REPORTING

Submission of quarterly and annual reports, containing the following information, will be completed to meet the requirements specified by the Type 'A' and Type 'B' water licences, the Commercial Lease, and the Project Certificate:

- Status and locations of Project waste management facilities;
- Quantities and disposal methods for the various types of waste generated by the Project;
- Location and name of the disposal facility (onsite and offsite) for each waste type; and
- Other information as requested by regulators or stakeholders.

Baffinland will submit a declaration of authorization from any community in Nunavut receiving waste from the Project, which clearly states that authorization has been granted for the deposit

of waste by Baffinland at the community's appropriately licenced facilities, to the NWB and CIRNAC thirty (30) days prior to the removal and transfer of any waste.

Baffinland will maintain records of all waste backhauled from the Project and confirmation of proper disposal through the use of waste manifest tracking systems and registration with the GN. Records of waste disposal activities will be available to the NWB and CIRNAC upon request.

Results of the Geotechnical Inspections will be submitted to the NWB within sixty (60) days of the inspection, as stipulated in the Type 'A' Water Licence, and also provided to the applicable regulatory agencies in the Type 'A' Water Licence and NIRB annual reports. Inspection and maintenance records will be maintained onsite and provided to CIRNAC or the NWB upon request.

Baffinland will provide at least ten (10) days notice to CIRNAC prior to planned discharges from any waste management facility, oily water/wastewater treatment facility, sewage treatment facility, and any other relevant facilities associated with the Project. The notice shall include the estimated volume proposed for discharge and the location and description of the receiving environment.

6. ADAPTIVE MANAGEMENT

Baffinland is committed to continuous improvement in its work activities with the aim of reducing risks to the environment and improving operational effectiveness. The strategy employed at Baffinland is regular monitoring supported by operational change and adoption of other mitigating measures if warranted. Examples of adaptive management strategies for waste management activities at the Project include identification of options for reuse of waste materials onsite, potential landfarm application of wastewater treatment solids, and integration of on-line instrumentation with the PLC interface to provide real-time operating data; based on operational, health and safety, and environmental monitoring results.

Housekeeping and operational measures have and will continue to be instituted. As part of the EPP (BIM-5200-PLA-0003), work procedures will continuously be adapted accordingly to reduce, recover, reuse and recycle waste. Regular scheduled inspections of waste management facilities along with the non-compliance reporting system described in Section 5 will ensure continual improvement and adaptation of waste management strategies throughout the life cycle of the Project.

As per the requirements of Baffinland`s HSE Management Framework (BAF-PH1-830-STD-0001), Baffinland will conduct and document management reviews of this Plan on a regular basis. Such reviews will ensure integration of waste monitoring results with other aspects of the Project and the implementation of necessary adjustments as required. These reviews also

provide a formal mechanism to assess effectiveness of management in achieving Baffinland's objectives and maintaining ongoing compliance with Project permits and authorizations.

7. RESPONSIBILITIES

Role	Responsibility
General Manager	• Responsible for the oversight of all Project operations and allocating the necessary resources for the operation, maintenance and management of Project waste management facilities and operations. • Ensure adherence to this WMP, and that all departmental managers and superintendents understand the contents of the Plan. • The General Manger is responsible for ensuring the preparation, submission and execution of this Plan.
Port & Logistics Manager/ Superintendent	• Responsible for importing materials to site, and providing support to the Site Services Department in regards to shipping wastes offsite for disposal at licensed waste disposal facilities.
Site Services Manager or Designate	• The Site Services Manager or designate is accountable for the overall waste management system, including the operation, maintenance and management of Project waste management facilities. Specifically, the Site Services Manager or designate shall: ○ Implement this WMP and associated management plans, procedures, operating manuals, etc. and ensure applicable documents are followed by personnel responsible for waste management system operations. ○ Ensure personnel responsible for operating and managing Project waste management facilities and operations are properly trained and competent to perform their assigned responsibilities. ○ Ensure personnel training records are maintained onsite and available to be provided to regulators upon request.
Site Services Superintendent	• Responsible for the operation, maintenance and management of Project incinerators, containment berms, landfill facilities, open burn facilities and landfarm facilities, and for supporting operations.
Site Services Supervisor	• The Site Services Supervisor is responsible for the implementation of the operational and management practices for Project incinerators, containment berms, landfill facilities, open burn facilities and landfarm facilities, and supporting operations, and for supervising operations in accordance with applicable management plans, procedures, manuals, etc. Specifically, the Site Services Supervisor shall:

	○ Work in conjunction with the Site Services Superintendent in executing waste management system operating procedures and operating manuals. ○ Ensure waste management facilities and operations are conducted in compliance with relevant procedures and associated documents. ○ Submitting incinerator logs, and open burn logs to the Environment Department on a weekly basis.
Site Services Operators	• Site Services Operators are responsible for operating Project waste management facilities in accordance with applicable procedures, manuals, manufacturer instructions, etc. Site Services landfill, incinerator, landfarm, and open burn operators are also responsible for the following: • Site Services Operators ○ Operating the Project Landfill Facility in accordance with the Landfill Maintenance and Operation Manual (BIM-5200-MAN-0002). Key landfill operational tasks include: ▪ Conducting visual inspections of deposited landfill waste prior to processing waste at the Project Landfill Facility to confirm waste sorting and conformance with the Project's Waste Sorting Guidelines (BIM-5200-GUI-0222). ▪ Compacting and managing waste along the working face of the active landfill cell. ▪ Placing cover material on compacted waste to complete exposed cells and prevent windblown debris. ▪ Ensuring the landfill is maintained free of windblown litter and that litter fences are appropriately placed and in good condition. ○ Operating Project incinerators in accordance with the Incinerator Operation Procedure (BAF-PH1-320-PRO-0002) and guidance documentation provided by the manufacturer. Key incinerator operational tasks include: ▪ Conducting visual inspections of incinerator waste prior to incineration to confirm proper waste sorting and conformance with the Project's Waste Sorting Guidelines (BIM-5200-GUI-0222). ▪ Combining waste streams to achieve incinerator waste loads with appropriate waste compositions to ensure optimal incineration of Project waste. ▪ Monitoring incinerator operational parameters (i.e. temperature of primary and secondary chambers, fuel

	levels, etc.) to ensure optimal combustion conditions are achieved. ▪ Recording waste volumes, waste type and date/time of burns in the incinerator logs. ○ Operating Project landfarm facilities in accordance with the Landfarm Operation Maintenance and Monitoring Manual (BIM-5200-MAN-0001). Key landfarm operational tasks will include: ▪ Inspecting incoming contaminated soils and directing facility users to proper/active stockpile locations. ▪ Applying water and/or nutrients to remediating soil under the direction of the Site Services Supervisor and the guidance of the Environment Department. ▪ Assist the Environment Department in treating water collected in facility sumps and contaminated snow containment.areas. ○ Operating Project open burn containers in accordance with the Open Burning of Untreated Wood, Cardboard, and Paper Products Procedure (BIM-5200-SOP-0020). Key open burn operational tasks include: ▪ Conducting visual inspections of open burn waste prior to open burning to confirm proper waste sorting and conformance with the Project's Waste Sorting Guidelines (BIM-5200-GUI-0222). ▪ Monitoring open burn operations to ensure safe controlled burning and optimal combustion conditions are achieved. ▪ Recording waste volumes and general types of waste and date/time of burns in the open burn logs.
Project Employees and Contractors	• All Project employees and contractors are responsible for sorting and disposing of their waste as outlined in this Plan.
Environment Department	• The Environment Manager or designate will work with the Site Services Manager, Superintendents, Supervisors, and Operators to ensure that waste management activities comply with the Type 'A' and Type 'B' water licences and other relevant requirements. If environmental non-compliances are identified, authorization for specified operations or activities may be revoked and specified corrective actions to be implemented to achieve compliance will be provided to the Environment Department for review. The Environment Department is also responsible for: ○ Conducting regular environmental compliance inspections of Project waste management facilities to confirm conformance with the Project's established operational and management practices

	and reporting any identified deficiencies to the Site Services department for corrective action. ○ Collecting and filing monitoring data logged by the Project's incinerators. ○ Sampling and monitoring incinerator bottom ash to confirm conformance with the applicable guidelines, maintaining an ash tracking log, and informing Site Services Supervisors, when laboratory results are received, if the incinerator bottom ash is suitable for onsite disposal at the Landfill Facility. ○ Conducting periodic waste audits to ensure waste streams are being properly segregated. ○ Providing environmental awareness training to Project employees and contractors, including waste management practices. ○ Reporting data and results of Project waste monitoring programs to the appropriate regulators and stakeholders. ○ Supporting the Site Services Department in scheduling stack emissions tests required for Project incinerators if requested. ○ Assisting Site Services in optimizing soil remediation processes and rates and sampling remediating soils to monitor remediation progress. ○ Assisting Site Services in the treatment of storm water/effluent collected in Project hazardous waste and bulk fuel storage berms, and landfarm and contaminated snow containment facilities as required.
Health & Safety Department	• The Health & Safety Department is responsible for conducting routine inspections of Project waste management facilities to confirm conformance with the Project's established operational and management practices, as it relates to the health and safety of Project personnel. Identified deficiencies will be reported to the appropriate department for corrective action.

8. PRE-REQUISITE COMPETENCY SKILLS

Baffinland is committed to preventing inadvertent release of wastes to the environment and accidents resulting from non-conformances. Baffinland has developed and implemented programs for employee training, facility inspection, drills and exercises to evaluate these systems, and procedural review to address deficiencies, accountability, and allow for continual improvement. All new employees receive environmental awareness and general spill training as part of the Project's on boarding on-site orientation. In addition, the Project's EPP is a reference document that provides concise guidance to Project personnel regarding the implementation of appropriate standards for protecting the environment and minimizing

adverse environmental effects. EPP training for personnel occurs as part of Baffinland's continuous education and awareness training.

All site personnel are required to obtain a general level of environmental awareness, and understanding of their obligations regarding compliance with Baffinland's regulatory requirements, commitments and best practices. Verification of training will be kept by the Training Department. Personnel responsible for waste management activities receive additional training, as required, to ensure they are competent to perform their assigned responsibilities in accordance with applicable waste management facility procedures, manuals, manufacturer instructions, etc. Department managers (or designate) are responsible for ensuring personnel training records are maintained onsite and available to be provided to CIRNAC or the NWB upon request. Review and modifications to training and awareness initiatives/programs are completed regularly based on training needs and regulatory requirements. Minimum additional competency skills/training required for personnel responsible for waste management activities is described below.

8.1.1 Personnel Training Programs for Incineration Operation

Site personnel responsible for incineration operations are required to be trained by experienced personnel on the specific requirements necessary to properly and safely operate Project incinerator units and to maintain compliance with Baffinland's Incinerator Operations Procedure (BAF-PH1-320-PRO-0002). The incinerator manufacturer is to be requested to provide support and guidance, including on-site specialized training, if/as required. Training will include a review of Baffinland's Waste Sorting Guidelines (BIM-5200-GUI-0002) and demonstrating an understanding of operating protocols, hazards, and controls, including:

- Physical and mechanical features of the equipment and facility;
- Operation and trouble-shooting procedures;
- Environmental and safety concerns related to the operation of the facility; and
- Spill and fire emergency response procedures.

8.1.2 Personnel Training Programs for Open Burning Operation

Site personnel responsible for open burning activities are required to be trained by experienced personnel on the specific requirements necessary to properly and safely operate Project open burn facilities and to maintain compliance with Baffinland's Open Burning of Untreated Wood, Cardboard and Paper Products Procedure (BIM-5200-SOP-0020). Training will include a review of Baffinland's Waste Sorting Guidelines (BIM-5200-GI-0002), Waste Sorting Guidelines for Open Burning of Untreated Wood, Cardboard and Paper Products (BAF-PH1-830-P25-0001; Appendix B of the Open Burning of Untreated Wood, Cardboard and Paper Projects Procedure), as well as the Open Burning of Untreated Wood, Cardboard and Paper Products Procedure (BIM-5200-SOP-0020) and demonstrating an understanding of operating protocols, hazards and controls, including:

- Physical and mechanical features of the equipment and facility;
- Operation and trouble-shooting procedures;
- Environmental and safety concerns related to the operation of the facility; and
- Spill and fire emergency response procedures.

8.1.3 Personnel Training Programs for Landfill Operation

Landfill Facility Operators are required to be trained by experienced personnel in the operational and safety procedures associated with the Mine Site Landfill Facility. Training will include a review of the Waste Sorting Guidelines (BIM-5200-GI-0002) and the Landfill Maintenance and Operation Manual (BIM-5200-PLA-0002) and demonstrating an understanding of operating protocols, hazards and controls associated with landfilling operations.

9. RELATED DOCUMENTS

Air Quality and Noise Abatement Management Plan - BIM-520-PLA-0005 (previously BAF-PH1-830-P16-0002)

Compliance Inspections Procedure - BIM-5200-SOP-0001 (previously BAF-PH1-830-PRO-0009)

Diesel E2 Plan - Milne Port - BIM-5200-PLA-0017 (previously BAF-PH1-830-P16-0056)

Diesel E2 Plan - Mary River - BIM-5200-PLA-0019 (previously BAF-PH1-830-P16-0057)

EHS Management System Framework Standard - BAF-PH1-830-STD-0001

Emergency Response Plan - BIM-5000-PLA-0005 (previously BAF-PH1-830-P16-0007)

Environmental Protection Plan - BIM-5200-PLA-0003 (previously BAF-PH1-830-P16-0008)

Explosives Management Plan - BAF-PH1-830-P16-0009

Fresh Water Supply, Sewage and Wastewater Management Plan - BIM-5200-PLA-0022 (previously BAF-PH1-830-P16-0010)

Hazardous Materials and Hazardous Waste Management Plan - BIM-5200-PLA-0007 (previously BAF-PH1-830-P16-0011)

Health, Safety and Environment Policy - BIM-5000-POL-0001 (previously BAF-PH1-800-POL-0001)

Incinerator Ash Sampling Procedure – BIM-5200-SOP-0004 (previously BAF-PH1-830-PRO-005)

Incinerator Operation Procedure - BAF-PH1-320-PRO-0002

Interim Mine Closure and Reclamation Plan - BIM-5200-PLA-0026 (previously BAF-PH1-830-P16-0012)

Landfarm Operation Maintenance and Monitoring Manual - BIM-5200-MAN-0001 (previously BAF-PH1-320-T07-0005)

Landfill Maintenance and Operation Manual - BIM-5200-MAN-0002 (previously BAF-PH1-320-T07-0004)

On Site Tire Disposal Procedure – BAF-PH1-300-PRO-0020

Open Burning of Untreated Wood, Cardboard, and Paper Products Procedure - BIM-5200-SOP-0020 (previously BAF-PH1-300-PRO-0001)

Sampling Program – Quality Assurance and Quality Control Plan – BIM-5200-PLA-0004 (previously BAF-PH1-830-P16-0001)

Spill Contingency Plan - BIM-5200-PLA-0012 (previously BAF-PH1-830-P16-0036)

Surface Water and Aquatic Ecosystem Management Plan – BIM-5200-PLA-0009 (previously BAF-PH1-830-P16-0026)

Sustainable Development Policy - BAF-PH1-800-POL-0002

Terrestrial Environmental Management and Monitoring Plan - BIM-5200-PLA-0010 (previously BAF-PH1-830-P16-0027)

Waste Sorting Guidelines - BIM-5200-GUI-0222 (previously BAF-PH1-830-P25-0001)

Waste Sorting Guidelines for Open Burning of Untreated Wood, Cardboard, and Paper Products - BAF-PH1-830-P25-0001 (Appendix B of the Open Burning of Untreated Wood, Cardboard and Paper Products Procedure)

Canadian Council of Ministers of the Environment (CCME). Canada-Wide Standards for Dioxins and Furans. Winnipeg: 2001.

Canadian Council of Ministers of the Environment (CCME). Canada-Wide Standards for Mercury Emissions. Quebec City: 2000.

Government of Nunavut. Department of Sustainable Development. Environmental Protection Service. Environmental Guideline for Contaminated Site Remediation. March, 2009.

Government of Nunavut. Department of Environment. Environmental Protection Service. Environmental Guideline for the Burning and Incineration of Solid Waste. January, 2012.

Government of Nunavut. Department of Sustainable Development. Environmental Protection Service. Environmental Guideline for Industrial Waste Discharges into Municipal Solid Waste and Sewage Treatment Facilities. April, 2011.

Government of Nunavut (GN). Department of Environment. Environmental Protection Service. Environmental Guideline for Used Oil and Waste Fuel. June, 2012.

Additional Reference Resources:

Canadian Council of Ministers of the Environment (CCME). Guidance Manual for Environmental Site Characterization in Support of Environmental and Human Health Risk Assessment. 2016

Canadian Council of Ministers of the Environment (CCME). Guidelines for the Management of Biomedical Waste in Canada. CCME-EPC-WM-42E. CCME, February, 1992.

Government of Nunavut. Department of Sustainable Development. Environmental Protection Service. Disposal Guidelines for Fluorescent Lamp Tubes. January, 2003.

Environment and Natural Resources. Guidelines for the Management of Biomedical Waste in the Northwest Territories. April, 2005.

Government of Nunavut. Department of Sustainable Development. Environmental Protection Service. Environmental Guideline for General Management of Hazardous Waste. October, 2010.

Government of Nunavut. Department of Sustainable Development. Environmental Protection Service. Environmental Guideline for Waste Paint. November, 2010.

Government of Nunavut. Department of Sustainable Development. Environmental Protection Service. Environmental Guideline for Ambient Air Quality. October, 2011.

Government of Nunavut. Department of Sustainable Development. Environmental Protection Service. Environmental Guideline for Ozone Depleting Substances. April, 2011.

Government of Nunavut. Department of Sustainable Development. Environmental Protection Service. Environmental Guideline for Waste Antifreeze. January, 2011.

Government of Nunavut. Department of Sustainable Development. Environmental Protection Service. Environmental Guideline for Waste Asbestos. January, 2011.

Government of Nunavut. Department of Sustainable Development. Environmental Protection Service. Environmental Guideline for Waste Batteries. January, 2011.

Government of Nunavut. Department of Sustainable Development. Environmental Protection Service. Environmental Guideline for Waste Solvents. January, 2011.

APPENDIX A CONCORDANCE TABLES

Table 10, Table 11 and Table 12 show the terms and conditions of the Project's Type 'A' Water Licence (2AM MRY1325 – Amendment No. 1), Type 'B' Water Licence (2BE-MRY2131), and the Project Certificate (No. 005 – Amend. No 1) and the location of each item within the WMP.

TABLE 10 CONCORDANCE TABLE WITH TYPE 'A' WATER LICENCE TERMS AND CONDITIONS

Part	Number	Condition	Section
D	17	The Licencee shall submit a Construction Monitoring Report to the NWB, within ninety (90) days following the completion of any structure designed to contain, withhold, divert or retain Waters or Wastes. The construction summary report shall be prepared by an Engineer(s) in accordance with Schedule D, Item 1.	Within 90 days of the completion of any structure designed to contain, withhold, divert or retain Waters or Wastes Baffinland will submit a Construction Summary Report.
D	19	The Licencee shall prevent any chemicals, fuel or wastes associated with the undertaking from entering any Water body.	Section 4.3.1 Also refer to the Hazardous Materials and Hazardous Waste Management Plan (BAF-PH1-830-P16-0011)
F	1	The Board has approved the Plan entitled Waste Management Plan (BAF-PH1-830-P160028, Rev 3), March 20, 2015, submitted as additional information with the 2014 Annual Report.	N/A
F	5	The Licencee shall locate areas designated for waste disposal at a minimum distance of thirty-one (31) meters from the ordinary High Water Mark of any water body such that the quality, quantity or flow of water is not impaired, unless otherwise approved by the NWB in writing.	Section 4.3.1
F	6	The Licencee is authorized to dispose of all acceptable food waste, paper waste and untreated wood products in an Incinerator System;	Section 4.5
F	7	The Licencee shall test the bottom ash generated by all Incinerator Systems, by using the acceptable test procedures for analyzing residuals, prior to being disposed of at any Landfill Facility. If the composition of the ash makes it unsuitable for disposal at the Landfill facilities, the Licencee shall direct the Waste to an appropriate facility for disposal. The records of analysis results and volumes of ash shall be maintained and provided to an Inspector upon request.	Section 4.5.2
F	8	The Licencee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood, to prevent the deposition of waste materials of incomplete combustion and/or leachate from	Section 4.6

Part	Number	Condition	Section
		contaminated ash residual, from impacting any surrounding waters, unless otherwise approved by the NWB in writing.	
F	10	The Licencee shall submit to the NWB and the Inspector (CIRNAC), thirty (30) days prior to the removal and transfer of waste, a declaration of authorization from any community receiving waste from the Project, which clearly states that authorization has been granted for the deposit by the Licencee at the Hamlet's appropriately licenced facilities.	Section 5.4
F	11	The Licencee shall provide at least ten (10) days' notice to the Inspector (CIRNAC) prior to planned Discharges from any Waste Management Facility, Oily Water/Wastewater Treatment Facilities, Sewage Treatment Facilities, and any other relevant facilities associated with the Project. The notice shall include the estimated volume proposed for Discharge and the location and description of the receiving environment.	Section 5.4 Also refer to the Hazardous Materials and Hazardous Waste Management Plan (BAF-PH1-830-P16-0011), and Fresh Water Supply, Sewage and Wastewater Management Plan (BAF-PH1-830-P16-0010)
F	13	The Licencee shall remove any waste generated from temporary and permanent shelters along the Tote Road and along the railway corridor for treatment at appropriately licenced Waste Management Facilities.	Section 4.3.2 Section 4.3.3
F	29	The Licencee shall maintain records of all Waste backhauled from the Mary River Project and confirmation of proper disposal through the use of Waste manifest tracking systems and registration with the Government of Nunavut, Department of Environment. These records shall be made available upon request, to an Inspector or the NWB.	Section 4.0 Section 5.4

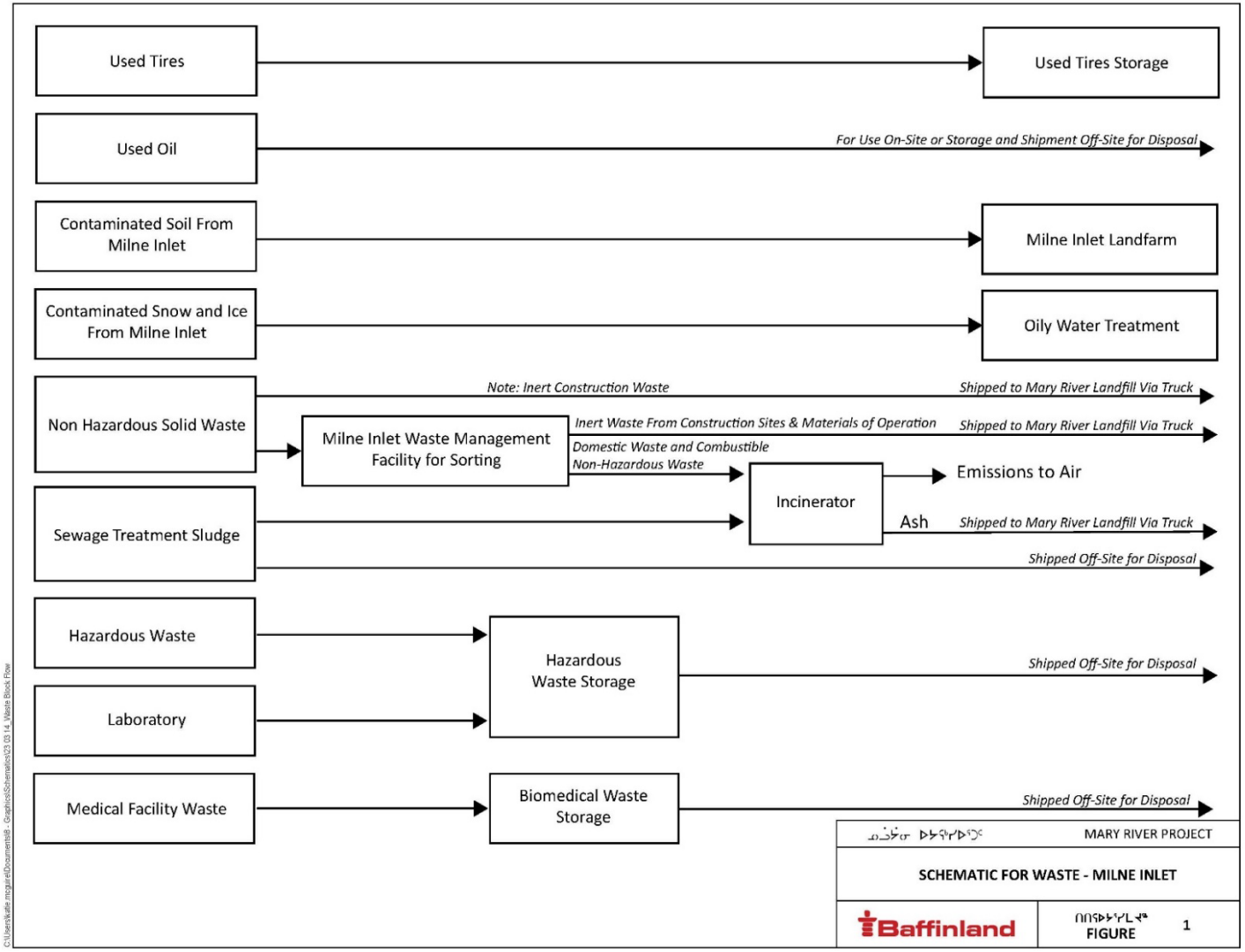
TABLE 11 CONCORDANCE TABLE WITH TYPE 'B' WATER LICENCE TERMS AND CONDITIONS

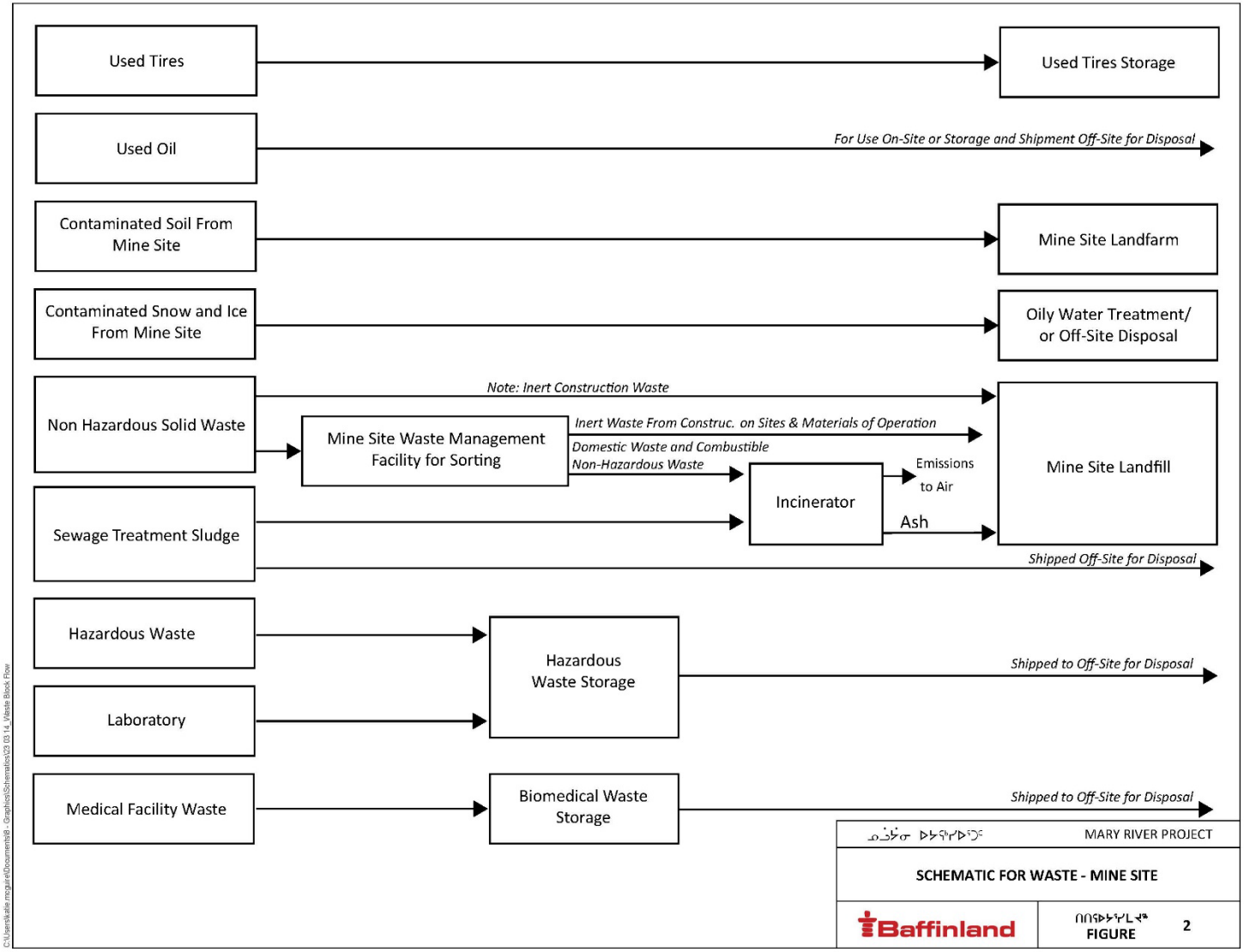
Part	Number	Condition	Section
D	1	The Licensee shall locate areas designated for waste disposal at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark of any water body such that the quality, quantity or flow of Water is not impaired, unless otherwise approved by the NWB in writing.	Section 4.3.1
D	2	The Licensee shall not practice on-site landfilling of domestic Waste unless otherwise approved by the NWB in writing.	Section 4.7
D	3	The Licensee is authorized to dispose of all acceptable food waste, paper waste and untreated wood products in an incinerator.	Section 4.5
D	4	The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood to prevent the deposition of Waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding Waters, unless otherwise approved by the Board in writing.	Section 4.6
D	5	The Licensee shall provide to the NWB documented authorization from all communities in Nunavut receiving Wastes from the Mary River Exploration Project prior to any backhauling and disposal of wastes to those communities.	Section 5.4
D	6	Licensee shall provide to the NWB a copy of the written authorization received from the Licensee of 2AM-MRY1325 at least 30 days prior to backhauling waste from facilities and undertakings under this licence to facilities associated with Licence 2AM-MRY1325.	Section 5.4
D	7	The Licensee shall backhaul and dispose of all hazardous wastes, waste oil and non-combustible waste generated through the course of operation at a licensed waste disposal facility.	Section 4.8 Section 5.1
D	8	The Licensee shall maintain records of all waste backhauled and records of confirmation of proper disposal of backhauled Waste. These records shall be made available to an Inspector or the NWB upon request.	Section 4.0 Section 5.4

TABLE 12 CONCORDANCE TABLE WITH PROJECT CERTIFICATE TERMS AND CONDITIONS

Number	Condition	Section
11	The Proponent shall develop and implement an Incineration Management Plan that takes into consideration the recommendations provided in Environment Canada's Technical Document for Batch Waste Incineration (2010).	Section 4.5
12	Prior to commencing any incineration of on-site Project wastes, the Proponent shall conduct at least one stack test immediately following the commissioning of each temporary and permanent incinerator.	Section 4.5
64	The Proponent shall ensure that its Environment Protection Plan incorporates waste management provisions to prevent carnivores from being attracted to the Project site(s). Consideration must be given to the following measures: The Proponent shall ensure that its Environment Protection Plan incorporates waste management provisions to prevent carnivores from being attracted to the Project site(s). Consideration must be given to the following measures: • Installation of an incinerator beside the kitchen that will help to keep the food waste management process simple and will minimize the opportunity for human error (i.e. storage of garbage outside, hauling in a truck (odors remain in truck), hauling some distance to a landfill site, incomplete combustion at landfill, fencing of landfill, etc.); and • Installation of solid carnivore-proof skirting on all kitchen and accommodation buildings (i.e., heavy-duty steel mesh that would drop down from the edge of the buildings/trailers and buried about a half meter into the ground to prevent animals from digging under the skirting).	This Condition has been addressed in the Environmental Protection Plan (BIM-5200-PLA-0003)

Appendix B Block Flow Diagrams for Solid Waste





APPENDIX C MILNE PORT AND MINE SITE LAYOUTS