# Hope Bay Mining Ltd.

# **Hazardous Waste Management Plan**

Hope Bay, Nunavut, Canada

Rev<sub>0</sub>

Prepared for

Hope Bay Mining Ltd.

Prepared by



Project Reference Number SRK 1CH008.018

September 2009





# Hope Bay Project Hazardous Waste Management Plan Revision 0

# **Hope Bay Mining Ltd.**

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### 1 Introduction

#### 1.1 Reason for Document

Hope Bay Mining Limited (HBML) is conducting advanced exploration and developing the infrastructure for the Hope Mining Project in the Hope Bay Belt, Nunavut, Canada. The Hope Bay Belt (HBB) is located on Inuit Owned Land in the West Kitikmeot region of Nunavut approximately 125 km southwest of Cambridge Bay and 75 km northeast of Umingmaktok (Figure 1).

The HBB mineral exploration rights property comprises an area of 1,078 km² and forms a contiguous block that is approximately 80 km long by up to 20 km wide and consists primarily of the Roberts Bay area, the Doris camp, a fuel storage and re-fuelling facility at Patch Lake, and the Boston and Windy Camps. The entire property is maintained in good standing by Hope Bay Mining Limited of Vancouver, British Columbia.

An integral part of the activities associated with the advanced exploration and infrastructure development program is to ensure the prompt and appropriate collection, segregation, handling, storage, transport, and disposal of all hazardous wastes generated at the sites in a safe, efficient and effective manner. Proper management of these wastes minimizes the risk to the site workforce, the general public and the environment, and reduces the financial cost to the company.

The Government of Nunavut, *Environmental Guidelines for the General Management of Hazardous Wastes in Nunavut*, (January, 2002) define "hazardous wastes" as:

"A contaminant which is a dangerous good that is no longer used for its original purpose and is intended for recycling, treatment, disposal or storage."

Those same guidelines state that:

- "A hazardous waste does not include a contaminant that is:
- Household in origin
- Included in class 1, Explosives or class 7, Radioactive materials of Transportation of Dangers Goods Regulations (Canada)
- Exempted as a small quantity
- An empty container
- Intended for disposal in a sewage system or by land filling that meets the applicable standards set out in schedules I, III or IV of the *Nunavut Environment Guideline for Industrial Waste Discharges in Nunavut.*"

This, the *Hope Bay Project Hazardous Waste Management Plan* has been prepared by Hope Bay Mining Ltd. (HBML) and is submitted to the Nunavut Water Board in compliance with Part G, Item

11 of Water Licence No. 2AM-DOH0713. The plan also provides details on how HBML complies with, Part D, Items 5 and 6 of Water Licence No. 2BE-HOP0712 and 2BB-BOS0712. A single *Hope Bay Project Hazardous Waste Management Plan* has been developed to address the requirements of the three Water Licenses in order to ensure that the Hope Bay Project has a consistent plan and that all Hope Bay Belt activities operate in a uniform and integrated manner with regard to the collection, handling, segregation, storage, transport, and disposal of all hazardous wastes.

#### 1.2 Hope Bay Belt Location & Operator

The Hope Bay Belt (HBB) activities are centred at approximately N 68<sup>0</sup> 09' and W 106<sup>0</sup> 40' and extend from the head of Roberts Bay (an extension of Melville Sound) in the north to the Boston site located approximately 70 km to the south (Figure 1).

The HBB and all components of the supporting infrastructure, with the exception of the jetty, have been constructed and are being operated on Inuit owned land. The jetty, which extends into Roberts Bay, is located on the foreshore Crown Land.

#### The HBB includes:

- The Robert's Bay Jetty area, located at approximately N68°10' W106° 36' which includes the marine jetty, a bulk fuel storage facility, maintenance shops, lay-down areas and incinerator
- The Doris Camp located at approximate N 68<sup>o</sup>08' W 106<sup>o</sup> 36' which was constructed in 2008 and designed to house a maximum of 160 people, as well as the necessary infrastructure to support the camp and the exploration drilling activities currently underway
- The Patch Lake facility located at approximately N68° 04' W106° 35' which consists of a total of six fuel storage tanks housed within a purpose built secondary containment facility
- The Windy Camp located at approximate N 68° 03' W 106<sup>0</sup> 37'. This camp is currently not inhabited and is under "care and maintenance" with regular inspections conducted by Hope Bay Project personnel
- The Boston Camp located at approximate N 67<sup>0</sup> 39' W 106<sup>0</sup> 23', which is currently in care and maintenance but is scheduled for re-opening in 2010. It consists of a camp constructed to house a maximum of 100 people, as well as the necessary infrastructure to support the camp and the exploration drilling activities in the area.

The HBB is owned and operated by:

**Operator**: Hope Bay Mining Ltd.

Suite 300 -899 Harbourside Drive North Vancouver, B.C. V7P 3S1

**Parent Company**: Newmont Mining Corporation

1700 Lincoln Street Denver, Colorado

USA 80203

#### 1.3 Hazardous Waste Management Policy

All hazardous waste generated at the HBB will be stored, transported and disposed of in a safe manner and in a manner that minimizes, to the extent possible, the risk to the site workforce, the general public and the environment.

All hazardous waste generated at the HBB must be identified, collected in appropriate labelled containers, segregated into compatible groups, securely stored, transported and disposed of in an appropriate and approved manner.

All documentation related to the management of hazardous wastes generated at the HBB sites will be accurately completed, submitted and a copy retained by Hope Bay Mining Ltd.

#### 1.4 Hazardous Waste Management Plan Objectives

The objective of this plan is to act as a general resource for employees and contractors on the HBB and enable the appropriate designated individuals on the sites to properly and safely collect, segregate, handle, treat, store, transport, and dispose of all hazardous waste in a safe and efficient manner.

It also provides a summary of the same to the relevant regulatory agencies and to the land owners who have regulatory interest over the site, its facilities and operations.

#### 1.5 Hazardous Waste Management Plan Review and Revision

This *Hope Bay Project Hazardous Waste Management Plan* is considered an "active" document. As such, the plan will undergo an annual review and be revised as necessary as the project proceeds. The level of detail within the document will continue to be refined with subsequent revisions as each modification will incorporate the lessons learned. It also reflects input from stakeholders, including but not limited to, INAC, Environment Canada, the NIRB, the Kitikmeot Inuit Association (KIA) and Nunavut Tunngavik Incorporated.

Each revision will be recorded in Table 1.

Table 1: Hope Bay Project Hazardous Waste Management Plan History of Revisions

Revision Number	Revision Date	Description of Revisions	Revised By	Approved By
0	September 2009	Hope Bay Project Hazardous Waste Management Plan, September 2009	SRK Consulting	

#### 1.6 Responsibility

The implementation, regular review and updating of the *Hope Bay Project Hazardous Waste Management Plan* is the responsibility of the Manager, Environmental Compliance and the Senior Environmental Coordinator. Revisions will be made to the procedures where necessary to reflect changes in site conditions and any new legislation or regulations that may be applicable. The revised document will then be submitted for review and approval by senior management of Hope Bay Mining Ltd. and, once approved; all relevant personnel will be notified and provided with at least one hard copy of the revised *Hope Bay Project Hazardous Waste Management Plan*. These plans will be numbered and assigned so that older versions can be collected and replaced.

# 2 Applicable Legislation, Licensing and Guidelines

Part G, Item 11 of Water Licence No: 2AM-DOH0713 issued to HBML by the Nunavut Water Board (NWB) specifies that the operator shall prepare and provide a revised Hazardous Waste Management Plan and this, the *Hope Bay Project Hazardous Waste Management Plan- Revision 0*, is submitted to address this requirement.

Part G, Item 11 of Water Licence No: 2AM-DOH0713 also states that "the handling and disposal of wood crates used in the transport of sodium cyanide shall be included in the Plan". This *Hope Bay Project Hazardous Waste Management Plan- Revision 0* does not include a discussion of the management of wood crates used in the transport of sodium cyanide because such material is not currently used on site and therefore has not been transported to the site. In the event that sodium cyanide is to be employed on site, a revised *Hope Bay Project Hazardous Waste Management Plan* will be submitted for review and approval prior to the transport of any bulk sodium cyanide materials to site.

#### Part D, Item 5 and 6 of Water Licence No. 2BB-BOS0712 states:

- 5. The Licensee shall backhaul and dispose of all hazardous wastes, waste oil and non-combustible waste generated through the course of the operation at an approved waste disposal site.
- 6. 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 upon request.

#### Part D, Item 5 and 6 of Water Licence No. 2BE-HOP0712 states:

- 5. The Licensee shall backhaul and dispose of all hazardous wastes generated through the course of the operation in an approved waste disposal site.
- 6. 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 upon request.

#### Part G, Item 12 and 13 of Water Licence No: 2AM-DOH0713 states:

- 12. The Licensee shall back haul and dispose of all hazardous wastes generated through the course of the operation at an approved waste disposal site.
- 13. The Licensee shall maintain records of all waste backhauled and confirmation of proper disposal. These records shall be made available to an Inspector upon request.

This *Hope Bay Project Hazardous Waste Management Plan –Revision 0* provides a discussion of how HBML complies with Part G, Item 12 and 13 of Water Licence No: 2AM-DOH0713 and Part D, Items 5 and 6 of Water Licence No. 2BE-HOP0712 and 2BB-BOS0712.

The Plan was prepared based on provision provided in the *Environmental Guidelines for the General Management of Hazardous Wastes in Nunavut*, issued by the Department of Sustainable Development, Environmental Protection Service (EPS), Government of Nunavut in January, 2002. The Plan was also prepared based on a review of the following guideline documents issued by that department:

- Environmental Guideline for Industrial Waste Discharges
- Environmental Guideline for Waste Antifreeze
- Environmental Guideline for Waste Batteries
- Environmental Guideline for Waste Solvents
- Disposal Guidelines for Fluorescent Lamp Tubes
- Guideline for the Management of Waste Lead and Lead Paint
- Municipal Solid Wastes Suitable for Burning
- Guideline for the Management of Waste Lead and Lead Paint.

# 3 Hope Bay Project Hazardous Waste Management Plan

#### 3.1 General Principles

#### 3.1.1 3Rs

The HBB has adopted the 3R's of waste management: Reduce, Reuse, and Recycle. The objective of these activities is to divert as much material from becoming a waste (hazardous or otherwise) and therefore reduce the total volume of wastes requiring handling, storage, transportation and disposal. Some of the most significant actions undertaken in this regard include:

#### Reduce

- Purchasing only the required amounts of materials
- Employing inventory control methods in an attempt to ensure that quantities of materials are completely utilized
- Establishing maintenance schedules that are consistent with the equipment manufacturers suggested replacement
- Maintaining and protecting materials to prevent damage and breakage
- Substituting less hazardous chemicals where possible
- Selecting products that provide the maximum "life-of-material".

#### Reuse

- If appropriate, collect and return materials to the system (i.e. equipment, operations, etc.) following maintenance or repair
- If appropriate, filter and/or use additives to replenish lost properties of material in order to extend its useful life
- Testing to ensure items (i.e. batteries) are "spent" before removing from service.

#### Recycle

 Commercial companies are used to the maximum extent practical to recycle appropriate materials on a fee for service basis.

#### 3.1.2 Hazardous Waste Storage

Despite the adoption and implementation of the 3R's of waste management, the HBB does produce hazardous wastes that require appropriate management, storage, transportation and disposal. The following general principles are applied to ensure the effective and efficient management of Hope Bay Project wastes:

- Only personnel trained in the Transportation of Dangerous Good (TDG), which includes
  packaging, storage and shipping procedures for hazardous wastes, and equipped with appropriate
  Personal Protective Equipment (PPE) are designated to handle hazardous waste materials and to
  have access to the storage area
- All hazardous wastes are stored in a location that provides the maximum amount of safety for site personnel and protection of the environment
- No incompatible chemical wastes are packaged or stored together based on the Work Site Hazardous Materials Information System (WHMIS) and/or the MSDS for each chemical
- All hazardous waste materials are store according to compatibility with other chemical waste in the storage area
- All hazardous wastes are stored on-site for the shortest practical length of time and in a manner that prevents release to the environment
- A material specific appropriate approved "container" is the primary containment for the majority
  of all liquid or solid hazardous wastes generated at the HBB sites
- Appropriately sized containers are used for collecting and storing the waste
- In the case of 4 or 10 litre plastic containers, 20 litre pails, and 205 litre drums, the container is also the "package" and shall have the appropriate waste label affixed to it. If multiple containers are included in the same box, the box is considered a package
- Efforts are made not to contaminate the outside of the container during filling. Containers and
  packages with visible signs of external contamination will not be used in the storage or transport
  of hazardous wastes
- Personnel ensure that all container and package lids are secured tightly and boxes are taped shut
- If reusing an empty container for waste collection, personnel ensure that the original label is defaced
- Personnel ensure that all approved containers and packages are structurally capable of withstanding the aggregate weight of all containers within the package
- Personnel ensure that all containers are properly packaged. All containers other than 4 or 10 litre plastic containers, 20 litre pails, or 210 litre drums must be enclosed in a package with sufficient appropriate packing material to ensure that the container(s) will not be damaged during transport
- All waste containers and packages are properly labelled according to the appropriate Work Site Hazardous Materials Information System (WHMIS), MSDS and/or federal *Transportation of Dangerous Goods Regulations*. The following general requirements apply:
  - Each package must be labelled with a waste label (see Appendix A)
  - Each container must be labelled with the container number and contents prior to being packed
  - When more than one container is in a package, each container within must be labelled accordingly

- Only proper chemical names are used on all labels. Acronyms, trade names, or chemical formulas are NOT acceptable
- UN numbers (United Nations Committee of Experts on the Transport of Dangerous Goods Numbers) should be used in labelling where applicable to ensure clear identification of materials
- Personnel ensure that all labels are securely attached to the container so that it will not come
  off during transport; and
- All other labels must be removed from the container or otherwise made illegible (i.e. painted over, scratched out, or otherwise defaced).
- All hazardous waste that is transported off site for recycling or disposal must be packaged and transported according to the specifications provided in the Nunavut Environmental Guideline for General Management of Hazardous Waste, the Northwest Territories Guideline for General Management of Hazardous Waste in the NWT, the federal Transportation of Dangerous Goods Regulations, and, if applicable the International Air Transportation Association (IATA) Dangerous Goods Regulations so as to meet specific requirements for packaging and labelling (i.e. placards, limitations, etc.).

#### 3.2 Site Hazardous Waste Record Keeping

Part G, Item 13 of Water Licence No: 2AM-DOH0713 and Part D, Item 6 of Water Licence No. 2BB-BOS0712 and No. 2BE-HOP0712 require HBML to maintain records of all waste backhauled and records of confirmation of proper disposal of backhauled waste. In order to accomplish this, HBML maintains a current and accurate record of all hazardous waste materials generated on site and all materials transported off site. That record, at a minimum, includes:

- A list of the materials being stored
- The volume of each material being stored
- The type of container used to store the material
- The location of the stored material
- A brief summary of the human health and/or environmental risk posed by each stored material.

In addition, HBML maintains a copy of all hazardous waste manifests for all materials that have been shipped from the site.

# 4 Site Management of Hazardous Wastes

#### 4.1 Introduction

The Hope Bay Project does not consider the on site storage of hazardous wastes as an acceptable long term waste management solution.

All hazardous wastes generated in the HBB sites are temporarily stored in appropriate containers which are then placed into appropriate, temporary containment located in a designated area near the Roberts Bay Incinerator. Care is taken that only compatible materials are stored in the area to ensure that all wastes are stored in a safe and secure manner.

In general, the temporary storage facility itself and the hazardous wastes within the facility are stored according to the following:

- Drainage into and from the storage location is controlled to prevent spills or leaks from leaving the site and to prevent run off from exiting the site
- Incompatible wastes are segregated by chemical compatibility to ensure the safety of workers and of the facility
- Only personnel trained in the Transport Dangerous Goods (TDG) / WHMIS for packaging, storage and shipping procedures for hazardous wastes and equipped with appropriate Personal Protective Equipment (PPE) will handle the materials and have access to the storage area
- The waste materials are stored in a secure manner with controlled access. Only persons authorized to enter and appropriately trained in waste handling procedures have access to the material storage area
- All persons interacting with hazardous wastes will be required to wear appropriate PPE
- Regular inspections are performed and recorded. Containers are placed so that each container can be inspected for signs of leaks or deterioration
- Leaking or deteriorated containers are removed as soon as practical and their contents transferred to a sound container
- A record is maintained of the type and amount of waste in storage
- The storage facility is equipped with emergency response equipment appropriate for the type and volume of materials stored within (i.e. spill kit, appropriate type of fire extinguisher, etc.).

The following provides a summary of the various hazardous wastes generated on site and how each is managed.

#### 4.2 Waste Antifreeze

#### 4.2.1 Definition

"Antifreeze" is defined as a chemical additive (ethylene glycol and propylene glycol) that lowers the freezing point of water in cooling or heating systems. For the purpose of this plan, antifreeze used in fuel systems is not included. Ethylene glycol and propylene glycol antifreeze are used to lower the freezing point of water with the former generally used in engines and other mobile equipment. Propylene glycol is generally used in building heating systems. Both types of antifreeze have anti-foaming agents and corrosion inhibitors that are added to prevent the corrosion of metal.

Ethylene and propylene glycol are toxic by ingestion and many of the corrosion and antifoaming inhibitors added to antifreeze are also toxic. In addition, during use the material picks up wear metals from the engine and pipes (such as lead, phosphorous and cadmium) which are also toxic.

"Waste antifreeze" is antifreeze that is no longer useable for its intended purpose due to the build up of impurities or loss of original properties and is therefore diverted to storage, recycling or disposal.

Mishandling and mismanagement of this waste could potentially result in a hazard to people and the environment.

Both ethylene and propylene glycol are water soluble. Improper disposal can potentially result in the contamination of drinking water, groundwater and surface lands. Fish, aquatic animals and people can be poisoned.

If antifreeze or waste antifreeze is allowed to enter sewage treatment works in sufficient concentrations it may affect the bacteria responsible for sewage treatment. Improperly disposed of antifreeze can result in the melting of permafrost which could affect building foundations.

Waste antifreeze is a contaminant under the Nunavut *Environmental Protection Act* and must be managed as a hazardous waste.

#### 4.2.2 Waste Antifreeze Management & Labelling

#### Storage

All waste antifreeze is stored as follows:

- When possible, re-use the original container, containers manufactured for the purpose or bulked into good quality 16 gauge (or lower) steel or plastic 205 Litre drums
- Use only containers that are sound, sealable and not damaged or leaking
- Containers will be clearly labelled according to the Work Place Hazardous Materials Information System (WHMIS) and the relevant TDG requirements
- At a minimum, the labelling of waste antifreeze will include the following information:

Waste Poisonous Liquids, N.O.S.

Subsidiary Name: Ethylene glycol mixture

P.I.N.: UN2810 Classification: 6.1, 9.2 Packing Group II, 111 Special Provisions 102, 109

- All storage containers will be kept sealed or closed at all times
- All storage containers will be stored in manner that prevents damage from weathering and from physical damage
- Temporary on site storage will be in an appropriate container located within a dedicated, secure area with controlled (restricted) access
- Waste antifreeze will **NEVER** be stored with food or in used food containers such as bottles or cans, as it is toxic if ingested.

The short term storage of waste antifreeze will only be an interim measure to permit time for the collection of sufficient volumes for cost effective transport to a recycling or disposal facility. At no time will the site store waste glycol in quantities greater than 1000 litres for a period greater than 180 days.

#### 4.2.3 Transportation

The transport of waste antifreeze will be completed with the proper TDG classification, packaging, labelling and manifesting as required by the transport authority. Containers that are suitable for transporting waste antifreeze include 205 litre steel and plastic drums that are in good condition. Prior to shipping, all containers will be inspected to ensure that they sound, securely covered, suitably and plainly labelled.

#### 4.2.4 Disposal

The preferred method for disposal of bulk waste antifreeze will be shipping the material to a registered recycling or disposal facility. Contacts for recycling or disposal companies are available by contacting the waste management associations listed in Appendix II of the Nunavut *Environmental Guideline for General Management of Hazardous Waste*.

Waste antifreeze will not be disposed of in a landfill. Waste antifreeze will not be disposed of in the sewage management system or drains because it can destroy the bacteria responsible for sewage treatment and contaminate ground and surface waters.

#### **Alternate Disposal Consideration**

In Nunavut, consideration will be given to proposals for alternate management methods that provide a level of environmental protection equivalent to complying with the *Environmental Guideline for Waste Antifreeze*, Department of Sustainable Development, Environmental Protection Service (EPS),

Government of Nunavut. The EPS must approve of the alternative disposal method prior to implementations and the approval may be subject to specific conditions.

Disposal of glycols in an industrial incinerator, with supplied air, adequate temperatures and retention time, may be approved by EPS if the costs and distances to a recycler are prohibitive.

#### 4.3 Waste Solvent Management

#### 4.3.1 Definition

Solvent is defined as an alcohol or petroleum based liquid capable of dissolving another substance (the solute) to form a uniformly dispersed mixture at the molecular level. The major uses include paint and coatings (paints, varnishes, and lacquers), industrial cleaners and extractive processes. Solvents are generally produced from petroleum or alcohol feedstock. Many solvents are flammable and toxic; substances that can contribute to fire hazards and the contamination of air and water.

Solvent vapours, if they originate from flammable solvents, can explode. Depending on the type of solvent the vapour may be explosive in air at concentrations as low as one percent.

Solvents are toxic by ingestion, skin contact, and vapour inhalation. Solvent vapours can also deprive the lungs of oxygen.

Numerous human health disorders are attributed to solvent exposures. Long term or chronic exposure to specific types of solvents can damage vital organs and affect the human immune system.

Improperly managed solvents and waste can harm or kill plants, wildlife and aquatic life. Water contaminated by solvents can adversely affect a community water supply system and the health of the community.

Chlorinated solvents bio-accumulate and are difficult to destroy. Chlorinated solvents are commonly found in cleaning and degreasing operations.

Waste (used) solvents are a contaminant under the Nunavut *Environmental Protection Act* and must be managed as a hazardous waste.

#### 4.3.2 Waste Solvent Management & Labelling

#### **Storage**

All waste solvent will be stored as follows:

- Re-use original containers, where possible, containers manufactured for the purpose or bulked into good quality 16 gauge or lower steel or plastic 205 Litre drums
- Use containers that are sound, sealable and not damaged or leaking

- Containers will be clearly labelled according to the requirements of the Work Place Hazardous Materials Information System (WHMIS) and the relevant TDG
- At a minimum, the labelling of waste solvent will include the following information (depending on the type of solvent):

Waste Naphta, Petroleum P.I.N.: UN1256 Classification: 3 Packing Group I, II, III

OR

Waste Flammable Liquids, N.O.S. P.I.N.: UN1993 Classification: 3 Packing Group I, II, III

- All storage containers will be kept sealed or closed at all times
- All storage containers will be stored in manner that prevents damage from weathering and from physical damage
- Temporary on site storage will be in an appropriate container located within a dedicated, secure area with controlled (restricted) access
- Waste solvent will NEVER be stored with food or in used food containers such as bottles or
  cans, as it is toxic if ingested.

The short term storage of waste solvent will only be an interim measure to permit time for the collection of sufficient volumes for cost effective transport to a recycling or disposal facility. At no time will HBB sites store waste solvent in quantities greater than 1000 litres for a period greater than 180 days.

#### 4.3.3 Transportation

The transport of waste solvent will be completed with the proper classification, packaging, labelling and manifesting as required by regulations related to TDG. Containers that are suitable for transporting waste solvent include 205 litre steel and plastic drums that are in good condition. Prior to shipping, all containers will be inspected to ensure that they are sound, securely covered, suitably and plainly labelled.

#### 4.3.4 Disposal

The preferred method for disposal of bulk waste solvent will be shipping the material to a registered recycling or disposal facility. Contacts for recycling or disposal companies are available by contacting the waste management associations listed in Appendix II of the Nunavut *Environmental Guideline for General Management of Hazardous Waste*.

Waste solvent will not be disposed of in a landfill. Waste solvent will not be disposed of in the sewage management system or drains because it can destroy the bacteria responsible for sewage treatment and contaminate ground and surface waters.

#### **Alternate Disposal Consideration**

In Nunavut, consideration will be given to proposals for alternate management methods that provide a level of environmental protection equivalent to complying with the *Environmental Guideline for Waste Solvents*, Department of Sustainable Development, Environmental Protection Service (EPS), Government of Nunavut. The EPS must approve of the alternative disposal method prior to implementations and the approval may be subject to specific conditions.

#### 4.4 Waste Batteries

#### 4.4.1 Definition

"Waste batteries" is a general term used to describe spent electrical storage batteries which are no longer useful for their intended purpose and are intended for storage, recycling, treatment or disposal.

Lead batteries (i.e. automotive and heavy equipment batteries) contain sulphuric acid and lead. Rechargeable batteries (i.e. industrial forklift, radio and transmitter batteries) usually contain either potassium hydroxide or nickel cadmium.

Examples of waste battery types include: lead acid; potassium hydroxide; nickel cadmium. For the purpose of this plan, waste batteries also include dry cell size MA to D, 6 or 9-volt domestic batteries. Batteries in products such as radios and flash lights, (examples: AAA to D cells, 6 or 9 volt consumer batteries) and button batteries (which may contain mercury, cadmium and silver) must be disposed of in an appropriate manner by segregating from regular domestic waste and shipping offsite for disposal.

All batteries contain a corrosive liquid or semi-liquid electrolyte that is either a strong acid or a strong base. In addition, batteries contain metals, such as cadmium, lead, lithium and potassium, which generally are toxic and persist in the environment.

Hazards from waste batteries are associated with improper handling and disposal. Improper handling can release corrosive fluids that can cause chemical burns and damage to a wide variety of materials. Improper disposal of batteries may result in the release of corrosive fluids and dissolved metals into groundwater and the environment. Metals in batteries, including lead, mercury and cadmium, are toxic and bio-accumulate in plants and animals and persist in the environment.

Waste batteries are a contaminant under the *Environmental Protection Act* and must be managed as a hazardous waste.

#### 4.4.2 Waste Battery Management & Labelling

#### **Storage**

All industrial batteries will be temporarily stored as follows:

- Only containers that are sound, sealable and not damaged or leaking will be used
- Spent batteries will be placed into a lined plywood box with a sound sealable lid
- Each container will be labelled according to the requirements of the Work Site Hazardous Materials Information System (WHMIS) and the relevant TDG regulations
- At a minimum, the labelling of containers containing spent batteries will include the following information (depending on the type of batteries):

Battery, wet, filled with acid P.I.N.: UN2794 Classification: 8 Packing Group III

OR

Battery, wet, filled with alkali P.I.N.: UN2795 Classification: 8 Packing Group III

OR

Battery, dry, containing potassium hydroxide solid P.I.N.: UN3028 Classification: 8 Packing Group III

- All storage containers will be kept sealed or closed at all times
- All storage containers will be placed on wooden pallets to keep the containers and batteries off the ground during storage and transport
- All storage containers will be stored in manner that prevents damage from weathering and from physical damage
- Temporary on site storage will be in a liner plywood container within a dedicated, secure area with controlled (restricted) access.

The temporary storage of spent (waste) batteries on site is only an interim measure to permit time for the collection of sufficient volumes for cost effective transport to a recycler or disposal facility. At no time will the storage of spent batteries at the HBB sites exceed 1000 kilograms for a period greater than 180 days.

#### 4.4.3 Transportation

The transportation of waste batteries to a recycling, treatment, or disposal facility will be completed with the proper TDG classification, packaging, labelling and manifests for the specific transport.

Spent batteries will be transported in secure packages (drums or lined boxes) secured to wooden pallets. The spent batteries will be stacked upright inside the package and separated by a layer of adsorbent material, cardboard or plywood. The package will be maintained in an upright position and sealed during transport. Prior to shipping, all containers will be inspected to ensure that they sound, securely covered, suitably and plainly labelled.

#### 4.4.4 Disposal

The long term goal for the management of spent batteries at HBB sites is 100% recycling. All spent batteries will be transported to a recycling or disposal company or disposed of in an approved management facility.

#### **Alternate Disposal Consideration**

In Nunavut, consideration will be given to proposals for alternate management methods that provide a level of environmental protection equivalent to complying with the *Environmental Guideline for Waste Batteries*, Department of Sustainable Development, Environmental Protection Service (EPS), Government of Nunavut. The EPS must approve of the alternative disposal method prior to implementations and the approval may be subject to specific conditions.

#### 4.5 Fluorescent Tubes

#### 4.5.1 Definition

Fluorescent light tubes contain mercury phosphor powder and trace cadmium. These chemicals are environmental contaminants under the Nunavut *Environmental Protection Act*.

Hazards from spent fluorescence tubes are associated with improper handling and disposal, particularly in the event that a tube is broken resulting in the release of mercury phosphor powder and trace cadmium contained within the tube. In addition, both mercury phosphor powder and cadmium are toxic and bio-accumulates in plants and animals and persist in the environment. As a result, special handling and safety procedures are required of persons handling broken fluorescent tubes.

The only disposal method for fluorescent tubes (whether whole or broken) is through an approved hazardous waste recycling or disposal company.

#### 4.5.2 Spent Tube Management & Labelling

#### **Storage**

- All fluorescent tube shipping boxes are retained for the storage of unbroken spent tubes
- Provided that the fluorescent tubes are not broken they are placed in the original shipping
  container and securely stored in the dedicated hazardous waste storage area located in the
  vicinity of the Robert's Bay incinerator
- If fluorescent tubes are broken, compliance with the Government of Nunavut *Environmental Guideline for General Management of Hazardous Waste* and the *Transportation of Dangerous Goods Regulations* (Canada) is required. As a result, all broken tubes will be stored in the following manner
- All containers used for the storage of broken fluorescent tubes will be sound, sealable and not damaged or leaking
- A good quality 16 gauge or lower gauge metal or plastic 205 litre drum will be suitable for the storage of broken tubes
- A label will be fixed to each container according to the requirements of the Work Site Hazardous Materials Information System (WHMIS) or the relevant TDG regulations
- At a minimum, the labelling of broken tubes will include the following information:

Broken Fluorescent Tubes Subsidiary Name: Mercury Phosphor Powder Classification: 1.1 Packing Group II

- The containers will be sealed or closed at all times
- Each container will be protected from the weather and from physical damage
- Use wooden pallets to keep the containers off the ground during storage and transport
- Storage should be in a secure area with controlled access.

#### 4.5.3 Transportation

#### Whole (Unbroken) Tubes

Provided that the fluorescent tubes are not broken and are packaged in their original shipping box, no special requirements are needed for transportation purposes (i.e. transport as a hazardous waste is not required).

#### **Broken Tubes**

If fluorescent tubes are broken, compliance with the Government of Nunavut *Environmental Guideline for General Management of Hazardous Waste* and the Transportation of Dangerous Goods

Regulations (Canada) is required. Prior to shipping, all containers with broken fluorescent tubes will be inspected to ensure that they sound, securely covered, suitably and plainly labelled.

#### 4.5.4 Disposal

The Nunavut *Guideline for Industrial Waste Dangerous Discharges* prohibits landfill disposal if mercury is present in excess of 0.2 mg/L (parts per million) based on leachate quality test results.

As the only disposal method for fluorescent tubes is through an approved hazardous waste recycling or disposal company, all spent tubes will be shipped off-site for disposal at a facility approved by the Government of Nunavut. Contacts for recycling or disposal companies are listed in the Nunavut Disposal Guidelines for Fluorescent Lamp Tubes or by contacting the waste management associations listed in Appendix II of the Nunavut Environmental Guideline for General Management of Hazardous Waste.

#### 4.6 Penetrable Wastes (Sharps, Broken glass, etc.)

#### 4.6.1 Definition

"Penetrable wastes" or "Sharps" are defined as waste consisting of any object that can penetrate the skin. This includes: needles, syringes, scalpel/razor blades, broken pipettes, broken glassware, broken blood tubes, and broken culture dishes, slides, cover slips, tubing with needles attached, wooden applicator sticks or any other objects that can puncture skin or a plastic bag.

#### 4.6.2 Penetrable Waste Management & Labelling

- Sharps are never disposed of into another waste vessel such as garbage bags or bins
- All sharps will be disposed of in a dedicated sharps container
- Small sharps will be collected in the specially designed puncture proof plastic containers that are labelled appropriately and located in each camp washroom
- All larger sharps such as broken glass are collect in a 205 litre barrel (plastic or steel) or another form of containment (such as a plywood box), as appropriate.

#### **Small and Potentially Contaminated Sharps**

All small sharps collected in the specially designed puncture proof plastic containers located in
each camp washroom will be picked up by the on site "contract" health care providers and
disposed of by that agent in an appropriate manner.

#### **Broken Glass Labelling & Storage**

All larger sharps (i.e. broken glass, etc.) will be temporarily stored as follows:

• The container used to stored broken glass will be labelled

Waste: Broken Glass

- All storage containers will be kept sealed or closed at all times
- All storage containers will be stored in manner that prevents damage from weathering and from physical damage
- Temporary on site storage will be in a lined plywood box located within a dedicated, secure area with controlled (restricted) access.

#### 4.6.3 Transportation

The transportation of broken glass in 205 litre plastic drums does not does not require any special dispensations. The drums will be maintained in an upright position and sealed during transport. Prior to shipping, all containers will be inspected to ensure that they sound, securely covered, suitably and plainly labelled.

#### 4.6.4 Disposal

All broken glass will be transported to an offsite recycling facility or disposed of in an approved manner at an appropriate off site facility. HBML is currently in the process of seeking the necessary approvals for the construction and operation of a landfill in the vicinity of the Doris Camp for the disposal of non-hazardous solid wastes as approved in Part G, Item 10 of Water Licence No. 2AM-DOH0713<sup>1</sup>. When this facility is approved and in operations, clean waste glass may be deposited in that facility.

#### 4.7 Waste Lubricating Oils

#### 4.7.1 Definition

Waste lubricating oils are defined as the various used motor oils, pump oils, hydraulic fluids, etc. generated on site.

Generally these materials have a low flash point and pose a similar human health and environmental risk to soils, vegetation and wildlife if spilled as the original unused products, although waste lubricants may also contain measureable amounts of heavy metals and other potential contaminants as a result of their use.

Mishandling and mismanagement of these wastes represent a hazard to people and the environment.

If waste lubricants are poured into sewage treatment works in sufficient concentrations it may poison the bacteria responsible for sewage treatment. Improper disposal of waste lubricants can result in the melting of permafrost which could affect building foundations and channelling of runoff. Proper care will be taken with all types of used lubricants.

10. The Licensee is authorized to dispose of and contain all non-hazardous solid wastes at the Landfill or as otherwise approved by the Board.

-

<sup>&</sup>lt;sup>1</sup> Part G, Item 10 of Water Licence No. 2AM-DOH0713 states:

Waste lubricants are not specifically identified as a contaminant under the Nunavut *Environmental Protection Act*, however they do pose environmental risk if not properly managed and have therefore been included in this plan.

#### 4.7.2 Waste Lubricants Management & Labelling

#### **Storage**

All waste lubricants will be stored as follows:

- Use original containers, where possible, containers manufactured for the purpose or bulked into good quality 16 gauge or lower steel or plastic 205 Litre drums
- Use only containers that are sound, sealable and not damaged or leaking
- Containers will be clearly labelled according to the requirements of the Work Place Hazardous Materials Information System (WHMIS) and the relevant TDG regulations
- At a minimum, the labelling of waste lubricants will include the following information:

# Non-Regulated Waste Waste Lubricants

- All storage containers will be kept sealed or closed at all times
- All storage containers will be stored in manner that prevents damage from weathering and from physical damage
- Temporary on site storage will be in an appropriate container located within a dedicated secure area with controlled (restricted) access
- Waste lubricants will NEVER be stored with food or in used food containers such as bottles or
  cans.

The short term storage of waste lubricants will only be an interim measure to permit time for the collection of sufficient volumes for cost effective transport to a recycling or disposal facility.

#### 4.7.3 Transportation

The transport of waste lubricants will be completed with the proper classification, packaging, labelling and manifesting as required by the transport authority. Containers that are approved for transporting waste lubricants include 205 litre steel and plastic drums that are in good condition and that contain a secure (leak proof) lid. Prior to shipping, all containers will be inspected to ensure that they sound, securely covered, suitably and plainly labelled.

#### 4.7.4 Disposal

The preferred method for disposal of bulk waste lubricants will be shipping the material to a registered recycling or disposal facility. Waste lubricants will not be disposed of in a landfill. Waste

lubricants will not be disposed of in the sewage management system or drains because it can destroy the bacteria responsible for sewage treatment and contaminate ground and surface waters.

#### **Alternate Disposal Consideration**

The Hope Bay Project is currently exploring the potential to burn waste lubricants in a furnace specifically engineered and constructed for that purpose as such action will conform to the authorizations provided in Appendix D of the Doris North Project Certificate. The heat produced by burning would be used to heat suitable buildings. The investigation includes:

- Costs and operating requirements
- The type of waste lubricants suitable for burning
- The type and volume of emissions generated during burning
- Maintenance and management of the furnace
- Occupational and public health and safety issues inherent in such a furnace and its use.

In the event that a suitable furnace to burn waste lubricants in an environmentally sound manner is identified, Hope Bay Mining will make a separate application to the Department of Sustainable Development, Environmental Protection Service (EPS), Government of Nunavut. Approval for the proposed furnace and the alternate management plan for on-site waste lubricants will be secured from the EPS prior to the purchase, installation or commissioning of the furnace.

#### 4.8 Biohazards & Sewage Treatment Sludge

#### 4.8.1 Definition

A biohazard refers to a biological substance that may pose a threat to the health and safety of humans, animals or the environment. Anything that comes in contact with a biohazard is normally deemed contaminated. There are essentially two potential categories of biohazard waste generated at the Hope Bay Project site: sewage sludge and medical waste (sharps, blood soaked towels or gauze).

Although not specifically identified as a hazardous waste these materials do have the potential pose a level of safety and environmental risk if not properly managed and have therefore been included in this plan.

#### 4.8.2 Medical Wastes

Medical wastes management and disposal is the responsibility of the on site "contract" health care providers. Such material is collected by the on site health care provider in specially designed puncture proof plastic container and disposed of by that agent in an appropriate manner.

#### 4.8.3 Sewage Sludge

The release of sewage water and sludge into water bodies adds nutrients to the receiving lakes which, under certain conditions, can lead to increase rates of algal growth. When the algal matter decays, oxygen is consumed within the water column, again reducing the available oxygen in the water column to sustain aquatic life. Consequently, the release of untreated sewage wastewater and sludge into receiving water bodies can affect the ability of these water bodies to sustain aquatic life.

Sewage sludge typically consumes oxygen from the water column if they are placed into areas where they ultimately will end up on the bottom of a lake. In northern lakes, this can have adverse effects in lakes that are shallow and are covered by a relatively thick ice cover over an extended winter period. In these lakes, dissolved oxygen within the water column will decrease naturally over the winter months, as oxygen is used up by biological activity within the remaining unfrozen portion of the water column; however, generally sufficient oxygen remains to sustain aquatic life. Any additional oxygen consumer (such as untreated sewage sludge) can result in there being insufficient oxygen in the water column under the ice cover to sustain life within the lake, which would lead to the death of the over-wintering fish populations within these lakes (extract from Miramar Revised Water Licence Application, April 2007).

#### **Storage**

All sewage sludge will be stored as follows:

- Use 16 gauge or lower steel or plastic 205 Litre drum lined to facilitate removal of material to incinerator
- Use only containers that are sound, sealable and not damaged or leaking
- Containers will be clearly labelled
- At a minimum, the labelling of sewage sludge will include the following information:

#### Non-Regulated Waste Sewage Sludge

- All storage containers will be kept sealed or closed at all times
- All storage containers will be stored in manner that prevents damage from weathering and from physical damage
- Temporary on site storage will be in a dedicated area with controlled (restricted) access
- Sewage sludge will NEVER be stored with food or in used food containers such as bottles or
  cans.

The short term storage of sewage sludge will only be an interim measure and all sludge will be incinerated as soon as practicably possible.

#### **Transportation**

The on-site transport of sewage sludge will be completed with the proper packaging and labelling. Containers that are used for transporting sewage sludge must be in good condition and include a secure (leak proof) lid. Prior to moving a container, it will be inspected to ensure that they sound, securely covered, suitably and plainly labelled.

#### **Disposal**

On May 6, 2008, Hope Bay Mining Ltd. made application to the Nunavut Water Board (NWB) to, among other things "install and operate a Westland CY2020 FA, or similar model incinerator, in order to more effectively meet the requirements of Part G, Items 5 and 6 of Water Licence No. 2AM-DOH0713".

The NWB approved the request on June 6, 2008 by way of Motion 2008-07.

Currently, sewage treatment plant sludge are incinerated in the Westland Model CY 100 –CA-D-O (dual Chamber) incinerator located in the Roberts Bay Jetty area at approximately N 68<sup>0</sup> 10.470' W 106<sup>0</sup> 37.11'.W.

#### **Alternate Disposal Consideration**

Consistent with its intent to conserve natural resources, HBML is currently investigating opportunities for using the dried sewage sludge as a fuel or fertilizer for re-vegetation if the material is found to be chemically suitable.

Sewage sludge generated by the on-site SaniBrane sewage treatment facility have a typical solids content of 25-30 % after the frame press, giving the material a consistency of top soil. This material can be further composted or it can be incinerated. If the material can be further processed and subjected to composting at high enough temperatures to destroy remaining pathogens, the compost could possibly be used as a source of fertilizer for rehabilitation in the future. The sludge will be required to be acceptable to local regulators as well as comply with regulations in terms of metal content and pathogen content.

The sludge are reported to sustain combustion at 50% solids. If the sludge can be adequately dried it could be used as a source of fuel, possibly even to sustain composting temperatures at high enough levels. Burning of the sludge would have to comply with emission requirements contained in Water License No 2AMDOH0713 and the ash would need to be safely disposed of in an appropriate facility. HBML is committed to investigating these and other opportunities to ensure their environmental footprint is limited to the extent possible.

#### 4.9 Incinerator and Wood Ash

#### 4.9.1 Definition

The operation of the Westland Model CY-100-CA-D-O Incinerator located at the Roberts Bay site and the approved burning of waste solid wood in the burn pan both generate ash which contains remnants of metals (i.e. nails, etc.) and other "foreign" material. Currently, as the potential impact of the on-site disposal of these materials has not been fully assessed, both streams of ash are transported off site for appropriate disposal.

Incinerator and wood ash are not specifically identified as a contaminant under the Nunavut *Environmental Protection Act*, however may have the potential to pose an environmental risk if not properly managed and have therefore been included in this plan.

#### 4.9.2 Ash Management & Labelling

#### **Storage**

All ash will be stored as follows:

- Good quality 16 gauge or lower steel 205 litre drums are used for ash storage
- Use containers that are sound, sealable and not damaged or leaking
- Containers will be clearly labelled
- At a minimum, the labelling of ash will include the following information:

Non-Regulated Waste Incinerator Ash w/Debris

Or

Non-Regulated Waste Wood Ash w/Debris

- All storage containers will be kept sealed or closed at all times
- All storage containers will be stored in manner that prevents damage from weathering and from physical damage
- Temporary on site storage will be in a dedicated secure area with controlled (restricted) access.

The short term storage of ash will only be an interim measure to permit time for the collection of sufficient volumes for cost effective transport to a recycling or disposal facility.

#### 4.9.3 Transportation

The transport of ash will be completed with the proper classification, packaging, labelling and manifesting as required by TDG regulations. Containers that are suitable for transporting ash include

205 litre steel drums that are in good condition and that contain a secure (leak proof) lid. Prior to shipping, all containers will be inspected to ensure that they sound, securely covered, suitably and plainly labelled.

#### 4.9.4 Disposal

The method for disposal of bulk ash is shipping the material to an approved disposal facility.

#### **Alternate Disposal Consideration**

The Hope Bay Project is currently exploring the potential to dispose of the incinerator and wood ash on site in an approved alternate location.

In the event that the on-site disposal of ash in an environmentally sound manner is identified, Hope Bay Mining will make a separate application to the appropriate regulatory and other authorities. Approval for ash disposal on site ash will be secured from all relevant authorities prior to commissioning the plan.

# 5 Registering Hazardous Waste Generators, Carriers and Receivers

When hazardous waste is transported off site, the generator (Hope Bay Mining Ltd.), carrier and receiver are registered with the Environmental Protection Service, Department of Sustainable Development, the Government of Nunavut Protection Services. Hope Bay Mining Ltd. is registered with the Government of Nunavut as a waste generator.

Hope Bay Mining Ltd. ensures that the each material carrier and the receiver of those materials is either registered in Nunavut or in the province or territory in which the company is based.

The following information is provided when applying for a registration number:

#### **Generator:**

- Company name, address, phone number and contact person, including position
- Location and description of the activity taking place which results in the generation of the hazardous waste
- Expected type, quantity and method of storage of hazardous waste.

#### Carrier:

- Company name, address, phone number and contact person, including position
- Proof of transport liability insurance
- Operating authority for transport in Nunavut or outside the Nunavut territory as needed
- Confirmation that the company meets the training requirements of the transport authority.

#### Receiver:

- Company name, address, phone number and contact person, including position
- Location and description of the management facilities and activities for hazardous waste
- Expected type, quantity and method of storage of hazardous waste.

# 6 Waste Manifests for Transporting Wastes

The *Transportation of Dangerous Good Regulations* require that a completed hazardous waste manifest form accompany each shipment of hazardous waste. Manifests are available from the Environmental Protection Service, Government of Nunavut and are completed by Hope Bay Mining Ltd. personnel prior to the of site shipment of any hazardous wastes.

The completed manifest form provides:

- Detailed information on the types and amounts of hazardous waste being shipped
- A record of the firms or individuals involved in the shipment
- Information on the storage, treatment or disposal of the waste and confirmation that they reached their intended final destination.

Waste manifest completion instructions are provided on the reverse side of each manifest. Further assistance in completing a waste manifest can be obtained by contacting the Department of Community Government and Transportation-Motor Vehicles Division, Government of Nunavut.

The Generator (Consignor), Carrier and Receiver (Consignee) each complete their portion of the manifest.

The information provided on the manifest as well as other TDGR requirements (i.e.: labelling) are intended to assist first responders (police, ambulance, fire fighters) with hazard information in the unlikely event that an accident occurs during transportation.

The Hope Bay Project site maintains a record of all hazardous waste manifests for materials that have been shipped from the site.

## 7 Document Control Record

This, the *Hope Bay Project Hazardous Waste Management Plan – Revision 0*, September 2009, has been reviewed and is approved by:

Table 2: Hope Bay Project Hazardous Waste Management Plan Document Approval

Position	Name	Signature	Date
Environmental Coordinator			
Senior Environmental Coordinator			
Environmental Compliance Manager			
Director, Environmental & Social Responsibility			
Operations Manager			
Compliance Manager			

The re-issuance of this document have been reviewed and approved by the Quality Assurance and Management and are authorized for use within Hope Bay Mining Ltd.

Table 3: Hope Bay Project Hazardous Waste Management Plan Document Revision History

		Document Control Revision History	ory		
Rev. No.	Page No.	Details of Revision	Name	Initial	Date

Table 4: Hope Bay Project Hazardous Waste Management Plan Document Distribution

Date	Сору #	Name	Department/Location	File Type
	1			
	2			
	3			
	4			
	5			
	6			
	7			
	8			
	9			
	10			
	11			

#### **Disclaimer**

"This report and the opinions and conclusions contained herein ("Report") contains the expression of the professional opinion of SRK Consulting (Canada) Inc. ("SRK") as to the matters set out herein, subject to the terms and conditions of the agreement dated April 2008, HBML Professional Services Agreement (HBML.BOC-CM.PSA.003) (the "Agreement") between Consultant and Hope Bay Mining Ltd. ("Hope Bay Mining"), the methodology, procedures and sampling techniques used, SRK's assumptions, and the circumstances and constraints under which Services under the Agreement were performed by SRK. This Report is written solely for the purpose stated in the Agreement, and for the sole and exclusive benefit of Hope Bay Mining, whose remedies are limited to those set out in the Agreement. This Report is meant to be read as a whole, and sections or parts thereof should thus not be read or relied upon out of context. In addition, this report is based in part on information not within the control of SRK. Accordingly, use of such report shall be at the user's sole risk. Such use by users other than Hope Bay Mining and its corporate affiliates shall constitute a release and agreement to defend and indemnify SRK from and against any liability (including but not limited to liability for special, indirect or consequential damages) in connection with such use. Such release from and indemnification against liability shall apply in contract, tort (including negligence of SRK whether active, passive, joint or concurrent), strict liability, or other theory of legal liability; provided, however, such release, limitation and indemnity provisions shall be effective to, and only to, the maximum extent, scope or amount allowable by law."

This report, "Hope Bay Project Hazardous Waste Management Plan", has been prepared by SRK (Consulting) Canada Inc.

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# **Hazardous Waste Identification**

	***	
	Waste:	
	P.I.N.:	
	Classification:	
	Packing Group:	
	Pakage # of	
	Waste Generator No.:	
	Waste Manifest Form #	<del></del>
<b>Generator Contact</b>		Carrier Contact
Hope Bay Mining Ltd.		Name:
Hope Bay Project		Address:
Dept		Phone #
Phone #		