



Waste Management Plan  
for the  
Confirmation and Exploration Program  
Pine Point District, Northwest Territories

## Purpose

This document is provided in support of the Mackenzie Valley Land and Water Board (MVLWB) Type A Land Use Permit and Type A Water Licence Application for the Pine Point Mining Limited Confirmation and Exploration Program (CEP). The intent of this document is to describe how this environmental management and monitoring plan relates to the CEP and to list applicable guidelines and standards. It was developed with the available CEP information. This document is not intended for approval but is provided for review purposes and will be further developed and refined as the regulatory process proceeds.

## Version History

Pine Point Mining Limited is responsible for the distribution, maintenance, and updating of this document. Changes that do not affect the intent of the document will be made as required (e.g., phone numbers, names of individuals). The table below indicates the version of this document, and a summary of revisions made.

| Revision # | Section(s) Revised | Description of Revision  | Issue Date       |
|------------|--------------------|--|------------------|
| 1.0        | -                  | Version for Type A Water Licence and Type A Land Use Permit Applications | 25 November 2020 |
|            |                    |  |                  |
|            |                    |  |                  |

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## Waste Management Plan

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## Abbreviations and Definition

| Abbreviation | Definition                               |
|--------------|--|
| ANFO         | Ammonium Nitrate Fuel Oil                |
| ENR          | Environment and Natural Resources (GNWT) |
| GNWT         | Government of the Northwest Territories  |
| NA           | Not Anticipated                          |

## 1.0 Summary

This management plan has been prepared for the Confirmation and Exploration Program at the Pine Point District. This plan identifies the waste minimization activities, types of waste that might be produced as part of the permitted activities and methods of waste handling and disposal.

## 2.0 Introduction

Pine Point Mining Limited (PPML), a wholly owned subsidiary of Osisko Metals Incorporated (Osisko Metals), is investigating the historic Pine Point Mine area with the objective of recommending mining of the lead and zinc deposits in the area. Osisko Metals head office is located at 1100 Ave Des Canadiens de Montreal, Bureau 300, Montreal, Quebec, H3B 2S2.

PPML is preparing to undertake a Confirmation and Exploration Program (CEP) to obtain information for ongoing engineering studies. The CEP will cover mineral leases and claims between Hay River and Fort Resolution, NWT (Figure 1). The CEP is situated about 10 km south of the Great Slave Lake. Access to the claims and leases is mainly via existing roads and trails that can be accessed from the public Highway. The mineral leases are situated mostly north of the Territorial Highways 5 and 6 that connects Hay River to the west of the former Pine Point town and Highway 6 which continues eastward towards the hamlet of Fort Resolution.

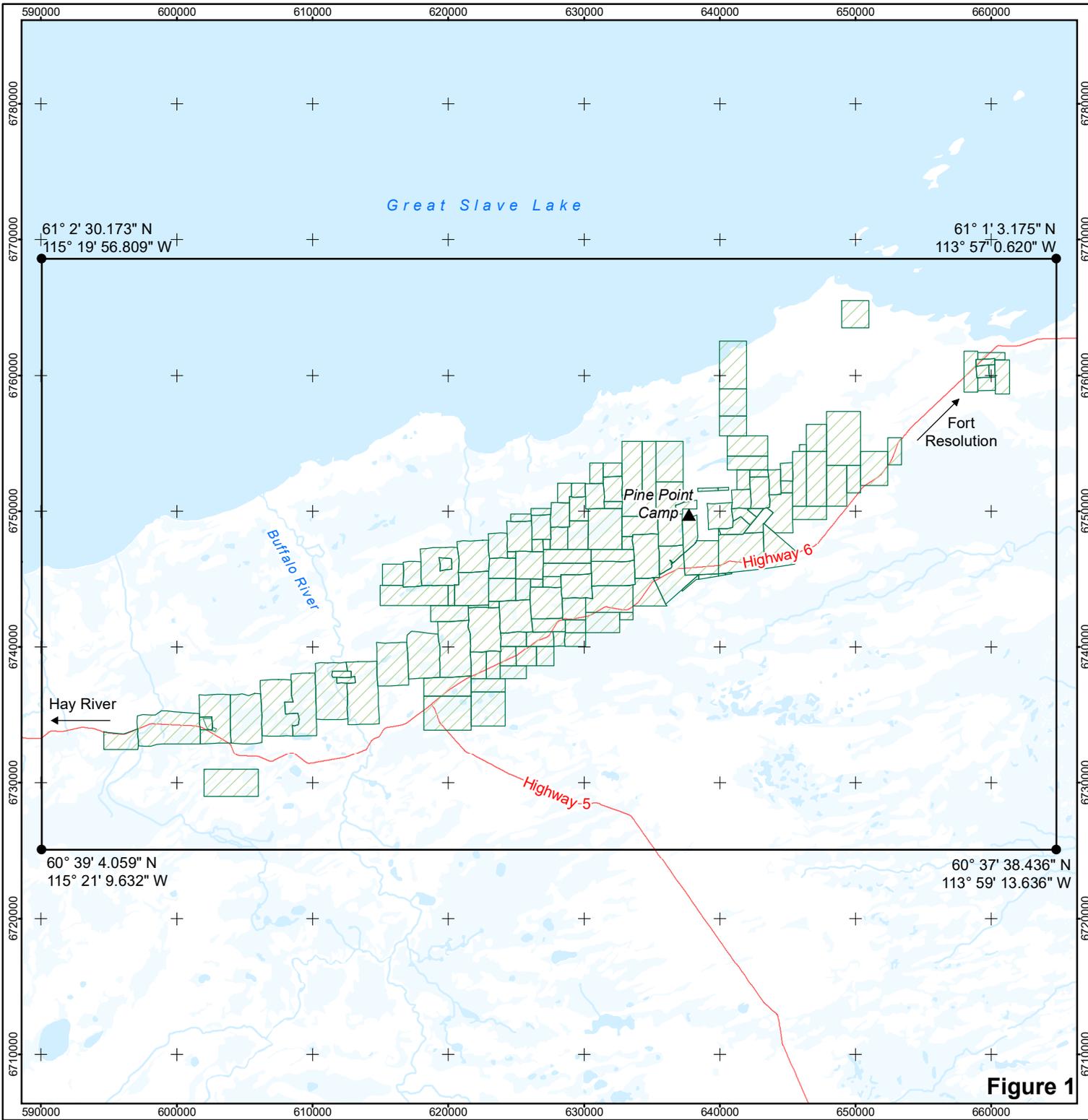
### 2.1 Effective Date

This Plan will be effective upon approval by the MVLWB.

### 2.2 Proponent Principles

This plan incorporates the basic principles of waste management including source reduction, reuse, recycle/recovery, treatment and disposal.

PPML is committed to conducting operations within the environmental standards of the exploration industry, in compliance with the directions of this Waste Management Plan and all conditions of permits and licenses authorizing related activities, and will comply with laws and regulations relevant to the activities.

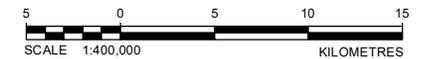


**LEGEND**

-  Proposed Area of Activity
-  PPML Mineral Tenure and Surface Leases
-  Main Road Access
-  Waterbody
-  Watercourse
-  Wetland

**REFERENCE**

BASE DATA OBTAINED FROM CANVEC®  
DEPARTMENT OF NATURAL RESOURCES CANADA  
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DATUM: NAD 1983 CSRS UTM ZONE 11N  
CREATED BY: AURORA GEOSCIENCES LTD.



FILE ID: PPM-20201019-PP\_Confirmation\_and\_Exploration\_Program

|                |   |  |         |              |        |                 |     |                 |       |                 |        |                 |                |  |
|----------------|---|--|---------|--------------|--------|-----------------|-----|-----------------|-------|-----------------|--------|-----------------|----------------|--|
| PROJECT        | PINE POINT MINING LIMITED   |  |         |              |        |                 |     |                 |       |                 |        |                 |                |  |
| TITLE          | <b>CONFIRMATION AND EXPLORATION PROGRAM</b>   |  |         |              |        |                 |     |                 |       |                 |        |                 |                |  |
|                |  | <table border="1"> <tr> <td>PROJECT</td> <td>PPM-20031-NT</td> </tr> <tr> <td>DESIGN</td> <td>RM   08/04/2017</td> </tr> <tr> <td>GIS</td> <td>JM   12/08/2020</td> </tr> <tr> <td>CHECK</td> <td>RM   20/10/2020</td> </tr> <tr> <td>REVIEW</td> <td>SM   20/10/2020</td> </tr> <tr> <td colspan="2">SCALE AS SHOWN</td> </tr> </table> | PROJECT | PPM-20031-NT | DESIGN | RM   08/04/2017 | GIS | JM   12/08/2020 | CHECK | RM   20/10/2020 | REVIEW | SM   20/10/2020 | SCALE AS SHOWN |  |
| PROJECT        |   | PPM-20031-NT   |         |              |        |                 |     |                 |       |                 |        |                 |                |  |
| DESIGN         |   | RM   08/04/2017  |         |              |        |                 |     |                 |       |                 |        |                 |                |  |
| GIS            |   | JM   12/08/2020  |         |              |        |                 |     |                 |       |                 |        |                 |                |  |
| CHECK          | RM   20/10/2020   |  |         |              |        |                 |     |                 |       |                 |        |                 |                |  |
| REVIEW         | SM   20/10/2020   |  |         |              |        |                 |     |                 |       |                 |        |                 |                |  |
| SCALE AS SHOWN |   |  |         |              |        |                 |     |                 |       |                 |        |                 |                |  |

**Figure 1**

Waste management principles applied in PPML's CEP (ordered most to least preferred) are outlined in Table 1:

**Table 1: Waste Management Principles**

|                                   |   |
|-----------------------------------|---|
| <b>Source reduction</b>           | Elimination or decreases of the volume/mass of waste generated by using alternative methods or processes  |
| <b>Reuse</b>                      | Use of a product more than once for the same use or different purpose, either on site or off site   |
| <b>Recycle/Recovery</b>           | Process by which materials otherwise destined for treatment or disposal are collected, processed, and/or remanufactured into the same or different products either onsite or offsite  |
| <b>Treatment</b>                  | A method which reduces the volume, mass and/or toxicity prior to disposal. Common methods of treatment are thermal, physical, chemical, and biological processes  |
| <b>Release to the Environment</b> | As a last resort, waste disposal may be required when it is not technically or economically feasible to apply preceding waste management activities. Disposal is commonly associated with the final storage location for waste at approved disposal facilities. |

Source: MVLWB 2011

### 2.3 Purpose of the Plan

This Waste Management Plan identifies the types of waste generated by CEP activities and describes how each will be managed – including the infrastructure required.

The Plan is designed to employ best practices that are also in compliance with relevant Acts, Regulations, Permits and Licenses. The Plan was developed following the Guidelines for Developing a Waste Management Plan (MVLWB 2011) and the Government of the Northwest Territories (GNWT 1998), Guideline for the General Management of Hazardous Waste in the NWT.

Proper execution of the Plan will mitigate and minimize the effects of waste on the local environment.

### 2.4 Description of Project

Pine Point Mining Limited (PPML) plans to conduct confirmation and exploration activities in Pine Point District.

The recent completion of a Preliminary Economic Assessment (PEA) concluded that the project has technical and financial merit and was sufficient to make the decision to advance to a feasibility study. The PEA recommended that additional work to advance the discovery of new deposits, increase the existing mineral resources by conducting further delineation drilling, conduct additional studies, sampling and test work for engineering design, metallurgical testing and groundwater testing.

Based on the recommendations from the PEA, a Confirmation and Exploration Program (the CEP) is proposed that will collect samples and provide information as recommended by the PEA. The information will be used to support a feasibility study and for detailed engineering design of mining and processing, including infrastructure requirements needed for the construction and operation of a mine. The work is expected to be ongoing as input requirements to the design and engineering are further refined.

## Waste Management Plan

The Confirmation and Exploration Program (CEP) will consist of:

- exploration by drilling/pitting to find additional mineral deposits;
- definition core drilling of the known mineral deposits to establish the extent and grade of the mineralization;
- geotechnical investigations by core drilling and test pitting;
- collection of metallurgical test samples of rock by small scale quarrying and collection of pit water samples;
- establishing groundwater recharge and discharge rates for existing pits and water reinjection wells;
- use of heavy machinery and vehicles;
- construction and maintenance of camps; and
- fuel storage.

### 2.5 Locations of Waste Management Activities

The camp infrastructure and location of waste management facilities for the existing Pine Point camp are shown in Figure 2.

Location and waste management layout for the new CEP camp has not yet been determined.

CEP operations may make use of one or more camp facilities set up on previously disturbed ground. Any new camp locations will first be approved by the GNWT Department of Lands Inspector.

### 2.6 Site Description

The Pine Point District contains approximately 100 known zinc and lead deposits, distributed along three trends which extend in aggregate along approximately 65 km of strike and 7 km of width. Previous mining and exploration activities were undertaken in the area by Teck/Cominco. Teck/Cominco ceased mining and milling operations in 1987. The mined deposits lie along a 35 km trend and included a mill and a full town site at Pine Point which were removed at the end of mining.

The area east of the Buffalo River is predominantly a brownfield site. The open pits remain and in many cases the pits have naturally filled with water (a combination of groundwater and surface water). Adjacent to the open pits are waste rock dumps (predominantly dolomite, a form of limestone). Each of the open pit sites were accessed by roads constructed with a crushed dolomite surface and which connect back to the central processing plant and the former townsite of Pine Point. The tailings management facility adjacent to the former processing plant is subject to a current Water Licence and Land Use Permit held by Teck Metals Ltd. (MV2017L2-0007 and MV2019X0006). Historic access for exploration in the area has been extensive, consisting of bulldozed and hand cut lines extending throughout the region.

## Waste Management Plan

The Project is located within the Taiga Plains Mid-Boreal ecoregion (ECG 2009). Topography is gently undulating with three major hill systems (Cameron Hills, Trout Upland, and Horn Plateau). Characterization of the environment in this ecoregion includes a cold boreal climate (mean annual temperature -2.0°C to 5.5°C (ECG 2009). Conditions are wet (mean annual precipitation 310 to 410 mm) in low-lying poorly drained areas which retard organic matter decomposition. Peatlands of varying thickness occur over extensive areas as patterned and horizontal fens, treed bogs, and peat plateaus (the latter on permanently frozen organic soils) (ECG 2009). On better-drained upland sites, the interplay of parent materials and active processes such as fire and alluvial deposition results in a mix of deciduous, mixed-wood, and coniferous forests (ECG 2009). Broad scale vegetation includes mixed-wood, deciduous, and coniferous forest fens with black spruce, larch, and dwarf birch; sedges and mosses are widespread, and peat plateaus (complexes of open, stunted black spruce – lichen forest and wet sedge – moss dominated collapse scars) are common (ECG 2009).

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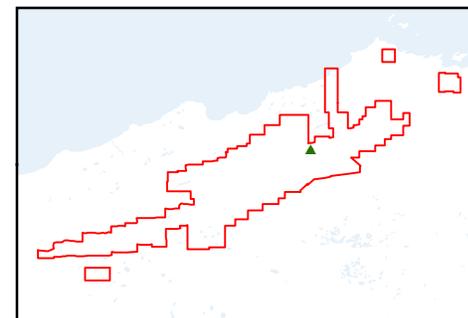
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LEGEND

Pine Point Camp Infrastructure

-  Cold Storage
-  Communications Tower
-  Core Tent/Storage Tent
-  Dry Tents
-  Fuel Storage
-  Generator
-  Greywater Management
-  Kitchen
-  Medic Tent
-  Office Structure
-  Latrine
-  Recreation Facility
-  Sleeper Tents
-  Camp Foot Print



REFERENCE

NTS 50K MAP SHEET: 085B16  
 BASE DATA OBTAINED FROM CANVEC®  
 DEPARTMENT OF NATURAL RESOURCES CANADA  
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 DATUM: NAD 1983 CSRS UTM ZONE 11N  
 CREATED BY: AURORA GEOSCIENCES LTD.



FILE ID: PPM-20201116-Detailed\_Infrastructure

|   |   |                 |
|---|---|-----------------|
| PROJECT   | PINE POINT MINING LIMITED               |                 |
| TITLE   | PINE POINT CAMP DETAILED INFRASTRUCTURE |                 |
|  | PROJECT                                 | PPM-20005-NT    |
|   | DESIGN                                  | RM   08/04/2017 |
|   | GIS                                     | BF   16/11/2020 |
|   | CHECK                                   | SM   17/11/2020 |
|   | REVIEW                                  | SM   17/11/2020 |
| SCALE AS SHOWN  |   |                 |

Figure 2

### 3.0 Identification of Waste Types

Anticipated wastes produced by the Confirmation and Exploration Program, including volumes and disposal methods, are presented in Table 2.

**Table 2: Waste Types Potentially Generated**

| Waste  | Characteristic  | Estimated Maximum Quantity | Disposal Method                          |
|--|---|----------------------------|--|
| <b>Hazardous or Potentially Hazardous</b>                      |   |                            |  |
| Incinerator Ash  | Ash   | 350 kilograms monthly      | To permitted disposal contractor         |
| Batteries  | Sealed batteries  | 12 monthly                 | To recycle as generated                  |
| Chemical Waste   | Cleaning and operations liquids                                   | 100 litres monthly         | To permitted disposal contractor         |
| Contaminated Soils   | Soils with potential contamination from hydrocarbons or additives | 400 kilograms monthly      | To permitted disposal contractor         |
| Used oils and filters, fuels, lubricants, greases and solvents | Fuels, oils and additives   | 1 cubic metre monthly      | To permitted disposal contractor         |
| <b>Non-Mineral</b>   |   |                            |  |
| Domestic Refuse  | Dry waste   | 7,500 kilograms monthly    | Removed from site, or incinerated        |
| Putrescible Waste  | Food waste  | 2,500 kilograms monthly    | Removed from site, or incinerated        |
| Construction Materials   | Wood, metal other solids  | 3,000 kilograms monthly    | Removed from site, burned or incinerated |
| Tires  | Vehicle tires   | 4 monthly                  | To permitted disposal contractor         |
| Vehicle Wash Runoff  |   | .5 cubic metres monthly    | Disposed as referenced in Section 4.4    |
| Greywater  | Water from kitchen and wash uses                                  | 56 cubic metres daily      | Disposed as referenced in Section 4.4    |
| Sewage Solids  | Residual solids   | 1,500 kilograms daily      | Disposed as referenced in Section 4.4    |
| <b>Mineral</b>   |   |                            |  |
| Drill Cuttings   | Non-toxic solid waste   | 450 kilograms daily        | Handled as referenced in Section 4.5     |
| Large Diameter Drill Cuttings                                  | Non-toxic solid waste   | 60 tonnes daily            | Handled as referenced in Section 4.5     |

## 4.0 Management of Each Waste Type

PPML prefers to work with contractors that have experience in the NWT. PPML will require its contractors to comply with permit conditions and follow its management plans. Furthermore, PPML understands that the inspectors have a helpful role in ensuring that all contractors adhere to the permit; PPML will cooperate with the inspectors. The following procedures apply waste management measures to reduce wildlife attractants, reclamation costs and health hazards. Some of the best practices for managing waste are outlined below.

### 4.1 Management of Hazardous and Potentially Hazardous Waste

Hazardous waste material generated from these drilling and/or camp operations will be temporarily stored at a designated, secure location within the camp at least 100 metres from all streams, rivers or lakes. In addition, the contractor will implement the following procedures:

- a) Store hazardous materials in clearly marked containers with lids (e.g., Drums).
- b) Remove hazardous materials from the site regularly to an approved facility for receiving hazardous waste.
- c) Complete an appropriate waste manifest form for transporting hazardous waste.
- d) Transport to Licensed Hazardous Waste Transfer Facility for disposal.

### 4.2 Management of Non-Mineral Non-Combustible Waste

Solid waste will be managed using the following procedures:

- a) Store non-combustible solid waste in secure containers at least 100 metres from a water body.
- b) Progressively remove non-combustible solid wastes from the site and dispose of at an approved facility for receiving solid waste (e.g., Hay River); use empty trucks to back-haul solid waste when practical.
- c) At closure, remove all wastes from the site and dispose at a designated waste facility.

### 4.3 Management of Non-Mineral Combustible Waste

Non-hazardous combustible waste may, depending on composition of the waste, be treated as non-combustible waste (Section 4.2) or open-burned or incinerated to reduce volume and to reduce potential wildlife attractants. Further details on open-burning and incineration are provided below.

Open burning may be used for paper, paperboard packaging and untreated wood only (GNWT 1993). Conditions for open burning are:

- The appropriate materials are segregated and burned in a controlled manner and site so that the fire cannot spread.
- Burn only on days where winds are light, in manageable volumes so that fires do not get out of control.
- Waste wood treated with preservatives such as creosote, pentachlorophenol or heavy metal solutions shall not be burned.

Incineration in an appropriately sized dual-chamber incinerator may be used to reduce putrescible (eg., Food waste) as well as other waste streams compatible with the incinerator being used. Details of incinerator operation are provided in Section 6.0.

## Waste Management Plan

### 4.4 Management of Non-Mineral Liquid Waste

Sewage generated from these operations refers to toilet waste and may include greywater while greywater refers only to water from washing and kitchen facilities. Since sewage may contain pathogens, these waste liquids will be temporarily stored well away from the water supply.

This Waste Management Plan will be updated prior to the establishment of a wastewater/sewage treatment facility.

#### Sewage

- a) Temporarily store sewage in a clearly-marked holding tank located at least 100 metres from any waterbody for future removal from the site, or incinerate at source with waterless incinerating toilet.
- b) Routinely remove stored sewage from the site and dispose of it at an approved facility for receiving and treating sewage waste (e.g., Hay River).
- c) Ash from incinerating toilets used at the camp(s) will be collected and disposed of as described in Section 5 of this Plan.

#### Greywater

- a) Dispose of greywater into a sump that is located on previously disturbed ground in close proximity to the camp(s) at a site that has been approved by the Lands Inspector.
- b) Greywater will be comprised of water from the showers, laundry, bathroom sinks, and kitchen sink.
- c) Hazardous wastes will not be disposed of into the greywater system.

#### ANFO Vehicle Wash Runoff

- a) Capture wash water at the point of production by means such as a lined pad.
- b) As necessary, treat water with an oil/water separator.
- c) Discharge water to an appropriate sump.

### 4.5 Management of Mineral Waste

While the core drilling process is designed to minimize waste product that is associated with recovery of drill core, some of the rock drilled through will be washed to the surface as “cuttings”. Large diameter drilling crushes and grinds all the rock (no core) to cuttings that are then brought to surface. Cuttings will be deposited and buried in a shallow excavation or natural depression located more than 100 metres from the ordinary high water mark of any water feature. Shallow excavations may be established at drill sites in order to meet the needs of the program and may include a drill hole sealed in such a way as to prevent cuttings from migrating down the hole (e.g., placed above a Van Ruth plug set at or near the top of bedrock in the hole). These deposit sites will be established with the full knowledge and approval of the Inspector. PPML will work with the Inspectors to identify appropriate sites for safe disposal of drill cuttings. Care will be taken to ensure that cuttings disposal pits are appropriately sized, that all cuttings are fully buried, and that the site is appropriately restored.

There will not be any mine tailings in the exploration program. Therefore, tailings containment is of not included. Management of waste rock is described in the Bedrock Sampling Management Plan.

## 5.0 Infrastructure Required for Waste Management

The following infrastructure is required to manage waste generated from these mineral exploration and camp operations:

1. Holding Tanks - appropriately sized and clearly marked tanks located within a cleared area and at least 100 metres from a river, stream or lake.
2. Pump/Vacuum Truck – Truck with an appropriately sized tank for transporting and disposing of liquid waste temporarily stored in the holding tanks.
3. Combustion Equipment – Incinerator designed for the purpose for which it is being used. Any incinerator employed for reduction of domestic or putrescible waste must comply with Environment and Climate Change Canada’s Technical Document for Batch Waste Incineration. Any incinerator ash generated at the site will be collected and transported for disposal as hazardous waste to an approved waste disposal facility.
4. Burn Pit for disposal of oversized, nonhazardous paper and wood.
5. Sump for drill cuttings disposal – either existing or constructed.
6. Greywater sump – area where greywater from camp operations may be deposited. The grey water from domestic uses is passed through a grease trap and collected in a sump. The kitchen uses strainer baskets and a grease trap (Appendix A, Figures A1 and A2) to prevent food material from entering the greywater waste stream. The sump is established in material including coarse-grained and unconsolidated sedimentary components. The area contains a plywood box which acts as the initial catchment. The current sump dimensions are 4 m wide by 8 m long by 4 m deep for a total volume of 80 m<sup>3</sup> (Appendix A, Figures A3, and A4). This volume is sufficient to handle greywater production from camp. Greywater outflow lines are checked for leaks regularly, as is the sump. If leaks or indications that the sump is not performing correctly are observed, deficiencies will be corrected while use is paused or reduced as necessary. Drains are flushed to keep them odour-free during operation and seasonal closures. At final closure all grey water lines will be drained, dismantled and removed from site. The sump will be examined and any extraneous waste packaged and removed and then backfilled as necessary.
7. Waste Disposal Facilities – registered and approved facilities that will receive waste materials generated through these operations (see Table 3).

**Table 3: Approved Waste Receiving Facilities**

| Waste Type   | Facility, Waste Generator Number and Location                                   |
|--|---|
| Domestic, putrescible and construction waste                 | Town of Hay River, Hay River, NT  |
| Liquid (sewage) waste  | Town of Hay River, Hay River, NT  |
| Hydrocarbon-contaminated soil                                | Town of Hay River (NTR023), Hay River, NT                                       |
|  | KBL Environmental Ltd. (NTR134, for soil processing facility), Yellowknife, NT  |
| Used oil and waste fuel (burners)                            | Bassett Petroleum (NTR100)  |
|  | Carter Industries (NTR107), 652395 Alberta Ltd. (L&P Disposals), High Level, AB |
| All other hazardous waste types including contaminated water | KBL Environmental Ltd. (NTR123, for general waste), Yellowknife, NT             |

## 6.0 Incinerator Operation

This section will be completed in an updated version of the Waste Management Plan and submitted to the MVLWB for approval at least 60 days prior to operation of an incinerator. The updated version will include the operation manual for the incinerator and an incinerator operation record sheet.

### 6.1 Background

A dual-chamber incinerator will be commissioned only following consultation with the GNWT Inspector to confirm that the make and model is suitable for the intended waste stream, volume of waste anticipated, and operation in cold temperatures.

Non-hazardous, combustible waste products that are appropriate for incineration include the following:

- paper-type products, including cardboard, paper, newspapers and magazines, most packaging, waxed paper, paper towels, serviettes, and paper cups
- food waste, including scraps, bones, coffee grounds and peelings
- natural cloth materials, including clothes, linens, towels and rags
- wood products, including untreated building materials
- pallets, lining and packing materials
- Other products deemed suitable for incineration

Dioxins and furans are frequently encountered as a result of incineration with incomplete combustion due to inadequate equipment and/or improper operation and are therefore also found in the resulting ash (EC 2010). This will be managed by only incinerating appropriate wastes, and proper operation and maintenance of the incinerator for proper combustion. The proper use of the appropriate incinerator is an important part of effective incinerator management (EC 2010).

### 6.2 Incinerator Operation

Trained personnel are responsible for loading, operating and maintaining the incinerator and incinerator records. To help with separation by type, waste will be collected in transparent bags or appropriately marked. The incinerator will be operated in accordance with manufacturer's instructions

All ash resulting from incineration will be stored securely onsite and later transported for disposal as hazardous waste to an approved waste disposal facility.

## 7.0 Monitoring and Evaluation

PPML staff will oversee contractors' operations and will work with them to make sure they are following this plan. The GNWT inspector has an important role in evaluating and monitoring the exploration program and ensuring that waste is being handled and disposed of safely and properly. PPML project management will maintain open lines of communication with the Inspector. This plan will be reviewed annually by PPML; any changes that may be necessary or desirable will be discussed with the Inspector and then submitted to MVLWB.

## 8.0 Contingencies

PPML will work with the Inspector to address any non-compliance issues that may arise with the project activities. Should unforeseen circumstances or natural events arise, PPML and its contractors will:

1. attempt to find a solution that falls within the allowable activities clearly defined in the permit;
2. contact the Inspector to seek advice on an appropriate response; and
3. seek a permit modification (last resort).

## 9.0 References

Environment Canada. 2010. Technical Document for Batch Waste Incineration. January 2010. Available at: [http://publications.gc.ca/collections/collection\\_2010/ec/En14-17-1-2010-eng.pdf](http://publications.gc.ca/collections/collection_2010/ec/En14-17-1-2010-eng.pdf).

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[https://www.enr.gov.nt.ca/sites/enr/files/guidelines/solid\\_wastes\\_suitable\\_open\\_burning.pdf](https://www.enr.gov.nt.ca/sites/enr/files/guidelines/solid_wastes_suitable_open_burning.pdf)

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Waste Management Plan

APPENDIX A: Greywater Management Details and Drawings

**Figure A1 Grease Trap**



**Figure A2 Grease Trap Operation**

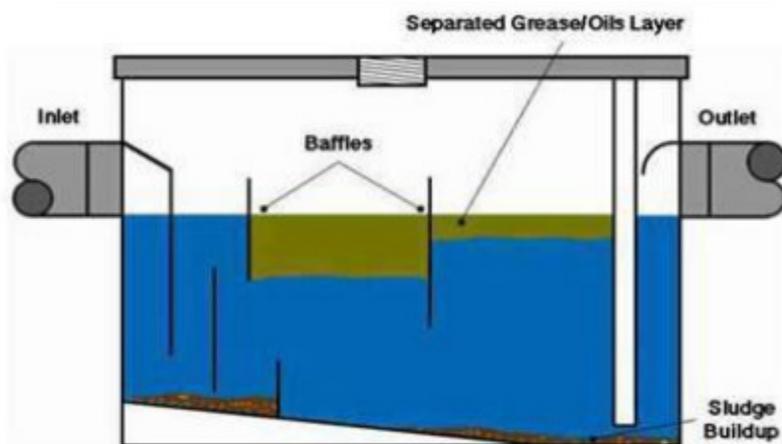


Figure A3 Sump Box Overview

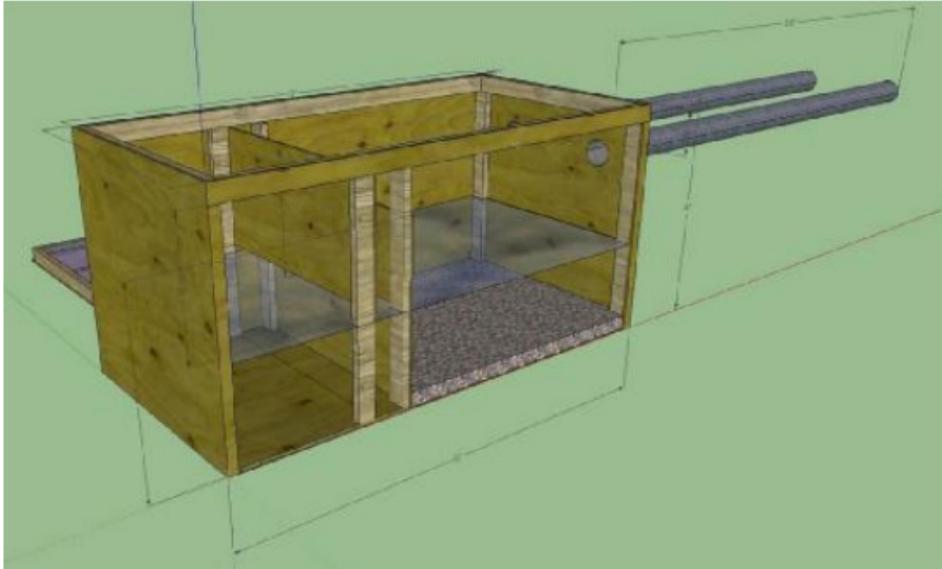


Figure A4 Sump Box Detail

