



**WASTE DISPOSAL PLAN
SLAVE PROJECTS**

AMMENDED OCTOBER 2012

**MMG RESOURCES
26 – 1177 W. HASTINGS ST.
VANCOUVER, BC
V6E2K3**

Guidelines for Waste Incineration

1. All waste will be categorized and any materials not in accordance with the Department of Environments Policy “Municipal Solid Wastes Suitable for Open Burning” will be removed from the waste stream. Only kitchen waste, sewage, and untreated wood and paper products are approved for incineration.
2. Kitchen and human waste is to be collected and incinerated on a daily basis. If volumes warrant then twice daily.
3. “wet” biological waste from kitchens or toilet facilities will be mixed in small volumes with more combustible paper and cardboard materials to ensure total elimination during incineration.
4. A suitable temporary storage facility for garbage awaiting incineration is required that is impervious to wildlife and decreases odours.
5. Any recyclable materials (plastic bottles, aluminium cans) will be separated, packaged appropriately for transport and removed from site for handling in Yellowknife.
6. Clearly marked separate containers for easy categorization of refuse is encouraged.
7. Any industrial refuse contaminated with petroleum based products from lubricants, fuels, or additives will be appropriately packaged for transport to Yellowknife and handling by KBL.
8. Any batteries, chemicals, or other waste categorized as dangerous or hazardous goods will be appropriately packaged and transported to Yellowknife for proper handling and disposal KBL.

9. Daily records of waste streaming and incineration will be kept and be available upon request to inspectors.

10. Records will be kept of all refuse shipped to Yellowknife for disposal, including date, volume, and category. Chain of custody and final disposal records will be requested from Expediter and KBL Environmental to fully document waste disposal. Copies of final disposal certificates will be provided to AANDC with annual reports.

Waste handling procedure and incinerators at exploration camp locations will be inspected on a monthly basis and reviewed for adequacy and performance in regards to the waste stream that they handle, with the following specifics in mind:

- Operating temperature and complete incineration of waste.
- Composition of remaining ash
- Containment of liquid waste within combustion chamber and structural integrity of the burn chamber.
- Integrity and proper function of the stack.
- Care and maintenance of incinerator and burner.
- Accuracy of records and reporting of transport and disposal

For further information, Environment Canada's guide to batch incineration should be consulted. A copy of summary information for this document is provided here.

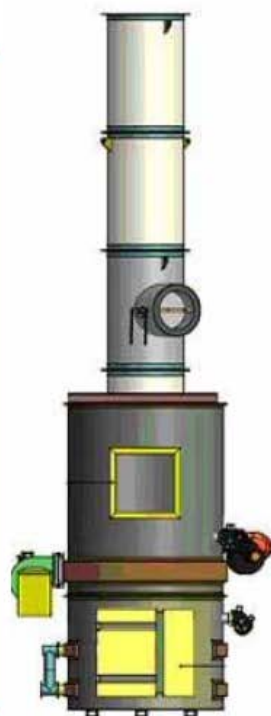


Fact Sheet: Technical Document for Batch Waste Incineration

The *Technical Document for Batch Waste Incineration* provides guidance for owners, operators and regulators on the appropriate incineration technologies and best management practices to minimize releases of toxic substances into the environment.

Six Steps to Better Incineration

- 1 Understand Your Waste Stream
- 2 Select the Appropriate Incinerator
(or Evaluate the Existing System)
- 3 Properly Equip and Install the Incinerator
- 4 Operate the Incinerator
for Optimum Combustion
- 5 Safely Handle and Dispose of
Incinerator Residues
- 6 Maintain Records and Report



For more information, please see the complete document at:

www.ec.gc.ca/gdd-mw/default.asp?lang=En&n=F53EDE13-1

Contact information:

TMB@ec.gc.ca or 819-997-3377



More Details About the Six-Step Process for Batch Waste Incineration

1

Understand Your Waste Stream

The first step in managing your waste is understanding what the waste is. Perform a waste audit to understand its quantity and composition. Based on the results, you can assess what appropriate disposal options should be undertaken. Remember the "3Rs": Reduce, Reuse and Recycle.

2

Select the Appropriate Incinerator (or Evaluate the Existing System)

To ensure that a suitable incinerator is chosen, the call for proposals for incinerator manufacturers who want to provide service for you should include specific information on the characteristics of the residual waste stream you need to dispose of. For facilities with existing incinerators, owners/operators should reassess the suitability of the existing system to manage the current waste stream. The recommended configuration is a dual chamber controlled air incinerator.

3

Properly Equip and Install the Incinerator

Make sure that building and equipment considerations are well planned during the design phase, before installing the incinerator.

4

Operate the Incinerator for Optimum Combustion

To ensure optimum combustion conditions, the incinerator must be operating correctly. Proper operation includes separating the waste, weighing it, mixing it for a specified calorific value, and closing the incinerator door once the waste is loaded, and not re-opening it until the burn is complete. Important considerations such as appropriate operator safety training should be completed.

5

Safely Handle and Dispose of Incinerator Residues

Ash from the primary chamber of the incinerator can contain materials that are hazardous to the operator's health and to the environment. Operators should use personal protective equipment when handling this material. The ash should be disposed of at an approved disposal site.

6

Maintain Records and Report

To demonstrate appropriate operation and maintenance of the incinerator, the facility must maintain records and prepare an annual report.

For more information, please see the complete document at:

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MMG – WASTE CONTROL DOCUMENT

[illegible]

WASTE CATEGORY	SYMBOL
RECYCLABLE MATERIAL	REC
INCINERATOR ASH	ASH
SCRAP METAL / INDUSTRIAL WASTE	IND
EMPTY DRUMS	DRM
PETROLEUM PRODUCTS	PET
HAZARDOUS	HAZ



CY-2020-FA "D"

[Photo: Diesel fired unit]

- **Built In Safety Features**
- **Readily Transportable**
- **Economical Operation**
- **Clean Burning**

Designed for Waste Disposal

Primary Chamber Volume / Heat Release

- 0.5 m³ / 300 MJ/h

Waste Types / Approx. Capacity

- Type No. 1: 20* kg/h
- Type No. 2: 30* kg/h
- Type No. 3: 50* kg/h

(* based on 6 loads/h)

Power Requirements

- 115 volts 60 cycle single phase.

Stack

- 14 gauge stainless steel.
- 33 cm diameter.
- 3 m high.
- c/w stainless steel spark arrester and a hinged base plate for transport.

Casing

- 12 gauge steel.
- Lining: high heat duty castable refractory over high temperature insulation.

Hearth

- Refractory hearth over 6.35 mm steel base.

Doors

- 6.35 mm steel plate c/w heavy duty blade latch.
- Charging Door
 - 46 cm x 61 cm clear opening.
 - Refractory lined over steel plate.
- Ash Door
 - 46 cm x 30 cm clear opening.
 - Refractory lined over steel plate.

Air Supply

- Forced air fan c/w duct to primary air jets and to secondary over-fire air jets.

Timers

- Cycle timer interconnected to air supply fan and gun type burner enclosed in burner housing.

Burners

- 490,000 Btu gun type primary burner. The gun burner is enclosed in protective plate steel housing.
- 280,000 Btu gun type burner in the secondary combustion chamber.

Fuel Supply Options:

- Natural gas "N".
- LPG "LPG".
- Diesel "D" – requires a 450 litre fuel storage tank c/w filter and flexible hose type connection.

Transporter

- Incinerator and fuel storage mounted on skid type frame 365 cm long x 152 cm wide.
- Height: 2.64 m, with stack folded.
- Constructed of 15 cm I Beam c/w bumper posts.

Weight

- 2268 kg.

Options

- LPG, fired burner.
- Diesel fired burner.
- 2.3 m Electric power cord.
- Stack winch.
- 1.3 m³ model CY-2050-FA.
- Cold climate assembly.

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