

Waste Management Plan



AURORA GEOSCIENCES

**Aurora Geosciences Ltd
Silvermet Camp
Nunavut Territory**

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1. WASTE MANAGEMENT PLAN

Aurora Geosciences Ltd's Waste Management Plan is intended to reduce or eliminate the effects of waste on the environment, to provide for public and worker safety. It is our mandate to ensure the natural environment remains pristine to the best of our ability. This document will outline what constitutes waste and hazardous waste in all of our camps. We will outline how to deal with waste you may come in contact with in one of Aurora's camps. It is extremely important to recognize waste or hazardous waste that requires proper treatment, storage and possible transport.

2. Types of Waste

2.1 Food and/or Garbage

This type of waste is very easy to manage and dispose of. It is imperative that all used or old food is incinerated daily using the incinerator on site (specially designed 45 gal drum with a tiger torch burner built specifically for this purpose). The waste will be incinerated for a minimum of 24 hours and allowed to cool and placed in heavy duty garbage bags and sent to the closest community dump (whether it be Kugluktuk or Yellowknife). This waste will be flown to the Waste Management Site.

2.2 Human Waste

A properly designed latrine over-lying a large human dug pit will be host to all human waste. This latrine will always be a minimum of 50m from the closest water source. Any possible chance of the human waste coming into contact with the closest water source will only happen through a natural filtration process.

2.3 Diesel Fuel, Hydraulic Oil and Lubricating Oil

If possible and safety permits, stop the flow and eliminate ignition sources. No smoking is permitted when responding to a diesel fuel, hydraulic oil or lubricating oil spill.

On Land

- ▶ Do not flush into ditches or drainage systems
- ▶ Block entry into waterways by building barrier with soil material to contain spill
- ▶ Remove spill using sorbent pads or digging out soil

On Water

- ▶ Use containment booms to concentrate spill for recovery
- ▶ Use sorbent pads to remove small spill
- ▶ Use a skimmer on large spills

On Ice and Snow

- ▶ Block entry into waterways by building a barrier with snow to contain spill

- ▶ Remove spill using sorbent pads and shovel contaminated ice and snow into plastic buckets with lid and/or polypropylene bags.

Storage and transfer

- ▶ All contaminated water, snow/ice, soils, cleanup supplies, and absorbent materials will be stored in closed, labeled containers. The containers will be stored in ventilated areas away from incompatible materials.

Disposal

- ▶ Consult with Federal and Territorial Environmental Authorities before disposing contaminated material. Possible disposal option on site would be controlled burning of the contaminants and possible incineration of liquid product.

2.4 Gasoline and Aviation Fuel

If possible and safety permits, stop the flow and eliminate ignition sources. Gasoline and Aviation Fuel form vapors that can ignite and explode. No smoking is permitted when responding to a gasoline spill.

On Land

- ▶ Build barriers with soil to block entry into waterways.
- ▶ Do not contain if there is a chance of ignition.
- ▶ Use particulate sorbent material to soak up the spill.

On Water

- ▶ Contain and remove spills only after vapors have dissipated.
- ▶ Use containment booms to concentrate spills.
- ▶ Use a skimmer on contained slick.

On Ice and Snow

- ▶ Block entry into waterways by building a barrier with snow to contain the spill.
- ▶ Remove spill using particulate sorbent and shovel contaminated ice and snow into plastic buckets with lid and/or polypropylene bags.

Storage and Transfer

- ▶ All contaminated water, snow/ice, soils, clean up supplies, and absorbent materials will be stored in closed, labeled containers. The containers will be stored in ventilated areas away from incompatible materials.
- ▶ Electrically ground all containers and transporting equipment.

Disposal

- ▶ Consult with Federal and Territorial Environmental Authorities before disposing contaminated material. Possible disposal option on site would be controlled burning of the contaminants and possible incineration of liquid product.

2.5 Antifreeze

If possible and safety permits, stop the flow.

On Land

- ▶ Do not flush into ditches or drainage systems.
- ▶ Block entry into waterways by building barrier with soil material to contain spills
- ▶ Remove spill using sorbent pads or digging out soil.

On Water

- ▶ Antifreeze sinks and mixes with water.
- ▶ Isolate/confine the spill by damming or diverting the spill.
- ▶ Pump contaminated water into containers.

On Ice and Snow

- ▶ Block entry into waterways by building a barrier with snow to contain the spill.
- ▶ Remove spill using particulate sorbent and shovel contaminated ice and snow into plastic buckets with lid and/or polypropylene bags.

Storage and Transfer

- ▶ All contaminated water, snow/ice, soils, cleanup supplies, and absorbent materials will be stored in closed, labeled containers. The containers will be stored in ventilated areas away from incompatible materials.

Disposal

- ▶ Consult with Federal and Territorial Environmental Authorities before disposing contaminated material. Possible disposal options on site would be controlled burning of the contaminants and possible incineration of liquid product.

2.6 Propane

If possible and safety permits, eliminate all ignition sources. No smoking is permitted when responding to a propane release.

On Land

- ▶ Do not attempt to contain or remove release.

On Ice and Snow

- ▶ Do not attempt to contain or remove release.

Storage and Transfer

- ▶ It is not possible to collect and containerize propane once it is released.

Disposal

- ▶ No disposal is required, as it cannot be contained once it has been released.

2.7 Disposal Methods

In case of a spill, the Aurora Geosciences Project Manager will seek government approval and advice for proper disposal. However, the following disposal options are considered appropriate and expected to meet government approval. The selected disposal method will be made in conjunction with the Project Manager and a Government Official. The possible disposal methods are as follows:

- ▶ Offsite disposal to a landfill site the permits disposal of hazardous materials.
- ▶ Controlled burning of the contaminants.
- ▶ Landfarming of hydrocarbon contaminated soils.
- ▶ Incineration of liquid product.

Although this document may not cover the potential for types of hazardous material Aurora might come across in other parts of their work, it covers the materials requiring waste management on the Silvermet Inc program under the current permits being requested.