



TRUE NORTH SAFARIS LTD

Yellowknife NT

Waste Management Plan 2022

Mackay Lodge

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Introduction

True North Safaris is committed to minimizing the impact of its activities on the environment and to protect the safety of communities, personnel and contractors, wildlife, and the land from unacceptable risk. Preventative maintenance reduces the likelihood of environmental concerns. Grassroots activities generally are low impact, and with diligence and good management practices it is possible to minimize any potential environmental impact.

This waste management plan allows for the identification of the different waste streams produced during operations of Mackay Lake lodge and outlines the procedures for managing them. Proper execution of the plan will mitigate and minimize the effects of waste on the local environment. This plan is designed to employ best practises that are also in compliance with relevant acts, regulations and permit service

Site Characteristics

The property is located in the central tundra natural region, approximately 326 km northeast of Yellowknife, Northwest territories, at 63.8557549 110.5855395.

General Camp Site

The lodge is authorized under Territorial Land Lease 075M/15-001.

There is 15 buildings on site.

The Kitchen facility is 32 ft by 24 ft.

The Common area is 36 ft by 24 ft.

There are 6 guest cabins each are 16 ft by 16ft.

One guest cabin is 20 ft by 16 ft.

Laundry facility is 16 ft by 18 ft.

There are 3 guide cabins each are approximately 16 ft by 8 ft

One additional guide cabin is 20 ft by 20 ft.

There is a site-specific camp layout sketch on the registry for [MV2013J0006](#).

Waste

Daily activity will generate several types of waste material. To effectively manage waste in a manner to protect the environment, the following basic rules will apply.

- a) No garbage will be left in the field or at the lodge at any time. All refuse, such as cigarette butts, will be collected and properly disposed of upon the return to camp and at the Lodge facility.
- b) Garbage will be separated by two types; compostable and waste and properly disposed of on site or removed from site for disposal.
- c) Garbage receptacles will be placed at work locations at around camp for convenience of personal.
- d) Cigarette butts will be extinguished and placed in appropriate reciprocal and will not be thrown on the ground.

- e) Wastes removed from the site to be delivered to appropriate waste handling facilities, such as the City of Yellowknife Solid Waste Facility which can safely receive waste generated by the lodge. Third parties such as the City of Yellowknife operate a transfer facility and KBL Environmental are the other examples of facilities capable of receiving non-hazardous and hazardous waste respectively.

Waste Types

Various wastes are generated during the day-to-day activities associated with the lodge operations. In remote locations such as an Mackay Lake lodge it is essential that these wastes are handled, stored and managed in a safe and environmentally responsible manner. Remote sites often face logistical challenges that must be rectified prior to opening. The lodge will be only accessible by aircraft during the summer so additional consideration will apply pertaining to the movement of waste offsite for disposal to an approved facility.

This section of the plan will detail the type of waste management options True North Safaris will utilize for activity of the lodge.

- a) Hazardous and potentially hazardous materials are to be placed and secured in storage at camp or lay down locations. Used materials from camp, and those which are returned from outings are to be sorted by the camp manager and stored in sealed plastic or steel containers to a weight off site. Separate storage containers are to be used for incinerator ash, lead acid batteries, lithium batteries, oil filters, waste oil and fuel, contaminated soils and used waste oil sludge. Following dispatch from Site, Materials will be expedited to hazardous waste transfer facility such as KBL environmental at #17 Cameron Road in Yellowknife for proper disposal.
- b) Waste materials are to be inspected and sorted by the lodge manager to remove all re-usable or Recyclable material and separate into domestic refuse, Construction material, black water sewage and grey water. All materials are then kept in secure storage at base camp within the perimeter of the bear fence
- c) Domestic refuse (Dry waste) and clean recyclables are to be kept in enclosed structures prior to Incineration or transportation off site. Any materials that are transported off site are to be immediately received by true North safaris employees representatives and transported to appropriate waste handling facility.
- d) Food waste - used or old food items are to be incinerated or regularly backhauled offsite for disposal. This is done to prevent the attraction of wildlife. Food items should only be consumed in the kitchen area, not in the sleeping quarters and conference Center. The kitchen is to contain waste receptacles for food waste. All food waste is being composted and then put back on the land. When immediate composting is not available, the food wastes are to be double bag with industrial grade garbage bags to restrict order from escaping and prevent the attraction of wildlife.
- e) Burnable waste such as wood, paper, cardboard may be incinerated or burned in a burn barrel.
- f) Construction materials are to be sorted by the Manager to remove any potential reusable or recyclable materials. Any materials identified as reusable are stored in the work shacks for future use. Non-recyclable or reusable materials are separated to be either incinerated or removed from

the site for disposal. Materials that are removed from the site are immediately received by true north safaris representatives and transported to appropriate waste handling facilities.

- g) Black water sewage is to be collected daily from waterless toilets and incinerated following all territorial and federal incineration guidelines, or incinerated point of collection with and incinerating toilet, collected daily and removed regularly from the site for proper disposal, or disposed directly in Privy toilets. When incineration is not possible the sewage is to be stored in a sealed wet storage bin and tell removal from site.
- h) Gray water from the kitchen and laundry facility is to be collected in a sump. Strainer baskets are to be used in kitchen sinks to prevent food material from entering the gray water waste stream. A gray water sun is to be located over 50 m from the lake shoreline. Some are to be situated in a patch of course grade gravity sand.
- i) Material waste produced from on-ice activities to be separated and stored for eventual composting and then disposal in on land.

Summary waste types and handling

- Food waste- Feed the land (composting) burn using incinerator or backhaul regularly for offsite disposal.
- Cardboard and paper waste - burn using incinerator or burn barrel on site or remove from site for offsite disposal as specified in the [Municipal Solid Wastes Suitable for Open Burning](#) NT guideline.
- Ash residue-rate for non-combustibles, sealed in barrels for offsite disposal.
- Recyclables-sorted and package for offsite disposal and refunds.
- Hazardous waste- package appropriately and removed from site for disposal.
- Machinery waste- packaged appropriately and removed from site for disposal.
- Tires and scrap- Package appropriately and removed from site for disposal.
- Human waste - Collected daily for regular removal from site and or separation in accordance with the [Territorial Guidelines for Industrial Waste Discharges](#) in the NWT and separated at point of election and deposited directly in a privy toilet.
- Grey water- Sump located on site that drains from kitchen laundry facility and shower house.
- Contaminated soil's- as per spill contingency plan.
- Other waste-sort package and removed from site for reuse, recycle or disposal.

The waste management plans will be subject to review annually to ensure compliance with regulations, permits and relevant legislation as well as to determine if adjustments to the plan are necessary.