



Gwich'in Wellness Camp

WASTE MANAGEMENT PLAN



Gwich'in Wellness Centre

Waste Management Plan

Prepared April 30, 2012

Introduction

Gwich'in Tribal Council is committed to minimizing the impact of its activities on the environment and to protect affected Communities, Gwich'in Tribal Council personnel, the land and the wildlife from unacceptable environmental risk. Gwich'in Tribal Council believes that preventative maintenance activities will reduce the likelihood of an environmental concern. Although the activities generally have a very low degree of impact upon the environment, we recognize that we must be diligent and innovate in the management of our activities to ensure minimal impact to the environment.

The waste management plan allows for the identification of waste produced during the operation of the Gwich'in Wellness Camp (Rachel Reindeer Camp) and outlines the procedures employed to manage the waste. The execution of the plan will mitigate the effect of waste on the environment, including the aesthetics and use of the land. Additionally, the plan is designed to employ practices that are in the best interest of the public and also in compliance with all applicable Acts, Regulations, authorizations, land use permits and water licenses.

Location

This document outlines the waste management practices employed by Gwich'in Tribal Council at its Gwich'in Wellness Camp (Rachel Reindeer Camp).

Current Project

CAMP: Gwich'in Wellness Camp (Rachel Reindeer Camp)

LOCATION: 68° 16' 02' N, 135° 46' 20' W

LAND USE PERMIT #:

The camp is located approximately 15 km outside of Inuvik.



SITE CHARACTERISTICS

The property area is geographically located on the East Channel of the Mackenzie Delta, situated within the Northern Taiga Region, characterized with rolling hills to flat wooded plateaus. Topographic relief is low with an elevation ranging from 15m to 68m above sea level. The area is just inside the tree line; vegetation cover is strands of Dwarf Birch, Willow, Northern Labrador Tea, Mosses and Lichens.

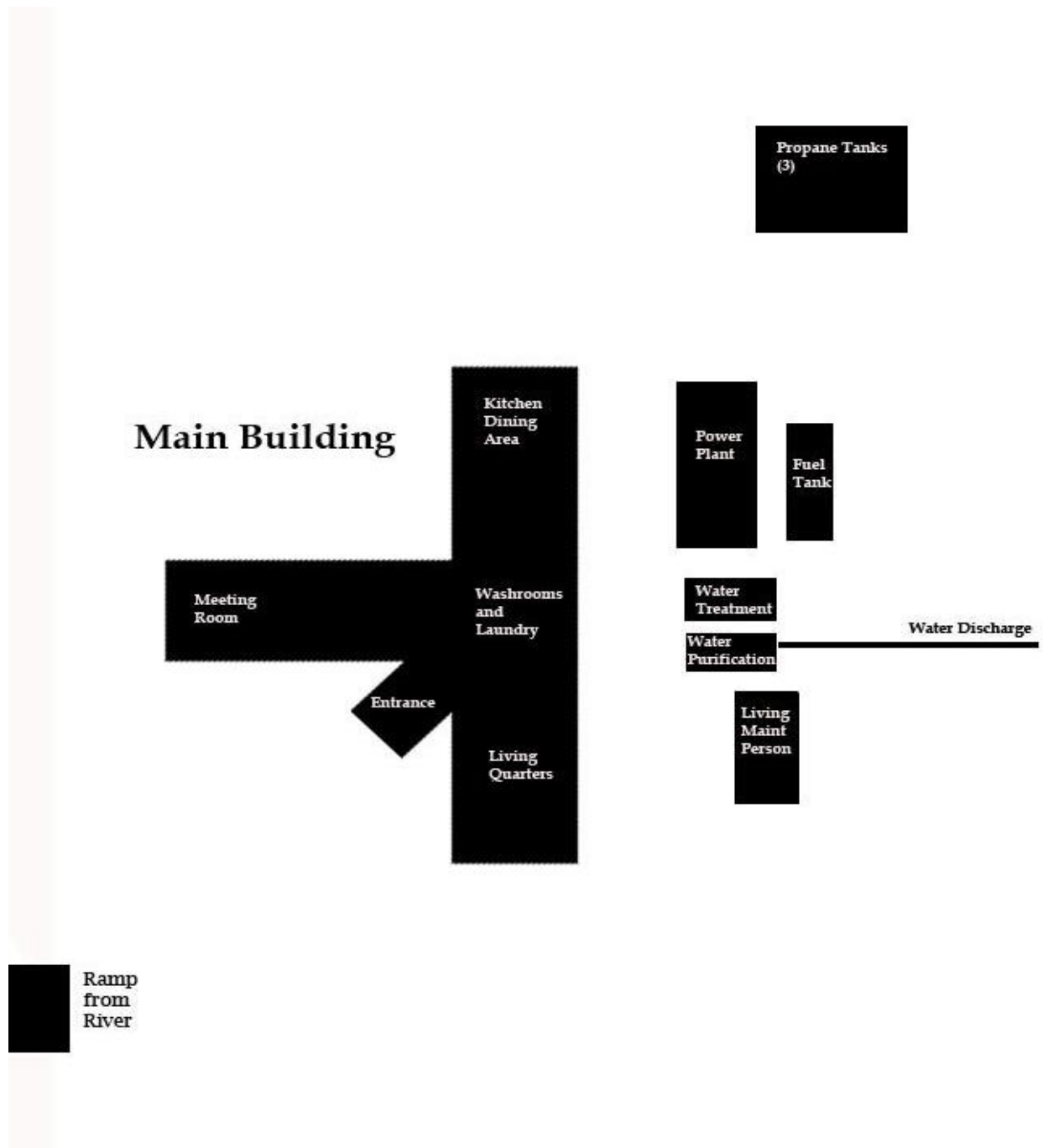
Climate conditions are highly variable. The temperature in the winter can reach -45°C and +30°C in the summer. The average annual snowfall is 53cm during the months of October to May. Winds of 5-12 km/hr are fairly constant.

GENERAL DESCRIPTION OF CAMPSITE

The camp contains five (5) buildings:

- The main building (approx 400 m²) contains a meeting room, a kitchen/ dining room, living quarters (12 rooms) and washroom, shower, and laundry facilities.
- The Power Generator Plant (approx 60 m²) contains the power generator and a 35,000 litres (7,700 gallons) doubled hulled Enviro-Tank on the outside for diesel fuel. Diesel fuel will be hauled from Inuvik as required on the ice road after freeze-up which is about the end of January and before break-up before the end of April of each year. Diesel fuel will be hauled by barge during the summer months of July – September.
- The Drinking Water Treatment Plant (DWTP) (approx 30m²) contains the water purification system. Sewage and waste water will be treated and deposited onto the land approximately 50 meters to the east of the plant. See details of the camp. (Camp description and layout)
- Maintainer's Building (approx 50 m²) will be used for living quarters for the maintenance personnel.

CAMP DESCRIPTION AND LAYOUT



Camp Layout on file with Application /Licence No G 08 L8 002

WASTE

On a daily basis, several types of waste will be generated in the operation of the campsite. GTC's basic rules that apply:

No garbage to be left in the camp area at any time. When at the camp, garbage and cigarette butts should be saved and disposed of properly on return from camp.

"Please do not litter, everyone is responsible for keeping the area clean."

Garbage should be bagged and be returned to Inuvik and should be placed in the Town of Inuvik municipal solid waste facility or returned to a proper disposal facility (ie. the dump).

Please make use of the garbage receptacles around camp do not litter. Cigarette butts should only be extinguished and disposed of in the appropriate receptacle and not thrown on the ground.

Types of Waste

The types of waste that can be generated include:

- 1) Food
- 2) Garbage
- 3) Human Waste
- 4) Other Waste (used oil)

Food

Depending on the amount of programs and length of stay onsite, used or old food items will be brought back to Inuvik. It is essential that old/food items are removed expeditiously to reduce the potential of attracting wildlife in the camp area. Typically, this will at minimum include double bagging where are items are heavier and wet.

Garbage

All items will be bagged and stored away from the Main Building. All bagged garbage will be brought back to the Town of Inuvik municipal solid waste facility or returned to a proper disposal facility.

Human Waste

Human Waste is treated on site with the Sewage and Waste Water Treatment Plant. The capacity of the holding tanks in the Waste Water Treatment Plant are:

Sewage holding tank - 7, 200 litres (1,584 gallons)

Ultrafiltration tank – 4,400 litres (968 gallons)

Clearwell and Effluent tanks – 3,200 litres (704 gallons)

Solids (sludge) tank – 3,600 litres (792 gallons)

The sludge tank will be pumped out at least once a year by a vacuum truck during the ice road season and will be deposited at the Town of Inuvik's sewage facilities.

Other Waste

The Gwich'in Wellness Camp (Rachel Reindeer Camp) has been in operation for a number of years. GTC has initiated the process of removing items that no longer serve a purpose to the program off site and hauled them back to Inuvik.

Waste Management Summary

Waste Type	Storage	Treatment	Disposal		
			On/ offsite	Method	Location
Household Waste (food, garbage)	Shed		Offsite	Municipal solid waste facility (landfill)	Inuvik NT
Sewage		Filtration & disinfection	Onsite	Discharge to land	Wooded area 50 meters east of wastewater treatment facility
Sewage solids (sludge, wastewater treatment system)			offsite	Deposit to municipal sewage treatment facility	Inuvik NT
Used Oil	45 gallon drums		Offsite	Northwind Industries to be used in the used oil burning furnace.	Inuvik NT

SUMMARY OF WASTE PLANNING

Waste Type	Disposal method
Food waste	Bagged food waste brought back to the Town of Inuvik solid waste facility or returned to a proper disposal facility. (double bagged if heavy or wet)
Garbage	Bagged garbage brought back to Town of Inuvik municipal solid waste facility or returned to a proper disposal facility.
Human Waste	Treated on site with a Waste Water Treatment Plant, with sludge tank pumped out once a year with a Vacuum Truck and disposed of in Town of Inuvik municipal sewage treatment facility (sewage lagoon)
Other Waste	Hauled back to Inuvik and disposed of as necessary or re-used where permissible (used oil burning furnace)

WASTE MANAGEMENT REVIEW AND UPDATE

The Waste Management Plan will be reviewed annually to ensure compliance with regulations, license conditions, etc. It will also be reviewed before, during and after onsite activity to determine any adjustments that may be required.