# Husky Oil Operations Limited

# Chedabucto Silica Project Delineation Program Tłįcho Region, NWT

(NTS Sheet 85J)

62°15′50" N to 62°29′35" N

-115°13'26" W to 115°29'22" W

# **APPENDIX V**

Waste Management Plan

Effective December 1, 2014



# NORTHERN GEOLOGICAL AND GEOPHYSICAL CONSULTANTS

This Waste Management Plan has been prepared by Aurora Geosciences Ltd. (Aurora) for Husky's exploration activities associated with the Chedabucto Project.

#### INTRODUCTION

Aurora is committed to minimizing the impact of its activities on the environment (land, water and wildlife) and to protect the safety of communities, personnel & contractors from unacceptable risk. Preventative maintenance reduces the likelihood of environmental concerns. Grassroots exploration 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 the Chedabucto project and outlines the procedures for managing same. Proper execution of the plan will mitigate and minimize the effects of waste on the local environment. The plan is designed to employ best practices that are also in compliance with relevant Acts, Regulations and Permits.

#### SITE CHARACTERISTICS

The Climate and Topography section has been modified after Ecological Stratification Working Group (1995).

The property is contained within the Taiga Shield Ecozone and the Great Slave Lowland High Boreal Ecoregion. This region tends to experience extreme and semi-arid polar climate and is classified as a polar semi-desert with limited precipitation in the form of snow in the winter and rain in the summer. Climate in the region is marked by cool summers and very cold winters, and has a sub-humid, high boreal ecoclimate. The mean annual temperature is approximately -5°C. The mean summer temperature is 11°C and the mean winter temperature is -21.5°C. The average annual precipitation ranges from 200-375 mm.

Topographically, the property is relatively flat with 10 m high limestone and dolomite bluffs bordering the western boundaries of the claim. Elevation is up to 260 m above sea level where the topographic high is dry and covered with spruce and deciduous trees. The topographic lows tend to be water logged with vegetation composed of stunted spruce and willows.

The region has numerous small to large lakes with adjacent marsh and muskeg. Wildlife includes moose, black bear, barren land caribou, bison, wolf, beaver, muskrat, snowshoe hare, ptarmigan and spruce grouse (Ecological Stratification Working Group, 1995).

# **TENT CAMP / CORE SHACK SITE**

The tent camp/core shack that will be erected at the existing GNWT-DOT quarry will consist of two (14 foot x 16 foot) plywood and canvas structures (tents) and a small shack for the power generator. The crew will mobilize to and from Yellowknife on a daily basis and will not be accommodated at the tent camp unless under an emergency situation. A fuel cache, drilling equipment lay down area are also included. The total land use area at the quarry is approximately 2 ha.

#### WASTE

Daily camp operations will generate several types of waste materials. The previously attached Wildlife, Archaeological and Environmental Plan outlines the following basic rules:

- 1. No garbage is to be left in the field at any time. All refuse and cigarette butts should be collected and properly disposed of upon return to Yellowknife at the end of each field day. Please do not litter.
- 2. Garbage will be returned to Yellowknife for sorting into waste and recyclables.
- 3. Garbage receptacles are placed around camp for your convenience. Cigarette butts are to be extinguished and placed in the appropriate receptacle, not thrown on the ground.

#### **WASTE TYPES**

The types of waste that might be generated include:

- 1. Food
- 2. Burnable waste (paper, cardboard, untreated wood)
- Recyclable items (tins, glass, plastic containers & wrapping)
- 4. Hazardous waste (batteries, solvents, paint)
- 5. Machinery waste (oils & lubricants)
- 6. Tires
- 7. Scrap (metal, tarps, Styrofoam)
- 8. Human waste
- 9. Grey water

# Food & Recyclables

All used or old food items will be collected and properly disposed of upon return to Yellowknife on a daily basis. This is done to prevent the attraction of wildlife. All waste backhauled to Yellowknife will be properly packaged (i.e. double bagged). All garbage including burnable waste (paper, cardboard, untreated wood) will be returned to Yellowknife for sorting into waste and recyclables.

# Hazardous & Machinery Waste, Tires & Scrap

Hazardous wastes that may be generated include batteries, cleaning solutions, light bulbs, treated wood, paint and solvents. Solids are packaged appropriately and shipped to Yellowknife for disposal according to regulations. Liquid wastes are stored in sealed containers, labeled and packed in a plastic grease pail for shipment to Yellowknife.

Old tires will be returned to Yellowknife for proper disposal. Scrap items include stove pipe segments, general scrap metal (nails, screws & pipe fittings), used tarps, Styrofoam insulation sections, electrical wire and hoses. These items are packaged and stored for backhaul to Yellowknife and proper disposal if they cannot be reused or recycled on site.

The hazardous waste and scrap materials generated during the project are expected to be minimal. For the diesel generator, 2-2.5 litres of motor oil every 4-5 days and one used oil filter every 9-10 days is typical.

## <u>Human Waste</u>

The tent camp will use bag toilets and all waste will be returned to Yellowknife for disposal according to regulations.

### **SUMMARY OF WASTE TYPES**

Waste Type	Disposal Method
Food Waste	Stored securely until it can be removed from site and backhauled
	on flights for proper disposal in Yellowknife.
Burnables	Stored securely until it can be removed from site and backhauled
	on flights for proper disposal in Yellowknife.
Recyclables	Sorted and packaged for back haul to Yellowknife and
	appropriate reuse, recycle or disposal.
Hazardous Waste	Packaged appropriately and TDG shipped to Yellowknife for
	appropriate disposal.
Machinery Waste	Packaged appropriately and TDG shipped to Yellowknife for
	appropriate disposal.
Tires & Scrap	Package and back haul to Yellowknife for appropriate recycle,

	reuse or disposal.
Human Waste	Bag toilets. Stored securely until it can be removed from site and
	backhauled on flights for proper disposal in Yellowknife.
Other Waste	Sorted, packaged and back haul to Yellowknife for reuse, recycle
	or disposal.
Contaminated Soils	As per Spill Contingency Plan

# **REVIEW AND UPDATE**

The Waste Management Plan will be subject to annual review and update to ensure compliance with regulations, permits and relevant legislation. The plan will also be reviewed prior to, during and after any on-site activity to determine if adjustments are required.