

# **WASTE MANAGEMENT PLAN**

**Heavy Equipment Operator, Surface Miner & Underground Miner  
Training Program**

**Fort Smith NWT – Aurora College**



*Updated August 30, 2022*

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## **INTRODUCTION**

This Waste Management Plan (“WMP”) allows for the identification of the different waste streams produced during the Heavy Equipment Operator, Surface Miner & Underground Miner programs and outlines the procedures for managing waste. Proper execution of the WMP will mitigate and minimize the effects of waste on the local environment.

Aurora College is committed to minimizing the impact of its training activities on the environment and to protect the safety of students and Instructors and the land from unacceptable risk. Preventative maintenance reduces the likelihood of environmental concerns. These training activities are low-impact, and with diligence and good management practices it is possible to minimize any potential environmental impact.

## **SITE CHARACTERISTICS**

There is little to no overburden or topsoil and the extraction process has left exposed rock, rubble and subsoil on the quarry floor.

Climatic conditions vary between +20°C in the summer months to -30°C during the winter. Average annual snow fall is about 150 inches, which predominantly falls during autumn and spring storms.

## **GENERAL TRAINING AREA**

The training area will consist of 24 pieces of light and heavy surface & underground mining equipment, a small shed to be used for storage, shelter and meals, a portable toilet, a laydown area for vehicle maintenance, a “timbering” structure and a small portable generator.

The footprint of the physical components are as listed:

Approximately 30km of road (Foxholes & Grandetour)

Sand quarry = 2.42 ha

Gravel quarry = 5.95 ha

Shale quarry = 2.58 ha

Mine Training grounds = 25.11 ha

TOTAL = 36.06 ha + ~30 km of gravel road.

## WASTE

Daily activities will generate waste materials. The following basic rules will apply:

1. No garbage is to be disposed of outside of the main site area (shed). All refuse and cigarette butts will be collected and properly disposed of in the appropriate waste containers at the main site area. Littering is strictly forbidden.
2. Aurora College personnel will ensure that all food waste, garbage and debris produced on a daily basis will be stored in secure containers on site and transported back to Fort Smith daily for disposal in an appropriate manner.  
All combustible and non-combustible waste will also be transported back to Fort Smith and disposed of appropriately
3. Garbage receptacles will be placed at the main site area for 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. Waste (paper, cardboard, untreated wood)
3. Recyclable items (tins, glass, plastic containers and wrapping)
4. Hazardous waste (batteries, solvents etc.)
5. Machinery waste (oils and lubricants)
6. Tires
7. Scrap (metal, Styrofoam)
8. Human waste
9. Contaminated soils

## **Food Waste, Combustibles, Non -Combustibles and Recyclables**

Waste food items will be stored in secure containers on site and transported back to Fort Smith daily for disposal in approved containers on Aurora College premises. This is done to prevent the attraction of wildlife. Food will only be eaten in the main site area. The main site area will contain ample secure waste receptacles for storage and ultimate removal back to Fort Smith. All paper, combustibles and non-combustible materials will be transported back to Fort Smith for appropriate disposal methods. Recyclables will be returned to Fort Smith. Students and Instructors will bring their own brown bag lunches so food waste is expected to be minimal.

As the Heavy Equipment Operator, Surface Miner & Underground Miner programs are primarily focused on “hands-on” training, the production of wastes will be minimal.

## **Hazardous and Machinery Waste, Tires and Scrap**

Hazardous wastes that may be generated include batteries, headlights, treated wood, washer fluid and solvents. Solids are packaged appropriately and transported back to Fort Smith for disposal according to regulations. Liquid wastes are stored in secure containers, labeled and packed in a plastic pail for transport back to Fort Smith.

Used oil, filters etc. will be transported back to Fort Smith and disposed of at the Fort Smith Land Fill site in the appropriate designated areas.

Old tires will be transported back to Fort Smith for proper disposal. General scrap metal (nails, screws, etc.) and Styrofoam will be packaged and transported back to Fort Smith for proper disposal.

Hazardous waste and scrap materials generated during the project are expected to be minimal.

## **Human Waste**

A portable toilet will be placed near the shed for use by the students and Instructors. Waste will be collected on a regular basis and transported back to Fort Smith and properly disposed of by the Contractor.

## **Contaminated Soils**

Contaminated soils will be disposed of as per the Spill Contingency Plan.

## SUMMARY OF WASTE TYPES

<b>Waste Type</b>	<b>Disposal Method</b>
Food Waste	Transported daily back to Fort Smith for proper disposal
Recyclables	Transported back to Fort Smith for proper disposal
Hazardous Waste	Packaged appropriately and transported back to Fort Smith for proper disposal
Machinery Waste	Packaged appropriately and transported back to Fort Smith for proper disposal
Tires and Scrap	Packaged appropriately and transported back to Fort Smith for appropriate recycle, reuse or disposal
Human Waste	Portable Toilet. Waste collected by local service provider
Other Waste	Sorted, packaged appropriately and transported back to Fort Smith for appropriate reuse, recycle or disposal
Contaminated Soils	Disposed of as per Spill Contingency Plan

## REVIEW AND UPDATE

The WMP will be subject to annual review and update to ensure compliance with regulations, permits and relevant legislation. The WMP will also be reviewed prior to undertaking each training session annually.