



# **WASTE MANAGEMENT PLAN**

**Nunavut Uranium Project, NUNAVUT, CANADA**

Effective Date: May 2022

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## 1. Preamble

This Waste Management Plan (WMP) is in effect until the expiry of Forum Energy Metals Corp. (FEMC or Forum or the Company) water licence and land use permit and land use licence and applies to the work areas planned for the Nunavut Uranium Project property.

The Nunavut Uranium Project is in the Kivalliq Region of Nunavut, approximately 90 km from Baker Lake, and 320 km from Rankin Inlet and consists of both mineral claims and leases on Inuit-Owned Lands (surface rights), and Crown Land.

Year-round access to the property is via fixed wing aircraft, equipped with skis or tundra tires, or helicopter. The property is bounded in a general sense by the following minimum and maximum latitudes/longitudes:

Min (degree/minute)	Lat	64.12539° N	Min (degree/minute)	Long	96.35659" W
Max (degree/minute)	Lat	64.70944° N	Max (degree/minute)	Long	98.70357° W

Forum Energy Metals Corp. acquired ground previously explored by Cameco Corporation between 2005-2012 to the west of Orano's Kiggavik Project near Aberdeen and Judge Sissons lakes.

Forum Energy Metals Corp. has 109,590 hectares of 100% Forum-owned claims mineral claims. These claims consist of Crown Land, and Inuit owned land surface (IOL) including parcels BL-31.. The minerals claims are on NTS maps sheets 66A04 to 66A07, 66A10 to 66A12, 66B01, 66B02, 66B07 and 66B08.

FEMC has applied for licences and permits from Crown Indigenous Relations and Northern Affairs Canada (CIRNAC) for exploration activities on Crown Land, the Kivalliq Inuit Association (KIA) for activities on Inuit Owned surface land (IOL), a water licence from the Nunavut Water Board (NWB) for water use and waste disposal related to the project.

A letter of authorization from the Hamlet of Baker Lake will be requested and appended to this Plan.

Questions or concerns regarding this Plan can be directed to

**FORUM ENERGY METALS CORP.**  
**Suite 615, 800 West Pender St.**  
**Vancouver, B.C. V6C 2V6**

Attention: (To be determined), Project Manager

## 1. Introduction

This Waste Management Plan (“WMP”) has been developed for Forum Energy Metals Corp. in accordance with applicable legislation, guidelines, and best practices. This WMP applies to the activities associated with the Nunavut Uranium Project (the “Property” or “Project”), located in the Kivalliq Region of Nunavut, Canada.

### 1.2 Purpose and Scope

The primary objective of the Nunavut Uranium Project WMP is to provide employees and contractors with operational guidelines to minimize the generation of wastes and facilitate the collection, storage, transportation, and disposal of wastes while minimizing adverse effects on the environment. The WMP includes the following:

- A summary of regulatory requirements.
- Potential waste minimization, recycling, and reuse options.
- Methods for collection, storage, and disposal of hazardous and non-hazardous wastes.
- Ways to minimize environmental impacts.
- Training, inspection, and monitoring efforts.

### 1.3 Other Plans

The WMP should be considered as a part of the Property wide management system. Other management plans in place at the Nunavut Uranium Project include:

- Abandonment and Restoration Plan (ARP)
- Wildlife Monitoring and Mitigation Plan (WMMP)
- Spill Contingency Plan (SP)

### 1.4 Property and Camp Description

This Plan has been prepared for one temporary campsite and several proposed diamond drilling locations on Forum’s Nunavut Uranium Project. The proposed campsite will be determined in the Spring/Summer of 2022 and will be constructed in 2023 with a water source that does not freeze to the bottom in winter.

Once a site has been determined, this plan will be updated to include the Latitude and Longitude.

The camp would house a maximum of 30 people but would normally house between 15-25 individuals.

Exploration based out of the camp is helicopter supported and generally consists of prospecting, till sampling, geophysical surveys, mapping, and diamond drilling.

All field work and drilling will be confined to the Nunavut Uranium Project mineral claims as illustrated in the Project Location Figure located in [Appendix 1](#).

## 1.5 Applicable Legislation and Guidelines

Acts, regulations, and legislation that relate to waste management in Nunavut are listed below:

### 1.5.1 Federal

- Canadian Centre for Occupational Health and Safety Act
- Canadian Environmental Protection Act
- Fisheries Act
- Nunavut Waters and Nunavut Surface Rights Tribunal Act
- Transportation of Dangerous Goods Act
- National Fire Code of Canada
- Northern Land Use Guidelines
- Workplace Hazardous Materials Information System (WHMIS)
- CCME Environmental Codes of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products
- Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations
- Guidelines for Spill Contingency Planning (CIRNAC)

### 1.5.2 Territorial

- Fire Prevention Act
- Environmental Protection Act
- Mine Health and Safety Act and Regulations
- Public Health Act
- Safety Act
- Nunavut Occupational Health and Safety Regulations
- Environmental Guideline for the General Management of Hazardous Waste

## 2 Waste Management

### 2.1 Definition of Wastes

Waste at the Nunavut Uranium Project is any material or substance that can no longer be used for its intended purpose, and is destined for recycling, disposal, or storage. Hazardous wastes are broadly defined by the Nunavut Department of Environment's Environmental Guideline for the General Management of Hazardous Waste as being "any unwanted material or products that can cause illness or death to people, plants and animals". Hazardous wastes may include waste petroleum products, solvents, paints, waste chemicals, batteries, and any combination of hazardous and non-hazardous materials (i.e., mixed waste).

### 2.2 Waste sources

Tables 2.1 and 2.2 provide a summary of the expected types of hazardous and non-hazardous (inert) wastes to be generated at the Nunavut Uranium Project.

Table 2.1: Non - hazardous (Inert) Wastes

Waste Type	Examples	Estimated Quantity Generated	Treatment/Disposal Method
Sewage	Human waste	10 – 30 people	Incinolet toilets will be used. Waste is incinerated daily.
Camp greywater	Water from kitchen and sinks, showers)	≤ 10 (m <sup>3</sup> /day)	Sumps located adjacent to camp; allowed to percolate into overburden; minimum distance of 30 m from nearby water sources
Combustible solid waste	Food wastes, paper, untreated wood	Variable	Incineration
Incinerator ash	Ash from the incinerator	Minimal	Stored in sealed containers, removed and taken the Baker Lake landfill
Non-combustible solid waste, bulky items, scrap metal	Scrap metal (ie. empty drums, nails/screws), glass (ie. bottles, jars), rubber products (ie. tires, floor mats), plastics (ie. bottles, packaging, bags), non-hydrocarbon contaminated equipment (ie. motors, fans, heaters, pumps, screens)	Variable	Stored in sealed containers, removed and taken to the Baker Lake landfill.
Hazardous waste or oil	Used oil	Minimal	Stored in sealed containers, removed and taken to approved disposal site
Contaminated soil/water	Hydrocarbons	Variable/negligible	Stored in sealed containers, removed and taken to approved disposal site
Drilling Greywater	Drill cuttings & water	≤ 289 (m <sup>3</sup> /day)	Sump located adjacent to drillhole; allowed to percolate into overburden; minimum distance of 30 m from nearby water sources. If uranium mineralization is intersected, cuttings in sumps will be scanned to ensure that the gamma radiation is <1 µSv/h at a height of 1 m. Cuttings >1 µSv/h

			will be collected and shipped to an appropriate place for disposal.
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Table 2.2: Hazardous Wastes and Pollutants

Waste Type	Examples
Petrochemicals	Diesel, jet fuel, gasoline, various oils
Solvents	Cleaning products
Contaminated soil	Contaminated soil/snow/water
Electronics	Computer parts, circuit boards, transformers
Fluorescent tubes	Regular and compact fluorescent tubes
Batteries	Dry cell batteries, button batteries, lead-acid based batteries

### 2.3 Waste Management Activities

Waste management operations at the Nunavut Uranium Project comprise a number of activities with the common goal of reducing the amount of waste generated on site and to ensure that any wastes created are reused, recycled, or disposed of in a responsible manner. Wastes will be separated at the source into several categories including organics (food wastes), materials for incineration, inert recyclables, inert non-combustible materials, and various hazardous materials. Materials that cannot be incinerated or burned will be stored in appropriate containers until they can be removed from site for treatment and/or disposal at an approved facility.

### 2.4 Waste Recovery and Reuse

Recovery and reuse options at the Project are limited due to the site's remote location and are restricted largely by the technology and equipment available on the Property. However, any available opportunity for waste recovery and reuse will be taken.

## 3 Waste Classification and Disposal Plan

### 3.1 Hazardous Wastes

All hazardous wastes will be placed in sealed containers and stored within "Arctic Insta-Berms", or similar, for secondary containment until they can be backhauled for recycling or disposal. A hazardous waste storage area will be established adjacent to the main fuel cache.

### 3.1.1 Used Oil

Waste lubricating oils, from vehicles, generators, pumps, or other equipment will be collected and stored in labeled 205 L steel drums and backhauled to a registered hazardous waste receiver.

### 3.1.2 Hydraulic Fluid

Whenever possible, hydraulic fluids will be filtered and reprocessed for reuse. Hydraulic fluid that cannot be reprocessed will be sealed in labeled 205 L steel drums and stored in the hazardous waste storage area until the product can be backhauled to an approved facility.

### 3.1.3 Contaminated or Expired Fuels

Contaminated or expired fuels, such as Jet A aviation fuel, should remain clearly labeled and tightly sealed in their original containers within the fuel storage area. The fuels will be moved to the hazardous waste storage area for backhaul to an approved facility.

### 3.1.4 Solvents

Whenever possible, non-toxic alternatives will be used in place of petroleum-based solvents. Excess or waste solvents will be packaged in clearly labeled, original, tightly sealed containers, or manufactured containers designed for solvent transport. Waste solvents will be stored in the hazardous waste storage area until backhauled to an approved facility.

### 3.1.5 Contaminated Soil, Snow, and Ice

Any contaminated soil, snow, or ice will be cleaned up immediately in accordance with the Forum Energy Metals Corp. Nunavut Uranium Project "Spill Contingency Plan" All contaminated soil, snow, and ice will be sealed in 205 L steel drums and stored in the hazardous waste storage area to await backhaul to an approved facility.

### 3.1.6 Used Rags and Sorbents

Used rags and sorbents will be placed in clearly labeled, tightly sealed containers, such as 205 L steel drums, and stored in the hazardous waste storage area until disposal or backhaul is possible. Rags and sorbent pads will be incinerated on site. Granular sorbent will be stored in drums and backhauled to an approved facility.

### 3.1.7 Empty Hazardous Material Containers and Drums

Empty containers will be stored in a designated area and returned to the supplier. Drums may alternatively be drained, air dried, backhauled to a recycling facility. Any residual fuels drained will be consolidated into drums and backhauled to an approved facility.

### 3.1.8 Waste Batteries

Generation of waste batteries will be reduced by properly maintaining batteries to prolong life and by replacing non-rechargeable batteries with rechargeable alternatives whenever possible. Even with proper maintenance, all batteries will eventually deteriorate and reach

the end of their useful life. Waste batteries must be properly handled to avoid spillage of corrosive materials and the release of metals into the environment.

Dry cell batteries are used in equipment such as hand-held radios and GPS units, flashlights, and cameras. Some of these types of devices utilize rechargeable battery packs, but others use general dry cell battery types such as AAA to D cells, 6 or 9 volt consumer batteries, and button batteries. Specific containers will be set up in the office, common spaces, and drill sites to collect dry cell batteries. The batteries will be placed in appropriate shipping containers and backhauled to an off-site recycling facility.

Waste lead acid batteries and rechargeable batteries will be temporarily stored in a 205 L plastic drum, within the hazardous waste storage area. These types of batteries can only be stored in this manner in quantities of 1000 kg or less and for periods of less than 180 days. All waste lead acid and rechargeable batteries will be backhauled from site as necessary to conform to regulations.

#### 3.1.9 Aerosol Cans

Use of aerosol cans at the Project will be limited. Whenever possible, alternatives, such as spray bottles, will be used in place of aerosol cans. Any waste aerosol cans will be collected in specific containers around camp and at drill sites. The cans will be stored in the hazardous waste storage area until backhauled for disposal.

#### 3.1.10 Fluorescent Bulbs and Tubes

Waste fluorescent bulbs and tubes will be packaged in their original (or equivalent) containers and stored in a watertight enclosure in the hazardous waste storage area until backhauled to a hazardous waste recycling or disposal company. Fluorescent bulbs and tubes are considered hazardous waste if broken and should be handled accordingly.

### 3.2 Inert Non-Combustible Solid Wastes

Labeled bins will be provided at various locations around camp and at drill sites for each type of waste listed below. Effort will be taken to reuse or repurpose any materials before disposal is considered.

#### 3.2.1 Tires and Other Rubber Materials

Waste tires, hoses, and other rubber materials that cannot be repaired or repurposed will be backhauled for recycling or disposal.

#### 3.2.2 Scrap Metal and Glass

Scrap metal and glass will be repurposed for alternative uses whenever possible. Any residual metal or glass that cannot be reused will be placed in 205 L steel drums and backhauled for recycling.

#### 3.2.3 Electronics

Electronics and electrical equipment will be collected and stored in sealed containers within the hazardous waste storage area and removed from site for recycling or disposal.

### 3.2.4 Mechanical Equipment

Mechanical equipment, such as generators, that are no longer usable, will be removed from site for refurbishment or recycling/disposal. Equipment awaiting backhaul will be stored in a specially designated, bermed area.

### 3.3 Inert Combustible Solid Wastes

The Project will use a batch feed dual-chamber controlled air incinerator to dispose of combustible solid wastes. All combustible wastes will be incinerated in accordance with applicable federal and territorial regulations and the Nunavut Department of Environment Guideline for the Burning and Incineration of Solid Waste. Incinerator ash will be properly stored in sealed containers, removed and taken to approved disposal site

#### 3.3.1 Food Waste and Packaging

Dedicated steel bins, lined with plastic garbage bags, will be provided for the collection of food waste and packaging at several locations throughout camp and at drill sites. The bins will be secured in place and use locking lids to avoid interference by wildlife. Food waste and packaging will be incinerated daily to minimize the attraction of wildlife.

Waste oil and grease collected from the kitchen will be stored in sealed plastic pails and remain in the kitchen until transferred to the incinerator for immediate disposal.

#### 3.3.2 Paper and Cardboard

Use of electronic methods for communication will be encouraged at the Project to minimize the amount of paper used. Effort will be taken to restrict the amount of corrugated cardboard coming to site, and waste cardboard will be reused as needed, possibly as packaging for backhauled materials. Specific containers, located throughout camp, will be used to collect paper and cardboard. Wastepaper and cardboard will be incinerated.

#### 3.3.3 Waste Lumber

Whenever possible, lumber will be reused at the Project. Excess waste lumber will be stored in appropriate areas and either backhauled or burned in a burned when the camp is completely removed.

### 3.4 Sewage

The Nunavut Uranium Project camp will utilize Incinolet systems, and the sewage will be incinerated. Ashes from incineration will be removed and taken to approved disposal site.

## 4 Site Facilities

### 4.1 Hazardous Waste Storage Area

The hazardous waste storage area will be located adjacent to the main fuel cache, away from any structures and a minimum of 30 metres from the normal high-water mark of any water body. It will be used for storage of any hazardous wastes until they can be

backhauled for recycling or disposal. All hazardous wastes will be sealed in appropriate, clearly labeled, watertight containers, such as 205 L steel or plastic drums.

All containers housing hazardous waste will be stored within “Arctic Insta-Berms”, or similar, for secondary containment. These types of berms utilize chemical and fire-resistant fabric (generally polyurethane coated nylon or vinyl coated polyester material) designed for extreme arctic temperatures and puncture resistance. “Rain-Drain” or similar hydrocarbon filtration systems will be used to safely remove any water collected inside the berms, and as a safeguard against any potential overflows of contaminated water.

All waste storage areas will be clearly marked and labeled with appropriate signage. Within the storage area, wastes will be segregated by type, and labeled to ensure safety for handlers and appropriate disposal.

#### 4.2 Incinerator

The Property will utilize a batch feed dual-chamber controlled air incinerator to dispose of combustible solid wastes. These types of incinerators typically produce the highest quality burn, with the least amount of ash and airborne particles.

All combustible wastes will be incinerated in accordance with applicable federal and territorial regulations and the Nunavut Department of Environment Guideline for the Burning and Incineration of Solid Waste.

### 5 Training

All on site management and any personnel required to handle hazardous wastes must have valid First Aid, WHMIS, and Transportation of Dangerous Goods (TDG) training. Site and job-specific training will be provided to all personnel who are required to handle waste materials. All employees and contractors will receive training in emergency response and spill response, as outlined in the Nunavut Uranium Project “Spill Contingency Plan”.

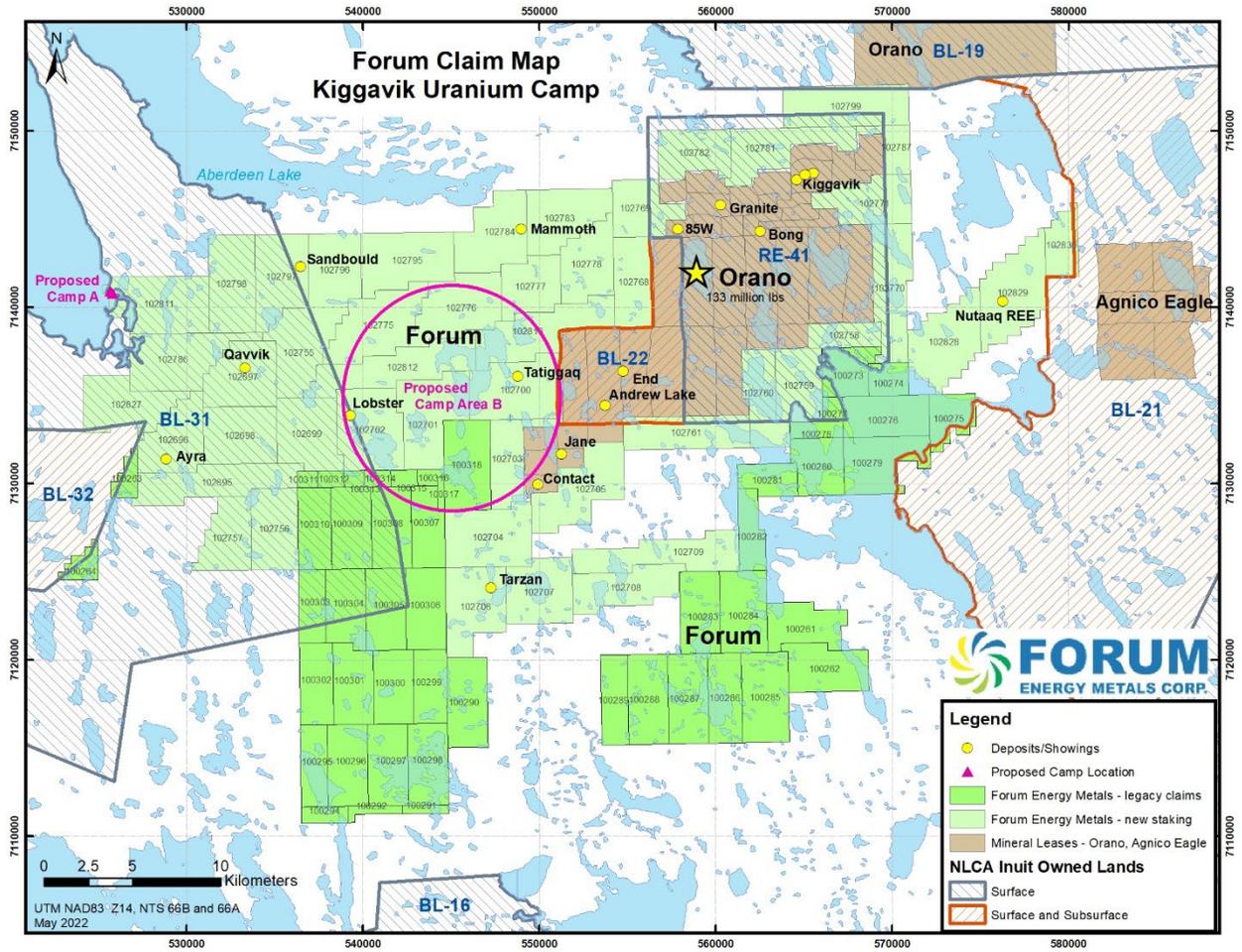
Personnel responsible for operating or maintaining the incinerator will receive hands on training to ensure the equipment is operated safely and efficiently.

### 6 Inspection and Monitoring

Inspections of the hazardous waste storage area and other waste storage facilities will be conducted daily. Regular inspections will include an assessment of the condition of waste receptacles and storage containers, checking for any damaged or leaking containers or berms, and ensuring that waste is collected and stored in the correct containers and storage areas. More detailed weekly inspections will be conducted to ensure the hazardous waste inventory is up to date, secondary containment is in place and in good condition, and spill kits are fully stocked and available. Any leaks or spills will be treated as outlined in the “Spill Contingency Plan.”

The Project Supervisor is responsible for supervising the monitoring and inspection program and keeping a detailed inventory of all hazardous wastes on site.

Appendix 1: Figures



Letter of Authorization from the Hamlet of Baker Lake