

# **WASTE MANAGEMENT PLAN**

## **MEADOWBANK PRECIOUS METAL PROPERTY NUNAVUT, CANADA**

Prepared for:

**Western Atlas Resources Inc./  
5530 Nunavut Inc.**

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## Contents

1	Introduction .....	4
1.1	Contact Details .....	4
1.2	Purpose and Scope .....	4
1.3	Other Plans .....	4
1.4	Property and Camp Description .....	5
1.5	Applicable Legislation and Guidelines .....	6
1.5.1	Federal .....	6
1.5.2	Territorial.....	6
2	Waste Management.....	6
2.1	Definition of Wastes .....	6
2.2	Waste sources.....	7
2.3	Waste Management Activities .....	8
2.4	Waste Recovery and Reuse.....	8
3	Waste Classification and Disposal Plan.....	8
3.1	Hazardous Wastes .....	8
3.1.1	Used Oil.....	8
3.1.2	Hydraulic Fluid .....	8
3.1.3	Contaminated or Expired Fuels .....	9
3.1.4	Solvents.....	9
3.1.5	Contaminated Soil, Snow, and Ice.....	9
3.1.6	Used Rags and Sorbents.....	9
3.1.7	Empty Hazardous Material Containers and Drums.....	9
3.1.8	Waste Batteries .....	9
3.1.9	Aerosol Cans .....	10
3.1.10	Fluorescent Bulbs and Tubes .....	10
3.2	Inert Non-Combustible Solid Wastes.....	10
3.2.1	Tires and Other Rubber Materials.....	10
3.2.2	Scrap Metal and Glass .....	10
3.2.3	Electronics .....	10
3.2.4	Vehicles and Other Mechanical Equipment.....	10
3.3	Inert Combustible Solid Wastes .....	10
3.3.1	Food Waste and Packaging.....	11
3.3.2	Paper and Cardboard .....	11
3.3.3	Waste Lumber .....	11
3.4	Sewage .....	11
4	Site Facilities.....	11
4.1	Hazardous Waste Storage Area.....	11
4.2	Incinerator .....	12
5	Training.....	12
6	Inspection and Monitoring.....	12

## Tables

Table 2.1: Non - hazardous (Inert) Wastes .....	7
Table 2.2: Hazardous Wastes and Pollutants .....	7

## Appendices

Appendix 1: Figures .....	AT END
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## 1 Introduction

This Waste Management Plan (“WMP”) has been developed on behalf of 5530 Nunavut Inc., a wholly owned subsidiary of Western Atlas Resources Inc. (the “Company”) in accordance with applicable legislation, guidelines and best practices. This WMP applies to the activities associated with the Meadowbank Precious Metal Property (the “Property” or “Project”), Nunavut, Canada.

This WMP will come into effect pending approval from all relevant regulatory bodies. Copies and updates to this plan may be obtained via the Company or APEX Geoscience Ltd. (“APEX”). This WMP will be replaced, upon approval, if there are any significant changes to the activities outlined in the existing permits, which warrant changes to this WMP. Minor changes will be submitted as an addendum to this WMP and submitted to the distribution list as required.

### 1.1 Contact Details

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### 1.2 Purpose and Scope

The primary objective of the Meadowbank Precious Metal Property 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 Meadowbank Precious Metal Property include:

- Abandonment and Restoration Plan (ARP)
- Emergency Response Plan (ERP)
- Environmental Management Plan (EMP)
- Spill Contingency and Fuel Management Plan (SCFMP)

## 1.4 Property and Camp Description

The Meadowbank Precious Metal Project (the “Project”) is located in the eastern part of the District of Kivalliq, within 1:50,000 scale National Topographic System (“NTS”) map sheets 56D12, 66A09, 10 and 16 and 66H01 and 08. The Project consists of three non-contiguous claim blocks (Black A, B and C) located on Crown Lands, approximately 50 km north of the community of Qamani'tuaq (Baker Lake) and 280 km northwest of the community of Kangiqliniq (Rankin Inlet).

The mineral claims are all 100% owned by 5530 Nunavut Inc, a wholly owned subsidiary of Western Atlas Resources Inc. All claim blocks comprising the Project are accessible by helicopter and the Agnico Eagle Mines Limited (“Agnico”) All Weather Access Road (“AWAR”), linking Baker Lake to Agnico’s Eagle’s Meadowbank and Amaruq mines. Permission is required from Agnico to use the AWAR.

Exploration activities on the Meadowbank Precious Metal Property to date include: helicopter-borne, versatile time domain electromagnetic (“VTEM”) surveys, ground induced polarization (“IP”) surveys, geological mapping, prospecting and rock geochemical sampling in 2018; a Property visit in 2019 and diamond drilling of 13 holes from 7 platforms in 2020. During the 2020 drilling program, on the request of Agnico, the AWAR was used by Agnico Eagle’s Energy and Infrastructure team to refuel an Orbit Garant fuel storage container located at Kilometer 58 in order to assist in reduction in the amount of helicopter flights required to refuel.

Although a 10-person temporary camp with fuel cache is currently permitted at the project, the 2018, 2019 and 2020 programs were based out of Baker Lake. The 2021 summer general exploration program (prospecting, geological mapping and geochemical sampling) will be based out of Baker Lake once again, but once the materials and equipment are shipped by barge in September, a seasonal 20 person (with the capacity to expand to 40 person) exploration camp with fuel cache will be constructed adjacent to the kilometer 58 staging area. Structures for the proposed camp will include 10 sleeper tents, 1 medical tent, 1 kitchen, 1 dry (with showers), 1 office tent, core shack, generator shack, incinerator and outhouses/pacto systems. The majority of the structures will be insulated Weatherhaven tents, or similar, with plywood floors.

Activities on the Project are currently authorized by Crown-Indigenous Relations and Northern Affairs Canada (“CIRNAC”) Land Use Permit (“LUP”) N2017C0005 and Nunavut Water Board (“NWB”) water licence 2BE-MPM1722. The current approved water usage authorized under water licence 2BE-MPM1722 is 42m<sup>3</sup>/day (2 m<sup>3</sup>/day for camp use and 40 m<sup>3</sup>/day for drilling). 5530 Nunavut Inc. is currently applying to amend water licence 2BE-MPM1722 to increase the water usage to 299 m<sup>3</sup>/day (10 m<sup>3</sup>/day for camp and 289 m<sup>3</sup>/day for drilling) to allow for the increase in the camp size and increase from one to four drills.

5530 Nunavut proposes annual exploration programs, which include rock, soil, and till geochemical sampling, geological mapping, ground and/or airborne geophysical surveys and diamond drilling of approximately 20,000 m. Continued use of the Orbit Garant fuel storage container located at Kilometer 58 of the AWAR is anticipated for future programs.

Annual Program are anticipated to commence approximately April 1 and run until September 30. All field work and drilling will be confined to the Meadowbank Precious Metal Property 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 (AANDC)

### **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 Meadowbank Precious Metal Property is considered to be 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).

The responsibility for proper waste management rests with the waste generator and should be budgeted for accordingly, as a cost of doing business.

## 2.2 Waste sources

Tables 1 and 2 provide a summary of the expected types of hazardous and non-hazardous (inert) wastes to be generated at the Meadowbank Precious Metal Property.

Table 2.1: Non - hazardous (Inert) Wastes

Waste Type	Examples	Estimated Quantity Generated	Treatment/Disposal Method
Sewage	Human waste	10 – 40 people	Privy Pits (outhouses treated with lime) and/or incinerated with incinerator specifically designed for that waste type. Ashes from incineration will be removed and taken to approved disposal site
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 31 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 to approved disposal site
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 approved recycling or disposal site
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 31 m from nearby water sources

Table 2.2: Hazardous Wastes and Pollutants

Waste Type	Examples
Petrochemicals	Diesel, jet fuel, gasoline, various oils
Solvents	Varsol, cleaning products

<b>Waste Type</b>	<b>Examples</b>
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 Meadowbank Precious Metal Property 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 a number of categories including: organics (food wastes), materials for incineration, inert recyclables, inert non-combustible materials, and various hazardous materials. Materials that cannot be incinerated will be stored in appropriate containers until they can be removed from site for treatment and/or disposal at an accredited facility.

## **2.4 Waste Recovery and Reuse**

Recovery and reuse options at the Meadowbank Precious Metal Property 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 a registered hazardous waste receiver.



### **3.1.3 Contaminated or Expired Fuels**

Contaminated or expired fuels, such as Jet B 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 a registered hazardous waste receiver.

### **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 a registered hazardous waste receiver.

### **3.1.5 Contaminated Soil, Snow, and Ice**

Any contaminated soil, snow, or ice will be cleaned up immediately in accordance with the Meadowbank Precious Metal Property "Spill Contingency and Fuel Management 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 a registered hazardous waste receiver.

### **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 a registered hazardous waste receiver.

### **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 a registered hazardous waste receiver.

### **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 Meadowbank Precious Metal Property 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 Vehicles and Other Mechanical Equipment**

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

### **3.3 Inert Combustible Solid Wastes**

The Meadowbank Precious Metal Property 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 a number of 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 Meadowbank Precious Metal Property 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. Waste paper and cardboard will be incinerated.

### **3.3.3 Waste Lumber**

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

## **3.4 Sewage**

The Meadowbank Precious Metal Property camp will utilize privy pits (outhouses), which will be located at least 31 m away from a water body. To control sewage pathogens, outhouses will be periodically treated with lime. When full, the pits will be covered with at least 30 cm of compacted soil. When required (e.g. size of camp increases), Pacto systems will be used and the sewage will be incinerated with incinerator specifically designed for that waste type. 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 31 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. “RainDrain” 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.

If sewage is to be incinerated it will be with an incinerator specifically designed for that waste type. Ashes from incineration will be removed and taken to approved disposal site.

## **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 Meadowbank Precious Metal Property “Emergency Response Plan” and “Spill Contingency and Fuel Management Plan”, respectively.

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**

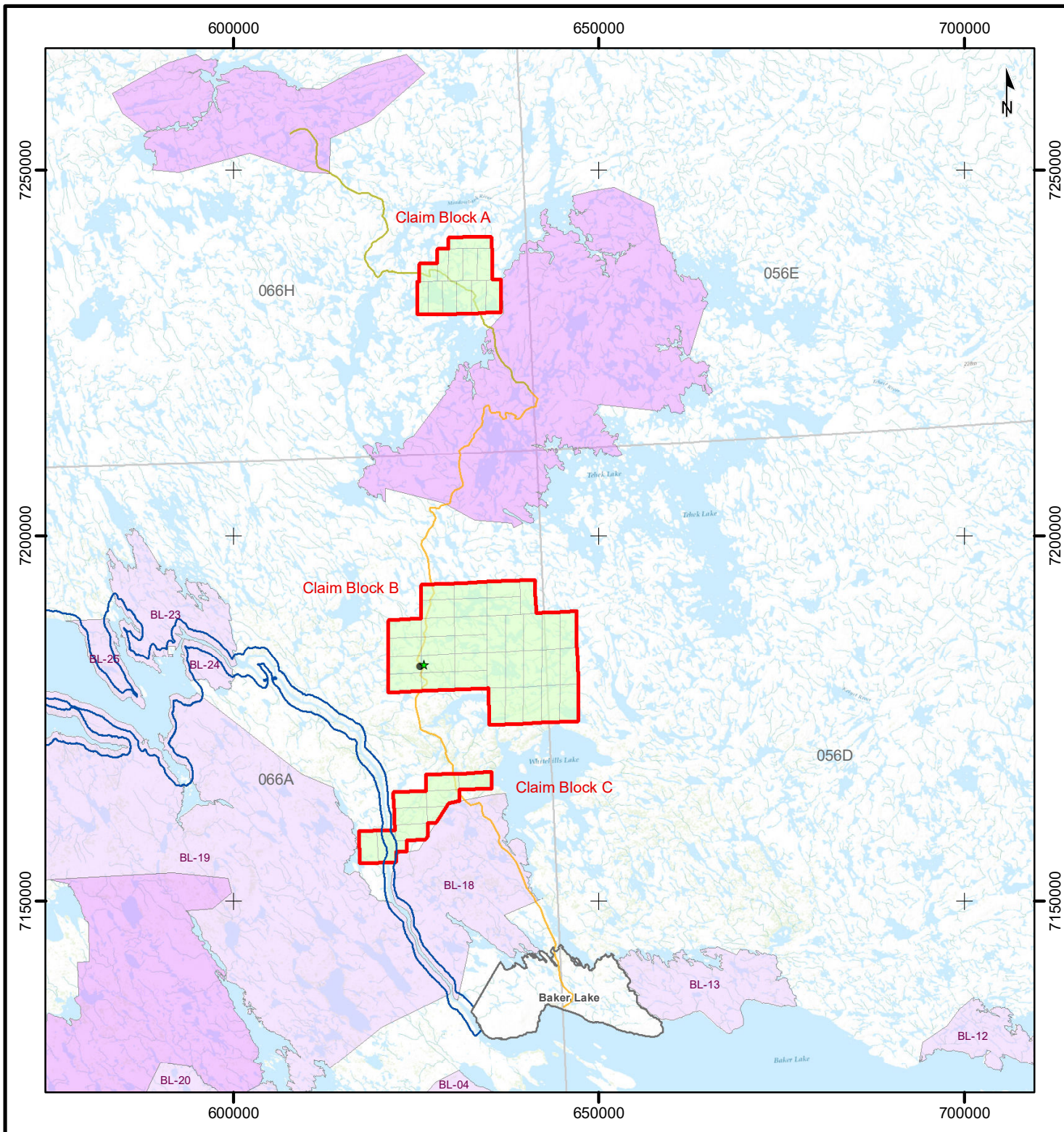
Inspections of the hazardous waste storage area and other waste storage facilities will be conducted daily. Regular inspections will include an assessment of the condition of waste receptacles and storage containers, checking for any damaged or leaking containers or berms, and ensuring that waste is 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 and Fuel Management Plan.”

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

## **Appendix 1**

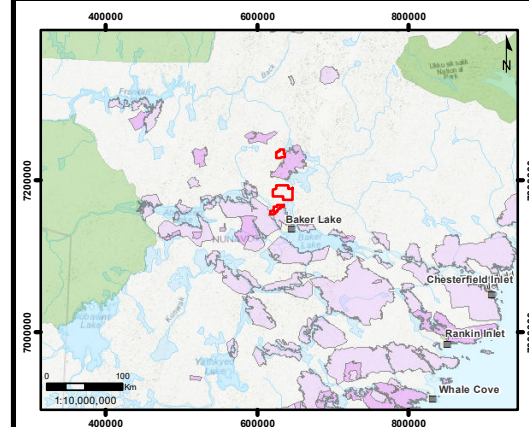
### **Figures**





## Legend

- ★ Proposed Camp Location
- Km 58 Fuel Cache
- Community
- AEM All Weather Access Road
- AEM Amaruq All Weather Access Road
- Major Watercourse
- Major Waterbody
- 1 Km Exploration/Drilling Activities Buffer
- Baker Lake Municipal Boundary
- Meadowbank Property Claim Block
- Meadowbank Property Mineral Claim
- Federal Protected Area
- IOL Surface and Subsurface Ownership
- IOL Surface Ownership
- 1:250,000 NTS Mapsheet



## Western Atlas Resources Inc.

Meadowbank Precious Metal Project, Nunavut, Canada

### Project Description

1:750,000  
0 20 Km

UTM NAD83 Zone 14  
APEX Geoscience Ltd.

Edmonton, AB

June, 2021