North Arrow
MINERALS INC.

Waste Management Plan V3

Loki Diamond Project
Lac de Gras, NT

Date: Originally submitted Dec. 6, 2016 ("V1"), amended Oct. 5, 2017 ("V2")
Re-submitted for Amendment to Land Use Permit W2017C0001 on April 15, 2019 with the following changes:

Section	Changes Made
Property Location and Description	Updates to paragraph to reflect additional of six new claims
Figure 2	Updated map showing six new claims and new proposed Loki Project work area
Table 1	New claims added to table

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INTRODUCTION

North Arrow Minerals Inc. ("North Arrow") is a Canadian owned and operated company which, in conjunction with our partners, conducts diamond exploration programs within Canada. North Arrow recognizes the importance of our role in discovering mineral deposits and that our exploration programs must be conducted in a socially and environmentally responsible fashion.

This document describes the practices undertaken by North Arrow for managing waste from exploration activities at the Loki Diamond Project (the "Project"), located at Lac de Gras in the Northwest Territories.

The land use activity being proposed is a diamond and/or reverse circulation (RC) drilling program to explore for diamond-bearing kimberlite. Timing of the land use operation is proposed for early spring, summer and fall months. Due to the small scope and short timeline of the proposed drilling program, North Arrow plans to rent an existing exploration camp rather than erect a new one.

North Arrow is committed to maintaining sound environmental practices in all of its activities. To achieve this, North Arrow, with its employees and contractors, will:

- Examine the potential impact to the environment of all proposed activities and take steps to minimize or where possible, eliminate the impact;
- Ensure that all activities are in Compliance with all environmental legislation and regulations;
- On a continuous basis, determine North Arrow's impact to the environment and through continuous improvement, strive to attain higher levels of environmental performance;
- Maintain a high level of environmental protection by applying practices and technologies that minimize impacts and enhance environmental quality;
- Maintain dialogue with the communities and other stakeholders within the area of influence of its exploration programs;
- Progressively rehabilitate disturbed areas, develop closure plans that can be continuously improved and incorporate new technologies where practical;
- Train all employees and contractors to understand their environmental responsibility related to its Mineral Exploration Properties;

By taking account of the potential impacts before initiating an exploration program, we will ensure that we are leaving as light a footprint as possible during that program.

There are no existing permits for the Project.

PROPERTY LOCATION AND DESCRIPTION

The Loki Project is comprised of 24 claims in two separate blocks, totalling approximately 13,898 hectares. It is located in the Lac de Gras area of the Northwest Territories, approximately 290 km north-east of Yellowknife, and approximately 30 km south-west and 40 km west from Ekati and Diavik diamond mines respectively (Figure 1). The proposed land use area would be restricted to within the mineral claims (Figure 2).

Figure 1: Loki Project Location Map.

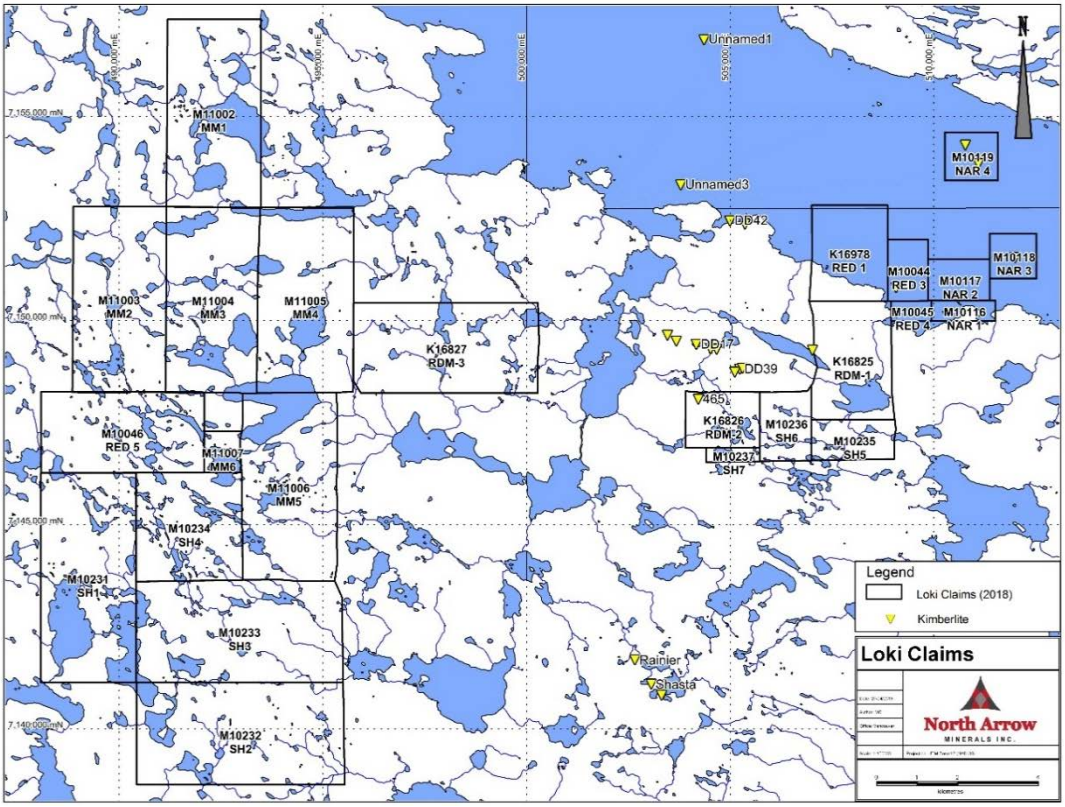

Figure 2: Project location with new claims (MM1-MM6).

Table 1: Loki Project Mineral Tenure with MM1-MM6 Additions

Diamond Project	Disposition Number	Claim Name	Surface Area (hectares)
Loki	K16825	RDM-1	568.58
Loki	K16826	RDM-2	252.12
Loki	K16827	RDM-3	998.77
Loki	K16978	RED 1	418.04
Loki	M10044	RED 3	150.00
Loki	M10045	RED 4	50.00
Loki	M10046	RED 5	785.00
Loki	M10231	SH1	1250.00
Loki	M10232	SH2	1250.00
Loki	M10233	SH3	1250.00
Loki	M10234	SH4	625.00
Loki	M10235	SH5	200.00
Loki	M10236	SH6	213.00
Loki	M10237	SH7	47.00
Loki	M10116	NAR1	75.00
Loki	M10117	NAR2	150.00
Loki	M10118	NAR3	100.00
Loki	M10119	NAR4	225.00
Loki	M11002	MM1	1047.00

Loki	M11003	MM2	1125.00
Loki	M11004	MM3	1125.00
Loki	M11005	MM4	845.00
Loki	M11006	MM5	1058.00
Loki	M11006	MM6	90.00

SITE PHYSICAL, SURFACE AND SUBSURFACE CHARACTERISTICS

The project area is located within the tundra of the Northwest Territories. The landscape in the proposed work area is dominated by exposed bedrock, interspersed with unconsolidated glacial deposits of variable depth, with many streams and river valleys, as well as swamps and bogs.

The property is located within the southern Arctic eco-zone, just north of the tree-line, and borders the transition between continuous and discontinuous permafrost. The average temperature is between -25°C (without wind-chill) in winter and +15° C in summer. Precipitation values are low in the western Arctic, generally less than 250 mm for the year. The landscape is characterized by gentle undulating hills as well muskeg and numerous shallow lakes. Wildlife in the region includes caribou, muskox, arctic hares, arctic foxes, wolverines, arctic wolves and grizzlies.

SUMMARY OF PROPOSED WORK

Exploration planned for the property is a small drill program designed to test a number of land and lake-based geophysical targets. As this is an early stage exploration project, a limited crew consisting of approximately 11 personnel (4 drillers, 1 drill foreman, 2 geologists, 1 helicopter pilot, 1 helicopter engineer, 1 cook/first aid attendant, and 1 camp maintenance/wildlife monitor) will be required. All crew members will be housed in a nearby camp facility, and drilling crews will be transported to and from the drill twice a day using the helicopter.

The short duration of the proposed program does not warrant the expense of building a standalone camp. Drilling will therefore be conducted out of a pre-existing and permitted camp located outside of the project work area. A decision on which nearby camp to work out of will be made closer to program commencement.

Fixed wing support for the camp will be variable, utilizing a ski or float equipped aircraft for the movement of personnel, supplies and equipment to the camp. A Long Ranger 206 or similar Helicopter will transport field crews to the drill site(s) from the camp location and will be used to transport the lightweight drill rig during drill moves. Concerns raised by communities across the north with regard to flight altitude and wildlife will be respected.

The drilling activities will be entirely helicopter supported (i.e. transport of drill rig, fuel and personnel), and will cause minimum disturbance to the land use area. Each drill site will use a maximum area of 20x20 m, or 400 m^2, and upon the completion of each drill hole the metal casings will be removed or cut-off at ground level, and all materials (including empty fuel drums) will removed from the drill site area. The total number of areas targeted over the course

of the program will ultimately be dependent upon results, however from 6-15 drill site locations could be utilized.

A winter program would finish before break-up with the potential to recommence once the lake ice has melted. If warranted, a second stage of summer drilling will be conducted sometime between July and September (scheduling dependent upon weather and logistics). The drilling programs will be conducted out of an existing nearby work camp.

During drilling operations, drill water and cuttings will be pumped into a natural depression or hand-dug sump at least 100 m from the high-water mark of any nearby water body. All drill muds used are nontoxic and biodegradable.

Additional exploration may be conducted on the property during the term of the land access permit. Till sampling, prospecting and ground geophysical surveying have all proved to be useful exploration methods in the past and may be carried out again if warranted. These programs are generally smaller in size and scope and will be conducted during two to four-week periods. Till sampling will involve two to six geologists accessing the land via helicopter, collecting 10-20 kg till samples from specific targeted areas. Personnel will spend anywhere from 1 to 8 hours at each site and will leave no evidence of their land use activities. Sampling and geophysical survey programs will also be conducted out of an existing camp near to the Project.

PURPOSE OF WASTE MANAGEMENT PLAN

The objective of this plan is to define a waste management system that will minimize the effect of exploration activities on the land, water, air, wildlife, fish and vegetation. Lasting impacts of the proposed land use can be mitigated with thorough reclamation practices at all drill sites.

All domestic combustible and non-combustible and hazardous waste materials generated at active drilling sites will be stored in secure containers before being transported back to the camp and disposed of according to the camp land use permit guidelines.

All waste materials generated in the camp will be treated based on existing land use permit for the camp. All waste generated during drilling will be done so under the new permit.

DRILLING OPERATIONS AND SITE RECLAMATION

The proposed land use operation is scheduled to take place over a ~2-3-week period between March and September for the duration of the land use permit authorization (timing and execution are dependent upon weather, logistics and resources).

Drill sites will be reclaimed on an ongoing, day to day basis, and will be occupied for periods of between 3 and 5 days. Upon completion, each drill site location will be fully reclaimed, leaving little to no evidence of the land use operation.

Two drums of diesel and one drum of jet fuel will be kept at the drill site at all times. These drums will be transported to the site via helicopter and stored in a small, easily portable "instaberm" style secondary containment system. One small spill kit plus an extra supply of absorbent pads will be kept at the drill site at all times.

All motor oil and drilling additives will be stored in the containers in which they are delivered and placed on top of absorbent pads. All empty containers will be backhauled on a regular basis and will be discarded in a proper treatment facility.

Garbage created from meals, etc. will be packed out with each shift change and returned to camp for placement in an animal proof storage box. Cigarette butts will be stored in a can expressly for that purpose and will not be thrown on the ground.

Returned water from drilling activities on land will be pumped into a nearby natural depression and the water will be allowed to absorb into the ground. Should there be any cuttings or sludges produced they will be buried in a suitable sump, the requisite distance away from the high-water mark from any water bodies. Any and all drilling muds used will be biodegradable, and any additives used will be non-toxic.

Upon the completion of each drill hole on ice, metal casings will be removed and cemented. Drill holes situated on land will have metal casings removed or cut-off at ground level when unable to retrieve them. Each site will undergo a final inspection once all equipment, fuel drums and refuse is removed.

Returned water/fluid from drilling activities on ice will be captured in a "closed loop" recycling system with no discharge to the water or ice. The cuttings from the return water will be filtered out and captured in bags specifically designed to capture drill cuttings. These bags will be taken to shore and emptied into a natural depression or hand dug sump the requisite distance away from the high-water mark of any water body. Once the contents are emptied, the bags will either be reused or taken back to camp for proper disposal.

Before leaving each site a final inspection will be completed by the project manager (or their designate) to ensure that everything has been removed from the area and that there is little to no evidence of the land use operation.

SPILL PLAN

Drill sites will be fully equipped with secondary containment of all fuels and hazardous materials and spill contingency equipment will be at the ready. Please see the document "Spill Contingency Plan – Loki Project", submitted with this document for further information regarding fuel handling and the storage of fuel and hazardous material for the Project.

WASTE MANAGEMENT PLAN REVIEW AND UPDATE

This waste management plan is current as of the submission date. It will be reviewed twice yearly or prior to the start of any drilling program. It will also be reviewed as and when required by either those in camp, or by the Land Use Inspector, or by changes in regulations.

Table 2: Summary of drilling wastes and disposal methods.

Item	Class	Primary Disposal	Secondary Disposal	Environmental Effect
Grey water, drill cuttings, drill muds	Non-toxic mineral waste	Directly into on-site sump	N/A	Very minor
Drill wastes (liquids or solids) used oils, fuels, lubricants	Hazardous or potentially hazardous	Securely packaged and removed to camp	Approved facility in Yellowknife (i.e. KBL)	None - removed
Domestic refuse	Non-mineral waste	Package and remove to Yellowknife	Approved facility in Yellowknife (i.e. KBL)	Minor release of smoke into atmosphere producing residue or none - removed
Materials for recycling	Non-mineral waste	Package and remove to Yellowknife	Recycle in Yellowknife facility	None - removed

North Arrow acknowledges that neither incineration nor open burning will be used as a means of waste disposal.

All wastes will be stored such that they are not accessible to wildlife and will be removed from the field at regular intervals. Black water will be buried to avoid attracting wildlife.