



PART 1 FORM PROJECT PROPOSAL INFORMATION REQUIREMENTS

To access NIRB documents, project screenings, and project reviews please visit the Nunavut Impact Review Board's ftp site <http://ftp.nirb.ca/>. The NIRB's website (www.nirb.ca) is currently under construction. Please contact info@nirb.ca should you have any questions or require further information.

IMPORTANT!

Please be advised that your application will not be processed until the Sections 1 - 9 are completed in their entirety, in both English and Inuktitut (+ Inuinnaqtun, if in the Kitikmeot).

SECTION 1: APPLICANT INFORMATION

1. **Project Name** Mel Project

2. **Applicant's full name and mailing address:**

North Arrow Minerals Inc.

Suite 960 – 789 West Pender Street

Vancouver, BC V6C 1H2

Phone: 604-668-8355 (Main Office)

Fax: 604-336-4813

Email: mmacmorran@northarrowminerals.com

3. **Primary contact's full name and mailing address:**

Mike MacMorran (Geologist)

Address same as above

Phone: 604-563-4808 (Direct Line)

Fax: 604-336-4813

Email: mmacmorran@northarrowminerals.com

SECTION 2: AUTHORIZATION NEEDED

1. **Indicate all authorizations associated with the project proposal:**

<input type="checkbox"/>	Regional Inuit Association (RIA)
<input checked="" type="checkbox"/>	Nunavut Water Board (NWB)
<input checked="" type="checkbox"/>	Nunavut Planning Commission (NPC)
<input checked="" type="checkbox"/>	Indian and Northern Affairs Canada (INAC)
<input type="checkbox"/>	Department of Fisheries and Oceans (DFO)
<input type="checkbox"/>	Community Government & Services (CG&S)
<input type="checkbox"/>	Nunavut Research Institute (NRI)
<input type="checkbox"/>	Department of Culture, Language, Elders, and Youth (CLEY)

<input type="checkbox"/>	Canadian Launch Safety (CLS)
<input type="checkbox"/>	Environment Canada (EC)
<input type="checkbox"/>	Government of Nunavut (GN)
<input type="checkbox"/>	Department of National Defense (DND)
<input type="checkbox"/>	Hamlet
<input type="checkbox"/>	Parks Canada (PC)
<input type="checkbox"/>	Canadian Wildlife Service (CWS)
<input type="checkbox"/>	Other (please specify):

2. **List the active permits, licenses, or other authorizations related to the project proposal, and their expiry date(s):**



3. List the pending permits, licenses, or other authorizations related to the project proposal:

INAC/AANDC LUP, NWB Water License, QIA Access to IOL

4. Has this project or any components of this project been previously screened or reviewed by NIRB?

☐ YES ☒ NO

If YES, indicate the previous project name and NIRB File No.

SECTION 3: PROJECT PROPOSAL DESCRIPTION

1. Indicate the type of project proposal (check all that apply)^(1,2):
(See Appendix A for Project Type Definitions)

1	All-Weather Road/Access Trail	<input type="checkbox"/>	9	Site Cleanup/Remediation	<input type="checkbox"/>
2	Winter Road/ Winter Trail	<input type="checkbox"/>	10	Oil and Natural Gas Exploration/Activities	<input type="checkbox"/>
3	Mineral Exploration	<input checked="" type="checkbox"/>	11	Marine Based Activities	<input type="checkbox"/>
4	Advanced Mineral Exploration	<input type="checkbox"/>	12	Scientific/International Polar Year Research*	<input type="checkbox"/>
5	Mine Development /Bulk Sampling	<input type="checkbox"/>	13	Harvesting Activities*	<input type="checkbox"/>
6	Pits and quarries	<input type="checkbox"/>	14	Tourism Activities*	<input type="checkbox"/>
7	Offshore Infrastructure (port, break water, dock)	<input type="checkbox"/>	15	Other ⁽²⁾ :	<input type="checkbox"/>
8	Seismic Survey	<input type="checkbox"/>			<input type="checkbox"/>

Please note:

- All project types listed above, except those marked with an asterisk (*), will also require the Proponent to submit a **Part 2 Project Specific Information Requirement (PSIR) Form**. The NIRB application process will not be considered complete without the Part 2 PSIR Form.
- Please be advised that in order to complete the NIRB process, the NIRB may request additional information at any time during the process.
- If "Other" is selected, contact NIRB for direction on whether a Part 2 PSIR Form is required.



2. If Project Type 3, 4 or 5 was selected above, please indicate the mineral of interest that is being extracted. Include a brief description.

<input type="checkbox"/>	Base Metals (zinc, copper, gold, silver, etc)
<input checked="" type="checkbox"/>	Diamonds
<input type="checkbox"/>	Uranium
<input type="checkbox"/>	Other: _____

3a. If Project Type 12, 13 or 14 was selected above, complete the table and questions below.

Transportation Type	Quantity	Proposed Use	Length of Use
<i>E.g. Helicopter</i>	<i>1</i>	<i>Site to site pick-ups and drop-offs</i>	<i>7-14 days</i>

3b. Describe any docks, piers, air strips or related structures that are to be used in conjunction with the proposed project activities. **Please note:** *the building of new structures may require a Part 2 Form.*

3c. If a temporary camp site is to be established, describe the proposed structures in detail and indicate the type and source of power for the camp site if applicable.

4. Personnel

Total No. of personnel on site = (A)	2 to 12	Total No. of days on-site = (B)	21 to 42	Total No. of Person days (A) x (B) = 42 to 504
_____		_____		_____

5. Timing

Period of operation:	from	<u>March 2017</u>	to	<u>Sept 2017</u>
Proposed term of authorization:	from	<u>March 2017</u>	to	<u>March 2019</u>

6a. Region (check all that apply):

<input type="checkbox"/> North Baffin	<input type="checkbox"/> Kivalliq	<input type="checkbox"/> Kitikmeot	<input type="checkbox"/> Transboundary: _____
<input type="checkbox"/> South Baffin	<input checked="" type="checkbox"/> Qikiqtani		

6b. Describe the location of the proposed project activities in a regional context, noting the proximity to the nearest communities and any protected areas.

The land use activity being proposed is a drilling program on North Arrow Minerals Inc.'s Mel Property. The Mel Property is located approximately 200 km northeast of the Hamlet of Nauyasat, and 150 km south of the Hamlet of Hall Beach. The Mel Property is comprised of six mineral claims on Inuit Owned (IOL) and Crown Land and fits within National Topographic System (NTS) map sheet 46O/08 and 46O/09.



IMPORTANT: IF THE PROPOSED ACTIVITIES REQUIRE SUBMISSION OF A NIRB PART 2 PSIR FORM, PLEASE COMPLETE SECTION 8 ONLY, OTHERWISE CONTINUE ON WITH SECTION 5.

SECTION 5: MATERIAL USE

1. List equipment to be used (including drills, pumps, aircraft, vehicles, etc.):

Equipment type and number	Size – dimensions	Proposed use
1 Helicopter (Bell 206 Long Ranger or similar)	Approx. 12 m x 2.8 m x 10.6 m (rotor diameter), 1,057 kg.	<ul style="list-style-type: none"> Daily transport of personnel to/from drill site and Camp. Estimate 2-4 flights per day during drilling. Transport of drill and its components to the drill site at the start of the program and once upon its completion; alternatively, a fixed wing single or twin otter may be used to mob/demob the drill if a safe landing location is identified. Transport of drill core boxes from the drill site to Camp (estimated at one flight per day for approximately 3-6 weeks' time) Transport of fuel drums to the drilling area and for the removal of the empty drums at the end of the program
1 Drill (Discovery 1 or Hornet RC or similar, heli-portable)	Approx. 6 m x 6 m x 3 m, 3,000 kg	Rock coring and RC chip sample collection

1-2 Snowmobiles	<i>Approx. 2 m x 1 m x 1 m, 200 kg</i>	<i>Transporting crews to/from the drill, and general working purposes in camp during the winter months.</i>
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2a. Detail fuel and hazardous material use:

Fuel	Number of Containers and Capacity of Containers	Total Amount of Fuel (in Litres)	Proposed Storage Methods
Diesel	50 (205 litres)	10250	Temporary storage berm in Camp, temporary storage berm at the drill site; fuel stored at site estimated at 3-6 drums. If possible, purchase bulk fuel from community on an as needed basis.
Gasoline	2-3 20 litre Jerry Cans	40-60	Temporary storage berm in Camp
Aviation fuel – Jet A/B	50 (205 litres)	10250	Temporary storage berm in Camp, temporary storage berm at the drill site; Fuel stored at site estimated at 1-2 drums at any one time for emergency purposes and to support drill moves.
Propane	5 x 100 lb tank	100 lb tank	Proximal to the drill. 1-2 tanks stored at the drill, the remainder kept in Camp.
Other			
Hazardous Materials and Chemicals		Total Amount of Hazardous Materials and Chemicals (in Litres)	
Engine Oil	12 (1 litre)	12	Proximal to the drill
Antifreeze	5 (5 litre)	25	Proximal to the drill
Drilling muds/grease	2 (20 litres)	40	Proximal to the drill
Salt	2 10-20 lb bags	n/a	Proximal to the drill
Lead Battery	1	n/a	Stored within the drill

2b. Describe the proposed Spill Prevention Plan.

See *Mel Project Spill Contingency Plan* submitted along with application

3a. Detail the anticipated daily water consumption rates

Daily amount (m ³)	Proposed water retrieval methods	Proposed water retrieval location
0-50	<i>Hose with screen and water pump</i>	<i>Waterbodies with suitable capacity located within the proposed land use area (see Appendix “A” in Project Specific Information Request Form)</i>



3b. Have you applied for a water License with the Nunavut Water Board?

☒ YES

☐ NO

If yes, what class of licence?

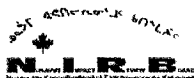
☐ Class A Water Licence

☒ Class B Water Licence

SECTION 6: WASTE DISPOSAL AND TREATMENT METHODS

1. List the types of waste associated with the proposed project activities:

Type of waste	Projected amount generated	Method of Disposal	Additional treatment procedures
Sewage (human waste)	Max.: 12 people for 6 weeks	Outhouse hand-dug pits	Application of lime upon completion of program
Greywater	Max.: 12 people for 6 weeks	Sump	Backfilled upon completion of program
Combustible wastes	Domestic (food containers, paper) – small amount	Transport to town for proper disposal	
Non-Combustible wastes	Bulk items: scrap metal – small amount	Transport to town for proper disposal	
Overburden (organic soil, waste material, tailings)	n/a		
Hazardous waste	<p>Diesel drums Aviation fuel drums Propane Tank</p> <p>Engine oil/container's Antifreeze/containers Drilling muds/grease Salt</p> <p>Batteries</p>	<p>Backhauled to an approved facility for disposal or refilling.</p> <p>Waste oil will be collected and sealed in clearly marked 205L drums and transported to an approved disposal site.</p> <p>Lead batteries will also be contained in appropriate sealed container, clearly marked and transported for disposal at an approved facility.</p>	
Drill cuttings	Approximately 0.5 m ³ per drill hole	Cuttings will be deposited in a natural depression or hand-dug sump the requisite distance from the high-water mark of waterbodies and will not be allowed to flow into any watercourse.	



Drill water	Approximately 0-50 m ³ per drill hole	Any surface runoff during or after drilling will be contained or channeled so it will be filtrated and not directly enter any watercourse.	
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2. Describe the proposed Waste Management Plan.

See **NIRB - Project Specific Information Request Form for Waste Management Procedures** submitted along with this application.

SECTION 7: COMMUNITY INVOLVEMENT & REGIONAL BENEFITS

1. List the community representatives that have been contacted and provide the minutes of the meetings if available:

Community	Name	Organization	Date Contacted
Naujaat	Community for the general public	People from the community	Meetings held in Naujaat May 20, 2014; November 4, 2014
Naujaat	Naujaat Mayor and Council (Donat Milortuk was the point of contact)	Mayor and Council	November 4, 2014; May 14, 2015
Naujaat	HTO (David Tudtadjuk was the point of contact)	HTO	November 4, 2014; May 14, 2015
Hall Beach	Peter Siakuluk	Hall Beach Mayor	November 19, 2014; July 20, 2015
Hall Beach	Salamonie Shoo	QIA	November 19, 2014; July 20, 2015

SECTION 8: GENERAL QUESTIONS

1. Will you be disturbing any known archaeological sites?

☐ YES

☒ NO

SECTION 9: APPLICANT SIGNATURE

Please sign and date your application:

Mike MacMorran

Signature

Geologist - North Arrow Minerals
Title

Oct. 12, 2016
Date



APPENDIX A Project Type Definitions

Access Trail: A project proposal with the objective of providing vehicular access to an area of interest involving minimal alteration to the terrain.

Advanced Exploration: A project proposal with the objective of identifying size, grade, and physical characteristics of a mineral occurrence and to assess the economic and technical feasibility of developing the mineral deposit into a producing mine

All-Weather Road: A project proposal with the objective of road construction for use in all seasons.

Bulk Sampling: A project proposal with the objective of extracting of large samples of mineralized material involving hundreds to thousands of tonnes. Samples are selected as representative of the potential mineral deposit being sampled. May involve crushing/milling (on small-scale)

Harvesting activities: A project proposal with the objective of harvesting animals, marine mammals and/or fish from their natural habitats by means of hunting or trapping for traditional and commercial use.

Marine Based Activities: Any activity occurring in the marine environment, such as vessel use associated with land-based activities or disposal at sea.

*Please note that normal community re-supply or individual ship movements not associated with land-based project proposals shall not be screened by NIRB (Section 12.12.2 of NLCA).

Mine Development: A project proposal with the objective of extracting broken rock with mineralization of sufficient grade and tonnage to sustain commercial mining operations (ore). Mining a body of ore can be achieved by either open pit and/or underground development. Mine development may involve milling. Milling involves treatment of the extracted ore through a combination of mechanical and chemical processes to selectively recover the valuable mineral.

Mineral Exploration: A project proposal with the objective of exploring an area to find geological anomalies. It involves site reconnaissance (ground and/or air) to locate broad and fiscal mineral deposits.

Offshore Infrastructure: A project proposal with the objective of building off loading facilities constructed off the shoreline and connected to the mainland of the marine or freshwater environment. Examples include a jetty, dock, or port facility.

Oil and Gas Exploration/Activities: A project proposal that includes 1) exploration, such as seismic or geological mapping, 2) drilling of oil and gas wells, 3) construction and operation of a pipeline, a gas processing plant or any oil and gas facility within Nunavut.

Pits and Quarries: A project proposal with the objective of pitting, which involves the extraction of granular material (i.e. sands and gravels) and quarrying, which involves the removal of consolidated rock (i.e. bedrock, frozen soil).

Scientific Research: A project proposal with the objective of implementing a series of site activities comprised of observation of phenomena, measurement and collection of data necessary for scientific investigation in designated areas within a limited time period.

Seismic Survey: A project proposal with the objective of conducting a survey to map the depths and contours of rock strata by timing the reflections of sound waves released from the surface. Survey site locations may be offshore (not within 12 nautical miles of any coast), near shore, and extended onshore.

Site Cleanups: A project proposal with the objective of site cleanups (includes DEW line site cleanups), which focuses on the remediation of chemically contaminated soils, stabilization of landfills and dumps, demolition/disposal of infrastructure and debris and monitoring after cleanup is completed.



Tourism Activity: A project proposal with the objective of conducting travel predominantly for recreational, sport or leisure purposes within a designated area and limited time period.

Winter Road: A project proposal with the objective of building a road for winter use by leveling and compacting surface snow and ice. Winter road is removed at end of season.

Winter Trail: A project proposal with the objective of building a trail for winter use by a single pass of a tracked vehicle using a blade, if necessary.