

Department of Energy, Mines & Resources PO Box 2703, Whitehorse, Yukon Y1A 2C6

January 21, 2022

File No: LQ00565

Minto Metals Corp. 61 Wasson Place Whitehorse, YT Y1A 0H7

Dear Sir/Madam:

Re: Class 4 Quartz Mining Land Use Approval

Your application for a Class 4 approval has been approved and is subject to the attached conditions. The effective date of this approval will be January 21, 2022. All work, including restoration, must be completed by January 20, 2032, and inspected before full security and/or completion certificates can be applied for.

Please ensure that pre-season and post-season reports are provided before and after each exploration season. Pre- and post-season reports assist the Mineral Resources Branch in monitoring exploration activity and reclamation. Not providing reports may result in additional security being required.

Please feel free to contact our office at (867) 667-3190 should you have any questions.

Regards,

Saleem Dar

Chief of Mining Land Use

cc: EMR Natural Resources Officer, Compliance Monitoring and Inspections ENV Environmental Affairs, Environmental Protection Branch



MINING LANDS

MINERAL RESOURCES BRANCH GOVERNMENT OF YUKON

Pursuant to the Quartz Mining Act and Quartz Mining Land Use Regulation, the Chief, Mining Land Use hereby grants a Class 4 approval to:

Minto Metals Corp. 61 Wasson Place Whitehorse, YT Y1A 0H7

APPROVAL NUMBER: LQ00565

PROPERTY NAME: Minto Mine

UNDERTAKING: Quartz

CLASS: Class 4 Approval

EFFECTIVE DATE: January 21, 2022

EXPIRY DATE: January 20, 2032

This approval shall be subject to the restrictions and conditions contained herein and to the restrictions and conditions contained in the Quartz Mining Act and the Quartz Mining Land Use Regulation made there under as proposed in Mining Land Use Application.

Dated this January 21, 2022

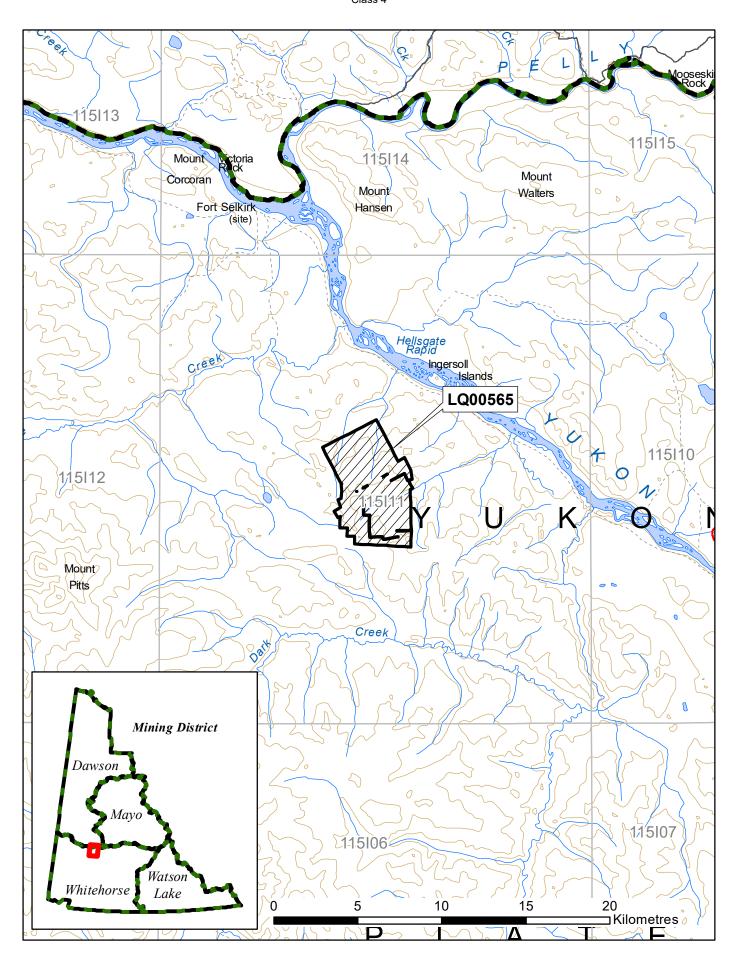
Saleem Dar

Chief of Mining Land Use

SCOPE OF APPROV	/AL:							
Claim Status Report (Appendix A)					Minto	Minto Mine		
Operating Season January 1 – December 31					LQ00565			
PROJECT ACTIVITIE	ES (ON-CLAIM	1):						
USE OF VEHICLES/I	EQUIPMENT							
Use of vehicles on exis	Use of vehicles on existing roads or trails ○ No • Yes							
Gross vehicle weight On-roa Mor 40 t						fore than Less that		
Off-road use of vehicle	es in summer						● No ○ Yes	
Off-road use of vehicle	es in winter						● No ○ Yes	
NEW & EXISTING A	CCESS							
Upgrading of existing	access		o No	• Yes	Length: 18.5 Wi		Width: 7 m	
New roads	o No	• Yes	Length: 18 Width: 7		Width: 7 m			
New trails			• No	o Yes	Leng	th: 0 km	Width: 0 m	
New temporary trails			• No	o Yes	Leng	th: 0 km	Width: 0 m	
Other new access:								
LINES & CORRIDOR	?S							
Lines			• No	$\circ Yes$	Leng	Length: 0 km Width		
Corridors			o No	• Yes	s Length: 1.5 Width: 1.		Width: 1.5 m	
SITE PREPARATION	1							
Number of clearings po	er claim: 0		Area:	0 m ²				
Number of clearings for	or drill pads: 72		Area:	45,000	m ²			
Removal of the vegeta	tive mat						○ No • Yes	
EXPLORATION TRE	NCHING & BU	JLK SAMPLING						
Hand-dug							● No ○ Yes	
Mechanized							● No ○ Yes	
Number: 0 Lo	Number: 0 Length: 0 m Width: 0 m Depth: 0 m Total volu					lume: 0 m³		
Bulk sampling • No • `						/year: 0 tonnes		
Explosives • No · Yes				Total amount: 0 kg Max. in 3			30 days: 0 kg	
EXPLORATION DRILLING:								
TYPE NUMBER OF			HOLES		DEPTH (m)			
Diamond 200			100,000			000		
Above and below ground drilling								

FUEL STORAGE is captured under QML0001								
FUEL TYPE	STORAGE TYPE & CAPACITY		TOTAL VOL	LUME				
FACILITIES & STRUCTURES								
Camp structures: Under QML 0001, the Mine presently has an operational camp, kitchen, potable water treatment plant, sewage treatment plant, fuel tanks and waste disposal facility (hazardous and non-hazardous).								
Number of persons in camp at any one time: 0 Number of person days: 0								
Construction of underground structures • No oYe								
Amount per year: Amount per program:								

All other applicable legislation, regulations, laws, by-laws and ordinances must be complied with. Additional authorizations or approvals may be required. Any doubt as to whether an additional authorization or approval is required should be verified by a duly authorized official at the appropriate government body or bodies.



DEFINITIONS

- "Act" means the Quartz Mining Act, S.Y. 2003, c.14;
- "Access road" means a road that provides access to a public highway or to a private road;
- "Adverse effects" of an exploration program means its adverse environmental or socioeconomic effects and any adverse effects it may have on the existing or asserted aboriginal or treaty rights of any First Nation;
- "Chief" means the Chief of Mining Land Use designated pursuant to the Act;
- "Clearing" means an area that is cleared of trees, brush or vegetative mat for the purpose of establishing a campsite or carrying out mining exploration, but does not include an area cleared for the purpose of establishing a corridor or trail;
- "Corridor" means a path from which trees and brush have been cut to accommodate a water line, fuel line or power line;
- **"Effective date"** means the date this Approval comes into force as evidence by the date of the signature of the Chief;
- **"Exploration program"** means any activity or group of activities undertaken for the sole or principal purpose of assessing land for its suitability for the production of minerals;
- **"Foundation"** means the part of a structure that penetrates the ground and supports the structure;
- "Isolated road" means a road that does not provide access to a public highway directly or through a private road;
- "Inspector" means an inspector designated pursuant to the Act;
- "Line" means a line cut for the purpose of carrying out a geophysical, geological, or engineering survey;
- **"Low ground pressure vehicle"** means a vehicle that applies 35 kPa of pressure or less to the ground surface;
- "Operator" means a person who is engaging in an exploration program, or in development or production;
- "Person-day" in respect of the use of a campsite, means the use of the campsite by one person during a period of 24 hours;
- "Response" means a notice given by the Chief that indicates whether or not an exploration program may be carried out or that extends the time for the Chief's review of a Notification or operating plan;
- "Road" means a pathway for vehicular traffic the construction of which requires the movement of rock or earth;
- "Site" means the area bounded by the sum of the mineral claims described above under 'Scope of Approval';
- "Summer" means the period of a year that is not winter;
- "Trail" means an access to a site within a claim or lease that is constructed with little or no movement of rock or earth; and

- "Trenching" means excavation carried out on a mineral claim for the purpose of obtaining geological information;
- "Upgrading", in relation to a road, means re-establishing a road that has not been useable for more than five years by vehicles of a type the road was originally designed to serve, modifying a road to provide usability for vehicles that are of a different type than those for which the road was originally designed to serve and any other upgrading or modifying of a road, other than for maintenance or erosion control;
- "Vegetative mat" means the organic surface of soil, characterized by the accumulation of organic matter, or partly decomposed organic matter, derived mainly from leaves, twigs, and woody materials, and includes the root mass of living vegetation;
- "Winter" means the period of the year during which (a) the ground is frozen sufficiently to support a vehicle, other than a low ground pressure vehicle, without rutting or gouging of the surface; and (b) there is a sufficient amount of snow on the ground to produce a packed base of 10 cm.

PART ONE - GENERAL REQUIREMENTS

Duration of Approval

1.0 This approval is valid upon signature of the Chief until the expiry date. In the event that claims lapse, or that agreements to operate on claims are dissolved, the approval becomes null and void for that portion of the operating plan, where there is no right to the minerals.

Compliance with Operating Conditions

1.1 All mineral exploration activities must comply with the Operating Conditions contained in Schedule 1 of the Quartz Mining Land Use Regulation and within the approval. Where there is a difference between the operating conditions and approval, the terms of this approval shall prevail. These Operating Conditions are enforceable.

Reporting Requirements

Contact Information

1.2 Submissions and reports to the Chief should be made to both the following addresses:

Chief, Mining Land Use Mining Lands Officer

Box 2703, K-9

Whitehorse, Yukon

Y1A 2C6

Room 102 - 300 Main Street

Whitehorse, YT Y1A 2B5

whitehorse.mining@gov.yk.ca

1.3 The contact for the operator will be:

Journey Paulus
Minto Metals Corp.
P.O. Box 61 Whitehorse,
YT Y1A 0H7
journeyp@mintomine.com

Pre-season and Post-season Reporting

- 1.4 Annually, on or before March 31st of each year commencing in 2022, the operator shall submit a written report covering the period of January 1st to December 31st of the prior year to the Chief which includes the following information for the reporting year:
 - outline the exploration activities planned for the season including the proposed locations;
 - detailed mapping of all areas worked;
 - location of new construction;
 - new areas of disturbance:
 - map data, in the form of SHP files or GIS compatible, of all new roads and trails;
 - map data, in the form of SHP files or GIS compatible, of all reclaimed roads and trails;

- areas of surface permafrost encountered;
- total disturbed area;
- pre-activity survey results, if applicable;
- reclamation activities (including photographs of reclamation efforts) and;
- other documentation produced specified in this approval
- 1.5 The operator shall contact the Northern Tutchone Mining Inspections Office Carmacks Compliance, Monitoring and Inspections at (867) 863-5271 at least 14 days prior to commencing the field season.
- 1.6 The operator shall contact the Northern Tutchone Mining Inspections Office Carmacks Compliance, Monitoring and Inspections at (867) 863-5271 at least 14 days prior to leaving the site at the end of the operation.

Spill Reporting

- 1.7 All spills must be reported immediately to the 24-Hour Yukon Spill Reporting Line (867) 667-7244 and to the Northern Tutchone Mining Inspections Office Carmacks Compliance, Monitoring and Inspections at (867) 863-5271.
- 1.8 An operator who takes an emergency remedial measure shall, as soon as possible but not later than 10 days after taking it, send a written report to the Chief describing the duration, nature and extent of the emergency and the measures taken to respond to it.

Heritage Reporting

- 1.9 All paleontological resources uncovered during operations shall be reported to the Yukon Paleontology Program, Government of Yukon in Whitehorse at (867) 667-8089 or (867) 667-5386 and the Chief.
- 1.10 All archaeological resources uncovered during operations shall be reported to the Yukon Archaeology Program, Government of Yukon in Whitehorse at (867) 667-3771 or (867) 667-5386 and the Chief.
- 1.11 The report developed for Section 2.9, shall be submitted to Government of Yukon Heritage Resources Unit, Cultural Services Branch.

Wildlife Reporting

1.12 All incidents with wildlife shall be reported to the District Conservation Officer in Carmacks at (867) 863-2411.

PART TWO - PROJECT SPECIFIC OPERATING CONDITIONS

Schedule 1 Operating Conditions (Appendix B)

The operator is bound by the Schedule 1 Operating Conditions per the Quartz Mining Land Use Regulation. In addition to the Schedule 1 Operating Conditions, the operator must also comply with the following terms and conditions:

Erosion Control and Permafrost

- 2.0 The operator shall insulate the ground surface beneath all temporary structures and temporary facilities used in the project where permafrost is present to:
 - a) prevent any vegetation from being removed; and
 - b) prevent the ground from settling or eroding.

Trenching

- 2.1 Open trenches shall be sloped at one end to avoid entrapment of wildlife.
- 2.2 The operator must ensure that all employees and contractors working at the trench sites are aware of the operating conditions for trenching.

Solid Waste

- 2.3 The operator shall keep all garbage, including kitchen waste, in a container that prevents access by bears and other wildlife, until properly disposed of in accordance with the Solid Waste Regulations.
- 2.4 When burning kitchen waste on site it must be burned regularly to reduce odours that might attract wildlife and be burned to ash by forced air or fuel fired incineration.

Petroleum Fuel and Hazardous Substances

- 2.5 The operator shall, with indelible marker or paint, clearly identify the owner, the contents and the date on fuel drums to establish and manage ownership and responsibility.
- 2.6 All fuel cache(s) must be protected with an earthen berm or suitable barrier and flagged to prevent spills resulting from accidental contact with heavy equipment. Flags should be visible above the snow pack.
- 2.7 The location of any spills shall be clearly marked until cleanup has taken place. Location markings shall not be removed until directed in writing by an Inspector.

Drilling

2.8 The operator must ensure that all employees and contractors working at the drill sites are aware of the operating conditions for drilling.

Heritage

- 2.9 A heritage resources assessment shall be completed, in consultation with the affected First Nations, in advance of ground disturbing activities in areas with elevated potential for the presence of archaeological or historic sites.
- 2.10 Upon discovery of a heritage resource, the operator shall notify Selkirk First Nation's Heritage Department, Government of Yukon, Chief of Mining Lands and Yukon Heritage, and Yukon Government shall inform the other relevant First Nations of the discovery. Yukon Government and Selkirk First Nation will determine provenance of any discovered heritage resources and inform all relevant First Nations of this determination.

Wildlife

- 2.11 The operator shall contact the regional wildlife biologist to determine if raptors' nests are likely to be in proximity to or overlapping the project area. Aircraft should remain a minimum of 1 km from raptors nests when safe to do so.
- 2.12 The project falls within a Wildlife Key Area for moose late winter habitat from February 1 to April 30. In areas which overlap with the footprint of existing mine disturbance during the February 1 to April 30 time period, the operator shall cease drilling if moose are observed on active claim blocks until moose move off on their own accord. A Moose Sensory Disturbance Mitigation Plan is required to be reviewed and approved by the Chief of Mining Land Use if the operator wishes to drill during the February 1 to April 30 time period in areas which do not overlap with the footprint of existing mine disturbance. The Chief may add any terms, and conditions to the Plan that he/she feels necessary. The Chief of Mining Land Use will consult with affected First Nations on the plan and the approved plan shall be incorporated as a condition of approval.

Water

2.13 The operator shall monitor water quality and water flow in McGinty Creek at the closest available sampling station downstream from active drilling locations. During drilling operations, the sampling frequency shall not be less than once per week and for the same suite of parameters as in the water use licence. Data shall be made available to Selkirk First Nation. Sampling locations and frequency may be adjusted through engagement with Selkirk First Nation.

Land Users

2.14 Each year prior to the commencement of activities, the Operator shall contact the Registered Trapline Concession holder (RTC #145) that overlaps with proposed activities to discuss plans and timing of activities in order to reduce land use conflicts and prevent loss of infrastructure.

Plans

- 2.15 The operator shall ensure that all personnel are familiar with relevant sections of the:
 - Operating Plan (YOR2021-0119-0012)
 - Wildlife Protection Plan (YOR 2021-0119-0017)
 - Waste Management Plan (YOR 2021-0119-0020)
 - Reclamation and Closure Plan (YOR 2021-0119-0013)
 - Sediment and Erosion Control Plan (YOR 2021-0119-0014)
 - MLUA (YOR 2021-0119-0011)

PART THREE - RECLAMATION AND/OR DECOMMISSIONING

- 3.0 Reclamation and/or decommissioning shall be progressive in nature where possible and will occur prior to the expiry of the exploration program or prior to the expiry of this approval, whichever comes first, according to standards outlined in the operating conditions, unless otherwise specified by the Chief.
- 3.1 Debris, equipment, fuel barrels, scrap metal and other waste at the work site shall be completely disposed of, so as not to attract wildlife, by removal to an authorized disposal site at the cessation of the exploration program or prior to the expiry of the approval, whichever comes first.
- 3.2 Structures must be removed and the site restored at the end of the exploration program or prior to the expiry of this approval, whichever comes first, to a level of utility comparable to its previous level of utility.
- 3.3 If an amendment to this approval or new approval is granted, for the claims within the scope of this approval (Appendix A), all outstanding reclamation continues to be the responsibility of the operator.

PART FOUR - OTHER MATTERS

- 4.0 Security may be required at any time by the Chief. The operator must furnish security within thirty (30) days of receiving the written notice from the Chief of the requirement to post security.
- 4.1 All activities requiring security identified in the pre- and/or post-season report(s) shall be paid on or before April 30 annually.
- 4.2 Notice of Schedule III must be provided to the Yukon Water Board ten (10) days prior to use of water.





Claim Status Report

Claim Name and Nbr.	Grant No.	Expiry DateRegistered Owner	% Owned	NTS #'s	Grouping	Permit	Settlement Land
DEF 1 - 9	Y 61693 - Y 61701	2028/10/07 Minto Metals Corp.	100.00	115I11 L		QML0001	Selkirk First Nation R-6A
DEF 10	Y 61702	2022/03/01 Minto Metals Corp.	100.00	115I11	HW07065	QML0001	Selkirk First Nation R-6A
DEF 11	Y 61703	2028/10/07 Minto Metals Corp.	100.00	115I11 L		QML0001	Selkirk First Nation R-6A
DEF 12	Y 61704	2022/03/01 Minto Metals Corp.	100.00	115111	HW07065	QML0001	Selkirk First Nation R-6A
DEF 13 - 18	Y 61705 - Y 61710	2028/10/07 Minto Metals Corp.	100.00	115I11 L		QML0001	Selkirk First Nation R-6A
DEF 19 - 30	Y 61711 - Y 61722	2022/03/01 Minto Metals Corp.	100.00	115111	HW07065	QML0001	Selkirk First Nation R-6A
DEF 31 - 32	Y 61723 - Y 61724	2028/10/07 Minto Metals Corp.	100.00	115I11 L		QML0001	Selkirk First Nation R-6A
DEF 33 - 34	Y 61978 - Y 61979	2028/10/07 Minto Metals Corp.	100.00	115I11 L		QML0001	Selkirk First Nation R-6A
DEF 35 - 36	Y 61980 - Y 61981	2022/03/01 Minto Metals Corp.	100.00	115I11	HW07065	QML0001	Selkirk First Nation R-6A
DEF 37 - 38	Y 61982 - Y 61983	2028/10/07 Minto Metals Corp.	100.00	115I11 L		QML0001	Selkirk First Nation R-6A

Total claims selected: 164

Right column indicator legend:

- L Indicates the Quartz Lease.
- F Indicates Full Quartz fraction (25+ acres)
- P Indicates Partial Quartz fraction (<25 acres)
- D Indicates Placer Discovery
- C Indicates Placer Codiscovery
 - B Indicates Placer Fraction

Left column indicator legend:

R - Indicates the claim is on one or more pending renewal(s).

P - Indicates the claim is pending.



Total claims selected: 164

Yukon

Claim Status Report

Claim Name and Nbr.	Grant No.	Expiry DateRegistered Owner	% Owned	NTS #'s	Grouping	Permit	Settlement Land
DEF 39 - 68	Y 61984 - Y 62013	2022/03/01 Minto Metals Corp.	100.00	115I11	HW07065	QML0001	Selkirk First Nation R-6A
DEF 69	Y 62014	2022/03/01 Minto Metals Corp.	100.00	115111	HW06585	QML0001	Selkirk First Nation R-6A
DEF 70 - 78	Y 62015 - Y 62023	2022/03/01 Minto Metals Corp.	100.00	115111	HW07065	QML0001	Selkirk First Nation R-6A
DEF 79 - 84	Y 66779 - Y 66784	2028/10/07 Minto Metals Corp.	100.00	115I11 L	F	QML0001	Selkirk First Nation R-6A
DEF 85 - 87	Y 76954 - Y 76956	2022/03/01 Minto Metals Corp.	100.00	115111	F HW07065	QML0001	Selkirk First Nation R-6A
DEF 1379	Y 76953	2028/10/07 Minto Metals Corp.	100.00	115I11 L		QML0001	Selkirk First Nation R-6A
MINTO 1 - 16	Y 61620 - Y 61635	2039/05/13 Minto Metals Corp.	100.00	115I11 L		QML0001	Selkirk First Nation R-6A
MINTO 17 - 18	Y 61904 - Y 61905	2039/05/13 Minto Metals Corp.	100.00	115I11 L		QML0001	Selkirk First Nation R-6A
MINTO 19 - 20	Y 61906 - Y 61907	2022/03/01 Minto Metals Corp.	100.00	115111	HW07065	QML0001	Selkirk First Nation R-6A
MINTO 23 - 28	Y 61914 - Y 61919	2022/03/01 Minto Metals Corp.	100.00	115I11	HW07065	QML0001	

Left column indicator legend:

P - Indicates the claim is pending.

Right column indicator legend:

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- F Indicates Full Quartz fraction (25+ acres)
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- D Indicates Placer Discovery
- C Indicates Placer Codiscovery
 - B Indicates Placer Fraction

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Yukon

Claim Status Report

Claim Name and Nbr.	Grant No.	Expiry DateRegistered Owner	% Owned	NTS #'s	Grouping	Permit	Settlement Land
MINTO 29 - 30	Y 61932 - Y 61933	2022/03/01 Minto Metals Corp.	100.00	115111	HW07065	QML0001	Selkirk First Nation R-6A
MINTO 31	Y 61920	2022/03/01 Minto Metals Corp.	100.00	115I11	HW07065	QML0001	Selkirk First Nation R-6A
MINTO 32	Y 61921	2039/05/13 Minto Metals Corp.	100.00	115I11 L		QML0001	Selkirk First Nation R-6A
MINTO 33	Y 61922	2022/03/01 Minto Metals Corp.	100.00	115111	HW07065	QML0001	Selkirk First Nation R-6A
MINTO 34	Y 61923	2039/05/13 Minto Metals Corp.	100.00	115I11 L		QML0001	Selkirk First Nation R-6A
MINTO 35 - 36	Y 61908 - Y 61909	2039/05/13 Minto Metals Corp.	100.00	115I11 L		QML0001	Selkirk First Nation R-6A
MINTO 37 - 38	Y 61910 - Y 61911	2022/03/01 Minto Metals Corp.	100.00	115111	HW07065	QML0001	Selkirk First Nation R-6A
MINTO 41 - 44	Y 61926 - Y 61929	2022/03/01 Minto Metals Corp.	100.00	115111	HW07065	QML0001	Selkirk First Nation R-6A
MINTO 45 - 46	Y 61930 - Y 61931	2039/05/13 Minto Metals Corp.	100.00	115I11 L		QML0001	Selkirk First Nation R-6A
MINTO 47 - 52	Y 61934 - Y 61939	2039/05/13 Minto Metals Corp.	100.00	115I11 L		QML0001	Selkirk First Nation R-6A

Total claims selected: 164

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Left column indicator legend:

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Claim Status Report

Claim Name and Nbr.	Grant No.	Expiry DateRegistered Owner	% Owned	NTS #'s	Grouping	Permit	Settlement Land
MINTO 65 - 68	Y 62296 - Y 62299	2039/05/13 Minto Metals Corp.	100.00	115I11 L		QML0001	Selkirk First Nation R-6A
MINTO 69	Y 62300	2022/03/01 Minto Metals Corp.	100.00	115111	HW07065	QML0001	Selkirk First Nation R-6A
MINTO 70 - 71	Y 62301 - Y 62302	2039/05/13 Minto Metals Corp.	100.00	115I11 L		QML0001	Selkirk First Nation R-6A
MINTO 72 - 73	Y 62303 - Y 62304	2022/03/01 Minto Metals Corp.	100.00	115I11	HW07065	QML0001	Selkirk First Nation R-6A
MINTO 75 - 89	Y 62305 - Y 62319	2022/03/01 Minto Metals Corp.	100.00	115111	HW07065	QML0001	Selkirk First Nation R-6A
MINTO 94 - 95	Y 77310 - Y 77311	2022/03/01 Minto Metals Corp.	100.00	115111	F HW07065	QML0001	Selkirk First Nation R-6A
MINTO 96 - 97	Y 78024 - Y 78025	2022/03/01 Minto Metals Corp.	100.00	115111	F HW07065	QML0001	Selkirk First Nation R-6A

Criteria(s) used for search:

CLAIM DISTRICT: WHITEHORSE CLAIM NAME: MINTO CLAIM NUMBER (FROM & TO): 94 & 97 CLAIM STATUS: ACTIVE & PENDING REGULATION TYPE: QUARTZ

Left column indicator legend:

P - Indicates the claim is pending.

Right column indicator legend:

L - Indicates the Quartz Lease.

F - Indicates Full Quartz fraction (25+ acres)

P - Indicates Partial Quartz fraction (<25 acres)

D - Indicates Placer Discovery

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APPENDIX B

Quartz Mining Land Use Regulation

Schedule 1 Operating Conditions

Removal of the Vegetative Mat

1. If the vegetative mat must be removed to carry out exploration activities, it must be removed so as to protect the seed and root stock contained within the mat and be stored separately from other overburden or bedrock removed for use in re-establishing the vegetative mat when the exploration program ceases.

Re-establishment of the Vegetative Mat

- 2. (1) All vegetated areas disturbed by exploration activities, including fuel and waste storage areas, clearings, corridors, temporary trails, camps and supporting infrastructure, and trenches and drill sites, must be left in a condition conducive to re-vegetation by native plant species or other species adaptable to the local environment to encourage re-vegetation comparable to similar, naturally occurring, environments in the area.
 - (2) Conditions conducive to re-vegetation include provision of adequate soil layer with moisture retaining ability, no soil contamination by hydrocarbons or other hazardous substances, provision of adequate seed or root stock, and contoured or otherwise stable slopes.
- 3. If adequate seed or root stock is not naturally available, re-seeding or transplanting of vegetation is required. Only non-invasive species may be used for re-seeding or transplanting. Consult with the Mining Inspector prior to seeding.

Erosion Control and Permafrost

- 4. All areas disturbed during an exploration program must be re-sloped, contoured or otherwise stabilized to prevent long-term soil erosion, slumping and subsidence.
- 5. All exploration activities must be carried out to avoid or minimize damage to and loss of permafrost.

Trenching

- 6. Trenching carried out by hand or using hand-held tools must be methodical. All trenches must be stabilized and marked to minimize risk to the public.
- 7. Trenches constructed with mechanized equipment must be back filled by first depositing any removed overburden and bedrock and then replacing the vegetative mat that was removed to construct the trench.

Historic Objects and Burial Grounds

- 8. Exploration activities must not be carried out within 30m of a known archeological site unless the Chief indicates, in writing, that such activities may be carried out.
- 9. Any sites containing archeological objects, paleontological objects or human remains or burial sites discovered in the course of carrying out an exploration program must be immediately marked and protected from further disturbance and, as soon as practicable, the discovery reported to the Chief. No further activities may be carried out within 30m of the site until the Chief indicates, in writing, that activities may be resumed.

Solid Waste

- 10. All solid waste, including debris, equipment, barrels, drums, and scrap metal, must be safely stored on the site of the exploration program while the program is carried out and must be disposed of in accordance with the Solid Waste Regulation when the program ceases.
- 11. Camps must be kept clean and tidy.

Petroleum Fuel and Hazardous Substances

- 12. If petroleum fuel storage capacity exceeds 4000 L, a secondary containment structure must be constructed. The containment structure must be made of a material impervious to petroleum products and:
 - a) if there is a single storage tank, be of sufficient size to accommodate at least 110% of the capacity of the storage tank; or
 - b) if there is more than one storage tank, be of sufficient size to accommodate 110% of the capacity of the largest storage tank or 10% of the total capacity of all the tanks, whichever is larger.
- 13. All petroleum products, including waste petroleum products, and any other hazardous substances must be stored in a secure fashion no less than 30m from the ordinary high water mark of any water body.
- 14. All petroleum products, including waste petroleum products, and any other hazardous substance, must be transferred and handled without spillage.
- 15. All petroleum products and any other hazardous substances must be removed from the site of the exploration program when the program ceases.
- 16. All waste petroleum products and any other special waste, as defined in the Special Waste Regulations, generated in the course of carrying out the exploration program must be disposed of in accordance with the Special Waste Regulations when the program ceases.

Spills and Spill Contingency Plans

- 17. A spill contingency plan for petroleum products and other hazardous waste must be prepared and posted in the camp and at all fuel handling locations used in carrying out the exploration program.
- 18. All spill clean-up equipment and material must be maintained in a state of readiness sufficient at all times to contain and clean-up any hazardous material spills.
- 19. If a spill occurs, the spill contingency plan must be immediately implemented and notice given to the 24-hour Yukon Spill Report Line. As soon as practicable, an inspector must be contacted. Whatever remedial action is required to clean-up the spill and reclaim the affected land and water must be taken.

Use of Vehicles

20. Vehicles must be maintained and operated to prevent spills of fuel, lubricants, coolants and oil.

Timber and Brush

- 21. Cut brush must not be piled so that it blocks movement of wildlife or people.
- 22. Leaning trees created by cutting of lines, corridors, temporary trails, and clearings must be felled.
- 23. When it is economically viable to do so, timber suitable for sale must be salvaged and stockpiled.
- 24. All risk of fire hazard must be avoided.

Drilling

- 25. All reasonable efforts must be made when drilling to minimize the impact on wildlife and the public.
- 26. Vegetation other than that within a drill sump, must not be covered with drill cuttings.
- 27. Core must be stored in a stable fashion.
- 28. Drill mud must be re-circulated when possible.
- 29. All drill fluids must be contained in a sump.
- 30. Drill holes that pose a hazard or that lead to ground water must be plugged to prevent flow of water to the surface.

- 31. The location of drill holes must be marked on the ground by flagging or other suitable means at the location of the drill hole.
- 32. Drilling waste, including fluid, cuttings and mud must not be left within 30m of a water body.

Roads, Trails, and Off-road Trail Use

- 33. All vehicles must be operated to avoid rutting and gouging of roads and trails.
- 34. Off road and trail routes must be reconnoitered and must be used in a way that minimizes ground disturbance, including damage to permafrost and sensitive wildlife habitat.
- 35. If rutting, gouging, ponding or permafrost degradation occurs off road or trail, vehicle use must be suspended or relocated to ground that is capable of bearing the weight of the vehicle without causing such damage.
- 36. Use of skids on permafrost or wet ground is only permitted outside of winter where it is not reasonable to use any other means of transporting equipment.
- 37. Routes for temporary trails must be reconnoitered and flagged.
- 38. In addition to any remedial action required in relation to item 2 of this schedule, temporary trails must be blocked to prevent further vehicular access.

Release of Sediment

39. All reasonable care must be taken in carrying out exploration activities near or adjacent to a water body to prevent sediment from entering a water body, unless otherwise permitted by law.

Use of Explosives

40. Explosives must be set off in a manner to minimize impact on wildlife and the public to ensure that forest fires, unplanned landslides, or artificial damming of water bodies does not occur.

Waste Rock

- 41. Waste rock piles must be located at least 30m from any water body and be physically stable.
- 42. Waste rock containing sulfides must be returned underground.
- 43. Access to underground openings must be blocked to prevent access by wildlife and people.

Operational Guidelines

Exploration activities

The Yukon Chamber of Mines has developed an informative Best Management Practices document that should be reviewed in the context of project activities. The operator should reference the following document when planning and conducting project activities:

 Yukon Mineral and Coal Exploration Best Management Practices and Regulatory Guide (https://www.yukonminers.org/index.php/all-docs/guidebooks/3-yukon-mineral-and-coal-exploration-best-management-practices-and-regulatory-guide/file).

Bears and other wildlife

To increase worker safety, reduce potential conflicts and prevent unnecessary wildlife mortality, the operator should implement pertinent components of:

- Guidelines for Industrial Activity in Bear Country for the Mineral Exploration, Placer Mining and Oil & Gas Industries (https://yukon.ca/sites/yukon.ca/files/env/env-quidelines-industrial-activity-bear-country.pdf).
- If an electric fence is an appropriate precaution, or a requirement, the operator should reference the following comprehensive and highly informative guide: Reducing Wildlife Conflict with Electric Fencing: A Beginner's Guide (https://yukon.ca/sites/yukon.ca/files/env/env-electric-fencing_en.pdf).

Invasive species

To minimize the risk and consequences of spreading invasive plant species the operator should:

 Become familiar with the Yukon invasive species and how to manage them by referring to the Yukon Invasive Species Council document, "Why Should I Care About Invasive Species" (https://www.yukoninvasives.com/index.php/en/resources/brochures/31-why-should-i-care-about-invasive-species/file).

Heritage Resources

To better understand how to manage potential impacts to heritage resources, the operator should refer to the following document(s):

- Mineral Exploration Best Management Practices for Heritage Resources (http://www.tc.gov.yk.ca/pdf/Mineral_Exploration_BMP_for_Heritage_Resources.pdf).
- Best Management Practices for Burial Sites and Human Remains in Yukon (http://www.tc.gov.yk.ca/pdf/BurialSites_BMP_2014.pdf).

Work in/near water

Project activities have the potential to affect water quantity, quality and/or rate of flow. The operator should provide for the protection of water by applying practices described in:

 Best Management Practices for Works Affecting Water in Yukon (https://yukon.ca/sites/yukon.ca/files/env/env-preferred-practices-works-affecting-yukon-waters.pdf).

Aircraft use

Project activities are authorized in an area known to be inhabited by sheep and/or caribou. The operator and/or aircraft pilots should plan flight paths and protocols based on the published guideline(s):

- Flying in Sheep Country: How to Minimize Disturbance from Aircraft (https://yukon.ca/sites/yukon.ca/files/env/env-flying-sheep-country.pdf).
- Flying in Caribou Country: How to Minimize Disturbance from Aircraft (https://yukon.ca/sites/yukon.ca/files/env/env-flying-caribou-country.pdf).