

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

July 27, 2018 File No: LQ00495

Bernie Kreft 1 Locust Place Whitehorse YT Y1A 5G9

Dear Sir/Madam:

# **Re:** Class 3 Quartz Mining Land Use Approval

Your application for a Class 3 approval has been approved and is subject to the attached conditions. The effective date of this approval will be July 27, 2018. All work, including restoration, must be completed by July 26, 2024, and inspected before full security and/or completion certificates can be applied for.

The attached 'Operational Guidelines' offer additional mitigations that would enable you to maximize the environmental performance of your program, but are not approval conditions.

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) 667-3107 should you have any questions.

Regards,

Robert Savard

A/Chief, 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 3 approval to:

Bernie Kreft 1 Locust Place Whitehorse YT Y1A 5G9

APPROVAL NUMBER: LQ00495

PROPERTY NAME: Sixty Mile

UNDERTAKING: Quartz

CLASS: Class 3 Approval

EFFECTIVE DATE: July 27, 2018

EXPIRY DATE: July 26, 2024

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 LQ00495.

Dated this July 27, 2018

Robert Savard

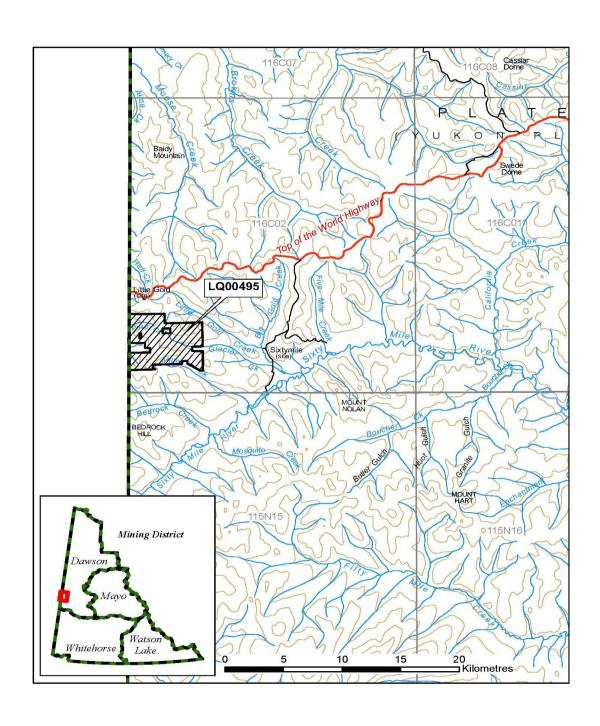
A/Chief, Mining Land Use

SCOPE OF APPROVA	AL:								
Claim Status Report (Appendix A)					LQ00495				
Operating Season May 1 to Oct. 15					Sixty Mile				
PROJECT ACTIVITIES (ON-CLAIM):									
USE OF VEHICLES/I	EQUIPMENT								
Use of vehicles on existing roads or trails ○ No • Yes									
Gross vehicle weight	On-trails: <20t								
Off-road use of vehicles	○ No • Yes								
Off-road use of vehicles	in winter					• No • Yes			
NEW & EXISTING A	CCESS								
Upgrading of existing a	ccess		○ No • Y	es Leng	th: 1 km	Width: 6 m			
New roads			○ No • Y	es Leng	th: 2 km	Width: 6 m			
New trails			○ No • Y	es Leng	th: 7 km	Width: 6 m			
New temporary trails			• No o Y	es Leng	th: x km	Width: x m			
Other new access: None	<b>)</b>		'						
LINES & CORRIDOR	RS								
Lines			• No o Y	es Leng	th: x km	Width: x m			
Corridors • No • Yes Length						Width: x m			
SITE PREPARATION	J								
Number of clearings for	helicopter pads a	and camps: 6	Area: 500 1	$m^2$					
Removal of the vegetati	ve mat					○ No • Yes			
EXPLORATION TRE	ENCHING & BU	LK SAMPLING							
Hand-dug						∘ No • Yes			
Mechanized						○ No • Yes			
Number: 24	Length: 75 m	Width: 2.3 m	Depth: 2 m		Total volu	ıme: 8280 m <sup>3</sup>			
Bulk sampling	• No o Ye	No ○ Yes							
Explosives		• No ○ Yes	Total amount: x kg Max. in 3		0 days: x kg				
EXPLORATION DRI	LLING								
ТҮРЕ		NUMBER OF HOLES			DEPTH	I (m)			
Diamond		60			6000				
Reverse Circul	lation	60	6000			0			

FUEL STORAGE								
FUEL TYPE		SE TYPE & ACITY	TOTAL VOLUME					
None								
FACILITIES & STRUCTURES								
Camp structures: None								
Number of persons in camp at any one time: x  Number of person days: x								
Construction of underground structures   • No • Yes								
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.

LQ00495 Sixty Mile Bernie Kreft



# **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 socio-economic 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 Box 249

Whitehorse, Yukon Dawson City. YT Y0B 1G0 Y1A 2C6 dawson.mining@gov.yk.ca

1.3 The contact for the Operator will be:

Bernie Kreft 1 Locust Place Whitehorse YT

Y1A 5G9 Bernie Kreft

Bernie.kreft@gmail.com

867-668-7965

# Pre-season and Post-season Reporting

- 1.4 A report shall be submitted at the beginning of each mining season outlining the exploration activities planned for the season including the proposed locations.
- 1.5 A report shall be submitted at the end of each mining season indicating exploration activities completed during that season. This report shall include but is not limited to:
  - 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 permafrost encountered;
  - total disturbed area:

- pre-activity survey results, if applicable;
- reclamation activities; and
- documentation produced by environmental monitors.
- 1.6 The operator shall contact the Dawson Mining Inspections Office (Compliance, Monitoring and Inspections) at (867) 993-7300 at least 14 days prior to commencing the field season.
- 1.7 The operator shall contact the Dawson Mining Inspections Office (Compliance, Monitoring and Inspections) at (867) 993-7300 at least 14 days prior to leaving the site at the end of the operation.

# **Spill Reporting**

- 1.8 All spills must be reported immediately to the 24-Hour Yukon Spill Reporting Line (867) 667-7244 and to the Dawson Mining Inspections Office (Compliance, Monitoring and Inspections) at (867) 993-7300.
- 1.9 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**

- 1.10 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.
- 1.11 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.
- 1.12 The report(s) developed for Section 2.15, shall be submitted to Government of Yukon Heritage Resources Unit, Cultural Services Branch.

# Wildlife Reporting

1.13 All incidents with wildlife shall be reported to the District Conservation Officer in Dawson (Northern Region) at (867) 993-5492.

# <u>PART TWO – PROJECT SPECIFIC OPERATING CONDITIONS</u>

# **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 All trenches, with the exception of active trenches, shall be backfilled by September of each year.
- 2.3 The operator must ensure that all employees and contractors working at the trench sites are aware of the operating conditions for trenching.

#### **Solid Waste**

- 2.4 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*.
- 2.5 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**

- 2.6 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.
- 2.7 All fuel cache(s) must be protected with an earthen berm and flagged to prevent spills resulting from accidental contact with heavy equipment. Flags should be visible above the snow pack.
- 2.8 The location of any spills shall be clearly marked with stakes or flags.

# **Drilling**

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

#### Wildlife

- 2.10 The operator shall contact the Regional Biologist (867-993-6461) weekly between September 26<sup>th</sup> and October 20<sup>th</sup> to obtain migration updates on the Fortymile Caribou Herd. If the Regional Biologist expects the herd to migrate through the project area, the operator shall comply with written guidance provided to it through the Chief of Mining Lands as to when project activities shall cease for the season.
- 2.11 The operator shall suspend exploration activities if large groups of caribou are within 1 km of active work areas.
- 2.12 The operator shall carry out all phases of the project in a manner that protects and avoids harming, killing or disturbing migratory birds or destroying or taking their nests or eggs.
- 2.13 If active bird nests are discovered, project activities should be postponed in the nesting area until nesting is completed.

#### Access

2.14 Reclamation and/or decommissioning of roads and trails shall be progressive in nature and shall be documented annually in the post season report. Reclamation and/or decommissioning of roads and trails shall occur as soon as roads and trails are no longer needed for exploration activities unless the need is documented in the post and pre-season reports. The status of roads and trails (i.e. active or inactive) and on-going/completed reclamation activities shall be reported to the Chief, Mining Land Use annually via post-season reports.

# Heritage

- 2.15 The operator shall complete a heritage resources impact assessment in advance of ground disturbing activities in areas with elevated potential for the presence of heritage resources.
- 2.16 Upon discovery of a heritage resource, the operator shall notify the Heritage Department of Tr'ondëk Hwëch'in in addition to Government of Yukon, Chief of Mining Lands and Yukon Heritage.

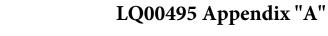
# <u>PART THREE – RECLAMATION AND/OR DECOMMISSIONING</u>

- 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.

- 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.
- 4.1 Notice of Schedule III must be provided to the Yukon Water Board ten (10) days prior to use of water.
- 4.2 Attached (Appendix C) are the commitments that form part of this operating plan.





# **Claim Status Report**

Claim Name and Nbr.	Grant No.	Expiry Date Registered Owner	% Owned	NTS #'s	Grouping	Permit
Ali 15 - 18	YD20151 - YD20154	2018/09/30 Bernard Kreft	100.00	116C02	<b>k</b> 6	C1Q00048, LQ00495
Ali 33 - 34	YD20169 - YD20170	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
Ali 47	YD20183	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
Ali 63 - 64	YD20199 - YD20200	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
Ali 65 - 70	YD20233 - YD20238	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
BK 1 - 8	YD17001 - YD17008	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
BK 11 - 20	YD17011 - YD17020	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
BK 22 - 39	YD17022 - YD17039	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
BK 41 - 50	YD17041 - YD17050	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
BK 74 - 81	YD17074 - YD17081	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
BK 93 - 102	YD17093 - YD17102	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
BK 269	YD17000	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
BK F 10	YD17010	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
Cici 3 - 6	YB67514 - YB67517	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
Cici 14 - 16	YB67525 - YB67527	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
Cici 18	YB67529	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
Cici 25	YB67536	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
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Left column indicator legend:

Right column indicator legend:

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

P - Indicates the claim is pending.

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



# **Claim Status Report**

	Claim Name and Nbr.	Grant No.	Expiry Date Registered Owner	% Owned	NTS #'s	Grouping	Permit
R	Cici 27	YB67538	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	CICI 44	YC07257	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00495 C1Q00048, LQ00495
R	CICI 46 - 47	YC07259 - YC07260	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00495 LQ00495
R	Creek 1 - 2	YC04560 - YC04561	2018/09/30 Bernard Kreft	100.00	116C02	F	C1Q00495 LQ00495
R	Creek 7	YC03742	2018/09/30 Bernard Kreft	100.00	116C02	F	C1Q00048, LQ00495
R	Creek 8 - 12	YC03743 - YC03747	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Creek 13	YC03748	2018/09/30 Bernard Kreft	100.00	116C02	F	C1Q00048, LQ00495
R	Creek 14	YC03749	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Creek 19	YC03754	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Creek 20	YC03755	2018/09/30 Bernard Kreft	100.00	116C02	F	C1Q00048, LQ00495
R	Creek 21	YC03756	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Creek 22	YC03757	2018/09/30 Bernard Kreft	100.00	116C02	F	C1Q00048, LQ00495
R	Creek 23	YC03758	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Creek 25	YC03760	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Creek 26	YC03761	2018/09/30 Bernard Kreft	100.00	116C02	F	C1Q00048, LQ00495
R	Creek 31 - 33	YC07263 - YC07265	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Creek 34	YC07266	2018/09/30 Bernard Kreft	100.00	116C02	F	C1Q00048, LQ00495
	6. 1			Total claims	s selected: 136	j	200175

Left column indicator legend:

Right column indicator legend:

Page 2 of 3

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

P - Indicates the claim is pending.

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



# **Claim Status Report**

	Claim Name and Nbr.	Grant No.	<b>Expiry Date Registered Owner</b>	% Owned	NTS #'s	Grouping	Permit
R	Creek 35 - 38	YC07267 - YC07270	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Uni 2	YB67500	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Uni 4	YB67502	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Uni 6	YB67504	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Uni 10	YB67508	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Uni 12	YB67510	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Uni 46 - 47	YC07375 - YC07376	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Uni 49	YC07378	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Uni 54	YC44635	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Uni 56	YC44637	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Uni 58	YC44639	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Uni 60	YC44690	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495
R	Uni 61 - 65	YC44685 - YC44689	2018/09/30 Bernard Kreft	100.00	116C02		C1Q00048, LQ00495

# **Criteria(s) used for search:**

CLAIM DISTRICT: 1000002 CLAIM STATUS: ACTIVE & PENDING DOCUMENT NUMBER: LQ00495 REGULATION TYPE: QUARTZ

Left column indicator legend:

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

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)

Total claims selected: 136

- D Indicates Placer Discovery
- C Indicates Placer Codiscovery
- B Indicates Placer Fraction

#### 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.

#### APPENDIX C

# **Proponent Commitments**

#### **Erosion/Sedimentation**

- No trenching, clearing, drilling or road/trail construction will occur within 30m of a watercourse.
- All trenches and other workings will be left in a safe and stable manner.
- Excavated material will be stockpiled in a stable manner adjacent to trenches.
- All trenches and surface disturbances will be contoured to conform to natural topography with rocky material placed first and soil plus vegetative matter spread over top.
- Trails will be constructed by falling and bucking timber and driving tracked vehicles across the ground, vegetative mat will remain intact and in place.
- Roads will be constructed in a similar manner but vegetative mat will be disturbed enough to allow wheeled vehicles to use the road.
- All slopes will be given a 1:2 slope ratio unless natural topography suggests a different aspect ratio is prudent.
- Disturbed areas will have available vegetation and overburden spread over them to promote rapid revegetation.

# **Contamination**

- Parts and other waste materials produced during the course of the Project will be removed from the site and taken to the nearest landfill located in Dawson City.
- The proposed workings will not occur near any running water.
- Sumps will be hand dug at each diamond drill site.
- No fuels/oils will remain on site.
- Fuel will be brought to site daily by tidy tank or as needed.
- No waste petroleum products are anticipated to be created at this site. If any waste petroleum is created it will be kept in sealed 20L pails and removed from the site and brought to Dawson where it will be disposed of in an appropriate manner.
- Machinery will be maintained in Dawson prior to arriving at the exploration site.
- Machinery requiring fueling will be parked in an open area that can be easily accessed by a 4x4 truck.

# **Reclamation**

- Reclamation will be conducted on an ongoing basis as well as at the completion of the program
- Final decommissioning will include de-activating roads, ensuring that all disturbed areas are left in a state conducive to rapid re-vegetation
- All equipment will be removed from site.
- Un-needed trails/roads will be deactivated at the end of each year of work
- Any access road or trail constructed during the course of the program will be fully reclaimed upon final decommission. This will include scattering bucked wood along trails, while reclamation of access roads include the construction of ditches to block access and the spreading of vegetative matter and soil onto surface to ensure rapid re-growth.

# Wildlife and Wildlife Habitat

- Trenches with no economic potential will be immediately backfilled.
- Trenches with obvious mineralization will be backfilled at either each year end or at the completion of the program.
- Trenches will be ramped at either end to allow for easy access in and out.
- Any access road or trails constructed during the course of the program will be fully reclaimed upon final decommission.

# **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 (http://yukonminers.org/wp-content/uploads/2017/06/BMP RG Aug29 FINAL WebFile.pdf).

#### 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 (<a href="http://www.env.gov.yk.ca/publications-maps/documents/Guidelines">http://www.env.gov.yk.ca/publications-maps/documents/Guidelines</a> for Industrial Activity in 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 (<a href="http://www.env.gov.yk.ca/publications-maps/documents/ElectricFencing.pdf">http://www.env.gov.yk.ca/publications-maps/documents/ElectricFencing.pdf</a>)

# 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"
 (http://yukoninvasives.com/pdf\_docs/WhyshouldIcare2011\_sm.pdf)

#### 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 (<a href="http://www.tc.gov.yk.ca/pdf/BurialSites">http://www.tc.gov.yk.ca/pdf/BurialSites</a> 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 (<a href="http://www.env.gov.yk.ca/publications-maps/documents/bestpractes-water.pdf">http://www.env.gov.yk.ca/publications-maps/documents/bestpractes-water.pdf</a>).

# 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 (<a href="http://www.env.gov.yk.ca/publications-maps/documents/flying\_in\_sheep\_country.pdf">http://www.env.gov.yk.ca/publications-maps/documents/flying\_in\_sheep\_country.pdf</a>).
- Flying in Caribou Country: How to Minimize Disturbance from Aircraft (<a href="http://www.env.gov.yk.ca/publications-maps/documents/flying-caribou-country.pdf">http://www.env.gov.yk.ca/publications-maps/documents/flying-caribou-country.pdf</a>).