

MINING LANDS MINERAL RESOURCES BRANCH GOVERNMENT OF YUKON

Pursuant to the *Quartz Mining Act* and <u>Quartz Mining Land Use Regulation</u>, the Chief, Mining Land Use hereby grants a Class 3 Approval to:

Anthill Resources Yukon Ltd. Suite 1105. 750 West Pender St. Vancouver, BC V6C 2TB

APPROVAL NUMBER:

LQ00363b

UNDERTAKING:

Quartz

CLASS:

Class 3 Approval

EFFECTIVE DATE:

May 12, 2017

EXPIRY DATE:

May 13, 2022

This permit shall be subject to the restrictions and conditions contained herein and to the restrictions and conditions contained in the *Quartz Mining Act* and the <u>Quartz Mining Land Use Regulation</u> made there under as proposed in Mining Land Use Application LQ00363b.

Dated this 12 of May, 2017

Chief, Mining Land Use



Energy, Mines and Resources Box 2703, Whitehorse, Yukon Y1A 2C6 Mineral Resources Branch (K-9) Mining Lands

May 12, 2017

Anthill Resources Yukon Ltd. Suite 1105. 750 West Pender St. Vancouver, BC V6C 2TB

Re:

Class 3 Approval

Dear Sir/Madam:

Your application for Class 3 approval has been approved:

As submitted.

Subject to the attached conditions.

Subject to security deposit as received.

The effective date of this approval will be May 12, 2017. All work must be completed by May 13, 2022, and inspected for restoration before full security and/or completion certificates can be applied for.

File No: LQ00363b

The attached 'Operational Guidelines' offer additional mitigations that would enable you to maximize the environmental performance of your program.

Please feel free to contact our office at (867) 456-3822 should you have any questions.

Yours parly,

Briar Young

Chief, Mining Land Use

MINING LAND USE APPROVAL Class 3 LQ00363b Anthill Resources Yukon Ltd.

SCOPE OF APPROVAL: See attached Appendix 'A'

NTS: 105N16, 105O13/14/15, 106B02/03/04 & 106C01

<u>PART ONE – GENERAL REQUIREMENTS</u>

Definitions

- "Chief" means Chief, Mining Land Use pursuant to the Act.
- "Corridor" means a path from which trees and brush have been cut to accommodate a trail, water line, fuel line or power line.
- "Isolated road" means a road that does not provide access to a public highway directly or through a private road.
- "Road" means a pathway for vehicular traffic the construction of which requires the movement of rock or earth.
- "Trail" means an access to a site within a claim or lease that is constructed with little or no movement of rock or earth.
- "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.

Duration of Approval

- 1. 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.
- 2. All outstanding reclamation continues to be the responsibility of the operator.

Compliance with Operating Conditions

3. All mineral exploration activities must comply with the *Operating Conditions* (appended) contained in Schedule 1 of the <u>Quartz Mining Land Use Regulation</u>. These Operating Conditions are enforceable.

PART TWO: Reporting Requirements

Contact Numbers/Planning and Communication

4. Submissions and reports to the Chief should be made in duplicate to the following addresses:

Chief, Mining Land Use Box 2703, K-09 Mining Lands Officer

Box 10

Whitehorse, Yukon Y1A 2C6

Mayo, Yukon Y0B 1M0

5. The contact for the Operator will be:

Anthill Resources Yukon Ltd. Suite 1105. 750 West Pender St. Vancouver, BC

V6C 2TB

- **6.** All spills must be reported immediately to the 24-Hour Yukon Spill Reporting Line (867) 667-7244 and to the Mining Inspections Division Mayo (867) 996-2568.
- 7. 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.
- **8.** A report shall be submitted at the beginning of each mining season outlining the exploration activities planned for the season including the proposed locations.
- 9. A report shall be submitted at the end of each mining season indicating exploration activities completed during that season. This report shall include detailed mapping with GPS coordinates of all areas worked, location of new construction, new areas of disturbance, areas of permafrost encountered, total disturbed area, and reclamation activities that have taken place to date.
- 10. Prior to commencing any burning operations, a Burning Permit must be obtained from the Fire Management Office in Mayo at (867) 996-3200, as well as any other communications regarding wildfire management.
- 11. The operator shall contact Mining Inspections at Mayo (867) 996-2568 at least 14 days prior to commencing the field season.
- 12. The operator shall contact Mining Inspections at Mayo (867) 996-2568 at least 14 days prior to leaving the site at the end of the operation.
- 13. The operator shall contact the local municipal solid waste facility prior to usage to ensure proper governance of waste.

Heritage

- **14.** All palaeontological resources uncovered during operations shall be reported to the Yukon Palaeontology Program, Government of Yukon in Whitehorse at (867) 667-8089 or (867) 667-5386.
- 15. 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.

Wildlife

- 16. All incidents with wildlife shall be reported to the District Conservation Officer in Mayo (Northern Tutchone Region) at (867) 996-2202, as well as any other communication regarding wildlife.
- 17. The proponent shall maintain a detailed wildlife log for submission to the Chief, Mining Lands each year.

PART THREE - TERMS AND CONDITIONS

Removal of the Vegetative Mat

18. 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 reestablishing the vegetative mat when the exploration program ceases.

Re-establishment of the Vegetative Mat

- 19. 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.
- 20. 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.
- 21. 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

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

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Historic Objects and Burial Grounds

- 24. The proponent shall complete a Heritage Resources Overview Assessment of the project claims with the objective of identifying areas that have elevated potential for the presence of heritage resources. Please contact Yukon Government, Heritage Resources for more information.
- 25. Subject to the results of the Heritage Resources Overview Assessment, areas with elevated potential for the presence of heritage resources are to be buffered from ground disturbing activities. If this is not possible, the proponent shall complete a Heritage Resource Impact Assessment in advance of activities that disturb the ground surface within areas with elevated potential for the presence of heritage resources. Please contact Yukon Government, Heritage Resources for more information.
- **26.** 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.
- 27. Any sites containing archeological objects, palaeontological 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.

Disposal of Wastes/Cleanliness

- **28.** 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 <u>Solid Waste Regulation</u> when the program ceases.
- 29. Camps must be kept clean and tidy.
- **30.** The proponent 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 <u>Solid Waste Regulations</u>.
- 31. 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.

Fuel and Chemical Storage and Handling

- **32.** If petroleum fuel storage capacity exceeds 4000L, 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.
- 33. 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.
- **34.** 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.
- **35.** All petroleum products, including waste petroleum products, and any other hazardous substance, must be transferred and handled without spillage.
- 36. All waste petroleum products and any other special waste, as defined in the Special Waste Regulations, generated in the course of carrying out the explorations program must be disposed of in accordance with the Special Waste Regulations when the program ceases.
- 37. The proponent shall clearly identify the owner, the contents and the date on fuel drums to establish and manage ownership and responsibility.

Spills and Spill Contingency Plans

- **38.** 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.
- **39.** 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.
- **40.** 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.

Timber and Brush

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

Trenching

- **45.** 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.
- **46.** Open trenches should be sloped at one end to avoid entrapment of wildlife.
- **47.** 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.
- **48.** The operator must ensure that all employees and contractors working at the trench sites are aware of the operating conditions for trenching.

Drilling

- **49.** All reasonable efforts must be made when drilling to minimize the impact on wildlife and the public.
- **50.** Vegetation other than that within a drill sump, must not be covered with drill cuttings
- 51. Core must be stored in a stable fashion.
- **52.** Drill mud must be re-circulated when possible.
- **53.** All drill fluids must be contained in a sump.
- **54.** Drill holes that pose a hazard or that lead to ground water must be plugged in a suitable manner.
- **55.** The location of drill holes must be marked on the ground by flagging or other suitable means at the location of the drill hole.
- **56.** Drilling waste, including fluid, cuttings and mud must not be left within 30m of a water body.
- **57.** The operator must ensure that all employees and contractors working at the drill sites are aware of the operating conditions for drilling.

Release of Sediment

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

Wildlife

- **59.** The proponent shall submit an attractant management plan to the Chief for review and approval within 60 days from issuance of the approval.
- **60.** The plan will detail wildlife deterrent measures, all related training, and measures to manage potential wildlife attractants, including, but not limited to:

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- food:
- toiletries and first aid materials;
- kitchen waste;
- grey water;
- solvents and cleaning products;
- fuel, including fuel caches and small quantities of fuel at work sites;
- oil, lubricants and industrial wastes;
- Seasonal shutdowns and mitigations for few and/or no people on-site;
- incinerator residue; and
- sanitary waste.
- **61.** The following mitigations shall be included in the attractant management plan:
 - The camp shall be equipped with properly maintained wildlife deterrent devices consistent with the *Guidelines for Industrial Activity in Bear Country* (http://www.env.gov.yk.ca/mapspublications/documents/Guidelines for Industrial Activity in Bear Country.pdf).
 - The proponent shall ensure that project personnel receive bear aware training. For guidance of training refer to the *Guidelines for Industrial Activity in Bear Country*.
- **62.** The Chief may require any additional information and/or adopt additional mitigation as required.
- 63. The approved plan will be incorporated as a condition of approval LQ00363a.

Security

64. Security may be required at any time by the Chief.

Reclamation

65. Reclamation shall be progressive in nature where possible and completed before expiry of the approval.

PART FOUR - FINAL DECOMMISSIONING

- **66.** Final reclamation will occur prior to the expiry of the operation, according to standards outlined in the operating conditions for re-establishment of vegetative mat and erosion control.
- **67.** All petroleum products and any other hazardous substance must be removed from the site of the exploration program when the program ceases.
- 68. All waste petroleum products and any other special waste, as defined in the Special Waste Regulations, generated in the course of carrying out the explorations program must be disposed of in accordance with the Special Waste Regulations when the program ceases.

- 69. 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 as often as is practicable throughout the mining season and completely at the cessation of the operation.
- **70.** Structures must be removed and the site restored at the end of the operation to a level of utility comparable to its previous level of utility.

PART FIVE – OTHER MATTERS

Applicable Laws

- 71. All applicable federal, territorial, and First Nation law or local regulations, ordinances or by-laws must be conformed with at all times. 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.
- **72.** Notice of Schedule III must be provided to the Yukon Water Board ten (10) days prior to use of water.
- 73. Attached is a list of the exploration activities for which you are approved.



MINING LAND USE EXPLORATION ACTIVITY REPORT

Date May 12, 2017

LQ00363b Class III

Anthill Resources Suite 1105, 750 West Pender St. Vancouver, BC V6C 2T8

ELEMENT	CRITERIA	TERMS AND CONDITIONS	
Fuel Storage in a stationary container		205L drums: 403,400L Jet A, 329,000L Diesel, 5330L Gasoline, 11,600lbs Propane in 100 lbs bottles.	
Nb of clearings per claim, including existing clearings		Up to 4 clearings per claim.	
Surface area of each clearing		300m2 where vegetative mat removed, 625m2 where trees and brush only removed, 3500m2 for camp.	
Total volume of trenching		Total volume of 3400m3: 170 trenches (20m x 1m x 1m = $20m3$).	
Nb of person days per camp		Total of 4450 person days: Anthill Lake Camp - 3850 person days, 4 fly camps - 600 person days total.	
Nb of persons in a camp at any one time		Anthill Lake Camp: 45 persons. 4 fly camps: 5 persons each.	

Anthill Resources Yukon Ltd. LQ00363b

OPERATIONAL GUIDELINES

- The proponent should contact the Regional Biologist for information on appropriate set back distances if raptor nests, dens or mineral licks are encountered.
- The proponent should follow guidelines outlined in the publication *Flying in Sheep Country: How to minimize disturbances from aircraft* (http://www.env.gov.yk.ca/pdf/flying in sheep country.pdf).
- The proponent should contact the Yukon Department of Environment Habitat Programs Branch for information on the exact location of the mineral lick.
- The proponent should not disturb known mineral licks. No exploration activity should occur on the mineral lick.
- No exploration activities or helicopter flights should occur within 1 km of known mineral licks during the period of heaviest use from April 15 to July 30.
- The proponent should make best efforts to communicate plans and timing of activities to other resource users (trappers, outfitters, wilderness tourism operators, quartz/placer miners, First Nation(s) and known subsistence harvesters) that may be affected by the proposed project as soon as practicable, prior to the actual commencement of activities to reduce land use conflicts and any potential negative impacts on other users.