

Land Use Permit Application Form


(Subsection 19(2) and Schedule 2 of the Mackenzie Valley Land Use Regulations)

1	Applicant's name and mailing address:		Fax no.: N/A
	Michael J. Byron Nighthawk Gold Corporation 141 Adelaide St. W., Suite 301 Toronto, Ontario M5H 3L5		Telephone no.: (647)794-4359
2	Head office address:		Fax no.: N/A
	Nighthawk Gold Corporation 141 Adelaide St. W., Suite 301, Toronto, Ontario M5H 3L5		
	Field supervisor: TBD	Email address: mbyron@nighthawkgold.com	Telephone no.: (647) 794-4359
3	Other personnel (subcontractor, contractors, company staff etc.): <ul style="list-style-type: none"> • Golder Associates Limited (consultants) • Tlicho Logistics and other Tlicho Investment Corporation companies • Nighthawk personnel (project geologist) • GeoMinEx Consultants Inc. (geologists, geological technicians, field assistants) • Major Diamond Drilling (drilling personnel) • Discovery Mining Services Ltd. (camp personnel, caretakers, assistants, Industrial Occupation First Aid Level 3 staff, camp cooks) • Great Slave Helicopters (helicopter support for diamond drilling) • Sub-Arctic Geomatics, Ltd (surveyors) • Additional subcontractors may be required as the project progresses Total number of persons on site: Up to 50 (at the Colomac Camp); may increase as project moves forward (pending approval by the Inspector)		
4	Eligibility (Refer to section 18 of the Mackenzie Valley Land Use Regulations):		
	<input checked="" type="checkbox"/> (a)(i)	<input type="checkbox"/> (a)(ii)	<input type="checkbox"/> (a)(iii) <input type="checkbox"/> (b)
5	Other rights, licences or permits related to this permit application (mineral rights, timber permits, water licences, etc.): <ul style="list-style-type: none"> • Exploration and closure and reclamation of the Damoti Lake mine site is covered under the existing Land Use Permit W2012C0002 Class A (expiration February 28, 2019) and Water License W2012L1-0002 Type B (expiration February 27, 2019). • Land Use Permit, Number W2012X0003 issued February 29, 2012, and expiring February 28, 2019. This LUP covers remediation of the Diversified, Chalco Lake, and Spider Lake Sites. • Nighthawk also holds a valid GNWT Prospector's License #33742, and (NWT-AANDC) Federal prospecting License NEF0012. • Nighthawk Mineral Leases and Mining Claims are included in Figure 5 Indin Lake Land Tenure Map. (note: Chalco Lake has been fully reclaimed and is included in the maps for reference purposes only)		
6	a) Summary of operation (describe purpose, nature and location of all activities) (Provide details on a separate page, if necessary) Exploration activities will take place within the Nighthawk lease boundaries and their staked claims. Associated activities include winter road construction and use, construction and use of temporary camps, and fuel storage. It is anticipated that operations for mineral exploration in the proposed area will include: <ul style="list-style-type: none"> • prospecting, bedrock sampling, geological mapping, geophysics. • exploration drilling (specific targets to be determined). • use of explosives for trenching and/or bulk sampling. 		

	<ul style="list-style-type: none"> • winter road construction from the Whati Junction to the Damoti Lake property. • winter road construction to the Colomac mine site. • winter road construction for spur roads from the main Winter Road to Diversified. Spur roads may also be required to access smaller satellite exploration camps at or near exploration drill sites. The locations of the smaller exploration camps will be provided to WLWB and the inspector as they become known. • progressive remediation to ensure that exploration sites are cleaned up. • maintenance of Colomac airstrip and access to quarry site should the need arise. <p>The exploration work done at the sites within Nighthawk’s lease boundaries will not interfere with engineered structures or monitoring sites established in past reclamation and remediation works.</p> <p>b) Indicate if a camp is to be set up. If yes, indicate size of camp or describe camp. (Provide details on a separate page, if necessary):</p> <p>The existing Colomac and Damoti camps were approved under W2012C0002. Only the Colomac camp will be used as a base camp; however, Nighthawk would not rule out a satellite camp setting and a possible fuel cache at the Damoti and / or Diversified camp sites.</p>
7	<p>Summary of potential environmental and resource impacts and mitigation measures (describe the effects of the proposed land-use operation on land, water, flora and fauna and related socio-economic impacts) (Use separate page if necessary):</p> <p>Environmental Impacts</p> <p>It is anticipated that potential environmental impacts from exploration activities will be minimal and may include disturbances to land, air, environment and wildlife. The following measures will be taken to reduce environmental impact from exploration and remediation activities:</p> <ul style="list-style-type: none"> • Helicopter-supported drilling to reduce or eliminate rutting or disruption of topsoil through land-based traffic. • Helicopter-supported and (foot) traverse-based geological mapping and sampling to minimize impact on the terrain. • Adherence to Nighthawk’s Waste Management Plan, Incinerator Management Plan and Spill Contingency Plan. • Proper closure by Nighthawk of camps not in use (main Colomac camp and satellite exploration camps); and when camps are no longer required, sites will be restored to pre-exploration conditions or to a level approved by the inspector. <p>Wildlife Impacts</p> <p>The area of land that the Indin Lake Gold Project encompasses is significant and Nighthawk is aware of potential impacts to wildlife. Refer to the Wildlife Mitigation and Management Plan for a summary of the potential negative impacts on wildlife and species at risk, proposed mitigation measures to reduce potential impacts, and ongoing monitoring to confirm the effectiveness of the mitigation.</p> <p>Nighthawk is committed to preserving the environment and will take steps to ensure that disturbances are minimized through consultations with government bodies, stakeholders and interest groups, knowledge and training of staff, by adhering to company policies, and through mitigation efforts.</p> <p>Various species at risk or species of socio-economic importance may be present within the lease area including: rusty blackbird (<i>Euphyagus carolinus</i>), grizzly bear (<i>Ursus arctos</i>), Wolverine (<i>Gulo gulo</i>), short-eared owl (<i>Asio flammeus</i>), caribou (<i>Rangifer tarandus</i>), moose (<i>Alces alces</i>), black bear (<i>Ursus americanus</i>), red fox (<i>Vulpes vulpes</i>), lynx (<i>Lynx canadensis</i>) and wolf (<i>Canis lupus</i>). A wildlife monitoring log will be used to record noteworthy sightings of wildlife during exploration activities. Data collected using the wildlife monitoring log can be a useful tool for supporting baseline knowledge of wildlife abundance and distribution in the area, supplementing traditional knowledge and overall understanding of the project area.</p> <p>To reduce disturbance to wildlife the following mitigation measures will be employed:</p> <ul style="list-style-type: none"> • Wildlife will not be directly disturbed by persons on foot or with equipment. • Wildlife will not be fed or harassed by Project personnel and contractors. • Disturbances to known wildlife habitat (eskers, nests, etc.) will be avoided as necessary. • If caribou are observed during operations within 500 metres of the project activities, non-critical work (e.g., aircraft departure, ground transportation) will cease until the animals have moved beyond the area of work. <p>Nighthawk’s Incinerator Management Plan and Waste Management Plan will be used to control garbage in camps and at work sites to prevent attracting wildlife.</p>

	<p>Archaeologically Important Sites Nighthawk understands that archaeological and heritage resources may also be impacted by camp, exploration and/or remediation activities. Nighthawk has been in consultation previously with the Cultural Places Program (GNWT, Prince of Wales Northern Heritage Centre) and is aware of known archaeological or heritage sites within the lease area. These areas of archaeological importance will be avoided during land use activities to protect the integrity of the sites. Any suspected archaeological sites (boulder features, lithic scatter, burial sites, etc.) encountered during field activities will be reported to the government of the Northwest Territories and the Canadian Museum of Civilization. Consultation with Government bodies, stakeholders and interest groups will take place to identify concerns or communicate knowledge of the project area. Site visits with elders or consultants is also an option for identifying historic significance. Should significant discoveries be made during the remediation of the Indin Lake legacy sites, Nighthawk will work with the regulatory agencies, governments and stakeholders to determine land use requirements that are beyond the scope of work outlined in this land use package.</p> <p>Resource Impacts Direct resource impacts regarding the exploration program will be positive at both the community and individual level. The number of exploration personnel involved including Nighthawk, contractors and sub-contractors is anticipated to be up to 50 individuals, therefore the number of individuals involved that will have direct resource benefits will be low.</p> <p>Engagement Nighthawk engaged the Tlicho Government, the Kwe Beh working group, the North Slave Métis Alliance, the Wek'èezhii Renewable Resources Board, and the Prince of Wales Northern Heritage Centre during past submission process. A summary of Nighthawk's Engagement Plan and the current Engagement Record is submitted with this application.</p>
8	<p>Proposed restoration plans (Use a separate page if necessary): The focus for restoration will be progressive reclamation. The Colomac site will be used as a base camp for continued exploration activity on new and existing land claims. The camp will provide facilities for up to 50 people and will be the embarkation/ disembarkation point for winter road travel and aircraft transportation of personnel. The Damoti site may also be used as a satellite camp. Progressive reclamation is a continual and on-going process. The progressive reclamation activities include the removal of scrap wood, metal, bio-waste and contaminated soil from both Colomac and Damoti. Monitoring of fuel storage sites will be ongoing to lessen the risk of hydrocarbon contamination; this will include checking drums or other storage containers to ensure that they are in good condition and to identify potential leaks. Excess drums are continually removed from sites when they are empty. Remaining fuel drums will be organized and placed on racks. In the past, an approved incineration procedure for both camp waste and human waste has been implemented and the same procedure will be proposed again for this upcoming work. A Surveillance Network Program (SNP) is active and ongoing at the Damoti Site with monitoring at specific sites. Along with this, site visits will be conducted twice a year for a visual assessment of the infrastructure for physical stability and security. Routine maintenance will be undertaken to address issues as required.</p> <p>Small, temporary drill camps may be established on or near exploration sites to support exploration activities. At the temporary drill camps and at drilling sites, all man-made material will be removed once drilling is complete. Upon the completion of work in an area (drill site, camps, etc.) the site will be reclaimed or restored to prior conditions. The sites will be searched for debris which will be collected and removed as well. Drill casings will be cut close to the ground and each hole will be capped to match the local topography wherever possible. Drill sumps are inspected regularly to reduce the risk of run-off. Drill water is held in natural depressions and backfilled, if necessary.</p> <p>For further information, refer to Damoti Lake Interim Closure and Reclamation Plan V3.2 that is being prepared by Golder Associates Ltd. and will be submitted to the Wek'èezhii Land and Water Board for review by November 2018.</p>
	<p>Roads:</p> <p><input type="checkbox"/> Is this to be a pioneered road? • See Figure 2 for a map of the existing winter road alignments</p> <p><input type="checkbox"/> Has the route been laid out or ground truthed? Proposed routes for spur winter access roads have been developed. Routes for additional roads for accessing satellite exploration drill sites have not been determined; information will be provided to WLWB and the inspector when these additional routes are determined.</p>
9	<p>Proposed disposal methods:</p> <p>See the Waste Management Plan. All waste will be handled, transported and disposed of by KBL Environmental based in Yellowknife, NWT.</p>

Equipment (includes drills, pumps, etc.) (Use separate page if necessary): *Note: all equipment types and numbers are estimated as of September 2018; any modifications will be subject to authorization by an Inspector. A full equipment list will be provided by the contractor as required.				
10	Type and Number		Size	Proposed Use
	2 to 5 diamond core drills		With platform, 7 m x 7 m	Diamond core drilling and collection
	Generator set		5.0 m x 2.0 m	Power submersible pumps
	Up to 2 Diesel Generator (rented)		38Kw and 20kw	To power camp
	Three (3) Gasoline generator (company owned)		15 kW	Dedicated power for the Nighthawk owned, Vancon brand, 3.5 hp diamond blade rock saw
	Diesel-fired Garbage Incinerator: Inciner8, A600 (Sec)		300 kg capacity	Burning camp waste – ashes collected and sent to Yellowknife for testing and proper disposal
	8 Electric burning Incinolet Toilets		220 volts	Sterile ash collected and shipped to Yellowknife for disposal
	Geo-stoves (Diesel burning drip stoves)			Located in Dining room, cutting room, water pump house
	Toyo brand Diesel-electric heaters (several)			All sleepers, wash and change dries, core shack and sampling room, kitchen supply corridor, office, lavatory, and one workshop
	6 Quads			Transport personnel in and around camp, moving equipment/supplies to airstrip etc.
	4 Side X sides (Major drilling)			Transport drillers from Colomac camp to drills holes on Colomac roads/infrastructure, and to airstrip
	Snowmobiles (several rental units as required)			Transport personnel in and around camp
	4 Snowmobiles (Major drilling)			Transport personnel in and around camp, and to drill sites on Colomac infrastructure
	1 Cat 950 payloader			Movement of equipment, repair of runway, etc.
	1 Kubota Mini-excavator			Movement of equipment, repair of runway, etc.
	Helicopter (on site GSH rental when drilling and exploration is on-going)		AStar350 B2	Transportation of crews and equipment from camp to drilling and exploration locations
	2 snow blowers			Assist clearing snow
	1 Westeel tidy tank on trailer		750 L	Safely transport diesel from fuel berm to heater drums behind tent, to generator, and to Incinera8
	1 smaller Westeel tidy tank to fit tobagan		275 L	As above
	2 Snowcat/Piston Bully			Initial clearing of snow on lakes and portages
2 Water trucks			Watering of portage	
2 Graders			Winter road maintenance	
Plow truck			Winter road construction	
2 Excavators			Movement of material	
11	Fuels:	Number of containers:	Capacity of containers: 205L	Location: Colomac
Diesel		At a minimum, the following quantities will be stored within bermed fuel storage areas at the Colomac site: 360 x P50 diesel.		
Gasoline				

Aviation Fuel	120 x Jet B.		
	12 x gasoline.		
Propane	10 x propane.		
Other			
12	Containment fuel spill contingency plans (attach separate contingency plan if necessary): See the Spill Contingency Plan.		
13	Methods of fuel transfer (to other tanks, vehicles, etc.): <ul style="list-style-type: none"> • Wobble pumps to transfer fuel from drums. • Electric pumps to fuel tanks. • Fuel transfer areas are bermed and spill kits are available. • Only trained operators will perform fuel transfers. • Westeel tidy tanks used to transport/transfer fuel to drums in camp. 		
14	Period of operation (includes time to cover all phases of project work applied for, including restoration): 5 years		
15	Period of permit (up to five years, with maximum of two years of extension): 5 years	Start Date: March 1, 2019	Completion Date: February 28, 2024
16	Location of activities by map coordinates (attach maps and sketches): See Figure 1 Regional Setting.		
	Minimum latitude (degree, minute): 64° 0' 0.76" N	Maximum latitude (degree, minute): 64° 31' 52.2"	
	Minimum longitude (degree, minute): 114° 48' 50" W	Maximum longitude (degree, minute): 115° 26' 43" W	
	Map Sheet no.: 86b NAD 83		
17	Applicant: Print name in full, in upper case: MICHAEL J. BYRON		
	Signature: 	Date: 20/09/18	
18	Application fees for Type A or Type B permit (for federal and non federal lands) ⁱ		
	a) Application fees for Type A or Type B permit (include the first two hectares) - \$150.00:	\$ 150	
	AND b) Land-use fees for federal public lands only : If more than two hectares of federal public lands are being used, enter the number of hectares in excess of the two hectares included in the Application fee, rounded up to the next whole hectare <u>1</u> hectares at \$50.00/hectare	\$ 50	
	Total fees ⁱⁱ :	\$ 200	

ⁱ To help identify whether your activity is on federal lands, please see [this map](#).

ⁱⁱ Please make all cheques payable to the Receiver General for Canada.