PERMISSIONS

Oil and Gas Activities Act

1. The BC Oil and Gas Commission ("the Commission"), under section 25 (1) of the Oil and Gas Activities Act hereby permits the holder to construct and maintain an oil and gas road, subject to the following conditions:

   (1) The permissions and authorizations granted under this permit are limited to the area described in construction plan 40.0.5.0_OGC_CONST, Sheet 1 and 2 of 2, revision 1, dated January 26, 2016 (the "construction plan") by McElhanney Geomatics professional Land Surveying Ltd. as submitted to the Commission in the permit application dated January 12, 2016 (hereinafter referred to as the "operating area").

   (2) Following initial construction of the road, future permission to construct is limited to required modifications within the operating area except as otherwise restricted by this permit.

Petroleum and Natural Gas Act

2. Pursuant to Section 138(1) of the Petroleum and Natural Gas Act, the permit holder is permitted to enter, occupy and use any unoccupied Crown land located within the operating area to carry out the oil and gas activity and related activities permitted under this permit.

   (1) The permission to occupy and use Crown land does not entitle the permit holder to exclusive possession of the area.

   (2) The total disturbance within the operating area must not exceed 6.64 ha.

AUTHORIZATIONS

Forest Act

3. The Commission hereby authorizes the permit holder, under section 47.4 of the Forest Act, to remove Crown timber from the operating area under Cutting Permit No. 22 under Master Licence to Cut number M02370.

4. Cutting Permit No. 22 is deemed spent upon the submission of the post-construction plan.
CONDITIONS

Notification:

5. The permit holder must submit the post-construction plan, as per section 11 of the Oil and Gas Road Regulation, as a shape file and PDF plan accurately identifying the location of the total area actually disturbed under this permit. The shapefile and plan must be submitted via eSubmission.

6. The Permit Holder must notify the Halfway River First Nation Lands Department office five (5) working days prior to project commencement. Notification must be sent via email to bilily@hrfn.ca and referral@hrfn.ca.

7. The permit holder must notify the Saulteau First Nations Lands Department office five (5) working days prior to commencement. Notification must be sent to Fernie Garbitt at fgarbitt@saulteau.com

General:

8. The permit holder will immediately effect, and keep in force while occupying the operating area, insurance of an amount not less than $1,000,000 protecting the Province, the Commission and the permit holder (without any rights of cross-claim or subrogation) against claims for personal injury, death, property damage, or third party liability claims arising from any accident or occurrence on the operating area.

9. The rights granted by this permit in relation to unoccupied Crown land are subject to all subsisting grants to or rights of any person made or acquired under the Coal Act, Forest Act, Land Act, Mineral Tenure Act, Petroleum and Natural Gas Act, Range Act, Water Sustainability Act or Wildlife Act, or any extension or renewal of the same.

10. The permit holder must not assign, sublicense or permit any person to use or occupy any Crown land within the operating area, other than its employees, contractors, or representatives, without the Commission's written consent.

11. The permit holder must ensure that any Crown land within the operating area is maintained in a condition so as to minimize hazards, including but not limited to hazards associated with storage of materials and equipment.

12. The permit holder must ensure that any Crown land within the operating area is maintained free of garbage, debris and unused equipment.

Environmental:

13. Upon completion of construction activities, the permit holder must restore any portions of the operating area not required for ongoing operation of the road, by ensuring re-vegetation of any exposed soil on the operating area including, where necessary, using seed or vegetative propagules of an ecologically suitable species that:

   (1) promote the restoration of the wildlife habitat that existed on the area before the oil and gas activity was begun, and

   (2) stabilize the soil if it is highly susceptible to erosion.

Archaeology

14. If artifacts, features, materials or things protected under section 13(2) of the Heritage Conservation Act are identified the permit holder must, unless the permit holder holds a permit under section 12 of the Heritage Conservation Act issued by the Commission in respect of that artifact, feature, material or thing:

   a. immediately cease all work in the vicinity of the artifacts, features, materials or things;

   b. immediately notify the Commission and the Archaeology Branch of the Ministry of Forests, Lands and Natural Resource Operations

   c. refrain from resuming work in the vicinity of the artifacts, features, materials or things except in accordance with an appropriate mitigation plan that has been prepared in accordance with the Heritage Conservation Act and approved by the Archaeology Branch of the Ministry of Forests, Lands and Natural Resource Operations.

Clearing:

15. All harvested Crown timber must be marked with Timber Mark Number MTB 818.
16. Cutting Permit No. 22 does not grant the Permit Holder the exclusive right to harvest Crown timber from the operating area. Authority to harvest some or all of the timber may be granted to other persons. The permit holder’s right to harvest timber applies to any timber found on the operating area at the time they undertake harvesting activities.

17. Stumpage for Cutting Permit No. 22 will be calculated in accordance with the Interior Appraisal Manual as amended from time to time. In the current version of the Manual, stumpage will be determined in accordance with Table 6-7 (area based).

18. The Interior merchantability specifications and monetary waste billing requirements in the Provincial Logging Residue and Waste Measurement Procedures Manual that are in effect upon issuance of this permit apply to any waste assessments required under Master License to Cut 22.

19. The holder of Cutting Permit No. 22 must pay to the government, stumpage and any waste billing determined in accordance with the terms of this permit.

20. The permit holder is permitted to fell any trees located on Crown land within 1.5 tree lengths of the operating area that are considered to be a safety hazard according to Workers Compensation Act regulations and must be felled in order to eliminate the hazard. Trees or portions of these trees that can be accessed from the operating area without causing damage to standing timber may be harvested.

**Watercourse Crossings or Works:**

21. Stream and wetland crossings must be constructed in accordance with the methods and any mitigations, as specified in the application.

22. Following initial construction, stream crossings are authorized for necessary road modification or maintenance activities on the operating area except for:

   (1) construction or replacement of a bridge or major culvert on a S1, S2, S3 or S5 stream;
   
   (2) installation of a closed bottom structure in a fish bearing stream; or
   
   (3) excavation or grading of a stream bank or stream bed.

23. Stream crossings must be constructed, maintained and deactivated according to the following requirements, as applicable:

   (1) Only bridges, culverts, ice bridges or snow fills may be constructed at stream crossings.
   
   (2) Snow fills must consist of clean snow and may only be located on streams that are dry or frozen to the bottom during the period of construction, maintenance and use. Where periodic thaws are anticipated, culverts must be installed to allow meltwater to pass through. Snow fill and any installed culverts must be removed prior to spring snow melt.
   
   (3) Ice bridges on fish bearing streams may only be constructed where sufficient water depth and stream flows prevent the bridge structure from coming in contact with the stream bottom.
   
   (4) Water applied to construct an ice bridge on a water body must be sourced in accordance with the Water Sustainability Act unless

      (a) the water body is a stream with a stream channel width of at least 5 metres and is not designated as a sensitive stream under the Fish Protection Act, or has a riparian class of W1, W3, or L1,
      
      (b) the water is sourced from the same water body proximal to the location on which the ice bridge is constructed,
      
      (c) the water body is not within the boundaries of a public park,
      
      (d) pump intakes do not disturb beds of streams or wetlands except as necessary for the safe installation and operation of equipment, and are screened with a maximum mesh size and approach velocity in accordance with the Fisheries and Oceans Canada Freshwater Intake End-of-Pipe Fish Screen Guideline, and
(i) where the water body is a stream, the flow of water in the stream at the time and location of pumping exceeds 60 litres per second and the instantaneous pumping rate does not exceed 1% of the water flowing in the water body at the time and location the pumping occurs, or

(ii) where the water body is a lake or pond, the cumulative volume of water withdrawn does not exceed 10 cm of lake or pond depth, calculated as the product of lake or pond surface area x 10 cm;

(5) In-stream activities within a fish bearing stream must occur:

(a) during the applicable reduced risk work windows as specified in the Peace Region Selected Terrestrial and Aquatic Wildlife Least-Risk Windows;

(b) in accordance with alternative timing and associated mitigation recommended by a qualified professional and accepted by the Commission; or

(c) in accordance with an authorization or letter of advice from Fisheries and Oceans Canada that is provided to the Commission.

(6) Bridge or culvert abutments, footings and scour protection must be located outside the natural stream channel and must not constrict the channel width.

(7) Equipment used for activities under this permit must not be situated in a stream channel unless it is dry or frozen to the bottom at the time of the activity.

24. Wetland crossings must be constructed, maintained and removed in accordance with the following:

(1) Organic cover within and adjacent to the wetland must be retained;

(2) Minimize erosion or release of sediment within the wetland;

(3) Any padding materials must be placed on the wetland surface only and must not be used for infilling;

(4) Any padding materials must be removed as soon as practicable following construction, considering weather and ground conditions; and

(5) The wetland, including banks and bed, must be restored, to the extent practicable, to the condition that existed before the crossing was initiated.

Additional Conditions:

25. The permit holder must not undertake construction between May 15 and July 15.

ADVISORY GUIDANCE

1. The term "unused equipment" has the same definition as in the Drilling and Production Regulation.

The attached plan(s) forms an integral part of this permit.
pc. Roy Northern Land Service Ltd.
Commission No.: 9643845
MoFLNRO: Peace
OGC First Nations: HRFN, MLIB, SFN, WMFN