# Supplemental Information Applicant: 0818575 BC Ltd.

Application for Investigative Permit: Pre-Development Plan

# **Site Plan for Investigative Permit**

- 1. One potential development area has been initially slated for sampling; Site #1a Raspberry
- 2. Attachments: Covering Letter, Maps, Supplemental Information, Application Form
  - A map at scale 1:20000 showing location of Phase 1 Test Holes (1 per hectare established on a grid pattern), access roads, and interest areas; gross and net areas; access trails
  - General Location Map at scale 1:50,000 overview map

# **Pre-Development Plan**

Section A

**Project Overview** 

# Project

# Energy

- 1. To establish the viability of biomass-to-biofuel conversion of peat; to produce an alternative, economical and, environmentally attractive and friendly biofuel
- 2. To establish the viability of peat input into the co-gen process

# Non-energy

1. To establish the viability of peat as a horticulture or agriculture product

## **Purpose**

The Investigative permit is required to complete sampling, including quantitative and qualitative assessment of the available peat inventory that can be used to produce fuel-grade peat, burn in the co-gen process or, to be used as horticultural and agriculture products.

#### **General Location**

The development areas are located on the west side of Williston Lake, Northwest of the community of Mackenzie, British Columbia.

Site #1a Raspberry: approximately 200km from Mackenzie, BC (Raspberry Harbour on Williston Lake).

#### **Development Area**

Proposed Development Area #: Raspberry Harbour

Size (gross ha) 1372.1 ha

Size (net area of peat bog ha) 702.4 ha

Access: 2WD via MOFR Forest Service Roads or Licensee Road Permit Roads

Testing Schedule Phase 1: Summer 2008, 2009

## Section B. Project Description

Description of Investigative Work

Sampling: Phase I

Field crews using hand held augers or coring instruments.

Sampling: Phase II

Mechanized Testing: Any one or more holes from Phase 1 testing may be further investigated.

Height of working face will not exceed 3m. Testing will be completed using an excavator or loader. The rectangular shaped test holes used in phase 2 testing will not exceed 20mX20mX3m, and the density will not exceed 1 site per 100 hectares. All excavated material will be used to fill the hole once testing is complete.

#### **Present State of Land**

Zoning: N/A Vacant crown land: Provincial Forest

# **Vegetation: General Description**

Based on the location and description of the bogs, it is expected that the test sites will have common wetland dwarf shrub and herb layers (*Ledum groenlandicum*, *Andromeda polifolia*), scattered patches of woody shrubs, stunted black spruce (*Picea mariana*) and Lodgepole pine (*Pinus contorta*), and a moss layer (*Pleurozium schreberi*, *Shpagnum spp.*. Bogs of this type are typically composed of deep *Sphagnum* peat. During the investigative or sampling stage, species identification will be confirmed using the BC Government publication titled "<u>Wetlands of British</u> Columbia: A Field Guide to Identification".

**Topography:** test sites are located in flat, isolated areas. The surrounding area is flat to gently rolling.

**Present Use:** No present use of peat bogs. Residential dwellings are > 5km from the area proposed for investigation. Adjacent use of the gross area of interest is predominantly limited to forestry (roads and cut blocks, load out) and, trappers and guides.

# **Condition of Access Roads**

Variable, mainly all weather 2WD/4WD. The test areas will make use of existing roads and construction of one trail (250m in length). Re-activation may be required however the test activities will target roads requiring little or no re-activation.

## Watercourses

To be determined at the Management Plan Stage. Sampling will not occur within 50m of high water mark of all watercourses.

Depth to Water Table: Not known. To be confirmed by sampling.

#### ALR: N/A

#### **Provincial Forest**

Located within BC Provincial Forest: non-productive crown land. Adjacent to the Raspberry Harbour Ecological Reserve (>500m)

#### C1. Additional Information: Environmental

Land Impact: Where possible, existing roads, trails, and access structures will be used to facilitate mechanized sampling. If alternative access points are required, the proponent will minimize the number of stream crossings and/or construction of new trails. Excavated sample holes will be filled in concurrent with operations.

Atmospheric Impacts: Testing not expect to have any significant impacts expected.

Aquatic Impacts: Significant Impacts related to sampling are not expected.

**Fish and Wildlife Habitat:** sampling with not occur within 50m of streams or within 500m of Ecological Reserve.

# C2. Socio-community

Land Use: Land use plans for the area are limited to Forest Stewardship Plans. Due to the non-productive nature of the bog areas, conflicting land use is not anticipated during the sampling phase. Public use appears to be limited to hunting.

Socio-Community Conditions: Road access and use by the public will not be significantly altered. The sites are located >150km (by road) from the nearest community. The community of Mackenzie is heavily reliant on the forest industry. Many mills are temporary shut down and the economy of Mackenzie is experiencing economic hardship. Diversification in industry will be beneficial to the community.

Public Health: N/A

**First Nations:** There are no known culturally significant areas within the sample areas. First Nations will be consulted as required during the application of a Licence of Occupation or Lease.