

File No.: 628.10 Licence No. 305 R

February 18, 2021

Tim North #52080 Peat Moss Road Elma, MB R0E 0Z0 Tim.north@sungro.com

Dear Tim North:

Re: Evergreen Bog Peat Harvesting Environment Act Proposal

The Environmental Approvals Branch has completed its review of the Environment Act Proposal and related Technical Advisory Committee and public comments for the proposed expansion of peat harvesting into the Evergreen 1 sub-area of the Evergreen Bog. Additional information is required based on this review. Please provide detailed responses to the following.

1. Drainage, Sedimentation Ponds, and Effluent

Background

In 2018, a revised Environment Act licence was issued for the existing development to incorporate standard requirements, including the following in relation to drainage from the development:

- The Licencee shall, during construction and operation of the Development, direct all drainage water associated with any harvesting area of the Development through one or more sedimentation ponds that are designed and constructed to achieve the effluent quality criteria specified in this Licence.
- The Licencee shall release the effluent from each sedimentation pond through one or more final discharge points and shall register with the Director a list of all active final discharge points and their GPS locations, and maintain the registered list in a current status at all times.
- The Licencee, unless otherwise approved by the Director, shall design and construct each sedimentation pond associated with the Development:
 - to facilitate the termination, if necessary, of the release of any effluent from each final discharge point;
 - with a manual flow rate measuring device at each final discharge point that is adequate to measure the full range of instantaneous rates of discharge as may be expected to be released into the environment; and
 - with a floating debris boom at the outlet of each final discharge point.

The Environment Act Proposal indicates that a gated culvert will be installed to control water discharge and manage suspended sediment, if required. It does not provide any information on sedimentation ponds, effluent flow rate measurement, or a floating boom at the discharge point.

Information Request

Please provide information on how the licence requirements regarding sedimentation ponds will be met.

2. Peat Harvesting

Background

2.5.7 Schedule of Project Stages and Activities, page 7: "At this point, the bog area is expected to be harvested down to the final planned depth of harvesting. A minimum of 0.5 m of peat will remain in place after harvesting."

It is understood that Sun Gro is looking for premium peat, and not highly decomposed sedge peat.

Information Request

Is it likely that harvesting will occur to the minimum proposed depth of 0.5 m given that the peat at these depths would be sedge-dominated peat?

3. Groundwater

Background

4.1.5 Groundwater, page 11: "the presence of a single groundwater well within 3 km of the Evergreen 1 sub-area."

Information Request

Exactly how far is the groundwater well from the Evergreen 1 sub-area?

4. Wetlands

Background

5.2.1 Loss of Wetland, page 24: "Horticultural peat harvesting, in comparison, only accounts for 0.02% (17,000 hectares) of Canada's total peatland area."

Area under peat harvest has increased in recent years. A 2017 report by the CSPMA indicates that 30,900 hectares were under harvest, and it has likely increased since that time. Manitoba has approximately 5,400 hectares under harvest (both Crown and private land). In the Northeast Red Watershed District, there are 570 hectares of active peatland harvesting. With the proposed 60 hectares of additional harvest area, that would mean nearly 1% of peatlands under harvest, or 50 times greater than the cited percentage of Canada's total peatland area.

Information Request

Please provide a response and include an explanation of how this affects the environmental assessment in relation to wetlands.

5. Climate Change

Background

5.2.4 Release of Greenhouse Gases, page 26: "GHG emissions from decomposition are associated with the end use and should not be attributed to the producer."

There is also an argument being put forward from the peat industry that because peat is used to grow other plants, like tree seedlings, that it is not as emissions-heavy when these sequestration effects are taken into account. The industry is currently pursuing a full life-cycle analysis in order to show this. However, when contrasted with the quoted statement above, it seems like the industry is having it both ways. Decomposition of the product should not be associated with them, yet the sequestration effects of their products should.

Information Request

Please provide a full life-cycle analysis of GHG emissions and removal.

5. Air Quality

Background

5.3.2 Air Quality, page 29: "an estimate release of 14,686 t - of CO₂ eq. [are expected] from land use change."

If the carbon contained within the product itself is included, an additional 192,639 tonnes of CO_{2e} would be emitted, which is 1300% higher than the carbon emitted from land use change. This calculation uses Gorham 1991 method: [Bulk Density] * [Percent of Carbon] * [Volume] * [CO_{2e} Multiplier].

Table 1: Estimated Peat Production Schedule: The table indicates that an additional 51,000 m³ of peat will be harvested each year as a result of opening Evergreen 1.

Information Request

With respect to the rest of Sun Gro's PHL#3 operations, what is the overall increase in harvested peat each year? (As the other areas are scheduled to begin restoration, the total increase should be less as these sites are retired.)

If you have any questions regarding this matter, please contact me at Elise.Dagdick@gov.mb.ca.

Yours sincerely,

Elise Dagdick Environment Officer

cc: Shawn Moffatt KGS Group (<u>smoffatt@kgsgroup.com</u>) Public registries