

**REASONS FOR DECISION
MINISTERIAL APPROVAL
PURSUANT TO SECTION 15
THE ENVIRONMENTAL ASSESSMENT ACT**

**SUNTERRA HORTICULTURE (CANADA) LTD.
USHERVILLE AND SWAN PLAIN PEAT HARVESTING PROJECT**

Introduction

The Environmental Assessment Act (hereinafter called “the Act”) states that a person shall not proceed with a development, as defined in the Act, until ministerial approval has been received. It further sets requirements for a process of environmental impact assessment (EIA) intended to inform the Minister of Environment (hereinafter called “the Minister”) of the potential impacts of a development prior to making a decision regarding the development.

In December 2013, the Environmental Assessment and Stewardship Branch (EASB) received a project proposal (hereinafter called “the Application”) from Sunterra Horticulture (Canada) Ltd. (hereinafter called “the Proponent”, “Sunterra”) for the *Usherville and Swan Plain Peat Harvesting Project* (hereinafter called “the project”). The project proposal was sent to the Saskatchewan Environmental Assessment Review Panel (SEARP) for technical review. Following the technical review, the project was determined to be a development under subsection 2(d) of the Act. Sunterra was therefore required to conduct an EIA and submit findings in an Environmental Impact Statement (EIS).

Public notice of the EIA was given in February 2014 pursuant to Section 10 of the Act. In August 2015, Sunterra submitted the final EIS seeking approval under clause 15(1)(a) of the Act. The EIS underwent both technical review and a 30-day public review.

Background

Sunterra is proposing to develop, operate and reclaim a 50-year peat harvesting operation approximately 50 km south of Hudson Bay. The proposed operation includes peat harvesting activities on 2,504 hectares (ha) of Crown land at four sites; two near the Hamlet of Usherville and two near the Hamlet of Swan Plain and a new peat processing facility 5 km west of the Town of Norquay. Approximately 1,620 ha of the lease area will be actively harvested.

Infrastructure at the harvest site will include: staging areas, borrow pits, upgraded and new access roads, drainage ditches, sedimentation ponds, a repair and maintenance building, construction/office trailers, generator, fuel tanks and potable water wells. The Project closure activities will include decommissioning and reclamation once the harvesting activity is completed.

The peat processing facility will be constructed on cultivated agricultural land owned by Sunterra. Facilities will include: a main processing building and adjoining office, a maintenance building, a loading area, a finished goods storage area, and a pallet storage area. Basic utilities will also be required. No wastewater will be generated and air emissions from dust and natural gas powered heating system will conform to guidelines.

Environmental Assessment

Public notice of the EIA was first given in February 2014 pursuant to section 10 of the Act. Sunterra prepared and submitted the initial EIS entitled *Environmental Impact Statement Usherville and Swan Plain Peat Harvesting Project* to the Ministry of Environment (hereinafter called "the ministry") in June 2015.

The EIS underwent technical review by SEARP and was found to be deficient in the information provided, which led to additional information being requested from Sunterra prior to the EIA proceeding to the public review phase. Information requests related to identification of appropriate vegetation donor sites and clarification regarding restoration activities and requirements following completion of harvesting.

Sunterra subsequently submitted a revised EIS in August 2015 that satisfied the requests for additional information. The final EIS (hereinafter called "the Statement") and the technical review comments document prepared by EASB were then made available for public review from September 12, 2015 to October 13, 2015 pursuant to Section 11 of the Act. During the public review period, the ministry received 16 separate letters/emails from the general public and one from the Wynyard Métis Local. After the public review period closed, an additional letter was received from the general public. Yellow Quill First Nation and Tisdale Métis Local also contacted the EASB following the close of the review period expressing concerns about the project.

Engagement and Consultation Activities

Sunterra initiated engagement activities in April 2013 and continued through 2016 to provide information about the project through various meetings, telephone conversations, emails and open houses as documented in the EIS.

The review period for the EIA provided an additional opportunity to review Project details and provide comments. Sixteen separate emails or letters were received from the public. Three were from area trappers expressing concern that an increase in hunting and snowmobiling associated with the access roads or harvest activities would disturb their trap lines and fur bearing animals. Other concerns expressed by the trappers related to restoration of the harvested areas and a desire for the government to ensure impact of the peat harvest is minimized. According to ministry records, there are currently no active trap lines in the project areas. The remaining thirteen submissions indicated support for Sunterra and the Project. Letters and emails of support were received from the Norquay Wildlife Federation, Norquay Co-operative Ltd., Skull Lodge Outfitters, Town of Preeceville, Rural Municipalities of Clayton and Hudson Bay and individual residents and businesses in

the area. Four of the support letters listed over 200 names of residents in the Norquay area as signatories.

Duty to Consult

The project triggered consultation with First Nation and Métis communities due to potential impacts to Crown lands and the resources required to hunt, fish and trap for food and carry out traditional uses. Consistent with Saskatchewan's *First Nation and Métis Consultation Policy Framework*, Sunterra was delegated procedural aspects of consultation. Sunterra conducted meetings with First Nation and Métis communities to gather information on the potential of the project to impact Treaty or Aboriginal rights.

The review period of the EIS provided an additional opportunity for First Nation and Métis communities to review the consultation record included in the EIS and provide comments on the characterization of potential impacts to their ability to hunt, fish and trap for food and carry out traditional uses. The Wynyard Métis Local provided comments during the public review period expressing concern over potential impacts to the ability to access the harvest area. Following the review period, the Ministry of Environment received requests to meet with Yellow Quill First Nation (YQFN) and the Tisdale Métis Local. In response, the Ministry of Environment met with the communities to discuss their concerns and determine if community members used and continue to use the proposed Project sites to exercise Treaty or Aboriginal rights and carry out traditional uses. Following these meetings, the Tisdale Métis Local provided written comments to the ministry.

Key concerns raised by the Métis communities and YQFN during consultations related to impacts to their ability to access to the Project sites to hunt, gather and trap and concern that cultural or burial sites that may be present would be disturbed. Environmental issues raised included the need for appropriate restoration of the harvest sites and potential impacts to drainage and water quality. No specific locations or occurrences of traditional use in any of the proposed Project sites were identified during consultation activities.

As the peat harvest occurs in bogs where access is normally difficult and there has been no specific information provided regarding traditional use of the harvest areas, the Project is not likely to have significant adverse effects on the ability of First Nation or Métis communities to hunt, fish, and trap for food or carry out other traditional activities. Sunterra has proposed measures to address concerns expressed by communities during consultation activities including facilitating access to the bogs when active harvesting is not occurring.

Project specific concerns raised during engagement and consultation activities were addressed by Sunterra during the meetings and have been documented in the EIS. Based on the EIS and information provided by First Nation and Métis communities, consultation during the environmental assessment of this project has been deemed adequate by the Government of Saskatchewan.

Reasons for Decision

I am satisfied that the proponent has met all the requirements of the Act, thereby requiring a decision to be made pursuant to section 15 of the Act. Having made my decision to issue a ministerial approval, the Act requires me, pursuant to subsection 15(2), to state the reasons for the decision.

Terrestrial Environment

The Project harvest sites are located in the Porcupine Hills, an area characterized by agricultural lands transitioning to forest and peat lands. Topography is strongly to moderately rolling with bogs located in low lying depressions with organic deposits over the glacial till. Sampled peat depths were generally greater than 2.1 m and underlain by clay. The peat processing facility, located near Norquay, will be situated in an agricultural field.

The harvest areas consist of lightly to moderately treed bogs with open areas of Sphagnum moss. The dominant vegetation in the bog areas are black spruce, tamarack, trembling aspen, white spruce and balsam poplar with an understory of sphagnum moss, feather moss, lichens and shrubs such as Labrador tea and cranberry.

A total of approximately 1620 ha of peat will be harvested over 50 years for this Project. Yearly harvests of about 8 cm will accumulate to a final depth of about 2 m in any given area. The harvested layer consists of poorly decomposed peat that forms a loose layer that can hold a large quantity of water and buffer water table variations. A residual peat layer of at least 50 cm will remain after harvesting has been completed. This layer is critically important in facilitating the restoration of the peatland during reclamation activities. Sunterra has proposed vegetation donor sites which will be delineated prior to construction and protected to allow re-introduction of peatland vegetation once operations are complete which will help ensure effective reclamation of the harvested bog and re-vegetation with representative species. Once harvesting is completed in an area, progressive reclamation will be used to expedite restoration of disturbed areas. Further details regarding the site decommissioning and restoration plan will be developed through the permitting phase of project development and the plan will be reviewed every five years to ensure it is functioning effectively. A financial assurance will also be required to ensure decommissioning and reclamation activities are carried out and sites are returned to pre-disturbance condition.

Sunterra's vegetation surveys did not identify any species which are federally-listed under the *Species at Risk Act* (SARA) or protected under *The Wildlife Act, 1998*. In addition, no weed species listed under *The Weed Control Act* were identified in the Project area. A weed management plan will be submitted prior to construction and implemented as part of the vegetation management plan for the Project; this will include monitoring for weed species during construction and operation. Mitigation to prevent significant impacts to vegetation communities includes: minimizing disturbance to designated areas; utilizing cleared timber for internal bog road construction; revegetating disturbed areas during and

after peat harvesting; using previously existing access routes or trails where possible; periodic inspections for stressed vegetation or weed species; and implementing a fire response plan.

Wildlife surveys did not identify any mammal, amphibian or reptile species at risk. One SARA listed (Threatened) bird species, Canada warbler, was identified. Sandhill cranes were also observed at the Swan Plain 2 site and although the breeding population is listed as rare (S2B), the transient population is not (S4M). Sunterra has committed to scheduling site clearing activities outside of breeding and rearing seasons which will prevent impacts to breeding populations of these species.

The boreal plain woodland caribou population range, as defined in the federal recovery strategy, overlaps slightly with the Swan Plain 2 site. However, the landscape around the Project area has been highly disturbed by previous and existing human development, including agriculture and forestry activities. Sunterra did not detect any woodland caribou in the regional study area during track and aerial surveys or on 15 trail cameras set up throughout the four harvest areas and Sunterra has indicated no harvesting will occur within the geographic boundary identified as caribou habitat in the federal recovery strategy for Woodland Caribou. Based on results presented in the EIS and commitments by Sunterra, no impacts to caribou or caribou habitat are anticipated.

Minor impacts to wildlife will largely be due to sensory disturbance during construction and operation of the Project. No harvest activities will occur during the winter. Impacts will be limited in duration and are not expected to result in significant adverse impacts to wildlife populations, distribution or health. Sunterra will minimize impacts through mitigation such as: maintaining habitat around the lease areas including 30 m buffer zones around water bodies; scheduling clearing outside of nesting and rearing periods; restoring bog vegetation when harvest is complete; and minimizing disturbances.

Based on mitigations developed to minimize impacts to land, vegetation and wildlife habitat and the disturbed nature of the area surrounding the Project location, I am satisfied there will be no significant residual impacts to the terrestrial environment.

Groundwater and Surface Water Environment

The Project is located in the Upper Red Deer and Swan River watersheds with all four of the proposed sites draining into the Lake Winnipegosis watershed. There are several smaller streams and ponds within the lease areas and four named lakes within the study area. A 30 m buffer zone will be implemented to ensure that local lakes and streams are not disturbed by the Project.

Peat harvesting is not expected to impact groundwater quality as there is a low permeability layer of clay between the saturated peat layer and the underlying aquifers that forms a barrier between the perched water in the bog and the underlying aquifers. Additionally, because only the top layers of peat will be dewatered, there should be no impact to groundwater recharge. Groundwater wells may be installed on site for domestic

water use with approval from the Water Security Agency.

Minor changes to the amount of surface water flow from the harvest sites are expected as the peatland is drained prior to harvest; however, there will be little change in the direction of flow. Surface water flows will be largely restored following reclamation activities which will include blocking the drain after the Project is completed and mulching and reintroduction of peatland vegetation from donor sites.

Drainage will be directed to sedimentation ponds to provide filtration for loose organic material and then to natural discharge points where water will enter the natural drainage system. Implementation of environmental design features and appropriate mitigation (e.g., floating booms, control culverts with sliding gates and monthly monitoring of water discharge) are expected to limit effects from erosion.

Drainage water quality will be monitored throughout operations to confirm that there will be no effect on surface water quality. Sunterra conducted baseline sampling in bogs, creeks and lakes in the study area and has committed to monthly water monitoring for total suspended solids and pH and semi-annual monitoring of all other parameters measured during baseline sampling.

Construction of drainage works for the project will require approval from the Water Security Agency. Based on the limited impacts of the Project and the mitigations proposed, including restoration and re-vegetation activities, I am satisfied that no significant residual impacts to ground or the surface water environment will result from this Project.

Atmospheric and Acoustic Environment

Airborne emissions will be generated during construction, operation, decommissioning and restoration of the Project. Emissions may arise from fugitive dust from the access road, vehicle operation, during the preparation of the bog surface for cutting and during extraction, storage and transportation of the peat.

Air quality impacts from fugitive emissions from road and peat dust during harvesting activities will be minimized by dust suppression measures including: applying dust suppressant on access roads; minimizing peat harvest and handling during high wind conditions; reducing exposed areas of stockpiles; controlling vehicle speeds; covering loads being hauled; revegetating sites; and using tree and brush windbreaks.

Sunterra is committed to implementing appropriate air and dust control measures, verified through monitoring, throughout the life of the Project and as a result, significant impacts to the atmospheric environment are not anticipated.

Project noise may arise from harvest and hauling equipment. Mitigation will include ensuring internal combustion engines of construction equipment are well maintained with muffler systems. Impacts to wildlife are expected to be minimal given the attenuation of

most sounds with distance from source. Animals quickly become accustomed to new sounds as long as they are not accompanied by other sensory disturbances. The remote locations should ensure that local people will not be impacted by Project noise. In addition, harvest activities will not occur during the winter which will further reduce impacts. It is unlikely that noise from the Project would cause significant disruption to humans and wildlife during construction and operation of the Project.

I am satisfied with Sunterra's commitment to implement appropriate noise, air emission and dust control measures, verified through monitoring, throughout the life of the project and as a result, significant impacts to the atmospheric environment are not anticipated.

Decommissioning, Reclamation and Abandonment

Sunterra will decommission and reclaim disturbed areas once harvesting activities are completed. Restoration of the disturbed areas will be completed to a post-harvest land use objective as directed by the Ministry of Environment. This will be accomplished through the reconfiguration of the drainage ditches to allow for natural recovery of water levels within the peatlands. Appropriate undisturbed donor sites will be maintained within the Usherville and Swan Plain peatlands during operations and will provide donor material to facilitate the re-establishment of the *Sphagnum*-dominated vegetation communities.

A detailed plan for decommissioning, reclamation and abandonment will be developed in consultation with the Environmental Protection Branch prior to construction.

Heritage and Socio-Economic

The project was reviewed by the Heritage Conservation Branch (HCB) and it was determined there are no known conflicts with heritage resources within the project footprint. Clearance letters under Section 63 of *The Heritage Property Act* were issued and a Heritage Resource Impact Assessment was not required.

As reflected in several comments received during the public review phase, project residual effects on employment and economy are expected to be positive. The project will employ approximately 50 to 60 individuals during harvesting and processing activities, will have a positive impact on local businesses in the project area and will generate tax revenues for the local and provincial governments. The project will result in a small increase in traffic. However, given the low volume of traffic and mitigation proposed, the residual effects on traffic are expected to be negligible.

Sunterra has adequately examined and addressed all the heritage resource and socio-economic impacts of the project. Based on the findings, I am satisfied with Sunterra's assessments.

Conclusion

The Ministry of Environment and review agencies are satisfied that, if the mitigative and environmental protection measures outlined in the EIS are implemented, adverse and cumulative effects can be minimized and benefits enhanced. This conclusion is based on Sunterra's commitments as documented in the Statement; on the ability of the Minister of Environment to impose specific conditions at this time; and on the knowledge that additional environmental protection requirements can be imposed through terms and conditions forming part of permits and licences required by provincial legislation. Additional approvals will be required under *The Environmental Management and Protection Act, 2010*, *The Mineral Industry Environmental Protection Regulations, 1996* and *The Water Security Agency Act*. In addition, a financial assurance will be required at the time of permitting to ensure project infrastructure is appropriately decommissioned and impacted areas are effectively reclaimed following harvesting.

I have concluded that any adverse environmental effects associated with Sunterra's Usherville and Swan Plain Harvesting Project can be eliminated or minimized. Approval under the Act, therefore, has been granted to Sunterra for the Project as described in the Statement.

The ministerial approval for the Project includes terms and conditions designed to promote the elimination and control of adverse environmental effects associated with the Project. Included are requirements that Sunterra:

- (a) proceed with the development in accordance with the Statement;
- (b) provide notification of any change;
- (c) follow the requirements of other applicable laws and regulations.

These conditions, plus the measures proposed in the Statement and the regulatory framework applicable to the Project, now and in the future, are adequate to address all issues related to the Project.

Dated at Regina, Saskatchewan this 17th day of August, 2016

Original signed by

Herb Cox
Minister of Environment