

July 5th, 2022

Premier Tech Horticulture Clearwater Peat Harvest Project Level 3 Consultation - FNC202108622 Information Package

The Aboriginal Consultation Office (ACO) has directed Premier Tech Horticulture Ltd (henceforth referred as Premier Tech), to consult with you on our proposed Clearwater Peat Harvest Project (hereafter referred to as the Clearwater Project). This project has been assessed as requiring Level 3 - Extensive Consultation, by the ACO. This is the information package on the Clearwater Project, including the following table detailing each proposed activity.

Activity #	Activity Type	ATS Legals	Area/Distance	Applicable	Regulatory
	81 Vagazon			Act	Body
FNC#	SML (Surface Material	Sections 1 to	323 ha	Public	AEP
001	Lease – Peat)	2-37-7-W5M		Lands Act	
FNC#	Water Act -	Sections 1 to	323 ha	Water Act	AEP
002	No. 001-00403446	2-37-7-W5M		Too company of the control of the co	Super Agramma College

Proponent Contact Information

Main contact André Fafard, Operations Director, Alberta Premier Tech Horticulture 1-4803 - 60th Street, Olds. AB T4H 1V1

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Both contacts should be used together when communicating.

Overall Project Description

The Clearwater Project is located approximately 10 km north-west of the Town of Caroline and about 26 km south of the Town of Rocky Mountain House on the west side of Range Road 22 (N 52.150, W 114.889). The Project Surface Material Lease (SML) area is approximately 323 hectares (800 ac) with 135.9 ha (335.8 ac) of harvestable fields. The field preparation work (as described in "Phases of Development"), prior to harvesting, would start in November and the harvesting (as described in "Phases of Development") is anticipated to start in June of the following year with expansion phases occurring during the winter and harvesting during the warmer seasons. Overall, the Clearwater Project has a harvesting anticipated life cycle of 21 years, (the expected duration of the Clearwater Project). The site would be restored gradually as harvesting in each section is completed. This operation would provide an estimated volume of

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Clearwater Project



1 800 000 cubic meters of harvestable peat. Peat harvested at the Clearwater Project will be incorporated in soil mixes for retail and agricultural products.

As a requirement of the *Water Act* application, Alberta Environment and Parks (AEP) has requested a 100m buffer along Mud Creek and its tributaries. The 100m buffer will not be disturbed and will remain in its natural state.

Project Justification

The proposed Clearwater Project has been under consideration for more than a decade, and is still of great importance to Premier Tech. The site is big enough to host an operation that will last possibly a few decades and will provide Premier Tech with material to support its operations. Its location also provides a great advantage as it would be the nearest harvesting site to our processing facility in Olds, Alberta, thus reducing transportation costs and GHG emissions.

Location (see attached Map 1 - Clearwater Peat Harvest Operation)

The proposed project site is located south of the Mud Creek. The site represents a fen that we call the "Clearwater fen". It is located on sections 1, 2 in Townships 37, in Range 07 West of the 5th Meridian. It is accessible by a municipal road in Clearwater County.

Project Development (see attached Map 2 – Outlet proposal: Dispersion)

Several steps are needed to be completed before harvesting can begin (see Table 1. *Operation stages of Clearwater Peat Harvest Project*). The proposed timeline of operations leading to the beginning of harvest spans from fall when the site is frozen to allow machinery to operate on the wetland until the following summer where the first drainage ditches are completed. Ditches will be dug to allow gradual drainage of the site during the spring which will allow the fen to be harvested. Each drain ditch flows in a main ditch which splits into sedimentations ponds. The sedimentation ponds have a width of 7 meters and their length is proportional to the area drained to ensure that the water has sufficient settling time and that the pond doesn't require frequent dredging. Sedimentation ponds will passively remove solid particles, and the water will exit through a channel connecting to a pumping station located outside of the 100 m buffer from Mud Creek. The water will be pumped through an agricultural irrigation system which will disperse the water into the 100 m buffer zone at a wide angle to prevent any artificial channeling.

The 100 m buffer for the Mud Creek is a mitigation measure to protect the habitat of the Bull Trout in the Mud Creek, by preserving the area surrounding the watercourse, the project does not cause any change to the habitat within the buffer.

The harvesting areas are also separated from the edge of the SML by a 40-meter buffer, in order to not impact adjacent lands outside of the lease.

The working yard will contain an office, a staff parking area, a dry toilet, a generator, and a garage for maintenance work on equipment. The yard (including the office and other structures) will be around 0.8 hectares. Harvesting will only occur once the ground is free of snow and ice (usually



April to November). Field preparations for new areas should be done during this period. Hauling out of the site may also happen all year round during the day.

Phases of development

The current proposal only covers Phase 1 (155.5 ha footprint), which will include maintaining a buffer of 40 meters between the harvesting areas and the edge of the lease. The buffer will increase to 100 meters between the Mud Creek bank and the harvest fields and drainages, to preserve ecological functions of the Creek. Premier Tech worked with Golder Associates Inc. (an engineering consulting firm hire for their expertise in the environmental field) to implement this setback distance of 100 meters. This distance is consistent with Alberta Government Guidelines ("Stepping back from the water," Alberta Environment & Parks, 2012).

The first phase of a project is the creation of the drainage network and the roads. The main ditches and secondary ditches are first done to lower the water table in the site. The second phase is removal of the surface vegetation after which the harvesting with peat vacuums can start. Harvesting is usually done during the day when the conditions are favorable. High winds (more than 50km/h), snow cover or rain will prevent harvesting due to the soil not being dry as required. The harvesting operations are usually done during the day between April and October. The material is stacked along the internal road in piles until it can be transported out of the site. In winter there is no harvest, the only activity will be, the loading and transportation of the harvested peat.

Within the operation there will be roads that will lead to harvesting sections. Those sections are where the vacuum harvesters will collect material. Along those roads will be stockpiling areas where the harvested material is stored into stockpiles. These are left on the site until they can be moved to the processing facility in Olds. Beyond the stockpiling area will be the harvesting fields. The harvesting fields are strips of approximately 30m width with a low dome profile and surrounded on 3 sides by ditches. Between each field are drainages ditches that collect into a main ditch, the field ditched usually have a depth of one meter and a width of one meter too. The main ditches usually have a width of one to two meters at the bottom and a slope of 45 degree on each side. They can have a height of one to two meters. The water then goes into the sedimentation ponds, their length varies, but their cross-section is the same. They are 3 meters wide at the bottom, around 2 meters deep and have a 45-degree slope that is two meters wide on each side. The main access to the operation will be constructed south of the fen to prevent heavy traffic from crossing the Mud Creek (located north). This main access road will be built within Surveyed Road Allowance, at the crossroad of Township Road 365A and Range Road 71. The access would be limited by a gate that will be locked when no personnel is on site. This is mostly for safety reasons as dried peat can be highly flammable and having sources of heat (cigarettes, fires, gas-powered vehicles) can pose a risk of fire.



Attached is the latest operational map. See Map 2 - Outlet proposal: Dispersion attached with this information package. Please note that Premier Tech is still working with the Government of Alberta to meet the requirements needed to operate. Therefore, minor modifications to this operational map (e.g. drainage design adjustments, fen road lengths, etc.) may be required to fulfill these requirements.

Table 1. Operation stages of Clearwater Peat Harvest Project

Operation	Year of operation	Duration
Tree clearing	November of year 0	2 months
(One harvest section per year)	November of year 1	1 month
	November of year 2	1 month
	November of year 3	1 month
Ditches identification with posts	January of year 1	2 weeks
Parking construction (within the Yard area)	January of year 1	2 weeks
Office and garage installation (within the Yard area)	January of year 1	1 week
Main ditches digging	February of year 1	1 week
(One harvest section per year)	February of year 2	1 week
	February of year 3	1 week
	February of year 4	1 week
Road construction	January of year 1	2 months
(One harvest section per year)	January of year 2	1 month
	January of year 3	1 month
	January of year 4	1 month
Secondary ditches digging	February of year 1	1 month
(One harvest section per year)	February of year 2	1 month
	February of year 3	1 month
	February of year 4	1 month
Initial field preparation (i.e. profiling	April of year 1	2 months
harrowing, ditch cleaning)	April of year 2	1 month
(One harvest section per year)	April of year 3	1 month
	April of year 4	1 month
Harvesting (yearly: April to Oct)	June of year 1	20 years
Reclamation	Year 21	5 years



Potential Impacts

Fish and wildlife protection

Mud Creek flows in the Clearwater River which is part of the North Saskatchewan River Basin. This basin is home to some populations of bull trout (*Salvelinus confluentus*, a Species of Special Concern under the *Wildlife Act of Alberta*.

Sampling along Mud Creek has shown no instances of bull trout, although the Clearwater River is listed as a medium abundance index and a declining trend in the population. During the 2020 survey by Golder Associates Inc., the Western toad (*Anaxyrus boreas*) were noted. Otherwise, no other species of concern or at risk were detected in the area during the wildlife or flora surveys done up to now: 2005 & 2006 by Stantec Inc., 2017 wetland survey & 2020 fauna & flora survey by Golder Associates Inc. Both organizations provide consulting in environment and their expertise was required to perform the surveys. Premier Tech is engaged in collaborating with Government of Alberta officials to monitor and mitigate impacts on cold water fish species (i.e., bull trout) during all phases of the Clearwater Project operation.

The fish inventory conducted in 2020 by Golder Associates Inc., had captured the following species listed in order of frequency: Finescale Dace (*Phoxinus neogaeus*), Lake Chub (Couesius *plumbeus*), Pearl Dace (*Margariscus margarita*), and Brook Stickleback (*Culaea inconstans*).

Weed control

Premier Tech engages in weed control by removal of all weeds within 200 feet of peat fields and inside ditches as indicated by our Quality Norm Policy (See Appendix A: Quality Criteria – Weeds on harvested fields).

Dust and air quality management

Dust and air quality management is done daily following Premier Tech's Fire Prevention and Procedure Program. During harvesting, the lead hand or foreman is required to measure wind speed every two hours. If wind gusts of 45 km/h or wind blows consistently at 50 km/h operations are suspended until wind speed reduces at 35 km/h.

First Nations Rights to hunt, fish and gather

Apart from the harvest area, the Clearwater Project is not expected to interfere with the First Nations rights to hunt, fish and gather. The peat operation will hinder hunting and gathering activities within the harvest area footprint while the 135.9 ha site is harvested (duration of approximately 21 years). Premier Tech will mitigate potential impacts on fish that are likely to dwell in the Mud Creek, as part of its *Water Act* Application. The project is not expected to adversely affect fish populations. After the operation and once the reclamation is carried out, hunting and gathering should be possible again in the impacted areas.



Regulatory Approvals

Premier Tech is committed in seeking all approvals required by Alberta government entities. As such, Premier Tech is in the process of requesting approval under the *Water Act* and *Public Lands Act*.

A Historical Resource application has been submitted and we are awaiting the results.

Premier Tech has obtained approval from some other existing dispositions holder on the site, listed in Table 2.

Table 2. Existing Dispositions within the Clearwater Project

Disposition	Purpose	Disposition Holder	
PNT 790758	Organic/Poorly Drained Soils	Rocky East Office Rangeland District – Lands Division, (AEP)	
PNT 753813	Organic/Poorly Drained Soils	Rocky East Office Rangeland District – Lands Division, AEP	
PNT 742685	Ungulate Habitat Protection Area	Rocky Mountain House Office Fish and Wildlife, AEP	
PLA 941008	Pipeline	Pengrowth Energy Corporation	
PLA 013920 Pipeline ConocoPhillip		ConocoPhillips Canada Operations Ltd.	
PLA 950554	Pipeline	Pengrowth Energy Corporation	
GRL 40235	Grazing Lease	Charles and Daniel Archibald	
GRL 38956	Grazing Lease	Jed Neal Radau	
LOC 941288	Access Road	Pengrowth Energy Corporation	
MSL 941855	Wellsite	Pengrowth Energy Corporation	
MSL 941483	Wellsite	Pengrowth Energy Corporation	
MSL 001993	Wellsite and Access Road	ConocoPhillips Canada Operations Ltd.	

Proposed Closure (Restoration)

Restoration techniques are efficient and applied successfully at Premier Tech's sites. Numerous examples show concrete results at Premier Tech's sites, most of them are in Eastern Canada, the nearest one in Alberta is located in Athabasca. The techniques could also be applied to the Clearwater Project. Time, effort, collaboration, and money have been invested in our company to establish successful restoration techniques. Site remediation will be performed on each section



after their closure according to experienced techniques to return the site according to the choice of reclamation made by Government of Alberta requirements, most likely as a fen.

The restoration of the site is determined by the Conservation & Reclamation Plan. This documentation is required under Alberta's Peat Policy and is a requirement for peat operations and in order to obtain the SML. More information on the Plan can be found at: https://www.alberta.ca/peat.aspx.

After the restoration, the existing drainage network will be filled, and the edge of the site will be profiled to slope gradually between the site to the outside. The harvesting fields will be profiled and the topography within the operation area should be flat. Berms might be added if needed to retain water, the berms are expected to be about 30cm (1 feet) high. This will depend on the remaining topography after profiling to prevent important concentration of water.

Harvesting areas will be converted back into a wooded coniferous fen, similar to the current site. The internal roads will remain more elevated and should be more densely forested, sloping gradually inside the harvesting fields. To ensure that the vegetation present in the site is adequate, vegetation from a donor site will be collected and spread back into the area to be restored. This will ensure a speedy colonization by the vegetation to create a fen.

Consultation with First Nations

As required by the Aboriginal Consultation Office (ACO), Premier Tech has been directed to consult at a Level 3 – extensive consultation with First Nations as per Alberta's consultation policy, starting with the distribution of this information package to First Nations.

Upon receipt of this notification letter and this information package, the concerned First Nation will have 20 GoA working days to respond to the attached Project Information Package with comments or concerns. Notably by mentioning project specific concerns and interests, a spatial reference and explanation of how Treaty rights or traditional uses may potentially be impacted.

Please review all relevant information included and provide a response within 20 GoA working days. The response should include a written submission identifying any concerns.

If you have concerns, please provide the following information:

- What specifically is the concern?
- Where specifically is the concern located in relation to the proposed project/activity footprint?
- What is the significance of the concern?
- How are Treaty Rights or traditional use activities impacted by the proposed project/activity?
- What (if any) are the First Nation proposal(s) to effectively address the concern?



Upon receipt of your written submission, consultation should be substantially underway or completed within 60 GoA working days as per *The Government of Alberta's Guidelines on Consultation with First Nations on Land and Natural Resource Management, 2014.*

Sincerely, <Original signed by>

André Fafard ^ℓ

Operations Director, Alberta - Horticulture

Note: See page 1 for detailed proponent contact information.

Proponent Background

Premier Tech manages 25 peat harvesting operations and 10 screening and bagging plants, located mostly in Canada. Over 25 million bags and bales of growing media, sphagnum peat moss, potting mixes and compost are produced and distributed annually for the professional and retail markets of North America, South America and overseas. Premier Tech is also known to be a leader in peatland restoration. Indeed, Premier Tech employs full time scientists to continuously improve their restoration skills.

Currently, Premier Tech holds a processing and packaging facility in Olds, and operates 7 peat harvesting operations in Alberta, now totaling over 400 hectares. Those sites are located in the Athabasca, Drayton Valley and Valleyview areas. Premier Tech applied for new areas to provide new supply to the packaging plant.

Premier Tech is currently certified by the VeriFlora for Responsible Peat Management provided by SCS Global Services. This certification showcases our commitment to responsible management of peatland, more information about the certification can be found at: https://www.scsglobalservices.com/services/responsibly-managed-peatlands

Alberta's Consultation Documents

For more information regarding Alberta's consultation process, including timelines and the proponent's obligations under the process, please refer to the Aboriginal Consultation Office website at: https://www.alberta.ca/indigenous-consultations-in-alberta.aspx. This includes:

- The Government of Alberta's Policy on Consultation with First Nations on Land and Natural Resource Management, 2013;
- The Government of Alberta's Guidelines on Consultation with First Nations on Land and Natural Resource Management, 2014; and, ,
- The Government of Alberta's Proponent Guide to First Nations and Metis Settlements Consultation Procedures, 2019.



Appendix A: Quality Criteria - Weeds on Harvested Fields

Title: Criteria for tolerance of weed in an exploited operation				
Specification number:	PTH-QU-NO-026e	Division :	PTH	
Written on:	1998-03-24	Written by:	Frédéric Caron	
Revision date:	2016-04-04	Approved by :		

❖ A multitude of approved methods which will not affect the peat (see guide) must be used in order to control vegetation. No vegetation is allowed within a 200 feet distance of harvested fields.

We must at all times control blooming. Flowers which bloom must be removed before July 15th. We must keep native plants (friendly flowers). We can observe an exception of this requirement along the main parking area, storage area (not storage of bulk peat) and along the roads.

Professional peat sectors:

No weeds tolerated in the following areas:

- In the main ditch;
- In all other ditches;
- In the fields.

Retail peat sectors:

No weeds tolerated in the fields.

Certain weeds might be tolerated in the ditches if we do not allow them to bloom.