

VeriFlora Certification for Responsible Peatland Management Requirements for Producers and Handlers

September 2010

SECTOR-SPECIFIC ANNEX: HORTICULTURAL PEAT MOSS

I. Purpose and Scope of the Annex

I.1. Purpose

This Annex is intended to be used in conjunction with the Standard (http://www.scs-certified.com/docs/VeriFlora_Version3_0407F.pdf) to identify and encourage sustainable production practices in the long run, and to stimulate continuing improvement in the peat moss industry. In addition to the Requirements found in the Standard for sustainable agriculture production and handling operations, peat moss producers and handlers shall conform to the sector-specific Tier 1 and Progress Requirements described in this Annex. The tables below identify critical requirements from Tier 1 and critical Progress Requirements for certification.

I.2. Sector Goals

- To favor restoration of carbon accumulating wetland ecosystems;
- To promote continuing improvement, stimulate innovation, and reduce the environmental footprint in peat moss production;
- To favor horticultural and other biological uses of peat moss, while promoting cost-effective uses of value-added by-products, which reduce greenhouse gas emissions; and
- To provide third-party assessments and certification to peat moss producers and handlers.

II. References

II.1. Normative References

1. Provincial Government of New Brunswick, Natural Resources. 2010. *Peat mining Policy*. (MRE-004-2005). 13 pages.
2. Provincial Government of Quebec, Ministère du Travail. *Code du travail du Québec*. (L.R.Q., c. C-27).
3. Wildlife Conservation Branch, Canadian Wildlife Service; Environment Canada. 1996. *The federal policy on wetland conservation implementation Guide for federal land managers*. 33. pages.

II.2. Additional References

1. Cleary, J., N. T. Roulet, and T. R. Moore. 2005. *Greenhouse Gas Emissions from Canadian Peat Extraction, 1990-2000: A life-cycle Analysis*. *Ambio* 34:6, 456-461.
2. Health Canada. Natural Health Products Directorate. 2006. *Good Manufacturing Practices Guidance Document*. Ministry of Health, Ottawa. 36 pages.
3. ITTO. 2005. *Revised Criteria and Indicators for Sustainable Management of Tropical Forests including a reporting format*. In: ITTO Policy Development Series No 15. International Tropical Timber Organization, Yokohama.
4. Joosten, H. and Clarke, D. 2002. *Wise Use of Mires and Peatlands. Background and Principles Including a Framework for Decision-Making*. International Mire Conservation Group and International Peat Society, Finland. 305 pages.
5. Okruszko, T., E. Multby, J. Szathlowics, D. Swiatek, and W. Kotowski, Eds. 2006. *Wetlands - Monitoring, Modeling, and Management*. Taylor & Francis. New York. 356 pages.
6. Quinty, F. and Rochefort, L., 2003. *Peatland Restoration Guide, Second Edition*, Canadian Sphagnum Peat Moss Association. 106 pages.
7. Silvius and Diemont. 2007. Climate Change, Poverty, Biofuels, and Pulp Deforestation and Degradation of Peatlands. *Peatlands International*. 2/2007, 32-34.

III. Terminology

Buffer zone. A strip of land surrounding the harvest area with conserved or enhanced habitat designed to mitigate the effects of peat harvesting operations on the neighboring areas, including HEVs, wetlands, and riparian zones.

Carbon Offset. The act of reducing or eliminating greenhouse gas emissions (GHG) in one place in order to “offset” GHG emissions occurring elsewhere.

Diaspore. All parts of the plant which can give rise to a new plant. Includes seeds and spores (which are the seeds of mosses), roots, stems, leaves, branches, etc.(Add. Ref.6).

Donor site. A designated area of the peatland assigned specifically for collecting Sphagnum moss or other plant material(s) to be used for restoration activities described in the Rehabilitation Plan.

Ecological Restoration. The goals and activities specific to the Rehabilitation Plan.

Handler. A user of harvested horticultural peat moss. For certification purposes, the Handler is the legal entity responsible for the chain of custody of peat products or peat based products including storing, processing, blending, packaging, and distribution. The handler is not a producer and does not own, administer or harvest peatlands.

Harvesting Plan. A written document that describes the protocols and procedures used by the entity in carrying out its daily functions. This Plan is a partial certification requirement of the Annex of this Standard.

High Ecological Value (HEV) Areas. Those areas of bogs and fens that possess one or more of the following attributes:

- a) areas containing globally, regionally or nationally significant concentrations of biodiversity (e.g., rainforest);
- b) areas that are in or contain rare, threatened or endangered ecosystems;
- c) areas that provide basic services of nature in critical situations (e.g., watershed protection or erosion control);
- d) areas fundamental to meeting the basic needs of local communities (e.g. health);
- e) areas critical to local communities’ traditional cultural identity (areas of significance identified in cooperation with such local communities); and
- f) areas that contain threatened or endangered species.

Humification. The process by which organic matter decomposes to form humus.

Peat Moss. A type of peat consisting primarily of various mosses of the genus *Sphagnum*,

accumulation in wetlands, in particular peatlands.

Peat. Sedentarily accumulated material consisting of at least 30% (dry weight) dead and partially decomposed organic material. Also, a heterogeneous mixture of more or less decomposed plant (humus) material that has accumulated in a water-saturated environment and in the absence of oxygen.

Peatland. Ecosystems dominated by moss species, especially *Sphagnum* as the principle life form, and in which the production of biomass exceeds its decomposition resulting in the accumulation of organic matter from plant debris. An area with or without vegetation, with a naturally accumulated peat layer at the surface.

Peatland Rehabilitation. The rebuilding of ecosystem structure and processes such as productivity and environmental services, that may or may not involve the re-establishment of the pre-existing biotic integrity in terms of species composition and community structure.

Peatland Restoration. The process of assisting to recreate in the long run, a peatland that presented wet conditions and dominated by sphagnum mosses or other vegetal species representing the original flora of the site.

Peat Moss By-Products. Peat moss by-products include, but not limited to: roots, wood, dust, peat moss sift residues and other low-value or non-horticultural products.

Peat Moss Production Plan. The Producer requirements which must be met annually for certification and the description of the protocols and procedures used to ensure conformance of the certified product to the Standard.

Peat Moss Handling Plan. The Handler requirements which must be met annually for certification and the description of the protocols and procedures used to ensure conformance of the certified product to the Standard.

Peat Moss Products. A number of individual products derived from peat moss that can be packaged and commercially marketed or blended with other material to create media for planting or growing plants and other biological and biomechanical uses

Producer. A harvester of horticultural peat moss. For certification purposes, the Producer is also the legal entity responsible for the harvesting and rehabilitation of peatlands and the production of peat moss product(s). A producer may also be involved in product packaging, blending and shipping operations.

Progress Requirement. A requirement for continued certification to be met by the Producer or Handler after a time period specified in this Annex.

Rehabilitation Plan. Activities required for the bog rehabilitation including restoration, rewetting, wetland and wildlife management, tree and shrub planting, or other means for ecological rehabilitation which constitute a partial requirement of the current Annex of the Standard. The Rehabilitation Plan shall be based on consensus and reflect the international Wise

Use principles and other relevant guidelines.

Sphagnum Farming. The cultivation of *Sphagnum* sp. mosses on rewetted bog peatlands.

Shall. The term shall used throughout this document indicates a mandatory requirement.

SOP. Standard Operating Procedure.

Stakeholder. Any person, organization, company or other party interested in or concerned with the topic, such as peatland management.

Threatened or Endangered Species. Flora or fauna species that have been listed as threatened or endangered by the legal provincial jurisdiction within which peat moss harvesting is being done, as well as in international listings, such as the Red List of the International Union for the Conservation of Nature.

IV. Conformance

As established in Section 3.0 of the Standard, the Producer or Handler must:

- Conform with 100% of the prerequisite (Section 6) and critical requirements of the Standard, with the exception of the Conditionally Applicable and Non-applicable Requirements (designated below);
- Conform with 100% of the Critical Requirements of this Peat Moss Annex (designated below); and
- Conform with at least 90% of the total applicable Standard and Peat Moss Annex Tier 1 requirements.

For this Annex the following additional Critical, Conditionally Applicable, and Non-applicable requirements have been identified:

IV.1. Critical Requirements

Critical Requirements for Producers		Critical Requirements For Handlers	
For conformance to the Annex		For conformance to the Annex	
V.1.1.1.	V.4.1.1.	VI.1.1.1.	VI.4.1.1.
V.1.1.2.	V.4.2.1.	VI.2.1.2.1.	VI.4.2.2.
V.1.2.1.	V.5.2.1.	VI.2.1.2.2.	VI.5.1.1.
V.1.2.2.	V.6.1.1.	VI.2.2.1.1.	VI.5.1.3.
V.1.2.3.	V.6.2.1.	VI.2.2.2.1.	VI.5.1.4.
V.1.2.4.	V.7.1.1.	VI.3.2.1.	VI.5.2.2.
V.1.2.5.	V.7.2.1.	VI.3.2.2.	
V.1.2.8.	V.7.2.2.		
V.2.2.1.	V.7.2.3.		

V.3.2.1.			
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IV.2. Non-Applicable Requirements

Producers and Handlers are not obliged to conform to the following requirements in the Standard, which are not applicable to peat moss Producers and Handlers:

Non-Applicable Requirements for Producers		Non-Applicable Requirements for Handlers	
7.2.1.5	13.1.1.2.	17.1.1.2	
7.3.	13.1.1.4.	17.2.1.	
8.1.6.2.b.	14.1	18.2.3.1.n.	
9.2.1.5.	14.2		
10.2.1.2.c.			

IV.3. Conditionally Applicable Requirements and Guidelines for Interpretation

Producers and Handlers shall be responsible for conformance to the following requirements in the Standard in the context and under the conditions described as follows:

Section of Standard	Conditions under which conformance is required for Producers and Handlers
Producer Section	
6.1.2.	No information for crop pest/disease management, or agro-ecosystem health is required. See Terminology for Peat Moss Production Plan.
7.1	Pest and disease management information will be provided for the synthetic or organic inputs used in the establishment and maintenance of the Producers rehabilitation areas.
7.2.1.1.-7.2.1.3.	If media mixes involve organic or synthetic materials with moderate or greater risk to the environment, the Producer shall demonstrate that their operations do not discharge these materials from the blending/product mixing facilities to the environment. Producers that apply fertilizer(s) as part of its Rehabilitation Plan are required to describe the methods and materials used.
7.2.1.4.	Guidance will be provided by the certification body for developing a carbon and greenhouse gas footprint.
8.1.1-8.1.6.	Specific requirements for peatland habitat management and protection are provided in this Annex.
9.1.	Specific Requirements for peatland drainage, rehabilitation, and water quality monitoring are provided in this Annex.
9.2.1.6-9.2.1.7	These are Tier 2 requirement.
10.1.1.2-10.1.1.3.	The handling practices required do refer to hazardous materials, not specifically pesticides and other agrochemicals.
11.2.2.1	Reference to non-discrimination, sexual harassment, and workplace conditions, including safety and hygiene only.

11.2.2.1.e.	Applicable only to operations that produce custom or commercial media with additives which must retain MSDS by law, or otherwise require safety protocols to avoid dermal contact or inhalation that may be hazardous to workers and their families.
12.3.1.3.	Technological innovations and adaptations include, but are not limited to, new product development and periodic review of techniques, such as block harvesting.
13.1.	The Quality Manual refers to the development of a quality management system. Product quality for this sector does not refer to appearance. Grade and tolerances for product mixes are specific to this sector and will be developed by the Producer. Other quality references and classification systems may apply. Examples provided in VeriFlora Version 3.0 Standard are for reference only. Grading requirements within this Annex are Critical Requirements.
Handler Section	
6.2.	See Reference for Peat Moss Handling Plan.
15.1.1.6.	This is a Tier 2 requirement.
15.3.1.5.	Waste management includes non-containerized materials, used in manufacturing and distribution of products.
16.1.1.4.	Reference is not strictly applicable only to chemicals. Other potentially hazardous materials are used in product mixes and in product manufacturing.
17.1.1.1.	The Quality Manual refers to the development of a quality management system. Product quality for this sector does not refer to appearance. Grade and tolerances for product mixes are specific to this sector and will be developed by the Producer. Other quality references and classification systems may apply.

V. Producer Requirements

V.1. Responsible Peatland Management

V.1.1. Tier 1 Requirements: Responsible Peatland Management

V.1.1.1. Legal Compliance

- a. The Producer shall submit a legally binding permit and/or certificate approved by the local or regional authorities and shall respect all binding laws and governmental regulations;
- b. The Producer shall demonstrate legal tenure for the land and legal permission for peatland harvesting;
- c. The Producer shall demonstrate compliance with all taxes, royalties, or fees associated with its permit; and
- d. The Producer shall submit a Production Plan where legally binding legislation requires such a plan (e.g. in some Canadian Provinces).

V.1.1.2. Harvesting Plan

The Producer shall establish a peatland management plan. The Harvesting Plan shall include at least the following:

- a. Management objectives¹, description of the peat moss resources, and harvesting techniques;
- b. Mapping of all past, present and future harvesting areas, access roads, and drainage ditches;
- c. Mapping of the boundaries of the buffer zones, the donor sites and all HEV areas;
- d. Estimation of total harvestable peat for each mapped harvested area;
- e. Annual harvest volumes for each mapped harvested area; and

V.1.2. Progress Requirements: Responsible Peatland Management

V.1.2.1. Environmental Context of Production Operation (1 year)

The Producer shall provide information on the environmental context of its operations, including at a minimum the following elements:

- a. Delimitation of the boundaries including a minimum of 0.25 km. surrounding the Producer's area of operation and a legend illustrating the major ecological and anthropogenic features;
- b. Delimitation and description of HEV area(s), including non-exploited peatlands designated within the Producer's area of operation, ponds, lakes, streams and rivers;
- c. Delimitation and description of buffer zones;
- d. Delimitation and description of surface and groundwater sources, including, but not limited to functional, non-functioning, and proposed drainage ditches;
- e. Delimitation and description of air quality concerns;
- f. Delimitation and description of potential nuisance problems for neighbouring communities; and
- g. Description of other cultural activities that affect or could affect the environment of the Operation.

¹The Producer should take into consideration values and framework for wise use decision-making in the plans for new harvesting areas of peatlands and mires (Additional Reference 4).

V.1.2.2. Rehabilitation Plan (1 year)

- a. The Producer shall establish a rehabilitation plan for all harvested areas following cessation of harvesting activities. Restoration² or sphagnum farming is required for all new peatlands. Other rehabilitation techniques may be allowed for older peatlands.

The plan shall include at least the following:

- i. The goals for the rehabilitation;
 - ii. Clear argument supporting the choice or choices of the rehabilitation goals;
 - iii. Description of practices and procedures used to ensure rehabilitation success;
 - iv. Timetable for bog closures;
 - v. Timetable and methods for rehabilitation; and
 - vi. Estimated yearly costs of establishment and final costs for rehabilitation for each planned area.
- b. The Producer shall demonstrate that it has established a donor site or sites representing at least 10% of the peatland harvested areas.
 - i. The donor site area requirements may not include the HEV areas;
 - ii. The donor site can be included in the buffer zones; and
 - iii. Donor sites must provide diaspores in sufficient quantity and viability.
 - c. The Producer shall demonstrate compliance with the Rehabilitation Plan 3 years following cessation of peat harvesting.
 - i. Progress towards compliance shall be documented through an accredited third-party or by other quantitative methods which demonstrate that the majority of the area(s) targeted for rehabilitation or ecological restoration are improving, and;
 - ii. Compliance with the Rehabilitation Plan shall prior to the end of the certification period, as stipulated in the timetables of the Plan.
 - d. The Producer shall demonstrate that personnel in charge of rehabilitation activities are qualified to carry out their responsibilities with regards to the rehabilitation plan.

V.1.2.3. Monitoring of Non-exploited Peatlands Designated as Buffer Zones, Donor Sites and HEV Areas (2 years)

As a part of the Peat Moss Production Plan, the Producer or contractor shall conduct an assessment every five years on the status of non-exploited peatlands designated as buffer zones, donor sites and HEV areas.

- a. The Producer shall provide a description of monitoring techniques, including detailed maps of sampling sites of donor sites and HEV areas.
- b. The Producer shall demonstrate through monitoring that the donor sites indicated in the Rehabilitation Plan are viable and provide sufficient diaspores needed for restoration in accordance with the timetable established

² Restoration includes both the reestablishment of peatland vegetation species and the rewetting of harvested sites by stabilizing and raising the water table (Page 22, Additional Reference 6).

in the Rehabilitation Plan.

V.1.2.4. Drainage Plan and Hydrology (1 year)

- a. Prior to bog opening, the Producer shall develop a drainage plan that takes into account future needs for restoration, rehabilitation, and the surrounding wetland environment.
- b. For existing bogs, the Producer shall develop a drainage plan that serves as a primary technical aid to the design and implementation of the Rehabilitation Plan.

V.1.2.5. Water Quality Management Plan (2 years)

- a. The Producer shall establish a Water Quality Management Plan (WQMP) for all areas in conjunction with Requirements V.1.2.1, V.1.2.3, V.1.2.3 and V.1.2.4 of this standard, The plan shall include at least the following:
 - i. Water quality goals for each bog;
 - ii. Concrete strategies to mitigate the operational impacts on water quality;
 - iii. Clear argumentative support for the choice or choices of the mitigation strategies for each bog;
 - iv. A flow diagram and description of practices and procedures used to ensure water quality goals are achievable;
 - v. Timetable and methods achieving water quality goals for each bog;
 - vi. Written water quality monitoring protocols; and
 - vii. Estimated yearly costs for the establishment and maintenance of the water quality program for each bog.
- b. The WQMP shall include written design and operational criteria for mitigating the operational impacts on water quality, including but not limited to methods such as sediment basins, overland flow, among other techniques.
- c. The Producer shall demonstrate that its personnel are qualified to carry out their responsibilities of the Water Quality Management Plan.
- d. The Producer shall initiate water quality monitoring prior to bog opening, continue monitoring during the harvesting time period, and monitor the water quality at decreasing intervals over the life cycle of the peatland, commensurate with the achievement of the goals.
- e. The Producer's shall maintain auditable records of water quality monitoring that are based upon a written protocol for water sampling and analysis. The sampling protocol(s) shall emphasize more frequent sampling at the opening of the bog and a reduced sample frequency commensurate with water quality improvements over successive years.

V.1.2.6. Pest and Weed Control Plan in the Harvested Area (1 year)

The Producer shall develop and implement a pest management program that contains at least the following elements:

- a. An alternative to chemical weed controls; and
- b. Monitoring for detection and control of weeds and pest populations.

V.1.2.7. Air Quality Plan (2 years)

The Producer shall be proactive during peatland harvesting activities to limit the impacts on air quality.

- a. The Producer shall develop and implement an air quality management program that contains at least the following elements:
 - i. Particulate matter controls in the plant and in the fields;
 - ii. Air quality monitoring shall meet local or regional current legislation, if required; and
 - iii. Where real or perceived public impacts have been noted, a written program with SOPs shall be instituted for operators.

V.1.2.8. Fire Prevention and Emergency Contingency Plan (1 year)

The Producer shall develop and implement a fire prevention plan and emergency contingency plan for protecting peatland resources from fire.

- a. The fire prevention plan shall include, but is not limited to the following fire fighting resources:
 - i. Access roads;
 - ii. Water sources³;
 - iii. Human resources;
 - iv. Firefighting equipment;
 - v. Communications;
 - vi. Emergency preparedness; and
 - vii. Community and/or regional interagency cooperation.
- b. A written fire fighting (contingency) plan shall be developed that includes at a minimum the following elements:
 - i. Goals, resources, and procedures for peatland protection;
 - ii. Identification and training of human resources in case of a fire event; and
 - iii. Measures to limit the risk of fire (e.g., equipment inspection, water storage, and checking wind speed at harvesting, public awareness).
- c. An assessment of the area effectively covered by the fire prevention plan shall be developed.

³ Water sources on managed peatlands shall be identified and reported.

V.1.3. Tier 2 Requirements: Responsible Peatland Management

V.1.3.1. Drainage Plan and Hydrology

- a. The Producer shall design and implement a geographic information system, such as stakes, driven poles or other survey benchmark to facilitate the implementation of the WQMP and Drainage Plans. Detailed topographic maps may also be prepared to assist in the design and implementation of the hydrology planning with a network of GPS-referenced benchmarks.
- c. Auditable hydrologic records shall be kept⁴.
- d. Design criteria for restoration shall reference and utilize the hydrological monitoring data.

V.1.3.2. Water Quality Management Plan

Currently there are no Tier 2 Requirements.

V.1.3.3. Weather Condition Monitoring

The Producer shall demonstrate through meteorological stations or other monitoring mechanisms that the harvesting operations are optimally managed.

V.1.3.4. Mechanism for Voluntary Financial Contribution

The Producer shall demonstrate a voluntary mechanism for financially contributing to future rehabilitation plans implementation.

V.1.3.5. Natural and Anthropogenic Fire

- a. The Producer shall document the historic fire regime of its peatland managed areas, including, but not limited to fire frequency, areas burned, and the fire effects on natural resources.
- b. The Producer shall conduct periodic or continuous stage measurements of surface and piezometric water elevations in representative natural areas adjacent to harvested peatlands where fire⁵ is prevalent.

V.2. Ecosystem Conservation and Protection

V.2.1. Tier 1 Requirements: Ecosystem Conservation and Protection

The Tier 1 Requirements for this section are covered in the Responsible Peatland Management requirements.

⁴ Examples may include the monitoring of water table fluctuations during the months of both peak and minimal flow.

⁵ The hydrological context for natural and anthropogenic fire occurrences in peatland environments, included by not limited to temperate, subtropical and tropical wetlands, must carefully assessed.

V.2.2. Progress Requirements: Conservation and Protection

V.2.2.1. Contaminant Discharges (1 year)

The Producer shall develop and implement standard operating procedures for tracking its principle sources of contaminants (e.g., vehicular maintenance, unscheduled maintenance due to breakdowns, organic matter leachates, etc.).

V.2.3. Tier 2 Requirements: Conservation and Protection

V.2.3.1. Mechanism for Voluntary Financial Contribution

The Producer shall demonstrate a voluntary mechanism for conservation areas or financially contributions to fire management planning in the inter-urban areas outside of their working circle.

V.3. Resource Conservation and Energy Efficiency

V.3.1. Tier 1 Requirements: Resource Conservation and Energy Efficiency

Currently there are no Tier 1 Requirements.

V.3.2. Progress Requirements: Resource Conservation and Energy Efficiency

V.3.2.1. Energy Efficiency (1 year)

- a. The Producer shall document continuous improvement in energy efficiency with quantitative targets and timetables.
- b. Auditable documentary evidence is required if by-products are used as a strategy to reduce greenhouse gas emissions.

V.3.3. Tier 2 Requirements: Resource Conservation and Energy Efficiency

V.3.3.1. New and Emergent Technologies

The Producer shall demonstrate the usage of effective new technologies that improve operational efficiencies and/or reduce the environmental footprint.

V.4. Integrated Waste Management

V.4.1.1. Tier 1 Requirements: Integrated Waste Management

The Producer shall provide a quantitative annual report which details the volumes or weights and degree of compliance of packaging wastes recycled, re-used, and/or sent to landfill.

V.4.2. Progress Requirements: Integrated Waste Management

V.4.2.1. Packaging Waste to Landfills and Recycling (1 year)

- a. The Producer shall develop a plan to minimize the packaging wastes to landfill.

- b. The plan shall have quantitative goals and timelines for compliance, including a quantitative annual report which details the volumes or weights and degree of compliance of packaging wastes recycled, re-used, and/or sent to landfill in relation to the goals and timetables established.

V.4.3. Tier 2 Requirements: Integrated Waste Management

Currently there are no additional Tier 2 requirements.

V.5. Fair Labor Practices

V.5.1. Tier 1 Requirements: Fair Labor Practices

Currently there are no additional Tier 1 Requirements

V.5.2. Progress Requirements: Fair Labor Practices

V.5.2.1. Occupational Health and Safety (1 year)

The Producer shall institute a Safety Committee which provides an assessment of workplace hazards and hazard risk rating for all jobs and develops a written job hazard policy with standard operating procedures.

V.5.3. Tier 2 Requirements: Fair Labor Practices

Currently there are no additional Tier 2 requirements.

V.6. Community Benefits

V.6.1. Tier 1 Requirements: Community Benefits

V.6.1.1. Economic Viability; Efficient Utilization of By-Products

The Producer shall maintain an auditable registry of peat moss by-products sold or utilized in its operations on-site or off-site.

V.6.2. Progress Requirements: Community Benefits

V.6.2.1. Community Engagements (1 year)

The Producer shall develop and document its community engagements appropriate to the scale and intensity of its operations at a minimum:

- a. Community engagements shall be documented annually.
- b. As part of the community engagement, an agenda shall be made available to the public. The agenda shall include, at a minimum, the following:
 - i. Key elements of work plans;
 - ii. Aspects of the work plans that are of public concern or offer opportunities for public participation; and
 - iii. Annual fire and emergency preparedness;
- c. A summary of past commitments shall be made available;
- d. The outcomes of the community engagements shall be made available to the public upon request; and

- e. Auditable records of community engagements shall maintained for at least five years.

V.6.3 Tier 2 Requirements: Fair Labor Practices

Currently there are no additional Tier 2 requirements.

V.7. Product Quality

V.7.1. Tier 1 Requirements: Product Quality

V.7.1.1. Packaging and Labeling

The Producer shall develop minimum specifications for packaging and labeling⁶ of its peat moss product(s) including, but not limited to the following elements:

- a. Material Content: the product contents shall be accurately represented and labeled;
- b. Packaging: the product must be packed, wrapped and presented in such a manner as to protect it from mechanical damage; and
- c. Instructions, recommendations and warnings (if applicable) provided for retail sales, in accordance with current provincial and federal regulations.

V.7.1.2. Contamination

- a. The Producer shall demonstrate care to avoid the contamination of its peat based product(s) throughout the process.
- b. The producer must separate and discard all contaminated material.
- c. If sales or customer records indicate product contamination has occurred at any of the Producer's sites, then the Producer shall identify any sources of contamination and maintain a corrective action log for three years.

V.7.2. Progress Requirements: Product Quality

V.7.2.1. Product Integrity (1 Year)

The producer shall develop product specifications which are market driven and include the following:

- a. Auditable records of the ingredients placed into retail mixes;
- b. Methods for determining material content of the mixes; and
- c. Compliance and complaint logs.

V.7.2.2. Storage (2 Years)

The Producer shall develop and implement a written procedure to manage temperature during the stockpiling of peat in the fields, including but not limited to the following:

- a. Systematic monitoring of the temperature;
- b. SOPs to avoid deterioration due to overheating; and

⁶Specifications must be determined by using the recognised testing methods according to current standards, regulations and/or laws. Products sold in bulk are not bound by this requirement.

- c. SOPs to handle peat which has overheated.

V.7.2.3. Transportation (2 Years)

The Producer shall develop specifications for transportation of its bulk or packaged products(s), including but not limited to:

- a. Requirements to avoid contamination during bulk transportation; and
- b. Requirements for the safe transportation and storage of its palletized packaged peat products.

V.7.3. Tier 2 Requirements: Product Quality

V.7.3.1. Product Labeling and Grading

The Producer shall utilize a recognized system for product grading.

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VI. Handler Requirements

VI.1. Product Traceability

VI.1.1. Tier 1 Requirements: Product Traceability

VI.1.1.1. Transportation and storage

The Handler's product must conform to mutual Canadian and USA shipment requirements (e.g., C.T.P.A.T.).

VI.1.2. Progress Requirements: Product Traceability

Currently there are no additional Progress requirements.

VI.1.3. Tier 2 Requirements: Product Traceability

Currently there are no additional Tier 2 requirements.

VI.2. Environmental Sustainability

VI.2.1. Resource Conservation and Energy Efficiency

VI.2.1.1. Tier 1 Requirements: Resource Conservation and Energy Efficiency

Currently there are no additional Tier 1 requirements.

VI.2.1.2. Progress Requirements: Resource Conservation and Energy Efficiency

VI.2.1.2.1 Energy Efficiency (1 year)

- a. The Handler shall develop a policies and procedures to reduce energy consumption in plant operations (e.g., fuel, electricity, transportation, etc.).
- b. This policy shall include energy efficiency targets and timetables.

VI.2.1.2.2 Greenhouse Gases (2 years)

- a. The Handler shall assess the greenhouse gas emissions of its operations and develop reduction goals, with timetables for implementation.
- b. The Handler shall publish its policies regarding the greenhouse gas emissions and provide a publically available summary of it operations and proposed reduction goals.

VI.2.1.3. Tier 2 Requirements: Resource Conservation and Energy Efficiency

Currently there are no additional Tier 2 requirements.

VI.2.2. Integrated Waste Management

VI.2.2.1. Tier 1 Requirements: Integrated Waste Management

VI.2.2.1.1. Packaging Waste to Landfills and Recycling

The Handler shall provide a quantitative annual report which details the volumes or weights and degree of compliance of packaging wastes recycled, re-used, and/or sent to landfill.

VI.2.2.2. Progress Requirements: Integrated Waste Management

VI.2.2.2.1. Packaging Waste to Landfills and Recycling (1 year)

The Handler shall develop a plan to minimize the packaging waste to landfill and include the opportunities to re-use and recycle packaging materials. The plan shall have quantitative goals and timelines for compliance, including a quantitative annual report which details the volumes or weights and degree of compliance of packing wastes recycled, re-use, and /or sent to landfill in relation to the goals and timetables established.

VI.2.2.3. Tier 2 Requirements: Integrated Waste Management

Currently there are no additional Tier 2 requirements.

VI.3. Fair Labor Practices

VI.3.1. Tier 1 Requirements: Fair Labor Practices

Currently there are no additional Tier 1 requirements.

VI.3.2. Progress Requirements: Fair Labor Practices

VI.3.2.1. Manufacturing, Blending and Handling (1 year)

The Handler shall establish written minimum standards for worker protection from noise, dust (e.g., dust masks and/or pressurized cabins), physical or chemical dangers (e.g., protective gloves, glasses and boots, etc.), and other probable or potential hazards during loading, materials grading, materials blending/mixing, and packaging operations.

VI.3.2.2. Manufacturing, Packaging, Transportation and Use (2 years)

The Handler shall develop written policies and procedures to ensure proper and safe management of its products in order to avoid all negative impact on the health and safety of its workers and others downstream in the supply chain that transport, re-packaging or use its products.

VI.3.2.3. Human Resources Management (2 years)

Currently there are no additional Progress requirements.

VI.3.3. Tier 2 Requirements: Fair Labor Practices

Currently there are no additional Tier 2 requirements.

VI.4. Community Benefits

VI.4.1. Tier 1 Requirements: Community Benefits

VI.4.1.1. Economic Viability; Efficient Utilization of By-Products

- a. The Handler shall develop strategies to increase its material efficiencies.
- b. The Handler's operations may utilize by-products for co-generation in accordance with the scale and complexity of the operations.

VI.4.2. Progress Requirements: Community Benefits

Currently there are no additional Progress requirements.

VI.4.3. Tier 2 Requirements: Community Benefits

Currently there are no additional Tier 2 requirements.

VI.5. Product Quality

VI.5.1. Tier 1 Requirements: Product Quality

VI.5.1.1. Quality Management Program

The Handler shall develop policies and procedures to ensure that minimum quality specifications are developed for peat moss products, including, but not limited to the following:

- a. Material Content: the product contents shall be accurately stated and labeled in such a way as to identify its components;
- b. Packaging: the product shall be packaged, wrapped and presented in such a way as to protect it from mechanical damage;
- c. Instructions, recommendations and warnings according to current laws;
- d. Weight and measurement: the product must comply with current laws; and
- e. Shipping Documents: the product must conform to international shipment requirements (e.g. Canadian and USA).

VI.5.1.2. Blending Methods and Material Content

The Handler shall not utilize methods or materials that are banned or restricted by international laws (e.g., Canadian or USA) in the handling facility and during shipment.

VI.5.1.3. Packaging and Labeling

The Handler shall develop minimum specifications for packaging and labeling⁷ of its peat moss product(s) including, but not limited to the following elements:

- a. Material Content: the product contents shall be accurately stated and

⁷ Specifications must be determined by using the recognised testing methods according to current standards, regulations and/or laws. Products sold in bulk are not bound by this requirement

- labeled;
- b. Packaging: the product must be packed, wrapped and presented in such a manner as to protect it from mechanical damage; and
 - c. Instructions, recommendations and warnings provided for Handlers, including retail sales in accordance with current state and federal regulations.

VI.5.1.4. Product Guarantee

The Handler shall have a written document, based upon the Quality Management Program, detailing its product guarantee.

VI.5.2. Progress Requirements: Product Quality

VI.5.2.1. Product Management Program (2 years)

The Handler shall develop written SOPs and be compliant with Sections 1.4.1, 1.4.2, and 1.4.4 of Good Manufacturing Practices for retail products produced [Additional Ref. 2].

VI.5.2.2. Product Integrity (1 Year)

The Handler shall develop product specifications which are market driven and include the following:

- a. Auditable records of the ingredients placed into mixes;
- c. Methods to ensure the quality of the mixes for professional growers meet the clients expectations in term of specifications; and
- d. Compliance and complaint logs.

VI.5.3. Tier 2 Requirements: Product Quality

Currently there are no additional Tier 2 requirements.