

# Environmental Choice<sup>M</sup> Program

## CERTIFICATION CRITERIA DOCUMENT

### CCD-087



**Product: Compostable Paper Bags**

### Preamble

Environment Canada's Environmental Choice<sup>M</sup> Program (ECP) is pleased to publish the following national certification criteria document on **compostable paper bags**.

The Environmental Choice Program is designed to support a continuing effort to improve and/or maintain environmental quality by reducing energy and materials consumption and by minimizing the impacts of pollution generated by the production, use and disposal of goods and services available to Canadians.

Life cycle review is an ongoing process. As information and technology change, the product category requirements will be reviewed and possibly amended.

Environment Canada anticipates that generators and marketers of **compostable paper bags** that conform to this criteria document will apply to the Environmental Choice Program for verification and subsequent authority to label the qualifying products with the Environmental Choice Program's EcoLogo<sup>M</sup>. The ECP maintains verification protocols that clearly define the terminology and associated criteria limits of this criteria document.

### Notice

Throughout this document, any reference to a standard or guideline means to its latest edition.

The Environmental Choice<sup>M</sup> Program (ECP) reserves the right to accept equivalent test data for the test methods specified in this document.

### Interpretation

1. In this set of requirements, please note the following definitions:

**“acutely lethal”** means that the effluent at 100% concentration kills more than 50 per cent of the rainbow trout subjected to it when tested in accordance with section 5 or 6 of the *Reference Method for Determining the Acute Lethality of Effluent to Rainbow Trout*, EPS 1/RM/13, July 1990;

**“biodegradable”** means the plastic product extruded from the resin degrades as per the prescribed ratios by the end of a standard test period when tested in accordance with ISO/FDIS 14855, *Determination of the ultimate aerobic biodegradability and disintegration of plastic materials under controlled composting conditions- Method by analysis of evolved carbon dioxide*;

**“chemical oxygen demand (COD)”** means the mass concentration of oxygen equivalent to the amount of dichromate consumed by dissolved and suspended matter when a water sample is treated with that oxidant in

accordance with test method ISO 6060, or test method 5220 C or D in "*Standard Methods for the Examination of Water and Wastewater*";

**“chlorine bleaching plant”** means a plant in a mill where pulp is bleached by chlorine or chlorine dioxide;

**“component pulp”** means a pulp which is used in the manufacture of a paper product and that is produced at an off-site facility;

**“consumer”** means a household, commercial establishment or institutional facility;

**“controlled composting”** means composting in accordance with ISO/FDIS 14855, *Determination of the ultimate aerobic biodegradability and disintegration of plastic materials under controlled composting conditions- Method by analysis of evolved carbon dioxide*;

**“effluent”** means waste water from a mill, including process water, gas scrubbing water, boiler blow-down water, washdown water, cooling water and leachate from any site at the mill where solid residues generated by any mill are treated or disposed of or where wood chips or hogfuel is stored;

**“measurable concentration of 2,3,7,8-TCDD”** means a concentration of 2,3,7,8-TCDD that is greater than the level of quantification as defined in *Environment Canada's Report EPS 1/RM/19, 1991*;

**“measurable concentration of 2,3,7,8-TCDF”** means a concentration of 2,3,7,8-TCDF that is greater than the level of quantification as defined in *Environment Canada's Report EPS 1/RM/19, 1991*, and that, when multiplied by 0.1, exceeds 5 ppq;

**“non-toxic”** means the quality of compost derived from controlled composting of the resin used in the manufacture of composting bags exhibits equivalent terrestrial toxicity levels when compared to a reference compost derived from the composting of cellulose, in addition to the compost (inoculum) control, under the same controlled composting conditions;

**“NOEC (no-observed-effect-concentration)”** means the highest concentration of a test material to which organisms are exposed, in which the response is found, by some statistical test, not to be different from the control response;

**“post-consumer material”** means a product which has served its end-use at the consumer level, has been discarded by the consumer, and unless diverted, would enter waste stream;

**“pre-consumer material”** means materials generated by an industrial process that would, unless diverted, enter the waste stream. This includes, but is not limited to, damaged or defective materials, overstock or obsolete inventories from manufacturers, distributors, wholesalers and trimmings from converting processes. It does not include wet or dry broke;

**“primary wood fibre”** means fibre from wood which has not previously been pulped;

**“printed recovered material”** means material which has been printed and/or coated and would, unless diverted, enter the waste stream;

**“recycled material”** means post-consumer material and pre-consumer material. It does not include by-products of an industrial process that can be, and regularly are, used in either the same process, or in a different process, except that proportion which originated as post-consumer material and pre-consumer material. It may include sawdust or planer shavings from sawmill operations;

“TEF<sub>sub</sub>” means sublethal toxicity emission factor. It is calculated as (100/NOEC) x waste water flow in m<sup>3</sup>/tonne of product. NOEC is determined for larval growth for effluents discharged:

- (a) to freshwater in accordance with *Biological Test Method: Test of Larval Growth and Survival Using Fathead Minnows*, Environment Canada, Report EPS 1/RM/22, 1992; and
- (b) to marine or estuarine waters by testing sheepshead minnow or inland silverside in accordance with *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, USEPA Report EPA/600/4-91/003; and

"terrestrial toxicity" means toxicity levels determined by testing in accordance with OECD 208, *Terrestrial Plant Growth Test*.

## General Requirements

- 2. To meet the requirements of this Criteria document, the **compostable paper bags**:
  - (a) meet or exceed all applicable governmental, industrial safety and performance standards; and
  - (b) be generated in such a manner that all steps of the process, including the disposal of waste products arising therefrom, will meet the requirements of all applicable governmental acts, by laws and regulations including, for facilities located in Canada, the Fisheries Act and the Canadian Environmental Protection Act, 1999, (CEPA, 1999).

## Product Specific Requirements

- 3. To meet the requirements of this Criteria document, the **compostable paper bag** must:
  - (a) be biodegradable;
  - (b) be manufactured so that the total of load points assessed for COD, TEF<sub>sub</sub>, and Net solid waste, as determined in Table 1 of Appendix 1, does not exceed 6.
  - (c) be manufactured so that the effluent from the paper mill or any mill which produces a market pulp does not contain either of the following:
    - i) a measurable concentration of 2,3,7,8-TCDD, and
    - ii) a measurable concentration of 2,3,7,8-TCDF; and
  - (d) be accompanied by a list of all fibre sources including market pulp (for each grade of compostable paper bag).

## Verification

4. To verify a claim that a product meets the criteria listed in this document, the Environmental Choice Program and its agents will require access, as is its normal practice, to relevant quality control and production records and the right of access to production facilities on an unannounced basis.
5. Compliance with sections 2(b) shall be attested to by a signed statement of the Chief Executive Officer or the equivalent officer of the licensee.

The Environmental Choice Program shall be advised in writing immediately by the licensee of any noncompliance, which may occur during the term of the license. On the occurrence of any noncompliance, the license may be suspended or terminated as stipulated in the license agreement. In the event of a dispute related to the suspension or termination of the license, the license agreement provides for arbitration.

## Conditions for EcoLogo Use

6. The EcoLogo may appear on wholesale or retail packaging, or on the product itself, provided that the product meets the requirements in this guideline.
7. It is recommended that a criteria statement appear with the EcoLogo whenever the EcoLogo is used in association with the ***compostable paper bag***. The intent of this statement is to provide clarification as to why the product was certified and to indicate constraints to which the certification is limited. This is to ensure no ambiguity over, or misrepresentation of, the reason(s) for certification.

The criteria statement must be specific to the product's sub-category.

The recommended criteria statement is "*Compostable Paper Bag*". The licensee may propose other wording for the criteria statement, but any such proposed wording must be approved by the Environmental Choice Program.

8. All licensees must comply with the Environmental Choice Program's *Guide to Proper Use of the EcoLogo<sup>M</sup>* regarding the format and usage of the EcoLogo.
9. Any accompanying advertising must conform with the relevant requirements stipulated in this Criteria document, the license agreement and the Environmental Choice Program's *Guide to Proper Use of the EcoLogo<sup>M</sup>*.

***For additional copies of this criteria document or for more information about the Environmental Choice Program, please contact:  
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## Appendix 1: Load Point Determination

Load Points are assigned for each parameter listed in the Table below. The Load Points for each parameter are summed to calculate the total Load Point value for the product. *The calculation methodology provided in Appendix 2 must be done for each product that is to be certified.*

Values relevant to upstream manufacturing of pulp, whether at the site of the paper mill or otherwise, are included. Generally, the minimum end of the scale for a parameter corresponds to the best attained by any installation in the world with a proven record of operating commercially and reliably. A manufacturing process that generates a parameter equal to the minimum end of the scale would be assigned zero points for the parameter. If innovative or unusual technology is used to operate below the minima, then negative points would be assigned.

Appendix 2 contains an outline of the methodology to be used when calculating the Load Point values. It is based on the methodology used in the Environmental Profile Data Sheet. This appendix will be provided on request to those who wish to calculate Load Points for a given product.

**Table 1: Calculating Load Points**

Category	Parameter	Load Point Value From Appendix 2
Liquid effluent	Chemical Oxygen Demand	
Liquid effluent	Sub-lethal toxicity (TEF <sub>sub</sub> )	
Solid waste	Net Solid waste	
<b>Total Calculated Load Points</b>		