

Environmental Choice^M Program

CERTIFICATION CRITERIA DOCUMENT

CCD-163



Product: Renewable Industrial Liquid Fuel

Introduction

Environment Canada's Environmental Choice^M Program is pleased to publish the following national certification criteria document on *Renewable Industrial Liquid Fuel*.

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

The majority of fuels combusted in industrial applications such as drying kilns, limekilns, blast furnaces, boilers or electricity turbines are non-renewable petrochemicals. Over 75% of industrial and commercial sector fuel requirements in Canada are for natural gas, coal, liquid petroleum gas and oil.

Forestry and agricultural residues can be efficiently processed into liquid fuel products that are lower in heating value than conventional petrochemical fuels but meet industrial fuel requirements. These fuels are renewable, displace limited non-renewable fuel stocks and all carbon dioxide emissions are considered to have a neutral impact on global greenhouse gas emissions and climate change. Other emissions produced during combustion are comparable or better than diesel, natural gas and fuel oil.

Based on a review of currently available life cycle information, the product category requirements will produce an environmental benefit through **conservation of non-renewable resources** and reduced **greenhouse gas emissions**.

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

It is anticipated that *Renewable Industrial Liquid Fuels* that meet these criteria will apply to the Environmental Choice Program for verification and subsequent authorization to use the Environmental Choice EcoLogo^M in product marketing and promotion.

Notice

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

The Environmental Choice 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:

"char-enriched industrial liquid fuel" means a viscous non-petroleum liquid fuel manufactured from a renewable source material that is meant for combustion in industrial applications such as drying kilns, limekilns, blast furnace, or boilers (but not electricity turbines).

"clean construction and demolition wastes" for the purposes of this certification criteria document, means wastes from the construction, renovation, or repair of buildings and building products that are not treated with organic and/or inorganic substances to change, protect or supplement the physical properties of the materials (including *inter alia* wood preservatives, paints, varnishes or other surfaces coatings, halogenated compounds and/or compounds containing heavy metals).

"regular renewable industrial liquid fuel" means a non-petroleum liquid fuel manufactured from a renewable source material that is meant for combustion in industrial applications such as drying kilns, limekilns, blast furnace, boilers or electricity turbines;

"renewable industrial liquid fuel" means a non-petroleum liquid fuel manufactured from a renewable source material. These fuels are distinct and separate from transportation fuels, and from wood pellets or similar biomass derived solid fuels;

"renewable feedstock material " means a material capable of being replaced by biological cycles; and

"wood-wastes and agricultural wastes" means any of the following (a) mill residues (e.g. waste by-products associated with the processing of forest materials such as bark, sawdust, solid trim, shavings, veneer clippings, clarifier sludge, pulping liquors), (b) logging residues (e.g. residual materials left in the forest following harvesting such as slash, sortyard debris, thinning, stumps, roots), and (c) crop residues (e.g. materials not needed for soil re-incorporation such as straw, chaff, corn cobs, bean residues, and dried stalks of harvested grain).

Category Definition

2. This category includes all **renewable industrial liquid fuel** products, as further defined in the subcategories in this section. The subcategories are:
 - (a) regular renewable industrial liquid fuel; and
 - (b) char-enriched renewable industrial liquid fuel.

General Requirements

3. To be authorized to carry the EcoLogo[®], the **Renewable Industrial Liquid Fuel** must satisfy the following:
 - (a) meet or exceed all applicable governmental and industrial safety and performance standards; and
 - (b) be manufactured 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 (CEPA)*.

Product Specific Requirements

4. To be authorized to carry the EcoLogo^M, the **Renewable Industrial Liquid Fuel** must satisfy the following:
- (a) be manufactured from renewable feedstock material;
 - (b) be formulated with not more than 5% additives from non-renewable sources;
 - (c) feedstock material shall not come from dedicated energy crops;
 - (d) feedstock material shall come from wood-wastes and agricultural wastes and / or clean construction and demolition waste
 - (e) in cases where the manufacturer and the wood-wastes and/or agricultural wastes producer source share common ownership:
 - i.) use only wood-wastes and/or agricultural wastes that have been sourced from operations that have implemented a sound environmental management system and are adhering to sound environmental management practices,
 - ii.) ensure the rate of harvest does not exceed levels that can be sustained, and
 - iii.) not use wastes from species that are listed in the CITES Appendices;
 - (f) in cases where the manufacture and the wood-wastes and/or agricultural wastes producer do not share common ownership the manufacturer shall make documented efforts to meet criteria 3.f (i), 3.f (ii), and 3. f(iii);
 - (g) the manufacturer shall provide explicit written information to buyers, noting there may be differences to the fuel product that users are accustomed to, and;
 - i.) stating that modifications to existing equipment may be needed when using the product to reduce risks to carbon steel and elastomers;
 - ii.) providing instruction on the maintenance and inspection required of equipment burning the product; and;
 - iii.) providing storage instructions.

- 4.1 To be authorized to carry the EcoLogo the **Regular Renewable Liquid Industrial Fuel** must have the following characteristics;

Water content	Ash content	Viscosity at 20°C	Viscosity at 80°C	Heating value
<25%	<0.1%	<120 centistokes	<15 centistokes	>15 MJ/kg

- 4.2 To be authorized to carry the EcoLogo the **Char-Enriched Renewable Liquid Industrial Fuel** must have the following characteristics;

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Water content	Ash content	Viscosity at 20°C	Viscosity at 80°C	Heating value
<25%	<3%	<1500 centistokes	<90 centistokes	>18 MJ/kg

- (a) written product information shall explicitly state the uses for **Char-Enriched Renewable Liquid Industrial Fuel**, do not include electricity turbines; and
- (b) written product information shall explicitly state the storage requirements for **Char-Enriched Renewable Liquid Industrial Fuel**, noting the differences from **Regular Renewable Liquid Industrial Fuel**.



Verification

- 5. To verify a claim that a product meets the criteria listed in this document, the ECP will require access, as is its normal practice, to relevant purchasing records, quality control and production records and the right of access to production facilities on an announced basis.
- 6. Compliance with requirement 3(b) shall be attested to by a signed statement of the Chief Executive Officer or the equivalent officer of the licensee. The ECP shall be advised in writing immediately by the licensee of any non-compliance which may occur during the term of the license. On the occurrence of any non-compliance, the license may be suspended or terminated as stipulated in the license agreement.

Conditions for EcoLogo Use

- 7. The EcoLogo may appear on wholesale or retail packaging, or on the product itself, provided that the product meets the requirements in this document.
- 8. All licensees and authorized users must comply with the ECP's *Guide to Proper Use of the EcoLogo^M* regarding the format and usage of the EcoLogo.
- 9. Any accompanying advertising must conform with the relevant requirements stipulated in this guideline, the license agreement and the ECP's *Guide to Proper Use of the EcoLogo^M*.
- 10. A criteria statement appears with the EcoLogo whenever the EcoLogo is used in association with the Renewable Industrial Liquid Fuel. 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.

Regardless of the applicable sub-category, the ECP suggested criteria statement wording for this product type is “Regular Renewable Industrial Liquid Fuel” or “Char-Enriched Renewable Industrial Liquid Fuel”. The licensee may propose other wording for the criteria statement, but any such proposed wording must be approved by the Environmental Choice Program.

	<p>For more information about the EcoLogoTM Program, please direct your inquiry to: The EcoLogoTM Program 171 Nepean Street, Suite 400 Ottawa, ON, K2P 0B4 Phone: 1.800.478.0399 www.ecologo.org</p>	
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