The Australian Ecolabel Program
Good Environmental Choice Australia Standard

Sanitary Paper Products
Use of This Standard

This voluntary environmental labelling standard may be used by competent environmental assessors to establish product compliance to the Australian Ecolabel Program. Products that are certified with the mark of conformity, the “Good Environmental Choice Label” have been independently tested and demonstrate compliance to the environmental and social performance criteria detailed in this standard. The overall goal of environmental labels and declarations is the communication of verifiable and accurate information, which is not misleading, on environmental aspects of products and services. This encourages the demand for, and supply of, those products and services that cause less stress on the environment, thereby stimulating the potential for market-driven continuous environmental improvement.

This standard identifies environmental, quality, regulatory and social performance criteria that products sold on the Australian market can meet in order to be considered as good “environment practice”. Products that have been certified as complying to this standard may gain greater market recognition and a marketing advantage in government and business procurement programs, as well as broad consumer preference.

This standard can be used by Australian producers to guide their designs for environment programs by using the environmental criteria as key performance benchmarks to reduce the environmental loads of their product. The standard is necessarily restricted in its identification of environmental loads from the product life-cycle. Producers should consider other environmental measures along the product cycle, which are not included in this standard, in their environment program designs for and aim for even higher levels of environmental performance where technically possible.

For further information please contact:

Good Environmental Choice Australia Ltd
Standards Review and Development
Ph: +61 (2) 6287 3100
E-mail: standards@geca.org.au

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Good Environmental Choice Australia Ltd
PO Box 4140, Weston Creek ACT, 2611, Australia.
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GOOD ENVIRONMENTAL CHOICE AUSTRALIA STANDARD

Sanitary Paper Products

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Abstract
This Standard specifies environmental performance requirements of sanitary paper products for the Australian Ecolabel Program. The Australian Ecolabel Program complies with ISO 14024: "Environmental labels and declarations - Guiding principles" which requires environmental labelling specifications to include criteria that are objective, reasonable and verifiable.

Definitions

**Air Dried Tonne (ADT)** is defined as a representative tonne of finished product that has a stable, consistently reproducible moisture content in air. It is thus a reliable measure of manufacturing output.

APEO means alkylphenol ethoxylate. APEO and other alkylphenol derivatives are prohibited under this standard due to aquatic toxicity.

**Chemical Oxygen Demand (COD)** means the mass of oxygen equivalent to the amount of dichromate consumed by dissolved and suspended matter when a water sample is treated with that oxidant under defined conditions.

**CITES** is the acronym for the Convention on International Trade of Endangered Species.

**Forestry Residues** are defined as waste from harvesting operations (including thinnings) and wood processing operations (including saw dust and chipped waste), provided that those operations fulfill the requirements of Section 3.2.1 of this Standard.

**Label** means the Good Environmental Choice Australia Label.

**Recycled Content** includes both pre- and post-consumer recycled content. Post-Consumer is defined as material generated by households, or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose. This includes returns of material from the distribution chain. Pre-Consumer is defined as material diverted from the waste stream during a manufacturing process. Excluded is reutilisation of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it.

**Pre-Consumer**: Material diverted from the waste stream during a manufacturing process. Excluded is re-utilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it.

**Sulphur (S)** means gaseous emissions of sulphur to the atmosphere, such as sulphur dioxide and reduced sulphur compounds.
1 INTRODUCTION

1.1 Purpose

This Standard seeks to define good environmental performance benchmarks for sanitary paper products. The voluntary environmental labelling standard implemented by Good Environmental Choice Australia (GECA) as part of the Australian ecolabel program specifies environmental performance criteria for a range of sanitary paper products including toilet paper, facial tissues and napkins. This standard stipulates the environmental load of such products throughout the major aspects of their life cycle.

1.2 Background

Paper manufacturing can potentially result in a significant burden being placed on the environment. Process effluents can contain high concentrations of natural organic materials which deplete oxygen from receiving waters, adversely impacting plant and animal life. Sulphur and hazardous materials, particularly halogenated organics used in some manufacturing processes (eg. for equipment cleaning) can bioaccumulate and have toxic effects on the environment if discharged in effluents. Non-biodegradable detergents (surfactants) may also accumulate and be toxic or otherwise harmful in the environment if discharged, and so only readily biodegradable surfactants should be used.

Elemental chlorine-based bleaches, if used, can result in the discharge of organochlorines into the environment. Organochlorines can be persistent, toxic and bioaccumulate in the environment.

The use of wood fibre for the production of paper from unsustainably managed forests is a concern for most Australians. This standard deals with this environmental problem by establishing a requirement that wood fibre is not sourced from uncertified Australian native ecosystems, but is predominantly sourced from recycled content or forestry residue.

This standard will produce environmental benefits through establishing environmental benchmarks that reduce the emissions during the manufacture of pulp and paper. It aims to reduce or eliminate the discharge of sulphur compounds, oxygen consuming organic material and organochlorines into the environment.

2 STANDARD CATEGORY SCOPE

This standard is applicable to all categories of sanitary paper products including toilet paper, facial tissues, paper towels, hand towels and table napkins.

Other paper products that do not directly fit the above categories may be considered for certification provided the product fulfills the requirements of any relevant sections of this Standard.
3 ENVIRONMENTAL PERFORMANCE CRITERIA

3.1 Fitness for Purpose

Certified products should be good performers in their intended application. Certain standards of quality and durability are implicit in the Label and the manufacturer must ensure that the product is fit for its intended purpose and:

3.1.1 Applicable Standards

The product meets or exceeds the requirements of the relevant Australian Standard, or the product meets the applicable and accepted standard in its target market if it is to be exported, or

3.1.2 Demonstrated Performance

If there is no relevant Australian Standard, the product can demonstrate sufficient quality by providing testing reports from an independent organisation or case studies from installations demonstrating market suitability and quality.

3.2 Material Requirements

3.2.1 Fibre Source

Post-consumer recycled fibre is exempt from this requirement.

The geographical origin of pre-consumer recycled and virgin fibre material must be documented, allowing confirmation of origin throughout the supply chain.

Virgin pulp from sources that are not certified under a recognised certification scheme (e.g. FSC or AS 4708 – 2007 (AFS)) as being sustainably managed shall not originate from:

a. Illegal harvesting

   Illegally harvested wood and natural materials are those that are harvested, traded or transported in a way that is in breach with applicable national regulations (such regulations can for example address CITES species, money laundering, corruption and bribery, and other relevant national regulations).

b. Genetically modified organisms

   Wood and natural materials from genetically modified organisms are those which have been induced by various means to consist of genetic structural changes (for a definition of genetically modified, please refer to the European Union Directive 2001/18/EC on the deliberate release of genetically modified organisms in the environment). Traditional breeding programs do not constitute genetic modification.

c. Uncertified high conservation value communities

   High Conservation Value communities are those that possess one or more of the following attributes:
   - Communities containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia); and/or large landscape level communities, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance.
   - Communities that are in [constitute] or contain rare, threatened or endangered ecosystems.
   - Communities fundamental to meeting basic needs of locally indigenous human populations (e.g. subsistence, health) and/or critical to these people’s traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).
For materials sourced from within Australia, please refer to the following:

The EPBC Act List of Threatened Fauna at

The EPBC Act List of Threatened Flora at

The EPBC Act List of Threatened Ecological Communities

The Australian Heritage Database (for listings of areas of cultural significance) at
http://www.deh.gov.au/cgi-bin/ahdb/search.pl

For materials sourced from outside Australia, please refer to credible lists detailing threatened species, threatened communities and areas of cultural significance in the respective countries.

### 3.2.2 Recycled Content Requirements

Certified products must incorporate at least 90% by weight preferably sourced fibre content. “Preferably sourced fibre” may include any combination of pre- or post-consumer recycled fibre or forestry residues, as defined above.

Toilet paper must incorporate at least 25% by weight recycled content.

### 3.3 Emissions Requirements

This section applies to all paper production regardless of fibre source (e.g., virgin or recycled).

The combined emissions from the production of both pulp and paper production (apportioned to the product being licensed) must:

- achieve weighting results for COD and sulphur (S) discharge in accordance with the limits set in Table 1 below, and
- achieve a final weighting of not more than 4 using Table 1, representing the sum of emissions from unbleached pulp and paper production, and
- be weighted on the basis of an annual mean of the test results derived from at least one sample per week with regard to COD and at least one sample per month with regard to sulphur.

**Table 1: Point system for emission requirements.**

Parameters are expressed in kilograms of discharge per ADT of paper product.

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<td>COD, kg/t paper</td>
<td>&lt;20.0</td>
<td>20.0 ≤ COD &lt; 30.0</td>
<td>30.0 ≤ COD &lt; 50.0</td>
</tr>
<tr>
<td>S, kg/t paper</td>
<td>&lt;1.0</td>
<td>1.0 ≤ S &lt; 1.5</td>
<td>1.5 ≤ S &lt; 2.5</td>
</tr>
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</table>

### 3.4 Hazardous Substances

This section applies to all paper production regardless of fibre source (e.g., virgin or recycled).

#### 3.4.1 Surfactants

When surfactants are used in the manufacturing process, such as for the de-inking of recycled paper input, where quantities ≥ 100 g/ADT (summed over all the surfactants used in all the different formulations used in de-inking return fibres), each surfactant shall be readily biodegradable in accordance with OECD test method No. 301 A-F. Where such surfactants are used in quantities < 100 g/ADT, each surfactant shall be readily biodegradable or
ultimately biodegradable in accordance with OECD test method No. 302 A-C. Foam inhibitors used for chemical recycling are exempted from this requirement.

Alkylphenol ethoxylates (APEO) or other alkylphenol derivates (APD) shall not be used.

3.4.2 Bleaching
The manufacturer must not use the following bleaching agents at any stage in the production of virgin fibre, or in the processing of recycled fibre:

- Elemental chlorine
- Halogenated bleaching agents that produce elemental halogens in-situ
- Optical brighteners
- Ethylenediamine tetraacetic acid (EDTA) or its derivatives.

Note: NaCl is specifically included in the second dot point.

3.4.3 Dyes and Additives

3.4.3.1 Prohibited Dyes
The following dyes shall not be used:

- 4-aminodiphenyl benzidine
- 4-chloro-o-toluidine
- 2-naphtylamine
- o-aminoazotoluene
- 2-amino-4-nitrotoluene
- 4-chloroaniline
- 2,4-diaminoanisole
- 4,4-diaminodiphenylmethane
- 3,3-dichlorobenzidine
- 3,3-dimethoxybenzidine
- 3,3-dimethyl-
- 4,4-diaminodiphenylmethane
- p-cresidine
- 4,4-methylene-bis-(2-chloroaniline)
- 4,4-oxidianiline
- 4,4-thiodianiline
- o-toluidine
- 2,4-toluylenediamine
- 2,4-diaminotoluene
- 2,4,5-trimethylaniline
- o-anisidine
- 4-aminoazobenzene

3.4.3.2 Risk Phrases
No dyes, pigments, lotions or fragrances shall be used on pulp, paper or the product as a whole that is assigned or may be assigned at the time of application any of the following risk phrases (or combinations thereof) in accordance with EU Directive 67/548/EEC:

R50: Very toxic to aquatic organisms
R51: Toxic to aquatic organisms
R52: Harmful to aquatic organisms
R53: May cause long-term adverse effects in the aquatic environment
R56: Toxic to soil organisms
R58: May cause long-term adverse effects in the environment

3.4.3.3 **Heavy Metals**
No dyes, pigments, lotions or fragrances shall be used that contain lead, copper, chromium, nickel, aluminium or cadmium as constituent parts. Copper phthalocyanine dyes or pigments are excepted.

The levels of ionic impurities in the dye stuffs used shall not exceed the following: Ag 100 ppm; As 50 ppm; Ba 100 ppm; Cd 20 ppm; Co 500 ppm; Cr 100 ppm; Cu 250 ppm; Fe 2 500 ppm; Hg 4 ppm; Mn 1 000 ppm; Ni 200 ppm; Pb 100 ppm; Se 20 ppm; Sb 50 ppm; Sn 250 ppm; Zn 1 500 ppm.

3.4.3.4 **Antibacterial Additives**
Antibacterial agents, such as organic chlorine carriers (e.g., triclosan), shall not be actively added to sanitary paper products.

3.4.3.5 **Carcinogenic Substances**
No additive of any kind may be used which has been identified as a carcinogenic substance in categories 1 or 2A as classed by the International Agency for Research on Cancer – [http://www.iarc.fr](http://www.iarc.fr).

When tested using EPA test method 8315, or equivalent, paper products shall not contain more than:
- 1 mg / dm$^2$ formaldehyde.
- 1.5 mg / dm$^2$ glyoxal.

3.4.4 **Solvents and Cleaning Agents**
Solvents used in the cleaning of production equipment must be free of halogenated hydrocarbons (including CFC, HCFC and HFC) and alkylphenol ethoxylates or other alkylphenol derivates (APEO's). Testing equipment is excluded from this requirement.

Solvents used to clean production equipment must not contain ozone depleting substances as listed in Annex A, B or C of the Montreal Protocol, or subsequent amendments.

3.5 **Waste Management and Energy Use**
The manufacturer must have effective policies and procedures to minimise waste, including measures to recycle waste materials from the production process.

The manufacturer must have a contract with a registered hazardous waste contractor for the environmentally responsible disposal of any hazardous waste produced during the production process.

The applicant is requested, on a voluntary basis, to provide information on energy and water use during the manufacturing process. Data gathered during the implementation of this version of the standard will be used to draft energy use criteria in future versions of the standard.

3.6 **Packaging Requirements**
Chlorinated or halogenated plastics must not be used in product packaging.

Used packaging shall be able to be recycled by local recycling systems.
4  COMPLIANCE TO ENVIRONMENTAL REGULATIONS

The applicant is required to comply with relevant environmental legislation and government orders at the Local, State, and Commonwealth levels, if these have been issued. An applicant’s compliance with these criteria may be established by undertaking a series of random checks; and/or by gathering samples of applicant operational procedures and documents from approved assessors as evidence to support compliance during the verification. Where an applicant is from an overseas jurisdiction, that jurisdiction’s environmental regulations apply. Where the applicant is subject to a guilty verdict by a legally constituted court in the last 24 months on the basis of a breach of any environmental legislation or permits, there must be evidence of corrective action.

5  COMPLIANCE TO LABOUR, ANTI-DISCRIMINATION AND SAFETY REGULATIONS

An applicant shall demonstrate that all employees are covered by a Federal or State award or a certified industrial agreement or a registered workplace agreement as determined by the Industrial Relations Commission, the Employment Advocate or a State or Territory Workplace Relations Agency or a workplace agreement in compliance with Workplace Relations Act 1996 Part 7 – The Australian Fair Pay and Conditions Standard.

An applicant shall demonstrate general compliance to the terms of State or Territory Legislation concerning Occupational, Health and Safety and/or the Commonwealth Safety, Rehabilitation and Compensation Act 1988, where applicable. Where the applicant is subject to a breach order by a government agency, or a guilty verdict by an Australian Court within the last 24 months, on the basis of a breach of State, Territory or Commonwealth Occupational, Health and Safety Legislation, there must be evidence of corrective action.

The applicant shall demonstrate general compliance to the requirements of the Racial Discrimination Act 1975, Sex Discrimination Act 1984, Disability Discrimination Act 1992, Equal Opportunity for Women in the Workplace Act 1999, and complementary State Legislation. Applicants cannot be in the list of ‘named’ or non-compliant employers under the Equal Opportunity for Women in the Workplace Act 1999. Where the applicant is subject to a breach order by a government agency, or a guilty verdict by an Australian Court in the last 24 months on the basis of a breach of these Acts, there must be evidence of corrective action.

Where an applicant is from an overseas jurisdiction, the applicant shall demonstrate general compliance to that jurisdiction’s anti-discrimination, occupational health and safety, and workers’ compensations regulations. Where the applicant is subject to a breach order by a government agency, or a guilty verdict by a legal court in their respective country within the last 24 months on the basis of a breach of anti-discrimination, occupational health and safety, and workers’ compensation regulations, there must be evidence of corrective action.

An applicant’s compliance with these criteria may be established by undertaking a series of random checks; gathering samples of applicant operational procedures and documents from approved assessors; and/or by providing a self-declaration document signed by an executive officer of the applicant organisation as evidence to support compliance during verification.
6 EVIDENCE OF COMPLIANCE

6.1 Audit Methodology

Conformance with this standard shall be demonstrated by undertaking an assessment under the above criteria by an approved assessor, following the certification and verification procedures detailed in the Good Environmental Choice Australia Ltd Documented Quality Management System, which generally follows the environmental auditing requirements of ISO 14 011 and 14 012.

6.2 Assessor Competency

The Australian Ecolabel Program classifies approved assessors as:

a. Assessors registered by Good Environmental Choice Australia Ltd as environmental professionals that hold expertise relevant for an assessment, and who have undertaken training in the procedures of the Australian Ecolabel Program,

b. Environmental auditors accredited with the RABQSA, or

c. Auditors from overseas ecolabelling bodies that GECA has established Mutual Recognition Arrangement with.

6.3 Suitable Sources

Audit evidence should be of such a quality and quantity that competent environmental auditors, working independently of each other, will reach similar audit findings from evaluation of the same audit evidence against the same audit criteria.

Suitable sources of information to establish compliance may be, but are not limited to:

a. Technical specification of the product.

b. Obvious characteristics of the product under examination.

c. Scientific test results and reports.

d. Environmental management system and audit reports and results.

e. Life-cycle assessment of each stage of the product life-cycle via a physical audit and examination.

f. Life-cycle assessment via scientific testing.

g. A statement of confirmation by an executive officer.

h. An assessment of company or government records.

i. Other material that can be considered objective evidence.

6.4 Laboratory Testing

New testing shall be undertaken by a laboratory accredited by the National Association of Testing Authorities (NATA), or similar overseas accreditation agents who can conduct the relevant tests and/or provide documentation detailing environmental performance against the criteria of this standard. The test results should be presented on NATA-endorsed reports or from a laboratory acceptable to Good Environmental Choice Australia Ltd.

If test results or environmental auditing results are not available, and/or there is insufficient data to establish full compliance with the criteria required by this standard, then certification cannot be awarded.