COMMISSION

COMMISSION DECISION

of 4 May 2001

establishing the ecological criteria for the award of the Community eco-label to tissue-paper products

(notified under document number C(2001) 1175)

(2001/405/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Regulation (EC) No 1980/2000 of the European Parliament and of the Council of 17 July 2000 (1) on a revised Community eco-label award scheme, and in particular Articles 3, 4 and 6 thereof,

Whereas:

- Article 3 of Regulation (EC) No 1980/2000 provides (1)that the eco-label may be awarded to a product possessing characteristics which enable it to contribute significantly to improvements in relation to key environmental aspects.
- Article 4 of Regulation (EC) No 1980/2000 provides (2)that specific eco-label criteria shall be established according to product groups.
- Article 4 of Regulation (EC) No 1980/2000 provides (3) that the review of the eco-label criteria as well as of the assessment and verification requirements related to the criteria shall take place in due time before the end of the period of validity of the criteria specified for each product group and shall result in a proposal for prolongation, withdrawal or revision.
- (4) By Decision 98/94/EC (2), the Commission established ecological criteria for the award of the Community ecolabel to tissue-paper products, which, according to Article 3 thereof, as modified by Decision 2000/ 413/EC (3), expire 31 December 2001.
- (5) It is appropriate to revise the definition of the product group and the ecological criteria that were established by

Decision 98/94/EC in order to reflect the developments in the market.

- It is appropriate to adopt a new Commission Decision (6) establishing the specific ecological criteria for this product group, which will be valid for a period of five years.
- (7) It is appropriate that, for a limited period of not more than 12 months, both the new criteria established by this Decision and the criteria previously established by Decision 98/94/EC are valid concurrently in order to allow sufficient time for companies that have been awarded the eco-label for their products prior to the adoption of this new Decision to adapt these products to comply with the new criteria.
- (8) The measures set out in this Decision have been developed and adopted under the procedures for the setting of eco-label criteria as laid down in Article 6 of Regulation (EC) No 1980/2000.
- The measures set out in this Decision are in accordance (9) with the opinion of the committee set up under Article 17 of Regulation (EC) No 1980/2000,

HAS ADOPTED THIS DECISION:

Article 1

The product group 'tissue-paper products' (hereinafter referred to as 'the product group') shall mean:

Sheets or rolls of tissue paper fit for use for personal hygiene, absorption of liquids and/or cleaning of soiled surfaces. The tissue product normally consists of creped or embossed paper in one or several plies. The fibre content of the product shall be at least 90 %. Laminated tissue products and wet wipes are excluded from the product group.

OJ L 237, 21.9.2000, p. 1. OJ L 19, 24.1.1998, p. 77. OJ L 155, 28.6.2000, p. 63.

Article 2

The environmental performance of the product group as defined in Article 1 shall be assessed by reference to the specific ecological criteria set out in the Annex.

Article 3

The product group definition and the criteria for the product group shall be valid for five years from the date on which this Decision takes effect.

The period of validity of the product group definition and the criteria established by Decision 98/94/EC, as modified by Decision 2000/413/EC, shall be extended to expire 12 months after the date on which this Decision takes effect.

Article 4

For administrative purposes the code number assigned to the product group shall be '004'.

Article 5

This Decision is addressed to the Member States.

Done at Brussels, 4 May 2001.

For the Commission Margot WALLSTRÖM Member of the Commission

ANNEX

FRAMEWORK

In order to qualify for an eco-label, the product as defined in Article 1 must comply with the criteria of this Annex, with tests carried out on application as indicated in the criteria and the technical appendix. Where appropriate, other test methods may be used if their equivalence is accepted by the Competent Body assessing the application (for example if the equivalence is established by a calibration curve at 95 % significance). Where no tests are mentioned, or are mentioned as being for use in verification or monitoring, Competent Bodies should rely as appropriate on declarations and documentation provided by the applicant and/or independent verifications.

The Competent Bodies are recommended to take into account the implementation of recognised environmental management schemes, such as EMAS or ISO 14001, when assessing applications and monitoring compliance with the criteria in this Annex (Note: it is not required to implement such management schemes.)

These criteria aim in particular at promoting:

- the reduction of discharges of toxic or otherwise polluting substances into waters,
- the reduction of environmental damage or risks related to the conversion and use of energy (global warming, acidification, depletion of non-renewable resources) by reducing energy consumption and related air emissions,
- the commitment to the need to apply good management principles in order to safeguard forests,
- the reduction of risks for human health, environmental damage or risks related to the use of hazardous chemicals,
 the minimisation and efficient use of waste.

The criteria are set at levels that promote the labelling of tissue paper produced with a low environmental impact.

ECOLOGICAL CRITERIA

1. EMISSIONS TO WATER AND AIR

(i) The performance concerning the parameters COD, AOX, CO₂, _{fossil} and SO₂ shall be expressed in terms of load points, in relation to a reference value (referred to as a 'coefficient' for each parameter).

The total emissions to water and air relating to the paper product shall be calculated as the sum of the emissions from the pulp and the tissue paper production stages.

Table 1

Coefficients and hurdles for the emission parameters

	Coefficients, (C), kg/ADT (¹) tissue	Hurdles, (H), kg/ADT (¹) tissue
1. Organics to water, COD	C1 = 15	H1 = 40
2. Chlorinated organics, AOX	C2 = 0,2	H2 = 0,5
3. Carbon dioxide, CO _{2, fossil}	C3 = 1500	H3 = 3750
4. Sulphur oxides, as S	C4 = 1,0	H4 = 2,5
(), ADT		

(ii) The load points, L, are calculated as shown in equation 1. The actual emission for each parameter should be divided by the corresponding coefficient for this parameter.

Li = (emission of parameter i)/Ci (equation 1)

(iii) The 'total load point sum', P, is calculated from equation 2 by adding the load points for each parameter.

P = L1 + L2 + L3 + L4 (equation 2)

(iv) If any of the emissions of the parameters COD, AOX, CO_2 , $_{fossil}$ and SO_2 for a product exceeds the values described as 'hurdles' in table 1, the product shall not qualify for the eco-label.

(v) To obtain the eco-label, the total load point sum (P) for the product must not exceed four points.

The amount of AOX (as Cl) discharged from each pulp manufacturing site shall not exceed 0,50 kg per air dry tonne of pulp.

Where trimmings are incorporated in the final product, the emissions related to their production, whether on-site or off-site, shall be included in the calculation of the load points.

Data on the use of water per tonne of pulp and paper produced in the production process of pulp and tissue paper shall be reported (Note: the data is necessary to evaluate the calculations of effluent flows and concentrations).

Sulphur compounds: The emissions related to the production of electricity need not be accounted for.

Carbon dioxide: from fossil sources per tonne of paper produced, including emissions from the production of electricity (whether on-site or off-site).

2. ENERGY USE

The total consumption of electricity relating to the tissue-paper product shall be calculated as the sum of the electricity used in the pulp and the tissue paper production stages and shall not exceed:

- 11 G joule (3 000 kWh) electricity per tonne of paper produced.

The applicant shall calculate all inputs of electricity used during the production of pulp and tissue paper, including the electricity used in the de-inking of waste papers for the production of recycled paper. Electricity means net imported electricity coming from the grid and internally generated electricity measured as

electric power. Electricity used for waste-water treatment and air cleaning need not be included.

3. FIBRES — SUSTAINABLE FOREST MANAGEMENT

Fibres may be wood fibres, recycled fibres (1) or non-wood fibres.

In the case of virgin wood fibres from forests, the operators in charge of managing the sources from which the fibres originate shall implement principles and measures aimed at ensuring sustainable forest management. A declaration, charter, code of conduct, certificate or statement to this effect from these operators and/or from the pulp mills shall be presented.

In Europe, the principles and measures referred to above shall correspond to those of the Pan-European Operational Level Guidelines for Sustainable Forest Management, as endorsed by the Lisbon Ministerial Conference on the Protection of Forests in Europe (2 to 4 June 1998). Outside Europe they shall correspond to the UNCED Forest Principles (Rio de Janeiro, June 1992) and, where applicable, to the criteria or guidelines for sustainable forest management as adopted under the respective international and regional initiatives (ITTO, Montreal Process, Tarapoto Process, UNEP/FAO Dry-Zone Africa Initiative).

4. HAZARDOUS CHEMICAL SUBSTANCES

Bleaching: Chlorine gas shall not be used as a bleaching agent. This requirement does not apply to chlorine gas related to the production and use of chlorine dioxide. (Note: while this requirement also applies to the bleaching of recycled fibres, it is accepted that the fibres in their previous lifecycle may have been bleached with chlorine gas.)

De-inking: Alkylphenolethoxylates (APEOs) or other derivates from alkylphenol shall not be added in de-inking chemicals. Derivates from alkylphenol are defined as substances that are degraded to alkylphenols.

Wet strength aids: Wet strength aids must not contain more than 1,0 chloro-organic substances, related to the dry content, that are assigned or may be assigned any of the risk phrases R45 (may cause cancer), R46 (may cause heritable genetic damage), R5O/53 (very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment), R60 (may impair fertility) or R61 (may cause harm to the unborn child) as defined in the Council Directive 67/548/EEC (2), as last amended by Commission Directive 2000/33/EC (3). Examples of such chloro-organic substances are epichlorohydrin (ECH). 1,3-dichloro-2-propanol (DCP) and 3monochloro-1,2-propanediol (MCPD).

 ^{(&}lt;sup>1</sup>) Recycled fibres are defined as fibres collected from paper products after consumption or paper waste from the conversion stages according to the grades defined in European list of standard grades of recovered paper and board, (CEPI, February 1999). Broke from paper mills is not defined as recycled fibres.
 (²) OJ L 196, 16.8.1967, p. 1.
 (³) OJ L 136, 8.6.2000, p. 90.

5. WASTE MANAGEMENT

All producers of pulp, paper and converted tissue products shall have a system for the handling of waste $(^1)$ and residual products arising from the production plants. The system shall be documented or explained in the application and shall include at least the following points:

- procedures for separating and using recyclable materials from the waste stream,
- procedures for recovering materials for other uses, such as incineration for raising process steam, or agricultural use,
- procedures for the handling of hazardous waste (1).

6. PRODUCT SAFETY

Products made from recycled fibres or mixtures of recycled and virgin fibres shall fulfil requirements on hygiene as follows:

The tissue paper shall not contain more than:

Formaldehyde:	1 mg/dm ² according to test method EPA 8315A
Glyoxal:	1,5 mg/dm^2 according to test method EPA $8315A$
PCB:	2 mg/kg according to test method EPA 8270

All tissue products shall fulfil the following requirements:

Slimicides and antimicrobic substances:	No growth retardance of micro-organisms according to test method EN 1104
Dyes and optical brighteners:	No bleeding according to test method EN $646/648$ (level 4 is required)
Dyes and inks:	Dyes and inks used in the production of tissue paper shall not contain azo-substances that may cleave to any of the amines listed in the technical appendix, table 3

FITNESS FOR USE

The product shall be fit for use.

CONSUMER INFORMATION

Box 2 of the eco-label shall include the following text:

- low water pollution

- low air pollution

- low greenhouse gas emissions and electricity use.

In addition, next to the eco-label the manufacturer may also provide a statement indicating the minimum percentage of recycled fibres.

Technical appendix: definitions, testing requirements and documentation

All emission parameters

The period for the measurements or mass balances shall be based on the production during 12 months. In case of a new or a rebuilt production plant, the measurements shall be based on at least 45 subsequent days of stable running of the plant. The measurement shall be representative for the respective campaign.

If a product is made out of different pulp qualities, the emission values from the pulp production shall be calculated as weighted averages of all pulps used. The total emissions shall be calculated by adding the emissions from the pulp production to the emissions from the production of the tissue paper.

Accredited laboratories or independent test institutes following the standard EN 45001 shall carry out measurements.

The laboratory of the pulp or paper manufacturer may, however, be approved for the analyses of discharges if any of the following conditions are fulfilled:

- the relevant regulatory authorities accept the relevant sampling and measurements made in that laboratory, or
 the manufacturer has a quality system which includes sampling and analysis supervision and is certified according to ISO 9001 or ISO 9002, or
- is an official GLP (good laboratory practice) approved laboratory.

 $^(^{1})$ As defined by the relevant regulatory authorities of the pulp and paper production sites in question.

Measurements of water emissions shall be taken on unfiltered and unsettled samples either after treatment at the mill or on discharge to public sewers before treatment in a public treatment plant. In the latter case the value measured before the public treatment plant shall be reduced by a factor corresponding to the average reduction by the treatment plant. The levels measured in incoming water to the mill may be subtracted from the emissions generated in the process and leaving the mill.

COD shall be measured in accordance with ISO 6060 second edition 1989.

AOX shall be measured in accordance with ISO 9562.

Other test methods can be accepted if their equivalence is accepted by the Competent Body assessing the application (for example if the equivalence is established by a calibration curve at 95 % significance).

AOX shall be measured in processes where chlorine compounds are used for the bleaching of the pulp. This means that AOX need not be measured:

- in the effluent from non-integrated paper production, or
- in the effluents from pulp production without bleaching, or
- when the bleaching is performed with chlorine-free substances.

Sulphur oxides

The applicant shall provide a balance on the air emissions of sulphur compounds. This balance shall include all such emissions, which occur during the production of pulp, and paper, except those related to the production of electricity. Measurements shall include recovery boilers, lime kilns, steam boilers and furnaces for incineration of strong smelling gases, if available. Diffuse emissions shall be accounted for.

Carbon dioxide

The applicant shall provide a balance on the air emissions of carbon dioxide. This balance shall include all sources of non-renewable fuels during the production of pulp and paper, including the emissions from the production of grid electricity. The emission factors from table 2 shall be used in the calculation of the CO₃, fossil emissions from fuels.

Table 2

Fuel	CO _{2, fossil} emission	Unit
Coal	95	g CO _{2, fossil} /MJ
Crude oil	73	g CO _{2, fossil} /MJ
Fuel oil 1	74	g CO _{2, fossil} /MJ
Fuel oil 2-5	77	g CO _{2, fossil} /MJ
Gasoline	69	g CO _{2, fossil} /MJ
Natural gas	56	g CO _{2, fossil} /MJ
Grid electricity (¹)	400	g CO _{2, fossil} /MJ
(1) European average.		

Equivalents of CO2, fossil from non renewable fuels

For grid electricity, the value quoted in the table shall be used for all sites within the European Union. For sites outside the European Union, the applicant may present documentation establishing the average value for their supplier(s) of electricity, and use this average value instead of the value quoted in the table.

Forest management See criterion 3.

Hazardous chemical compounds

The applicant shall present a declaration from each pulp supplier that chlorine gas has not been used for the bleaching of the pulps.

The applicant shall present a declaration from each pulp supplier that alkylphenol ethoxylates or other derivates from alkylphenol have not been used for the de-inking process.

The applicant shall present a list of the products used in the paper production for the purpose of wet strength in the final product. The list shall include the brand name of the product, the area of use and the name, address and telephone number of the supplier. In addition to this list, the applicant shall present a declaration of the content of chloro-organic substances, such as epichlorohydrin (ECH), 1,3-dichloro-2-propanol (DCP) and 3-monochloro-1,2-propanediol (MCPD), which are classified as dangerous to the environment or to health according to Council Directive 67/548/EEC.

Waste management See criterion 5

Product safety

The tissue-paper producer shall provide a document of the test results of finished tissue paper concerning: formaldehyde, glyoxal, PCB, slimicides, antimicrobial substances, dyes and optical brighteners.

Table 3

Amines referred to in criterion 6

Amine	CAS-No
4-aminoazobenzene	60-09-3
o-anisidine	90-04-0
4-aminodiphenyl	92-67-1
benzidine	92-87-5
4-chloro-o-toluidine	95-69-2
2-naphthylamine	91-59-8
o-amino-azotoluene	97-56-3
2-amino-4-nitrotoluene	99-55-8
p-chloroaniline	106-47-8
2,4-diaminoanisol	615-05-4
4,4'-diaminodiphenylmethane	101-77-9
3,3'-dichlorobenzidine	91-94-1
3,3'-dimethoxybenzidine	119-90-4
3,3'-dimethylbenzidine	119-93-7
3,3'-dimethyl-4,4'-diaminodiphenylmethane	838-88-0
p-cresidine	120-71-8
4,4'-methylene-bis-(2-chloraniline)	101-14-4

Amine	CAS-No
4,4'-oxydianiline	101-80-4
4,4'-thiodianiline	139-65-1
o-toluidine	95-53-4
2,4-diaminotoluene	95-80-7
2,4,5-trimethylaniline	137-17-7
2,4-xylidine	95-68-1
4,6-xylidine	87-62-7

Fitness for use

The applicant shall provide evidence to demonstrate that the product is fit for use. This evidence may include data from appropriate ISO or CEN test methods, but may include national or in-house test procedures as well. Details of the test procedures shall be provided with the application.