II

(Acts whose publication is not obligatory)

COMMISSION

COMMISSION DECISION
of 4 September 2002
establishing revised ecological criteria for the award of the Community eco-label to copying and graphic paper and amending Decision 1999/554/EC
(notified under document number C(2002) 3294)
(Text with EEA relevance)

(2002/741/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 on a revised Community eco-label award scheme (1), and in particular the second subparagraph of Article 6(1) thereof,

Whereas:

(1) Under Regulation (EC) No 1980/2000 the Community eco-label may be awarded to a product possessing characteristics which enable it to contribute significantly to improvements in relation to key environmental aspects.

(2) Regulation (EC) No 1980/2000 provides that specific eco-label criteria are to be established according to product groups.

(3) It also provides that the review of the eco-label criteria, as well as of the assessment and verification requirements related to the criteria, is to take place in due time before the end of the period of validity of the criteria specified for each product group. That review is to result in a proposal for prolongation, withdrawal or revision.

(4) It is appropriate to revise the ecological criteria that were established by Commission Decision 1999/554/EC of 19 July 1999 establishing the ecological criteria for the award of the Community eco-label to copying paper (2) in order to reflect the developments in the market. At the same time, the definition of the product group should be modified to include graphic paper.

(5) A new Commission Decision should be adopted establishing the specific ecological criteria for this product group, which will be valid for a period of five years.

(6) 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 established by Decision 1999/554/EC should be valid concurrently, in order to allow sufficient time for companies that have been awarded or that have applied for the award of the eco-label for their products prior to the date of application of this Decision to adapt those products to comply with the new criteria.

(7) The measures provided for in this Decision are based on the draft criteria developed by the European Union Eco-Labelling Board established under Article 13 of Regulation (EC) No 1980/2000.

(8) The measures provided for in this Decision are in accordance with the opinion of the committee instituted by Article 17 of Regulation (EC) No 1980/2000,

HAS ADOPTED THIS DECISION:

Article 1

In order to be awarded the Community eco-label under Regulation (EC) No 1980/2000, paper must fall within the product group 'copying and graphic paper' as defined in Article 2, and must comply with the ecological criteria set out in the Annex to this Decision.

(2) OJ L 210, 10.8.1999, p. 16.
Article 2

1. The product group ‘copying and graphic paper’ shall comprise sheets or reels of unprinted paper which are used for printing or copying or writing or drawing.

2. Newsprint, thermally sensitive paper and carbonless paper are not included in the product group.

Article 3

For administrative purposes the code number assigned to the product group ‘copying and graphic paper’ shall be ‘011’.

Article 4

Article 3 of Decision 1999/554/EC is replaced by the following:

‘Article 3

The product group definition and the specific ecological criteria for the product group shall be valid until 31 August 2003.’

Article 5

This Decision shall apply from 1 September 2002 until 31 August 2007.

Producers of products falling within the product group ‘copying paper’ which have already been awarded the eco-label before 1 September 2002 may continue to use that label until 31 August 2003.

Producers of products falling within the product group ‘copying paper’ which have already applied for the award of the eco-label before 1 September 2002 may be awarded the eco-label under the terms of Decision 1999/554/EC. In these cases the label may be used until 31 August 2003.

Article 6

This Decision is addressed to the Member States.

Done at Brussels, 4 September 2002.

For the Commission

Margot WALLSTROM

Member of the Commission
ANNEX

FRAMEWORK

The aims of the criteria

These criteria aim in particular at:
— the reduction of discharges of toxic or eutrophic substances into waters,
— the reduction of environmental damage or risks related to the use of energy (global warming, acidification, ozone
deposition, depletion of non-renewable resources) by reducing energy consumption and related emissions to air,
— the reduction of environmental damage or risks related to the use of hazardous chemicals,
— the application of sustainable management principles in order to safeguard forests.

The criteria are set at levels that promote the labelling of copying paper and graphic paper which have a lower
environmental impact.

Assessment and verification requirements

The specific assessment and verification requirements are indicated within each criterion.

Where the applicant is required to provide declarations, documentation, analyses, test reports, or other evidence to show
compliance with the criteria, it is understood that these may originate from the applicant and/or his supplier(s) and/or
their supplier(s), etc., as appropriate.

Where appropriate, test methods other than those indicated for each criterion may be used if their equivalence is accepted
by the competent body assessing the application.

Where possible, testing should be performed by appropriately accredited laboratories that meet the general requirements
expressed in standard EN ISO 17025.

Where appropriate, competent bodies may require supporting documentation and may carry out independent
verifications.

The competent bodies are recommended to take into account the implementation of recognised environmental manage-
ment schemes, such as EMAS or ISO 14001, when assessing applications and monitoring compliance with the criteria
(Note: it is not required to implement such management schemes).

CRITERIA

1. Emissions to water and air

(a) COD, Sulphur (S), NOx: For each of these parameters, the emissions to air and/or water from the pulp and the
paper production shall be expressed in terms of points (P_{COD}, P_{S}, P_{NOx}) as detailed below.

None of the individual points P_{COD}, P_{S}, or P_{NOx} shall exceed 1.5.

The total number of points (\sum_{\text{total}} = P_{COD} + P_{S} + P_{NOx}) shall not exceed 3.0.

The calculation of P_{COD} shall be made as follows (the calculations of P_{S} and P_{NOx} shall be made in exactly the same
manner).

Calculation for pulp production: For each pulp i used, the related COD emissions (COD_{pulp, i} expressed in kg/air
dried tonne — ADT), shall be divided by the reference value for that pulp type (COD_{reference, pulp}) given in the table
below. These quotients shall be weighted according to the proportion of each pulp used (\rho_i with respect to moist
paper), and summed together to give the number of points for the pulp production (P_{COD, pulp}). Thus:

\[ P_{COD, pulp} = \sum (\rho_i \times \frac{\text{COD}_{pulp, i}}{\text{COD}_{reference, pulp}}) \]

Calculation for paper production: The number of points for the paper production (P_{COD, paper}) shall be calculated by
dividing the related COD emissions (COD_{paper}) by the reference value for paper (COD_{reference, paper}) given in the table
below. Thus:

\[ P_{COD, paper} = \frac{\text{COD}_{paper}}{\text{COD}_{reference, paper}} \]

Overall calculation of points P_{COD}: An overall reference value for pulp weighted over the different pulps used
(COD_{weighted reference, pulp}) shall be calculated as follows:

\[ \text{COD}_{weighted reference, pulp} = \sum (\rho_i \times \text{COD}_{reference, pulp}) \]
Finally, the points for pulp and paper production shall be combined to give the overall number of points ($P_{COD}$) as follows:

$$P_{COD} = \frac{P_{COD, pulp} \times \frac{COD_{weighted\ reference, pulp}}{COD_{reference, pulp}} + P_{COD, paper} \times \frac{COD_{reference, paper}}{COD_{weighted\ reference, pulp} + COD_{reference, paper}}}{P_{COD, pulp} \times \frac{COD_{weighted\ reference, pulp}}{COD_{reference, pulp}} + P_{COD, paper} \times \frac{COD_{reference, paper}}{COD_{weighted\ reference, pulp} + COD_{reference, paper}}}$$

Table of reference values for emissions from different pulp types and from paper production

<table>
<thead>
<tr>
<th>Pulp grade/paper</th>
<th>Emissions (kg/ADT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COD$_{reference}$</td>
<td>S$_{reference}$</td>
</tr>
<tr>
<td>Chemical pulp (kraft and all others except sulphite)</td>
<td>18.0</td>
</tr>
<tr>
<td>Chemical pulp (sulphite)</td>
<td>25.0</td>
</tr>
<tr>
<td>CTMP</td>
<td>15.0</td>
</tr>
<tr>
<td>TMP/groundwood pulp</td>
<td>3.0</td>
</tr>
<tr>
<td>Recycled fibre pulp</td>
<td>2.0</td>
</tr>
<tr>
<td>Paper (non-integrated mills where all pulps used are purchased market pulps)</td>
<td>1.0</td>
</tr>
<tr>
<td>Paper (other mills)</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**Assessment and verification:** The applicant shall provide detailed calculations showing compliance with this criterion, together with related supporting documentation which shall include test reports using the following test methods: COD: ISO 6060; NO$_x$: ISO 11564; S$_{oxid.}$: EPA no.8; S$_{red.}$: EPA no 16A; S content in oil: ISO 8754:1995; S content in coal: ISO 351.

The supporting documentation shall include an indication of the measurement frequency and the calculation of the points for COD, S and NOx. It shall include all emissions of S and NOx which occur during the production of pulp and paper, including steam generated outside the production site, except those emissions related to the production of electricity. Measurements shall include recovery boilers, lime kilns, steam boilers and destructor furnaces for strong smelling gases. Diffuse emissions shall be taken into account. Reported emission values for S to air shall include both oxidised and reduced S emissions (dimethyl sulphide, methyl mercaptan, hydrogen sulphide and the like). The S emissions related to the heat energy generation from oil, coal and other external fuels with known S content may be calculated instead of measured, and shall be taken into account.

Measurements of emissions to water shall be taken on unfiltered and unsettled samples either after treatment at the plant or after treatment by a public treatment plant. The period for the measurements 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.

**(b) AOX:** The AOX emissions from the production of each pulp used shall not exceed 0.25 kg/ADT.

**Assessment and verification:** The applicant shall provide test reports using the following test method: AOX ISO 9562 (1989). The supporting documentation shall include an indication of the measurement frequency. AOX shall only be measured in processes where chlorine compounds are used for the bleaching of the pulp. AOX need not be measured in the effluent from non-integrated paper production or in the effluents from pulp production without bleaching or where the bleaching is performed with chlorine-free substances.

Measurements shall be taken on unfiltered and unsettled samples either after treatment at the plant or after treatment by a public treatment plant. The period for the measurements shall be based on the production during 12 months. In case of a new or a re-built 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.

**(c) CO$_2$:** The emissions of carbon dioxide from non-renewable sources shall not exceed 1 000 kg per tonne of paper produced, including emissions from the production of electricity (whether on-site or off-site). For non-integrated mills (where all pulps used are purchased market pulps) the emissions shall not exceed 1 100 kg per tonne. The emissions shall be calculated as the sum of the emissions from the pulp and paper production.
Assessment and verification: The applicant shall provide detailed calculations showing compliance with this criterion, together with related supporting documentation.

The applicant shall provide data on the air emissions of carbon dioxide. This shall include all sources of non-renewable fuels during the production of pulp and paper, including the emissions from the production of electricity (whether on-site or off-site).

The following emission factors shall be used in the calculation of the CO₂ emissions from fuels:

<table>
<thead>
<tr>
<th>Fuel</th>
<th>CO₂ fossil emission</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>95</td>
<td>g CO₂ fossil/MJ</td>
</tr>
<tr>
<td>Crude oil</td>
<td>73</td>
<td>g CO₂ fossil/MJ</td>
</tr>
<tr>
<td>Fuel oil 1</td>
<td>74</td>
<td>g CO₂ fossil/MJ</td>
</tr>
<tr>
<td>Fuel oil 2 — 5</td>
<td>77</td>
<td>g CO₂ fossil/MJ</td>
</tr>
<tr>
<td>LPG</td>
<td>69</td>
<td>g CO₂ fossil/MJ</td>
</tr>
<tr>
<td>Natural gas</td>
<td>56</td>
<td>g CO₂ fossil/MJ</td>
</tr>
<tr>
<td>Grid electricity</td>
<td>400</td>
<td>g CO₂ fossil/KWh</td>
</tr>
</tbody>
</table>

For grid electricity, the value quoted in the table above (the European average) shall be used unless the applicant presents documentation establishing the average value for their supplier(s) of electricity, in which case the applicant may use this value instead of the value quoted in the table.

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

2. Energy use

(a) Electricity: The electricity consumption related to the pulp and the paper production shall be expressed in terms of points (Pₑ) as detailed below.

The number of points, Pₑ, shall be less than or equal to 1.5.

The calculation of Pₑ shall be made as follows.

Calculation for pulp production: For each pulp i used, the related electricity consumption (Eₑ, pulp, i expressed in kWh/ADT) shall be calculated as follows:

\[ E_{\text{pulp, i}} = \text{Internally produced electricity} + \text{purchased electricity} - \text{sold electricity} \]

This value shall be divided by the reference value for that pulp type (E_{reference, pulp}) given in the table below. These quotients shall be weighted according to the proportion of each pulp used (pᵢ with respect to moist paper) and summed together to give the number of points for the electricity consumption in the pulp production (Pₑ, pulp).

Thus:

\[ P_{\text{E, pulp}} = \sum (pᵢ \times E_{\text{pulp, i}} / E_{\text{reference, pulp}}) \]

Calculation for paper production: Similarly, the electricity consumption related to the paper production (Eₑ, paper) shall be calculated and divided by the reference value for that paper type (E_{reference, paper}) given in the table below, as follows:

\[ E_{\text{paper}} = \text{Internally produced electricity} + \text{purchased electricity} - \text{sold electricity} \]

\[ P_{\text{E, paper}} = E_{\text{paper}} / E_{\text{reference, paper}} \]

Overall calculation of points Pₑ: An overall weighted reference value for pulp (E_{weighted reference, pulp}) shall be calculated as follows:

\[ E_{\text{weighted reference, pulp}} = \sum (pᵢ \times E_{\text{reference, pulp}}) \]

Finally, the points for pulp and paper production shall be combined to give the overall number of points (Pₑ) as follows:

\[ P_{\text{E}} = P_{\text{E, pulp}} \times E_{\text{weighted reference, pulp}} / (E_{\text{weighted reference, pulp}} + E_{\text{reference, pulp}}) + P_{\text{E, paper}} \times E_{\text{reference, paper}} / (E_{\text{weighted reference, pulp}} + E_{\text{reference, paper}}) \]
(b) **Fuel (heat):** The fuel consumption related to the pulp and the paper production shall be expressed in terms of points \( P_\text{F} \) as detailed below.

The number of points, \( P_\text{F} \), shall be less than or equal to 1.5.

The calculation of \( P_\text{F} \) shall be made as follows.

**Calculation for pulp production:** For each pulp \( i \) used, the related fuel consumption \( (F_{\text{pulp}, i} \) expressed in kWh/ADT) shall be calculated as follows:

\[
F_{\text{pulp}, i} = \text{Internally produced fuel} + \text{purchased fuel} - \text{sold fuel} - 1.25 \times \text{internally produced electricity}
\]

**Note:** \( F_{\text{pulp}, i} \) (and its contribution to \( P_\text{F, pulp} \)) need not be calculated for mechanical pulp unless it is market air dried mechanical pulp containing at least 90 % dry matter.

\( F_{\text{pulp}, i} \) shall be divided by the reference value for the respective pulp type \( (F_{\text{reference, pulp}}) \) given in the table below. These quotients shall be weighted according to the proportion of each pulp used \( (p_i \) with respect to moist paper \( ) \) and summed together to give the number of points for the fuel in the pulp production \( (P_\text{F, pulp}) \). Thus:

\[
P_{\text{F, pulp}} = \sum (p_i \times F_{\text{pulp}, i} / F_{\text{reference, pulp}})
\]

**Calculation for paper production:** Similarly the fuel consumption related to the paper production \( (F_{\text{paper}} \) expressed in kWh/ADT), shall be calculated as follows:

\[
F_{\text{paper}} = \text{Internally produced fuel} + \text{purchased fuel} - \text{sold fuel} - 1.25 \times \text{internally produced electricity}
\]

\[
P_{\text{F, paper}} = F_{\text{paper}} / F_{\text{reference, paper}}
\]

**Overall calculation of points \( P_\text{F} \):** An overall weighted reference value for pulp \( (F_{\text{weighted reference, pulp}}) \), shall be calculated as follows:

\[
F_{\text{weighted reference, pulp}} = \sum (p \times F_{\text{reference, pulp}})
\]

Finally, the points for pulp and paper production shall be combined to give the overall number of points \( (P_\text{F}) \) as follows:

\[
P_\text{F} = P_{\text{F, pulp}} \times F_{\text{weighted reference, pulp}} / (F_{\text{weighted reference, pulp}} + F_{\text{reference, paper}}) + P_{\text{F, paper}} \times F_{\text{reference, paper}} / (F_{\text{weighted reference, pulp}} + F_{\text{reference, paper}})
\]

**Table of reference values for electricity and fuel**

<table>
<thead>
<tr>
<th>Pulp grade</th>
<th>Fuel kWh/ADT</th>
<th>Electricity kWh/ADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical pulp</td>
<td>4 000</td>
<td>800</td>
</tr>
<tr>
<td>(Note: for air dry market pulp containing at least 90 % dry matter (admp), this value may be upgraded by 25 % for the drying energy)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical pulp</td>
<td>900</td>
<td>2 500</td>
</tr>
<tr>
<td>(Note: this value is only applicable for admp)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recycled fibre pulp</td>
<td>1 800</td>
<td>800</td>
</tr>
<tr>
<td>(Note: for admp, this value may be upgraded by 25 % for the drying energy)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paper grade</th>
<th>Fuel kWh/tonne</th>
<th>Electricity kWh/tonne</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncoated woodfree fine paper</td>
<td>1 800</td>
<td>600</td>
</tr>
<tr>
<td>Magazine paper (SC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coated woodfree fine paper</td>
<td>1 800</td>
<td>800</td>
</tr>
<tr>
<td>Coated magazine paper (LWC, MWC)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Assessment and verification (for both (a) and (b)): The applicant shall provide detailed calculations showing compliance with this criterion, together with all related supporting documentation. Reported details should therefore include the total electricity and fuel consumption.

The applicant shall calculate all energy inputs, divided into heat/fuels and electricity used during the production of pulp and paper, including the energy used in the de-inking of waste papers for the production of recycled paper. Energy used in the transport of raw materials, as well as conversion and packaging, is not included in the energy consumption calculations.

Total heat energy includes all purchased fuels. It also includes heat energy recovered by incinerating liquors and wastes from on-site processes (e.g. wood waste, sawdust, liquors, waste paper, paper broke), as well as heat recovered from the internal generation of electricity — however, the applicant need only count 80% of the heat energy from such sources when calculating the total heat energy.

Electric energy means net imported electricity coming from the grid and internal generation of electricity measured as electric power. Electricity used for wastewater treatment need not be included.

Where steam is generated using electricity as the heat source, the heat value of the steam shall be calculated, then divided by 0.8 and added to the total fuel consumption.

3. Fibres — sustainable forest management

Fibres may be wood fibres, or recycled fibres from recovered paper, or other cellulose fibres. Fibres from paper mill broke shall not be considered as recycled fibres.

At least 10% of virgin wood fibres from forests shall come from forests that are certified as being managed so as to implement the principles and measures aimed at ensuring sustainable forest management.

The remaining virgin wood fibres from forests shall come from forests that are managed so as to implement the principles and measures aimed at ensuring sustainable forest management.

The origin of all virgin fibres used shall be indicated.

In Europe, the principles and measures referred to above shall at least 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 at least 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).

Assessment and verification: The applicant shall indicate the types, quantities and origins of fibres used in the pulp and the paper production. The origins of virgin fibres shall be indicated with sufficient precision to allow, where appropriate, checks to be carried out that the virgin fibres are from sustainably managed forests. Where virgin fibres from forests are used, the applicant shall provide appropriate certificate(s) together with supporting documentation showing that the certification scheme correctly assesses the abovementioned principles and measures of sustainable forest management. For those virgin wood fibres from forests that are not certified as being from sustainably managed forests, the applicant shall provide the appropriate declarations, charter, code of conduct or statement, verifying that the above requirements are met.

4. Hazardous chemical substances

Assessment and verification: The applicant shall supply a list of the chemical products used in the pulp and paper production, together with appropriate documentation (such as MSDSs). This list shall include the quantity, function and suppliers of all process chemicals used.

(a) Chlorine: 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.

Assessment and verification: The applicant shall provide a declaration from the pulp producer(s) that chlorine gas has not been used as a bleaching agent. Note: while this requirement also applies to the bleaching of recycled fibres, it is accepted that the fibres in their previous life-cycle may have been bleached with chlorine gas.

(b) APEOs: Alkylphenol ethoxylates or other alkylphenol derivatives shall not be added to cleaning chemicals, de-inking chemicals, foam inhibitors, dispersants or coatings. Alkylphenol derivatives are defined as substances that upon degradation produce alkyl phenols.

Assessment and verification: The applicant shall provide a declaration(s) from their chemical supplier(s) that alkylphenol ethoxylates or other alkylphenol derivatives have not been added to these products.
(c) **Residual monomers:** The total quantity of residual monomers (excluding acrylamide) that are assigned or may be assigned any of the following risk phrases (or combinations thereof):

- **R45** (may cause cancer)
- **R46** (may cause heritable genetic damage)
- **R49** (may cause cancer by inhalation)
- **R50/53** (very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment)
- **R51/53** (toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment)
- **R52/53** (harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment)
- **R60** (may impair fertility)
- **R61** (may cause harm to the unborn child)

as defined in Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances (1) and its subsequent amendments, in coatings, retention aids, strengtheners, water repellents or chemicals used in internal and external water treatment shall not exceed 100 ppm (calculated on the basis of their solid content).

Acrylamide shall not be present in coatings, retention aids, strengtheners, water repellents or chemicals used in internal and external water treatment in concentrations higher than 1 000 ppm (calculated on the basis of their solid content).

The competent body may exempt the applicant from these requirements in relation to chemicals used in external water treatment.

**Assessment and verification:** The applicant shall provide a declaration of compliance with this criterion, together with appropriate documentation (such as MSDSs).

(d) **Surfactants in de-inking formulations for return fibres:** Where surfactants are used in quantities of at least 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. Where such surfactants are used in quantities of less than 100 g/ADT, each surfactant shall be either readily biodegradable or ultimately biodegradable (see test methods and pass levels below).

**Assessment and verification:** The applicant shall provide a declaration of compliance with this criterion together with the relevant material safety data sheets or test reports for each surfactant which shall indicate the test method, threshold and conclusion stated, using one of the following test methods and pass levels: for ready biodegradability OECD 301 A-F (or equivalent ISO standards), with a percentage degradation within 28 days of at least 70 % for 301 A and E, and of at least 60 % for 301 B, C, D and F; for ultimate biodegradability OECD 302 A-C (or equivalent ISO standards), with a percentage degradation (including adsorption) within 28 days of at least 70 % for 302 A and B, and of at least 60 % for 302 C.

(e) **Biocides:** The active components in biocides or biostatic agents used to counter slime-forming organisms in circulation water systems containing fibres shall not be potentially bio-accumulative.

**Assessment and verification:** The applicant shall provide a declaration of compliance with this criterion together with the relevant material safety data sheet or test report which shall indicate the test method, threshold and conclusion stated, using the following test methods: OECD 107, 117 or 305 A-E.

(f) **Azo dyes:** No azo dyes shall be used that may cleave to any of the following aromatic amines:

- 4-aminobiphenyl (92-67-1)
- benzidine (92-87-5)
- 4-chloro-o-toluidine (95-69-2)
- 2-naphthylamine (91-59-8)
- o-aminazotoluene (97-56-3)
- 2-amino-4-nitrotoluene (99-55-8)
- 4-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-chloroaniline) (101-14-4)
4,4′-oxydianiline (101-80-4)
4,4′-thiodianiline (139-65-1)
o-toluidine (95-53-4)
2,4,5-trimethylaniline (137-17-7)
o-anisidine (90-04-0)
4-aminoazobenzene (60-09-3)

Assessment and verification: The applicant shall provide a declaration of compliance with this criterion.

(g) Dye stuffs: No commercial dye formulation shall be used on either pulp or paper that is assigned or may be assigned at the time of application any of the following risk phrases (or combinations thereof):

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),


No commercial dye formulation shall be used on either pulp or paper that contains more than a total of 2 % by weight of substances that are assigned or may be assigned at the time of application any of the above risk phrases (or combinations thereof) according to Directive 67/548/EEC and its subsequent amendments.

This criterion does not apply to formulations where the classification is solely due to the presence of dyeing component(s) with a degree of fixation of at least 98 %. The degree of fixation is taken as the total dye retention on the fibres in the process.

Assessment and verification: The applicant shall provide a declaration of compliance with this criterion together with appropriate supporting documentation such as the relevant Material Safety Data Sheets.

(h) Metal complex dye stuffs or pigments: Dyes or pigments shall not be used that are based on lead, copper, chromium, nickel or aluminium. Copper phthalocyanine dyes or pigments may, however, be used.

Assessment and verification: The applicant shall provide a declaration of compliance.

(i) Ionic impurities in dye stuffs: The levels of ionic impurities in the dye stuffs used shall not exceed the following:

\[
\begin{align*}
\text{Ag} & : 100 \text{ ppm} \\
\text{As} & : 50 \text{ ppm} \\
\text{Ba} & : 100 \text{ ppm} \\
\text{Cd} & : 20 \text{ ppm} \\
\text{Co} & : 500 \text{ ppm} \\
\text{Cr} & : 100 \text{ ppm} \\
\text{Cu} & : 250 \text{ ppm} \\
\text{Fe} & : 250 \text{ ppm} \\
\text{Hg} & : 4 \text{ ppm} \\
\text{Mn} & : 1000 \text{ ppm} \\
\text{Ni} & : 200 \text{ ppm} \\
\text{Pb} & : 100 \text{ ppm} \\
\text{Se} & : 20 \text{ ppm} \\
\text{Sb} & : 50 \text{ ppm} \\
\text{Sn} & : 250 \text{ ppm} \\
\text{Zn} & : 1500 \text{ ppm}
\end{align*}
\]

Assessment and verification: The applicant shall provide a declaration of compliance.

5. Waste management

All pulp and paper production sites shall have a system for handling waste (as defined by the relevant regulatory authorities of the pulp and paper production sites in question) and residual products arising from the production of the eco-labelled product. The system shall be documented or explained in the application and include information on 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 heating, or agricultural use,
— procedures for handling hazardous waste (as defined by the relevant regulatory authorities of the pulp and paper production sites in question).

Assessment and verification: The applicant shall provide a description of the waste management for the sites concerned and a declaration of compliance with the criterion.

6. **Fitness for use**

The product shall be fit for use.

*Assessment and verification:* The applicant shall provide appropriate documentation and/or test results.

7. **Information on the packaging**

The product shall bear the following text (or equivalent text) on the primary and secondary packaging:

- ‘This product qualifies for the Flower because it meets requirements that, amongst others, limit emissions to water (COD, AOX), to air (S, NOx, CO2), and limits the use of energy, fossil fuels and hazardous substances.’
- ‘For more information on the Flower, please visit the web-site: http://europa.eu.int/ecolabel’
- ‘Please collect used paper for recycling’.

In addition, the manufacturer may also provide a statement indicating the minimum percentage of recycled fibres.

*Assessment and verification:* The applicant shall provide a sample of the product packaging and of the information supplied with the product, together with a declaration of compliance with this criterion.

8. **Information appearing on the eco-label**

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

- low air and water pollution
- low energy use
- harmful substances restricted.

*Assessment and verification:* The applicant shall provide a sample of the product packaging showing the label, together with a declaration of compliance with this criterion.