Valid from 19 August 2010

MANUAL FOR AN ENVIRONMENTAL PRODUCT DECLARATION FOR THE PULP AND PAPER INDUSTRY - PAPER PROFILE

1 GENERAL REMARKS

The objective of this manual is to give guidance in preparing an environmental product declaration within the pulp and paper industry according to an initiative by major European paper producers.

Only member companies are allowed to use the Paper Profile. Application for membership is open for all paper manufacturing companies worldwide. Application procedures are described on the Paper Profile website www.paperprofile.com.

A Paper Profile environmental product declaration includes information supplied to business-to-business customers and/or to end-use consumers. It is voluntary and presents the information in a format that facilitates comparison between products.

In order to verify that a declaration complies with the Paper Profile environmental product declaration format and with this manual, accredited verification of the declaration by a certification body is recommended. If this is done, the verifying logo should be listed in the declaration. Auditing of the declaration should be done annually.

2 SCOPE OF A PAPER ENVIRONMENTAL PRODUCT DECLARATION

- A Paper Profile environmental product declaration, as described below, can be used for all paper products. The declaration provides information on the relevant environmental factors of the pulping and papermaking process. These include product composition, manufacturing environmental load, consumption of electricity and environmental management.

3 GENERAL DATA ASPECTS

The following instructions and definitions are to be taken into consideration when preparing a Paper Profile environmental product declaration:

- functional unit used as calculation basis: tonne of final product
- emissions from both pulp and paper production to be included. The emissions from pulp production must be given for the relative proportion of pulp used in the paper product irrespective of whether the pulp is produced at the same site as the paper, or not.
- all the operations of the mills from material receiving through waste water treatment and waste disposal shall be included
- environmental loads of packaging and packaging materials of the final product are excluded
- allocation within an (integrated or non-integrated) mill: calculation must be production-line specific in such a way that emission (and other) figures of all co-processes add up to 100% of the total emission load of the site. Information may be given based on annual average product composition.

- allocation must be based on a cause-effect approach (e.g. air emissions of a power plant should be allocated to different paper machines at the site based on the power plant steam used by the paper machines)
- annual mean values based on one year should be used for the product in question
- in the event of an introduction of new processes or internal improvements, data must be determined on the basis of at least 3 months consecutive samples

4 PAPER PROFILE FORM

All the items in the declaration shall be reported unless otherwise stated. If a parameter or a quantity is not measured or not available, it is marked “Not available”.

Additional information or other environmental data can not be included into the standard Paper Profile form. In order not to confuse the reader, any supplementary information has to be in a different style and layout, clearly differentiating it from the Paper Profile document. It is recommended to make the additional information available in a separate file.

4.1 GENERAL INFORMATION

The following information shall be given in the general information part of the form:

Product:	Brand name (and optional: owner of the brand name if other than paper producer) and/or product (and grammage, if relevant)
Company:	Paper producer
Mill:	Production mill (and possibly the production line)
Information gathered from – to:	Period during which information for the declaration has been gathered.
Date of issue	Date when the Paper Profile report is finalised.
Company logo	Logo of the paper producing company
Cert.	Logo of the verifying company (optional)

4.2 ENVIRONMENTAL MANAGEMENT

Certified environmental management system at _____

When referring to the possible use of certified environmental management systems
- specify the approach according to the certification system (ISO 14001, EMAS, etc)

Company management systems ensure traceability of the origin of wood

- 'Yes' can be answered only if:
  - -A company has systems in place for tracing the geographic origin of wood used for pulp to at least country level. This covers also wood used for purchased pulp.
  - -Traceability systems control the legality of the wood.
- Can be marked '100% recovered paper ' if only recovered paper is used.

Optional parameter: Choose out of the three alternatives or blank

1) Certified Chain of Custody system in place _____

- Specify the scope of the Chain of Custody (CoC) certification: the mill / the mill and the wood procurement organisation / the wood procurement organisation
- The scheme in use should be named, e.g. PEFC, FSC.

- Reference to CoC certification status can be done when a third party verified CoC certification has been established.

AND/OR

***2)* x% of ____ certified fibres in the product (with CoC certification)**

- If certified CoC in place at the mill, the percentage can be given and the scheme (e.g. PEFC, FSC) in use can be named separately (example: x% PEFC + y% FSC) or as one (example: x% PEFC / FSC).
- If the wood or pulp is double certified the percentage is mentioned as follows; x% PEFC / FSC.

AND/OR

3) x% of ____ certified fibres at the mill, with CoC certification/ without CoC certification

- If certified CoC in place, the percentage can be given and the scheme (e.g. PEFC, FSC) in use can be named separately (example: x% PEFC + y% FSC) or as one (example: x% PEFC / FSC).
- If the wood or pulp is double certified the percentage is mentioned as follows; x% PEFC / FSC.
- If no certified (but documented) CoC in place the forest certification system can not be specified but announced as a total percentage of certified fibre used (example: x% of certified fibre).

Empty line: You may write here web site address where the copies of certificates can be found

4.3 ENVIRONMENTAL PARAMETERS

The figures include both paper and pulp production including also the purchased pulp.

Emissions to water and air

The production-line specific loads listed below shall be expressed. Methods and procedures for measurement approved by the local (or national) environmental regulators shall be used. Examples of possible standardised methods for parameters and quantities are shown in Appendix 1.

Water

COD	Chemical Oxygen Demand. The amount of oxygen consumed in complete chemical oxidation of matter present in waste water.
AOX	Adsorbable organic halogens. In this case, it means the total amount of chlorine bound to organic compounds in waste water.
N_{tot}	Nitrogen. Total amount of organic and inorganic nitrogen measured as Tot-N (nitrogen).
P_{tot}	Phosphorus. Total amount of organic and inorganic phosphorus measured as Tot-P (phosphorus).

Air

For emission parameters, emissions of pulp production, calculated both from the production process and auxiliary boiler on the site, shall be included. Air emissions include the emissions from the generation of purchased steam.

SO_2	Sulphur Dioxide. Total sulphur shall be indicated as sulphur dioxide. Gas produced by burning sulphur-containing fuels and as a by-product in chemical pulping.
NOx	Nitrogen oxides. Collective symbol for nitrogen oxides.
CO_2(fossil)	Carbon Dioxide. Gas produced by burning fossil fuels and peat.

Solid waste landfilled

Solid waste (not including fluids) landfilled both at site and elsewhere is regarded as discarded materials. Solid waste includes organic and inorganic material. It is expressed as dry matter (bone dry).

Purchased electricity consumption

The total amount of electricity procured from the grid (kWh/ton paper) both for the paper mill and the pulp mill in relation to the amount of pulp used in the paper. Possible electricity surplus from a non-integrated pulp mill will not be taken into consideration.

How to handle lack of pulp suppliers' environmental data

These instructions contain information how to calculate and present environmental parameters when there is a lack of pulp data.

1. All data are missing from one or several pulp suppliers

A. Data for less than 5% of the pulp mix used for the product, for the period in question, are missing.

Increase the share of the other pulp/-s, for which data are available, proportionally, to compensate for the missing share so that 100% is reached. This compensation is made within the specific pulp quality/-ies (chemical, mechanical, CTMP, DIP or other pulps) where data is lacking. See example in Appendix 2.

B. Data for less than 25%, but more than 5% of the pulp mix used for the product, for the period in question, are missing.

Same instructions for calculations as in A.

When filling in the Paper Profile word form, write an asterisk, "*", after the figures in the parameter fields. At the bottom of the page there is a field where the asterisk is commented:

*) X% of raw data for pulp are missing. Weighted average value of available data have been used.

X= the percentage of the pulp mix that data are lacking for. Fill in your specific X value.

C. Data for more than 25% of the pulp mix used for the product, for the period in question, are missing.

No Paper Profile can be calculated or issued for the product.

See example in Appendix 2.

2. Data are missing for one environmental parameter from one or several suppliers

A. The lack of data for the parameter represents less than 5% of the pulp mix.

Calculate the weighted average value for the parameter, based on the available data for the specific pulp quality (chemical, mechanical, CTMP, DIP or other pulps). Use this value for the pulp/ -s lacking data for the parameter, see in Appendix.

B. The lack of data for the parameter represents between 5% and 25% of the pulp mix.

Same instructions for calculations as in A.

When filling in the Paper Profile word form, write an asterisk, "*", after the missing parameters' figures in the parameter fields. At the bottom of the page there is a field where the asterisk is commented:
*) X% of raw data for pulp is missing. Weighted average value of available data have been used.

X= the percentage of the pulp mix that data are lacking for. Fill in your specific X value.

C. The lack of data for the parameter represents more than 25% of the pulp mix.

The parameter shall be marked "Not available".

4.4 PRODUCT COMPOSITION

The composition of the finished product shall be expressed as relative shares (w-%) of the following components. Presentation of information in full percentage figures:

- chemical pulp
- mechanical pulp
- pulp from recovered fibre
- other pulp (specify which)
- pigments and fillers
- binders (e.g. starch, latex)
- moisture

Chemical pulp and mechanical pulp could be combined as virgin pulp, if a company would like to do so. Raw material from recovered fibre is included but paper-mill broke is excluded.

4.5 MORE INFORMATION ABOUT PAPER PROFILE

Specify the contact details of the person in the company able to provide interested parties with more detailed environmental information about the product in question. Contact information shall include the person's address, phone number, e-mail and company web site address. The person and company mentioned here is the responsible publisher of the document.

5 LOGO AND GRAPHIC APPEARANCE OF THE DECLARATION

The graphic appearance of a Paper Profile environmental product declaration is presented in the file including the form.

A Paper Profile logo is to be used in a Paper Profile environmental product declaration to provide a link between the declaration and the Paper Profile initiative. The logo's appearance can be seen in the Paper Profile environmental product declaration form.

6 THE PAPER PROFILE FORM AND THE MANUAL

The latest version of the original form and its manual including appendices are available at the website www.paperprofile.com.

A review of the form and the manual is conducted by the member companies on a regularly basis. Latest valid manual and form at the time of publishing a new Paper Profile declaration should always be used.

7 THE USE OF OTHER LABELS

The usage of labels other than the Paper Profile label is not allowed. However if data reported in the Paper Profile have been verified the logo of the verifying body can be presented in the upper right box.

References to forest certification schemes or other environmental labels and claims are to be included in the text part of the Paper Profile form in the section "Environmental Management".

NOTE

This manual has been prepared with the support of the Paper Profile member companies. A list of the member companies can be found on the Paper Profile website www.paperprofile.com.

A company issuing a Paper Profile environmental product declaration is fully responsible for the information provided in it.

APPENDIX 1

Examples of possible standardised methods for parameters and quantities for measuring emissions to water and air:

Water

COD	ISO6060 2nd ed. 1989. NS 4748, alternatively SFS 3020, SFS 5504, SS028142, DIN 38409 part 41, NFT 90101 or ASTM D 1252 000
AOX	ISO 9562 (1989), Scan W9:89, alternatively SS 028104 or DIN38409 part 14
N_{tot}	SFS 5505:1988, ISO 11905-1:1997, SS 0280101:1992, ISO 5663:1984 + ISO 6777:1984 + ISO 10304-2:1995
P_{Tot}	SS 028102, SFS 3026, NS 4725 or EN 1189:1993

Air

SO_2	NS 4859, SFS 5265, SS 028421, EPA method Nr., NBN T95-201 or T95-202
NO_x	ISO-CD10849, SS 028425 or EPA n:o 7
CO_2 (fossil)	based on emission factors

APPENDIX 2

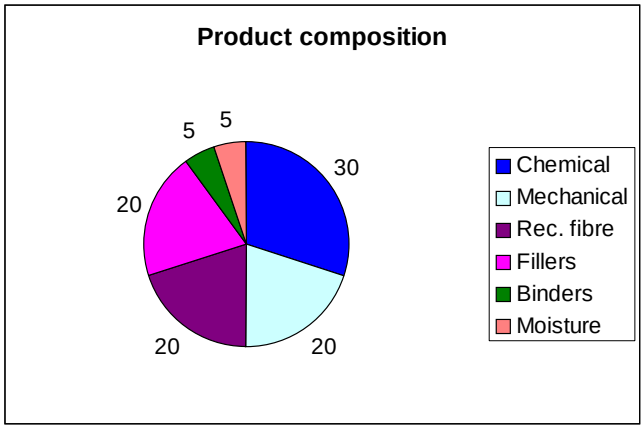
1. All data are missing from one or several pulp suppliers

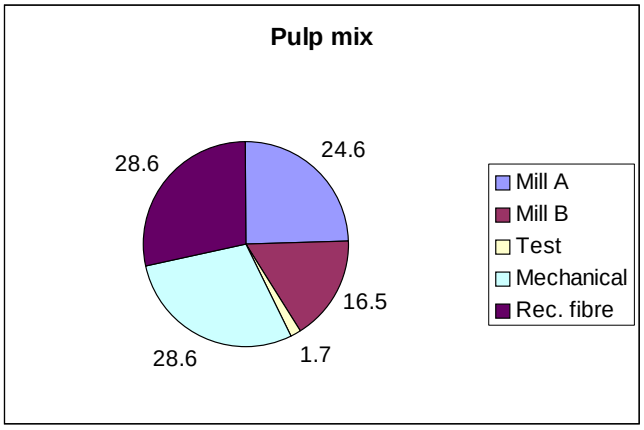
Example: A product contains 30% chemical pulp. Of this chemical pulp, in previous year, 57.5% was from Mill A, 38.5% from Mill B and 4% from a third supplier, Test pulp. The product also contains 20% internal mechanical pulp, 20% recovered fibre, 20% pigments and fillers, 5% binders and 5% moisture.

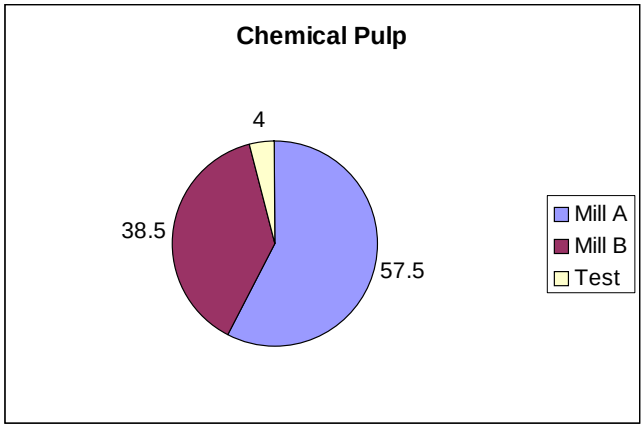
Data are not available for the Test pulp. The shares from Mill A and Mill B are increased proportionally to reach 100%:
Mill A: 57.5*100/96(Mill A + Mill B)≈ 60%
Mill B: 38.5*100/96(Mill A + Mill B)≈ 40%

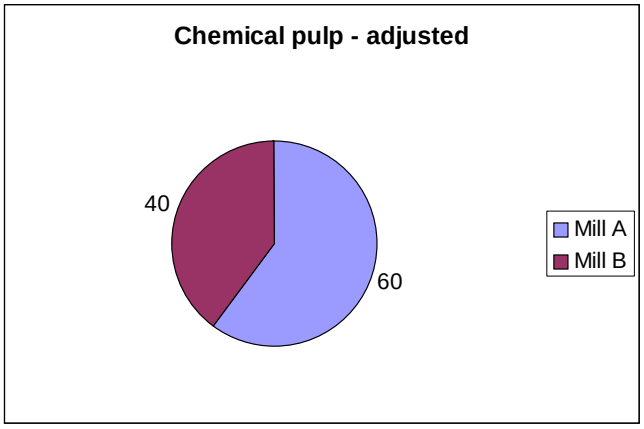
The chemical pulp represents 30/70*100=42.8% of the pulp mix, and the Test pulp represents 4/100*42.8=1.7% of the pulp mix.

The product composition, pulp mix composition, true and adjusted chemical pulp mix are seen in the graphs below.









As the missing data in this case represented less than 5% of the pulp mix, no asterisk is needed on the Paper profile.

2. Data are missing for one environmental parameter from one or several suppliers

Example: We have received data from the supplier of Test pulp in the previous example, but the NOx value is reported as “Not available”.

*The weighted average value of Mill A (1.0 kg/t90) and Mill B (2.0 kg/t90) NOx values is calculated: 0.6*1.0+0.4*2.0=1.4 kg/t90 This NOx value is used for the Test pulp.*