Eco Mark Product Category No. 108

"Sanitary Paper" Version 2.3

Japan Environment Association
Eco Mark Office

1. Environmental Background

Annual production of sanitary paper in Japan in 2001 totaled some 1.71 million tons, of which tissue paper, toilet paper and coarse tissue paper (chirigami) accounted for about 1.48 million tons and it has no recycle use in itself. While some sanitary papers are made exclusively with recycled paper, sanitary paper has contributed to various environmental impacts such as: deforestation of primary resources for raw-materials of paper production; production of paper of excessive brightness which requires selected high-quality raw materials; energy consumption for production, chemical use, and water contamination.

In particular, information on chemical substances is gradually accumulating with the enforcement of the "Law Concerning Reporting, etc. of Release to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management" (the PRTR Law). This leads to an increasing need to clearly prescribe a careful handling of chemicals as an Eco Mark certification condition for sanitary paper.

Currently, the amount of toilet paper made exclusively of waste paper exceeds that of toilet paper containing no recycled raw materials. However, the production percentage of the former to the latter is now rapidly declining.

In addition to the use of the current waste paper and careful handling of chemical substances, wide use of environmentally considered sanitary paper to encourage the use of waste paper will contribute significantly to environmental conservation.

Recently, many international conferences have been held to discuss "sustainable forest management,"and some certification systems are being formulated by third parties. If a consensus can be reached regarding such a certification system, it may be incorporated in the criteria for the Eco Mark certification.

The criteria of this product category No. 108 "Sanitary Paper" will be reviewed as the category has reached the end of its 5-year deadline from its establishment in 1997. The category continues to focus on paper for communication that imparts a reduced burden on the environment in terms of its raw materials, production processes, recycling and disposal.

NOTE: This document is a translation of the criteria written in Japanese. In the event of dispute, the original document should be taken as authoritative.

2. Applicable Products

Tissue paper, toilet paper, and coarse tissue paper (excluding paper towels and other types of sanitary paper).

3. Terminology

- Sanitary paper: A general term for tissue paper, toilet paper, coarse tissue paper, paper towels and other paper for sanitary use.
- Waste paper: Collected post-consumer waste paper and pre-consumer waste paper.
- Post-consumer waste paper: Used paper generated in shops, offices, or homes.
- Pre-consumer waste paper: Paper diverted from the waste stream during the processing stage at facilities which use paper for material such as paper processing factories, paper products factories, printing and book-producing facilities. Excluded is paper generated during processing (in the factories) and reused as a raw material in the same process (and factories).
- Percentage of waste paper pulp: Weight percentage of waste paper pulp in the total pulp contained in the product. Indicated as (waste paper pulp)/(virgin pulp + waste paper pulp) x 100 (%). Pulp containing 10% moisture is used to measure the weight.
- Fluorescent whitening agent: An agent that fluoresces under UV light and visually enhances the whiteness of paper.
- Specified components: Components added intentionally to give products characteristics, excluding impurities that were unavoidably mixed in during the production process.

4. Certification Criteria

4-1. Environmental criteria

(1) The percentage of waste paper in pulp mixture shall be 100%.

(2) The production process shall conform to relevant environmental regulations and agreements on preventing air pollution, water contamination, noise, odor, and emission of hazardous materials.

(3) The product shall not contain fluorescent whitening agents as specified components.

(4) The product packaging shall be designed to facilitate recycling and shall impart a reduced environmental burden when incinerated.

(5) Azo colorants (dyes and pigments) which may generate one or more amines of Table 1 in the decomposition of one or more azo radicals by reduction shall not be used. If used, one or more amines listed in Table 1 shall not be detected in 30 mg per kg or more of the product. (However, this item shall not be applied until February 20, 2004).

4-2. Quality criteria

The quality of the toilet paper shall conform to the provisions of JIS P 4501 concerning areal weight, burst strength, water solubility and form; the quality of tissue paper shall conform to the provisions of JIS S 3104 concerning areal weight and tear strength. Check that there is no elution of fluorescent whitening agent according to "7.7 Elution of Fluorescent Whitening Agent" of JIS S 3104.

5. Certification Procedure

5-1. Certification Procedure for "4-1. Environmental criteria"

(1) Attachments and certificates shall be submitted to indicate compliance to criteria.

(2) For Criterion 4-1.(1), certificates on the percentage of waste paper pulp issued by paper manufacturers shall be submitted. The certificates shall include the specific percentage of waste paper pulp.

(3) For Criterion 4-1.(2), certificates issued by the manager of the plant manufacturing the product stating that environment laws and regulations of the area in which the plant is located have been observed for the past five years since application and that no laws have been violated shall be submitted. If the plant is subject to the PRTR law and is using restricted substances (Class 1 chemical substances) at levels above the specified quantities set down by the law, which requires reporting, then certificates issued by the plant manager on the discharged and transferred amounts for every substance shall be submitted.

(4) For Criterion 4-1.(3), certificates issued by the paper manufacturer indicating whether fluorescent whitening agents are used shall be submitted.

(5) For Criterion 4-1.(4), details shall be indicated in the Attached Certificate.

(6) For Criterion 4-1.(5), certificates issued by the paper manufacturer indicating whether the concerned substances are used shall be submitted. If used, one of the three certificates 1) to 3) below issued by the paper manufacturer to certify that no amines in Table 1 exceeding 30 mg per kg in the product have been detected shall be submitted.

1) Certificates specifying that no azo colarants exceeding 30 mg per kg of the product are contained.

2) Certificates specifying that no amines in Table 1 have been detected exceeding 30 mg per kg of the product after considering every such risk in theory.

3) Certificates specifying that no amines in Table 1 exceeding 30 mg per kg of the product have been detected by an analysis method prescribed in the list of public testing methods based on Article 35 of the German law on foods and daily supplies.

5-2. Certification Procedure for "4-2. Quality Criteria"

(7) For Criterion 4-2.(6), certificates stating that the product complies with app ropriate quality criteria shall be submitted.

Established on February 20, 2003 (Version2.0)
Revised: December 23, 2003 (Eco Mark Usage)
Revised: April 8, 2004 (4-2.(6))
Revised: July 1, 2004 (statements below Eco Mark Version2.1)
Revised: October 14, 2004 (definition of pre-consumer waste paper)
Revised: Nov. 1, 2004
Revised: Oct. 19, 2006 (Version2.3, deletion of 6. Other Requirement)
Term of Validity: March 31, 2009

These certification criteria for the product category will be reviewed in five years after the date of enactment, and the certification criteria and/or the product category will be revised or abolished.

Table 1. Amines that shall not be generated as a result of the decomposition of azo radicals

Chemical substance		CAS No.
1	4-aminodiphenyl	92-67-1
2	benzidine	92-87-5
3	4-chloro-0-toluidine	95-69-2
4	2-naphthylamine	91-59-8
5	0-aminoazotoluene	97-56-3
6	2-amino-4-nitrotoluene	99-55-8
7	p-chloroaniline	106-47-8
8	2,4-diaminoanisole	615-05-4
9	4,4'diaminophenylmethane	101-77-9
10	3,3'dichlorobenzidine	91-94-1
11	3,3'dimethoxybenzidine	119-90-4
12	3,3'dimethylbenzidine	119-93-7
13	3,3'dimethyl-4,4'diaminodiphenylmethane	838-88-0
14	p-cresidine	120-71-8
15	4,4'methylene-bis-(2-chloroaniline)	101-14-4
16	4,4'oxydianiline	101-80-4
17	4,4'thiodianiline	139-65-1
18	0-toluidine	95-53-4
19	2,4-toluilenediamine	95-80-7
20	2,4,5-trimethylaniline	137-17-7
21	0-anisidine	90-04-0