



Recovered Paper Quality Control Guidelines



Preamble

Paper recycling in Europe increased markedly throughout the 1990s. The amount of paper collected and recycled at the end of the decade was roughly two thirds more than at the beginning. This means that the recycling rate (the percentage of recovered paper utilisation compared to total paper consumption) at the European level was 53.9% in 2003, compared to 38.8% in 1990. In 2003, 43.7 million tonnes of recovered paper and board were collected and used as a raw material by the paper industry in Western Europe. The paper industry is convinced that in the years to come these developments will continue.

The Confederation of European Paper Industries (CEPI) and the European Recovered Paper Association (ERPA) jointly signed and launched the European Declaration on Paper Recovery on 9 November 2000. The European Declaration on Paper Recovery pledges that by 2005, 56% of the paper and board products used in Europe will be recycled, and that measures to further improve the environmental performance of the industry will be taken, i.e. to ensure the optimum management of used paper and board products, to improve the quality of recovered paper and to reach a high level of environmental protection in the areas of paper and board manufacturing, collection and processing of used paper and board products. It also means that the industry aims to increase recycling in 2005 by 25%, or in other words, to annually recycle an additional 10 million tonnes or more of recovered paper.

To achieve a better closing of the loop, an optimised collection according to a proper classification of recovered paper by grades, along with a sustainable level of quality of the recovered paper are required.

Over the past few years, one of the main tasks of the CEPI Recycling Committee on behalf of the European paper industry, has been to adopt a common list of "standard qualities for recycled paper in Europe".

Much time and effort has been dedicated to this task, which concluded with a very satisfactory result: the "European List of Standard Grades of Recovered Paper and Board", agreed by the two market parties in recycled paper, represented by CEPI (as buyers) and ERPA (as suppliers). Since January 1999, this list has been available and used in Europe by the paper mills and the recovered paper and board traders as a reference in their commercial relationship and has become the official European standard in 2001 (EN 643). General recommendations are nevertheless needed to facilitate the common understanding of the list and have to be established by CEPI and ERPA. Specific agreements between buyer and supplier for grades with special specifications might still be necessary to meet individual requirements and would not be excluded by any implied regulations associated with the publication of the EN 643 Standard.

Nevertheless, heterogeneous quality control practices take place in the recovered paper plants and mills, the outcome of which may lead to discrepancies regarding the recovered paper grade classification, according to the definitions established in the EN 643 Standard.

To achieve greater harmonisation, to improve the implementation of the EN 643 Standard and to facilitate commercial relationships between paper mills and recovered paper merchants, it has been decided to set up guidelines with respect to the recovered paper quality control processes at paper mills. These guidelines will contain recommendations regarding recovered paper quality controls made at the recovered paper plants and mills. Concerning the quality controls made at the mills, general principles in a first step and specific principles by grade in a second step have to be clearly established and supported by technical annexes.

Guidelines

Summary

These guidelines are to be seen as recommendations to the recovered paper buyers and sellers in order to achieve a better understanding and relationship. They apply to all grades of recovered paper and board and are subject to continuous improvement.

Specifications should be written by grades according to the EN 643 European List of Standard Grades of Recovered Paper and Board. Both parties must be in compliance with the health, safety and environmental requirements. Health and safety will take precedent over all other issues.

- 1) Description of the procedure of mutual agreement, standard terms and conditions including baling and transport conditions should be indicated as part of the general conditions for suppliers' approval.
- 2) Training and education for employees from both sides with common background should be recommended. Quality controllers should be independent from the commercial department.
- 3) Reference to the EN 643 Standard should be made by the contractors. Specific agreements between buyer and supplier for grades with special specifications are necessary to meet individual requirements.
- 4) Recovered paper buyers and suppliers should be aware of the quality control procedures and system used at the recovered paper plant and at the paper mill before the first contract is signed between them.
- 5) Information should be given through a delivery document by the suppliers to the buyers at delivery to the paper mill.
- 6) Results of the quality controls made at the paper mills and at the recovered paper plants can be available on request and on a reciprocity basis.
- 7) Information on the results of the quality controls should be given by the buyers to the suppliers through periodical reports.
- 8) Conditions for reject and re-classification should be clearly established.
- 9) The procedure to solve conflicts and reach a global acceptance of the results by both sides should be settled between the individuals according to their own agreements. Recommendations have to be further developed.
- 10) The conditions and the limits of the ownership of the recovered paper and the responsibility for the materials delivered should be clearly established between the supplier and the buyer.

Guidelines in detail

- 1) **Description of the procedure of mutual agreement, standard terms and conditions including baling and transport conditions should be indicated as part of the general conditions for suppliers' approval.**
 - A description of the procedure of mutual agreement should be made. If both parties agree, an external audit may be ordered to support the procedure of mutual agreement.
 - Reference to ISO should be made when the paper mill or the recovered paper plant holds a certificate. ISO or equivalent schemes or certificates should be recommended.
 - Baling conditions should be clearly detailed and mentioned to the supplier by the buyer. See separate insert for further details.
 - Transport:
 - minimum tonnage by delivery
 - transport conditions
 - compliance with time schedule as agreed by both parties
 - safety
- 2) **Training and education for employees from both sides with common background should be recommended. Quality controllers should be independent from the commercial department.**
- 3) **Reference to the EN 643 Standard should be made by the contractors. Specific agreements between buyer and supplier for grades with special specifications are necessary to meet individual requirements.**
 - The EN 643 Standard gives a general description of the standard grades by defining what they do and do not contain.
 - Reference to the EN 643 Standard should be clearly made in each contract with regard to the classification of recovered paper.
 - The EN 643 Standard is for use by industry professionals, organisations and individuals with an interest in the recovered paper sector to assist in the buying and selling of this raw material intended for recycling by the paper and board industry.
 - It is not the purpose to specify all the qualities of recovered paper and board that exist in the different markets, but rather to define those qualities most commonly traded in Europe. The description of the grades is brief, and for this reason it is recognised that specific agreements between buyer and supplier for grades with special specifications may still be necessary to meet individual requirements and may not be excluded by any implied regulations associated with the publication of the EN 643 Standard.

Guidelines in detail

4) Recovered paper buyers and suppliers should be aware of the quality control procedures and system used at the recovered paper plant and at the paper mill before the first contract is signed between them.

- A description of the recovered paper quality control procedures and system installed and operating at the paper mill should be given by the buyer to the supplier before the first contract is signed between them. Any substantial modification (a new test for instance) should be communicated to the supplier.
- A description of the recovered paper quality control procedures and system installed and operating at the recovered paper plants - currently only visual control and weight measurement - should be given by the supplier to the buyer before the first contract is signed between them. Any substantial modification (a new test for instance) should be communicated to the buyer.

5) Information should be given through a delivery document by the suppliers to the buyers at delivery to the paper mill.

- Quality controls (weight and visual controls) have to be made at the recovered paper plants.
- One delivery document has to be established per load and a copy has to be given to the paper mill.
- The delivery document must at a minimum include:
 - The identification of the contract partner, with an identification number if it exists or a name
 - The identification of the trailer
 - The delivered grade: numerical code according to the EN 643 List of European Standard Grades of Recovered Paper and Board. Special "mill grades" are possible. In such cases, the standardised grades composing such special "mill grades" should be specified.
 - The weight
 - The number of bales or bulk

- Paper mills may ask for a declaration from the supplier about the origin of the material in relation to the EN 643 Standard.
- Conditions for information release (timing...) will have to be further developed and clearly determined.

6) Results of the quality controls made at the paper mills and at the recovered paper plants can be available on request on a reciprocity basis.

6.1) Controls at the sorting plants

- Visual controls and use of calibrated weighbridge should be considered as a minimum.

6.2) Controls at the paper mills

The following criteria have to be observed as far as recovered paper quality controls are concerned:

Moisture content

Recovered paper and board will, in principle, be supplied with moisture of not more than the naturally occurring level. Where the moisture content is higher than 10% (of air dried weight), the additional weight in excess of 10% may be claimed back - with the method of testing and sampling to be agreed between buyer and seller (as mentioned in the EN 643 Standard).

Non-paper components: contaminants/impurities

These consist of any foreign matter in the recovered paper and board, which during processing may cause damage to machines or interruptions to production or may reduce the value of the finished products, such as:

- metal
- plastic
- glass
- textiles
- wood
- sand and building materials
- synthetic materials
- "synthetic papers"

Guidelines in detail

Paper and board detrimental to production

These are grades of paper and board which have been recovered or treated in such a way that they are, for a basic or standard level of equipment, unsuitable as raw material for the manufacture of paper and board, or are actually damaging, or whose presence makes the whole consignment of paper unusable.

The criteria for defining the percentage of "unusable materials" for these grades will be subject to individual mills' specifications.

Materials and technologies used

- Visual controls are necessary and have to be made at the trailer and during unloading.
- All the paper mills should have an officially calibrated weighing system.
- Facilities that allow sampling from the bales and thus measure at least moisture and non-paper components content, such as "core drills", are highly recommended. The number of bales per truck, which have to be submitted to test, has to be determined. Bales have to be chosen at random.
- All the mills should try to follow the evolution of the technology in this field and acquire new processes when available and proved to be able to allow more reliable and quicker tests.

7) Information on the results of the quality controls should be given by the buyers to the suppliers through periodical reports.

- A periodical report on the results of the controls has to be given to the suppliers. In case of rejects, the results of the controls have to be given immediately.
- Recalculation of weight has to be mentioned immediately according to the moisture content, percentage of contaminants, and/or percentage of non-conformity. Downgrading has to be mentioned. It remains the decision of the supplier to immediately take the full loading of the recovered paper volume concerned back.

8) Conditions for reject and re-classification should be clearly established.

- Precision has to be given regarding the threshold, the requirements and clear conditions for re-classification from one grade to another. Recommendations have to be further developed.

9) The procedure to solve conflicts and reach a global acceptance of the results by both sides should be settled between the individuals according to their own agreements. Recommendations have to be further developed.

10) The conditions and the limits of the ownership of the recovered paper and the responsibility for the materials delivered should be clearly established between the supplier and the buyer.



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