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Saudi Standards, Metrology and Quality Org (SASO)



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Circular Economy – Recycling of Paper and Cardboard Waste and Scrap

الاقتصاد الدائري – إعادة تدوير نفايات وخردة الورق والكرتون

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BOARD OF DIRECTOR

Foreword

The national Circular Economy technical Committee of Saudi Standards, Metrology and Quality Organization (SASO) has prepared the Saudi Standard “*Circular Economy – Recycling of Paper and Cardboard Waste and Scrap* ” based on relevant ADMO, International and National foreign Standards and references

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Introduction:

The transition toward a circular economy represents a fundamental enabler for achieving environmental sustainability and optimizing resource efficiency within the Kingdom of Saudi Arabia. In alignment with national directives for integrated waste management and the strategic objectives of the National Waste Strategy, this standard strengthens the principles of circularity by promoting the recovery, recycling, and valorization waste and scrap.

Accordingly, the National Technical Committee for the Circular Economy plays a pivotal role in advancing Saudi Arabia's shift toward a more sustainable and resource-efficient future. Through its initiatives, the committee seeks to develop and adopt internationally aligned standards that foster responsible production, minimize waste generation, and drive innovation across industrial sectors.

In conclusion, the committee's objective is to establish a comprehensive framework for the sustainable management of paper and cardboard waste and scrap through systematic recycling practices that enhance material recovery, reduce reliance on primary raw resources, and mitigate environmental impacts. It underscores the importance of adopting efficient collection, sorting, and processing methods that ensure product quality, traceability, and adherence to environmental and safety requirements.

1. Scope

This document specifies the recycling standards to be applied in the Kingdom of Saudi Arabia in relation to paper and cardboard waste, including materials from:

- Commercial sources such as paper waste from offices and packaging and paper waste from retail, etc.,
- Manufacturing industries such as paper waste during the production of paper and cardboard products, including packaging,
- Households such as newspapers, magazines, printed marketing material, cardboard packaging, and printing paper,
- Institutions (paper waste from schools, hospitals, and government offices),
- The waste treatment sector (e.g., paper waste separated from dry mixed recyclables),
- Uncontaminated paper and packaging materials from any other sectors, including agriculture and food industry, finance and administration, e-commerce and shipping, hospitality and events, construction, healthcare etc.

The scope of this standard includes the segregation, processing, and recycling of these materials to ensure environmentally sound practices and compliance with National Waste Strategy Targets. These standards apply to recycling facilities and waste management companies and are relevant for consideration by major waste producers involved in the generation and segregation of paper and cardboard materials for recycling.

Note: This standard applies to Recyclers producing Paper and Cardboard bales.

Paper and cardboard waste must comply with the quality standards, be recovered domestically or internationally, and adhere to the requirements described in Annex I, Annex IV and Annex VI. Paper and cardboard waste must be transported in clean, labelled containers/bales with batch and grade details to avoid contamination and ensure appropriate processing for recycling. Recovered paper and cardboard is traded with reference to its grade, as described in Annex VI, with the main grades being Group 1: Ordinary grades, Group 2: Medium grades, Group 3: High grades, Group 4: Kraft grades, and Group 5: Special grades.

The recovered paper and cardboard materials must meet contamination limits, and external quality monitoring is required regularly, with records to be kept for five years. A sampling protocol is also mandatory, and feedback must be solicited from the recycling facilities to ensure product quality. A quality management system covering input acceptance, process monitoring, product sampling, and feedback from the recycling facilities must be put in place to ensure consistent quality.

1.1. ACCEPTABLE WASTE TYPES

For the purpose of clarifying the full scope of the wastes addressed in this standard, the following Main World Customs Organization (WCO) Harmonized System (HS) codes of paper and cardboard waste and scrap apply.

Heading	H.S. Code ¹	Description
47.07		Recovered (waste and scrap) paper or paperboard.
	4707.10	• Unbleached kraft paper or paperboard or corrugated paper or paperboard
	4707.20	• Other paper or paperboard made mainly of bleached chemical pulp, not coloured in the mass
	4707.30	• Paper or paperboard made mainly of mechanical pulp (for example, newspapers, journals and similar printed matter)
	4707.90	• Other, including unsorted waste and scrap

The below tables include all potential inputs of recycled fibre to the recycling (converting) process (the paper mill) but the acceptable types and proportions of each type of input waste in the overall mix is likely to vary according to each customer's requirements, whether this is the paper mill or intermediate buyers of recycled fibre, and to comply with the other requirements of this standard.

Paper and cardboard waste can be generated from the following HS Code materials:

1- Paper and paperboard; articles of paper pulp, of paper or of paperboard:

Heading	H.S. Code ²	Description
48.01		Newsprint, in rolls or sheets.
48.02		Uncoated paper and paperboard, of a kind used for writing, printing or other graphic purposes, and non-perforated punch-cards and punch tape paper, in rolls or rectangular (including square) sheets, of any size, other than paper of heading 48.01 or 48.03; hand-made paper and paperboard.
	4802.10 4802.20 4802.40 4802.54 4802.55 4802.56 4802.57 4802.58 4802.61	• Hand-made paper and paperboard • Paper and paperboard of a kind used as a base for photo-sensitive, heat-sensitive or electro-sensitive paper or paperboard • Wallpaper base • Other paper and paperboard, not containing fibers obtained by a mechanical or chemi-mechanical process or of which not more than 10 % by weight of the total fiber content consists of such fibers : • Weighing less than 40 g/m² • Weighing 40 g/m² or more but not more than 150 g/m², in rolls

¹ HS (Harmonized System) codes (export/import codes) under Heading 2710, Chapter 27, Section V of Mineral Products.

² HS (Harmonized system) codes (export / import codes) 0848-2022E

Heading	H.S. Code ²	Description
	4802.62 4802.69	• Weighing 40 g/m² or more but not more than 150 g/m², in sheets with one side not exceeding 435 mm and the other side not exceeding 297 mm in the unfolded state • Other, weighing 40 g/m² or more but not more than 150 g/m² • Weighing more than 150 g/m² • Other paper and paperboard, of which more than 10 % by weight of the total fiber content consists of fibers obtained by a mechanical or chemi-mechanical process: • In rolls • In sheets with one side not exceeding 435 mm and the other side not exceeding 297 mm in the unfolded state • Other
48.03	Toilet or facial tissue stock, towel or napkin stock and similar paper of a kind used for household or sanitary purposes, cellulose wadding and webs of cellulose fibers, whether or not creped, crinkled, embossed, perforated, surface -colored, surface-decorated or printed, in rolls or sheets.	
48.04	Uncoated kraft paper and paperboard, in rolls or sheets, other than that of heading 48.02 or 48.03.	
	4804.11	• Kraftliner :
	4804.19	• Unbleached
		• Other
	4804.21	• Sack kraft paper:
	4804.29	• Unbleached
		• Other
	4804.31	• Other kraft paper and paperboard weighing 150 g/m ² or less:
	4804.39	• Unbleached
		• Other
	4804.41	• Other kraft paper and paperboard weighing more than 150 g/m ² but less than 225 g/m ² :
	4804.42	• Unbleached
		• Bleached uniformly throughout the mass and of which more than 95 % by weight of the total fiber content consists of wood fibers obtained by a chemical process
	4804.49	• Other
	4804.51	• Other kraft paper and paperboard weighing 225 g/m ² or more:
	4804.52	• Unbleached
		• Bleached uniformly throughout the mass and of which more than 95 % by weight of the total fiber content consists of wood obtained by a chemical process
	4804.59	• Other

Heading	H.S. Code ²	Description
48.05	Other uncoated paper and paperboard, in rolls or sheets, not further worked or processed than as specified in Note 3 to this Chapter.	
	4805.11 4805.12 4805.19	• Fluting paper: • Semi-chemical fluting paper • Straw fluting paper • Other
	4805.24 4805.25	• Testliner (recycled liner board): • Weighing 150 g/m² or less • Weighing more than 150 g/m²
	4805.30	• Sulphite wrapping paper
	4805.40	• Filter paper and paperboard
	4805.50	• Felt paper and paperboard
	4805.91 4805.92 4805.93	• Other: • Weighing 150 g/m² or less • Weighing more than 150 g/m² but less than 225 g/m² • Weighing 225 g/m² or more
48.06	Vegetable parchment, greaseproof papers, tracing papers and glassine and other glazed transparent or translucent papers, in rolls or sheets.	
	4806.10	• Vegetable parchment
	4806.20	• Greaseproof papers
	4806.30	• Tracing papers
	4806.40	• Glassine and other glazed transparent or translucent papers
48.07	4807.00	Composite paper and paperboard (made by sticking flat layers of paper or paperboard together with an adhesive), not surface-coated or impregnated, whether or not internally reinforced, in rolls or sheets.
48.08	Paper and paperboard corrugated (with or without glued flat surface sheets), creped, crinkled, embossed or perforated, in rolls or sheets, other than paper of the kind described in heading 48.03.	
	4808.10	• Corrugated paper and paperboard, whether or not perforated
	4808.40	• Kraft paper, creped or crinkled, whether or not embossed or perforated
	4808.90	• Other
48.09	Carbon paper, self-copy paper and other copying or transfer papers (including coated or impregnated paper for duplicator stencils or offset plates), whether or not printed, in rolls or sheets.	
	4809.20	• Self-copy paper
	4809.90	• Other
48.10	Paper and paperboard, coated on one or both sides with kaolin (China clay) or other inorganic substances, with or without a binder, and with no other coating,	

Heading	H.S. Code ²	Description
		whether or not surface-colored, surface -decorated or printed, in rolls or rectangular (including square) sheets, of any size.
	4810.13 4810.14 4810.19 4810.22 4810.29 4810.31 4810.32 4810.39 4810.92 4810.99	• Paper and paperboard of a kind used for writing, printing or other graphic purposes, not containing fibers obtained by a mechanical or chemi-mechanical process or of which not more than 10% by weight of the total fiber content consists of such fibers: • In rolls • In sheets with one side not exceeding 435 mm and the other side not exceeding 297 mm in the unfolded state • Other: • Paper and paperboard of a kind used for writing, printing or other graphic purposes, of which more than 10% by weight of the total fiber content consists of fibers obtained by a mechanical or chemi-mechanical process: • Lightweight coated paper • Other • Kraft paper and paperboard, other than that of a kind used for writing, printing or other graphic purposes: • Bleached uniformly throughout the mass and of which more than 95% by weight of the total fiber content consists of wood fibers obtained by a chemical process, and weighing 150 g/m² or less • Bleached uniformly throughout the mass and of which more than 95% by weight of the total fiber content consists of wood fibers obtained by a chemical process, and weighing more than 150 g/m² • Other • Other paper and paperboard: • Multi-ply • Other
48.11		Paper, paperboard, cellulose wadding and webs of cellulose fibers, coated, impregnated, covered, surface-colored, surface-decorated or printed, in rolls or rectangular (including square) sheets, of any size, other than goods of the kind described in heading 48.03, 48.09 or 48.10.
	4811.10 4811.41 4811.49 4811.51 4811.59	• Tarred, bituminised or asphalted paper and paperboard • Gummed or adhesive paper and paperboard: • Self-adhesive • Other • Paper and paperboard coated, impregnated or covered with plastics (excluding adhesives): • Bleached, weighing more than 150 g/ m² • Other

Heading	H.S. Code ²	Description
	4811.60 4811.90	- Paper and paperboard, coated, impregnated or covered with wax, paraffin wax, stearin, oil or glycerol - Other paper, paperboard, cellulose wadding and webs or cellulose fibers
48.12	4812.00	Filter blocks, slabs and plates, of paper pulp.
48.13	Cigarette paper, whether or not cut to size or in the form of booklets or tubes.	
	4813.10	In the form of booklets or tubes
	4813.20	In rolls of a width not exceeding 5 cm
	4813.90	Other
48.14	Wallpaper and similar wall coverings; window transparencies of paper.	
	4814.20	Wallpaper and similar wall coverings, consisting of paper coated or covered, on the face side, with a grained, embossed, colored, design-printed or otherwise decorated layer of plastics
	4814.90	Other
48.16	Carbon paper, self-copy paper and other copying or transfer papers (other than those of heading 48.09), duplicator stencils and offset plates, of paper, whether or not put up in boxes.	
	4816.20	Self-copy paper
	4816.90	Other
48.17	Envelopes, letter cards, plain postcards and correspondence cards, of paper or paperboard; boxes, pouches, wallets and writing compendiums, of paper or paperboard, containing an assortment of paper stationery.	
	4817.10	Envelopes
	4817.20	Letter cards, plain postcards and correspondence cards
	4817.30	Boxes, pouches, wallets and writing compendiums, of paper or paperboard, containing an assortment of paper stationery
48.18	Toilet paper and similar paper, cellulose wadding or webs of cellulose fibers, of a kind used for household or sanitary purposes, in rolls of a width not exceeding 36 cm, or cut to size or shape; handkerchiefs, cleansing tissues, towels, tablecloths, serviettes, napkins for babies, tampons, bed sheets and similar household, sanitary or hospital articles, articles of apparel and clothing accessories, of paper pulp, paper, cellulose wadding or webs of cellulose fibers.	
	4818.10	Toilet paper
	4818.20	Handkerchiefs, cleansing or facial tissues and towels
	4818.30	Tablecloths and serviettes

Heading	H.S. Code ²	Description
	4818.40	Sanitary towels and tampons, napkins and napkin liners for babies and similar sanitary articles
	4818.50	Articles of apparel and clothing accessories
	4818.90	Other
48.19	Cartons, boxes, cases, bags and other packing containers, of paper, paperboard, cellulose wadding or webs of cellulose fibers; box files, letter trays, and similar articles, of paper or paperboard of a kind used in offices, shops or the like.	
	4819.10	Cartons, boxes and cases, of corrugated paper or paperboard
	4819.20	Folding cartons, boxes and cases, of non-corrugated paper or paperboard
	4819.30	Sacks and bags, having a base of a width of 40 cm or more
	4819.40	Other sacks and bags, including cones
	4819.50	Other packing containers, including record sleeves
	4819.60	Box files, letter trays, storage boxes and similar articles, of a kind used in offices, shops or the like
48.20	Registers, account books, notebooks, order books, receipt books, letter pads, memorandum pads, diaries and similar articles, exercise books, blotting-pads, binders (loose-leaf or other), folders, file covers, manifold business forms, interleaved carbon sets and other articles of stationery, of paper or paperboard; albums for samples or for collections and book covers, of paper or paperboard.	
	4820.10	Registers, account books, notebooks, order books, receipt books,
	4820.20	Letter pads, memorandum pads, diaries and similar articles
	4820.30	Exercise books
	4820.40	Binders (other than book covers), folders and file covers
	4820.50	Manifold business forms and interleaved carbon sets
	4820.90	- Albums for samples or for collections - Other
48.21	Paper or paperboard labels of all kinds, whether or not printed.	
	4821.10	Printed
	4821.90	Other
48.22	Bobbins, spools, cops and similar supports of paper pulp, paper or paperboard (whether or not perforated or hardened).	
	4822.10	Of a kind used for winding textile yarn
	4822.90	Other
48.23	Other paper, paperboard, cellulose wadding and webs of cellulose fibers, cut to size or shape, other articles of paper pulp, paper, paperboard, cellulose wadding or webs of cellulose fibers.	
	4823.20	Filter paper and paperboard
	4823.40	Rolls, sheets and dials, printed for self-recording apparatus

Heading	H.S. Code ²	Description
	4823.61 4823.69	• Trays, dishes, plates, cups and the like, of paper or paperboard: • Of bamboo • Other
	4823.70	• Moulded or pressed articles of paper pulp
	4823.90	• Other

Note: HS codes 48.03 and 48.18 are only applicable as potential inputs of recycled fibre only if the material is surplus stock, unused, or off-spec.

2- Paper and paperboard; articles of paper pulp, of paper or of paperboard:

Heading	H.S. Code ³	Description
49.01	Printed books, brochures, leaflets and similar printed matter, whether or not in single sheets.	
	4901.10	• In single sheets, whether or not folded
	4901.91 4901.99	• Other: • Dictionaries and encyclopedias, and serial instalments thereof • Other
49.02	Newspapers, journals and periodicals, whether or not illustrated or containing advertising material.	
	4902.10	• Appearing at least four times a week
	4902.90	• Other
49.03	Children's picture, drawing or coloring books.	
	4903.10	• Picture books
	4903.20	• Drawing or coloring books
49.04	4904.00	Music, printed or in manuscript, whether or not bound or illustrated.
49.05	Maps and hydrographic or similar charts of all kinds, including atlases, wall maps, topographical plans and globes, printed.	
	4905.20	• In book form
	4905.90	• Other.
49.06	4906.00	Plans and drawings for architectural, engineering, industrial, commercial, topographical or similar purposes, being originals drawn by hand; hand-written texts; photographic reproductions on sensitized paper and carbon copies of the foregoing.
49.07	4907.00	Unused postage, revenue or similar stamps of current or new issue in the country in which they have, or will have, a recognized face value; stamp-impressed paper; banknotes; cheque forms; stock, share or bond certificates and similar documents of title.

*3 HS (Harmonized system) codes (export / import codes) **0849-2022E***

49.08	Transfers (decalcomanias).	
	4908.10	• Transfers (decalcomanias), vitrifiable
	4808.90	• Other
49.09	Printed or illustrated postcards; printed cards bearing personal greetings, messages or announcements, whether or not illustrated, with or without envelopes or trimmings.	
	4909.10	• Greetings or Wedding cards
	4909.90	• Other
49.10	4910.00	Calendars of any kind, printed, including calendar blocks.
49.11	Other printed matter, including printed pictures and photographs.	
	4911.10	• Trade advertising material, commercial catalogues and the like
	4911.91	• Other:
	4911.99	• Pictures, designs and photographs • Other

2. Normative References

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document. For the undated documents, only the latest versions (including all the amendments) are applicable to this standard.

- National Waste Management Law and Implementing Regulations.
- Council of Ministers order No. 457, date 11/8/1440 AH for The National Center for Waste Management establishment.
- Royal Decree No. M/10 Dated 1392-03-03 for The Saudi Standards, Metrology and Quality Organization (SASO) establishment.
- Commission Decision of 3 May 2000 establishing a list of wastes (2000/532/EC).
- ISRI Scrap Specifications Circular 2022.
- HS (Harmonized system) codes (export / import codes) 0847-2022E, 0848-2022E and 0849-2022E.
- SASO-GSO-1856:2008: Marking of recycled paper and board
- SASO-ASTM-D5663: 2015 - Standard Guide for Validating Recycled Content in Packaging Paper and Paperboard

3. Terms and Definitions

For the purpose of this standard, the definitions set out in the National Waste Management Law and Implementing Regulations must be considered.

In addition, the following definitions apply in this standard and do not replace the definitions in the National Waste Management Law and Implementing Regulations:

Term	Definition
By-product	As specified and detailed by the MWAN and relevant competent authorities
Center	National Center for Waste Management
Collection	Collecting waste from designated storage containers of various sizes and types using trucks and machinery designated for such purpose
Collectors	Entities that are responsible for collecting waste from designated storage containers of various sizes and types using trucks and machinery designated for such purpose.
Consignment	Refers to a batch of the waste concerned which is intended for delivery from a producer to another holder and may be contained in either one or several transport units, such as containers
Converters	Converters take recycled materials and transform them into new products. This step often involves significant manufacturing processes.
End of Waste	As specified and detailed by the MWAN and relevant competent authorities
Fiber	Refers to cellulose fiber which is the main component of paper and cardboard waste. Paper and Cardboard waste is commonly referred to as fiber by the industry. Cellulose fibers are extracted at paper mills as raw material to manufacture new paper and cardboard products.
Hazardous waste	Waste that is classified as hazardous under this Law and the Regulations, and generated from industrial or non-industrial activities which contain toxic, flammable, reactive, or corrosive materials, or solvents, degreasers, oils, dyes and pigments, pasty residues, or acids and alkalis
Holder	Refers to the natural or legal person who is in possession of the waste material.
Importer of waste	Refers to any natural or legal person established within the Kingdom of Saudi Arabia who introduces waste into the customs territory of the Kingdom
Inspector and/or inspectors	Persons designated by a decision of the Minister to take charge of detecting, proving and investigating violations of the provisions of the Law and the Regulations, jointly or individually
ISRI	Refers to the US trade association 'Institute of Scrap Recycling Industries' (ISRI) publishes yearly a so-called scrap specification circular.
Law	Waste Management law
License	A written permission issued by the Center to carry out any activity related to waste management, as specified in this Law and the Regulations.

Term	Definition
Minister	Minister of Environment, Water, and Agriculture, and Chairman of the Center's Board of Directors
Multi-Material Paper	Refers to waste paper, such as used beverage cartons and layered and coated packaging, containing more than 5% of air-dry weight of non-paper materials that cannot be separated using dry sorting techniques
Non-hazardous waste	Waste that does not formulate a threat to public health or the environment, and which cannot be classified under any circumstances as hazardous waste
Non-paper and cardboard components: Also known as contraries or impurities	Refers to the materials different from paper and cardboard, which are present in waste paper and cardboard. Examples of non-paper and cardboard components are metals, plastic, glass, textiles, earth, sand, dust, wax, bitumen, ceramics, burnt or fire damaged materials, textiles, leather, rubber, wood and other chemical or organic substances. In addition to this definition, there is a list of materials to which there is zero tolerance e.g. health care waste, hazardous waste, foodstuffs, toxic compounds, or used personal hygiene products
Paper and Cardboard waste	Refers to paper and cardboard discarded, intended to be discarded, or required to be discarded, including material separately collected for recycling as well as paper and cardboard recovered from mixed dry recycling at a Material Recovery Facility (MRF)
Permit	A document issued to waste recycling facilities by the Center to verify their compliance with the Center's controls and requirements prior to obtaining the licenses issued by the competent agencies in accordance with their regulations.
Qualified staff	Refers to staff which is qualified by experience or training to monitor and assess the properties of the waste concerned
Recovered Paper and Cardboard or Output material	Refers to paper and cardboard waste collected through dry mixed recycling, separated at MRFs and processed.
Recycled Paper and Cardboard	Refers to paper and cardboard produced by reprocessing recovered paper or cardboard waste at paper mills or recycling units, which is then reformed into new paper and cardboard products
Recycler	Entities that are responsible for the process of transforming specific waste components into usable materials for the purpose of recovering such components or using them as raw materials in manufacturing processes
Recycling	The process of transforming specific waste components into usable materials for the purpose of recovering such components or using them as raw materials in manufacturing processes.
Regulations	Implementing Regulations of this Law
Resource recovery	The process of recovering energy, raw materials, or any other product from waste for reuse.

Term	Definition
Retailers	Retailers are businesses that sell products directly to consumers. They play a crucial role in the recycling chain by influencing consumer behaviour, offering sustainable products, and facilitating recycling initiatives.
Service Provider	A person who holds a license or permit to engage in any waste management activity.
Sorters	Entities that are responsible for manually or automatically separating waste components, such as paper, glass, metals, and the like, in transfer stations or sorting and treatment facilities for the purpose of recycling or treatment
Sorting	Manually or automatically separating waste components, such as paper, glass, metals, and the like, in transfer stations or sorting and treatment facilities for the purpose of recycling or treatment.
Storage	Temporarily storing all or part of the components of waste for transportation or future use.
Transportation	Transporting waste using approved means of transportation to transfer stations, treatment or sorting facilities, or designated landfills.
Treatment	The use of physical, biological, or chemical means; a combination of such means; or other means to change the properties of waste in order to reduce its size, make it easier to reuse or recycle, extract certain products therefrom, or remove organic pollutants and other pollutants, for the purpose of reducing particular waste components or benefiting therefrom, or eliminating their potential harm to humans or the environment.
User	Refers to construction and infrastructure, sports and recreation surfaces, automotive and transportation, agriculture and horticulture, industrial applications, consumer goods and household items, energy recovery or individual responsible for the use of recycled paper and cardboard.
Visual inspection	Refers to inspection of the waste concerned covering all parts of a consignment and using human senses or any non-specialized equipment
Waste	All materials that are thrown or disposed of, and that directly or indirectly affect public health or the environment
Waste management	Managing any activity or practice related to waste, such as waste collection, transportation, sorting, storage, treatment, recycling, import, export, and safe disposal, including the aftercare of waste disposal sites.
Waste Producer	A person who produces the waste classified under this Law
Waste Processor	Any individual, organization, or entity responsible for managing waste. This includes the collection, transportation, treatment, recycling, recovery, or disposal of waste materials. Waste processors ensure that

Term	Definition
	waste is handled in compliance with relevant environmental, health, and safety regulations

4. General Requirements

4.1. General Application Of The Waste Hierarchy

Article 11, chapter 3 of the waste management law provides the following waste hierarchy that shall apply as a priority order in waste prevention and management for the waste concerned:

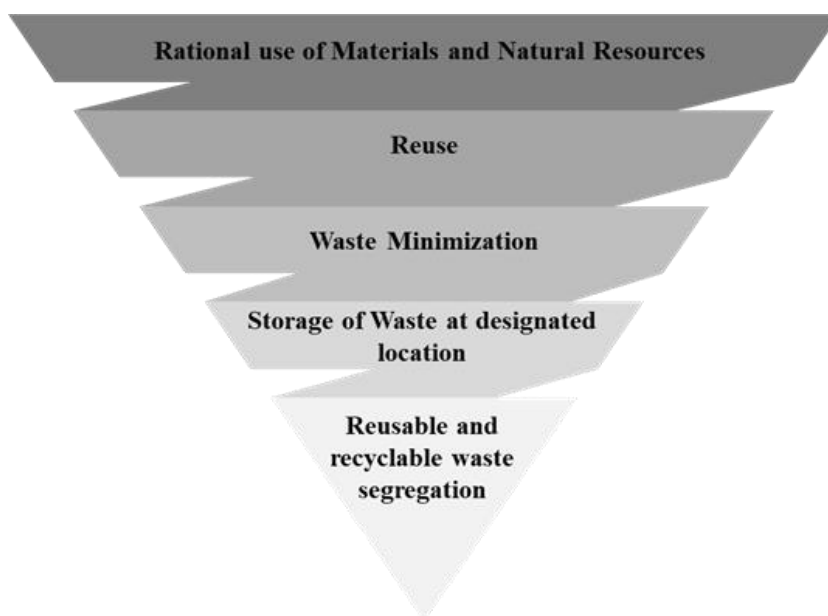


Figure 1: Waste Hierarchy

- a) The use of materials and natural resources will be rationalized;
- b) Wherever possible the waste will be re-used;
- c) Wherever rational use of materials and reuse is not possible, the waste will be minimized;
- d) Waste will be stored at the designated locations, in accordance with the requirements specified by the Regulation;
- e) The waste that can be reused or recycled will be sorted and placed in designated locations.

4.2. Requirement To Hold A Permit To Manage Wastes

All parties that undertake activities involving the treatment, recovery, or recycling of waste must hold the necessary permit(s) and/or license(s) from MWAN and other relevant competent authorities to undertake the relevant activity for the waste concerned.

5. Input Requirements

5.1. Specified Input Materials

Paper and cardboard waste which is specified as input materials typically come from the waste sources as specified in Section. خطأ! لم يتم العثور على مصدر المرجع.

Paper and cardboard waste to be used as input material in the recycling operation must meet the criteria of acceptable paper and cardboard waste set out in Annex I.

5.2. Incoming Inspections

Parties that carry out waste recycling to recover materials that is suitable for recycling must check, as part of an incoming delivery inspection, whether the materials they receive, and their own materials are suitable for production of recycled material. In particular, incoming inspections must be conducted in compliance with the criteria of acceptable paper and cardboard waste, indicated within Annex I. Any starting materials that do not meet these requirements must be excluded from the paper and cardboard recycling process. Details including their origin, producer/importer of original waste information, type of waste, and quantity of the consignment in tonnes, reason of noncompliance, as well as their whereabouts must be recorded separately.

5.3. Input Record Keeping

A record of all consignments shall be maintained by the waste processor for a period of five years and made available for inspection upon request by MWAN and any other relevant competent authority. The records shall specify the origin, type, and quantity of each consignment.

- Waste type
- Waste volume or weight
- Waste source of the waste
- Delivery date
- Waste acceptance review (demonstrating the waste accepted is compatible with the allowed inputs)

5.4. Storage Of Input Materials

The incoming waste shall be stored in a covered area and under dry conditions and stored separately from any other waste streams that may be managed on the same site. Storage should prevent access by pests, should prevent ingress by climatic conditions that may affect the materials stored and storage time should be minimized as much as possible.

6. Processing Requirements

6.1. Separation Of Contaminants

Where consignments are contaminated with separable amounts of non-target materials or pollutants, treatment must be carried out in order to fulfill the requirements of acceptable paper and cardboard waste in Annex I and to achieve the highest possible recovered product quality. If the requirements cannot be achieved using the equipment and techniques available on site, these consignments must be separated and sent to alternative waste treatment to achieve the requirements or alternatively be disposed.

The origin, type, quantity, and whereabouts of the impermissible separated or discarded materials must be recorded separately.

6.2. Recycling Processes And Techniques

6.2.1. Specified Production Processes And Techniques

Material must be treated:

- In accordance with the conditions of the license or permit.
- To ensure the output material meets the requirements of the designated market and intended application, including the Annex VI and any additional customer requirements.
- To the point that it requires no further processing before it can be used as intended (i.e., it has been recovered).

The scope of this standard is strictly limited to the recovery process of paper and cardboard and does not include any subsequent recycling stages (i.e. as part of the paper manufacturing process at the receiving paper mill). This standard does not specify the treatment process to be applied. Common recovery and treatment stages are described as shown below:

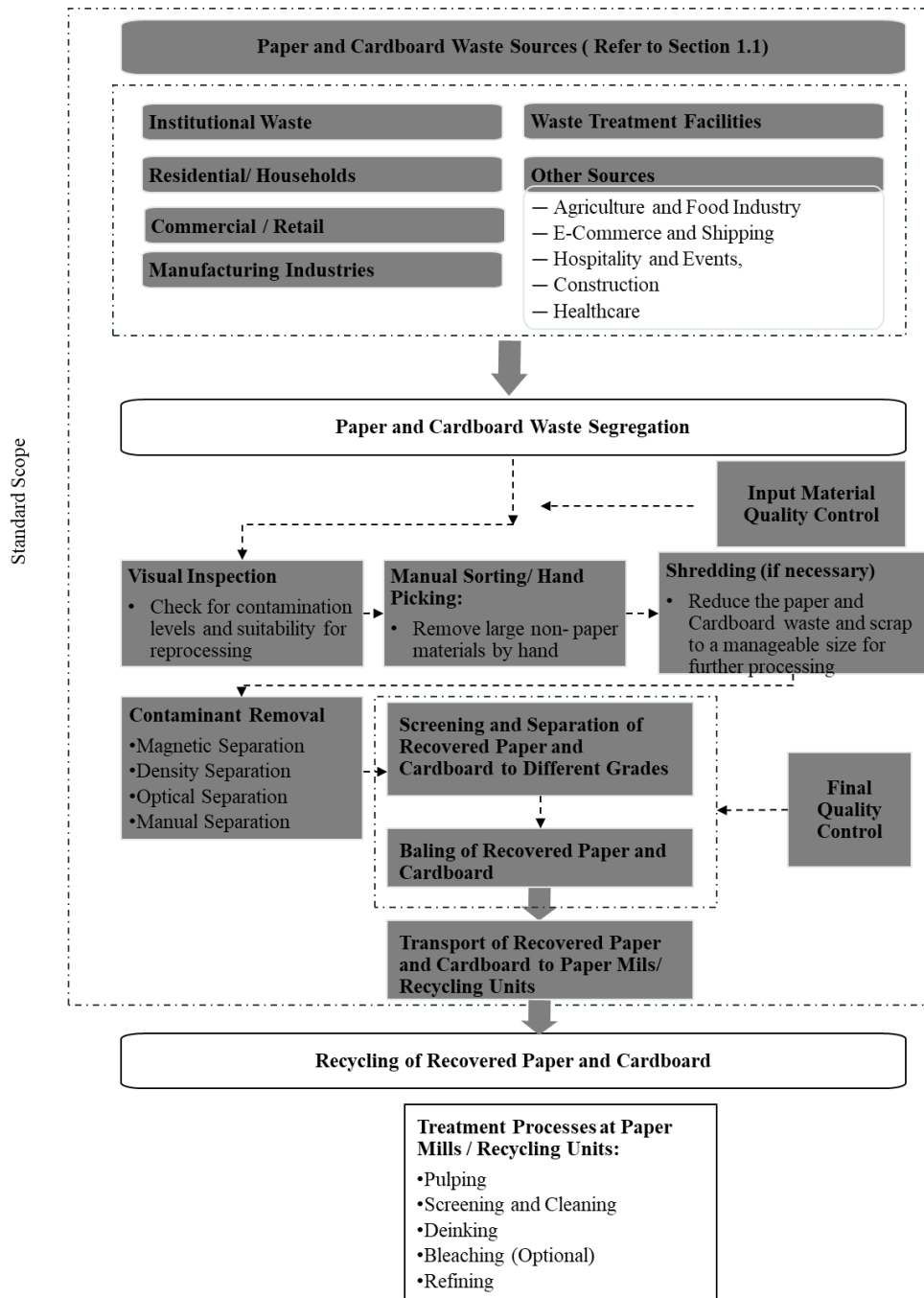


Figure 2 Common Treatment Stages

- **Visual Inspection:** Experienced staff perform a visual inspection of the paper and cardboard waste load upon arrival, assessing contamination levels and processing needs. Highly contaminated loads may be rejected for economic reasons and disposed of without treatment.
- **Manual Sorting/ Hand picking:** Manual sorting, also known as hand picking, is a method used to separate substances from a mixture by manually selecting and

removing unwanted components. This technique is often used when the substances are visibly different in size, shape, color, or weight.

- **Screening:** Screens separate paper and cardboard by size fractions, facilitating the removal of contaminants in later separation processes and separating the material into different grades.
- **Magnetic Separation:** Magnetic separators are used to remove ferrous materials that may be mixed with paper and cardboard waste.
- **Density Separation:** Techniques like air classification may be used to separate materials based on their weight and density.
- **Optical Separation:** Advanced sensors and cameras are used to identify and separate materials based on their properties such as color, shape, size, and material composition.
- **Baling:** Baling is the process of compressing loose paper and cardboard waste into tightly compacted bales, reducing its volume and making it more efficient to handle and transport.
- **Quality Control:** May include inspection and (if the material is baled) bale dressing to remove any residual contamination visible in the bales and splitting randomly selected bales to assess compliance with the requirements of standards and customer specifications.

The treatment processes and techniques used by the recovering unit must meet the criteria specified in Annex II. Qualified staff must be available to operate the recycling process and techniques on site.

6.3. Monitoring Of The Treatment Processes And Techniques Applied

Qualified staff shall carry out inspections of the treatment processes and techniques applied on site. Such inspections must be continuously monitored.

Where an inspection identifies a problem in the treatment processes and techniques applied a corrective action will be specified and enacted at the earliest opportunity.

Where an inspection identifies a problem that may result in a failure to meet the output specifications included in this standard the treatment processes and/or techniques applied must cease to operate until corrective action has been taken.

Records of all inspections and corrective action employed shall be kept for a period of at least five years and made available for inspection upon request by the MWAN and the relevant competent authority.

7. End Requirements

7.1. End-Product Specifications And Statement Of Conformity

The recovered paper and cardboard resulting from the recycling operation must comply with the criteria set out in Annex I. Annex VI provides definitions of the different categories of recovered paper and cardboard.

Each batch of product from the recycling process shall be accompanied by a statement of conformity in accordance with the model set out in Annex III.

7.2. End Product Record Keeping

A record of all product batches shall be maintained for a period of five years and made available for inspection upon request by the MWAN and the relevant competent authority. The records shall specify the destinations, type, and quantity of each consignment as well as copies of the statements of conformity accompanying each batch in accordance with the model set out in Annex III.

7.3. End Use Restrictions

All recovered paper and cardboard (being graded) must at least comply with the quality requirements laid down in this standard. Subsequent recycling of paper and cardboard that meets the requirements of this standard is a process where paper and cardboard waste is transformed back into a usable form by treatment within a paper mill including pulping to recover the constituent cellulose fibers suitable for new applications. This pulp is used to create new paper and cardboard goods, including specialty products such molded pulp items like egg cartons and food trays.

Recovered paper and cardboard that is suitable for recycling applications must be produced from the input materials specified in Section 1.2 and comply with the criteria of acceptable paper and cardboard waste contained in Annex I.

7.3.1. Transport Of Output Materials

Final recovered paper and cardboard (being graded) will be transported in separate containers or bales for each grade to those used for input materials to avoid their contamination by other objects or substances including waste unless those containers have been subject to cleaning operations to prevent such contamination prior to transport of the final output materials offsite for further processing. The transport will take place accompanied by the statements of conformity of all product batches on that vehicle.

7.3.2. Labelling

Where end-use restrictions apply for the recovered paper and cardboard, they must be communicated and explained on the labelling of the product in a way that is clear and understandable to the end-user. Labelling must include batch number, size of container, grade, end use restrictions etc.

7.3.3. Defined List Of Levels Of Contamination Of Output Materials

Final outputs must meet the general requirements for quality specified in Annex I خطأ! لم يتم العثور على مصدر المرجع. in terms of the levels of contamination that must not be exceeded. Any batch that exceeds those levels must be treated as a waste and recovered or disposed in keeping with the waste hierarchy.

7.3.4. EXTERNAL QUALITY MONITORING

The processor must have external quality monitoring of the end products which it undertakes at regular intervals in accordance with Annex V by an authorized specialist or specialist institute. The results of the external quality monitoring must be kept in the form of a product assessment by the authorized specialist or specialist institute and held on the site of the recovering unit for a period of at least five years and made available to the MWAN and the relevant competent authority upon request.

7.3.5. SAMPLING PROTOCOL

In addition to the external quality monitoring referred to above the processor must perform their own sampling according to the provisions listed in Annex V خطأ! لم يتم العثور على مصدر المرجع. Where such sampling is undertaken by a third party that third party must not be the same as the external quality monitoring organization referred to above.

7.3.6. CUSTOMER FEEDBACK

The processor will provide a facility for customer feedback on the quality of the products made available. Feedback provided will be assessed and, if necessary, changes to the treatment processes applied will be made to address any substantiated negative feedback received in respect to product quality.

7.3.7. QUALITY MANAGEMENT SYSTEM

A suitable quality management system for recovered paper and cardboard is expected to include:

- Procedures to decide about the acceptance of input materials
- Monitoring of processes to ensure they are effective at all times
- Procedures for monitoring product quality (including sampling and analysis) that are adjusted to the process and product specifics according to good practice
- Actively soliciting feedback from customers in order to confirm compliance with product documentation
- Record keeping of main quality control parameters
- Measures for the review and improvement of the quality management system
- Training of staff

ANNEX I (Normative)

ANNEX I. CRITERIA FOR ACCEPTABLE PAPER AND CARDBOARD WASTE

The table below has been developed in-line with European good practice for managing paper and cardboard waste recycling to establish criteria for acceptable paper and cardboard waste for the end user, i.e. paper mills. Customers may require additional standards to be met.

Criteria for Acceptable Paper and Cardboard Waste		
	Criteria	Self-monitoring requirements
1.1	The paper and cardboard resulting from the recovery (collection and/or separation) operation shall be graded according to the European standard EN 643.	Qualified staff shall grade each consignment.
1.2	The non-paper and cardboard component content shall be less than or equal to 1.5 % of air dry weight. A non-paper and cardboard component is any material different from paper and cardboard, which is present in recovered paper and cardboard, and can be separated using dry sorting techniques. Examples of non-paper components are metals, plastic, glass and other inert materials, textiles, rubber, wood, and other organic substances. Mineral fillers bound to paper fibers such as clay, calcium carbonate, and starch are considered as part of paper and cardboard and do not count as non-paper and cardboard components. Multi-material paper (e.g. plastic laminated) with a content of non-paper materials of more than 30% of air dry weight shall count in its totality as non-paper component.	Qualified staff shall carry out visual inspection of each consignment. At appropriate intervals and subject to review if significant changes in the operating process are made, representative samples of each grade of recovered paper and cardboard shall be analyzed gravimetrically to measure the content of non-paper and cardboard components. The non-paper and cardboard components content shall be analyzed by weighing after mechanical or manual (as appropriate) separation of materials under careful visual inspection. The appropriate frequencies of monitoring by sampling shall be established taking into account the following factors: • The expected pattern of variability (for example as shown by historical results); • The inherent risk of variability in the quality of the waste used as input for the recovery operation and any subsequent, for instance the higher average content of plastics or glass in sorted paper from multi-material collection systems; • The inherent precision of the monitoring method; and • The proximity of results of the non-paper and cardboard components

Criteria for Acceptable Paper and Cardboard Waste		
	Criteria	Self-monitoring requirements
		content to the maximum limitation of 1.5 % of air dry weight. The process of determining monitoring frequencies should be documented as part of the management system and should be available for auditing.
1.3	The recovered paper and cardboard, including its constituents and in particular ink and dyes, shall not display any of the hazardous properties listed in KSA waste law and its implementing regulations (Appendix 1, 2, and 3). This means that the recovered paper and cardboard shall comply with the concentration limits laid down in KSA waste law and its implementing regulation and not exceed these concentration limits.	Qualified staff shall carry out a visual inspection of each consignment. Where visual inspection reveals any indications for possible hazardous properties, further appropriate monitoring measures shall be taken, such as sampling and testing, where appropriate. The staff shall be trained on potential hazardous properties that may be associated with recovered paper and cardboard and on material components or features that allow hazardous properties to be recognized. The procedure of recognizing hazardous materials shall be documented under the management system.
1.4	Recovered paper and cardboard must not contain absorbed oil, solvents, paint, aqueous and/or fatty foodstuffs, bio-waste or other organic components (e.g. including used paper hygiene products) that can be detected by visual inspection or can be identified by odor.	Qualified staff shall carry out a visual inspection of each consignment. Where visual inspection reveals signs of fluid absorption except water that may result in e.g. mould growth or odors, and these signs are non-negligible, the consignment shall be considered mixed waste and managed accordingly. The staff shall be trained on potential types of contamination that may be associated with recovered paper and cardboard and on material components or features that allow the contaminants to be recognized. The procedure of recognizing contamination shall be documented under the management system.

ANNEX II (Normative)

ANNEX II. TREATMENT PROCESSES AND TECHNIQUES

The table below has been developed in-line with European good practice for managing paper and cardboard waste recycling to establish criteria for appropriate treatment processes and techniques.

Criteria For Treatment Processes and Techniques	
	Criteria
2.1	The wastepaper and cardboard must have been segregated at source or collected as a component of mixed dry recycling. The input waste must have been treated to separate the paper and cardboard from the non-paper and cardboard components, either during collection or at a suitable and appropriately permitted materials recovery facility. The paper and cardboard resulting from these operations shall be kept separate from any other waste.
2.2	All treatments needed to prepare the wastepaper and cardboard for direct input to pulping in the manufacture of paper and cardboard products, such as sorting, separating, cleaning, or grading, and except de-baling, shall have been completed.
2.3	For waste containing hazardous components, the following specific requirements shall apply: (a) input materials that originate from hazardous waste that are listed in KSA waste law and its implementing regulations (Appendix 1, 2, and 3) shall have undergone all treatments required by relevant KSA law. (b) hazardous substances in waste that is not mentioned in point (a) shall have been efficiently removed in a process which is approved by the competent authority.

Note: As regards multi-material paper consignments, the producer/importer shall identify the next holders of the consignment as well as the amounts transferred until the recovery of all the materials in the multi-material paper. Such identification can be undertaken by use of a traceability system.

ANNEX III (Normative)**ANNEX III. STATEMENT OF CONFORMITY**

1.	Producer/importer of original waste: Name: Address: Contact person: Tel. Fax E-mail:
2.	(a) Name or code of the paper and cardboard waste category, in accordance with an industry specification or standard the recovered waste now complies: (b) Where relevant, main technical provisions of a customer specification, such as composition, size, type and properties:
3.	The paper and cardboard waste and scrap consignment comply with the industry specification or standard referred to in point 2(a) or with the customer specification to in point 2(b).
4.	Quantity of the consignment in tonnes:
5.	The producer of the product applies a quality management system which has been verified by an accredited verifier.
7.	Declaration of the producer/importer of the final product. I certify that the above information is complete and correct to my best knowledge. Name: Date: Signature:

ANNEX IV (Normative)

ANNEX IV. GENERAL QUALITY REQUIREMENTS

The criteria for recovered paper and cardboard typically include the following specifications to ensure it can be effectively processed into recovered paper and cardboard for recycling operations:

CONTAMINATION LIMITS

- **Acceptable Contaminants:** Materials that do not hinder the recycling process, such as adhesives or minor ink residues.
- **Unacceptable Contaminants:** As listed in KSA waste law and its implementing regulations (Appendix 1, 2, and 3), as described in ANNEX I. CRITERIA FOR ACCEPTABLE PAPER AND CARDBOARD WASTE
- **Maximum Contamination Levels:** Typically, contaminants (non-paper and cardboard components) should not exceed 1.5% by weight, depending on the grade of recovered material.

TYPE AND GRADE OF PAPER AND CARDBOARD

- Only specific grades of paper and cardboard specified in ANNEX VI. RECOVERED PAPER AND CARDBOARD CATEGORIES ACCORDING TO EN-643 (CEN, 2001) STANDARD may be accepted, depending on the intended recovered product.
- The grade of paper and cardboard should meet specified requirements to ensure consistency in the recovered paper and cardboard output.

MOISTURE CONTENT:

- Waste paper and cardboard will, in principle, be supplied with moisture of not more than the naturally occurring level (10%). Buyers and sellers may choose to agree approaches to testing and sampling and any compensation approaches if the moisture content exceeds 10% (of air dried weight).

PHYSICAL PROPERTIES

- The recovered paper and cardboard waste should contain limited amounts of non-paper and cardboard components (which must be accounted for within the maximum allowable contamination level of 1.5% by weight; refer to ANNEX I. CRITERIA FOR ACCEPTABLE PAPER AND CARDBOARD WASTE part 1.2) or wax coatings (which must comply with customer requirements).

PACKAGING AND TRANSPORT

- **Baling Requirements:** If the paper and cardboard is to be supplied baled, it must be baled securely to prevent bales breaking or contamination during transportation. The baling specifications, including size, weight, and dimensions, shall be in accordance with the customer's requirements.

- **Labelling:** Containers or bales should be labelled with grade and content information, ensuring traceability.

STANDARD COMPLIANCE

Compliance with industry standards such as those set by the Institute of Scrap Recycling Industries (ISRI), or the European Committee for Standardization (CEN) is often required.

Various standards organizations provide specifications and classifications for recovered paper and cardboard. The following standards ensure consistency and quality in the recycling and reuse of paper and cardboard across various applications:

SASO/GSO Standards (GCC Standardization Organization):

- **SASO-GSO-1856:2008: Marking of recycled paper and board**

SASO/ISO Standards (International Organization for Standardization):

- **SASO-ISO-4046-4:2016** - Paper, board, pulps and related terms - Vocabulary – Part 4: Paper and board grades and converted products.
- **ISO-18604:2013** - Packaging and the environment — Material recycling
- **ISO 186:2002**- Paper and board — Sampling to determine average quality

SASO/ASTM Standards (American Society for Testing and Materials)

- **SASO-ASTM-D1968:2019** - Standard Terminology Relating to Paper and Paper Products.

EN Standards (European Norm)

- **EN 643:2014** - Paper and board - European list of standard grades of paper and board for recycling.

ISRI specification (Institute of Scrap Recycling Industries):

- **ISRI Scrap Specifications Circular 2022:** Scrap Specifications Circular- ISRI provides a wide range of scrap specifications of different materials.

ANNEX V (Normative)

ANNEX V. EXTERNAL QUALITY MONITORING

External quality monitoring must meet the following minimum requirements.

MONITORING FREQUENCY

The appropriate frequencies of analysing representative samples shall be established taking into account the following factors:

- (1) The expected pattern of variability (as shown by historical results)
- (2) The inherent risk of variability in the quality of waste used as input for the recovery operation and in the performance of the treatment processes
- (3) The inherent precision of the monitoring method
- (4) The proximity of results to the limit values for the total amount of foreign materials.

Monitoring frequency	Description
Routine Monitoring (internal)	Quality checks should be undertaken by the recycling company preparing recycled paper and cardboard for sale. These should be conducted on every batch of paper and cardboard waste they receive and every batch of recycled paper and cardboard they dispatch following treatment. The approach and frequency can be adjusted based on, for example, historical quality performance and supplier reliability. Details are set out in ANNEX I. CRITERIA FOR ACCEPTABLE PAPER AND CARDBOARD WASTE
Periodic Audits (external)	Comprehensive quality audits should be undertaken by an external party. These should initially be conducted quarterly in the first year of operation to ensure compliance with quality standards as set out in ANNEX I. CRITERIA FOR ACCEPTABLE PAPER AND CARDBOARD WASTE (including sampling and analysis). If all audits in the first year confirm compliance, the frequency may be reduced to twice yearly from the second year onward. In the event of a non-compliance finding, the audit frequency will return to quarterly until compliance is restored. Periodic audits represent the minimum timing for external monitoring.
Random Inspections (external)	Unannounced random inspections should be conducted by an external party at least once every six months to verify ongoing adherence to ANNEX I. CRITERIA FOR ACCEPTABLE PAPER AND CARDBOARD WASTE and ANNEX VI. RECOVERED PAPER

	AND CARDBOARD CATEGORIES ACCORDING TO EN-643 (CEN, 2001) STANDARD Customers or their representatives (e.g. waste brokers acting on behalf of paper mills) may undertake their own inspections.
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SAMPLING

Sampling Method

Sampling can be carried out manually or using specialized devices and varies depending on whether the consignment is loose or baled.

- **Quantitative (gravimetric) manual sampling of bales** consists of the random selection of one or two bales of the consignment. The bale(s) is opened by de-wiring and a sample of 30 to 100 kg is taken. The sample is manually sorted in various components (paper types, plastic, wood, glass, etc.). Each category of components is dried and weighted to quantify the amount of non-paper components, unusable paper, and to be measured per air dry weight. Moisture content is also measured by sampling, weighting, drying and weighting again.
- **For the loose consignments**, one of several possible procedures consists in spreading the load on the floor and sampling on a 2-meter length on all the width of delivery, followed by the manual sorting of components and moisture content measurement. When waste newsprint is used as raw material in a process requiring de-inking, the age of the newsprint has to be assessed by reading the date, because of difficulties to deink old newspapers, as the ink properties change, and it binds strongly to the fiber.

Sampling Locations

- Samples should be collected from different points of the batch (e.g., top, middle, and bottom) to ensure the representativeness of the sample.
- For larger batches, samples should be taken from various containers or lots within the batch.

SAMPLING PROTOCOL

The sampler must prepare a record (sampling protocol), which must contain in particular the following information:

1.	Date and time of sampling: Place of sampling (address, if not identical to that of the recycling facility):
2.	Name and address of the external sampling organization: Name of the sampler (natural person):
3.	Name (company name) of the recycler: Recycling facility address:
4.	Sample name for clear identification of the fresh original sample:
5.	Quality assurance data:
6.	Description of the location, cubature and dimensions of the assessment quantity: Description of the nature of the assessment quantity:
7.	Description of sampling: a) sampling method: b) number of sampling points or cuts:
8.	Signatures of the sampler and the recycler or his authorized representative:
9.	Other relevant comments if necessary:

ANNEX VI

**ANNEX VI. RECOVERED PAPER AND CARDBOARD CATEGORIES ACCORDING TO EN-643
(CEN, 2001) STANDARD**

The following table contains the EU classifications which define the various general grades for different types of Paper and Cardboard waste:

Group 1 - Ordinary grades	Group 2 – Medium grades	Group 3 – High grades	Group 4: Kraft grades	Group 5: Special grades
1.01 Mixed paper and board, unsorted, but unusable materials removed Various grades of paper and board; no restrictions on short fiber content; unusable materials removed (e.g. plastic envelopes)	2.01 Newspapers Made up of read or unsold newspapers, containing no more than 5% mass-colored material	3.01 Mixed lightly colored printer shavings	4.01 New shavings of corrugated board	5.01 Mixed recovered paper and board
1.02 Mixed papers and boards (sorted) As 1.01, a mixture of papers and boards; free of unusable materials, but with max. 40%	2.02 Unsold newspapers Includes unsold daily newspapers, free from additional inserts or illustrated	3.02 Mixed lightly colored woodfree printer shavings	4.02 Used corrugated kraft 1	5.02 Mixed packaging

old newspapers and magazines	material colored in bulk			
1.03 Grey board	2.03 Lightly printed white shavings	3.03 Woodfree binders	4.03 Used corrugated kraft 2	5.03 Liquid board packaging Includes brick packaging and other multi-layer, multi-material packaging for liquids
1.04 Supermarket corrugated paper and board - At least 70% corrugated board; remainder: cartonboard and other packaging paper - Also known by its German name, "kaufhaus"	2.04 Heavily printed white shavings	3.04 Tear white shavings	4.04 Used kraft sacks	5.04 Wrapper kraft
1.05 Old corrugated containers - At least 80% corrugated board and other packaging papers - Commonly called OCC	2.05 Sorted office paper	3.05 White woodfree letters Also known as white letters	4.05 Unused kraft sacks	5.05 Wet labels

1.06 Unsold magazines	2.06 Colored letters	3.06 White business forms	4.06 Used kraft	5.06 Unprinted white wet-strength woodfree papers
1.07 Telephone books	2.07 White woodfree books	3.07 White woodfree computer print-out	4.07 New kraft	5.07 Printed white wet-strength woodfree papers
1.08 Mixed newspapers and magazines 1	2.08 Colored woodfree magazines - Coated or uncoated magazines, white or colored, but free from non- flexible bindings, non- deinkable inks, glue and labels. It may include printed circulars, colored shavings and up to 10% mechanical pulp-based paper. - Also known as "colored best pams"	3.08 Printed bleached sulphate board	4.08 New carrier kraft	
1.09 Mixed newspapers and magazines 2	2.09 Carbonless copy paper	3.09 Lightly printed bleached sulphate board		
1.10 Mixed magazines and newspapers	2.10 Bleached woodfree PE-coated board	3.10 Multi printing		

1.11 Sorted graphic paper for deinking - Contains at least 40% old newspapers and magazines from household collections - Also known as "news and pams"	2.11 Other PE-coated board	3.11 White heavily printed multiply board		
	2.12 Mechanical pulp-based computer print-out	3.12 White lightly printed multiply board		
		3.13 White unprinted multiply board		
		3.14 White newsprint Made up of shavings and sheets of white unprinted newsprint, free from magazine paper.		
		3.15 White mechanical pulp-based coated and uncoated paper		
		3.16 White woodfree coated paper, without glue		
		3.17 White shavings		
		3.18 White woodfree shavings		

		• Shavings and sheets of white, unprinted woodfree paper, free from glue, but containing up to 5% coated paper • Also known as "white number two" 3.18.01 White uncoated woodfree shavings • Same as 3.18, but should contain no coated paper • Also known as "best white number one" 3.19 Unprinted bleached sulphate board		
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