BEFORE THE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 851 OF 2018

IN THE MATTER OF:

Amit Jain ... **APPLICANT**

VERSUS

Union of India ...**RESPONDENTS**

INDEX

DELHI

DATED: 8/6/2021

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ORIGINAL APPLICATION NO. 851 OF 2018

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AFFIDAVIT ON BEHALF OF MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE i.e. RESPONDENT NO. 1

MOST RESPECTFULLY SHOWETH:

I, Vinod K. Singh, currently working as Scientist 'E' in the Ministry of Environment, Forest and Climate Change (MoEF&CC), New Delhi, do hereby solemnly affirm and state as under: -

1. That I, in my official capacity of Scientist 'E' in the Ministry Environment, Forest and Climate Change, New Delhi i.e. Respondent No. 1 in the above mentioned matter, am conversant with the facts and circumstances of the case on the basis of official records, and as such authorized and competent to swear this affidavit.
2. That the instant matter relates to the remedial action against cheap waste paper and the road sweep waste import for firing of brick kilns. According to the applicant, 9,00,000 tons of waste is imported in India annually which is hazardous to the environment and public health.
3. That this short affidavit is being filed by the Respondent Ministry in pursuance of the order dated 8th January, 2021 whereby the Hon'ble

NOTARY A.N. SINGH Supreme Court of India Regd. No. 15925 Exp. Date 31.01.2025 INDIA

Tribunal recorded the reply submitted by the Ministry and also recorded that an Expert Working Group (EWG)/committee had been constituted to review import and export policy of hazardous and other wastes such as tyre, textile, lead, oil, paper, glass, printed circuit board etc. and give its recommendations to the Ministry. However, the report on import of paper waste was pending.

4. That it is submitted that *vide* the aforesaid order, the Hon'ble Tribunal while disposing of the matter, directed the Ministry to follow up to ensure that the requisite report becomes available at the earliest, so that Ministry may take further policy decision in the matter.

5. That it is submitted that the EWG constituted by the Ministry on 29th November, 2019 under the Chairmanship of Shri Sudhir Shrivastava, Chairman, Maharashtra Pollution Control Board has addressed the issues like the extent of non-paper recyclable material contamination in the imported wastepaper; extent of wastepaper import in India & the driving force behind such exports; and measures to promote import of lesser contaminated wastepaper etc in its report and submitted to the Ministry.

6. That it is submitted that the key findings and recommendations of the EWG inter-alia includes the following:

   a. Office Memorandum No. 13-1/2004-HSMD dated 11th May, 2010 issued by MoEF&CC has prescribed limits for non-paper recyclable material in wastepaper consignments imported from other countries. The same standards may be continued to regulate quality of imported wastepaper till a review of standards after one year.

   b. Given the uncertainty because of Covid-19 and given that imports have held steady between 2018-19 and 2019-20, at this stage, there is scant evidence that import of wastepaper is adversely affecting domestic waste collection. Further, present situation indicates that

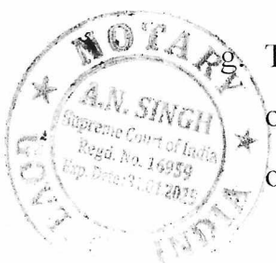
usage of recycled fibre from imported wastepaper is essential for sustainability of paper industry. Therefore, while the import of wastepaper may continue (Retaining paper waste in Schedule III Part D), the situation needs to be constantly monitored.

c. The monitoring of contamination levels in paper needs to be enhanced and several stringent measures for enhancing monitoring are proposed in the report. At this moment, efforts need to be focused on implementing those stringent monitoring measures. Therefore, the working group at this point of time is of the opinion that existing prescribed limits may be continued and may be reviewed after a year of implementing the proposed measures.

d. The importers/ clearing house agents should put in the correct HSN code for the import consignments instead of putting everything under HSN 47079000.

e. The import documents should be accompanied by a Bale break report on the letter head of the exporting company indicating the percentage of contaminants.

f. It recommends that consignments of mixed paper waste should be accompanied by a self-declaration on the letter head of the exporting company, indicating name and address of the wastepaper plant or any other source of the material.



g. The import documents should be accompanied by a Bale break report on the letter head of the exporting company indicating the percentage of contaminants.

h. Imports may be allowed only in the name of mills since it is difficult to make traders accountable. The Committee recommends that bill of entries should only be filed in the name of paper mills and the registration number provided by SPCBs should also be mentioned in it.

i. The waste generated in the recycling process is presently being sent to cement kilns by some of the paper mills. The CTO of cement plants may be amended to incorporate mandatory use of alternative fuels.

j. The cement Kilns should be mandated to buy at least 10% alternate fuel and maintain AFR of at least 10% and they may buy the plastic at a price of at least 50% of the equivalent quantity of coal based on Calorific Value delivered to the gate of cement kiln.

k. The EWG recommends establishing a Paper Recycling Promotion Society and a fund to help promotion of domestic waste recycling and welfare of the workers involved in paper waste collection. Such a fund could be created by framing suitable rules under the EP Act, 1986. A Paper Recycling Promotion Society may be formed as a public private partnership with representation from the Ministry, the mills, the wastepaper trade and other stakeholders to administer the amount received and utilize the funds.

A copy of the EWG's report on "Approach to Policy Framework for Import of Wastepaper" is annexed herewith and marked as **Annexure-R1**.

7. That it is humbly submitted that the report on wastepaper import has been received and the recommendations of the committee are under consideration by the Ministry. Recommendations of the EWG are under active consideration of the Ministry for framing policy on the subject matter. Therefore, keeping the same in mind, it is requested that some more time may be granted to the Respondent Ministry for finalization of the policy on waste paper import.

8. That in view of the aforementioned facts and circumstances, this Hon'ble Tribunal may kindly be pleased to pass appropriate order(s).

(डा. विनोद के. सिंह)
(Dr. VINOD K. SINGH)
वैज्ञानिक 'ई'/Scientist 'E'
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Min.of Environment,Forest and Climate Change
भारत सरकार, नई दिल्ली
Govt. of India, New Delhi

DEPONENT

NOTARY
A.N. SINGH
Supreme Court of India
Regd. No. 16959
Exp. Date: 31.01.2025
GOVT. OF INDIA

VERIFICATION

I, the above named deponent do hereby verify that the contents of the above affidavit are true and correct on the basis of official record maintained by the Ministry in daily course of its business, no part of it is false and nothing material has been concealed there from.

Verified at New Delhi on this the 8 JUN 2021 day of June, 2021.

I identify the deponent who has Signed/Put T.I. in my presence

(डा. विनोद के. सिंह)
(Dr. VINOD K. SINGH)
वैज्ञानिक 'ई'/Scientist 'E'
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Min.of Environment, Forest and Climate Change
भारत सरकार, नई दिल्ली
Govt. of India, New Delhi

DEPONENT

NOTARY A.N. SINGH Supreme Court of India Regd. No. 16959 Exp. Date: 31.01.2025 GOVT. OF INDIA

ATTESTED
Notary Public, Govt. of India, Delhi

Certified that the above Named Deponent I identify by Shri/Smt. Rakesh Kr. Singh
Solemenly affarmed before me at Delhi
S. No. 6613
The contents of the affidavit which have been read & explained to me are true and correct

Notary

8 JUN 2021

Nov.
2020

Approach to Policy Framework for Import of Hazardous and Other Waste in India: Wastepaper

Prepared by
Expert Working Group,
Import & Export of Hazardous Waste

सुधीर श्रीवास्तव भाप्रसे (से.नि.)
अध्यक्ष
Sudhir Shrivastava IAS (Retd.)
CHAIRMAN

महाराष्ट्र प्रदूषण नियंत्रण मंडळ
MAHARASHTRA POLLUTION CONTROL BOARD

MPCB/CM/EWGR-05

Date - 17 / 11 / 2020

To,
Hon'ble Secretary,
Ministry of Environment, Forest and Climate Change,
Government of India,
Indira Paryavaran Bhawan,
Jorbagh Road, New Delhi-110003.

Sub : Submission of report on 'Approach to Policy Framework for Import of Wastepaper'

Ref: Office Order by Ministry of Environment, Forest and Climate Change, (MoEF&CC), Govt. of India, regarding 'Constitution of Expert Working Group' to review the import and export of hazardous and other waste, dated 29.11.2019 and 22.05.2020

Dear Sir,

Please refer to the Office Order about the constitution of Expert Working Group for the review of export and import of hazardous and other wastes.

The Working Group noted that various waste streams included in the Terms of References of the Working Group have their own technical, commercial, logistical and environmental aspects and therefore, it was decided to consider each waste stream separately and make separate recommendations in respect thereof.

The Working Group has already submitted reports regarding import of tyre waste, lead scrap, plastic waste and textile waste. I am now very happy to hereby submit the report on '**Approach to Policy Framework for Import of Wastepaper'** along with key recommendations for the import policy of wastepaper, for your kind consideration.

I also thank my colleagues in the Committee Dr. D.K. Gupta, Director, MoEF&CC, Mr. B. Vinod Babu, Scientist E, Central Pollution Control Board, Prof. Sanjeev Chaudhari, IIT Bombay and Prof. S.N. Tripathi, IIT Kanpur for giving their valuable time and inputs for the report. During this period, Dr. Sonu Singh, Additional Director MoEF&CC was assigned other responsibilities in the Ministry and was replaced by Dr. Vinod Singh, Director MoEF&CC. I deeply appreciate very insightful and diligent contribution by Dr. Sonu Singh. I also appreciate the expert insights provided by Dr. Vinod Singh, Additional Director, MoEF&CC and Mr. Nandkumar Gurav, Regional Officer (HQ), MPCB. I also deeply appreciate the diligent and extensive research work done by Ms. Sushilkumar Rathod (Sub-Regional Officer, MPCB) and Mr. Vikrant Bhalerao (Sub-Regional Officer, MPCB) for preparation of this report and facilitating interaction with various stakeholders. I also acknowledge the efforts by Mr. Sayan Pal for developing *'Wastepaper Import Monitoring Portal – beta version'* in a very short time.

Thanking you,

Yours faithfully,

(Sudhir Shrivastava)
Chairman, Expert Working Group

कल्पतरु पॉईंट, सायन सर्कल, सायन (पूर्व), मुंबई – ४०० ०२२. टेलि. : २४०४ २४१८ • फॅक्स : २४०२ ३५१६
Kalpataru Point, Sion Circle, Sion (East), Mumbai - 400 022. Tel.: 2404 2418 • Fax : 2402 3516
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1. Introduction

The import/export of different types of wastes in India is currently regulated by Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (HW Rules) and corresponding earlier Rules, issued by Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India. As per this notification, the import of waste of certain categories requires prior permission from MoEF&CC, GoI.

MoEF&CC has constituted an Expert Committee (EC) for the appraisal of proposals for Import / Export of Hazardous and "Other Wastes" with reference to HW Rules, 2016. Since October 2016, the submission of online applications on Integrated Waste Management portal (www.iwms.nic.in) is made mandatory for consideration of application for import/export of hazardous and other waste in the meeting of the EC.

2. Constitution of the Expert Working Group

In view of the above and for better understanding of the current scenario of import-export of the Hazardous and Other Waste under the HW Rules, the HSM Division of MoEF&CC, GoI has constituted an Expert Working Group (EWG) consisting of five members chaired by **Shri. Sudhir Shrivastava**, Chairman, Maharashtra Pollution Control Board (MPCB), on 29.11.2019. The other members of the Group are:

1. **Prof. S.N. Tripathi**, IIT Kanpur,
2. **Prof. Sanjeev Chaudhari**, IIT Mumbai,
3. **Mr. Vinod Babu**, Additional Director (Scientist-E) and Nodal Officer, Waste Management Division, CPCB.
4. **Dr. Dharmendra Kumar Gupta**, Director (Scientist F), HSMD, MoEF&CC (replacing Shri Manoj Kumar Gangeya, who moved to another assignment)

   The EWG co-opted **Shri N. N. Gurav, RO(HQ), MPCB** as a permanent invitee.

   A copy of the office order of the constitution and extension of the committee is attached as (Error! Reference source not found. & Error! Reference source not found.).

Prior to the first meeting, the EWG had the opportunity of meeting the Hon'ble Minister, MoEF&CC. He expressed a concern that imports of certain wastes had increased rapidly in the past few years, which may not always be disposed of in scientific manner. Further, there is a possibility that such imports could substitute and reduce the use of domestic waste. He emphasized that our policies should incentivize the use of domestic waste and Indian waste

processing industry shall contribute to the key Swachh Bharat Mission started by Hon'ble Prime Minister of India.

The Expert Working Group has submitted reports for tyre waste, waste lead acid battery, waste plastic and waste textiles and this report on paper is the 5th report.

EWG had interaction with different stakeholders in Paper Industry such as Paper Associations Viz. Indian Paper Manufacturing Association (IPMA), Indian Agro & Recycled Paper Mills Association (IARPMA), Indian Newsprint Manufacturers Association (INMA), Gujarat Paper Mills Association (GPMA), Wastepaper Trader & Indenters on different occasions. The meetings were held on virtual conferencing due to limitations set by Covid-19. Details of meetings held are in annexure XXXIX

3. Rules and Regulation Regarding Wastepaper Import

There are multiple laws / notifications governing wastepaper import in India that are enlisted hereunder.

I. **Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 under Environment (Protection) Act 1986**- As per the Rules, paper waste comes under 'Part D', Basel No. B3020 and can be imported in India without approval from MoEF&CC, provided they are not mixed with hazardous wastes:

Waste and scrap of paper or paperboard of:

a) unbleached paper or paperboard or of corrugated paper or paperboard
b) other paper or paperboard, made mainly of bleached chemical pulp, not coloured in the mass
c) paper or paperboard made mainly of mechanical pulp (for example newspapers, journals and similar printed matter)
d) other, including but not limited to
    i. laminated paperboard
    ii. unsorted scrap

II. **Office Memorandum No. 13-1/2004 – HSMD dtd. 11th May 2010** issued by MoEF&CC which prescribed limits for non-paper recyclable material in wastepaper consignments imported from other countries (which superseded Office Memorandum No. 13-1/2004 – HSMD dtd. 10th Feb 2006)

III. Paper import under Free Trade Agreement route requires 'rules of Origin' - The Government has notified the Customs (Administration of Rules of Origin under Trade Agreements) Rules, 2020, which will come into force from 21st September 2020. These Rules (CAROTAR 2020) will apply to imports into India of goods at preferential rates of basic customs duty under free trade and other trade agreements and seek to curb the misuse of the Rules of Origin under the FTAs by requiring the importer to submit detailed information about the imported goods while importing under the claim of a preferential rate of duty.

4. Issues Framed by the Committee

Based on the discussions with various stakeholders, following are the critical issues framed by the Committee that need to be addressed.

- What is the extent of wastepaper import in India and what is driving these imports?
- What is the extent of non-paper recyclable material contamination in the imported wastepaper?
- What are the measures to promote import of lesser contaminated wastepaper?
- What is the quantity of wastepaper recycled domestically and what measures can be taken to promote recycling of domestic waste?

These issues have been deliberated upon subsequent parts of the report.

5. Introduction to Paper Industry

There are 861 paper mills in India of which 500 are currently in operation. The total installed capacity is 27.15 million tonnes and operating capacity is 21.90 million tonnes. This equates to approximately 80% utilisation of capacity. Paper industry provides direct employment to 6 lakh persons and indirect employment to 1.6 lakh persons. The per capita paper consumption in India is about 15.75 kg, which is way behind the global average of 57 kg.

The annual turnover of paper industry is around 67,000 Crores (9 Billion USD) and it contributes about 8000 Crores to state exchequer.

Approximately 21% production is based on wood, 70% on recycled fibre and 9% on agro-residues.

No. of Mills		861	
Total Installed Capacity, million tons		27.15	
Operating Installed Capacity, million tons		21.90	
Production of Paper, Paperboard, and Newsprint, million tons		19.36	
Capacity Utilization, %		~89	
No. of Running units		500	
No. of Mills Closed		361	
Idle installed capacity, million tons		4.80	
Import (in Million tons)		3.25	
Export (in million tons)		1.91	
Consumption (in million tons)		20.70	
Per capita Consumption (kgs)		15.75	
Global Share		4.72%	
Contribution from Different Segments (million tons)			
Segment wise Production	Wood-Based	Agro-Based	RCF Mills
Production in Million tons	4.20	1.66	13.50

Figure 1 Introduction of Paper Industry[1]

[1] CPPRI Statistical Cell

6. Estimated Domestic Market Size & Growth

The domestic paper consumption in 2018-19 was 20.70 million tonnes with a CAGR of 5.83%. Paper industry is expected to grow consistently due to favourable factors such as increase in literacy coupled with increasing population, increase in e-commerce penetration, increase in lifestyle etc.

More than half the paper consumption is in paper grade 'Packaging Paper / Board'. This segment consumes 10.65 million tonnes of paper annually. Further, the growth rate is also amongst the highest. Though the consumption is high in this grade, almost all of it is produced using recycled paper. In addition, the recycling percentage of paper board is also highest amongst all the grades.

'Newsprints' paper grade consumes 2.52 million tonnes of paper and 'Writing & Printing Paper' paper grade consumes around 6.78 million tonnes of paper. 'Others' (i.e. tissues, speciality papers etc.) consume only 0.77 million tonnes of paper but has the highest growth rate.

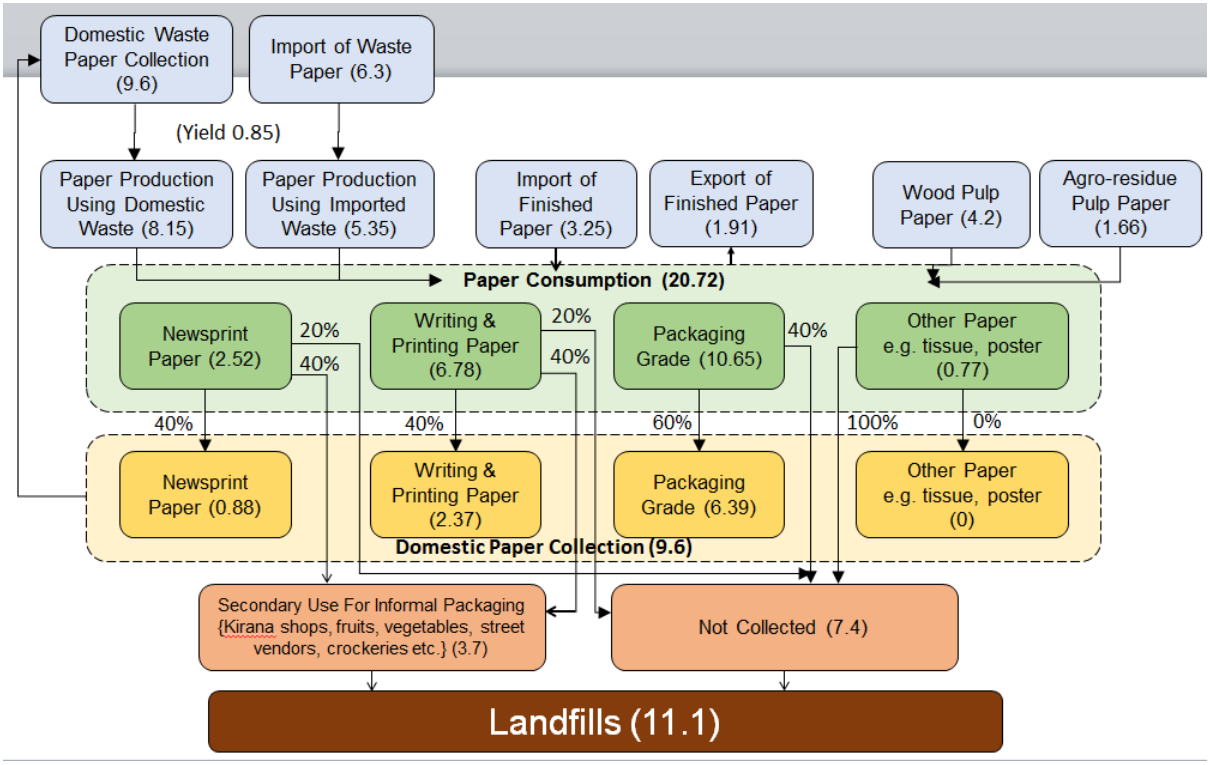
It must however be noted that many varied projections on production along with demand of various grades of paper have been made by different agencies. The same is reproduced below:

Source	Year	Paper Consumption (million tonnes)	Growth Rate (%)
Indian Paper Manufacturing Association (IPMA)[2]	2018-19	18.6	6.42
Central Pulp & Paper Research Institute (CPPRI)[3]	2018-19	20.70	5.83
Indian Agro & Recycled Paper Mills Association (IARPMA)[4]	2018-19	24.00	7.00
Indian Pulp & Paper Technical Association (IPPTA)[5]	2018-19	24.98	-

[2] Indian Paper Mills Association (IPMA). http://ipma.co.in/statistics/
[3] A Short Treatise of Indian Paper Industry (January 2020) by CPPRI, Saharanpur
[4] Indian Pulp & Paper Technical Association (IPPTA) Directory 2020
[5] Indian Pulp & Paper Technical Association (IPPTA) Directory 2020

The level of variation in numbers provided by various associations is due to the fact that data has been compiled from secondary sources. It is desirable that industries should share the production figures with Government agencies such as CPPRI, Saharanpur. The data based on primary source is most accurate and will go a long way in helping planners and government agencies to frame policies for the paper sector.

7. Paper flow in the economy



** Collection percentages are estimates based on stakeholder discussions

Figure 2 Material Flow Chart for paper recycling

- All the figures in million tonnes.
- The above figures do not include paper packaging movement through import and export of other products.
- Yield (.85) is approximate average for yield of Packaging grade (0.9) and Writing and Printing Paper (0.75)

Paper consumption in India is 20.70 million tonnes. India imports 3.25 million tonnes of finished paper most of which is newsprints and exports 1.91 million tonnes of finished paper. Hence, the net import of finished paper is 1.34 million tonnes. Paper manufactured from wood pulp is 4.2 million tonnes and from agro-residue is 1.66 million tonnes. Roughly 40% of paper i.e. 8.15 Mn tonnes is manufactured from domestic wastepaper and 1/3rd i.e. 6.3 Mn tonnes from imported wastepaper.[6]

[6] A Short Treatise of Indian Paper Industry (January 2020) by CPPRI, Saharanpur

Newsprints consume 1.16 million tonnes paper, writing and printing paper consume 6.78 Mn tonnes paper, packaging paper/cardboard consume more than 50% paper i.e. 10.65 Mn tonnes and the rest 0.77 Mn tonnes is consumed for other purposes such as tissues, cards, banners etc.

Recovery rate of Newsprints and writing and printing paper is 40% and that of packaging paper/cardboard is 60%. Hence, about 9.6 Mn tonnes of wastepaper is recycled domestically and the rest i.e. 11.1 Mn tonnes directly or indirectly ends up at landfill. It must be noted here that though the wastepaper collection is 9.6 Mn tonnes, actual conversion to paper is 8.15 Mn tonnes. Approximately 15% of the content of wastepaper is lost during recycling. Thus, the 'Yield' obtained is around 85%. The losses include moisture loss which is typically 4-5%, Outthrows & prohibitives around 3%, de-inking loss around 4-5% and coating material loss of about 4-5%.

7.1 Estimation of secondary use of paper for informal packaging –

There are 12 million neighbourhood Kirana shops in India. If they consume on an average ½ kg paper per day, that itself amounts to approximately 2.2 million tonnes of consumption. Paper is used for packaging of fruits such as pomegranate, papaya, grapes etc. and vegetables such as tomato. It is estimated that roughly one million tonnes of paper are consumed for fruit and vegetable packaging. Paper is consumed in considerable amount by street vendors and is also used for packaging of glassware, crockeries etc. The total used paper consumed in packaging applications is estimated to be roughly 3.7 million tonnes.

7.2 Loss of paper due to non-segregation of Municipal Solid Waste –

In most of the Local Bodies there is no segregation of Municipal Solid Waste at the source. The paper packaging or paper waste generated in households is thrown in the single dust bin and it gets mixed with the wet waste and gets soiled. The unsegregated waste is then transported in compactor trucks to waste processing facilities/landfills. At this stage even if the waste processing facility deploys Material Recovery Facility, the recovered paper being soiled is considered to be unfit for recycling. Hence a large quantity of precious paper fibre is lost in the landfills.

7.3 Estimation of paper loss from MSW –

Wastepaper comprises about 7% of the total composition of Municipal Solid Waste.[7] Assuming the Urban population of 440 million and per capita waste generation of 500 gm, paper waste generation per year from urban households amounts to around 5.6 million tonnes.

Population in Urban India (2017)	440 million
Per capita MSW generation	500 grams
Total MSW generation in per year	80 million tonnes
% of Paper in MSW	7%
Paper waste generation per year	**~ 5.6 million tonnes**

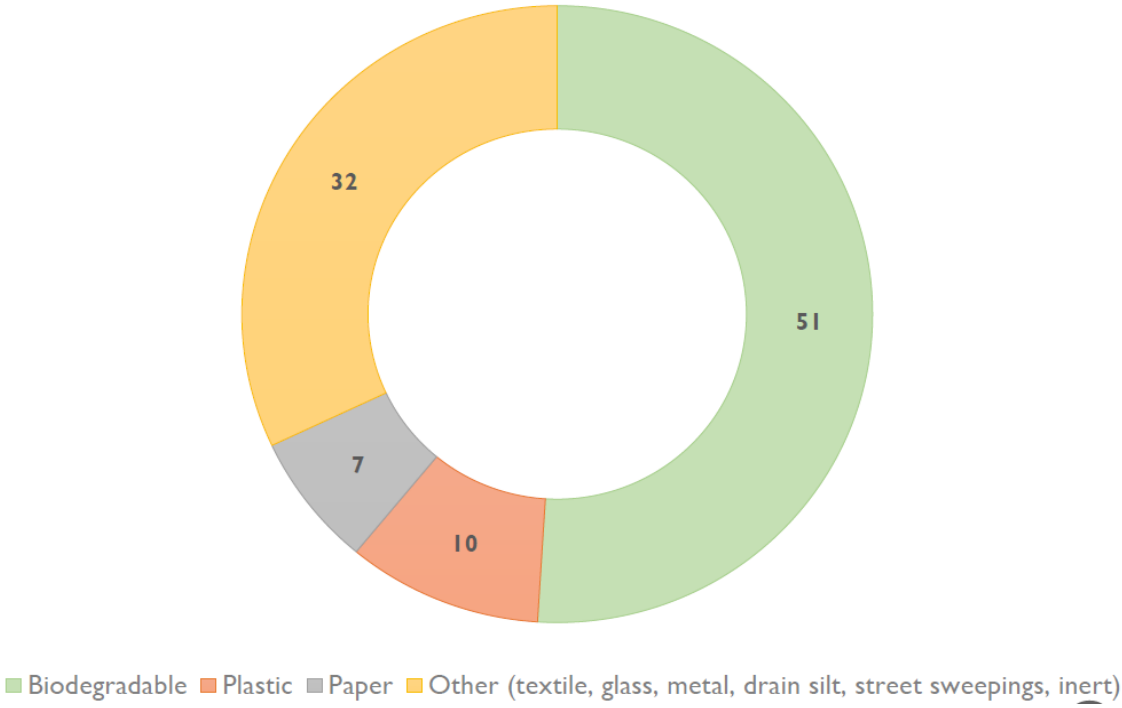


Figure 3 Composition of MSW

The per capita waste generation in rural areas is likely to be lower but would be compensated by the higher population. Therefore, it is likely to be approximately the same as for urban population.

[7] Task Force on Waste to Energy, Planning Commission & MoH&UA

8. Wastepaper Types and Specifications

Wastepaper is one of the major waste streams in USA and Europe and the trade is guided by the specifications issued by different trade bodies. The ISRI specifies more than 50 grades, prominent amongst them being Old Corrugated Containers (OCC), Old Newspapers (ONP), Over-issue News (OIN), Residential Mixed Paper, Unsorted Office Paper (UOP) etc. (

Annexure III). The European specifications classify wastepaper into 5 major groups, namely Group 1 – Ordinary grades, Group 2 – Medium grades, Group 3 – High grades, Group 4 – Kraft grades, Group 5 – Special grades (Annexure IV).

There is some difference between these specifications, and a brief tabular summary, as available in the literature is at Annexure V. Because of different classifications sometimes there may be ambiguity in the minds of different stakeholders and there may be some difficulties in implementation and monitoring. An attempt should be made to harmonize the classifications. In view of complexity of the matter this group is not addressing the issue. MoEF&CC may appoint a separate committee comprising of members from MoEF&CC, CPCB and representatives of the industry.

9. Wastepaper Import

9.1. Wastepaper Import Statistics

The Harmonized System Codes (HS Codes) for wastepaper and the standard rate of Customs duty as on 30th June 2020 are as given in table below. The Standard rate of Customs duty on import of wastepaper (HSN 4707) is 10%. However, under notification 50/2017 Sr no 292(A) of Customs this is exempted.[8] The IGST applicable is 5%.

HS Code	Description	Unit	Effective rate of duty	IGST
47071000	Unbleached kraft paper or paperboard or corrugated paper or paperboard	Kg.	0%	5%
47072000	Other paper or paperboard made mainly of bleached chemical pulp, not coloured in the mass	Kg.	0%	5%
47073000	Paper or paperboard made mainly of mechanical pulp (for example, newspapers, journals and similar printed matter)	Kg.	0%	5%
47079000	Other, including unsorted waste and scrap	Kg.	0%	5%

Table 1 HSN for wastepaper and Customs duty on import of paper[9]

The wastepaper import in India increased from 950 Million USD in 2017-18 to 1310 Million USD in 2018-19. This amounts to 37.34% growth YoY. The import of sorted waste (HS Codes 47071000, 47072000, 47073000) is negligible compared to the 'other including unsorted waste' category (HS Code 47079000). The import of waste has seen considerable growth after the imposition of one per cent non-fibre tolerance by China.

Year	47071000	47072000	47073000	47079000	Value (Mn USD)
2017-18	4.21	0.5	0.24	949.13	954.07
2018-19	8.45	1.53	0.62	1299.81	1310.4
% Growth	100.71	206.00	158.33	36.94	37.34

Table 2 Value wise Import Analysis (USD Mn)[10]

[8] https://www.cbic.gov.in/resources/htdocs-cbec/customs/cs-act/notifications/notfns-2017/cs-tarr2017/cs50-2017.pdf
[9] Central Board of Indirect Taxes & Customs. https://www.cbic.gov.in/resources//htdocs-cbec/customs/cst2021-310620/Chap%2047.pdf
[10] Source: Directorate General of Commercial Intelligence and Statistics (DGCI&S). http://www.dgcisanalytics.in/dgcis/EXIM-Analytics#/home?_g=()

In quantity terms wastepaper import increased from 4 million tonnes in 2017-18 to 6.3 million tonnes in 2018-19. This amount to 59.08% increase YoY. The percentage increase in quantity terms is higher than value terms due to steep fall of wastepaper prices since China imposed restrictions on import.

Year	47071000	47072000	47073000	47079000	Quantity (Thousand Tonnes)
2017-18	17.9	1.4	1.24	3993	4013.54
2018-19	50.15	4.69	4.22	6323	6382.06
% Growth	178.64	234.62	240.08	58.32	59.08

Table 3 Quantity wise Import Analysis (Thousand tonnes)[11]

In year 2019-20 the import of wastepaper in quantity terms remained flat at 6.32 million tonnes. However, in price terms the imports declined from 1.3 billion USD in 2018-19 to 1.1 billion USD in 2019-20. This implies the average price of wastepaper fell from 205 USD/tonne to 175 USD/tonne which amounts to approximately 14% reduction in price in international markets.

FY Year	Price (Mn. USD)	Qty (tonnes)	Price (USD/ton)	Price (INR/ton)
2018-19	1299.81	6,322,782	205	15,233
2019-20	1112.71	6,329,128	175*	13,064*
% Increase	-14.39 %	0.10 %	-14.63 %	-14.23 %

Table 4 Import analysis of wastepaper in the year 2019-20

The wastepaper import is mainly from the developed countries viz. US, Canada, UK, Germany, Gulf Countries etc. The waste import in last three years from 2017-20 is roughly 3 Billion USD.

[11] Source: Department of Commerce - Export Import Data Bank. https://commerce-app.gov.in/eidb/Icom.asp

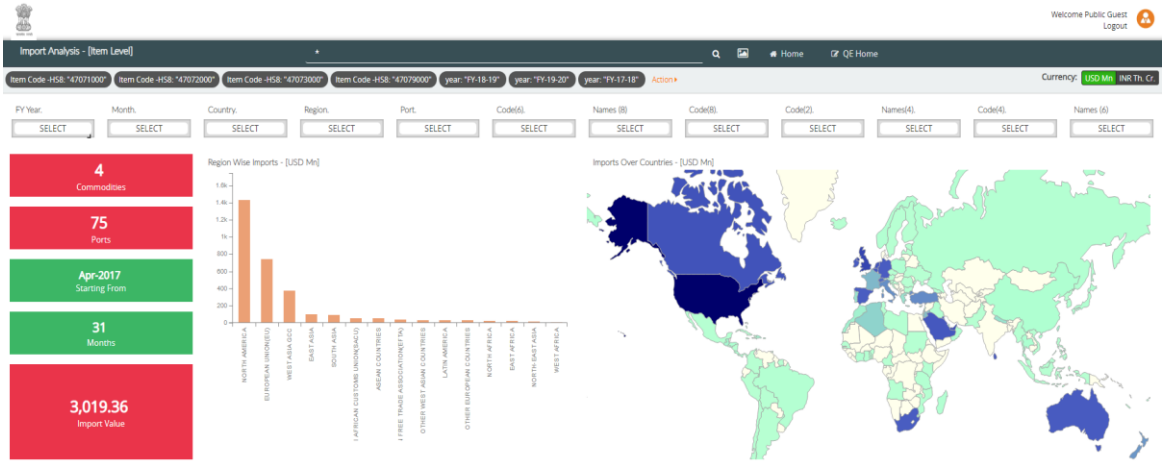


Figure 4 Wastepaper Import Analysis (2017-2020) in USD[12]

It may also be noted that almost all imports are classified under HSN 47079000. However, industry representatives mentioned that imports are predominantly of OCC and ONPs, and for ease of customs clearance, the bills of entry are filed under this HSN code, though the relative invoices and preshipment inspection certificates indicate the specific waste that is being imported. (Samples at Annexure VI)

The Shipment data obtained from Indian Customs disclose that OCC and ONP are imported in large quantity and constitute approximately 50% of wastepaper imports. The grade wise import figures for last five years are as below:

Wastepaper import in MT	MIX	ONP	OCC	UNSOP	OTHER	Grand Total
FY 2015 - 16	213,817	108,743	1,221,447	14,599	859,296	2,417,902
FY 2016 - 17	221,619	122,301	1,249,718	19,837	1,073,776	2,687,251
FY 2017 - 18	795,525	196,298	1,738,228	24,117	1,203,299	3,957,466
FY 2018 -19	1,791,018	411,015	2,009,300	25,445	1,468,915	5,705,693
FY 2019 -20	1,627,737	407,561	3,156,103	43,626	1,694,346	6,929,373
Grand Total	4,649,716	1,245,918	9,374,796	127,624	6,299,632	21,697,686

Table 5 Grade wise import figures for last five years (k tons) (2015-20)[13]

[12] Source: Directorate General of Commercial Intelligence and Statistics (DGCI&S)
[13] Shipment data from Indian Customs

9.2 Movement in price of imported wastepaper

China is the biggest importer of wastepaper, but the volumes imported by China have fallen steeply since 2017. As a result, the prices of wastepaper (FoB basis) had softened to as low as US$25 per tonne for OCC and negative for mixed paper as of December 2019. The prices have since recovered somewhat. (Annexure VII, Annexure VIII & Annexure IX for details). The recyclability of paper and prices are critically dependent on the extent of contamination in the wastepaper.

10. Wastepaper collection mechanism

10.1 Collection mechanism in USA/Europe

In order to understand the issue of contamination, it is necessary to understand the method of collection of post-consumer wastepaper (Excerpts of document 'Material Recovery Facilities' by The Waste and Resource Action Programme (WRAP), UK at Annexure X)

The two most common methods of collection from domestic sources are:

a. **Single-stream co-mingled (or fully co-mingled) (or two bin system)** – Compostable waste is collected in one bin and all dry recyclables, comprising of plastics, glass, cans and paper, are co-mingled and collected in the second bin or a single compartment of a collection vehicle. The recyclables are collected from a wheeled bin, box or sack.

b. **Two-stream (or three bin system)** – Compostable waste is collected in one bin, fibre is collected separately in second bin and the other co-mingled materials (typically glass, plastics and cans i.e. containers) are collected in the third bin. Typically, collection vehicles have two compartments to keep the materials separate.

The collected materials are then sent to Material Recovery Facility for sorting into individual streams. As is typical with many sorting processes, larger items are separated out at the front end of the process and smaller items toward the back end.

The primary sorting step separates fibre (newsprint, magazines, office paper, OCC) from containers. Advanced sorting steps may then be used to segregate paper by fibre grade and containers by material type. In automated sorting, initial sorting is done using either a trommel screen or a disc screen and advanced sorting is done using optical reflective near infrared scanners (NIR) scanners (Annexure XI)

In the second step various mechanical techniques are used to separate different container types based on the size, shape, density and conductivity of the material. Technologies commonly used to sort by type include eddy currents for aluminium and overband magnets for ferrous metals.

Single stream sorting is easier for the consumers, makes the collection easier. It is reported that more than two thirds of the USA waste is now single stream. However, the flip side is that single stream collection makes material recovery more challenging, results in a higher degree of contamination and reduces recyclability.

The common Contamination in domestic and commercial waste is of two types:

i. Non-recyclables – single use plastic bag, diapers, Styrofoam etc.
ii. Recyclables – glass, paper, plastic, cylinders (aluminium cans etc)

The extent of contamination in wastepaper is one of the key factors determining the recyclability, quality and price of wastepaper.

10.2 Definition of Contaminants as per various standards

From the recycling perspective, the contaminants are classified as Prohibitives and Outthrows. Following table compare the ISRI (USA), CEPI (Europe) and ACOR (Australian) standards.

Sr. No.	Standard	Countries	Outthrows	Prohibitives
1	ISRI	USA & North America	The term "Outthrows" as used throughout this section is defined as "all papers that are so manufactured or treated or are in such a form as to be undesirable for consumption as the grade specified.""	The term "Prohibitive Materials" as used throughout this section is defined as: a. Any materials which by their presence in a packing of paper stock, in excess of the amount allowed, will make the pack unusable as the grade specified. b. Any materials that may be damaging to equipment.
2	CEPI	Europe	Material not suitable for the production of paper and board" and may comprise the following elements: I. non-paper components II. paper and board not according to grade definition III. paper and board detrimental to production IV. paper not suitable for deinking (if applicable).	Any materials which represent a hazard for health, safety and environment, such as medical waste, contaminated products of personal hygiene, hazardous waste, organic waste including foodstuffs, bitumen, toxic powders and similar.

Sr. No.	Standard	Countries	Outthrows	Prohibitives
3	ACOR	Australia	Outthrows are limited to fibrous material only	Prohibitives in paper recycling generally include: i. Plastic, metal, glass, synthetics, timber, dirt, food, or any other materials that damage equipment or machinery. ii. Materials that are considered to create occupational health and safety, engineering, or environmental risks. iii. Fibrous materials that are contaminated by medical or hazardous wastes, explosive materials and chemicals, poisonous or other harmful substances or liquids. iv. Any wax materials are prohibited unless they are accepted and approved by the buyers.

Note for ISRI - In connection with Items 8 and 9, a material can be classified as an "Outthrow" in one grade and as a "Prohibitive Material" in another grade. Carbon paper, for instance, is "UNSUITABLE" in Mixed Paper and is, therefore, classified as an "Outthrow"; whereas it is "UNUSABLE" in White Ledger and in this case classified as a "Prohibitive Material."

The specifications set out the tolerance limits for Prohibitives and Outthrows; however, the ISRI, CEPI and ACOR specifications are more in the nature of guidelines and they have to be agreed between the seller and the buyer.

11. Regulatory Backdrop on contamination in import of wastepaper

An Office Memorandum No. 13-1/2004 – HSMD was issued by MoEF&CC on 24th March, 2005. The OM mentioned "to ensure that at all the ports of entry only properly segregated paper, paperboard and paper product wastes enter the country without being contaminated with Municipal waste". There was a concern that since wastepaper is not a manufactured item and collected from offices, publishing houses, commercial complexes, industries etc. it cannot adhere to a particular specification. Hence, wastepaper is bound to get contaminated with small portions of household items.

A revised OM was issued by MoEF&CC in Feb 2006 which mentioned following conditions:

a. Upto 8% by weight of wastepaper imported for processing by the paper mills may consist of recyclable materials which are otherwise on Open General License (OGL), and no putrefiable organic matter.
b. The maximum 8% content of recyclable materials must be verified by the Customs authorities in respect of each import consignment.
c. The importers would have to ensure that all recyclable materials are actually recycled, either by them or by other firms in the business of recycling. There should be no disposal of materials other than by recycling. Further that adherence to this condition would be verified by the concerned State Pollution Control Boards (SPCB) and Pollution Control Committees (PCC) and Ministry of Environment and Forests (M0EF) Regional Offices.

A writ petition WP 23097/2008 (ITC Ltd Vs TNPCB) was filed in Madras High Court. The High Court directed that "there should be a policy review to consider the necessity for permitting import of wastes containing paper with a tolerance of 8% for non-paper waste, when this could translate into thousands of tonnes of foreign municipal waste into India."

MoEF&CC had a series of consultations and deliberations to finalize the allowable contamination limit in import of paper waste. The Ministry also discussed whether they should consider ISRI wastepaper grade specifications. ISRI in a written reply communicated that the published grades are a set of guidelines that are intended to assist industry in the buying and selling of the materials and products. These guidelines were not intended to be a rigid standard for legal compliance. Accordingly after consultation with CPPRI and Industry

representatives, revised standards were issued by MoEF&CC Vide Office Memorandum No. 13-1/2004 – HSMD 11th May, 2010 (Annexure XII) prescribing limits for non-paper recyclable material in wastepaper consignments being imported from other countries. The Office Memorandum superseded earlier OM dated 10.02.2006.

The revised guidelines and specifications for non-recyclable material in wastepaper consignment are as follows:

I. Import and export of paper, paperboard and paper product wastes shall be regulated in accordance with the provisions laid down under the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 as amended.
II. Import of paper wastes shall be only for recovery/ manufacture at the paper manufacturing unit (henceforth called as unit") and the imported material shall not be sold further.
III. The importers would have to ensure that all recyclable materials are actually recycled by them. There should be no disposal of materials - other than by recycling.
IV. The imported wastepaper consignment shall not contain any municipal solid waste or post-consumer domestic waste or biomedical waste-or any other type of contaminants. In case of any such contaminant being found, -the consignment will have to be sent back to the exporting country and the importer shall bear the cost thereof.
V. An inventory of imported material will be maintained by the unit including the name of company and industry from where imported.
VI. A record of waste material generated, while recycling the imported wastepaper, along with the quantity and characteristics of the disposal of non-recyclable waste including toxic waste should be maintained by the unit. The non-recyclable waste may be disposed of as per the requirement of the State Pollution Control Board concerned to avoid any surface or ground water contamination.
VII. The extent of recyclable material, which is otherwise on Open General License (OGL), shall not exceed the limits specified in an appended table. However, there shall be no putrefiable organic matter at all in the imported wastepaper consignment.
VIII. The content of paper wastes must be verified by the Customs authorities in respect of each consignment imported into the country.
IX. Adherence to stipulated conditions would be verified by the Customs Authorities, the State Pollution Control Board (SPCB)/Pollution Control Committee (PCC) concerned and the Regional Offices of the Ministry of Environment and Forests.

Very recently, a petition OA 851/2018 is also considered in Hon'ble NGT, Principal Bench. The issue for consideration is the remedial action against cheap wastepaper along with the road sweep waste import in India. A report has been filed by CPCB inventorizing the quantity of wastepaper imported, quantity of plastic imported along with wastepaper, disposal mechanism of plastics etc. (Annexure XIII) Hon'ble NGT has also asked MoEF&CC to file a report in the matter.

11.1 Measurement of contamination in wastepaper

The measurement of contamination in wastepaper is a tricky issue. Wastepaper is usually received in bales of about 350-400 kgs each and a container or lorry may contain many bales. The most accurate way to assess contamination is to break open a bale, physically sort out the contaminants and weigh them. Clearly, this cannot be carried out for all bales. A more commonly used method is to take cores out of the bales and then estimate the contamination by weighing. Usually, contamination is estimated visually. The Confederation of European Paper Industries (CEPI) has come with guidance on measurement of contamination (Annexure XIV).

Apart from the gravimetric and visual methods of estimating contamination, newer technologies such as Near Infra-Red (NIR) and microwave absorption are also being developed.[14][15][16][17]

11.2 Monitoring of contamination levels in imported waste and compliance of the 2010 O.M

The Customs had also released circulars regarding implementation of Office Memorandum. (Annexure XV). The mainstay of the monitoring mechanism is the requirement of a preshipment inspection certificate from an agency notified by the DGFT. At the port of delivery, inspection is randomised. Since the volume of imports is very large, the cargo is

[14] PaperBaleSensor by PTS paper. https://www.ptspaper.com/products/manuelle-altpapierkontrolle/
[15] Valmet Bale Tester at Smurfit KappaHoya Mill, Germany. https://www.valmet.com/media/articles/board-and-paper/whats-in-the-recovered-paper/
[16] https://www.recyclingtoday.com/article/measuring-moisture-in-paper-bales/
[17] The new techpap NIR spectroscopy for recycled paper bales inspection.https://www.tappi.org/content/events/07recycle/presentation/rech.pdf

baled and bulky and often there is direct from port delivery, inspection covers a minuscule fraction of the imports (Report filed by CPCB in Hon'ble NGT at Annexure XIII).

Individual mills have evolved their own mechanism to monitor the quality of raw material. Initially a sample of the product is procured and sent to laboratory for quality check. Once the quality is verified, the price is agreed upon and then the order is placed with the supplier. The consignment on arrival is inspected at the premise and an inspection report is prepared (sample inspection reports at Annexure XVI). If the product does not comply with the agreed quality, then the consignment is kept on hold and the matter is informed to the supplier. A person from supplier visits the mill, takes the photographs and send to their office. A revised price is negotiated and the mills use the product in a different process.

Few mills also place the order based on photographs sent by the supplier. In this case the quality is verified based on the photographs, the price is agreed upon based on the prevailing price of that grade in international markets and then the order is placed. When the consignment is arrived the photographs are matched.

In order to assess the reliability of the preshipment certificates, a few mills were visited. The extent of contamination, as evidenced by a visual inspection of the stored stock and the generation of plastic waste in the pulping process was compared to the contamination percentage reported in the preshipment certificates. At least in the case of one mill, the preshipment certificate did not appear to reflect the correct levels of contamination, which were way higher than the permitted levels (Visit Reports at Annexure XVII).

11.3 Disposal of Contaminants

The major contaminant in wastepaper is plastic and the disposal of this poses a challenge. Assuming the contamination levels to be between 2 to 5 per cent, the amount of plastic generated through imported wastepaper processing would be between 1.2 to 3 lakh tonnes. An equivalent amount would be generated in the processing of domestic wastepaper.

Presently, the main disposal pathway is by co-processing in cement kilns. However, discussions with the industry representatives suggest that the offtake by the cement kilns tends to be uncertain and the cement kilns tend to dictate terms. One mill reported some use in granulating and reusing the plastic, while another mill has set up a waste to energy boiler for recovery of energy and captive use of the generated steam.

12. Need for import of wastepaper

The total requirement of wastepaper is estimated between 10 million and 11 million tonnes a year. Though paper consumption in the country is about 18 million tonnes, recovery of wastepaper is just 46%. These rates are much lower as compared to 80 % in Japan 73 % in Germany 69 % in Sweden and 49 % in USA.

Utilisation of recovered paper in India is also restricted due to multiple end uses of paper products such as wrapping and packaging applications which often offer a better price as compared to the paper industry.

In addition, because of multiple use of packaging, it was represented that kraft paper made from domestic waste often cannot achieve the desired strength (burst factor). Even use of expensive fractionation technology for separating out longer fibres does not give a fibre strong enough for some of the uses.

Accordingly, a major portion of industry's requirement of wastepaper (approx. 6 million tonnes) is met through import which is on increase. Of the 850 paper mills in the country, 700 are based on wastepaper.

There has been a spurt in the import of waste post the tightening of import norms by China. Between 17-18 and 18-19, the imports jumped from 4 million tonnes to 6.3 million tonnes, though they have remained steady in the year 19-20.

Precise statistics on the use of domestic paper waste are not available. However, Anecdotal evidence available to the committee points to a reduction in the use of domestic waste (Annexure XVIII). Further, interaction with the wastepaper trade indicates both, a reduction in volumes transacted and the price realised for domestic paper waste in the 2018-19 compared to 2017-18. The imports however held steady between 2018-19 and 2019-20.

The situation has changed very dramatically because of Covid-19. Domestic generation of ONP (Old News Papers), office stationary waste etc. has come down drastically. The long term impact of Covid-19 on lifestyles, economy and international trade is still not clear. Given the uncertainty because of Covid-19 and given that imports have held steady between 2018-19 and 2019-20, at this stage, there is scant evidence that import of wastepaper is at present adversely affecting domestic waste collection. Further, present situation indicates that usage of recycled fibre from imported wastepaper is essential for sustainability of paper industry. Therefore, while the import of wastepaper may continue, the situation needs to be constantly monitored.

12.1 Contamination limits

One of the key policy decisions is the prescription of the extent of contamination that may be allowed in imported waste. however, the situation is made complex by the fact that not only the classification of wastepaper varies across countries, but the terms ‘prohibitives’ and ‘outthrows’ are to be interpreted relative to grade of paper in question and also the agreement between the buyer and the seller.

The OM dated 10 May 2010 has prescribed contamination limits of non-paper recyclables for 48 different grades. This O.M was issued after considerable consultation with the industry and CPPRI and the classification is based on then prevalent ISRI classification for wastepaper.

The issue was again discussed with the industry representatives fairly extensively. The level of contamination prescribed is ‘Nil’ for as many as 31 grades. Further, the ISRI classification has also changed and some of the grades mentioned are superseded and some new grades have come. Specifically, grades ISRI #1(residential mixed paper), ISRI#2(Soft mixed paper), ISRI#3(hard mixed paper) have been superseded and grades ISRI#54 (mixed paper) and ISRI#56 (sorted residential papers) and ISRI #58(Sorted clean news) have been added.

It is understood that over 75% of the consignments are of types of wastepaper which have a prescribed limit of 1% or less and remaining 25% have a prescribed limit of more than 1% and less than 2% contamination. It is also understood that a small amount of plastic that is integral to paper (as in waste laminated cartons, envelopes with plastic windows, polycups etc.) is usually not counted towards the contamination, as far as enforcement of contamination limits at customs is concerned.

As mentioned earlier, the monitoring of contamination levels in paper needs to be enhanced and several stringent measures for enhancing monitoring are proposed elsewhere in the report. At this moment, efforts need to be focussed on implementing those stringent monitoring measures. Therefore, the working group at this point of time is of the opinion that existing prescribed limits may be continued and may be reviewed after a year of implementing the proposed measures.

12.2 Strengthening of the monitoring mechanism

The following steps may be taken for strengthening the monitoring mechanism.

1) The importers/clearing house agents should put in the correct HSN code for the import consignments instead of putting everything under HSN 47079000.

2) Consignments of mixed paper waste, along with other import documents, should be accompanied by a self-declaration on the letter head of the exporting company, indicating name and address of the wastepaper plant or any other source of the material.

3) Further, the import documents should be accompanied by a Bale break report on the letter head of the exporting company indicating the percentage of contaminants.

4) The pre-shipment certificate issued by the authorised inspection agencies should clearly mention whether the material imported is pre- or post-consumer (commercial) or post-consumer (residential dual stream recycling) or post-consumer (residential single stream recycling).

3) The reliability of the certification by the inspection agencies should be randomly checked. The manpower and expertise available with them also should be periodically assessed.

4) The imports by most mills are on a continuing basis. The importers should submit a six-monthly certificate to the customs authorities from the SPCB that the contaminant has been disposed of in the prescribed manner (Annexure XIX for format). The import consignments should be cleared only on production of this certificate.

5) CPCB/MoEF&CC should develop a portal where all importers of waste are mandatorily registered. Importers should report all import consignments on the portal, including in case of wastepaper imports. The disposal pathways of contaminants/residues generated from recycling should also be reported in the portal. (More details in Annexure XX). CPPRI has also recommended similar portal for monitoring of imports (*Paper Import Monitoring Portal*).

6) Under European/U.K. regulations, each export consignment from there has to be mandatorily accompanied by a certificate named as Annexure 7 indicating the facility from where the consignment originated (Sample at

Annexure XXI). It should be taken up with authorities in USA for a making a similar certificate mandatory for consignments originating from USA.

12.3 Import of wastepaper by Traders

As per the HWM Rules import is permitted only to the actual user or to the trader on behalf of the actual users authorised by SPCB on one-time basis.

It has been observed in multiple instances that traders are importing wastepaper in their own name and not on behalf of actual users. The Committee could access a few bill of entries generated in the name of traders. The End User certificate is later collected from paper mills and submitted to Customs for waiver of Standard Customs Duty. In such cases Purchase Order is issued by the Paper Mills after the consignment is arrived in the country. In this scenario, if the consignment is stuck at Customs due to exceedance of contamination limit then the accountability falls solely on the trader and not on paper mill as the paper mill is officially not on board at this point of time.

Imports may be allowed only in the name of mills since it is difficult to make traders accountable. There is a possibility of misdeclaration and mistrust on behalf of traders. On the contrary, Paper Mills are sitting on hard assets and huge investments and therefore there is a greater accountability. The Committee recommends that bill of entries should only be filed in the name of paper mills and the registration number provided by SPCBs should also be mentioned in it.

12.4 Disposal of waste

The waste generated in the recycling process is presently being sent to cement kilns by some of the paper mills. The C to O of cement plants may be amended to incorporate mandatory use of alternative fuels.

There are some concerns by paper mills about permissions from PCBs to dispose plastic waste in the cement kilns outside the state. Since, rules does not mandate NOC from States, for inter State transportation of hazardous and other wastes for the purpose of recycling, utilization or energy/resource recovery, CPCB may issue a clarificatory circular in the matter.

It is recommended that energy recovery in waste to energy plants may also be considered as a disposal option. Bigger paper mills may set up captive waste to steam/energy boilers where the plastic generated by their unit may be used as alternate/supplementary fuel, while the smaller ones may be allowed to send their plastic waste to bigger plants or even to municipal waste to energy plants. There may also be a provision that RDF or the

combustible dry fraction from nearby MSW facilities can be provided to such captive plants set up by the paper mills. However, the plants so set up to meet all the regulatory guidelines, especially appropriate residence times in the furnace for complete destruction of dioxins and furans and for meeting the NOx emission standards. We suggest that CPCB issue detailed guidelines on the subject and carry out inspections as necessary for this purpose.

The paper mills may also be allowed to dispose the plastic with due agreement with cement Kilns. The relationship between buyer and seller, in this case paper mill and cement kiln should be commercially determined. However, in the instant case the paper mills have the legal compulsion to dispose the generated plastic and therefore the relative bargaining strength of the paper mill and the cement kilns are tilted in the favour of the cement kilns. Therefore, it is necessary to have some framework which in some way restores the evenness of the bargaining position.

The cement Kilns should be mandated to buy at least 10% alternate fuel and maintain AFR of at least 10% and they may buy the plastic at a price of at least 50% of the equivalent quantity of coal based on Calorific Value delivered to the gate of cement kiln.

12.5 Regulation of imports of wastepaper

The working group carefully considered whether wastepaper should continue to be in Schedule D of the HoWM Rules 2016. The imports are voluminous, constitute close to one-third of the raw material requirement and the main concerns arise from the weaknesses in monitoring of source of imports, pre-shipment inspections, inspection at ports of imports and post import monitoring of disposal of contaminants. Mere shifting of paper waste from Schedule D to Schedule B may not entirely address any of these concerns; on the other hand, it will increase the administrative burden at the Ministry phenomenally and also increase procedural bottlenecks in business.

The group also noted that there is a significant import of finished product, mainly newsprint and any restriction on availability of raw material will give an impetus to the import of finished product, which will be detrimental to viability of domestic mills and domestic employment

At this juncture, it is therefore felt that the enhanced inspection and monitoring mechanisms suggested above may be tried out in the first place. The outcomes may be carefully observed and if the imports become a bigger proportion of raw material, contamination is not controlled or disposal of contaminants is not appropriate, only then more stringent measures may be implemented.

The group also considered whether any specific stream of wastepaper, especially mixed paper waste should be brought under Schedule B or even banned altogether. It is noted that mixed paper waste constitutes around 25 % of the imports and an immediate ban on these imports will be highly disruptive to the industry. However, imports of mixed paper waste originating from single stream recycling MRFs may be banned from April 2022 and this decision may be announced well before that date, giving sufficient preparatory time to the industry and trade.

12.6 Export of pulp by mills importing wastepaper

It was also brought to the notice of the group that the export of recovered pulp and paper to China is on the rise, consequent to the restrictions imposed by China on import of wastepaper. There is a concern that the import of waste for export purposes results in import and possible accumulation of contaminants. However, we note that production lines use a mix of material, including domestic and imported waste, and there is no way to characterize a particular product as made solely from imported waste. So, there is no way to prevent some exports on the ground that they are derived from imported waste. In any case, we need to strike a balance between the availability of competitively priced raw material for exports and the environmental concerns associated with that.

13. Domestic Wastepaper Collection

13.1 Domestic Wastepaper Collection Mechanism

The collection of wastepaper is carried out mostly by informal sector. The collection hierarchy consists of paper collectors, paper traders and paper aggregators.

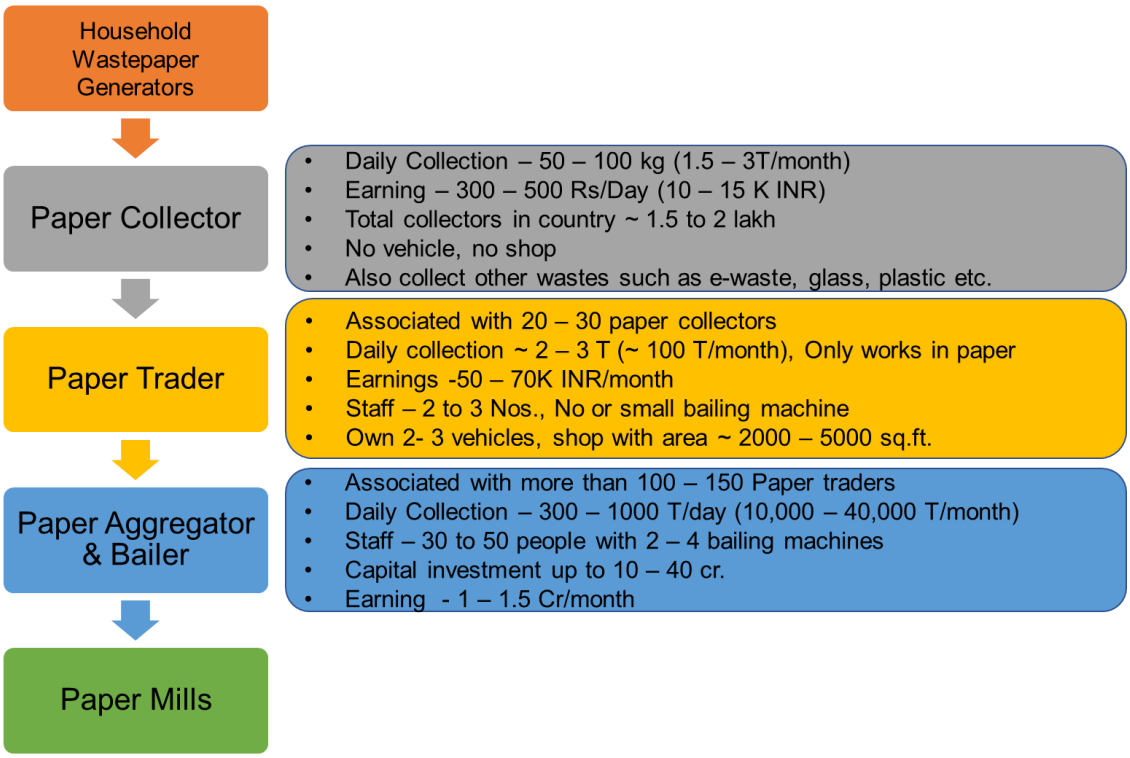


Figure 5 Wastepaper Collection Hierarchy

Based on the flow chart provided above, the key elements of wastepaper recycling chain are described as below:

1. Wastepaper Collector –

Household collection of wastepaper (records, newsprint and packaging carboard etc.) is done by paper collectors. Interviews with a few of them suggest that the daily number of households through which wastepaper is collected are ~ 10 – 15 and the total collection is 50 – 100 kg/day or 2 to 3 T/month. For records and newsprint, the profit margin for wastepaper collector is ~1-2 Rs/kg. In current scenario, the packaging cardboards are collected from house owners at zero cost which is sold to paper trader @ 7 – 8 Rs/kg. As per interviews taken for EWG, daily earning for these collectors ranges from 300 – 500 Rs. Or 10,000 to 15,000 Rs. per month. It is estimated that more than 1.5 to 2 lakh of wastepaper collectors are operating within the country. Other items such as e-waste rigid plastics, glass

containers etc. are collected along with paper which improves the total earning of waste collector.

Due to informal nature of trade, and strong competition, waste collectors have very little bargaining power. It is noticed that the paper collectors tend to switch to other jobs in case waste collection does not fetch them sustainable wages, therefore the aggregator tries to maintain and regulate the cost in such a way that waste collectors get minimum wages on average. Thus price of paper is mainly defined by main aggregator-paper mill (higher tier/ hierarchy in paper recycling trade chain), while what has to be paid to the households is determined by competition among the waste collectors. Thus, though the waste collectors are the backbone of the system, they are presently earning near sustenance level incomes only.

Experience in some countries suggests that if they are linked to some NGO and the local municipal administration recognises them, the relative bargaining power may increase somewhat and their incomes may increase somewhat.

2. Paper Traders –

Paper traders are one step higher than wastepaper collectors. 20 – 30 wastepaper collectors are tied up to them. Traders have own space up to 5000 sq. ft. (based on area of operation) along with the light commercial vehicles for the transport of wastepaper. Daily collection for traders is up to 3 – 5 ton (100 – 150 ton/month). They are intermediaries for collectors and aggregators to smoothen the supply chain of wastepaper in terms of time and category. The profits ranges from 1.5 to 2.5 Lakhs/month.

Traders also enter into annual contract with commercial complexes, offices, industries etc to collect the wastepaper generated from their premises.

Sometimes, a well organised paper aggregator with wide network of his own may by-pass traders.

3. Paper Aggregators –

Paper aggregators are top of the hierarchy in wastepaper recycling. The daily turnover ranges from 400 T to 1500 T/day (10,000 – 40,000 T/month). They are normally coupled with 150 – 200 traders. They have their own light commercial vehicles for local collection. Based on the

interaction with few aggregators, cost offered by paper mills is normally based on international market prices. The turnover cycle (supply of paper to payment) is normally 1 month. As per one of the aggregators, normally 50,000 sq. Ft. area with 1 - 2 balers are required for 300 - 400 T/day capacity. The capital cost for foresaid facility is estimated ~ 10 cr.

13.2 Preference of domestic waste over imported waste by Paper Industry

Discussions with both traders and recycled paper units suggest that domestic wastepaper is preferred by paper industry due to multiple factors enlisted below:

a. Payment Terms – In import scenario the price has to be paid upfront before the consignment is shipped whereas in domestic scenario the price is paid after the consignment is delivered to the premise.
b. Quality Assurance – In import scenario there is a risk of received paper quality varying with desired quality as the orders are made based on photographs or samples. The negotiating mechanism can also be little cumbersome as the seller is in a different country. In domestic scenario the quality is assured by the fact that the payment is made after the product is received. There is always a threat to trader that industry may stop or delay the payment if desired quality is not delivered. Hence, the industry has an upper hand in domestic transaction.
c. Time factor – In import scenario planning has to be done several months in advance as a lot of time is consumed in shipping and customs clearance whereas in domestic market the product can be delivered in few days after placing the order.

13.3 Effect of Wastepaper import on domestic collection

For the reasons mentioned above, the committee is informed by various paper traders that domestically collected wastepaper is completely consumed by the paper industry. The imports are over and above the domestic collection. In quantity terms, the imports do not affect the domestic collection but in pricing terms, imports govern the domestic price. The price of domestic paper is in direct correlation with the price of imported paper. If the import price is reduced, domestic waste price also gets reduced thereby affecting the supply chain. As noted earlier, the informal waste collectors have very little bargaining power either with respect to the household sellers or with respect to the buying trader and they work on thin margins. Since most of the workers in waste management work on sustenance incomes only which cannot be reduced any further, the incidence of reduction in market price falls

substantially on to the primary seller, namely the households. EWG also observed that, imported wastepaper is essential to maintain quality of paper produced and non-availability of imported wastepaper may impact viability of paper industry, which in turn may affect consumption of domestic wastepaper. In this context, domestic paper waste aggregators have no objection for imports. However, they have expressed the need for governmental support in developing infrastructure facilities such as dedicated common space for waste handling, bailing equipment etc. to improve domestic waste collection efficiency.

13.4 Linkage of imports with domestic waste utilisation

The EWG carefully considered whether recycled paper units should be mandated to use a certain minimum of domestic paper waste. The committee has made such a recommendation in the case of waste tyres and lead acid battery imports. However, it is noted that both tyres and lead acid batteries fall in the category of hazardous and other wastes that have higher environmental impacts associated with recycling. In both cases, the domestic waste collection is weak, and there is significant evidence of the domestic waste being handled in environmentally unsafe manner leading to pollution and health hazards. The situation with respect to paper waste is different on these counts. Paper waste is not hazardous and there is a well-established, though informal household collection system. Further even if paper does end up in municipal solid waste sites, it is biodegradable unlike plastic and has less environmental impact.

The EWG also noted that viable operations of the paper mills is a necessity for domestic paper waste collection and prima facie, what is being collected is being used by the recycled paper mills and that imports are a necessity for operating at viable capacity. The products of mills are very varied, with different raw material requirements especially in terms of fibre length and burst factor (B.F) of the resulting paper, different availability of domestic waste and a uniform regulation of this type may not be appropriate. Further, the present disruption in domestic and international markets due to Covid-19 also must be considered. Presently the availability of domestic wastepaper is severely impacted and therefore the group refrains from making such a recommendation.

Nonetheless, the situation with respect to imports needs to be monitored continuously. If there is an abnormal reduction in the price of imported waste, or an abnormal spurt in the quantity being imported that actually impacts the domestic waste collection then customs

duty can be increased or non-tariff barriers such as mandatory recycling of domestic paper waste can be implemented to protect the business of domestic waste recycling. In any case, we are suggesting some additional measures in the following paragraphs to boost domestic recycling.

13.5 Mandatory use of recycled fibre

In few countries there is a mandate to use minimum percentage of recycled fibre in paper manufacturing. For example, in USA, the EPA has introduced a Comprehensive Procurement Guidelines (CPG) program under which it recommends minimum recovered fibre content levels for different categories of paper.[18] The mandated percentage of recovered fibre varies from 10%-50%. The category wise details are provided in **Annexure XXXVIII**. In Europe on other hand there is no mandatory minimum requirement for recycled fibre content due to opposition by certain Member State representatives and industry stakeholders, citing that such a requirement would favour some regions (i.e. paper producers in areas with large population centres and thus locally available Paper for Recycling) over others.[19]

In India the use of recycled fibre as per material balance worked out is close to 70% and therefore there may not be a necessity for making such a legal stipulation. At the same time, many procurement agencies insist on the use of virgin fibre for their paper requirements.[20] We understand that this matter has received substantial attention and has been the subject of litigation as well. The group feels that the procurement policies should promote the use of recycled fibre, consistent with quality requirements, as the use of recycled fibre uses less water, less energy, causes less pollution and improves the market for domestic waste.

[18] https://www.epa.gov/smm/comprehensive-procurement-guidelines-paper-and-paper-products

[19] https://ec.europa.eu/environment/ecolabel/documents/tissue_paper_tr_2019.pdf

[20] Discussions with CPPRI on 12th Nov. 2020

13.6 Scope to improve Domestic Collection

Indian households tend to stock newspapers, magazines, notebooks etc and whenever sufficient quantity is accumulated it is sold to local raddiwala. These items are mostly diverted to recycling channel. However, other paper products such as packaging items are thrown into dustbins. In most of the Indian households since there is no source segregation, paper waste gets soiled after mixing with wet waste. Such soiled paper is unfit for recycling and ultimately ends up at landfill.

The waste collectors may be authorised to collect recoverable paper waste from mixed waste at door steps, transfer point or material recovery facility on daily basis at no cost, the waste that is normally entering to landfill can be diverted in such case to the recycling channel.

The Government may also run a consistent campaign on the line of Swachh Bharat Abhiyan to create awareness among masses. Visual and print media may be used to urge the people to segregate waste at source to avoid contamination at the later stage.

13.6.1 Development of dedicated neighbourhood paper waste collection centre

Wastepaper is high volume, low cost commodity. Large space is required to operate accumulate, segregate, store and bail wastepaper prior to dispatch to aggregators and mills. It is suggested that a neighbourhood waste collection centre, with facilities such as storage shed, bailers, weighing units, etc. may be developed for use by waste collectors and traders as it would reduce cost of transportation significantly due to bailing and also improves waste collection. The neighbourhood waste collection facility needs to be set up in every 20 square Km area, and may also be used for collection of other household wastes such as glass, metals, plastics, domestic hazardous wastes, etc.

13.6.2 Establishment of Paper Recycling Promotion Society and Paper Recycling Promotion Fund

The EWG feels that provisions similar to Extended Producers Responsibility for plastics are necessary to promote domestic recycling in a substantial and sustained manner. Further, a dedicated institutional arrangement is needed to sustain the efforts to improve recycling. The EWG therefore recommends to establish a Paper Recycling Promotion Society and a Fund that may be created by imposing fee on import of paper waste to help promotion of domestic waste recycling and welfare of the workers involved in paper waste collection. Such a fund could be created by framing suitable rules under the EP Act,1986.

Proposed Salient Features of the fund:

- A Paper Recycling Promotion Society may be formed as a public private partnership with representation from the Ministry, the mills, the wastepaper trade and other stakeholders to administer the amount received and utilize the funds.
- recycling promotion fee of 2 USD/tonne shall be levied on wastepaper that is imported in the country.
- A similar EPR levy shall be imposed on import of finished paper/pulp and on manufacturing of virgin paper in the country.
- The fund shall be used for facilitating the setting up of neighbourhood waste collection centres, recycling infrastructure and technologies, to improve the livelihood of the workers involved in paper collection, to incentivise municipal bodies to meet segregation targets, and to create awareness amongst the masses and related matters.

14. Key Findings and Recommendations

1. Approximately 19% production of paper is based on wood, 10% on agro-residues and 71% on recycled fibre. Of the 850 paper mills in the country, 700 are based on wastepaper.
2. Paper consumption in India is 18.6 million tonnes. 1/3rd of paper i.e. approx. 6.0 million tonnes are manufactured from domestic wastepaper, 1/3rd from imported wastepaper, 3.2 million tonnes from wood pulp, 1.7 million tonnes from agro-residue and the rest 1.4 million tonnes is net import.
3. Recovery of wastepaper in India is just 46%. This rate is much lower as compared to 80 % in Japan, 73 % in Germany, 69 % in Sweden and 49 % in USA.
4. The wastepaper import is mainly from the developed countries viz. US, Canada, UK, Germany, Gulf Countries etc.
5. Office Memorandum No. 13-1/2004 – HSMD dated 11th May 2010 issued by MoEF&CC has prescribed limits for non-paper recyclable material in wastepaper consignments imported from other countries. The same standards may be continued to regulate quality of imported wastepaper till a review of standards after one year.
6. There has been a spurt in the import of waste post the tightening of import norms by China. Between 17-18 and 18-19, the imports jumped from 4 million tonnes to 6.3 million tonnes, though they have remained steady in the year 19-20.
7. Given the uncertainty because of Covid-19 and given that imports have held steady between 2018-19 and 2019-20, at this stage, there is scant evidence that import of wastepaper is adversely affecting domestic waste collection. Further, present situation indicates that usage of recycled fibre from imported wastepaper is essential for sustainability of paper industry. Therefore, while the import of wastepaper may continue, the situation needs to be constantly monitored.
8. The monitoring of contamination levels in paper needs to be enhanced and several stringent measures for enhancing monitoring are proposed in the report. At this moment, efforts need to be focussed on implementing those stringent monitoring measures. Therefore, the working group at this point of time is of the opinion that existing prescribed limits may be continued and may be reviewed after a year of implementing the proposed measures.
9. The importers/clearing house agents should put in the correct HSN code for the import consignments instead of putting everything under HSN 47079000.

10. The Expert Working Group recommends that consignments of mixed paper waste should be accompanied by a self-declaration on the letter head of the exporting company, indicating name and address of the wastepaper plant or any other source of the material.
11. The import documents should be accompanied by a Bale break report on the letter head of the exporting company indicating the percentage of contaminants.
12. The pre-shipment certificate (PSC) issued by the authorised inspection agencies should clearly mention whether the material imported is pre or post-consumer (commercial) or post-consumer (residential dual stream recycling) or post-consumer (residential single stream recycling).
13. The reliability of the certification by the inspection agencies should be randomly checked. The manpower and expertise available with them should also be periodically assessed.
14. The imports by most mills are on a continuing basis. The importers should submit a six-monthly certificate to the customs authorities from the SPCB that the contaminant has been disposed of in the prescribed manner (Annexure XIX for format). The import consignments should be cleared only on production of this certificate.
15. CPCB/MoEF&CC should develop a portal where all importers of waste are mandatorily registered. Importers should report all import consignments on the portal, including in case of wastepaper imports. The disposal pathways of contaminants/residues generated from recycling should also be reported in the portal. (Details in Annexure XX). CPPRI has also recommended similar portal for monitoring of imports (*Paper Import Monitoring Portal*)
16. Under European/U.K. regulations, each export consignment from there has to be mandatorily accompanied by a certificate named as Annexure 7 indicating the facility from where the consignment originated (Sample at Annexure XXI). It should be taken up with authorities in USA for a making a similar certificate mandatory for consignments originating from USA.
17. Imports may be allowed only in the name of mills since it is difficult to make traders accountable. There is a possibility of misdeclaration and mistrust on behalf of traders. On the contrary, Paper Mills are sitting on hard assets and huge investments and therefore there is a greater accountability. The Committee recommends that bill of entries should only be filed in the name of paper mills and the registration number provided by SPCBs should also be mentioned in it.

18. The waste generated in the recycling process is presently being sent to cement kilns by some of the paper mills. The C to O of cement plants may be amended to incorporate mandatory use of alternative fuels.
19. There are some concerns by paper mills about permissions from PCBs to dispose plastic waste in the cement kilns outside the state. Since, rules does not mandate NOC from States, for inter State transportation of hazardous and other wastes for the purpose of recycling, utilization or energy/resource recovery, CPCB may issue a clarificatory circular in the matter.
20. It is recommended that energy recovery in waste to energy plants may also be considered as a disposal option. Bigger paper mills may set up captive waste to steam/energy boilers where the plastic generated by their unit may be used as alternate/supplementary fuel, while the smaller ones may be allowed to send their plastic waste to bigger plants or even to municipal waste to energy plants. There may also be a provision that RDF or the combustible dry fraction from nearby MSW facilities can be provided to such captive plants set up by the paper mills. However, the plants so set up to meet all the regulatory guidelines, especially appropriate residence times in the furnace for complete destruction of dioxins and furans and for meeting the NOx emission standards. EWG suggest that CPCB issue detailed guidelines on the subject and carry out inspections as necessary for this purpose.
21. The paper mills may also be allowed to dispose the plastic with due agreement with cement Kilns. The relationship between buyer and seller, in this case paper mill and cement kiln should be commercially determined. However, in the instant case the paper mills have the legal compulsion to dispose the generated plastic and therefore the relative bargaining strength of the paper mill and the cement kilns are tilted in the favour of the cement kilns. Therefore, it is necessary to have some framework which in some way restores the evenness of the bargaining position.
22. The cement Kilns should be mandated to buy at least 10% alternate fuel and maintain AFR of at least 10% and they may buy the plastic at a price of at least 50% of the equivalent quantity of coal based on Calorific Value delivered to the gate of cement kiln.
23. The imports are voluminous, and the main concerns arise from the weaknesses in monitoring of source of imports, pre-shipment inspections, inspection at ports of imports and post import monitoring of disposal of contaminants. Mere shifting of paper waste from Schedule D to Schedule B may not entirely address any of these concerns; on the other hand, it will increase the administrative burden at the Ministry phenomenally and also increase procedural bottlenecks in business.
24. EWG felt that the enhanced inspection and monitoring mechanisms suggested in the report may be tried out in the first place. The outcomes may be carefully observed and if the imports

become a bigger proportion of raw material, contamination is not controlled, or disposal of contaminants is not appropriate, only then more stringent measures may be implemented.

25. The EWG noted that mixed paper waste constitutes around 25 % of the imports and an immediate ban on these imports will be highly disruptive to the industry. However, imports of mixed paper waste originating from single stream recycling MRFs may be banned from April 2022 and this decision may be announced well before that date, giving sufficient preparatory time to the industry and trade.
26. For the improvement of Domestic Recycling of wastepaper,
    a. It is suggested that a neighbourhood waste collection centre, with facilities such as storage shed, bailers, weighing units, etc. may be developed for use by waste collectors and traders as it would reduce cost of transportation significantly due to bailing and also improves waste collection. The neighbourhood waste collection facility needs to be set up in every 20 square Km area, and may also be used for collection of other household wastes such as glass, metals, plastics, domestic hazardous wastes, etc.
    b. The EWG recommends to establish a Paper Recycling Promotion Society and a fund to help promotion of domestic waste recycling and welfare of the workers involved in paper waste collection. Such a fund could be created by framing suitable rules under the EP Act, 1986.
        - A Paper Recycling Promotion Society may be formed as a public private partnership with representation from the Ministry, the mills, the wastepaper trade and other stakeholders to administer the amount received and utilize the funds.
        - Recycling promotion fee of 2 USD/tonne shall be levied on wastepaper that is imported in the country.
        - A similar EPR levy shall be imposed on import of finished paper/pulp and on manufacturing of virgin paper in the country.
        - The fund shall be used for facilitating the setting up of neighbourhood waste collection centres, recycling infrastructure and technologies, to improve the livelihood of the workers involved in paper collection, to incentivise municipal bodies to meet segregation targets, and to create awareness amongst the masses and related matters.

15. Annexures

Annexure I: Office order by MoEF&CC, Govt. of India for constitution of Expert Working Group to review the import and export of Hazardous and Other Wastes

F.No.23/27/2019-HSM
Government of India
Ministry of Environment, Forest & Climate Change
HSM Division

3rd floor, Jal Wing
Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj
New Delhi-110003

Dated the 29th November, 2019

Office Order

Sub: Constitution of Expert Working Group to review the import and export of hazardous and other wastes

In supersession of the Office Order of even number dated 27/11/2019, the Ministry of Environment Forest and Climate change hereby constitutes a Committee to review import and export policy of hazardous and other wastes with the following composition:

(i)	Shri Sudhir Shrivastava, Chairman, Maharashtra Pollution Control Board	Chairman
(ii)	Prof. S.N. Tripathi, IIT Kanpur	Member
(iii)	Prof. Sanjeev Chaudhari, IIT Bombay	Member
(iv)	Shri Vinod Babu, Central Pollution Control Board	Member
(v)	Director, HSMD, Ministry of Environment, Forest and Climate Change	Member Secretary

2. The Expert Working Group shall review the policy for import and export of hazardous and other wastes such as tyre, textile, lead, oil, paper, glass, printed circuit board, etc. and give recommendations to the Ministry.

3. The tenure of the committee shall be for a period of three months.

4. The payment of sitting fee amounting to Rs. 4,000/- shall be applicable only in case non-official members in pursuance of extant guidelines and rules.

5. The payment of TA/DA shall be governed in accordance with the guidelines of Department of Expenditure OM dated 19/7/2017 which state that air tickets may be purchased directly from Airlines (at Boarding counters/offices/websites of Airlines) or from the authorized Travel Agents viz. M/s Balmer Lawrie & company Limited, M/s Ashok

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Travels & Tours and IRCTC only. In respect of Non-officials of committees/Boards/Panels, tickets have to be purchased from authorized travel agent only, otherwise their claims will not be settled.

6. This issues with the concurrence of IFD vide their Dy no. 128914/AS&FA dated 27.11.2019 and with the approval of the competent authority

(**Dr. Sonu Singh**)
Additional Director(S)
Ph: 011-24695418
Email: sonu.singh@nic.in

To,

All Members of the Expert Working Group

Copy to:

1. PS to MEF&CC
2. PPS to Secretary (EF&CC)
3. PPs to AS (RSP)
4. PS to JS(NK)
5. SO(HSMD)
6. Director (IFD)
7. Guard File

Annexure II: Office order by MoEF&CC, Govt. of India for extension of Expert Working Group to review the import and export of Hazardous and Other Wastes

F.No. 23/27/2019-HSM
Govt. of India
Ministry of Environment, Forest & Climate Change
HSM Division

3rd Floor, Jal Block
Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj
New Delhi-110003

Date: 22nd May, 2020

OFFICE ORDER

Subject: Constitution of Expert Working Group to review the import and export of hazardous and other wastes.

This is in continuation to Office Order of even number dated 29thNovember, 2019 & extension dated 20thMarch, 2020 (copies enclosed), the Ministry of Environment Forest and Climate Change hereby extends the tenure of the Expert Working Group constituted under the Chairmanship of Shri. Sudhir Shrivastava, Chairman, Maharashtra Pollution Control Board by another three months i.e up to 28/08/2020.

2. The other terms and conditions would remain same as that of the Office Order dated 29th November, 2019.

3. This issues with the concurrence of IFD vide their Dy. No. 128914/AS&FA dated 22.05.2020 and with the approval of competent authority.

Sonu Singh

(Dr. Sonu Singh)
Scientist 'E'/Add. Director

To:

All EWG Members

Copy to:

1. PS to MEF&CC.
2. PPS to Secretary (EF&CC)
3. PPS to AS (RSP)
4. PS to JS(GM)
5. SO(HSMD)
6. Director (IFD)
7. Guard File

Annexure III: ISRI Paper Grades, USA

Grade No	Paper grade	Descriptions	Prohibitive Materials may not exceed %	Outthrows plus prohibitives may not exceed %
1	**(Grade not currently in use)**			
2	**(Grade not currently in use)**			
3	**(Grade not currently in use)**			
4	**Boxboard Cuttings**	Consists of new cuttings of paperboard used in the manufacture of folding cartons, set-up boxes, and similar boxboard products.	1/2 of 1%	2%
5	**Mill Wrappers**	Consists of paper used as outside wrap for rolls, bundles, or skids of finished paper.	1/2 of 1%	3%
6	**(Grade not currently in use)**			
7	**(Grade not currently in use)**			
8	**(Grade not currently in use)**			
9	**Over-Issue News (OI or OIN)**	Consists of unused, overrun newspapers printed on newsprint, or securely tied in bundles, containing not more than the	None permitted	None permitted

		normal percentage of rotogravure and colored sections		
10	**Magazines (OMG)**	Consists of coated magazines, catalogues, and similar printed materials. May contain a small percentage of uncoated news-type paper.	1%	3%
11	**Old Corrugated Containers (OCC)**	Consists of corrugated containers having liners of either test liner or kraft.	1%	5%
12	**Double-Sorted Old Corrugated (DS OCC)**	Consists of double-sorted corrugated containers, generated from supermarkets and/or industrial or commercial facilities, having liners of test liner or kraft. Material has been specially sorted to be free of boxboard, off-shore corrugated, plastic, and wax.	1/2 of 1%	2%
13	**New Double-Lined Kraft Corrugated Cuttings (DLK)**	Consists of new corrugated cuttings having liners of either test liner or kraft. Treated medium or liners, insoluble adhesives, butt rolls, slabbed or hogged medium, are not in this grade. Acceptable	None permitted	2%
14	**Fiber Cores**	Consists of paper cores made from either recycled paperboard and/or linerboard, single or multiple plies. Metal or plastic end caps, wood plugs, and textile residues are not acceptable in this grade.	1%	5%
15	**Used Brown Kraft**	Consists of used brown kraft bags free of objectionable liners and original contents.	None permitted	1/2 of 1%
16	**Mixed Kraft Cuttings**	Consists of new brown kraft cuttings, sheets and bag scrap free of stitched paper.	None permitted	1%

17	**Carrier Stock**	Consists of printed or unprinted, unbleached new beverage carrier sheets and cuttings. May contain wet strength additives	None permitted	1%
18	**New Colored Kraft**	Consists of new colored kraft cuttings, sheets and bag scrap, free of stitched papers.	None permitted	1%
19	**Kraft Grocery Bag (KGB)**	Consists of new brown kraft bag cuttings, sheets and misprint bags	None permitted	1%
20	**New Kraft Multi-Wall Bag**	Consists of new brown kraft multi-wall bag cuttings, sheets, and misprint bags, free of stitched papers.	None permitted	1%
21	**New Brown Kraft Envelope Cuttings**	Consists of new unprinted brown kraft envelopes, cuttings or sheets.	None permitted	1%
22	**Mixed Flyleaf Shavings**	Consists of trim of magazines, catalogs, inserts and similar printed matter, not limited with respect to ground wood, uncoated or coated stock, and may contain the bleed of cover and insert stock as well as beater-dyed paper and solid color printing.	None permitted	2%
23	**Telephone Directories**	Consists of clean telephone directories printed for or by telephone directory publishers.	None permitted	1/2 of 1%
24	**White Blank News (WBN)**	Consists of unprinted cuttings and sheets of white newsprint or other uncoated white groundwood paper of similar quality.	None permitted	1%
25	**Ground wood Computer**	Consists of ground wood papers which are used in forms manufactured for use in data processing machines. This grade may	None permitted	2%

	Printout (GW CPO)	contain colored stripes and impact or nonimpact (e.g., laser) computer printing.		
26	**Publication Blanks (CPB)**	Consists of unprinted cuttings or sheets of white coated or filled ground wood content paper.	None permitted	1%
27	**Coated Flyleaf Shavings**	Consists of lightly printed trim from magazines, catalogs and similar printed matter, not limited with respect to ground wood, uncoated or coated stock. The bleed of cover, insert card stock, and beater-dyed paper may not exceed 2%.	None permitted	1%
28	**Coated Soft White Shavings (SWS)**	Consists of unprinted, coated, and uncoated, shavings and sheets of white ground wood-free printing	None permitted	1%
29	**(Grade not currently in use)**			
30	**Hard White Shavings (HWS)**	Consists of shavings or sheets of unprinted, untreated white ground wood-free paper.	None permitted	1/2 of 1%
31	**Hard White Envelope Cuttings (HWEC)**	Consists of ground wood-free cuttings, shavings or sheets of unprinted, untreated and uncoated white envelope paper.	None permitted	1/2 of 1%
32	**(Grade not currently in use)**			
33	**New Colored Envelope Cuttings**	Consists of ground wood-free cuttings, shavings, or sheets of untreated, uncoated bleachable colored envelope paper. Prohibitive Materials	None permitted	2%

34	**(Grade not currently in use)**			
35	**Semi Bleached Cuttings**	Consists of sheets and cuttings of unprinted, untreated, ground wood-free paper such as file folder stock, untreated milk carton stock, or manila tag.	None permitted	2%
36	**Unsorted Office Paper (UOP)**	Consists of printed or unprinted paper typically generated in an office environment that may include a document destruction process. This grade may contain white, colored, coated and uncoated papers, manila and pastel colored file folders.	2%	10%
37	**Sorted Office Paper (SOP)**	Consists of paper, as typically generated by offices, containing primarily white and colored ground wood-free paper, free of unbleached fiber. May include a small percentage of ground wood computer printout and facsimile paper.	1%	5%
38	**(Grade not currently in use)**			
39	**Manifold Colored Ledger (MCL)**	Consists of sheets, shavings, and cuttings of industrially generated printed or unprinted colored or white ground wood-free paper. All stock must be uncoated and free of nonimpact printing. A percentage of carbonless paper is allowable.	1/2 of 1%	2%
40	**Sorted White Ledger (SWL)**	Consists of uncoated, printed or unprinted sheets, shavings, guillotined books, and cuttings of white ground wood-free ledger,	1/2 of 1%	2%

		bond, writing, and other paper which has similar fiber and filler content.		
41	**Manifold White Ledger (MWL)**	Consists of sheets, shavings, and cuttings of industrially generated printed or unprinted white ground wood-free paper. All stock must be uncoated.	1/2 of 1%	2%
42	**(Grade no longer in use)**			
43	**Coated Book Stock (CBS)**	Consists of coated ground wood-free paper, printed or unprinted in sheets, shavings, guillotined books and cuttings. A reasonable percentage of paper containing fine ground wood may be included.	None permitted	2%
44	**Coated Ground wood Sections (CGS)**	Consists of printed, coated ground wood paper in sheets, sections, shavings or guillotined books. This grade may not include news quality ground wood paper.	None permitted	2%
45	**Lightly Printed Bleached Board Cuttings**	Consists of ground wood-free printed bleached board cuttings, free from misprint sheets, cartons, wax, greaseproof lamination, metallic, and inks, adhesives or coatings that are insoluble.	1/2 of 1%	2%
46	**Printed Bleached Board**	Consists of ground wood-free misprint sheets, cartons and cuttings of bleached board, free from wax, greaseproof lamination, metallic, and inks, adhesives or coatings that are insoluble.	1%	2%
47	**Unprinted Bleached Board**	Consists of ground wood-free unprinted, untreated bleached board cuttings, sheets or rolls, free from wax, greaseproof	None permitted	1%

		lamination and adhesives or coatings that are insoluble.		
48	**#1 Bleached Cup Stock (#1 Cup)**	included. Must be free of wax, poly, and other coatings that Consists of untreated cuttings or sheets of coated or uncoated cup base stock. Cuttings with slight bleed may be are insoluble.	None permitted	1/2 of 1%
49	**#2 Printed Bleached Cup Stock (#2 Cup)**	Consists of printed, untreated formed cups, cup die cuts, and misprint sheets of coated or uncoated cup base stock. Glues must be water soluble. Must be free of wax, poly, and other coatings that are insoluble.	None permitted	1%
50	**Unprinted Bleached Plate Stock**	Consists of ground wood-free bleached coated or uncoated, untreated and unprinted plate cuttings and sheets.	None permitted	1/2 of 1%
51	**Printed Bleached Plate Stock**	Consists of ground wood-free bleached coated or uncoated, untreated printed plates and sheets. Must be free of coatings or inks that are insoluble.	None permitted	1%
52	**Aseptic Packaging and Gable-Top Cartons**	Consists of liquid packaging board containers including empty, used, polyethylene (PE)-coated, printed one-side aseptic and gable-top cartons containing no less than 70% bleached chemical fiber and may contain up to 6% aluminum foil and 24% PE film.	2%	5%
54	**Mixed Paper**	Consists of all paper and paperboard of various qualities not limited to the type of fiber content, sorted and processed at a recycling facility.	2%	3%

56		Consists of sorted newspapers, mail, magazines, printing and writing papers and other acceptable papers generated from residential programs (such as residential household and apartment collections and drop-off centers) sorted and processed at a recycling facility. Containerboard and brown grades (OCC, Kraft bags, boxboard and Kraft carrier board) will be considered as "Outthrows."	2%	3%
58	**Sorted Clean News (SCN)**	Consists of sorted newspapers from source separated collection programs, converters, drop-off centers and paper drives containing the normal percentages of roto gravure, colored and coated sections. May contain inserts that would normally be included in the newspaper in the proper proportions. Grade must be free of excessive ink, brown grades and non-paper material. (Some mills may require pack to be free of flexographic inks.)	½ of 1%	1%

Annexure IV: EU Paper Grades

Sr. No.	Paper grade	Descriptions
Group 1- Ordinary grades		
1	**1.01 - Mixed paper and board, unsorted, but unusable materials removed**	A mixture of various grades of paper and board, without restriction on short fiber content.
2	**1.02 - Mixed papers and board (sorted)**	A mixture of various qualities of paper and board, containing a maximum of 40% of newspapers and magazines.
3	**1.03 - Grey board**	Printed and unprinted white lined and unlined grey board or mixed board, free from corrugated material.
4	**1.04 - Supermarket corrugated paper and board**	Used paper and board packaging, containing a minimum of 70% of corrugated board, the rest being solid board and wrapping papers.
5	**1.05 - Old corrugated containers**	Used boxes and sheets of corrugated board of various qualities.
6	**1.06 - Unsold magazines**	Unsold magazines, with or without glue.
7	**1.06.01 - Unsold magazines without glue**	Unsold magazines without glue.
8	**1.07 - Telephone Books**	New and used telephone books, with unlimited content of pages coloured in the mass, with and without glue. Shavings allowed.
9	**1.08 - Mixed newspapers and magazines I**	A mixture of newspapers and magazines, containing a minimum of 50% of newspapers, with or without glue.
10	**1.09 - Mixed newspapers and magazines II**	A mixture of newspapers and magazines, containing a minimum of 60% of newspapers, with or without glue.

11	**1.10 - Mixed magazines and newspapers**	A mixture of newspapers and magazines, containing a minimum of 60% of magazines, with or without glue.
12	**1. 11- Sorted graphic paper for deinking**	Sorted graphic paper from households, newspapers and magazines, each at a minimum of 40%. The percentage of non- drinkable paper and board should be reduced over time to a maximum level of 1.5%. The actual percentage is to be negotiated between buyer and seller.
Group 2 - Medium grades		
13	**2.01 - Newspapers**	Newspapers, containing a maximum of 5% of newspapers or advertisements coloured in the mass.
14	**2.02 - Unsold newspapers**	Unsold daily newspapers, free from additional inserts or illustrated material coloured in the mass.
15	**2.02.01 - Unsold newspapers, no flexographic printing allowed**	Unsold daily newspapers, free from additional inserts or illustrated material coloured in the mass, strings allowed. No flexographic printed material allowed.
16	**2.03 - Lightly printed white shavings**	Lightly printed white shavings, mainly mechanical pulp based paper.
17	**2.03.01- Lightly printed white shavings without glue**	Lightly printed white shavings, mainly mechanical pulp based paper, without glue.
18	**2.04 - Heavily printed white shavings**	Heavily printed white shavings, mainly mechanical pulp based paper.
19	**2.04.01- Heavily printed white shavings without glue**	Heavily printed white shavings, mainly mechanical pulp based paper, without glue.
20	**2.05 - Sorted office paper**	Sorted office paper.
21	**2.06 - Coloured letters**	Correspondence, in mixed papers coloured in the mass, with or without print, of printing or writing paper. Free from carbon paper and hard covers.

22	**2.07 - White wood free books**	Books, including misprints of books, without hard covers, mainly of wood free white paper, black printed only. Containing a maximum of 10% of coated paper.
23	**2.08 - Coloured wood free magazines**	Coated or uncoated magazines, white or coloured in the mass, free from non-flexible covers, bindings, no dispersible inks and adhesives, poster papers, labels or label trim. May include heavily printed circulars and coloured in the mass shavings. Containing a maximum of 10% mechanical pulp based papers.
24	**2.11 - Other PE-coated board**	Other PE-coated board. May contain unbleached board and paper from board manufacturers and converters.
25	**2.12 - Mechanical pulp based computer print-out**	Continuous computer print-out, mechanical pulp based, sorted by colours, may include recycled fibers.
Group 3 - High grades		
26	**3.01 - Mixed lightly coloured printers shavings**	Mixed shavings of printing and writing papers, lightly coloured in the mass, containing a minimum of 50% of wood free paper.
27	**3.02 - Mixed lightly coloured wood free printer shavings**	Mixed shavings of printing and writing papers lightly coloured in the mass, containing a minimum of 90% of woodfree paper.
28	**3.03 - Woodfree binders**	White woodfree lightly printed shavings with glue, free from paper coloured in the mass. May contain a maximum of 10% of mechanical pulp based paper.
29	**3.04 - Tear white shavings**	White woodfree lightly printed shavings without glue, free from wet-strength paper and paper coloured in the mass.
30	**3.05 - White woodfree letters**	Sorted white woodfree writing papers, originating from office records, free from cash books, carbon paper and non-water soluble adhesives.
31	**3.06 - White business forms**	White woodfree printed business forms.

32	**3.07 - White woodfree computer print-out**	White woodfree computer print- out, free from carbonless paper and glue.
33	**3.08 - Printed bleached sulphate board**	Heavily printed sheets of bleached sulphate board, without glue, polycoated or waxed materials.
34	**3.09 - Lightly printed bleached sulphate board**	Lightly printed sheets of bleached sulphate board, without glue, polycoated or waxed materials.
35	**3.10 - Multi printing**	Woodfree, coated, lightly printed, free from wet strength paper or paper coloured in the mass.
36	**3.11 - White heavily printed multiply board**	New cuttings of heavily printed white multi-ply board, containing woodfree, mechanical or thermo- mechanical pulp plies, but without grey plies.
37	**3.12 - White lightly printed multiply board**	New cuttings of lightly printed white multi-ply board, containing woodfree, mechanical or thermo- mechanical pulp plies, but without grey plies.
38	**3.13 - White unprinted multiply board**	New cuttings of unprinted white multi-ply board, containing woodfree, mechanical or thermo- mechanical pulp plies, but without grey plies.
39	**3.14 - White newsprint**	Shavings and sheets of white unprinted newsprint, free from magazine paper.
40	**3.15 - White mechanical pulp based coated and uncoated paper**	Shavings and sheets of white unprinted coated and uncoated mechanical pulp based paper.
41	**3.14 - White newsprint**	Shavings and sheets of white unprinted newsprint, free from magazine paper.
42	**3.15 - White mechanical pulp based coated and uncoated paper**	Shavings and sheets of white unprinted coated and uncoated mechanical pulp based paper.
43	**3.15.01 - White mechanical pulp based**	Shavings and sheets of white unprinted mechanical pulp based coated paper.

	paper containing coated paper	
44	**3.16 - White woodfree coated paper, without glue**	Shavings and sheets of white unprinted woodfree coated paper, without glue.
45	**3.17 - White shavings**	Shavings and sheets of white unprinted paper, free from newsprint and magazine paper containing a minimum of 60% of woodfree paper; may contain a maximum of 10% of coated paper. Without glue.
46	**3.18 - White woodfree shavings**	Shavings and sheets of white unprinted woodfree paper; may contain a maximum of 5% of coated paper. Without glue.
47	**3.18.01 - White woodfree uncoated shavings**	Shavings and sheets of white unprinted woodfree paper, free from coated paper. Without glue.
48	**3.19 - Unprinted bleached sulphate board**	Unprinted sheets of bleached sulphate board, without glue, polycoated or waxed materials.
Group 4 - Kraft grades		
49	**4.01 - New shavings of corrugated board**	Shavings of corrugated board, with liners of Kraft or test liner
50	**4.01.01- Unused corrugated Kraft**	Unused boxes, sheets and shavings of corrugated board, with Kraft liners only, the fluting made from chemical or thermo-chemical pulp.
51	**4.01.02 - Unused corrugating material**	Unused boxes, sheets and shavings of corrugated board, with liners of Kraft or test liner.
52	**4.02 - Used corrugated Kraft I**	Used boxes of corrugated board, with Kraft liners only, the fluting made from chemical or thermo-chemical pulp.
53	**4.03 - Used corrugated Kraft II**	Used boxes of corrugated board, with liners of Kraft or test liners but having at least one liner made of
54	**4.04 - Used Kraft sacks**	Clean used Kraft sacks. Wet-strength and non-wet strength.

55	**4.04.01- Used Kraft sacks with polycoated papers**	Clean used Kraft sacks. Wet-strength and non-wet strength. May include polycoated papers.
56	**4.05 - Unused Kraft sacks**	Unused Kraft sacks. Wet-strength and non-wet-strength.
57	**4.05.01- Unused Kraft sacks with polycoated papers**	Unused Kraft sacks. Wet-strength and non-wet-strength, may include polycoated papers.
58	**4.06 - Used Kraft**	Used Kraft paper and board of a natural or white shade.
59	**4.07 - New Kraft**	Shavings and other new Kraft paper and board of a natural shade.
60	**4.08 - New carrier Kraft**	New carrier Kraft, may include wet- strength paper.
Group 5 - Special grades		
61	**5.01 - Mixed recovered paper and board**	Unsorted paper and board, separated at source.
62	**5.02 - Mixed packaging**	A mixture of various qualities of used paper and board packaging, free from newspapers and magazines.
63	**5.03 - Liquid board packaging**	Used liquid packaging board including used PE-coated liquid packaging board (with or without aluminum content), containing a minimum of 50% by weight of fibers, and the balance being aluminum or coatings.
64	**5.04 - Wrapper Kraft**	Poly-lined, sprayed, or laminated used Kraft. Must not contain bitumen or wax coatings.
65	**5.05 - Wet labels**	Used wet labels from wet-strength papers, containing a maximum of 1% glass content, and a maximum of 50% moisture, without other unusable materials.
66	**5.06 - Unprinted white wet- strength wood free papers**	Unprinted white wet-strength wood free papers.
67	**5.07 - Printed white wet-strength wood free papers**	Printed white wet-strength wood free papers.

Annexure V: Comparison of wastepaper grades (ISRI, CEPI, ACOR)[21]

		CEPI EN 643 - 2013 Europe		ISRI PS-2018 North America		ACOR Australia	
Sr. No.	**Generic Name**	**Grade Name:**	**Code:**	**Grade Name:**	**Code:**	**Grade Name:**	**Code:**
	Group 1 - Ordinary Grades (CEPI categorization)						
1	**Corrugated Paper and Board Wastes**	**Corrugated Paper and Board Packaging**	**1.04.00**	**No corresponding grade**	**Not applicable**	**ISRI (3): Hard Mixed Paper**	**AuRPS HM- 02**
2		**Ordinary Corrugated Paper and Board**	**1.04.01**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
3		**Corrugated Paper and Board**	**1.04.02**	**Double-Sorted Old Corrugated (DS OCC)**	**Grade 12 DS OCC (PS#12)**	**Premium OCC ISRI (12): Double Sorted Old Corrugated (DS OCC)**	**AuRPS PCC- 12**
4	**Old Corrugated Containers (OCC)**	**Ordinary Corrugated Board**	**1.05.00**	**Old Corrugated Containers (OCC)**	**Grade 11 OCC (PS#11)**	**ISRI (11): Corrugated Containers (OCC)**	**AuRPS OCC- 11**
5		**Corrugated Board**	**1.05.01**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**

[21] https://www.paperindex.com/academy/waste-paper/comparison-of-waste-paper-grades

6	**Unsold Magazines**	**Magazines**	**1.06.00**	**Magazines (OMG)**	**Grade 10 OMG (PS#10)**	**ISRI (10): Magazines (OMG)**	**AuRPS MAG-10**
7		**Magazines without Glue**	**1.06.01**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
8		**Magazines with Product Samples**	**1.06.02**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
9	**Mixed Newspapers and Magazines I**	**No corresponding grade**	**Not applicable**	**Sorted Residential Papers & News (SRPN)**	**Grade 56 SRPN**	**Soft Mixed ISRI (1): Residential Mixed Paper**	**AuRPS SM- 01**
10		**Newspapers and Magazines**	**1.09.00**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
11	**Sorted Graphic Paper for Deinking**	**Mixed Magazines and Newspapers**	**1.10.00**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
12		**Sorted Graphic Paper for Deinking**	**1.11.00**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
	Group 2 - Medium Grades (CEPI categorization)						

13	Unsold Newspapers	Unsold Newspapers Not Intended for Deinking	2.02.00	Sorted Clean News (SCN)	Grade 58 SCN (PS#8)	News, De- inked Quality #8 ISRI (8): Special news, de- inked quality (#8 ONP)	AuRPS KNP- 08
14	Unsold Newspapers, No Flexographic Printing Allowed	Unsold Newspapers	2.02.01	Over-Issue News (OI or OIN)	Grade 9 OIN (PS#9)	Over Issue News #9 ISRI (9): Over Issue News (OI or OIN)	AuRPS OIN- 09
15	Sorted Office Paper	Ordinary Sorted Office Paper	2.05.00	Sorted Office Paper (SOP)	Grade 37 SOP (PS#37)	Office Pack #1 ISRI (37): Sorted Office Paper (SOP)	AuRPS OP1- 37
16		Sorted Office Paper	2.05.01	No corresponding grade	Not applicable	No corresponding grade	Not applicable
17		Ordinary Sorted Coloured Letters	2.06.00	No corresponding grade	Not applicable	Office Pack #2 ISRI (37): Sorted Coloured Ledger (SOP) with higher proportion of coated papers	AuRPS OP2- 38
18		Sorted Office Paper	2.06.01	No corresponding grade	Not applicable	No corresponding grade	Not applicable
19	White Woodfree Books	White Woodfree Bookquire	2.07.00	Sorted White Ledger (SWL)	Grade 40 SWL (PS#40)	Sorted White ISRI: Sorted	AuRPS SWL- 40

						White Ledger (40)	
20		**White Mechanical Pulp-Based Bookquire**	**2.07.01**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
21	**Carbonless Copy Paper**	**Multigrade**	**2.13.00**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
22		**Coloured Log End Tissue**	**2.14.00**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
23		**White Log End Tissue**	**2.14.01**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
	Group 3 - High Grades (CEPI categorization)						
24	**Woodfree Binders**	**Woodfree Binders**	**3.03.00**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
25		**Special Woodfree Binders**	**3.03.01**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
26	**White Woodfree Letters**	**White Woodfree Letters**	**3.05.00**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
27		**White Woodfree**	**3.05.01**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**

		Letters Unprinted					
28	White Woodfree Computer Print-Out	White Woodfree Computer Print-Out	3.07	Groundwood Computer Printout (GW CPO)	Grade 25 GW CPO	No corresponding grade	Not applicable
29	Multi Printing	Multi Printing	3.10.00	No corresponding grade	Not applicable	No corresponding grade	Not applicable
30		Medium Printed Multi Printing	3.10.01	No corresponding grade	Not applicable	No corresponding grade	Not applicable
31	White Heavily Printed Multiply Board	White Heavily Printed Multiply Board	3.11.00	Lightly Printed Bleached Board Cuttings	Grade 45	No corresponding grade	Not applicable
32		Mixed White Heavily Printed Multiply Board	3.11.01	Printed Bleached Board	Grade 46	No corresponding grade	Not applicable
33	White Coated Woodfree Paper, without Glue	White Coated Woodfree Paper	3.16.00	Publication Blanks (CPB)	Grade 26 CPB	No corresponding grade	Not applicable
34		White Woodfree Papers	3.16.01	White Blank News (WBN)	Grade 24 WBN (PS#24)	No corresponding grade	Not applicable

35	**White Woodfree Shavings**	**White Woodfree Shavings**	**3.18.00**	**Hard White Shavings (HWS)**	**Grade 30 HWS (PS#30)**	**No corresponding grade**	**Not applicable**
36	**White Woodfree Uncoated Shavings**	**White Woodfree Uncoated Shavings**	**3.18.01**	**Coated Soft White Shavings (SWS)**	**Grade 28 SWS (PS#28)**	**No corresponding grade**	**Not applicable**
37		**White Envelope Cuttings**	**3.18.02**	**Hard White Envelope Cuttings (HWEC)**	**Grade 31 HWEC (PS#31)**	**No corresponding grade**	**Not applicable**
38		**Unprinted Tissue Coloured in the Mass**	**3.20.00**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
39		**White Unprinted Tissue**	**3.20.01**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
	Group 4 - Kraft Grades (CEPI categorization)						
40	**Unused Corrugating Material**	**Unused Corrugated Material**	**4.01.02**	**New Double-Lined Kraft Corrugated Cuttings (DLK)**	**Grade 13 DLK (PS#13)**	**Corrugated Clippings**	**AuRPS CC- 13**
41	**Used Kraft Sacks with Poly-Coated Papers**	**Used Kraft Sacks with Polycoated Papers**	**4.04.01**	**Used Brown Kraft**	**Grade 15**	**No corresponding grade**	**Not applicable**

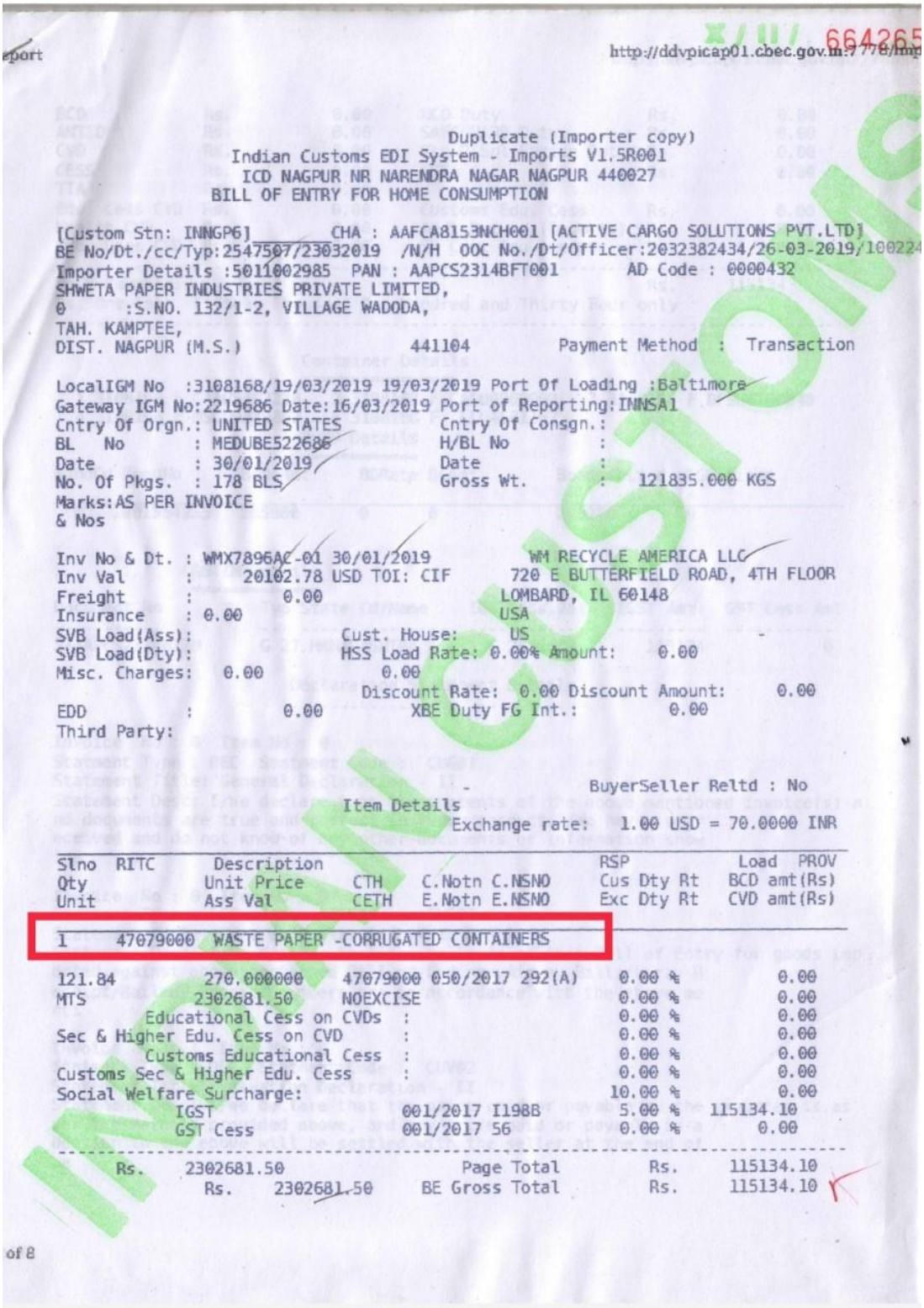
42	**Unused Kraft Sacks with Polycoated Papers**	**Unused Kraft Sacks with Polycoated Papers**	**4.05.01**	**Carrier Stock(KCB)**	**Grade 17 (PS#17)**	**No corresponding grade**	**Not applicable**
	Group 5 - Special Grades (CEPI categorization)						
43	**Mixed Recovered Paper and Board**	**Mixed Papers**	**5.01.01**	**Mixed Paper (MP)**	**Grade 54**	**No corresponding grade**	**Not applicable**
44	**Liquid Board Packaging**	**Liquid Packaging Board**	**5.03.00**	**Aseptic Packaging and Gable-Top Cartons**	**Grade 52**	**Liquid Paperboard ISRI (6-S): Polycoated Milk Carton Stock**	**AuRPS LPB- S6**
45		**Unused Liquid Packaging Board**	**No corresponding grade**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
46	**Labels**	**Wet Labels**	**5.05.00**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
47		**Dry Labels**	**5.05.01**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**

48		**Labels with Base Layer**	**5.05.02**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
49		**Paper Release Liner for Self-adhesive Labels**	**5.05.03**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
50	**Unprinted White Wet-Strength Woodfree Papers**	**Unprinted White Wet-Strength Woodfree Papers**	**5.06.00**	**Coated Book Stock (CBS)**	**Grade 43 CBS (PS#43)**	**No corresponding grade**	**Not applicable**
51		**Unprinted White and Coloured Wet-Strength Papers**	**5.06.01**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
52	**Printed White Wet-Strength Woodfree Papers**	**Printed White Wet-Strength Woodfree Papers**	**5.07.00**	**Coated Groundwood Sections (CGS)**	**Grade 44 (CGS)**	**No corresponding grade**	**Not applicable**
53		**Printed White and Coloured Wet Strength Woodfree Papers**	**5.07.01**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
54	**Cores**	**Cores**	**5.08.00**	**Fiber Cores**	**Grade 14**	**No corresponding grade**	**Not applicable**

55	**NCR Shavings**	**Carbonless Copy Paper (NCR)**	**5.09.00**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
56	**Envelopes**	**Printed White Envelope**	**5.10.00**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
57		**Mixed Envelopes**	**5.10.01**	**New Colored Envelope Cuttings**	**Grade 33 (PS#33)**	**No corresponding grade**	**Not applicable**
58	**Blister Pack**	**Blister Pack**	**5.11.00**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
59	**Kraft Sacks**	**Used Kraft Sacks**	**5.12.00**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
60		**Used Kraft Sacks with Plastic Layer Papers**	**5.12.01**	**No corresponding grade**	**Not applicable**	**No corresponding grade**	**Not applicable**
61		**Unused Kraft Sacks**	**5.13.00**	**Kraft Grocery Bag (KGB)**	**Grade 19 (KGB)**	**No corresponding grade**	**Not applicable**
62		**Unused Kraft Sacks with Plastic Layer Papers and Poly Liners**	**5.13.01**	**New Kraft Multi-Wall Bag**	**Grade 20 (PS#20)**	**No corresponding grade**	**Not applicable**

63	**Paper Cups**	**Used Paper Cups and Other Used Tableware**	**5.14.00**	**#2 Printed Bleached Cup Stock (#2 Cup)**	**Grade 49 (#2 Cup) (PS#49)**	**No corresponding grade**	**Not applicable**
64		**Unused Paper Cups and Other Tableware**	**5.14.01**	**#1 Bleached Cup Stock (#1 Cup)**	**Grade 48 (#1 Cup)**	**No corresponding grade**	**Not applicable**

Annexure VI: Sample copy of Invoice and PSIC for HS 47079000



eport http://ddvpicap01.cbec.gov.in:7778/imp

Duplicate (Importer copy)
Indian Customs EDI System - Imports V1.5R001
ICD NAGPUR NR NARENDRA NAGAR NAGPUR 440027
BILL OF ENTRY FOR HOME CONSUMPTION

[Custom Stn: INNGP6] CHA : AAFCA8153NCH001 [ACTIVE CARGO SOLUTIONS PVT.LTD]
BE No/Dt./cc/Typ:2547507/23032019 /N/H OOC No./Dt/Officer:2032382434/26-03-2019/10022
Importer Details :5011002985 PAN : AAPCS2314BFT001 AD Code : 0000432
SHWETA PAPER INDUSTRIES PRIVATE LIMITED,
0 :S.NO. 132/1-2, VILLAGE WADODA,
TAH. KAMPTEE,
DIST. NAGPUR (M.S.) 441104 Payment Method : Transaction

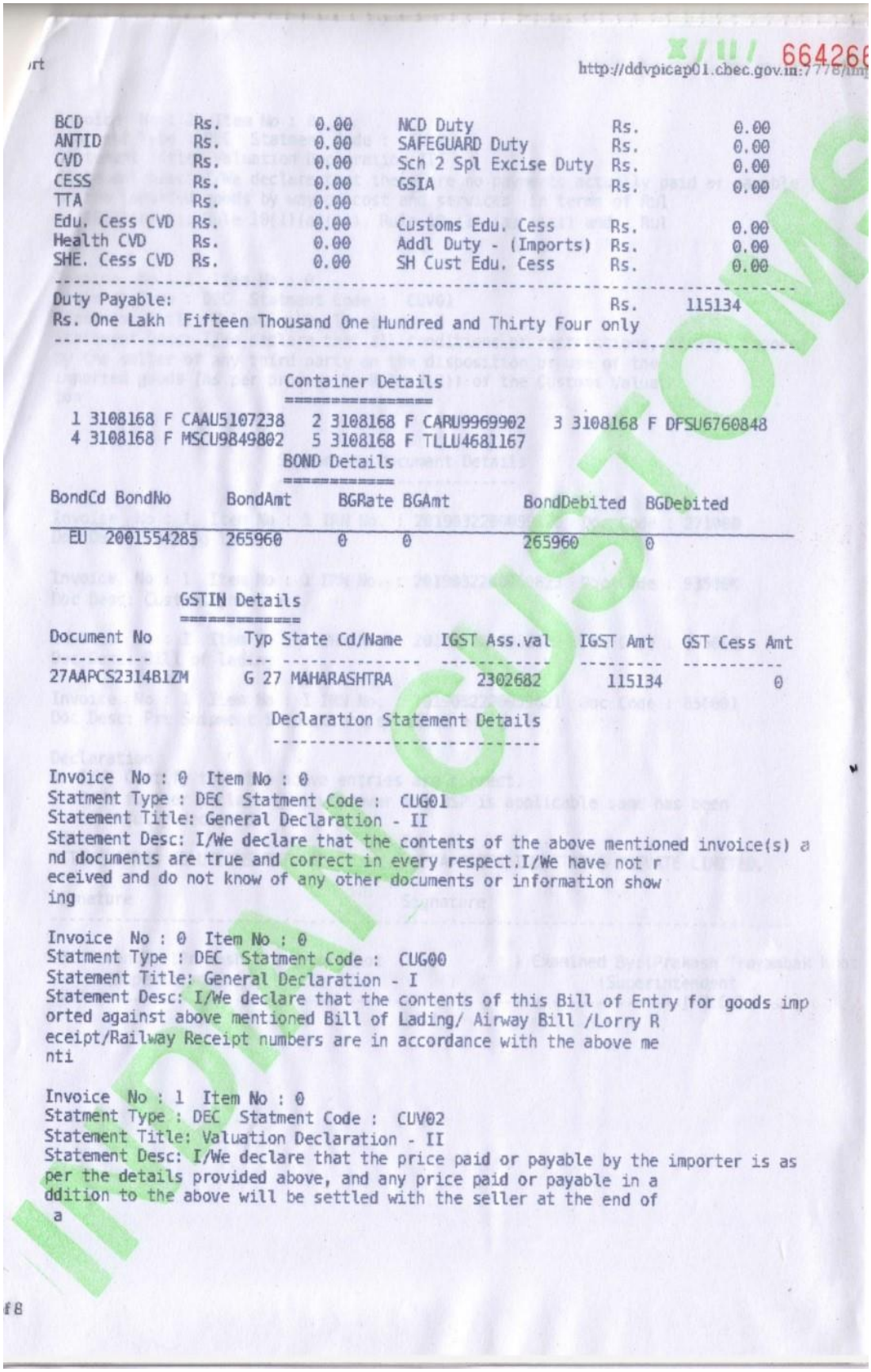
LocalIGM No :3108168/19/03/2019 19/03/2019 Port Of Loading :Baltimore
Gateway IGM No:2219686 Date:16/03/2019 Port of Reporting:INNSA1
Cntry Of Orgn.: UNITED STATES Cntry Of Consgn.:
BL No : MEDUBE522686 H/BL No :
Date : 30/01/2019 Date :
No. Of Pkgs. : 178 BLS Gross Wt. : 121835.000 KGS
Marks:AS PER INVOICE
& Nos

Inv No & Dt. : WMX7896AC-01 30/01/2019 WM RECYCLE AMERICA LLC
Inv Val : 20102.78 USD TOI: CIF 720 E BUTTERFIELD ROAD, 4TH FLOOR
Freight : 0.00 LOMBARD, IL 60148
Insurance : 0.00 USA
SVB Load(Ass): Cust. House: US
SVB Load(Dty): HSS Load Rate: 0.00% Amount: 0.00
Misc. Charges: 0.00 0.00
Discount Rate: 0.00 Discount Amount: 0.00
EDD : 0.00 XBE Duty FG Int.: 0.00
Third Party:

BuyerSeller Reltd : No
Item Details
Exchange rate: 1.00 USD = 70.0000 INR

Slno RITC Description				RSP	Load PROV
Qty	Unit Price	CTH	C.Notn C.NSNO	Cus Dty Rt	BCD amt(Rs)
Unit	Ass Val	CETH	E.Notn E.NSNO	Exc Dty Rt	CVD amt(Rs)
1 47079000 WASTE PAPER -CORRUGATED CONTAINERS					
121.84	270.000000	47079000	050/2017 292(A)	0.00 %	0.00
MTS	2302681.50	NOEXCISE		0.00 %	0.00
Educational Cess on CVDs :				0.00 %	0.00
Sec & Higher Edu. Cess on CVD :				0.00 %	0.00
Customs Educational Cess :				0.00 %	0.00
Customs Sec & Higher Edu. Cess :				0.00 %	0.00
Social Welfare Surcharge:				10.00 %	0.00
IGST			001/2017 I198B	5.00 %	115134.10
GST Cess			001/2017 56	0.00 %	0.00
Rs. 2302681.50			Page Total	Rs.	115134.10
Rs. 2302681.50			BE Gross Total	Rs.	115134.10

of 8



http://ddvpicap01.cbec.gov.in:7778/ui

BCD	Rs.	0.00	NCD Duty	Rs.	0.00
ANTID	Rs.	0.00	SAFEGUARD Duty	Rs.	0.00
CVD	Rs.	0.00	Sch 2 Spl Excise Duty	Rs.	0.00
CESS	Rs.	0.00	GSIA	Rs.	0.00
TTA	Rs.	0.00			
Edu. Cess CVD	Rs.	0.00	Customs Edu. Cess	Rs.	0.00
Health CVD	Rs.	0.00	Addl Duty - (Imports)	Rs.	0.00
SHE. Cess CVD	Rs.	0.00	SH Cust Edu. Cess	Rs.	0.00

Duty Payable: Rs. 115134

Rs. One Lakh Fifteen Thousand One Hundred and Thirty Four only

Container Details

1 3108168 F CAAU5107238 2 3108168 F CARU9969902 3 3108168 F DFSU6760848
4 3108168 F MSCU9849802 5 3108168 F TLLU4681167

BOND Details

BondCd	BondNo	BondAmt	BGRate	BGAmt	BondDebited	BGDebited
EU	2001554285	265960	0	0	265960	0

GSTIN Details

Document No	Typ	State Cd/Name	IGST Ass.val	IGST Amt	GST Cess Amt
27AAPCS2314B1ZM	G	27 MAHARASHTRA	2302682	115134	0

Declaration Statement Details

Invoice No : 0 Item No : 0
Statment Type : DEC Statment Code : CUG01
Statement Title: General Declaration - II
Statement Desc: I/We declare that the contents of the above mentioned invoice(s) a
nd documents are true and correct in every respect.I/We have not r
eceived and do not know of any other documents or information show
ing

Invoice No : 0 Item No : 0
Statment Type : DEC Statment Code : CUG00
Statement Title: General Declaration - I
Statement Desc: I/We declare that the contents of this Bill of Entry for goods imp
orted against above mentioned Bill of Lading/ Airway Bill /Lorry R
eceipt/Railway Receipt numbers are in accordance with the above me
nti

Invoice No : 1 Item No : 0
Statment Type : DEC Statment Code : CUV02
Statement Title: Valuation Declaration - II
Statement Desc: I/We declare that the price paid or payable by the importer is as
per the details provided above, and any price paid or payable in a
ddition to the above will be settled with the seller at the end of
a

NECTAR
INSPECTION SERVICES L.L.C.

نكتر
لخدمات المعاينة ش.ذ.م.م.

PRE-SHIPMENT INSPECTION CERTIFICATE

CERTIFICATE NO. 01/NCTR/67849	**DATE OF ISSUE :** 10.01.2019

I.Details of Exporter		**II Details of Importer**	
a) Name	WM - RECYCLE AMERICA LLC	**a) Name**	SHWETA PAPER INDUSTRIES PVT LTD.
b) Address	720 E, BUTTERFIELD ROAD, 4TH FLOOR LOMBARD, IL 60148, USA	**b) Address**	S. NO. 132/1-2, VILLAGE WADODA, TAH KAMPTEE, DIST. NAGPUR , STATE NAME : MAHARASHTRA , STATE CODE : 27 . INDIA IEC# 5011002985 GST # 27AAPCS2314B1ZM
INVOICE NO.	WMX7896AC-01		
c) Telephone No.	630-573-2463	**c) Telephone No.**	
d) Fax No.	630-572-2455	**d) Fax No.**	
e) E-mail		**e) E-mail**	

III.Details of Import :

S.No.	Description of Waste Paper Grade	Consignment Quantity KGS
	WASTE PAPER - CORRUGATED CONTAINERS	121,835.00

IV.Container Numbers :

S.No.	Container Numbers	Quantity in KGS
1	DFSU 6760848	24,222.00
2	CAAU 5107238	24,893.00
3	CARU 9969902	24,095.00
4	MSCU 9849802	24,104.00
5	TLLU 4681167	24,521.00

DECLARATION / UNDERTAKING

After due inspection I/we hereby certify that :

V. The Consignment is actually waste paper as per the internationally acceptable parameters for such material.
Vi. There is no putrefiable organic matter in this consignment.
VII. The approximate content of non recyclable material is not more than 1%.
VIII. No municipal solid waste or medical waste or hazardous waste is part of this consignment.
IX. This certificate is not to be considered as a certificate of Quality and Quantity.

I/We hereby declare that the particulars and statements made in this certificate are true and correct and nothing has been concealed or held there from.

Date of Inspection: **09.01.2019**
Place of Inspection: **BALTIMORE , USA**
Name of the Inspecting Person/Inspector: Sunil Kapoor
Issued by : 5501, Demarcus Blvd 426,
CA 94568
nectardxb@gmail.com
Signature. **Nectar Inspection Services LLC**

P.O. Box 90468 DUBAI - U.A.E. NECTAR INSPECTION SERVICES L.L.C.

MEMBER OF MRAI
MRAI
METAL RECYCLING ASSOCIATION OF INDIA

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ISRI Member of Institute of Scrap Recycling Industries, Inc.
Voice of the Recycling Industry

Annexure VII: Recyclables: Article 'Recyclables - Mixed paper & India' – National Waste & Recycling Association (Jan 2020)

National Waste & Recycling Association℠
Collect. Recycle. Innovate.

Recyclables: Mixed Paper & India

January 2020

Overview

The recycling industry has been very successful at providing environmental benefits including diverting material from landfills, conserving natural resources, and reducing greenhouse gas emissions by displacing the use of raw materials. This success was accomplished through the combined efforts of both the public and private industry to collect, sort, bale and market the recyclables to their end-markets. However, over the past few years, the recycling industry has experienced significant structural changes that impact material flow and commodity prices. Most recently, announcements from India are impacting mixed paper.

Most paper recovered from households is made into mixed paper bales. Mixed paper consists of junk mail, newspaper, magazines, office paper, paperboard packaging like cereal boxes, phone books, and some corrugated cardboard.

Approximately 38.3 percent of all paper recovered in North America was exported in 2018. For the past two years, more than 40 percent of mixed paper exports went to India. However, India is set to reduce the allowable contamination for mixed paper to only one percent with random inspections of five bales of mixed paper for each container which is causing some disruptions in the export market.

As a result, all mixed paper exports to India have halted until there is certainty in India's requirements. The domestic impacts of this disruption vary regionally. The most significant impacts are being felt on the eastern seaboard; except Atlanta which has sufficient domestic capacity. Barring any further changes from the export markets, these disruptions are anticipated to be temporary lasting 30-60 days. This is a fluid, dynamic situation that is subject to change.

Background on mixed paper

1. February 2017 - as part of China's broader "National Sword" campaign, customs enforcement began a one-year crack down on illegal smuggling of "foreign waste."
2. January 2018 - China bans mixed paper from being imported.
3. 2018 – present

   a. China imports of mixed paper plummet as a result of the ban dropping from 1.8 M tons in 2017 to 92k tons in 2018 to only 53k tons through October 2019.
   b. India becomes dominant export country for mixed paper, rising from less than 15 percent of the market prior to 2018 to greater than 40 percent.
4. July 2018 - China releases draft rules that propose a complete ban on recyclable imports effective 2020
5. 2019 – The second largest export country in 2018, Indonesia, announced a 0.5 percent contamination rate on mixed paper. Exports drop by 95 percent from 47k tons in January 2019 to only 2k tons in October 2019.
6. January 2020 – India announces strict one percent allowable contamination and random inspections of containers.

Impact to U.S. Recycling

- **No outlet available at any price.** Since February 2019, the average price of mixed paper in the U.S. has been negative. Depending on the market, there might not be an outlet for mixed paper bales at any price.
- **Temporary disposal of processed mixed paper bales.** Without an outlet, there may be short-term disposal of mixed paper bales.
- **Higher costs and lower revenues:**
  - **Lower revenues due to depressed commodity prices.** The overall revenues from the combined recycling stream is depressed. Sample price differences between end of 2018 and end of 2019 are shown below:

Commodity	**December 2018**	**December 2019**
Corrugated cardboard	$70/ton	$25/ton
Mixed paper	$4.69/ton	Negative $2/ton
Aluminum cans	60.19 cents/pound	51.06 cents/pound
PET bottles and jars	15.11 cents/pound	10.29 cents/pound
HDPE	38.69 cents/pound	58.25 cents/pound
Glass	Varies regionally	Varies regionally
Contamination	Varies regionally	Varies regionally

  - **Higher processing costs.** In order to meet the new quality standards, MRFs have upgraded equipment and added labor. Processing at some facilities has been changed from negative sorts to positive sorts resulting in more effort to produce less salable material. These measures reduced throughput and increased processing costs.
- **Stockpiling issues.** Due to storage capacity issues, stockpiling is not a viable option. Warehousing is also an issue due to availability of space and costs of facilities. The quality of processed bales of mixed paper deteriorates over time which creates unacceptable safety hazards and unmarketable recycled product.
- **Regional variations.** The impact varies by region and local markets across the country.

- **Development of new outlets.** Numerous new or expanded facilities have been announced which will provide new domestic outlets for materials, especially recovered paper. When these facilities will begin accepting materials, however, is uncertain due to its dependence infrastructure development. NERC has tracked the progress of the mills and followed the opening of some of these facilities.

Actions to take

- **Ensure High Quality Recyclables.** High quality material is more likely to find a market. The new one percent prohibitives limit is below normally accepted standards. However, high quality material will be welcomed by both domestic and international markets. Focus on core recyclables to reduce contamination.
- **Work with the entire industry.** This is a global and an industry-wide issue, not a local or individual company issue. Our industry will benefit if we work together with city and state officials to develop solutions in the near term, and to work together for longer term solutions.
- **Communicate.** It is important to communicate with recycling partners to focus on quality and to develop solutions for your communities. See the communications strategy below for more suggestions.
- **Review contracts.** Recycling requirements may need to be amended through force majeure provisions as this is a global situation. In addition, both recyclers and municipalities should review contracting provisions to ensure fair and equitable contracts. NWRA and SWANA worked together to develop a Joint Advisory on Designing Contracts for Processing of Municipal Recyclables along with two attachments, one on auditing and the second on determining the value of recyclables. These documents should be utilized to inform future contracts. The documents can be found here.
- **Talk with regulators.** States may need to approve temporarily suspensions of recycling requirements where there is no market.

Annexure VIII: Price of wastepaper in USA (Sep 4, 2020)

Fastmarkets RISI

PPI Pulp & Paper Week

Monthly Recovered Paper Prices — **Yellow Sheet**

PRICE WATCH: Recovered Paper - Domestic

September 4, 2020

US$ per short ton for open market purchases by mills, FOB seller's dock, for delivery this month. (Further specifications below.) — Incorporating Official Board Markets

	Northeast						LA-SF		
	New England	New York	Buffalo	Midwest (Chicago)[3]	Southeast[3]	Southwest[3]	LA	SF	Pacific NW[3]
MIXED PAPER									
Mixed Paper (54)	15 - 20 (+5)	15 - 20 (+5)	15 - 20 (+5)	25 - 30 (+5)	15 - 20 (+5)	15 - 20 (+5)	25 - 30 (+10)	20 - 25 (+10)	5 - 10 (+5)
BROWN GRADES									
Boxb cutt (4) - OBM*	35 - 40 (+0)	35 - 40 (+0)	35 - 40 (+0)	30 - 35 (+0)	30 - 35 (+0)	40 - 45 (+0)	45 - 50 (+5)	35 - 40 (+5)	25 - 30 (+5)
OCC (11) - OBM*	55 - 60 (+0)	55 - 60 (+0)	55 - 60 (+0)	50 - 55 (+0)	65 - 70 (+0)	60 - 65 (+0)	65 - 70 (+5)	55 - 60 (+0)	55 - 60 (+10)
DLK (13) - OBM*		65 - 70 (+0)		60 - 65 (+0)	75 - 80 (+0)	75 - 80 (+0)	75 - 80 (+5)	65 - 70 (+5)	65 - 70 (+10)
GROUNDWOOD									
Sorted Residential Papers & News (56) *	35 - 40 (+5)	35 - 40 (+5)	35 - 40 (+5)	50 - 55 (+5)	45 - 50 (+5)	35 - 40 (+5)	30 - 35 (+5)	20 - 25 (+5)	25 - 30 (+10)
	Northeast						LA-SF[2]		
OMG (10)	80 - 85 (-25)			80 - 85 (-30)	80 - 85 (-30)	80 - 85 (-35)	95 - 105 (+0)		60 - 65 (-5)
CGS (44)	80 - 85 (-25)			80 - 85 (-30)	80 - 85 (-30)	80 - 85 (-35)	90 - 100 (+0)		55 - 60 (-10)
SCN (58)	140 - 150 (+15)			145 - 155 (+10)	145 - 155 (+10)	165 - 175 (+15)	135 - 145 (+10)		90 - 100 (+15)
WBN (24)	235 - 245 (+0)			225 - 235 (+0)	220 - 230 (+0)	245 - 255 (+0)	205 - 215 (+0)		170 - 180 (+0)
HIGH GRADES									
SOP (37)	85 - 90 (-15)			85 - 90 (-15)	85 - 90 (-15)	85 - 90 (-15)	140 - 150 (-15)		55 - 60 (-10)
CBS (43)	85 - 90 (-15)			85 - 90 (-15)	85 - 90 (-15)	85 - 90 (-15)	135 - 145 (-15)		55 - 60 (-10)
SBS heavy print (45)	105 - 115 (-15)			105 - 115 (-15)	95 - 105 (-15)		160 - 170 (-10)		
SWL (40)	125 - 135 (-15)			130 - 140 (-10)	145 - 155 (-15)	170 - 180 (-5)	205 - 215 (-10)		145 - 155 (-15)
MWL (41) [1]	135 - 145 (-35)			140 - 150 (-15)	150 - 160 (-15)	180 - 190 (-5)	200 - 210 (-15)		155 - 165 (-15)
SBS light print (45)	160 - 170 (-15)			135 - 145 (-10)	140 - 150 (-15)	160 - 170 (-15)	200 - 210 (-15)		
PULP SUBS									
SBS unprinted (47)	230 - 240 (-10)			225 - 235 (-10)	235 - 245 (-10)	240 - 250 (-10)	245 - 255 (-10)		
HWS (30)	235 - 245 (-10)			240 - 250 (-10)	255 - 265 (-10)	265 - 275 (-10)	260 - 270 (-10)		
HWEC (31)	265 - 275 (-10)			275 - 285 (-10)	275 - 285 (-10)	285 - 295 (-10)	300 - 310 (-10)		245 - 255 (-10)

*** OBM PRICES**

Prices for grades designated "OBM" are a continuation of the prices originally published in Official Board Markets ("OBM", "The Yellow Sheet") and are reported on the same basis as published historically in OBM. See www.risi.com/RCPmethodology for a complete description of what has and has not changed about OBM prices. (Price not marked * are consistent with prices published historically in P&PW.)

SPECIFICATIONS

Prices represent open market board and paper mill purchases agreed to for delivery in the indicated month. Contractually indexed transactions are excluded. Specifications: baled; full-truckload quantities; exclusive of delivery charges, premium or distress lots, and of all subsequent charges for packing, handling, destination considerations, or other special charges. Grades and preparation requirements are as defined in the current ISRI Scrap Specifications Circular.

NOTES

1. Preconsumer.

2. The price on the low end of the range is for the Bay Area and the price at the top end of the range is for the Los Angeles area.

3. As of Oct 2012, these region names were changed from a city to a region (e.g. "Chicago" to "Midwest"). This is a change in title, not in methodology. All references to the new names (e.g. "Midwest") as they apply to each price series above are consistent with the legacy names (e.g. "Chicago").

4. ONP #8 can be replaced with SRP #56 in formulas used to derive ONP#6 price.

5. Change reflects the difference between the high of the current month and the high of the previous month.

DISCLAIMER

While the information contained in this report has been obtained from sources believed to be reliable, Fastmarkets RISI does not warrant or guarantee the accuracy and completeness of the information. All prices are best estimates of prices, and are composite prices as opposed to median or average prices.

PPI Pulp & Paper Week Yellow Sheet

Fastmarkets RISI

PRICE WATCH: Recovered Paper - Export

Open market transactions for delivery this month, US$. (Further specifications noted at right.)

September 4, 2020

	Destination	New York[1]		LA[2]		SF/Oakland	
FAS port of origin (per ton)			Change[6]				
Mixed Paper (54) [4]	Asia	32 - 35	(+10)	42 - 45	(+10)	37 - 40	(+10)
OCC (11)	Asia	117 - 120	(+5)	127 - 130	(+10)	122 - 125	(+10)
Double Sorted OCC (12)	China	167 - 170	(+10)	182 - 185	(+10)	177 - 180	(+10)
DLK (13)	China	170 - 173	(+10)	187 - 190	(+5)	182 - 185	(+5)
Sorted Residential Papers & News (56) [5]	Asia	62 - 65	(+10)	77 - 80	(+15)	72 - 75	(+15)
CGS/OMG (44,10)	China	117 - 120	(+15)	127 - 130	(+20)		
SOP (37)	China	150 - 153	(-10)	182 - 185	(-35)	177 - 180	(-35)
SWL (40)3	Asia	192 - 195	(-10)	257 - 260	(-15)	252 - 255	(-15)
CFR to destination port (per tonne) [7 8]							
OCC (11)	India	175 - 178	(+3)				
Double-sorted OCC (12)	India	182 - 185	(+0)				
DLK (13)	China	227 - 230	(+15)	237 - 240	(+5)		

SPECIFICATIONS

Prices represent open market purchases agreed to for delivery within 30 days. Contractually indexed transactions (i.e. transactions whose price is determined in whole or in part by a formula in a long-term contract) are excluded. Specifications: baled; full-truckload quantities; exclusive of premium or distress lots. Grades and preparation requirements are as defined in the current ISRI Scrap Specifications Circular (now PS-13).

NOTES

1. "New York" includes ports in Northern New Jersey
2. "LA" includes Long Beach and LA ports
3. SWL prices are for ports in South Korea, Indonesia, and Thailand
4. As of March 2018, the destination of Mixed Paper assessments was changed to Asia from China and Mixed Paper assessments CFR China were discontinued.
5. As of April 2018, the destination of Sorted Residential Papers & News assessments was changed to Asia from China and SRPN assessments CFR China were discontinued.
6. Change reflects the difference between the high of the current month and the high of the previous month.
7. As of October 2018, assessments of SOP CFR China and SWL CFR Asia were discontinued.
8. As of April 2019, assessments of OCC (11) bound for China, SCN (58) bound for non-China asia and all grades FAS Chicago were discontinued.

The next issue of *PPI Pulp & Paper Week Monthly Recovered Paper Prices* will be available on Monday, October 5.
View the full year's recovered paper prices schedule here.

Annexure IX: Price of wastepaper in EU (July 6, 2020)

MARKTBERICHTEN

OUDPAPIER

Informatie die zich uitbetaalt!

Nederland & België *(prijzen franco geleverd papierfabriek per ton)*	Euro
Bont (1.01/1.02)	€ 25,00 - € 37,50
Karton (1.04/1.05)	€ 33,00 - € 50,00
Druk (1.09)	€ 45,00 - € 55,00
Ol (1.11)	€ 60,00 - € 70,00

Duitsland *(prijzen franco geleverd papierfabriek per ton)*	Euro
Bont (1.01/1.02)	€ 20,00 - € 30,00
Karton (1.04/1.05)	€ 30,00 - € 40,00
Ol (1.11)	€ 65,00 - € 75,00

Groot Brittannië *(prijzen afgehaald oudpapier onderneming per ton)*	Pond	Euro
Bont (1.01/1.02)	£ 15,00 - £ 25,00	€ 16,50 - € 27,50
Karton (1.04/1.05)	£ 35,00 - £ 45,00	€ 39,00 - € 50,00
Ol (1.11)	£ 40,00 - £ 50,00	€ 44,50 - € 55,50

Verre Oosten *(prijzen franco haven per ton)*	US Dollar	Euro
Bont (1.01/1.02)	$ 0,00 - $ 0,00	€ 0,00 - € 0,00
Karton (1.04/1.05)	$ 42,00 - $ 47,50	€ 37,00 - € 42,00
Druk/Ol (1.09/1.11)	$ 56,50 - $ 67,50	€ 50,00 - € 60,00

Koers op slotdatum 6 juli 2020: € 1,00 = $ 1,129 = £ 0,901 (valuta omrekeningen afgerond)

Oost-Duitsland
Hier wordt de situatie als volgt samengevat: 'Zelfde situatie als in het Zuiden en het Westen van Duitsland: prijzen voor oudpapier naar beneden onafhankelijk van de beschikbaarheid.'

West-Duitsland
In Nordrhein-Westfalen lopen de schoolvakanties van 29 juni tot 11 augustus en in Rheinland-Pfalz van 6 juli tot 14 augustus. In beide deelstaten samen wonen ruim 23 miljoen mensen, bijna 30% van alle Duitsers. Dat zal gevolgen hebben voor de inzameling van oudpapier, mag worden aangenomen.

Scandinavië
Ook hier begint de vakantieperiode met mogelijk ook effecten op de inzameling. Norse Skog gaat newsprint machines in Colbey (Frankrijk) en Bruck (Oostenrijk) ombouwen naar containerboard.

Groot-Brittannië
Ook de tissueproducenten in de UK zien hun orderposities krimpen. Het prijsverschil voor bont op de lokale markt tussen MRF bont en betere kwaliteit bont is teruggelopen tot acht á tien pond per ton, aldus onze informant. Naast karton gaat ook de prijs voor ontinktingspapier wat terug. Naar verluidt stoppen sommige rederijen met het vervoer van oudpapier vanuit de UK naar China.

-3-

Annexure X: Excerpts from document 'Material Recovery Facilities' by Waste and Resource Action Program (WRAP), UK

Written by:

The Dougherty Group LLC on behalf of WRAP

The Waste & Resources Action Programme

The Old Academy, 21 Horse Fair, Banbury, Oxon OX16 0AH Tel: 01295 819900 Fax: 01295 819911 www.wrap.org.uk

WRAP Helpline: freephone 0808 100 2040

September 2006

An introduction to MRFs and comparison of sorting operations based on site visits to selected facilities in England, Europe and North America

Methods of collection

The two most common methods of co-mingled collection are:

- Single-stream co-mingled (or fully co-mingled) – all dry recyclables are co-mingled and collected in a single compartment of a collection vehicle. The recyclables are collected from a wheeled bin, box or sack.
- Two-stream – either fibre is collected separately from the other co-mingled materials (typically glass, plastics and cans i.e. containers) or glass is collected separately from the other materials. Typically, collection vehicles have two compartments to keep the materials separate.

Sorting materials at the curb side and transporting them in a vehicle with multiple compartments/stillages is common practice in the UK. This type of collection system does not require a central sorting facility, and hence is not one of the collection systems discussed in this report.

Local authorities and waste contractors often prefer the convenience and potential lower **collection** costs of the single- and two-stream co-mingled collection systems.

On the other hand, most reprocessors purchasing the recovered materials prefer that materials be sorted at curbsides as this minimizes the potential for cross contamination and generally produces higher quality materials. The challenge of two-stream, and more so single-stream MRFs, is to meet the specifications required by the materials markets/

The sorting processes

There are three primary phases in the MRF sorting process:

- Receiving and preparing materials for the sorting process
- Sorting the materials into their individual material streams
- Inspecting, baling, storing and shipping sorted materials

Sorting into individual material streams

As is typical with many sorting processes, larger items are separated out at the front end of the process and smaller items toward the back end.

The primary sorting step separates fibre (newsprint, magazines, office paper, OCC) from containers. Advanced sorting steps may then be used to segregate paper by fibre grade and containers by material type.

Sorting paper from containers

Separating the two-dimensional (paper) from three-dimensional (containers) early in the sorting process allows easier access to the materials for further sorting.

With automated sorting, this initial sorting is done using either a trommel screen or a disc screen.

Trommel screen

A trommel screen consists of a large rotating cylinder with holes of various sizes through which materials fall. The cylinder is set on an incline, the smaller holes being located at the upper end.

As co-mingled materials enter the cylinder, the larger fraction materials pass through the screen first. As the holes become progressively smaller along the length of the cylinder, gradually smaller materials sort out.

Typically, containers pass through various sized holes along the sides of the cylinder while paper passes through last.

Disc screen

Disc screens have become more popular in recent years in a variety of sorting applications:

- In single stream MRFs they are used to perform an initial separation of fibre and container materials.
- In fibre sorting applications, they are used to separate OCC or newspaper and magazines from other fibre grades.
- In co-mingled container sorting systems, they serve as an alternative to vibratory screens and tromme screens for removing fines, debris, broken glass, etc. from the larger containers.
- In co-mingled container sorting systems, they are used to sort containers from miscellaneous fibre contaminants.

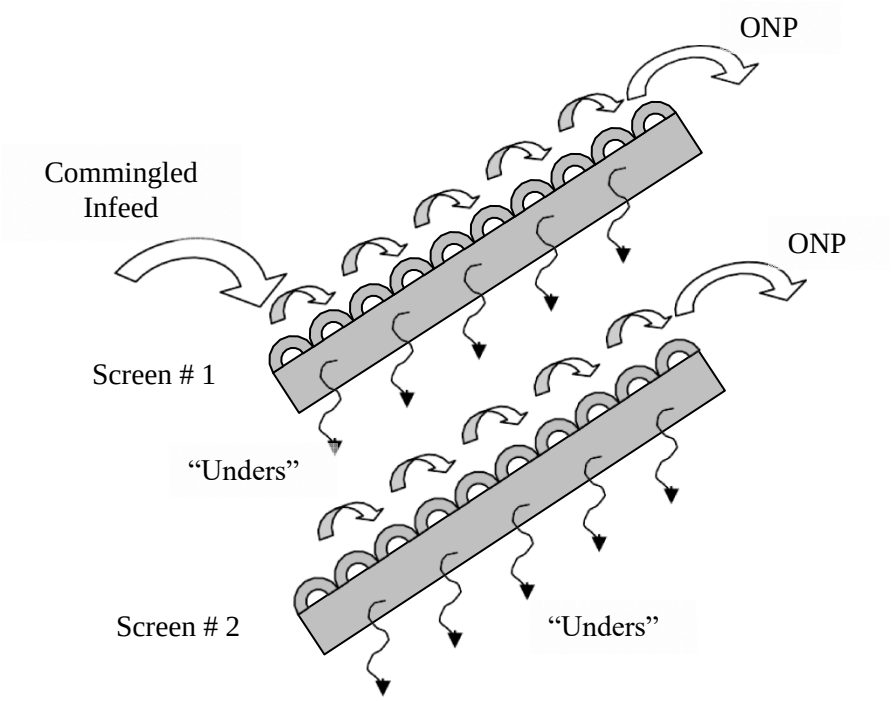
The disc screen has several inclined rows of oblong steel discs which spin in the direction of the materia flow. Larger surface size (or two-dimensional) materials move up the incline of rotating discs while smaller materials are bounced in the air and knocked off the top. There is sufficient space between the conveyor

belt and the disc screen, as well as space between the rows of discs, to allow the smaller surface size materials to fall below onto another conveyor system.

Typically, the disc screen is used to sort three fractions:

- newspaper and magazines over the top of the screen, referred to as “overs”;
- mixed paper and lighter containers through the middle of the screen, referred to as “unders”; and
- heavier material (primarily glass) at the bottom of the screen.

The screens can be designed as single, double or triple screens depending on the function.



ONP = old newspapers

Sorting paper into grades (advanced grading)

Two methods are used for further sorting the mixed paper into various market-grade specifications:

- Disc screens

A series of two disc screens is often employed. The first disc screen has wider spaces between the conveyor and between the discs, allowing for only large and ridged materials, specifically OCC, to move up the screen while all others fall below onto another belt.

At the second disc screen, which has smaller spaces between the discs, the newsprint is sorted from mixed papers.

At two of the MRFs visited (Eureka Recycling, St. Paul, and Waste Management, Seattle), a third disc

screen, with even narrower spacing, sorts low grade card (wetpak) from mixed paper.

- Optical scanning

Optical scanners are capable of identifying fibre grades and sorting targeted grades using reflective near infrared (NIR) sensors. The sensor module can be placed on top of the sorting conveyor and once sensed, air jets (or air knives) at the end of this conveyor sequentially eject the target material, separating it from the remainder of the materials. This technology is used successfully for sorting various grades of paper and plastic resins at several MRFs in North America and Europe.

Optical scanners can be used to identify and sort various grades of paper as well as to separate paper from other materials.

Whether using manual or automated sorting techniques, the sorted paper stream should pass through one final inspection station where individuals remove any remaining contamination before the paper is baled and/or shipped to market. This last inspection stage is referred to as the **paper inspection or "buffing" station** and is key to ensuring that the sorted paper meets the specifications/quality standards required by the reprocessors e.g. the paper mills.

Sorting containers by material type

There are a variety of mechanical techniques to separate different container types based on the size, shape, density and conductivity of the material.

Technologies commonly used to sort by type include eddy currents for aluminum and overband magnets for ferrous metals.

Screens and discs are also used to sort larger containers from smaller ones (plastic from glass, aluminum and steel), or the lighter-weight fractions (plastics, aluminum and steel) from the heavier-weight fractions (glass).

There are different schools of thought on the optimal sequence for sorting containers. Some prefer to remove the plastic early in the process while others find it more efficient to remove metals early so as to optimize the efficiency of plastics sorting later in the process.
Notwithstanding the selected sequence, the sorting techniques and technologies are similar

Large-capacity North American MRFs such as those in Seattle and Minneapolis operated by Waste Management Inc. have installed a "crusher" that breaks glass and flattens plastic, aluminum and metal Once fractured, a trommel screen is used to sort the smaller fraction (glass) from the larger (plastics metals and aluminum).

Sorting plastic containers

Due to their size and volume, plastic containers are often removed early in the sorting process. This facilitates identifying and sorting the remaining aluminum and steel cans.

Sorting plastic containers is done either manually or by means of a near infrared optical scanning system (NIR) which can identify plastic from other materials. Once identified, an air jet separates plastics from other materials on the conveyor.

The plastic containers pass through an inspection or quality control station where any lingering contaminants are manually removed.

Advanced sorting of plastics containers

Plastics commodity markets require clean streams of specific resins. At some point in the process, plastic containers must be sorted by resin, and often by color, prior to reprocessing.

Manual sorting is sometimes used to carry out this process. However, more common is the use of near infrared (NIR) technologies to identify each resin and color, and an air jet to lift the sorted containers into the appropriate bunker.

Advanced sorting can occur at the MRF or at a separate location. In determining whether to carry out advanced sorting on site, MRF operators should compare the costs of sorting to the market price for mixed vs. resin-sorted plastic containers.

Sorting metal

Magnets are used to pull steel cans from the conveyor belt. This is an inexpensive and accurate way to sort the metals. Once pulled from the belt they are dropped into a storage bunker and then baled.

Sorting aluminium

Aluminum cans tend to be removed at a point in the sorting process where they are the dominant material or at least one of only a few remaining materials on the conveyor belt. Eddy current separators are placed at the end of the sorting process where aluminum is separated from a plastic mix, or after positive sorting of plastics takes place. This ensures that the eddy current separator operates at maximum efficiency and that aluminum cans do not get “buried” under other containers (and that other materials don’t get pulled off with aluminum cans).

An eddy current has a slight electrical charge which passes through other materials (paper, plastic, metals, and glass) but is resisted by aluminum, causing the cans to lift or bounce off the conveyor.

Due to the very stringent specifications and the high value of aluminum, manual quality control is often

employed to remove any remaining contamination before the sorted aluminum falls into the bunker.

Sorting glass

Both manual and automated systems are used to sort glass from other containers.

Manual sorting:

Manual sorting of glass occurs after the containers are separated from the fibre. Typically it occurs early in the sorting process so as to not block the eddy current and overband magnet from efficiently removing aluminium and steel container.

Automated sorting:

- Disc screens or trommel screens may be used early in the process.
- The container line passes through a crushing system which flattens plastics and breaks the glass containers. A trommel screen can then be used to sort the glass cullet from larger containers (plastic aluminium and ferrous metals).

The broken glass is often sorted into two main size categories – particles larger than, and smaller than 0.95cm (3/8th inch). The larger size glass particles can be sorted by means of an optical scanner. The smaller size cullet tends to be sold to the sand blasting or aggregates markets.

Advanced sorting:

Optical scanning technology can be used to sort glass by color. However, to achieve optimal efficiency glass cullet must be at least 0.95cm in size to be identified by the near infrared sensors (NIR).MRF operators should evaluate the market value for mixed cullet compared to color separated, to determine if there is sufficient price margin to justify the advanced color sorting of glass either at the MRF or at a separate location.

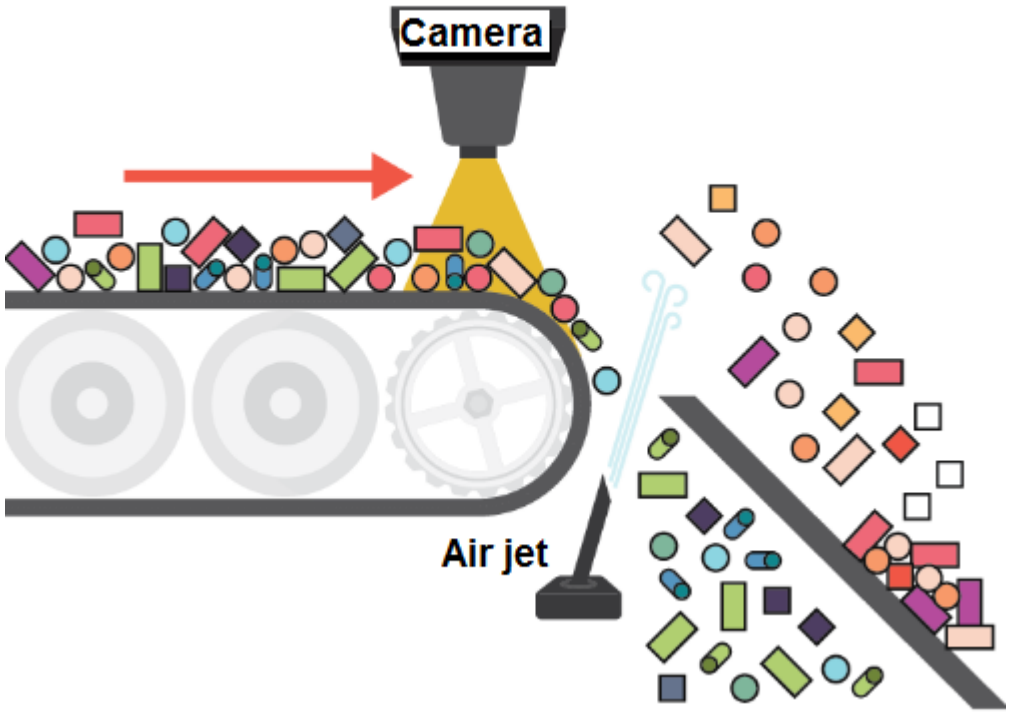
Annexure XI: Automatic Paper Sorting Technologies

1. Near-Infrared Sorting

a. NIR (near infrared technology) refers to a spectrum in a range between 760 and 2500 nm that is invisible to humans.

b. The NIR machine detects the unique wavelength signature of the desired polymers and air jets direct the polymers to their specific streams.

c. NIR machines are both faster and more accurate than manual sorters.



Issues with NIR sortation: NIR sortation cannot be considered reliable in detecting black colored items. NIR sensors cannot “see” black items as the black colorant absorbs the light waves and provides no signature.

2. LASER Sorting - The shortcomings of NIR systems can be overcome by using LASER based sensors. Since LASER detects items like black plastic and glass that NIR cannot see, combining LASER technology with our pneumatic sorting system gives MRFs the ability to produce a cleaner paper product that meets today’s purity standards.

3. Lignin Sensors:

a. This sensor is used for non-destructive, real-time identification of wastepaper grades, to aid in automating a wastepaper sorting process.

b. The sensor is capable of identifying about 500 papers in one second. It is based on the principle that fluorescence light emitted from paper following absorption of visible light has a wavelength distribution determined by the chemical composition of the paper.

c. This sensor is vastly superior to all other sensors previously designed for this purpose because, it does not use the conventional reflective type optical properties of paper, and this is the only sensor that can identify all grades unlike the previous sensors that could identify only white ledger papers.

d. The lignin sensor for sorting has been commercialized and is in use in several automated sorting operations.

Annexure XII: Office Memorandum issued by MoEF&CC prescribing limits for non-paper recyclable material in wastepaper consignments imported from other countries.

Copy of:-

GOVERNMENT OF INDIA

MINISTRY OF ENVIRONMENT & FORESTS

No. 13-1/2004 – HSMD

Dated 11th May, 2010

OFFICE MEMORANDUM

The Ministry has reviewed the prescribed limits for non-paper recyclable material in waste paper consignments being imported from other countries. In supersession of the O.M. of even number dated 10.02.2006, the revised guidelines and specifications for non-recyclable material in waste paper consignment are as follows:

i. Import and export of paper, paperboard and paper product wastes shall be regulated in accordance with the provisions laid down under the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 as amended.

ii. Import of paper wastes shall be only for recovery/ manufacture at the paper manufacturing unit (henceforth called as unit") and the imported material shall not be sold further.

iii. The importers would have to ensure that all recyclable materials are actually recycled by them. There should be no disposal of materials - other than by recycling.

iv. The imported wastepaper consignment shall not contain any municipal solid waste or post consumer domestic waste or biomedical waste-or any other type of contaminants. In case of any such contaminant being found, -the consignment will have to be sent back to the exporting country and the importer shall bear the cost thereof.

v. An inventory of imported material will be maintained by the unit including the name of company and industry from where imported.

vi. A record of waste material generated, while recycling the imported waste paper, along with the quantity and characteristics of the disposal

of non-recyclable waste including toxic waste should be maintained by the unit. The non-recyclable waste may be disposed of as per the requirement of the State Pollution Control Board concerned to avoid any surface or ground water contamination.

vii. The extent of recyclable material, which is otherwise on Open General License (OGL), shall not exceed the limits specified below. However, there shall be no putrefiable organic matter at all in the imported waste paper consignment.

S. No.	Grade	Limit (in per cent)
1.	Residential Mixed Paper	2
2.	Soft Mixed Paper	1
3.	Hard Mixed Paper	½
4.	Boxboard Cuttings	½
5.	Mill Wrappers	½
6.	News	1
7.	News, De-Ink Quality	None permitted
8.	Special News, De-Ink Quality	None permitted
9	Over-Issue News	None permitted
10.	Magazines	1
11.	Corrugated Containers	1
12.	Double Sorted Corrugated	
13.	New Double-Lined Kraft Corrugated Cuttings	None permitted
14.	Fiber Cores	1
15.	Used Brown Kraft	None permitted
16.	Mixed Kraft Cuttings	None permitted
17.	Carrier Stock	None permitted
18.	New Colored Kraft	None permitted
19.	Grocery Bag Scrap	None permitted
20.	Kraft Multi-Wall Bag Scrap	None permitted
21.	New Brown Kraft Envelope Cuttings	None permitted
22.	Mixed Ground wood Shavings	None permitted
23.	Telephone Directories	None permitted
24.	White Blank News	None permitted
25.	Ground wood Computer Printout	None permitted
26.	Publication Blanks	None permitted
27.	Flyleaf Shavings	None permitted
28.	Coated Soft White Shavings	None permitted
29.	Hard White Shavings	None permitted
30.	Hard White Envelope Cuttings	None permitted
31.	New Colored Envelope Cuttings	None permitted
32.	Semi Bleached Cuttings	None permitted

33	Unsorted Office Paper	2
34.	Sorted Office Paper	1
35.	Manifold Colored Ledger	½
36	Sorted White Ledger	½
37.	Manifold White Ledger	¼
38.	Computer Printout	None permitted
39.	Coated Book Stock	None permitted
40	Coated Ground wood Sections	None permitted
41.	Printed Bleached Board Cuttings	½
42.	Misprinted Bleached Board	1
43.	Unprinted Bleached Board	None permitted
44.	#1 Bleached Cup Stock	None permitted
45.	#2 Printed Bleached Cup Stock	None permitted
46.	Unprinted Bleached Plate Stock	None permitted
47.	Printed Bleached Plate Stock kinds	None permitted
48.	Specialty Grades (White waxed cup cuttings, printed waxed cup cuttings, Plastic coated cups, polycoated bleached kraft-unprinted, polycoated bleached kraft-printed, polycoated milk carton stock, polycoated diaper stock, polycoated boxboard cuttings, Waxed boxboard cuttings, Printed and /or unprinted bleached sulphate containing foil, Waxed corrugated cuttings, Wet strength corrugated cuttings, Asphalt laminated corrugated cuttings, Beer carton scrap, Contaminated bag scrap, Insolubale glued free sheet paper and/or board, White wet strength scarp, Brown wet strength scarp, Printed and/or coloured wet strength scarp, File stock, New computer print out, Ruled white, Fly leaf shavings containing hot melt glue, Carbon mix, Books with covers, Unsorted tabulating cards, Coloured tabulating cards, Carbonless treated ledger, Plastic windowed envelops, Textile boxes, Printed TMP, Unprinted TMP, Manila tabulating cards, Sorted colored ledgers)	None permitted

2. The content of paper wastes must be verified by the Customs authorities in respect of each consignment imported into the country.

3. Adherence to stipulated conditions would be verified by the Customs Authorities, the State Pollution Control Board (SPCB)/Pollution Control Committee (PCC) concerned and the Regional Offices of the Ministry of Environment and Forests.

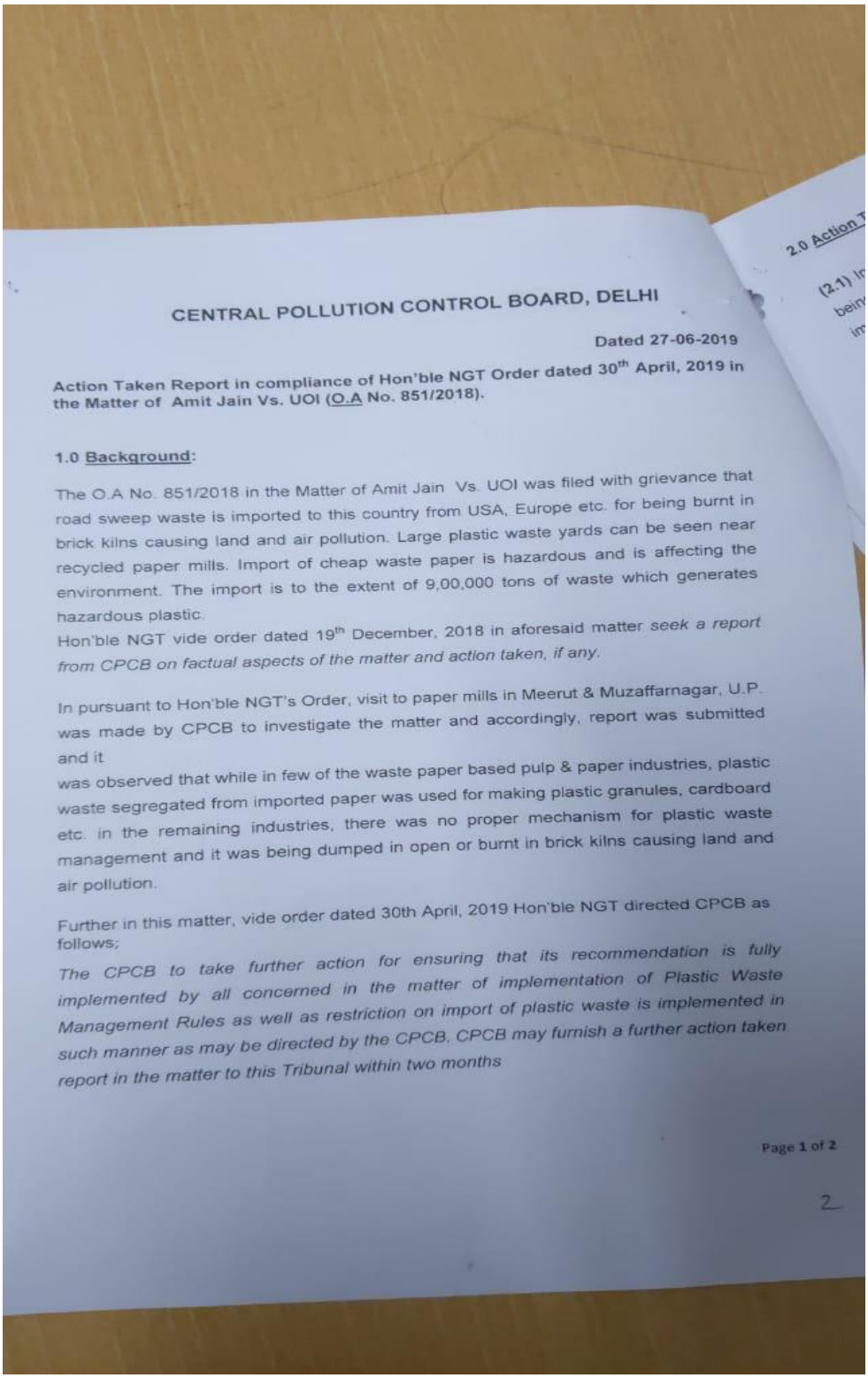
This issues with the approval of the Competent Authority

Sd/-
(Dr. Manorajan Hota)
Director

To:

1. The Director General of Inspection, Customs and Central Excise, 'D' Shape Building, I. P. Estate, New Delhi-110002
2. The Director General of Foreign Trade (DGFT), Udyog Bhawan, H-Wing, Maulana Azad Road, New Delhi-110011
3. The Joint Secretary (Customs), Ministry of Finance, New Delhi
4. The Chairman, Central Pollution Control Board, East Arjun Nagar, Delhi-110032.
5. The Chief Conservator of Forest, Regional Offices of the Ministry of Environment and Forests
6. The Secretary (Revenue), Ministry of Finance, Government of India.
7. Member Secretary, All the SPCBs/PCCs.
8. The Additional Commissioner (Docks), Ministry of Finance, New Delhi

Annexure XIII: Report filed by CPCB in Hon'ble NGT in the matter OA 851/2018



CENTRAL POLLUTION CONTROL BOARD, DELHI

Dated 27-06-2019

Action Taken Report in compliance of Hon'ble NGT Order dated 30th April, 2019 in the Matter of Amit Jain Vs. UOI (O.A No. 851/2018).

1.0 Background:

The O.A No. 851/2018 in the Matter of Amit Jain Vs. UOI was filed with grievance that road sweep waste is imported to this country from USA, Europe etc. for being burnt in brick kilns causing land and air pollution. Large plastic waste yards can be seen near recycled paper mills. Import of cheap waste paper is hazardous and is affecting the environment. The import is to the extent of 9,00,000 tons of waste which generates hazardous plastic.

Hon'ble NGT vide order dated 19th December, 2018 in aforesaid matter *seek a report from CPCB on factual aspects of the matter and action taken, if any.*

In pursuant to Hon'ble NGT's Order, visit to paper mills in Meerut & Muzaffarnagar, U.P. was made by CPCB to investigate the matter and accordingly, report was submitted and it

was observed that while in few of the waste paper based pulp & paper industries, plastic waste segregated from imported paper was used for making plastic granules, cardboard etc. in the remaining industries, there was no proper mechanism for plastic waste management and it was being dumped in open or burnt in brick kilns causing land and air pollution.

Further in this matter, vide order dated 30th April, 2019 Hon'ble NGT directed CPCB as follows;

The CPCB to take further action for ensuring that its recommendation is fully implemented by all concerned in the matter of implementation of Plastic Waste Management Rules as well as restriction on import of plastic waste is implemented in such manner as may be directed by the CPCB. CPCB may furnish a further action taken report in the matter to this Tribunal within two months

Page 1 of 2

2

2.0 Action Taken

(2.1) In compliance to Hon'ble NGT's Order, Central Pollution Control Board (CPCB) being issued Directions to all SPCBs/PCCs to ensure that pulp & paper units which are importing waste paper containing plastic should manage plastic waste in accordance with the provisions of PWM Rules, 2018. **(Annexure I)**

(2.2) As per Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016, Solid plastic waste(Category B3010 – Schedule VI) is prohibited for import.

(2.3) MOEFCC is the nodal Ministry to deal with transboundary movement(Import/Export) of Hazardous and Other Wastes in accordance with the provisions of these Rules (Clause 11).

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 851/2018

IN THE MATTER OF:-

AMIT JAIN — APPLICANTS

VS.

UNION OF INDIA — RESPONDENTS

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SL. NO.	PARTICULARS	PAGE NO.
01.	**ACTION TAKEN REPORT** OF CENTRAL POLLUTION CONTROL BOARD IN O.A. NO. 851/2018 IN THE MATTER OF AMIT JAIN VS. UNION OF INDIA IN COMPLIANCE OF HON'BLE NGT ORDER DATED 06.09.2019.	
02.	**ANNEXURE-I** DIRECTIONS ISSUED UNDER SECTION 18(1) OF AIR (PREVENTION & CONTROL OF POLLUTION) ACT, 1981 BY CPCB TO ALL SPCBs/PCCs DATED 18.09.2019.	
03.	**ANNEXURE-II** LETTER ISSUED BY CPCB TO ALL SPCBs/PCCs DATED 09.10.2019 REGARDING EPR AS PER CLAUSE 13 (2) OF PWM RULES, 2018.	
04.	**ANNEXURE-III** LETTER ISSUED BY CPCB TO MOEF & CC DATED 20.09.2019 REGARDING TRANSBOUNDARY MOVEMENT (IMPORT/EXPORT) OF HAZARDOUS AND OTHER WASTES.	
05.	**ANNEXURE-IV** THE HON'BLE TRIBUNAL ORDER DATED 06.09.2019.	

DIVYA SINHA
SCIENTIST-E
CENTRAL POLLUTION CONTROL BOARD,
PARIVESH BHAWAN, EAST ARJUN NAGAR,
DELHI-110032.

DATE: 10.10.2019
PLACE: DELHI

CENTRAL POLLUTION CONTROL BOARD, DELHI

Dated 09-10-2019

Action Taken Report in compliance of Hon'ble NGT Order dated 06th September, 2019 in the Matter of Amit Jain Vs. UOI (O.A No. 851/2018).

Background:

O.A No. 851/2018 in the Matter of Amit Jain Vs. UOI is filed before Hon'ble NGT with grievance that waste paper based pulp & paper mills import waste paper containing plastic, it was further informed that large plastic waste yards can be seen near these paper mills. Import of cheap waste paper is hazardous and is affecting the environment and it is also being used for firing in brick kilns.

CPCB issued following directions dated 25.06.2019 to all SPCBs/PCCs.

To ensure that pulp & paper units which are importing waste paper containing plastic should manage plastic waste in accordance with the provisions of PWM Rules, 2018.

i. To provide Action Taken Report as per (i) above including details of such unit importing waste paper containing plastic in your State/UT.

Action taken on the above Directions was to be communicated to CPCB within 10 days of receipt of these directions.

Hon'ble NGT vide its Order dated 6th September 2019 in this matter directed that "*apart from issuance of direction, compliance of direction is required to be overseen. Even with regard to illegal import, CPCB as a statutory regulator can take up the matter with concerned authorities*". *Let further steps be taken in the matter accordingly and report filed before the next date i.e. 16.10.2019.*

Action Taken:

In compliance of Hon'ble NGT order, CPCB had written a letter dated: 18.09.2019(**Annexure -I**) to all SPCBs/PCCs to communicate action taken on directions dated 25.06.2019 in the matter

In response of above letter, 9 SPCBs/PCCs have provided information related to no. of pulp and paper units importing waste paper in their respective jurisdiction to CPCB. (Table-1). Out of 9 states, 3 states (**Tamil Nadu, Punjab & Odisha**) have issued directions to Pulp & paper units which are involved in importing waste paper in their state to manage imported waste paper in accordance with the provisions of PWM rules,2018.

Table-1: List of SPCBs/PCCs which have provided the information

S. No.	Name of the SPCB/PCC	No. of pulp & paper units importing waste paper	Quantity of waste paper (B 3020) for which Hazardous Waste Authorization(HWA) issued
1	Tamil Nadu	57	23,94,081 TPA
2	Punjab	21	Not Provided
3	Odisha	1	Not provided
4	Arunachal Pradesh	Nil	Nil
5	Chandigarh	Nil	Nil
6	Lakshadweep	Nil	Nil
7	Mizoram	Nil	Nil
8	Nagaland	1 (Not in Operation)	Nil
9	Tripura	Nil	Nil

Kerala State Pollution Control Board has acknowledged receipt of letter of directions.

Vide letter (**Annexure II**) dated 9th October,2019 CPCB has communicated to all SPCBs/PCCs that pulp and paper units importing waste paper should be covered under Extended Producer Responsibility(EPR) as per clause 13(2) of PWM Rules, 2018.

Further, as MoEF&CC is the nodal Ministry to deal with transboundary movement(Import/Export) of Hazardous and Other Wastes, CPCB had written a letter dated 20.09.2019 to MoEF&CC for taking necessary action in this regard **(Annexure -III)**.

Annexure XIV: Inspection procedure of Wastepaper Consignment (INGEDE methods)

The purpose of the procedure is to assess the proportion of unwanted material in a load of PCR (Paper & Cardboard Recycle) delivered to paper mills.

First step: Visual Inspection

1. It consists of an assessment of the content of undesirable materials by visual inspection. The result of the visual inspection could lead, without further inspection, to acceptance or rejection of the load. Some additional inspections could be necessary (see second step) and lead to conditional acceptance.
2. If a significant presence of unwanted material is visually detected in a loading, and if this loading has not been refused, the inspection consisting of a measurement unwanted material should be made, even if it was not planned.
3. Visual measurement should be performed using statistical methods.

Second step: In-depth visual inspection and / or gravimetric method

This procedure defines an additional examination (advanced visual inspection and / or gravimetric) to be carried out by paper mills following visual inspection, which may lead to conditional acceptance.

1. The in-depth visual check - Regarding the paper to be recycled, the visual inspection in-depth is detailed by INGEDE (methods 7 and 8):

a. Method 7 for INGEDE bulk papers: This method describes the recommendations for a comprehensive entry inspection and the whole entry control procedure with several quality parameters to check: (state general delivery, smell, mold and rot, humidity, presentation of the delivery, seniority and composition of the PCR. It also describes how to check the visual assessment results and how to do a good calibration;

b. Method of INGEDE 8 for balls in addition to method 7: This method describes how to prepare the load for the entry inspection and gives recommendations on bale sampling. Quality parameters following must be analyzed; (General condition of delivery, odor, mold and rot, humidity, age as well as the composition of the PCR) - proportion of various materials desirable and undesirable.

2. The gravimetric method / weighing samples

a. It consists of weighing the quantity of undesirable matter present in a sample;

b. There is no standardized method, for the moment, for all kinds, but it is recommended to always take the same representative sample and at least one sample from the loading. For types of graphic

paper, INGEDE provides the INGEDE 14 method for sampling and composition determination. For baled materials, method 8 also describes sampling. A coring device can be used to obtain a good sample of balls;

c. A quantitative measurement of the unwanted material content is made from the sample taken. The undesirable materials obtained must then be weighed and their proportion calculated. as a percentage of the weight of the complete sample taken.

3. Technical solutions: Technical solutions are available on the market and increasingly used to measure the content of unwanted materials (the near infrared (NIR) scanner for non-components paper). Ordinary calibration can take place if it follows manufacturers recommendations devices to be sure that they are working properly.

INGEDE Method 7 April 2009 8 Pages	Visual inspection for recovered paper for deinking Unbaled delivery	INGEDE International Association of the Deinking Industry

Introduction

For paper mills using recovered paper for deinking, the quality of recovered paper is very important. Therefore it is desired to inspect as many deliveries as possible. Gravimetric inspection is very accurate but also time consuming. However, the time available for entry inspection is relatively short.

This method provides a practical, quick, reliable and impartial procedure to quantify the portion of unusable material and the composition of a delivery. It mainly applies to recovered paper grade 1.11 according to EN 643 but can also be used for other grades.

1 Scope

This INGEDE method describes a procedure to visually inspect the quality of recovered paper for deinking which is delivered unbaled. The method is suitable for assessing the main components of a recovered paper delivery and for contents of total unwanted material from 1 % to 8 %.

2 Terms and definitions

Reference surface:

Surface of a pile of recovered paper after unloading which is used for the visual inspection.

3 Principle

The method describes the inspection of unbaled deliveries of recovered paper with visual counting of unwanted material and subsequent conversion to their content by weight. The portion of accepted papers is visually assessed by estimation. Both conversion and estimation need verification by a gravimetric inspection on a regular basis

4 Equipment and auxiliaries

Option: Moisture measuring device

5 Procedure

The following quality parameters are to be checked: general condition at the time of delivery, odour, mould and rotting, recovered paper composition (percentages of the various accepted papers and unusable materials), moisture, and age.

The conditions mentioned below are applicable to entry inspection as a whole unless specified otherwise in the instructions for individual control parameters.

INGEDE Method 7 Page 2	Visual inspection for recovered paper for deinking Unbaled delivery

5.1 Inspection site and conditions for inspection

5.1.1 Location

Entry inspection may either be performed in warehouse halls or outdoors. Visual inspections carried out outdoors may be strongly affected by the prevailing weather conditions.

5.1.2 Illumination

The reference surface should be exposed to antiglare, neutral white illumination with a nominal light intensity of 200 lux (minimum).

5.1.3 Reference surface

It is essential to keep the reference surface constant or – if this is not possible – to relate the results to the standard reference surface. The standard reference surface depends on the plant premises and should measure at least 30 m².

The recovered paper should be performed preferably after unloading unless it is obvious that this particular delivery is to be refused.

With dump trucks and 20 ft. containers with a volume of about 33 m³, an unloading angle smaller than 60° and simultaneous forward motion of the truck during unloading usually ensure sufficient loosening up of the recovered paper delivery and, at the same time, a surface of the pile of about 30 m².

For walking floor trucks or container sizes which result in a different surface of the unloaded material it has to be ensured that the inspection surface is related to the standard reference surface.

5.1.4 Distance for inspection

The reference surface should be observed from a distance not exceeding 2 metres.

5.1.5 Observation Inspection angle

The inspection angle should be as close as possible to 90 degrees.

5.2 Behaviour of the recovered paper during unloading

An assessment of the general condition of the delivered recovered paper requires observation of the unloading process at close range in compliance with applicable safety provisions. During unloading, particular attention is to be paid to untypical sounds, recovered paper flow behaviour and formation of dust. Untypical sounds are indicative of contaminated containers or major fractions of non-paper components. The moisture content of the delivered paper affects flow behaviour and sounds to be perceived when the paper hits the ground during unloading. Formation of dust may indicate an incorrect disposal at press rooms or extended storage prior to delivery. The perception of untypical behaviour should trigger a more thorough inspection.

Visual inspection for recovered paper for deinking
Unbaled delivery

5.3 Odours, mould and rotting

The unloaded delivery should be examined at close range from various sides. Particular attention is to be paid to untypical odours and indications of mould and rotting. Untypical odours comprise all odours which are not characteristic of paper and may be attributed to cross contamination or mould. Reasons for these can be unsuited collection systems, organic waste, excessive moisture, unsuited storage and so on.

5.4 Recovered paper composition

With this method, a characterisation of recovered paper according to the following list is possible:

- Accepted paper
  - Newspapers
  - Magazines
  - Other accepted papers
- Total unwanted material
  - Unwanted papers
    - Unbleached papers and boards
    - Dyed papers
    - Papers not suitable for deinking
    - Laminated papers
    - ...
  - Non-paper components
    - Light non-paper components
    - Heavy non-paper components

As a minimum, the inspection should differentiate between total unwanted material and accepted papers. More details according to the list is possible. If a further detailing is desired, it should be done by gravimetric inspection according to INGEDE Method 14.

Examples for further details:

Other accepted papers: Catalogues, flyers, office papers.

Light non-paper components: CD's, plastic bags, hard plastics, other synthetic materials, synthetic papers, textiles.

Heavy non-paper components: Glass, metal, wood, sand, building materials.

All data provided refer to the complete delivery unless stated otherwise. Attention has to be paid that the total of all components assessed add up to 100%.

If the delivery contains a significant amount of papers not suitable for deinking, a more thorough inspection or further analyses are recommended.

5.4.1 Assessment of unwanted material

The most important step is the assessment of the fractions of unwanted papers as well as of non-paper components.

The numbers of items of any of these components visible on the observation surface are counted. For unwanted papers, the unit for counting are size equivalents of ISO A 4 format; for non-paper components, the unit for counting are weight equivalents of 100 grams.

Subsequent conversion to weight is to be done by means of conversion tables or by weighting factors (see Annex), thus yielding the proportion of the individual components in weight per cent.

5.4.2 Assessment of accepted papers

If no further detailing is wanted, the portion of accepted papers is 100% minus the portion of total unwanted material.

For a more detailed assessment of the accepted paper, their composition is to be estimated. It is recommended to start with the proportion of papers which are not newspapers, magazines or the like.

Following that, newspaper and magazine fractions are assessed. If this is done by estimating the newspaper/magazine ratio (e.g. 60:40, total = 100) the results have to be related to their real content by taking the contents of the other fractions – unwanted material and other accepted papers – into account.

Flyers inserted in newspapers are calculated as newspapers.

5.5 Moisture

Optionally, moisture can be checked. At five representative spots distributed as evenly as possible along the sides of the pile of unloaded recovered paper, moisture tests are to be carried out which are able to detect potential conspicuous moistening. In the case of excessive moistening, the moisture content should be measured.

5.6 Age

Optionally, the age of the prints can be determined. Inspection staff is to pick one sample newspaper of legible date of issue from each of five representative and evenly distributed spots along the sides of the recovered paper pile. The newspaper's age is then determined by the number of months between the date of issue and the delivery date.

INGEDE Method 8 July 2013 4 Pages	Entry inspection of deinking grade paper for recycling in bales	INGEDE International Association of the Deinking Industry

Introduction

INGEDE has set up several methods for the entry inspection of paper for recycling. A unique procedure is INGEDE Method 7, in which loose paper for recycling is assessed visually and the composition as well as the content of unwanted material is calculated from the visual result. INGEDE Method 14 serves as gravimetric verification or as a stand-alone method for gravimetric inspection. This INGEDE Method 8 refers in large parts to these two methods and describes only parameters specific to bales and sampling from bales.

1 Scope

This INGEDE method describes a procedure how to select and how to open bales of deinking grades and how to make bale-specific assessments. The further inspection has to be done by applying INGEDE Methods 7 or 14.

2 Terms and definitions

This method does not contain any specific terminology.

3 Principle

Unless otherwise stated, the following descriptions refer to the inspection of one bale.

Depending on the quality feature to be analysed, a sufficient number of bales has to be selected at random from a particular truck delivery to be inspected. For waggon deliveries the number of bales should be in proportion to the tonnages. The bales are to be unloaded in a way that five sides per bale are visible and accessible.

Assessment of the baling quality is done by inspection of unopened bales. Since their composition can appear significantly different between the outer surface and the interior, the quality inspection uses the material inside the bales by opening or drilling.

4 Equipment and auxiliaries

Core drilling device, if applicable.

5 Procedure

To perform INGEDE Method 7 and/or 14 at bales some preparation has to be done:

5.1 Selection of bales

The bales which will be inspected have to be selected randomly.

For procedures of selection please refer to Annex 1 of this method.

5.2 Bale opening

5.2.1 Bale-opening method I

The bale to be assessed is opened and split up so as to obtain several clods and gain access to the inner parts of the bale.

5.2.2 Bale-opening method II

The bale to be assessed is opened and the material evenly spread so as to obtain a covered surface of at least 30 m² of roughly the same layer thickness.

5.3 Sampling

5.3.1 Sampling from opened bale

The bale is to be sampled at various points with individual clods being used as samples or by taken a sufficient amount of paper randomly from the spread surface, most suitable by a bucket loader.

5.3.2 Sampling from closed bale (e. g. Core drill method)

The bale to be sampled is being punctured with a core drill in the direction of compression. Depending on the type of core drill used (diameter and length of boring rods), a sufficient sample size may be obtained with a single boring operation. If, however, the core drill measures only half the length of the bale, two borings – at two diametrically opposed points on the right and left – in the direction of compression are required. The core drill is to be operated according to applicable operating instructions.

Core drill sampling usually does not affect stackability of the bales.

5.4 Inspection site and conditions for inspection

Please refer to chapter 5.1 and its sub-chapters in INGEDE Method 7.

5.5 Condition at the time of delivery

An assessment of the general condition of delivered paper for recycling requires close-up inspection from all angles of the bale to be sampled. The following assessment criteria are to be considered:

- Stackability
- Compliance with dimensions
- Compression quality (no voids, “same” consistency)
- Compliance with wiring directives
- Size of pieces (in the case of shredded material)

5.6 Odour, mould and rotting

Please refer to INGEDE Method 7, chapter 5.3

5.7 Composition

If the visual inspection is to be performed by looking at the gaps between clods, the inspection surface should be 30 m² or more. This means that at least 10 gaps have to be inspected on both sides which usually require more than one bale.

For assessing the composition, please refer to INGEDE Method 7, chapter 5.4

5.8 Moisture

Please refer to INGEDE Method 7, chapter 5.5

It is to be pointed out in this context that due to atmospheric influences and paper for recycling storage both prior and subsequent to baling, the moisture content in the bale core may differ from that on the bale surface.

5.9 Age

Please refer to INGEDE Method 7, chapter 5.6

6 Report

The main report is the inspection according to either INGEDE Method 7 or 14. In addition, the procedure of sampling from bales has to be stated.

7 References

7.1 Cited Standards and methods

INGEDE Method 7 – Visual inspection for recovered paper for deinking – Unbaled delivery

INGEDE Method 14 – Gravimetric determination of recovered paper composition

7.2 Literature and other related documents

Responsible Management of Recovered Paper – Guidelines on "responsible sourcing and quality control, published by CEPI, some of the documents together with ERPA and FEAD

7.3 Sources

This method was established in June 1999 for the first time.

INGEDE Method 14 April 2009 5 Pages	Gravimetric determination of recovered paper composition	INGEDE International Association of the Deinking Industry

Introduction

The intention to develop this method was the need to have a gravimetric verification for the results of the visual entry inspection according to INGEDE Methods 7 and 8. This INGEDE Method 14 can also serve as a gravimetric inspection method for itself, not only in connection with INGEDE Methods 7 and 8.

1 Scope

This INGEDE method describes a procedure to gravimetrically determine the composition of recovered paper for deinking. It mainly applies to recovered paper grade 1.11 according to EN 643. To be more specific and informative, the allocation criteria may be further differentiated as it is possible in the case of visual inspection.

2 Principle

A sample of a recovered paper is separated manually into different fractions and their portions are determined by weight.

3 Equipment and auxiliaries

Containers for sampling

Bins for separating

Scale - weighing capacity high enough to weigh the complete sample, accuracy 0.1% of the sample weight as minimum requirement

Optional: Core drilling device

4 Procedure

4.1 Sampling

In general, the weight of the sample should not be inferior to 30 kg, i.e. 0,15 per cent of a delivery of 20 tons. The largest feasible sample size should be chosen. When using a core drilling device the sample size is usually much smaller. In that case the user has to make sure that the size of the sample is representative.

4.1.1 Sampling from unbaled recovered paper

A wheel loader which is particularly suited for sampling picks a very large sample from the recovered paper pile after unloading and empties it into a stable sample container. The volume of the sample container limits the size of the sample taken to about 30 – 50 kg.

INGEDE Method 14 Page 2	Gravimetric determination of recovered paper composition

4.1.2 Sampling from baled recovered paper

For the sampling the bales have to be dewired. At least 2-3 bales must be chosen at random; however they should be representative for the total load, especially if the load is inhomogeneous.

Option 1: The bales have to be divided manually into several sheaves. Now samples can be taken as big parts of those sheaves. The samples have to be taken at least from five places of each bale.

Option 2: The bales have to be loosened and mixed with the help of a wheel loader. Now a sample can be taken with a wheel loader in the same way as from unbaled material.

Option 3: Drilling

Contrary to option 1 and 2 the bales do not have to be opened and the sample size is given by the drilling system.. However several drillings should be carried out to get a representative sample of the investigated bale.

Annexure XV: Customs Notice reg. implementation of OM issued in 2010

OFFICE OF THE COMMISSIONER OF CUSTOMS (IMPORT)

JAWAHARLAL NEHRU CUSTOM HOUSE, NHAVA SHEVA,

TALUKA URAN, DIST.- RAIGAD, PIN 400 707.

F. No. : S/26-Misc-144/2010 Gr. IIB Dated:- 10/11/2010

PUBLIC NOTICE NO. 113 / 2010

(Referred / amended vide P.N.No. 120/2010)

Attention of all the Importers, CHA, Trade and all others concerned, is invited to Office Memorandum dated 11.05.2010 issued by Ministry of Environment and Forest (MOEF) vide F. No. 13-1/2004 HSMD, in supersession of the earlier O.M. of dated 10.02.2006.

2. The O.M dated 10.02.2006, issued by MOEF allows maximum of 8% of recyclable material in the consignment of imported waste paper.

3. Hazardous Waste Management Rule,2008 and subsequent amendments vide dated 21.07.2009 and 23.09.2009 prescribed for following requirements for import of waste paper:

   a. Shipment Movement Documents i.e. Form-9
   b. Registration of the importer with SPCB(State Pollution Control Board)
   c. Pre-shipment Inspection Certificate (PSIC) by Inspection and Certification Agency approved by the DGFT. Such PSIC certifies the content of recyclable material in terms of O.M. date 10.02.2006.

4. The above provisions were given effect by Public Notice No. 37/2009 dated 19.06.2009 and Public Notice No. 75/2009 dated 07.10.2009, both issued by this Custom House

5. The O.M. dated 11.05.2010, issued by MOEF revises the permissible limit of recyclable material for different types of waste paper as per which the revised limit of recyclable material in waste paper is as follows:

[Laminating Cards, Sorted colored ledgers)]

Further, as per para (vii) of the O.M. dated 11.02.2010, there shall not be presence of putrefiable organic matter at all in the imported waste paper consignment.

6. Presently, Customs verifies the content of recyclable material by means of a Test Report or alternatively, pre-shipment inspection certificate issued by the inspection and Certification Agency approved by the DGFT in addition to Shipment Movement Documents i.e. Form-9 and Registration of the importer with SPCB(State Pollution Control Board).

7. Since, the MOEF has revised the content of recyclable materials in the import consignment of various types of waste papers, such pre-shipment certificates or test report should mention declaration/certification of content of recyclable materials in accordance with Office Memorandum dated 11.05.2010 issued by Ministry of Environment and Forest vide F. No. 13-1/2004-HSMD.

8. Further, as the said O.M. of dated 11.05.2010 stipulates that the content of waste paper must be verified by the Customs Authority in respect of each consignment imported into the country, therefore depending upon the track record of the importer, Customs will draw samples of 5-20 % of the containers in each consignment for testing by the MOEF recognized labs notified by the MOEF vide Notification dated 18.07.2007 as per Annexure-A before the clearance of the goods.

9. The Trade and the concerned associations are requested to take note of the above for necessary compliance.

(MALA SRIVASTAVA)
COMMISSIONER OF CUSTOMS,(IMPORT)
J.N.C.H. ZONE-II

Annexure XVI: Sample Inspection Reports prepared by paper mills of raw wastepaper on arrival

14.02.20

Test report of Waste Paper Sample – received from , M[redacted].

The waste paper sample is received through Purchase Dept.

Characteristics		Value
Total filler	%	19.5
Brightness of handsheet after slushing waste paper	%	64.1
Disintegration		O.K
Plastic content	%	0.26

Remarks:

1. The waste paper received from M/S Wespap is Textbook which is printed.
2. The filler content is 19.5%
3. The Brightness of handsheet after disintegration of waste paper is 64.1%.
4. **Not recommended for purchase.**

[redacted] [redacted]

09.01.2019

TEST REPORT OF WASTE PAPER, RECEIVED FROM [redacted].

Sample received: White printed paper, printed magazine paper, plane cutting and printed cutting.

Particular	Unit	Results
Total filler	%	26.2
Plastic	%	1
Mechanical fiber	--	Present
Disintegration	--	O.K
Hand sheet Brightness (Without De-inking)	%	71.7
Fiber Classification at	^{0}SR	21
+14	%	0.7
+28	%	8.0
+48	%	17.5
+100	%	33.7
+200	%	18.9
-200	%	21.2
Approx. Yield %	%	70 - 72

Remarks:

1. Waste paper contains White printed paper, printed magazine paper, plane cutting and printed cutting.
2. Total filler is-26.2 %.
3. Hand sheet Brightness is-71.7%.
4. Approximate yield will be 70-72 %
5. Printing is on paper hence ink spots are seen on hand sheet.
6. Waste paper grade needs De-inking.

[redacted] [redacted]

Annexure XVII: Visit Reports

a. Paper Industry A

Paper Waste Import – Field Visit Report

1	Company Name MPCB Consent No. & Validity				
2	Address				
3	Production Capacity (Tons/yr)	96000 MT / year.			
4	Past 3 years production (Tons)	M.T.			
	2017 - 18	66190.5			
	2018 - 19	77146.5			
	2019 - 20	72984.5			
5	Domestic Paper waste used				
		Quantity (Tons)			Avg. rate of Domestic Paper Waste (Rs. / Ton)
	2017 – 18	4681.189			15876
	2018 – 19	5653.787			12702
	2019 – 20	4018.091			10794
6	Contaminants Disposed from Domestic Paper Waste (Tons)	2017 - 18	2018 - 19	2019-20	Disposal Pathway (Proofs to be submitted)
	Plastics				
	Ferrous Materials	NIL	NIL	NIL	N.A
	Aluminium	NIL	NIL	NIL	N.A.
	Other Metallic objects	NIL	NIL	NIL	N.A
	Glass	NIL	NIL	NIL	N.A
	Others (Specify)	–	–	–	N.A.
7	Type of Paper Waste being imported				
8	Major HSN codes used for import				
		47079000			
9	Import of Paper Waste				
		Quantity (Tons)			Avg. rate of imported Paper Waste(Rs./ Ton)
	2017 - 18	68508.292			20341
	2018 - 19	80011.491			20216
	2019 - 20	76055.081			15450

10	Contaminants Sorting / separation	
		Disposal Pathway (Proofs should be separately attached)
	Plastic	NIL
	Ferrous Metals	NIL
	Aluminium	NIL
	Other Metallic objects	NIL
	Glass	NIL
	Others (Specify)	—

11	Contaminants disposed from imported paper waste consignments (Tons)				
		2017 - 18	2018 - 19	2019 - 20	Disposal Pathway (Proofs should be separately attached)
	Plastic (T)	437.9	1310	2465	Ambuja Cement Ltd. Chandrapur (M.S.)
	Ferrous Metals (T)	—	113.630	151.154	
	Aluminium	NIL	NIL	NIL	
	Other Metallic objects	NIL	NIL	NIL	
	Glass	NIL	NIL	NIL	
	Other (specify)	—	—	—	

* Note! plastic waste with 55-60 % Moisture content.

Other Observations / Remarks

a. *Attach photos of DGFT license, MPCB consent*
b. *Attach the photos of document of import (import order, pre-shipment inspection certificate, shipping bill, bill of lading, packing list, invoice copy etc.) – one month of each year (last 3 years)*
c. *Open the consignment and few bails and click the photos*








b. Paper Industry B

Paper Waste Import – Field Visit Report

1	Company Name MPCB Consent No. & Validity				
2	Address				
3	Production Capacity (Tons/yr)	1,26,000 Tons/yr			
4	Past 3 years production (Tons)				
	2017 - 18	65787			
	2018 - 19	60098			
	2019 - 20	59339			
5	Domestic Paper waste used				
		Quantity (Tons)			Avg. rate of Domestic Paper Waste (Rs. / Ton)
	2017 – 18	54448.5			14977.32
	2018 – 19	37369.6			16083.4
	2019 – 20	41889.09			14081.48
6	Contaminants Disposed from Domestic Paper Waste (Tons)	2017 - 18	2018 - 19	2019-20	Disposal Pathway (Proofs to be submitted)
	Plastics	1670 ~~3340~~	4562.5 ~~9125~~	1774.5 ~~3575~~	*Ambuja Cement at Chandrapur in 2017-18
	Ferrous Materials			~~3549.~~	* Manikgarh Cement, Chandrapur 2018-19, 2019-20.
	Aluminium				
	Other Metallic objects				
	Glass				
	Others (Specify)				
					Hard white shaving, Soft white shaving, *
7	Type of Paper Waste being imported				
8	Major HSN codes used for import				4707900
9	Import of Paper Waste				
		Quantity (Tons)			Avg. rate of imported Paper Waste(Rs./ Ton)
	2017 - 18	16591.09			20738.25
	2018 - 19	29681.7			17729.39
	2019 - 20	24388.9			13147.35

* - Board box cuttings
- 90C.
- scrap office paper

10	Contaminants Sorting / separation				
		Disposal Pathway (Proofs should be separately attached)			
	Plastic	~~Pre~~ Pre pulper manual sorting & pulper separation.			
	Ferrous Metals				
	Aluminium				
	Other Metallic objects				
	Glass				
	Others (Specify)				

11	Contaminants disposed from imported paper waste consignments (Tons)				
		2017 - 18	2018 - 19	2019 - 20	Disposal Pathway (Proofs should be separately attached)
	Plastic	1670	4562.5	1774.5	Ambuja Cement &
	Ferrous Metals				Manigarh Cement, Chandrapur.
	Aluminium				
	Other Metallic objects				
	Glass				
	Other (specify)				

Other Observations / Remarks

a. *Attach photos of DGFT license, MPCB consent*
b. *Attach the photos of document of import (import order, pre-shipment inspection certificate, shipping bill, bill of lading, packing list, invoice copy etc.) – one month of each year (last 3 years)*
c. *Open the consignment and few bails and click the photos*

c. Paper Industry C

1	Company Name MPCB Consent No. & Validity				
2	Address				
3	Production Capacity (Tons/yr)	Paper – 75000 Tons/yr, Pulp (from recycled waste paper) – 54000 Tons/yr			
4	Past 3 years production (Tons)	Paper			Pulp
	2017 - 18	58325			13110
	2018 - 19	63607			19846
	2019 - 20	68548			18317
5	Domestic Paper waste used				
		Quantity (Tons)			Avg. rate of Domestic Paper Waste (Rs. / Ton)
	2017 – 18	6739.231 MT			16500 / MT
	2018 – 19	10855.055 MT			17000 / MT
	2019 – 20	10320.982 MT			17500 / MT
6	Contaminants Disposed from Domestic Paper Waste (Tons)	2017 - 18	2018 - 19	2019-20	Disposal Pathway (Proofs to be submitted)
	Plastics	96.15	133.65	111.6	Pyrolysis / recycling
	Ferrous Materials	NIL	NIL	NIL	-
	Aluminium	NIL	NIL	NIL	-
	Other Metallic objects	NIL	NIL	NIL	-
	Glass	NIL	NIL	NIL	-
	Others (Specify)	NIL	NIL	NIL	-
7	Type of Paper Waste being imported				Tissue Waste (WET STRENGTH)
8	Major HSN codes used for import				47079000
9	Import of Paper Waste				
		Quantity (Tons)			Avg. rate of imported Paper Waste(Rs./ Ton)
	2017 - 18	10959.930 MT			$ 400 / MT
	2018 - 19	14420.270 MT			$ 350 - 380 / MT
	2019 - 20	14108.699 MT			$ 300 / MT

Paper Waste Import – Field Visit Report

10	Contaminants Sorting / separation				
		Disposal Pathway (Proofs should be separately attached)			
	Plastic	Pyrolysis / recycling			
	Ferrous Metals	NIL			
	Aluminium	NIL			
	Other Metallic objects	NIL			
	Glass	NIL			
	Others (Specify)	NIL			
11	Contaminants disposed from imported paper waste consignments (Tons)				
		2017 - 18	2018 - 19	2019 - 20	Disposal Pathway (Proofs should be separately attached)
	Plastic	93.15 MT	133.65 MT	111.6 MT	Pyrolysis / recycling
	Ferrous Metals	NIL	NIL	NIL	-
	Aluminium	NIL	NIL	NIL	-
	Other Metallic objects	NIL	NIL	NIL	-
	Glass	NIL	NIL	NIL	-
	Other (specify)	NIL	NIL	NIL	-

Other Observations / Remarks

a. Attach photos of DGFT license, MPCB consent

b. Attach the photos of document of import (import order, pre-shipment inspection certificate, shipping bill, bill of lading, packing list, invoice copy etc.) – one month of each year (last 3 years)

c. Open the consignment and few bails and click the photos


sand & grit


Imported pulp


Virgin tissue waste


News PAMS


omestic Newspape


ight printed cutting


lastic coarse screen


plastic fine screen

d. Paper Industry D

1	Company Name MPCB Consent No. & Validity				
2	Address				
3	Production Capacity (Tons/yr)	48000Mt			
4	Past 3 years production (Tons)				
	2017 - 18	31409			
	2018 - 19	31848			
	2019 - 20	33185			
5	Domestic Paper waste used				
		Quantity (Tons)			Avg. rate of Domestic Paper Waste (Rs. / Ton)
	2017 – 18	11273.12			14945
	2018 – 19	14680.60			11910
	2019 – 20	13605.31			10135
6	Contaminants Disposed from Domestic Paper Waste (Tons)	2017 - 18	2018 - 19	2019-20	Disposal Pathway (Proofs to be submitted)
	Plastics	115	150	140	Supplied to M/s. Ambhuja Cements
	Ferrous Materials	N A	N A	N A	
	Aluminium	N A	N A	N A	
	Other Metallic objects	N A	N A	N A	
	Glass	N A	N A	N A	
	Others (Specify)Sand, Grit and stapples (Centri Cleaner Rejections)	115	120	135	LAND FILL
7	Type of Paper Waste being imported				Double sorted old corrugated containers, Kraft Multiwall Bag, Textile Boxes, NDLKC, Old corrugated containers etc.,
8	Major HSN codes used for import				4707
9	Import of Paper Waste				
		Quantity (Tons)			Avg. rate of imported Paper Waste(Rs./ Ton)
	2017 - 18	22009.52			19645
	2018 - 19	18701.18			19266
	2019 - 20	17110.14			15730

10	Contaminants Sorting / separation				
		Disposal Pathway (Proofs should be separately attached)			
	Plastic	Supplied to M/s. Ambuja Cements, Chandrapur			
	Ferrous Metals	Supplied to local vendors			
	Aluminium	N A			
	Other Metallic objects	N A			
	Glass	N A			
	Others (Specify)Sand, grit and staples(Centricleaner Rejections)	Land Fill			
11	Contaminants disposed from imported paper waste consignments (Tons)				
		2017 - 18	2018 - 19	2019 - 20	Disposal Pathway (Proofs should be separately attached)
	Plastic	250	200	190	Supplied to M/s. Ambuja Cements, Chandrapur
	Ferrous Metals	110	95	95	Supplied to local vendors
	Aluminium	N A	N A	N A	
	Other Metallic objects	N A	N A	N A	
	Glass	N A	N A	N A	
	Other (specify)Sand, Grit and staples (Centri Cleaner Rejections)	100	75	75	Land Fill

Other Observations / Remarks

a. Attach photos of DGFT license, MPCB consent.(Attached)

b. Attach the photos of document of import (import order, pre-shipment inspection certificate, shipping bill, bill of lading, packing list, invoice copy etc.) – one month of each year (last 3 years.

c. Open the consignment and few bails and click the photos.


metallic waste


second stage reject 3,5 mm


NDLKC


cal corrugated was


raft multiwalled ba


double sorted OCC


single sorted OCC


Hard white shavings

Annexure XVIII: Raw material consumption pattern of different industries

Financial Year	Raw Materials					
	Local			Imported		
	Qty (MT)	Value (Rs.)	Price (INR/ton)	Qty (mt)	Value (Rs.)	Price (INR/ton)
2017 - 18	37141	550,160,100	14812	10858	174,008,596	16025
2018 - 19	35492	394,191,808	11106	18450	261,785,157	14188
2019 - 20	34744	349,414,476	10056	15678	186,121,446	11871

Table 6 Industry A - Raw material consumption pattern (2017-20)

Financial Year	Raw Materials					
	Local			Imported		
	Qty (MT)	Value (Rs.)	Price (INR/MT)	Qty (MT)	Value (Rs.)	Price (INR/ton)
2017 - 18	39238	545,653,000	13906	1681	23,385,000	13911
2018 - 19	32913	379,794,000	11539	13420	133,760,000	9967
2019 - 20	26979	248,938,000	9227	19942	165,748,000	8311

Table 7 Industry B - Raw material consumption pattern (2017-20)

Annexure XIX: Format for Half Yearly Return of recyclable contaminants Disposal

[To be issued by 30th September/31st March for the half year ending preceding 31st March/30th September respectively]

It is certified that contaminants recovered from waste paper processing in the half year ending 31st March 20_ _ / 30th September 20_ _ (strike out whatever is not applicable) have been disposed off as per the approved norms.

Signature of authorized person

Name & Designation

Countersigned

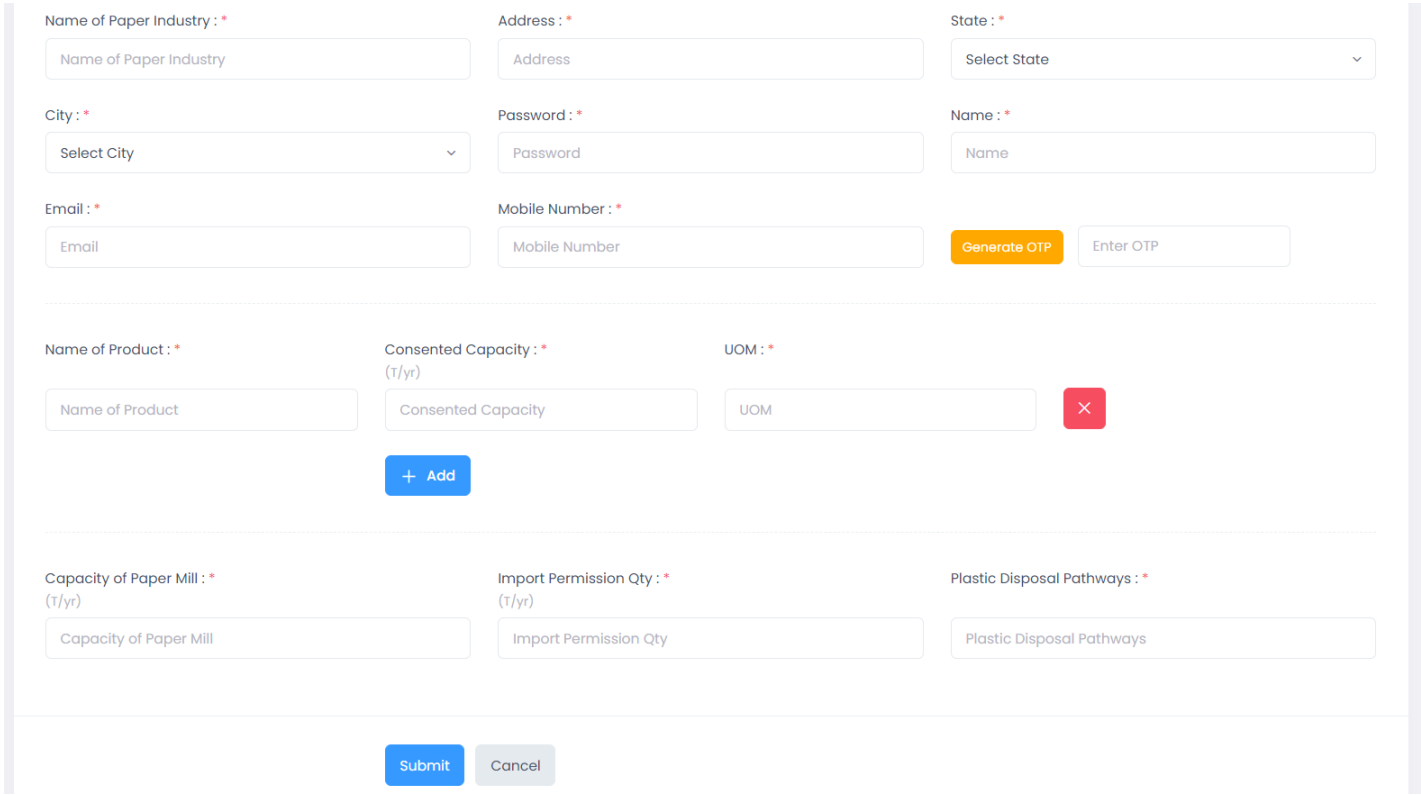
Name/Designation

(For SPCB/PCC)

NB: To be submitted to customs authorities for clearance of imports

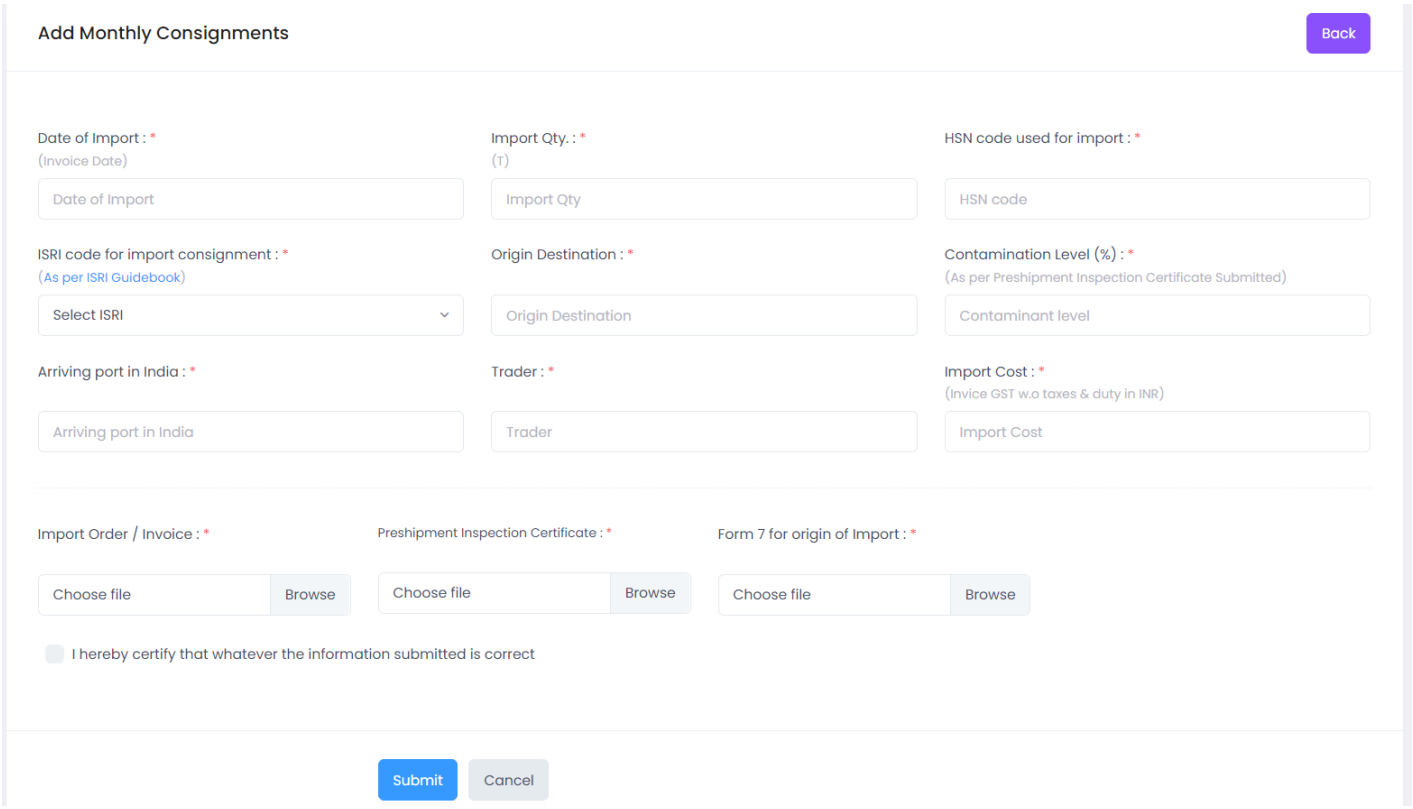
Annexure XX: Online Portal wireframes to track Import Consignments

One time Registration on portal by Industries



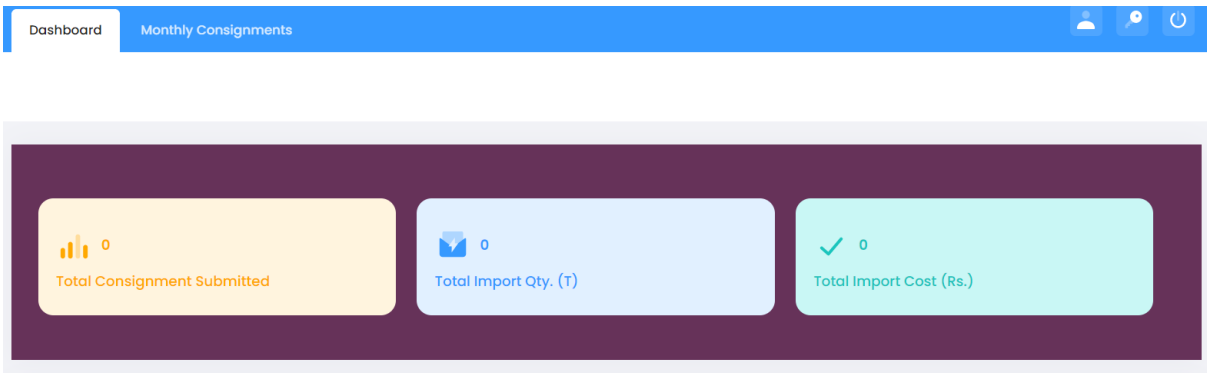
UOM – Unit of Measurement (Ton/month, Ton/yr)

Consignment Details Submission Screen

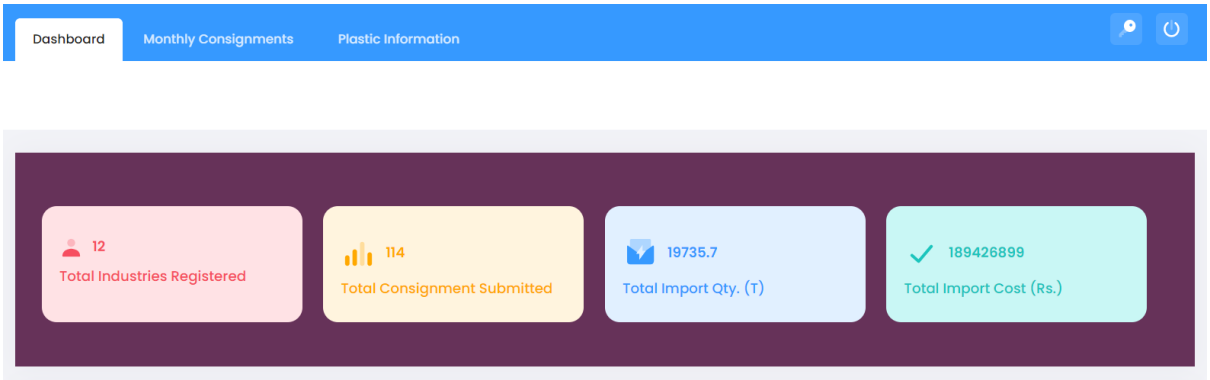


Dashboard for Mills

(period selection will be provided)



Dashboard for Regulatory Authorities



Month wise summary report :

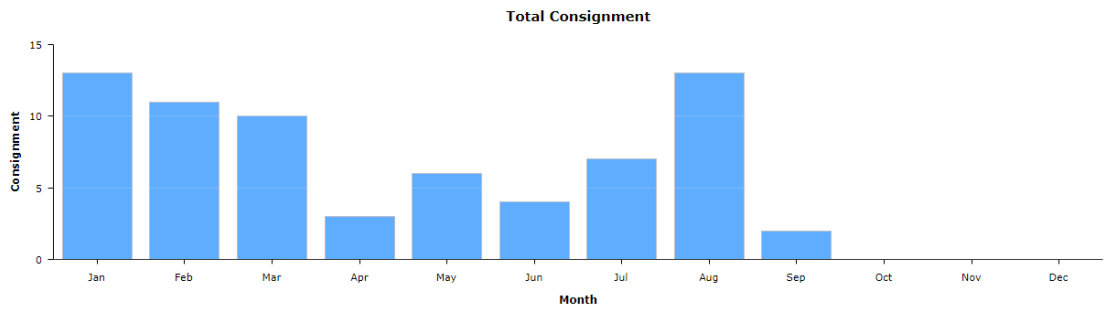
Table View | Graph View

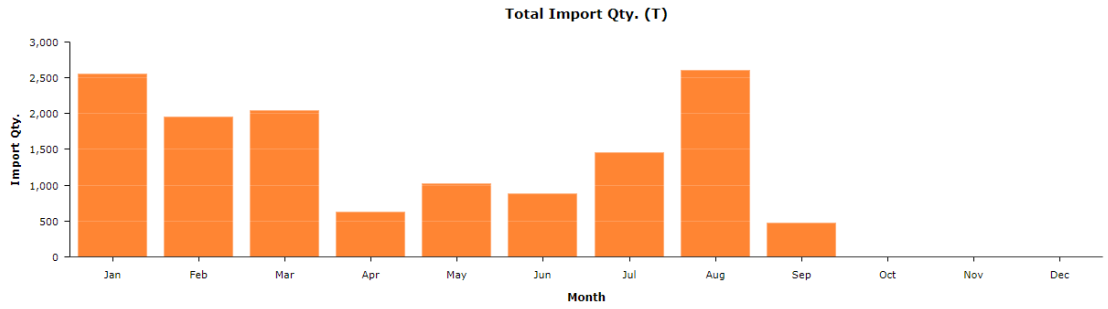
Show 25 entries

MONTH	TOTAL CONSIGNMENT SUBMITTED	TOTAL IMPORT QTY. (T)	TOTAL IMPORT COST (RS.)	TOTAL PLASTIC SEPARATED	TOTAL PLASTIC DISPOSED
Jan	13	2558	17350485	0	0
Feb	11	1954	19252550	0	0
Mar	10	2044	20297829	400.722	829.01
Apr	3	628	6165831	0	0
May	6	1027	13967502	0	0
Jun	4	881.69	12839271	186.312	2141.86
Jul	7	1457.78	15655688	254.002	1291.43
Aug	13	2610.59	31338585	248.227	934.01
Sep	2	476.64	6346242	9607.631	11008.24
Oct	0	0	0	377.762	1510.11
Nov	0	0	0	9298	9298
Dec	0	0	0	0	0

Month wise summary report :

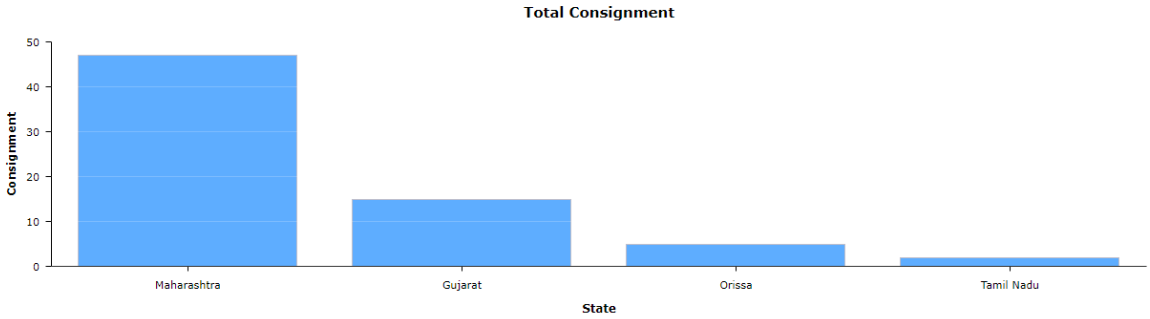
Table View | Graph View

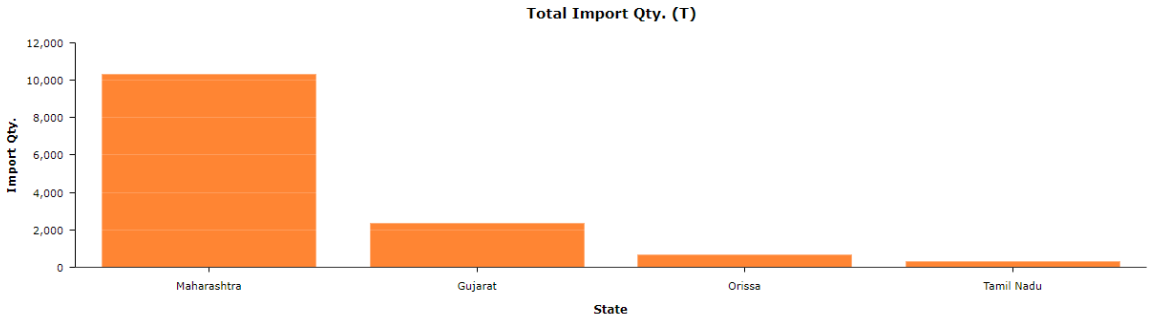




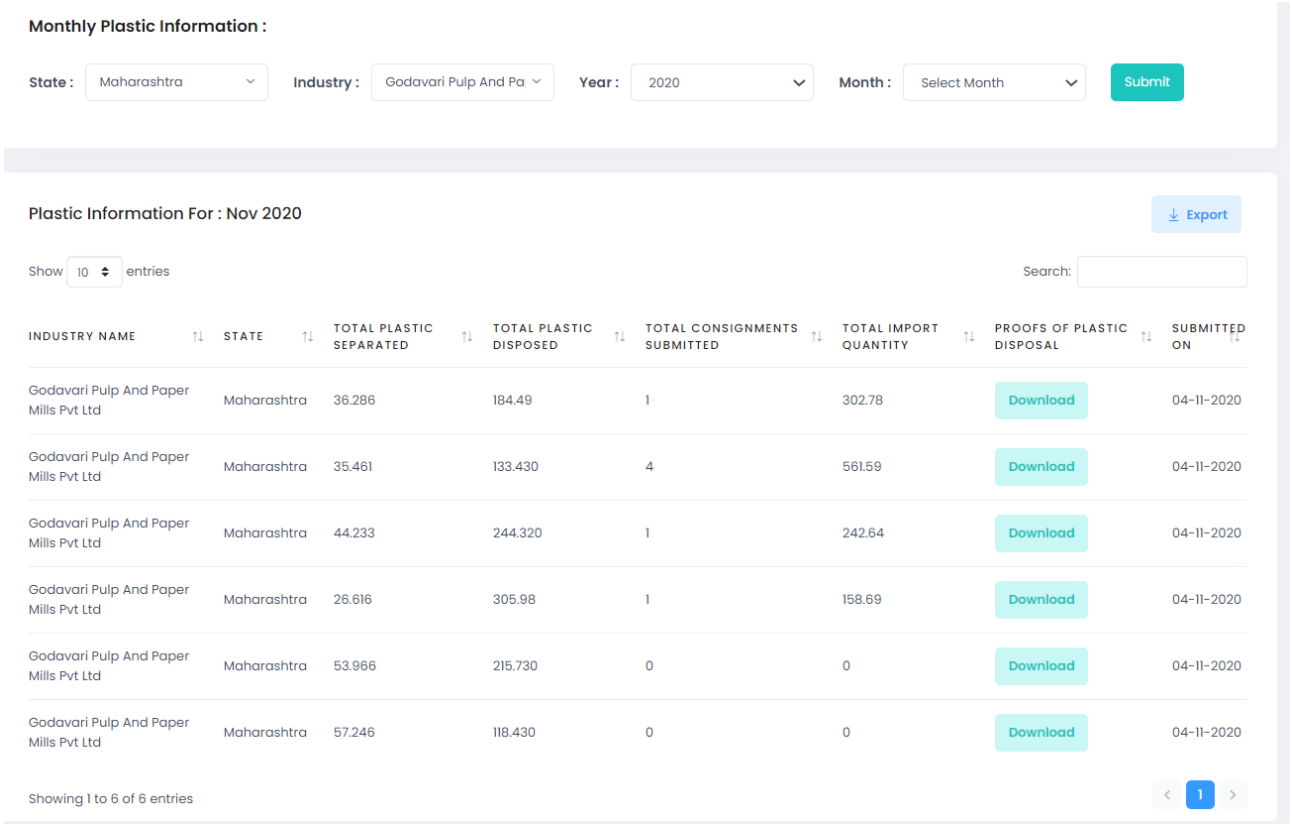
State wise summary report :

Table View | Graph View





Monthly Plastic Disposal Dashboad for regulatory affairs



Annexure XXI: Annexure 7 – Export Delivery Note & Tracking Document

Sample Copy

80414

ANNEX VII

INFORMATION ACCOMPANYING SHIPMENTS OF WASTE AS REFERRED TO IN ARTICLE 3(2) AND (4)

Export Delivery Note & Tracking Document for Green List Waste

CONSIGNMENT INFORMATION (1)

1. Person Who Arranges the Shipment

Name: PAPER LINK INTERNATIONAL LIMITED C/O PAPERLINK INTERNATIONAL FZCO

Address: UNIT 4, 1-2 SPARROW WAY, CANTERBURY, KENT, CT3 4AL

Contact Person: Mr.Abil Fazal

Tel: 44 7739 660321 / 44 7775 434389

Fax:

Email: abilfazal@paperlinkintl.com

Company No. 6312366

UK Waste Carrier License No. CBDU264510

2. Importer / Consignee

Name: Mehali Papers Private Limited

Address: Paper Board Div. D2/11/B2, GIDC, Dahej -392130 Gujarat, India

Contact Person: Operations Dept.

Tel: +91 260 663 0786

Fax:

Email: purchase@mehali.co.in

License No : IEC No. : 0314069135

3. Actual Quantity: 22.860

4. Actual Date of Shipment: 06/02/2020

5.(a)(2) First Carrier

Name: MULTIMODAL

Address: WALTON AV FELIXSTOWE

Contact Person:

Tel:

Fax:

Email:

Means of Transport: ROAD / CONTAINER

Date of Dispatch: 6/2/20

Signature:

5.(b) Second Carrier

Name: JPP LTD

Address: 23 CRANEFORD WAY TWICKENHAM TW2 7SB

Contact Person: MR. IAIN PHILIPS

Tel: 0208 744 0400

Fax: 01689 862761

Email: iain@jppartnership.com

Means of Transport: FORWARDER

Date of Transfer:

Signature:

5.(c) Third Carrier

Name: Cosco Shipping Lines UK Ltd

Address: China Shipping House, Walton Ave, Felixstowe IP11 3HG, UK

Contact Person: Customer SVS

Tel: +44 1394 678700

Fax:

Email: expdocs@coscon.co.uk

Means of Transport: SEA / CONTAINER

Date of Transfer:

Signature:

Vehicle Number	AV18 D2A	**Seal Number**	13257582
Container / Trailer Number	VIETU 537688-3	**Container Tare Weight**	3900
Number of bales	28.	**Load Reference Number**	7089

6. Waste Generator (3)

Original Producers, New producer or Collector:

Name: OCEALA LIMITED

Address: FELDSPAR CLOSE, WARREN INDUSTRIAL PARK, ENDERBY, LEICESTER, LE19 4SD

Contact Person: CORRINE MAHON

Tel: 0116 286 7772

Fax

Email: CorinneMahon@casepak.co.uk

8. Recovery Operation (or if appropriate disposal operation in the case of waste referrred to in Article 3(4)):

R-Code/D Code:

Paper for Recovery R3

9. Usual Description of Waste:

BBC

7. Recovery Facility / **Laboratory**

Name: Mehali Papers Private Limited

Address: Paper Board Div. D2/11/B2, GIDC, Dahej -392130, Gujarat, India

Contact Person: Operations Dept.

Tel: +91 260 663 0786

Fax:

Email: purchase@mehali.co.in

License No : IEC No. : 0314069135

10. Waste Identification (fill in relavent codes):

(i) Basel Annex IX:	B 3020
(ii) OECD (if different from (i)):	
(iii) Annex IIIA (4):	
(iv) Annex IIIB (5):	
(v) EC List of Wastes:	20.01.01 15.01.01 19.12.01
(iv) National Code:	4707 9000

11. Countries / States Concerned:

Export / Dispatch	Transit	Import / Destination
LONDON GATEWAY, UK	SEA	HAZIRA,INDIA

12. Declaration of the person who arranges the shipment:

I certify that the information is complete and correct to the best of my knowledge. I also certify that effctive written contractual obligations have been entered into with the consignee (not required in the case of waste reffered to in Artlcie 3(4)).

Name: MR. ABIL FAZAL Date: 06/02/2020 Signature:

13. Signature upon reciept of waste by the consignee:

Name: Date: Signature:

TO BE COMPETED BY THE RECOVERY FACILITY OR BY THE LABORATORY:

14. Shipment received at recovery facility / **or Laboratory** Quantity Received: Kg: Litre:

Name: Date: Signature:

Collection / Controlled Waste Transfer Note

*** In accordance with Council Regulation(EEC) No 259/93 1/02/1993**

(1) Information accompanying shipments of green listed waste and destined for recovery or waste destined for laboratory analysis pursuant to Regulation (EC) No 1013/2006.

For completing this document, see also the corresponding specific instructions as contained in Annex IC of Regulation (EC) No 1013/2006.

(2) If more than three carriers, attach information as required in blocks 5 (a), (b), (c).

(3) When the person who arranges the shipment is not the producer or collector, information about the producer or collector shall be provided.

(4) The relevant code(s) as indicated in Annex IIIA to Regulation (EC) No 1013/2006 are to be used, as appropriate in sequence.

Certain Basel entries such as B1100, B3010 and B3020 are restricted to particular waste streams only, as indicated in Annex IIIA.

(5) The BEU codes listed in Annex IIIB to Regulation (EC) No 1013/2006 are to be used."

* These goods comply with Article 11 of CEE ruling 259.93 and Annex 11B of directive 75/442and Decision 96/350/ec

CORRESPONDENTS' GUIDELINES No 10

Subject: Shipments of waste pursuant to Article 18 of Regulation (EC) No 1013/2006 on shipments of waste

1. These correspondents' guidelines represent the common understanding of all Member States on how Regulation (EC) No 1013/2006 on shipments of waste (Waste Shipment Regulation – WSR) should be interpreted. The guidelines were agreed by the correspondents through written procedure on 12 May 2017. They are not legally binding. The binding interpretation of European Union law is an exclusive competence of the Court of Justice of the European Union (CJEU). The guidelines apply from 12 July 2017 and should be reviewed at the latest five years from the above date and, if necessary, revised.

1. Introduction

2. These correspondents' guidelines provide information for:

(a) Persons arranging shipments of waste that are subject to the general information requirements of Article 18 of the WSR;

(b) Other persons or parties involved in the use of Annex VII to the WSR, such as waste producers, collectors, dealers, brokers, waste carriers, consignees, recovery facilities and laboratories, and

(c) Authorities responsible for the enforcement of the WSR.

2. The application of Article 18 and the use of Annex VII

2.1 Instructions for completing the Annex VII document

3. *There is a need for further guidance on how to complete the Annex VII document in addition to the reference to the specific instructions for completing the notification and movement documents contained in Annex IC to the WSR* (see Annex VII, footnote 1, 2nd sentence). A Union-wide approach is needed in order to ensure that the Annex VII document is completed in the same way.

4. *As a common understanding of the correspondents*, it has been agreed that the instructions provided in Appendix 1 to these guidelines should be used for completing the Annex VII document.

2.2 Person who arranges shipment pursuant to Article 18(1)(a)

5. *There is a need for guidance on which persons may act as "the person under the jurisdiction of the country of dispatch who arranges the shipment" pursuant to Article 18(1)(a).*

6. *As a common understanding of the correspondents*, it has been agreed that the person who arranges the shipment may only be a natural or legal person under the jurisdiction of the country of dispatch, including

(a) the original producer,

(b) the licensed new producer who carries out operations prior to shipment,

(c) a licensed collector who assembled the shipment from various small quantities of the same type of waste collected from a variety of sources,

(d) a registered 'dealer' who has been authorised in writing by the original producer, new producer or licensed collector specified in (a), (b) and (c) to act on his/her behalf as the person who arranges the shipment,

(e) a registered 'broker' who has been authorised in writing by the original producer, new producer or licensed collector specified in (a), (b) and (c) to act on his/her behalf as the person who arranges the shipment, or

(f) the holder of the waste where all of the persons above are unknown or insolvent.

7. *There is a need for guidance on how to interpret "under the jurisdiction of the country of dispatch".*

8. *As a common understanding of the correspondents*, it has been agreed that it is up to the authorities of the country of dispatch to define the conditions upon which a person arranging a shipment of waste falls "under the jurisdiction of the country of dispatch". Once these conditions are fulfilled in the country of dispatch, all relevant parties concerned, including the authorities of the countries of transit and destination are to accept that the person arranging a shipment of waste is under the jurisdiction of the country of dispatch. In case Member States have laid down respective provisions on such conditions in their national legislation, or take measures in individual cases, these measures must comply with the Treaties' provisions[1], including conformity with the principles of necessity and proportionality in the interpretation given in applicable rulings of the CJEU.

2.3 Contract pursuant to Article 18 (2)

9. *There is a need for guidance on how the contract referred to in Article 18(2) should be worded and whether the contract may cover more than one shipment*[2].

10. *As a common understanding of the correspondents*, it has been agreed that the information in the contract should be consistent with that provided in the corresponding Annex VII document(s), whereby at least information related to the person who arranges the shipment and the consignee (blocks 1 and 2) as well as to one or more wastes (blocks 9 and 10) and the recovery operation(s) corresponding to each waste should be included in the contract[3]. An example template for such a contract is provided in Appendix 2.

11. *As a common understanding of the correspondents*, it has been agreed that more than one Annex VII document may correspond to a single contract.

2.4 Illegal shipments pursuant to Article 2(35)(g)(iii) and take back of waste

12. *There is a need for guidance on how to interpret the text "not specified materially in the document set out in Annex VII" in Article 2(35)(g)(iii).*

13. *As a common understanding of the correspondents*, it has been agreed that "not specified materially in the Annex VII document" means that the document is missing, or that important information in this document is missing, including the signature in block 12, or is not correct. Each case should be judged on its own merits in terms of the severity of penalties which should always remain proportionate.

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[1] Treaty on European Union and the Treaty on the Functioning of the European Union

[2] The WSR does not require for the contract to accompany a shipment of waste under Article 18.

[3] In each Annex VII document corresponding to a contract, only one recovery operation is to be indicated according to Appendix I, paragraph 16.

14. *There is a need for guidance on whether in case of a take-back of waste in accordance with Article 18(2) where the shipment of waste or its recovery cannot be completed as intended or where it has been effected as an illegal shipment according to Article 2(35)(g)(iii), a new Annex VII document should be completed and if so, by whom.*

15. *As a common understanding of the correspondents*, it has been agreed that in the case of take-back of waste pursuant to Article 18(2) where the shipment of waste or its recovery cannot be completed as intended or where it has been effected as an illegal shipment according to Article 2(35)(g)(iii), the person who had arranged the original shipment or, where that person is not in a position to do so (for example, is insolvent), the consignee should complete any new Annex VII document[4, 5].

2.5 Case of shipment consisting of several transport units

16. *There is a need for guidance on how the obligation in Article 18(1) that the waste is accompanied by the document contained in Annex VII during the transport applies to a consignment consisting of several individually packaged transport units.*

17. *As a common understanding of the correspondents*, it has been agreed that in case of a consignment consisting of several individually packaged transport units (examples of such units are drums, wooden barrels, jerricans, boxes, bags[6] and containers), one Annex VII document may be used for all the units in the consignment under the condition that the information in the accompanying Annex VII document is descriptive for the whole consignment[7,8]. Examples of a consignment consisting of several individual transport units may be two or more drums, two or more wooden barrels, two or more jerricans, two or more boxes, two or more bags, or two or more containers loaded with the same type of waste and carried (i) by a truck, (ii) by a truck and a trailer attached to this truck, (iii) by one or more railway carriages of the same train, (iv) by a barge, or (v) by a barge and a trailer attached to this barge.

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[4] In case of illegal shipments, see also Article 24, in particular Article 24(9).

[5] The instructions provided in Appendix 1 are not fully applicable for the case of take-back.

[6] See packaging types according to Annexes IA and IB.

[7] Competent authorities in Member States may require a separate Annex VII document in certain cases, for example, (i) for each unit, (ii) for a trailer or railway carriage.

[8] Where it is impractical that an original Annex VII document accompanies the consignment, competent authorities in the Member States may accept e.g. a copy or fax to accompany the consignment.

Appendix 1

Instructions for completing the Annex VII document

I. Introduction and purpose of the Annex VII document

1. The present instructions provide the necessary explanations for completing the Annex VII document. The Annex VII document is intended to accompany a shipment of waste at all times[9] from the moment the shipment starts in the country of dispatch to its arrival at a recovery facility or laboratory in another country. The present instructions are applicable to shipments of waste as long as the waste shipped is located within the European Union, i.e. the Annex VII document relates to waste shipments within the EU, and from, into or through the EU. Relevant parties involved in the shipment (the person who arranges the shipment, carriers, the consignee where applicable, and the relevant recovery facility or laboratory) are to sign the document either upon delivery or receipt of the waste concerned.

II. General requirements

2. A planned shipment subject to Article 18 may take place only after the Annex VII document has been fully completed pursuant to this Regulation[10].

3. The Annex VII document should be completed either in typed format or by using capital letters in permanent ink throughout. Signatures should always be written in permanent ink and the name of the authorised representative should accompany the signature in capital letters. In the event of a minor mistake, a correction can be made by the person who arranges the shipment. The correction should be marked and signed or stamped, and the date of the modification noted. For major changes or corrections, a new document should be completed.

4. The Annex VII document has also been designed to be easily completed electronically. In such cases, appropriate security measures should be taken to prevent any misuse of the document, such as converting into an unalterable electronic format. Any changes made to a completed document should be visible. An Annex VII document may accompany the transport in an electronic form with a digital signature, if it can be read at any time during the transport and if this is acceptable to the competent authorities concerned.

5. To simplify translation, a code rather than text is required for the completion of some blocks. Where text is required, however, it should be in a language acceptable to the authorities of all countries involved[11].

6. A six-digit format should be used to indicate the date. For example, 29 January 2017 should be shown as 29.01.17 (Day.Month.Year).

7. Where annexes providing additional information are attached to the Annex VII document, these should include clear references (e.g. enumerated references) pointing to the relevant parts of the Annex VII document as well as a citation of the block(s) to which they relate.

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[9] The person arranging the shipment is to ensure that the shipment is accompanied by the Annex VII document.

[10] It is noted that, according to paragraph 13 of the present Correspondents' guidelines, there may be an illegal shipment pursuant to Article 2(35)(g)(iii) of Regulation (EC) No 1013/2006 on shipments of waste if the Annex VII document is missing or if important information in this document is missing, including the signature in block 12, or is not correct.

[11] See Article 27 of Regulation (EC) No 1013/2006 on shipments of waste.

III. Specific instructions for completing the Annex VII document

8. Before the actual start of the shipment, the person who arranges the shipment or its representative[12] is to complete blocks 1 to 12 and sign block 12, with the exception of block 5. At the time of taking possession of the consignment, the respective carrier or its representative[13] is to complete block 5. The consignee is to complete and sign block 13 in the event that this is not the recovery facility or the laboratory and when it takes charge of a shipment of waste after it arrives in the country of destination. The recovery facility or the laboratory is to complete block 14 after receipt of the waste.

9. **Block 1:** Provide the name, address and all other required details of the person who arranges the shipment. The address should include the name of the country and telephone and fax numbers including the country code. Provide the phone and fax numbers and the e-mail address which should facilitate the contact of all relevant persons regarding an incident during the shipment. If a fax number cannot be provided write N/A. Where the person who arranges the shipment is a legal person such as a company, the name of the company should be filled-in under "Name" and information of an authorised person who can give additional information if needed should be added under "Contact person". The contact person should be responsible for the shipment including any incidents that may occur during the shipment. In case the person who arranges the shipment is a natural person, no contact person may need to be added.

10. **Block 2:** Provide the required information. Normally, the consignee would be the recovery facility or laboratory given in block 7. In some cases, however, the consignee may be another person, for example a dealer, a broker, or a corporate body, such as the headquarters or a mailing address of the receiving recovery facility in block 7. In order to act as a consignee, a dealer, broker or corporate body must be under the jurisdiction of the country of destination and possess or have some other form of legal control over the waste at the moment the shipment arrives in the country of destination[14]. The country appearing in the address of this block should be the same as that of block 7.

11. **Block 3:** Give the actual weight of the waste in tonnes (1 tonne equals 1 megagram (Mg) or 1000 kg.

12. **Block 4:** Enter the date when the shipment actually starts.

13. **Block 5 (a-c):** The information and signature required in block 5 should be provided by each carrier or carrier's representative when taking possession of the consignment. The address should include the name of the country, and telephone and fax numbers should include the country code. If a fax number cannot be provided write N/A. When more than three carriers are involved, appropriate information on each carrier should be attached to the Annex VII document.

14. **Block 6:** Provide the name, address and all other required information of the "waste generator"[15]. If the waste generator is the same as the person who arranges the shipment, then

[12] A "representative" is a person employed and authorised in writing by the person who arranges the shipment.

[13] A "representative" is a person employed and authorised in writing by the carrier.

[14] Some Member States have a stricter approach as to when such other person may act as consignee, for example that the consignee must have physical control over the waste at the moment the shipment arrives in the country of destination. See also the reply to question 5.2 in the Frequently Asked Questions (FAQs) on Regulation (EC) No 1013/2006 on shipments of waste (available at http://ec.europa.eu/environment/waste/shipments/pdf/faq.pdf).

[15] As regards the completion of this block, see the Court judgement on Case C-1/11 (see: http://curia.europa.eu/juris/document/document.jsf?text=&docid=121166&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=839361).

write "Same as block 1". If the waste has been produced by more than one generator, write "See attached list" and append a list providing the requested information for each generator (see footnote 3 of the Annex VII document). A "waste generator" may include the original producer, a new producer or a licenced waste collector. In case the generator is unknown, the name of the person in possession or control of such waste (holder) should be provided.

15. **Block 7:** Provide the name, address and all other required information (give destination of the shipment by ticking either recovery facility or laboratory). The address should be the actual address (i.e. no P.O.Box). The country appearing in the address of this block should be the same as that of block 2. If the recovery facility or laboratory is also the consignee, state here "Same as block 2".

16. **Block 8:** In case "Recovery facility" is ticked in block 7, indicate the type of recovery operation by using R-codes of Annex II to Directive 2008/98/EC on waste or, in case "Laboratory" is ticked in block 7, the type of recovery or disposal operation by using R-codes or D-codes of Annexes I and II to Directive 2008/98/EC on waste.

17. **Block 9:** Give the name or names by which the material is commonly known or the commercial name. In the case of a mixture of wastes listed in Annex IIIA to the WSR, provide the same information for the different fractions.

18. **Block 10:** Fill in the code or codes that identify the waste according to Annexes III, IIIA or IIIB to the WSR in the subheadings as indicated below. A code corresponding to one of the four following categories is to be specified in block 10:

(a) *Subheading (i):* Basel code(s) from Basel Convention Annex IX which are listed in Part I of Annex III to the WSR should be provided (see also List B in Part 1 of Annex V to the WSR).

(b) *Subheading (ii):* OECD codes should be used for wastes listed in Part II of Annex III to the WSR, i.e. wastes that have no equivalent listing in Annex IX to the Basel Convention or that have a different level of control under the WSR from the one required by the Basel Convention.

(c) *Subheading (iii):* In case of mixtures of wastes listed in Annex IIIA to the WSR, provide the relevant code(s) as indicated in Annex IIIA as appropriate in sequence (cf. footnote 4 of Annex VII). Certain Basel entries such as B1100, B3010 and B3020 are restricted to particular waste streams only, as indicated in Annex IIIA.

(d) *Subheading (iv):* In case of waste listed in Annex IIIB to the WSR, provide the BEU codes listed in Annex IIIB (cf. footnote 5 of Annex VII). These codes are only valid in the EU and are to be used for shipments within, into or through the EU.

In addition, a code corresponding to the following two categories should be specified in block 10:

(a) *Subheading (v):* Provide the codes included in the European list of waste (see Commission Decision 2000/532/EC as amended)[16].

(b) *Subheadings (vi):* Where applicable, national identification codes (other than the codes of the European list of waste) used in the country of dispatch and, if known, in the country of destination should be provided.

[16] See http://ec.europa.eu/environment/waste/framework/list.htm and http://ec.europa.eu/environment/waste/legislation/a.htm.

19. Block 11: Provide the name of the countries of dispatch, transit and destination or the codes for each country by using the ISO standard 3166 abbreviations[17].

20. Block 12: At the time of shipment, the person who arranges the shipment or its representative[18] should fill in his/her name and sign and date the Annex VII document. In case the person who arranges the shipment is a legal person, its representative that signs block 12 may differ from its representative that signs the contract but they should sign on behalf of the same legal entity.

21. Block 13: This block is to be completed and signed by the consignee, shown in block 2 in case the consignee is neither the recovery facility not the laboratory and in case the consignee takes charge of the waste after the shipment arrives in the country of destination.

22. Block 14: This block is to be completed and signed by a representative[19] of the recovery facility or the laboratory upon receipt of the waste consignment. Tick the box for either recovery facility or laboratory. Give the quantity of the waste received in tonnes (1 tonne equals 1 megagram (Mg) or 1000 kg).

[17] See https://www.iso.org/obp/ui/#search/code/.

[18] A "representative" is a person employed and authorised in writing by the person who arranges the shipment.

[19] A "representative" is a person employed and authorised in writing by the recovery facility or the laboratory.

Appendix 2

Example template for the contract concluded according to Article 18 of Regulation (EC) No 1013/2006

This appendix includes the following example template for the wording of the contract referred to in Article 18(2) and block 12 of Annex VII to the WSR providing information that is consistent with that provided in the Annex VII document:

Contract for Shipments of Waste Subject to the Information Requirements of Article 18 of Regulation (EC) No 1013/2006 on Shipments of Waste

between **"The Person who arranges the shipment"**[20]
[company name]
[contact information]

and **"The Consignee"**
[company name]
[contact information]

concerning shipments for recovery of the following waste(s) and the recovery operation(s) corresponding to each waste[21]**:**

[usual description(s) of the waste[22]*; waste identification(s) according to box 10 of Annex VII*[23]*; operation(s) R...*[24]*]*

The parties to this agreement, being the Person who arranges the shipment and the Consignee, shall comply with the requirements of Regulation (EC) No 1013/2006 in respect of the shipment of waste referred to in Article 3(2) of this Regulation. Shipments shall be carried out in accordance with Article 18 and the information provided in the Annex VII document(s) and under the terms of this contract.

The Person who arranges the shipment agrees to deliver the waste to the Consignee and/or recovery facility for the recovery thereof and the Consignee agrees, in case it is also the recovery facility, to recover it according to Regulation (EC) No 1013/2006 on shipments of waste.

It is hereby agreed between the parties to this agreement that the following legal duties and obligations will be observed, as required by Regulation (EC) No 1013/2006:

(a) The Person who arranges the shipment shall ensure that the waste is accompanied by an Annex VII document.

(b) The Annex VII document(s) shall be signed by the Person who arranges the shipment before the shipment(s) start(s), and by the recovery facility and the Consignee when the waste is received.

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[20] The person who arranges the shipment must fall under the jurisdiction of the country of dispatch.

[21] In case of multiple wastes, provide a list of the wastes with their corresponding recovery operation(s). In each Annex VII document corresponding to this contract, only one recovery operation is to be indicated according to Appendix I, paragraph 16.

[22] See paragraph 17 in Appendix 1.

[23] See paragraph 18 in Appendix 1.

[24] See paragraph 16 in Appendix 1.

(c) This contract between the Person who arranges the shipment and the Consignee shall be effective when the shipment(s) start(s).

(d) Where a shipment of waste or its recovery cannot be completed as intended, or where it has been effected as an illegal shipment, the Person who arranges the shipment or, where this person is not in a position to complete the shipment of waste or its recovery (for example, due to insolvency) the Consignee, shall take the waste back or ensure its recovery in an alternative way, and provide, if necessary, for its storage in the meantime.

(e) This contract remains valid for the duration of the shipment(s) effected on the Annex VII document(s) until the recovery operation at the facility has been completed.

(f) The Person who arranges the shipment or the Consignee shall provide a copy of the contract upon request by the authority involved in inspections.

For the Person who arranges the shipment:

Name and title: [*Name and title]* _____

Date: *[Date of signature]* _____Signature:_____

For the Consignee:

Name and title: [*Name and title]* _____

Date: *[Date of signature]* _____Signature:_____

Annexure XXII: Finished Paper Grades[22]

Sr. No.	Paper Grade	Description
1	**Newsprint**	▪ Uncoated mechanical pulps ▪ GSM - 40-50 g/m2 ▪ Needs to be cheap, strength, brightness, bulk, ink receptivity
2	**Printing & Writing**	
2(a)	Uncoated Woodfree	▪ Less than 10% mechanical pulp, normally 0% ▪ Not coated ▪ Office papers (forms, copy, bond, tablet, and envelope), carbonless, and printing papers (offset, cover, text). ▪ Other names: printing, writing, and book papers. ▪ Needs exact color/whiteness/brightness, smoothness, ink receptivity, surface strength, stiffness
2(b)	Coated Woodfree	▪ Less than 10% mechanical pulp, normally 0% ▪ Magazines, books, and commercial printing. ▪ GSM - 70 g/m2 to 170 g/m2 for the finished sheet. ▪ Needs exact color/whiteness, smoothness, ink receptivity, surface strength, stiffness
2(c)	Uncoated Mechanical	▪ Uncoated mechanical pulps ▪ 80% used in newsprint ▪ GSM - 24-75 g/m2 with newsprint 40-50 g/m2 ▪ Directory, computer paper, catalog, advertising supplements ▪ Needs to be cheap, strength, brightness, bulk, ink receptivity
2(d)	Coated Mechanical	▪ At least 10% mechanical pulps, typically 50-55%, balance chemical pulp ▪ Finished sheet GSM 45-130 g/m2 ▪ Letterpress, offset, lightweight coated (LWC), and magazine. ▪ 70% of magazines are this grade ▪ Needs to be cheap, strength, brightness, bulk, ink receptivity
3	**Packaging Paper and Board**	
3(a)	Kraft paper	▪ Unbleached or bleached kraftpulp ▪ GSM - 50 g/m2 to 134 g/m2. ▪ Wrapping, bag/sack, shipping sack, and other converting (such as saturating and cable) ▪ High tensile and tear strength
3(b)	Bleached Paperboard	▪ Bleached kraftpulps primarily ▪ About half is coated ▪ GSM Generally above 134 g/m2, typically from 200 g/m2 to 500 g/m2.

[22] North Carolina State University, Raleigh. https://faculty.cnr.ncsu.edu/richardvenditti/wp-content/uploads/sites/24/2018/10/PaperGrades-Venditti.pdf

		▪ Primarily folding carton and milk carton. ▪ Also included: cups, plates, printing boards, tag stock, computer cards, file folders, and index cards. ▪ Needs stiffness, strength, barrier properties
3(c)	Unbleached Paperboard	▪ Unbleached and made from virgin kraft or neutral sulfite semi chemical pulp ▪ Also may have recovered paper as a feedstock ▪ GSM - 130 g/m2 to 450 g/m2 ▪ Primarily linerboard for corrugated containers. Typically: 205 g/m2 or 42 lb/1000 ft2 ▪ Also included in this is corrugated medium, made with semi-chemical and often some amount of recycled. Typically 9 point medium, 125 g/m2 or 26 lb/1000 ft2 ▪ Needs strength, burst, stiffness, tensile, water resistance
3(d)	Recycled Paperboard	▪ Sometimes called chipboard. ▪ Made entirely of recovered paper, often newspapers and low valued recovered papers ▪ Often made on a multi-cylinder machine ▪ Have greyish color since not deinked ▪ Used often to make solid fiber boxes that require low strength ---make up with thickness ▪ Grades include corrugating medium, folding boxboard (clay coated), setup boxboard (uncoated), and paperboard. ▪ Also included are gypsum liner, core tube stock, and roofing felt. ▪ Needs to be cheap, substitute thickness for fiber strength properties
3(e)	MG kraft specialties	▪ Machine glazed finish, high gloss ▪ Made by allowing the coating to dry on a large, chrome plated dryer with polished surface ▪ Grades include wax base, wrapping, carbonizing, and kraft specialties.
4	**Tissue**	▪ At home: bleached chemical pulps ▪ Away from home: recovered paper ▪ Manufactured on Yankee machines with either a wet or dry crepe operation ▪ GSM - 20 g/m2 to 75 g/m2 ▪ Primarily tissue, towel, bathroom, napkins, etc. ▪ Also: wrapping tissue, tracing tissue, Soft, bulky, absorbent, moderate strength
5	**Other Paper and Board**	▪ Grades that do not fit conveniently in other categories ▪ Less than 5% of all paper or board ▪ Examples are hardboard, asbestos board, thin papers (cigarette tissue, condenser, bible), and dense papers (glassine, grease proof, release, and vegetable parchment).

Annexure XXIII: Important Parameters for Paper and Paperboard

All Paperboard tests are to be done after conditioning the samples. The steps in conditioning are:

a. Pre dry the samples at 60°C for 30 minutes in a drying chamber with air circulation.

b. Condition the samples at 23°C ± 10C and 50% ± 2% relative humidity for at least 3 hours.

Sr. No.	Property of paper	Description
1	Grammage	Weight per unit area is expressed in g/m2. The standard procedures are laid out in ISO 536, Tappi T 410.
2	Thickness (Caliper)	The perpendicular distance between the two surfaces of the board / paper, expressed in mm or microns measured with a micrometer. The standard procedures are explained in Tappi T 411.
3	Compressibility	The reduction in thickness under compressive forces or pressure. It influences the ability of paper to change its surface contour and to conform to and make contact with the printing plate or blanket during printing impression. This is highly relevant in gravure and letterpress printing. Compressibility is measured as a ratio of roughness under two different standard pressures in a Parker Print Surf tester.
4	Resiliency	The ability of paper to recover its original thickness and surface contour after release of the compressive forces of printing nips. Water Absorption (COBB): The surface water absorption over 60 seconds, expressed in g/m2, measured by Cobb Test. The procedural standards are explained in Tappi T 441.
5	Water Absorption (WICK)	Water absorption at the edges, expressed in kg/m2, using Wick Test. Board surface is sealed with waterproof tape on both sides, weighed, placed in water @ 800F for 20 minutes and weighed again to measure the water absorbed by wicking.
6	Wettability	Printing ink/glue adherence to the board surface is influenced by wettability, measured as the surface tension of the liquid, expressed in dynes/cm. The procedure is laid out in Tappi: 558.

7	Moisture Content	The absolute moisture content, expressed as a % of the paperboard weight. (The sample is generally not conditioned while doing this test). The standard procedures are laid out in Tappi T 412 and ISO 287.
8	Stiffness (Taber)	A measure of flexural rigidity, Stiffness is the bending moment (g-cm or mNm) required to deflect the free end of a 1.5 inch wide vertically clamped sample 150 from its center line when load is applied 50 mm away from the clamp; measured in MD & CD. The procedural standards are explained in Tappi T 489 and ISO 2491.
9	Bending Resistance (L&W)	Commonly, though incorrectly, referred to as “Stiffness”, bending resistance is a measure of the resistance offered to a bending force by a rectangular sample, expressed in mN (millinewtons). The most commonly used instrument is an L & W tester, which consists of a clamp, which can pivot about a vertical axis. The sample is held between the clamp and a knife connected to a transducer and the force measured after the clamp is pivoted through an angle of 15^{o} for paperboards. The procedural standards are as per Tappi T 556.
10	Bursting Strength	The maximum hydrostatic pressure required to rupture the sample by constantly increasing the pressure applied through a rubber diaphragm on 1.20-inch diameter sample. The sample is initially held flat & rigid and allowed to bulge during the test. B.S is expressed in kPa or psi. The procedure is laid out in Tappi t 403.
11	Ply Bond	The interlayer strength of the paperboard, measured on Scott Bond Tester, expressed in J/m2. The standard procedures are explained in Tappi T 403.
12	Tensile Strength	The tensile force required to produce a rupture in a strip of paperboard, measured in MD & CD, expressed in kN/m. The procedural standards are explained in Tappi T 404.
13	Elongation	The tensile strain developed in a test sample at maximum tensile strength before rupture, measured as the % increase in the length of the sample to the original length. The standard procedures are laid out in Tappi T 404.

14	Tearing Resistance	The force required to tear a paperboard, measured in both MD & CD, expressed in mN (millinewtons). The procedural standards are explained in Tappi T 414.
15	Surface Strength (Wax Pick)	A measure of the surface strength of the sample or surface resistance to picking. Pick occurs due to blisters or coating substance adhering to graded wax sticks (Dennison). This test is valid only for uncoated board or paper. For coated stock IGT pick test is applicable. (T 459-om 99).
16	Roughness (PPS)	This is a measure of surface roughness (hills and valleys) expressed in microns. This is an important measure of coated board surface evenness / smoothness. Lower the values in microns better the coated surface smoothness. This is explained in Tappi 555.
17	Smoothness (BENDSTEN)	This is a measure of ml of air escaping per minute through the hills and valleys of the surface of paperboard. Higher the value, rougher the surface. This is normally done for all uncoated paper and boards. This is considered a better measure to predict flexographic printability.
18	Print Quality	The degree to which the appearance and other properties of a print approach a desired result. Many paper and board parameters like caliper, roughness, gloss, ink absorption, whiteness and brightness affect this.
19	Brightness	The percentage of blue light reflectance from a sample measured at an effective wavelength of 457nm, to provide an indication of the amount of bleaching. Generally, the higher the reflectance, the brighter the sample appears. Measured with two different standards – Tappi/GE and ISO. Though there is no direct correlation, ISO brightness of a sample is usually lower by 1–1.5 units over GE brightness. The procedural standards are as per Tappi T 452.

20	Whiteness	The extent that paper diffusely reflects light of all wavelengths throughout the visible spectrum i.e. the magnitude & uniformity of spectral reflectance measured as the percent light reflectance for the whole wavelength range. The procedural standards are explained in Tappi: 560.
21	Colour	Related to perception and therefore measured or specified in terms of colour space. A commonly used system is the CIE L, a, b system. This is based on the idea of colour opposites. L - measure of whiteness and varies from 100 for perfect white to 0 for perfect black. a - redness to greenness. b - yellowness to blueness. The procedure is laid out in Tappi :524.
22	Gloss	It is the specular reflection of light, which is reflected at an equal and opposite angle. Normally measured at 75°or 20°. It is advisable to measure high gloss surfaces at 20°. Printed and varnished surfaces are measured at 60°. The standard procedures are laid out in Tappi: T 480.
23	Opacity	The property of a substrate to resist passage of light. Important in book printing where both sides of the paper are printed. The procedural standards are explained in ISO 2471.
24	Printability	The extent to which properties of paper lend themselves to the true reproduction of the original artwork. This is influenced by the printing process and can be evaluated in terms of - dot reproduction, dot gain, print gloss, hue shift and print uniformity.

Annexure XXIV: Collection Mechanism in Europe – PRO Europe

PRO Europe (Packaging Recovery Organisation Europe), founded in 1995, is the umbrella organisation for European packaging and packaging waste recovery and recycling schemes which mainly use the registered trademark “The Green Dot" as a financing symbol. In its primary role, PRO Europe is the general licensor of the Green Dot trademark for Europe.

The Green Dot on packaging means that for such packaging a financial contribution has been paid to a national packaging recovery company.PRO Europe’s members span 31 countries. In the majority of these countries, the Directive has been implemented through ‘producer responsibility’ systems set up to assume packaging waste collection and recovery responsibilities on behalf of the industry.

The main task of PRO Europe’s members is to organize the efficient implementation of adequate national collection and recovery systems, mostly for sales and household packaging. In this way, industrial companies and commercial enterprises are relieved of their individual obligation to take back used sales packaging.

Annexure XXV: Current Paper Recycling situation in different European Countries

IMPACTPAPEREC

Boosting separate paper collection

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 690182

1.2 Current situation in different European regions

59 millions tonnes of PfR were collected from households, business, industry and offices in 2015

The pulp and paper industry in Europe has undergone continuous growth over the last few years, which has increased the amount of Paper for Recycling (PfR) available as well as the amount of paper consumed, reaching 59 million tonnes in 2015 (1). Demand for PfR in Asia has increased even more. 10 million of the 59 million tonnes collected, were exported to Asia.

In this global context, the availability of European PfR as a raw material has forced industry and government to boost actions to ensure its constant and sustainable procurement. All the PfR collected is currently recycled, with the PfR collection rate equal to the PfR recycling rate, with the exception of cases in which the quality of the collected materials does not meet industrial requirements (i.e. high wet content, presence of contaminants). These cases have also been tackled in the IMPACTPapeRec Project. All this considered, current EU paper-recycling rates reached 71.5% in 2015 (1), as has already been mentioned above. This project focuses on countries with low and medium average paper recycling rates in order to boost their recycling performance.

Figure 3. European paper recycling rates 1991 – 2015 (1) (Source: CEPI)

Despite the high collection and recycling ratio (almost 90%) (1) of paper and board from commerce and industry (applied in different industrial uses; i.e. corrugated boxes, office paper), as a result of the implementation of specific industrial PfR collection systems, there

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 690182

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As shown in Figure 4, recycling rates in central, southern and northern European countries (Belgium, Germany, Sweden, Spain, France and UK) exceeded 70% in 2015, whilst these rates in eastern European countries (Poland, Romania, Bulgaria) were below 60%.

Figure 5. National recycling rates in Europe in 2015 (Source: CEPI) (1)

In general terms and according to CEPI's "*Final Monitoring Report of the 2011-2015 period*", 15 European countries exceeded the 70% recycling rate whilst 10 European countries were below 60% in 2015. (1)

Some of the issues that may cause the low rates in some countries include scarce authority knowledge and engagement, low citizen-awareness, poor management skills, and a non-restrictive legal framework, among others.

In this sense, **both quantity and quality are key aspects to be considered for efficient paper and board recycling.** Even in countries with high collection rates, poor quality of the PfR collected could risk progress in increasing recycling rates, and especially in the manufacturing of added value recovered-paper products. Hence, there are still quality issues to be addressed while maintaining the high levels achieved in the best-in-class collection systems.

Countries with separate collection schemes reach **higher recycling rates** with better quality of the PfR collected.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 690182

IMPACTPAPEREC
Boosting separate paper collection

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 690182

is still considerable room for improvement in municipal PfR collection and recycling rates. Theoretically, 80% of household paper is recoverable (the remaining 20% is not recoverable due to its characteristics; i.e. toilet paper, wallpaper, tissue) (1). Moreover, policy trends have established the need for a progressive increase in recovery rates as well as prioritising recycling and recovery, in this order, and avoiding elimination via landfill[3].

When EU paper and board collection and recycling rates are analysed (Figure 4 shows representative countries from north, south, east and central Europe), there is a notable gap between the different collection systems used in Europe. Three different systems are employed, depending on the different regions: ① Door-to-Door: Separate collection of paper and board from other waste streams, ② Bring Bank sites: Paper and board are separated from other waste streams, ③ Together with other recyclables like glass and plastic.

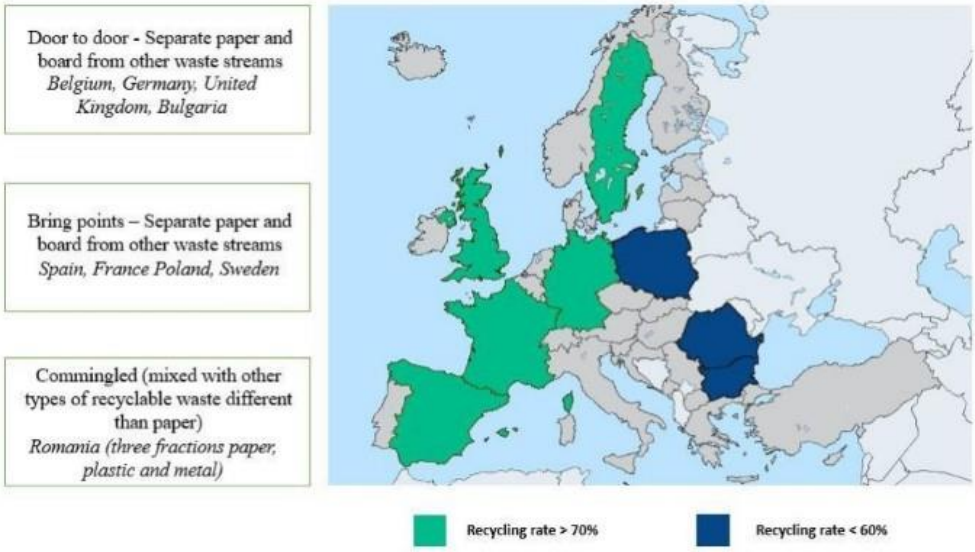

Figure 4. Paper recycling rate in 2015. Data from different collection systems in European regions (3)

[3] Waste Framework Directive 2008/98/EC: http://ec.europa.eu/environment/waste/framework/

Annexure XXVI: Request letter from IPMA to Secretary, MoEF&CC for enforcement of regulations to restrict imports of contaminated wastepaper into India

IPMA

INDIAN PAPER MANUFACTURERS ASSOCIATION

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Tel : +91-11-26518379, 41617188, Fax : +91-11-26518379
Email : sg@ipma.co.in / secretariat@ipma.co.in, Website : www.ipma.co.in

IPMA/16.1/2019/47

12th June 2019

Mr. C K Mishra
Secretary
Government of India
Ministry of Environment, Forests & Climate Change
Indira Paryavaran Bhavan
Jorbagh Road, Aliganj
New Delhi – 110003

Dear Sir,

Subject: Request for Enforcement of Regulations to Restrict Imports of Contaminated Waste Paper into India

Indian Paper Manufacturers Association (IPMA) is the apex and national level body which represents the interests and development of Pulp & Paper Industry in the country. IPMA membership comprises of large integrated Paper Mills from private and public sector with a product mix of all varieties of paper (Writing, Printing, Packaging, Paperboard, Tissue, Specialty, and Newsprint) located in all the regions of the country and using conventional fibre such as pulpwood from plantations and unconventional raw materials like bamboo, bagasse, recycled paper, etc.

To accelerate the efforts to achieve universal sanitation coverage and to put focus on sanitation, the Honb'le Prime Minister of India launched the Swachh Bharat Mission on 2nd October 2014. Under the Swachh Bharat Mission, waste management is an important constituent as it impacts several aspects of the society and also the economy, especially health and climate change. Environmentally sound management of waste is an important and key element in protecting health of the citizens and environment against adverse effects. Sound waste management involves proper segregation at source, collection and a robust recycling ecosystem.

India is a fibre deficient country. Inadequate raw material availability domestically, whether pulp wood, agro residue or recycled fibre (recovered / waste paper), is a major constraint for India's Paper Industry. Waste paper collection / recovery mechanism is not very strong in our country, and it is estimated that India recycles only about 38% (recovery rate) of the total paper consumed in the country. As a result, import of waste paper are necessitated to manufacture paper in the country.

The Ministry of Environment, Forests & Climate Change (MoEF&CC) prescribed the limits for non-paper recyclable material in different grades of waste paper being imported into India from other countries vide its Office Memorandum No. 13-1/2004-HSMD dated 11th May 2010.

As per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016, import of waste and scrap of paper or paperboard mixed with hazardous waste is not allowed unless permission is granted by MoEF&CC. Import of waste and scrap of paper or paperboard made mainly of mechanical pulp (for example newspapers, journals and similar printed matter), provided they are not mixed with hazardous waste, is permitted by actual users or by importers registered with the State Pollution Control Board (SPCB) on behalf of the actual users. Pre shipment inspection has to be carried out by concerned inspection agency and necessary certificate has to be attached with the documents at the time of export of waste and scrap of paper or paperboard mainly made of mechanical pulp. Import is permitted in India by actual user or trader on behalf of the actual users authorised by SPCB on one time basis and subject to verification of documents.

India also amended its Plastic Waste (Management and Handling) Rules in 2016 giving thrust on waste minimisation, segregation of waste at source by generators, gainful utilisation of waste through recycling and recovery.

Given the above background, we would like to highlight the following for your kind information:

1. China is the world's largest consumer and producer of paper. It was, till recently, importing about 25-30 million tonnes of waste paper per annum, amounting to around 55% of global imports of waste paper, and was the main waste paper destination for exports from developed countries.

2. In July 2017, China notified the World Trade Organisation (WTO) of its intention to ban imports of 27 kinds of solid waste as part of its National Sword 2018 programme - a national environmental initiative. The contamination threshold was also reduced for imports of recyclable paper commodities such as old corrugated containers (OCC) and old newspapers (ONP) not covered by the ban. The new standards, which came into effect on 1st March 2018, allow only 0.5% contamination. Several other stringent conditions have been also imposed which are being further strengthened. Mountains of waste and pollutants alarmed the Chinese Government to take such drastic steps to ban import of mixed paper waste.

3. As a result of the Chinese ban on import of mixed paper waste, it is feared that India may be emerging as a destination for such exports of contaminated waste paper from different parts of the world.

4. According to import data of the Directorate General of Commercial Intelligence & Statistics (DGCI&S), Indian imports of waste & scrap of paper or paperboard have jumped from 3.2 million tonnes in 2016-17 to 4.0 million tonnes in 2017-18 to 6.4 million tonnes in 2018-19. It is likely to increase multi-fold in years to come if China continues its policy on restricted import of waste paper.

5. The contaminated portion of mixed waste paper imported into India, after being segregated, may be finding its way into dumpsites or simply being burnt with adverse environmental consequences. Cheap imported contaminated waste paper will also disincentivise waste segregation and recycling efforts being undertaken in India which are the need of the hour and need to be intensified.

In light of the above, this is to request the Ministry of Environment, Forests and Climate Change to ensure that the laws / regulations already in place in India are enforced strictly by the concerned authorities so that misuse of the provisions is minimised and we do not allow India to become dumping ground for waste / garbage and pollutants.

We hope the above will merit the serious consideration of the Government.

Thanking you,

Yours sincerely,

Rohit Pandit
Secretary General

Copy to:

Mr. Alok Chaturvedi
Director General
Directorate General of Foreign Trade
Government of India
Udyog Bhawan
H-Wing, Gate No. 2
Maulana Azad Road
New Delhi – 110011

Mr. S P Singh Parihar
Chairman
Central Pollution Control Board
Government of India
Parivesh Bhawan
East Arjun Nagar
Delhi – 110032

Mr. Anil Agrawal
Joint Secretary
Government of India
Department for Promotion of Industry & Internal Trade (DPIIT)
Ministry of Commerce & Industry
Udyog Bhawan
New Delhi - 110011

Annexure XXVII: Request letter from IARPMA to Secretary, MoEF&CC to continue to import wastepaper to meet the increased demand of raw material for paper industry in India.

INDIAN AGRO & RECYCLED PAPER MILLS ASSOCIATION

REGISTERED UNDER THE SOCIETIES REGISTRATION ACT, 1860, REGN. NO. S/18193 OF 1987, DELHI

IARPMA

Ref. No. IARPMA/MOEF-WP-Imports/2019 25th June 2019

The Secretary to Government of India
Ministry of Environment, Forests & Climate Change
Indira Paryavaran Bhawan,
Jorbagh Road,Aliganj,
New Delhi - 110 003

Dear Sir,

Sub: **Import of Waste Paper (Recycled Fibre) to meet the increasing demand of raw material for Paper Industry in India**

We have great pleasure in introducing our Association, Indian Agro & Recycled Paper Mills Association (IARPMA) to your goodself as the apex body of Paper Mills based on non-woody raw materials (NCRM) namely rice straw, wheat straw, bagasse, jute, grasses, etc and waste paper (Recycled Fibre) numbering more than 800 paper mills with capacities ranging from 25-30 MT per day to 800-1000 MT per day. Out of total paper and board production in the country, around 77% of production is coming for the paper industry segments represented by our Association. IARPMA functions as a catalytic agent for the promotion and development of Indian Paper Industry.

We take this opportunity to bring to your kind attention that members of our Association across the country brought to our notice that some agencies are campaigning against the import of waste paper which is the basic raw material for the paper mills in the country. In this connection, as the apex body of Paper Mills based on Recycled Fibre, we wish to bring to your kind attention the followings:-

Indian Pulp and Paper Industry is producing around 19.5 million tons of paper of different grades, out of which 77% production is made from non-wood raw materials (recovered fibre 67% and agro residues 10%) sourced indigenous as well as imported. Total consumption of paper in the country according to our estimate is around 22 million tonnes. India being a fiber deficient country, major part of its production is coming from waste paper based segment of the industry and the demand of waste paper for paper manufacturing in the country is increasing day by day. **To meet the increasing demand of waste paper, the manufacturer in the country has to depend both**

(Contd.....2)

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IARPMA

INDIAN AGRO & RECYCLED PAPER MILLS ASSOCIATION

REGISTERED UNDER THE SOCIETIES REGISTRATION ACT, 1860, REGN. NO. S/18193 OF 1987, DELHI

indigenous and import sources. However, recovery rate of wastepaper from the total consumption of 22 million tonnes is hardly 38%, i.e. 8.36 million tonnes. Based on the share of production of 67% from recovered paper, industry needs around 14.76 million tonnes of recovered paper (Approx). Out of total requirement of waste paper in the country, only 38% is recovered indigenously and remaining approximately 6.4 million tonnes of wastepaper is imported to meet the raw material requirement of paper mills based on waste paper and it is wrong to say that the Industry is importing hazardous waste.

There are a number of checks and balances created by the Government for not importing trash or hazardous waste from other countries. **According to the Ministry of Environment & Forests notification / office memorandum No. 13-1/2004-HSMD dated 11th May 2010 it is very clearly prescribed the limits for non-paper recyclable in waste paper imported from other countries (copy of the MOEF office memorandum enclosed).** As per the Office Memorandum any material exceeding the fixed percentage is not cleared by the customs. An Inspection authority has to certify the contraries contained in the material before exporting and the importer is required to submit the statement including the certificate of the Inspecting agency to the customs authorities before clearance. Therefore the importers are adhering strictly to the norms prescribed by the Government.

Further it is also submitted that in the absence of availability of raw-materials for paper industry, India has to depend heavily on imported waste paper to meet the growing requirements of the Industry. The recovery of waste paper in the country as mentioned above is only 38% and therefore the Industry has to necessarily depend on imports. We have been requesting the Government to adopt legislative measures for increasing recovery rate of waste paper in India which is otherwise used for other than paper making at present. More than 800 mills in the country are dependent on waste paper as raw-material for manufacture of paper. Millions of people are employed direct or indirectly in the recycled based paper Industry and is also contributing crores of rupees to the exchequer. The emergence of the small and medium size paper mills based on waste paper in the country have enabled the country to be self-sufficient in most of the varieties of papers except few specialty papers.

Further we wish to point out that under the Swatch Bharat Mission initiated by Hon'ble Prime Minister of India on 2nd October 2014, waste management is an important and key element, therefore, we request to take necessary steps to include waste paper collection also under Swatch Bharat Mission which will generate jobs for marginal people as well as Paper Industry in the country can also meet its increasing raw material requirement indigenously and accordingly the industry can reduce its dependance on import.

(Contd.....3)

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IARPMA

INDIAN AGRO & RECYCLED PAPER MILLS ASSOCIATION

REGISTERED UNDER THE SOCIETIES REGISTRATION ACT, 1860, REGN. NO. S/18193 OF 1987, DELHI

Looking into the present raw material situation of the country and also considering the importance of waste paper for meeting the raw material requirements of the majority of paper mills in India, the present policy of allowing import of waste paper should be continued to keep the wheels of the industry running and provide employment to people, besides meeting the ever increasing demand for paper.

In case you need any further information we shall be pleased to provide the same.

Thanking you,

Yours faithfully,
for Indian Agro & Recycled Paper Mills Association

P G Mukundan
Secretary General

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Annexure XXVIII: Wastepaper Import Policy of China

China's New Regulations on Wastepaper Imports and Their Impacts on Global Wastepaper Recycling

China notified the World Trade Organization (WTO) of its intention to ban imports of 27 kinds of solid waste in July 2017 as part of its **National Sword 2018 program—a national environmental initiative**; this ban went into effect on January 1, 2018.

China was once the largest wastepaper importing market in the world. Due to environment/ safety issues, in recent years the Chinese government has implemented a number of new regulations on wastepaper import such as:

1. Prohibiting importing of unsorted wastepaper.
2. Lowering the foreign (non-paper) content in the imported wastepaper from 1.5% to 0.5%.
3. Small-scale (less than 50,000 tons per year capacity) paper mills are not eligible for importing wastepaper.

The previous standards were not strictly enforced and industry norms have allowed higher degrees of contamination to enter China over recent years.

China New Regulations of Wastepaper Import

China has the largest paper and paperboard production and consumption. Because of the shortage of raw materials, the recycled fibres from wastepaper is key raw material for the pulp and paper industry, and China has been importing much of them from countries such as USA, Japan, and the United Kingdom. Recent statistics show that the wastepaper accounted for 60 to 65% of the raw materials for the Chinese papermaking industry and more than a third is imported.

Nearly half the global wastepaper was exported to China in recent years. Since Dec 2014 the Chinese Government started to tighten the regulations on wastepaper import.

New Regulations in Recent Years:

Issue Date	Regulation
Dec, 2014	Wastepaper listed as “restricted imported goods”
Aug, 2017	Unsorted wastepaper from “restricted imported goods” list to “prohibited imported goods” list
Dec, 2017	Mills with lower than 50,000 tons/year capacity prohibited from importing of wastepaper
Jan 2018	Non-paper content of lower than 0.5% in the imported wastepaper
Jan, 2021	Ban on all imports of solid waste (proposed)

The Chinese Government is also set to ban all imports of solid waste from 2021. The Ministry of Ecology and Environment announced on 30 June in a press conference that it would no longer accept and approve import applications for solid waste from 2021.

Impacts on Chinese Domestic Wastepaper Recycling

The quantity and cost of wastepaper imported into China are negatively affected especially for the low-grade wastepaper. The unsorted wastepaper is prohibited from being imported. The unsorted wastepaper will have to be processed by removing contaminants, such as plastics and metals before importing in the country. Such changes imply an increase in the cost and price. The increased price of the imported wastepaper means that it will face fierce competition from the domestic wastepaper in China.

On the other hand, these new regulations have brought a great opportunity to the Chinese domestic wastepaper recycling business. The Chinese government has implemented some new initiatives that aim to improve the practice/ management of domestic wastepaper recycling in China. It has planned to construct a highly efficient wastepaper recycling network around the country so that the quality and quantity of domestic wastepaper recycling

can meet the new demands from the Chinese papermaking industry. In January 2017, the Ministry of Industry and Information of China issued “Guidance on speeding up the development of renewable resources industry”, with the plan of establishing 3 to 5 wastepaper recycling centres of 300,000 to 500,000 tons per year, 15 national recycling companies, and 10 mid-scale recovery operations for every 5 million of population.

“Blue Sky 2020” Campaign against Solid-Waste Smuggling

General Administration of Customs China (GACC) will continue the crackdown on criminal smuggling of illicit inbound waste by deepening law-enforcement cooperation with domestic and foreign authorities in an intensive long-acting mechanism, so as to safeguard domestic eco-environment and human health.

Annexure XXIX: Wastepaper Import Policy of South Korea

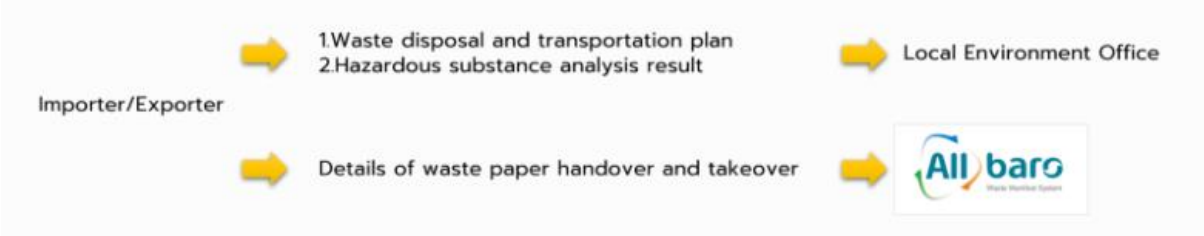
On July 2nd, 2020 South Korea's Ministry of Environment announced an amendment to the notification of waste import subject to 'the Act of Transboundary Movements of Hazardous Wastes and Their Disposal' to cancel wastepaper exemption from waste import notification and will take effect from July 3rd.

Salient Features:

1. 100 percent inspection requirements for recovered paper imports.
2. All imports and exports of wastepaper from July 3rd must submit the notification of import and export waste to the local environment office by attaching

a. Waste disposal and transportation plan
b. Hazardous substance analysis result.

3. Wastepaper handover and takeover details must be entered into the Allbaro System (IT based MIS system)



South Korean government has also notified the World Trade Organization (WTO) of its intent to put all pulp and recovered paper that is "contaminated with oil or contains foreign substances" under the prior informed consent procedures of the Basel Convention.

On Feb. 17, South Korea's Ministry of Environment published an **announcement (in Korean)** describing a general policy to reduce "wastepaper" imports.

The salient features of the announcement are (converted from Korean using Google translate):

1. As of '19, the amount of wastepaper imported was 1.46 million tons, and the export volume was 390,000 tons, which was about 1.07 million tons of wastepaper net import.
2. The Ministry of Environment recommended that the domestic paper industry refrain from importing wastepaper as much as possible and first purchase the abolished paper

accumulated in the country according to the voluntary agreement signed by the Ministry of Environment, the paper industry, and the papermaking fee industry on January 22.

3. The Ministry of Environment, along with local governments, plans to actively promote the method of separating and disposing of wastepaper so that the public can easily know what papers are difficult to recycle in order to improve the recycling quality of domestic wastepaper.

Annexure XXX: Wastepaper Import Policy of Indonesia

The government of Indonesia has issued import regulations for all scrap commodity imports.

Salient features of the regulations are:

1. New import and export permitting system will have better oversight of trade in “non-B3” materials—those that are “imported for raw material industrial use”.
2. The regulation confirms that materials must be shipped directly from the country of origin i.e. no transhipment is permitted.
3. The materials must be inspected before shipment by a surveyor company.
4. Survey company must meet the requirements such as SIUJS (Survey Service Business License), have been accredited as an inspection body by KAN (National Accreditation Committee), have a minimum of 5 years’ experience, have overseas branches / representatives / affiliations accredited by authorized institutions in the country has a network of information systems for the effectiveness of verification services and has good track records in managing import verification activities.
5. The materials must be exported only by companies that obtain permits as outlined in the regulation and imported by Indonesian companies with permits. Hence, both importers and exporters have permitting requirements.
6. Importers (Indonesian Company) are required to manage their non-B3 waste and are not allowed to trade their waste with other parties. Non-B3 waste that cannot be utilized in production must be managed individually, in groups or in collaboration with a licensed waste management company.
7. Non-B3 Waste can only be imported to the ports that are listed (Tanjung Priok – Jakarta, Tanjung Emas – Semarang, Tanjung Perak – Surabaya, Soekarno-Hatta – Makassar, Belawan – Medan, Batu Ampar – Batam, Teluk Lamong – Surabaya, Merak – Cilegon).

8. Penalties for compliance failures are also outlined in the new regulation. PI (Import Approval) will be frozen if the company violate the provisions of the regulations.
9. If the imported Non-B3 waste as Industrial Raw Material does not meet the requirements, the importer is obliged to re-export.
10. The regulation mentions that the material must be “homogenous” and “clean”. It does not include specific thresholds set for contamination.
    (Later in June 2020 Indonesian Government agreed 2% contamination limit)

Annexure XXXI: Hon'ble NGT Order OA 851/2018 (Amit Jain vs UoI)

Item No. 03 Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

(By Video Conferencing)

Original Application No. 851/2018

Amit Jain Applicant(s)

Versus

Union of India Respondent(s)

Date of hearing: 10.09.2020

CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE S. P. WANGDI, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER

Respondent(s): Mr. Raj Kumar, Advocate for CPCB

ORDER

1. The issue for consideration is the remedial action against cheap waste paper and the road sweep waste import for firing of brick kilns. According to the applicant, 900,000 tons of waste is imported which is hazardous.

2. The matter has been considered earlier on several occasions and it was found that there was absence of proper mechanism for plastic waste management, including cheap waste paper and imported hazardous road sweep waste. According to the CPCB, it has written to the MoEF&CC but MoEF&CC has not taken any action.

3. On 06.12.2019, the Tribunal *inter-alia* observed:-

"

4. *The matter was further considered on 06.09.2019 with reference to the report dated 28.06.2019 as follows:*

"Report dated 28.06.2019 acknowledges that there is no proper mechanism for plastic waste management ***which was being dumped in open or burnt in brick kilns resulting in pollution.*** *Action taken by the CPCB is the issuance of directions. MoEF&CC is to deal with the issue of transboundary movement (import/export) hazardous and other wastes.*

The report cannot be taken as adequate action. Apart from issuance of direction, compliance of direction is required to be overseen. ***Even with regard to illegal import, CPCB as a statutory regulator can take up the matter with the concerned authorities****. This Tribunal vide order 26.08.2019 in O.A. No. 804,2017, Rajiv Narayan v. UOI has already issued direction for restricting import of hazardous waste and vide order dated 22.07.2019 in E.A. No. 13/2018, CPCB v. State of Andaman & Nicobar & Ors. directions have been issued with regard to management of plastic waste. These directions need execution.*

Let further steps be taken in the matter accordingly and report filed before the next date by e-mail at judicialngt@gov.in."

5. *Accordingly, report dated 10.10.2019 has been filed on behalf of the CPCB to the effect that 9 SPCBs/PCCs have provided information related to number of pulp and paper units importing waste paper containing plastic in their respective jurisdiction to CPCB. (Table-1). Out of 9 States, 3 States (Tamil Nadu, Punjab & Odisha) have issued directions to Pulp & paper units which are involved in importing waste paper containing plastic in their state to manage imported waste paper containing plastic in accordance with the provisions of PWM rules, 2018. Table – I in the report is as follows:-*

S. No.	***Name of the SPCB/PCC***	***No. of pulp & paper unit importing waste paper***	***Quantity of waste paper (B3020) for which Hazardous Waste Authorization (HWA)***
1.	*Tamil Nadu*	*57*	*23,94,081 TPA*
2.	*Punjab*	*21*	*Not provided*
3.	*Odisha*	*1*	*Not provided*
4.	*Arunachal Pradesh*	*Nil*	*Nil*
5.	*Chandigarh*	*Nil*	*Nil*
6.	*Lakshadweep*	*Nil*	*Nil*
7.	*Mizoram*	*Nil*	*Nil*
8.	*Nagaland*	*1 (Not in operation)*	*Nil*
9.	*Tripura*	*Nil*	*Nil*

Vide letter (Annexure II) dated 9th October, 2019 CPCB has communica

Further, as MoEF&CC is the nodal Ministry to deal with Transb

"

6. *CPCB has also written to the MoEF&CC for further action.*

7. *In view of the above, let MoEF&CC furnish its action taken report before the next date by e-mail at judicial-ngt@gov.in."*

4. No report has been filed by the MoEF&CC nor any one is present which is happening in several important cases as already noted in O.A. No. 15/2014 and E.A. No. 13/2019, listed today. In E.A. No. 13/2019, we have directed the concerned Joint Secretary, MoEF&CC to remain present during the hearing by way of video conferencing.

5. Accordingly, in the present case also, the MoEF&CC may file its response before the next date by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF. The Joint Secretary MoEF&CC may remain present during the hearing on the next date.

List again on 14.10.2020.

A copy of this order be sent to the Secretary, MoEF&CC by e-mail for compliance.

Adarsh Kumar Goel, CP

S. P. Wangdi, JM

Dr. Nagin Nanda, EM

September 10, 2020
Original Application No. 851/2018
SN

Annexure XXXII: OM No. 13-1-2004 HSMD dtd. 24.03.2005 reg. requests for inspections of shipments of paper waste under OGL

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Copy of:-

No.13-1/2004 HSMD
Govt of India
Ministry of Environment & Forests

Paryavaran B
CCO Complex Lodi Road
New Delhi - 110 003.

Dated: 24th March 2005

OFFICE MEMORANDUM

Subject: Request for inspections of shipments of paper waste under OGL - regarding.

The Ministry of Environment & Forest is receiving several representations from UK Environment Agency and Ministry of Environment, Netherlands regarding the illegal shipment of recovered (waste & scrap) paper or paper board contaminated or mixed with garbage / Municipal Solid Waste to India. This Ministry is frequently in touch with the DGFT as well as with various State Pollution Control Board to investigate specific instances reported.

In this regard it is pointed out that under the EXIM Policy as well as Hazardous Wastes (Managing and Handling) Rules 1989 amended in 2003, import of paper, paperboard and paper product wastes into the country is permitted without any license. However, these should not be contaminated with municipal and other wastes.

Keeping the above in view, the customs authorities are requested to inspect and ensure all that the ports of entry only properly segregated. Paper, paper board and Dark paper product wastes enter the country without being contaminated with municipal waste. This may kindly be brought to the notice of all concerned custom authorities.

Sd/-
(Dr. U. Sridharan)
Additional Director

Annexure XXXIII: OM No. 13-1-2004 HSMD dtd. 23.06.2006 reg. Import of Wastepaper and Clarification

67233/2017/IT

416 443

No. 13-1/2004-HSMD
Government of India
Ministry of Environment & Forests

Paryavaran Bhawan,
CGO Complex, Lodi Road,
New Delhi - 110 003
Dated: February, 2006

OFFICE MEMORANDUM

Subject: ***Import of paper Waste -regarding.***

This refers to this Office OM of even number dated 24th March 2005 for inspection by Custom Authorities to ensure that only properly segregated paper, paper board and paper product wastes enter the country and to the subsequent representation received from the Indian Paper Manufacturers Association dated 20-10-2005 with a request to issue clarification regarding permissible recyclable materials in the imported waste paper consignments.

2. The undersigned is directed to inform all concerned that the matter has been considered and in this connection, the following is agreed to :

(i) Upto 8% by weight of waste paper imported for processing by the paper mills may consist of recyclable materials which are otherwise on Open General License (OGL), and no putrefiable organic matter.

(ii) The maximum 8% content of recyclable materials must be verified by the Customs authorities in respect of each import consignment.

(iii) The importers would have to ensure that all recyclable materials are actually recycled, either by them or by other firms in the business of recycling. There should be no disposal of materials other than by recycling. Further that adherence to this condition would be verified by the concerned State Pollution Control Boards (SPCB) and Pollution Control Committees (PCC) and Ministry of Environment and Forests (MoEF) Regional Offices.

3. All concerned are requested to ensure strict compliance to the above instructions.

(Dr U. Sridharan)
Additional Director

To : **DG (Inspection),** Directorate General of Inspection, Customs and Central Excise, 'D' Shape Building, I.P Estate, New Delhi-110002.

Annexure XXXIV: Advantages of recycling of wastepaper

According to the Bureau of International Recycling, recycling one tonne of paper saves up to:

- 31 trees / 2.5 tonnes of wood logs
- 4,000 kWh of energy
- 26,000 litres of water
- 3.5 cubic metres of landfill space.

Hence, it is desirable to recycle wastepaper than to consume precious raw material of which the country already deficient.

Indicator	Unit	Wood	Agricultural residue	Recovered paper
Energy	KWh/ton of final product	1050-1350	1000-1100	400-800
Share of energy produced by recovery boiler	Percentage	21-60	16-23	NA
Water	M3/ton of final product	30-70	50-80	8-12

Energy and water consumption[23]

Process	Indicator	Unit	Wood	Agricultural residue
Cooking	Silfidity through sodium sulphate and sodium hydroxide	kg/ton of pulp	20-40	25-35
	Uncooked fibre (for recirculation) knots and shives	kg/ton of pulp	04-46	06-22
Bleaching: Chlorine based	Chlorine	kg/ton of pulp	NA. All wood-based plants use elemental chlorine free bleaching	48-53
	Sodium hydroxide	kg/ton of pulp		10-23
	Hydrated lime	kg/ton of pulp		26-30
Bleaching: Elemental chlorine free	Chlorine dioxide	kg/ton of pulp	15-35	15-20
	Hydrogen peroxide	kg/ton of pulp	06-29	05-17
	Oxygen	kg/ton of pulp	5-6	3-5

[23] Resource Efficiency in the Steel and Paper Sectors: Evaluating the Potential for Circular Economy - CII

	Caustic soda (sodium hydroxide)	kg/ton of pulp	10-20	5-10
Recovery boiler	Black liquor generation	m3/ton of pulp	8-12	8-12
	Recovery efficiency	Percentage	96-97	94-96
	Total lime requirement	kg/ton of white liquor	700-1200	700-1200
	Lime from external source	kg/ton of white liquor	16-76	NA. No lime kilns in plants of this category

Chemical consumption (at pulping and bleaching stage) and indicators of chemical recovery (wood and agriculture residue)[24]

Process	Indicator	Range of values
Cooking	Caustic soda (sodium hydroxide)	2 to 8
De-inking/bleaching	Hydrogen peroxide	20 to 30
	Hydro sulphite	4 to 8
	Hydro-bisulphite	25 to 30

Chemicals consumed (recovered paper) (in kg/ton of pulp)[25]

[24] Resource Efficiency in the Steel and Paper Sectors: Evaluating the Potential for Circular Economy - CII
[25] Resource Efficiency in the Steel and Paper Sectors: Evaluating the Potential for Circular Economy - CII

Annexure XXXV: Advantages of Domestic Recycling

Domestic recycling in India has suffered due to many reasons viz. Absence of EPR mechanism, absence of organized vendors, non-availability of segregation facilities to unorganized vendors, non-segregation of Municipal Solid Waste, availability of cheaper imported wastepaper etc. Thus, about 70% domestic wastepaper ends up in the landfills.

There are numerous advantages of domestic recycling:

A. Reduction in environmental load on eco-system –

i. Lesser requirement of land for dumping.
ii. Lowering of formation of greenhouse gases (methane) upon decomposition of cellulose.
iii. Lowering of the requirement of wood based fibre resources for papermaking.
iv. Further, use of recycled fibre in the process leads to lower air emissions and energy use, which again lowers the carbon footprint.

B. Lowering of the import bill for wastepaper –

i. If there is a mechanism to recover wastepaper, there would be a considerable reduction in the import bill which currently stands at 1.3 Billion USD.
ii. Paper consumption is expected to increase in future, this will further increase the import bill.

C. Opportunity for income and employment generation –

i. The process of collection, segregation, sorting, baling and storage of post-consumer paper presents an opportunity for income and employment generation.

Annexure XXXVI: Paper Recycling Process

Manufacturing recycled papers involves a multistage process that starts with the raw material of wastepaper and ends with the final product of a recycled paper.

The steps in Paper Recycling are:

A. Raw Materials, Pulping and Screening

a. Pulping - Sorted wastepaper is dispersed in water in the pulper to separate fibres, ink and other components.

b. Screening - Cyclonic purification allows for complete elimination of all contaminants and non-fibrous materials such as:

i. Minerals
ii. Plastics
iii. Staples
iv. Dirts

In addition, 99% of ink and glue is removed from the pulp during this process whilst preserving cellulose fibre quality.

B. De-Inking And Whitening

c. De-inking - Ink is extracted from the pulp mix through flotation. Air is blown into the bottom of the tank with soap which creates bubbles; the ‘hydrophobic’ ink particles stick to bubbles that float to the surface, the ink is then skimmed from the surface. 90% of the residue produced by this process is put to agricultural use (composting and spreading), or used as a raw material to produce cement and bricks.

d. Whitening - Recycled pulp is produced without the use of chlorine; a Process Chlorine Free (PCF) method. The whitening process uses bio degradable cleaners. Colour is removed from the fibres using sodium hydrosulphate, a reductive bleach. Hydrogen peroxide is used to brighten the fibres and when disposed of it breaks down into water and oxygen.

C. Pulp Preparation And Wet Section

e. Pulp Preparation - If the pulp and paper manufacturing process are split – it is at this stage that the pulp will need to be transported to the paper mill – in this case, pulp is dried and cut into bales. For an ‘in-line’ process, the pulp is cleaned, refined and purified in a 97% water mix containing both long and short cellulose fibres.

f. Wet section - The pulp mix is poured from the ‘head box’ onto a wire mesh - usually made from nylon - called 'the wire'. The fibres mesh together on the wire whilst water is drained to form the sheet. Water is collected, recycled and ultimately treated prior to being returned to the environment.

D. Pulp Transformation And Drying

g. Pulp transformation - As the water drains, the pulp mesh becomes a wet paper base. The paper base is fed into the press section where it is pressed between two absorbent cylinders to extract more water.

h. Drying (first stage) - Most of the remaining moisture in the paper is evaporated in the drying section as it goes through a set of heated cylinders. The now dry paper web is called the base paper.

i. Coating - To improve the surface of the base paper, it receives a coating of ‘size’. The sizing material is fed onto rollers from a vat, the sizing is to reduce the papers moisture absorbency.

j. Drying (second stage) - Having been 'wetted', the base paper goes through another drying stage to eliminate moisture added by the coating.

k. The Jumbo Reel - At the end of the paper machine, paper is wound onto jumbo reels. By using a flying splice arrangement between reels, the machine speed remains constant. Depending on the product and substance, this reel can weigh 15-20 tonnes.

l. Final coating - After quality checks and depending on the required finish, the coating(s) are applied on the coating machine. The coating contains a mixture of mineral pigments, binders (synthetic latex etc.) and colour additives.

This reel is then cut down into smaller reels which can be packaged or further cut down and packaged as sheets.

Annexure XXXVII: Bale break Report Format

Contaminants Only		
Recyclable Material	Weight	**%**
Steel	0.06	0.01%
Aluminium	0.62	0.07%
Glass	0.18	0.02%
Plastic	1.12	0.13%
Total Recyclable	1.98	0.23%
Non-Recyclable Material	Weight	**%**
Plastic Bags	0.72	0.08%
Textile	0.4	0.05%
Food	0	0.00%
Shoes	0	0.00%
Organics	0.02	0.00%
Timber	0.06	0.01%
Nappies	0	0.00%
Other	0	0.00%
Total Waste	1.2	0.14%
	Weight (KG's)	**%**
Total Contaminants	3.18	0.36%
Total Cardboard	8.78	1.00%
Total Paper	868.04	98.64%
Check	**880**	**100.00%**

Annexure XXXVIII Comprehensive Procurement Guidelines for Paper and Paper Products by USEPA

EPA designated the following paper products under the Comprehensive Procurement Guidelines (CPG) program to promote the use of materials recovered from municipal solid waste (MSW). Recycled-content recommendations for each item are listed below.

Printing and Writing Papers

Printing and writing papers comprise one of the largest categories of paper and paper products. Examples include copier paper, stationery, computer printout, offset paper and note pads. Printing and writing paper can be either coated or uncoated.

EPA's Recovered Materials Advisory Notice (RMAN) recommends that procuring agencies establish minimum content standards expressed as a percentage of recovered fibre, including a percentage of postconsumer fibre. For most grades, EPA recommends postconsumer fibre content. Postconsumer fibre does not include newsstand returns or printer's overruns.

Recommended Recovered Fibber Content Levels for Uncoated Printing and Writing Papers[1]

Product	Postconsumer Fibber (%)	Total Recovered Fibber (%)
Reprographic Paper (e.g., mimeo and duplicator paper, high-speed copier paper, and bond paper)	30	30
Offset Paper (e.g., offset printing paper, book paper, and bond paper)	30	30
Tablet Paper (e.g., offset paper such as note pads, stationery, and other writing papers)	30	30

Forms Bond (e.g., forms, computer printout paper, and ledger)	30	30
Envelope Paper Wove Kraft, white, and coloured (including manila) Kraft, unbleached Excludes custom envelopes	30 10-20 10	30 10-20 10
Cotton Fibre Paper (e.g., cotton fiber papers, ledger, stationery and matching envelopes, and other writing papers)	30	30
Text & Cover Paper (e.g., cover stock, book paper, stationery and matching envelopes, and other writing paper)	30	30
Supercalendered	10	10
Machine Finish Groundwood	10	10
Papeteries	30	30
Check Safety Paper	10	10

[1]Most of these items can be made from a variety of printing and writing papers, depending on the performance characteristics of the item. Some of the papers are a commodity-type and some are specialty papers. EPA recommends that procuring agencies determine the performance characteristics required of the paper prior to establishing minimum content standards. Bond, ledger or stationery made from cotton fiber paper or a text & cover paper, for example, have different characteristics than similar items made from commodity papers.

Recommended Recovered Fiber Content Levels for Coated Printing and Writing Papers

Product	Postconsumer Fiber (%):	Recovered Fiber (%):
Coated Printing Paper	10	10
Carbonless	30	30

Recommended Recovered Fiber Content Levels for Bristols

Product	Postconsumer Fiber (%)	Total Recovered Fiber (%)
File Folders (manila and colored)	30	30
Dyed Filing Products	20	20-50
Cards (index, postal, and other, including index sheets)	20	50
Pressboard Report Covers and Binders	20	50
Tags and Tickets	20	50

Annexure XXXIX EWG Interaction with Stakeholders

EWG had interaction with different stakeholders in Paper Industry such as Central Pulp & Paper Research Institute (CPPRI), Paper Associations Viz. Indian Paper Manufacturing Association (IPMA), Indian Agro & Recycled Paper Mills Association (IARPMA), Indian Newsprint Manufacturers Association (INMA), Gujarat Paper Mills Association (GPMA), Paper Mills from Maharashtra, Gujarat and North India, Wastepaper Traders, Aggregators and Indenters on different occasions. The meetings were held on Virtual Conferencing due to limitations set by Covid-19. Also, Field staff visited four different paper mills in Maharashtra. The detail of meetings and field visit is shown in table below:

Sr. No	Date	Meeting Details
1	03/09/2020	Meeting with Paper Mills Associations Viz. IPMA, IARPMA, INMA, GPMA
2	03/09/2020	Meeting with Wastepaper Trader
3	15/09/2020	Meeting with Paper Mills Associations Viz. IPMA, IARPMA, INMA
4	23/09/2020	Meeting with Paper Mills from Maharashtra
5	30/09/2020	Meeting with Paper Mills from Gujarat and Maharashtra
6	01/10/2020	Visit to four different Paper Mills
7	03/10/2020	Meeting with Gujarat Paper Mills Association
8	06/10/2020	Meeting with Paper Mills from North India
9	09/10/2020	Meeting with Indenters
10	15/10/2020	Meeting with Paper Mills Associations Viz. IPMA, IARPMA, INMA
11	02/11/2020	Meeting with Paper Waste Aggregator & Baler
12	12/11/2020	Meeting with CPPRI Director and Senior Scientist

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