

### WEST COAST PAPER MILLS LTD.,

Registered & Works Office: Post Box No. 5, Bangur Nagar, Dandeli-581 325 Dist Uttar Kannada (Karnataka) - India





ZZP/CLAB-KSPCB/17/1612 26-09-2022

Environmental Officer, Karnataka State Pollution Control Board, Regional Office, "Parisara Bhavan", LIG-11b – 217, Near Hari Om Trust, Habbuwada - KARWAR. SPEED POST WITH AD

Dear Sir,

Sub: Environmental Audit statement for the year ending 31st March, 2022.

We are forwarding here with the Environmental Audit statement of our mills in prescribed format –"Form V" for the financial year ending 31st March, 2022.

We trust you will find the same in order.

Thanking You,

Very truly yours,
For, WEST COAST PAPER MILLS LTD

Anuj Kumar Tayal Senior Vice President (Technical)

Encl: As above

Cc: Member Secretary,

Karnataka State Pollution Control Board, 49, Parisara Bhavan, 4th & 5th floor, Church Street, Bangalore - 560 001. SPEED POST WITH AD



Corporate Office: 31, Chowringhee Road, Kolkata - 700 016 Phone: (033) 2265 6271-78 (8 lines), Fax: (033) 2226 5242,

Email: wcpm.sale@westcoastpaper.com

#### **ANNEXURE**

### **ENVIRONMENTAL STATEMENT FORM-V**

(See rule 14)

# ENVIRONMENTAL STATEMENT FOR FINANCIAL YEAR ENDING 31<sup>ST</sup> MARCH - 2022

PART-A

1.	Name and Address of the Owner/Occupier of the Industry / Operation or Process	Shri Rajendra Jain, Executive Director, West Coast Paper Mills Ltd., Bangur Nagar, Dandeli.	
2.	Industry Category Primary- (STC Code) Secondary- (STC Code)	-	
3.	Production Capacity	3,20,000 MT/A	
4.	Year of Establishment	1955	
5.	Date of the last Environmental Statement submitted	25-09-2021	

#### PART -B

7715	Water and Raw Material Consumption					
(I)	Water consumption, m3/d					
1	Process Water	47,283 M³/ Day				
2	Domestic Water	6152 M³/ Day				

Products	Process Water Consumption per unit of Products				
	During the previous financial year (Excluding domestic water)	During the current financial year (Excluding domestic water)			
	2020-2021	2021-2022			
Paper, Paper Boards & Duplex Boards	64 m <sup>3</sup> /T of product	58 m <sup>3</sup> /T of product			

Remarks: Due to COVID -19 pandemic in 2020-21 most of the time plant was running very low capacity.

### (II) Production Details:

SI.	Products		2020-2021	2021-2022	
		UoM	Quantity / Month	Quantity / Month	
1	Total Paper Production	MT	19,085	24,732	
а	Writing and Printing	MT	15,659	20,659	
b	Duplex Board	MT	3,426	4,074	
2	Pulp Production	BDMT	14,043	19,187	

# (III) Raw Material Consumption: 1. Raw Materials

Name of Raw materials	Name of product	Units	Consumption of Raw Material per ton	
			2020-2021	2021-2022
Wood	Danes Danes	MT/T Paper	3.15	3.39
Imported Pulp	Paper, Paper Boards & Duplex Boards	MT/T Paper	0.04	0.01
Waste Paper		MT/T Paper	0.08	0.04

#### 2. Chemicals

Name of Chemicals	Name of	Units	Consumption of Raw Material per ton		
Name of Chemicals	Product	Offics	2020-2021	2021-2022	
Caustic Soda		Kgs/T Pulp	29.87	29.62	
Salt Cake		Kgs/T Pulp	21.88	19.91	
Lime		Kgs/T Pulp	426.13	452.61	
Chlorine		Kgs/T Pulp	8.73	8.53	
Sulphuric Acid		Kgs/T Pulp	4.95	5.52	
Hydrochloric Acid	Paper, Paper	Kgs/T Pulp	25.83	18.94	
Hydrogen Peroxide	Boards &	Kgs/T Pulp	14.47	13.08	
PAC	Duplex Boards	Kgs/T Paper	16.71	17.77	
Sizing Solution		Kgs/T Paper	13.57	14.11	
Talcum Powder/PCC/ GCC		Kgs/T Paper	160.71	159.73	
Starch		Kgs/T Paper	32.95	33.63	
Optical Whitening Agent		Kgs/T Paper	3.94	3.23	
Dyes		Kgs/T Paper	0.15	0.14	

PART-C
Pollution Discharged to Environment / Unit of Output

(Parameter as specified in the Consent issued)

#### (a) Water

SI.	Pollutants	Qty as per Consent	Pollutants Discharged		Percentages of variation from prescribed
No.	(as specified in consent issued)	Kgs / day	mg/litre	Kgs / day	standards with reasons
1	BOD <sub>3</sub> at 20°C	2,577	24	977	
2	COD	21,471	210	8,630	
3	Suspended Solids	4,294	28	1,149	No variation as all the pollutants discharged are
4	Oil & Grease	859	Nil	Nil	
5	Chloride [as Cl]	30,060	201	8,265	
6	Sulphate [as SO <sub>4</sub> ]	85,885	77	3,157	
7	Sulphide [as S]	172	Nil	Nil	
8	Total Residual Chlorine	86	Nil	Nil	well within prescribed
9	Ammonical Nitrogen [as N]	4,294	Nil	Nil	Standards.
10	Total Kjeldahl Nitrogen [as N]	8,589	1.8	74	
11	Free Ammonia [ as NH <sub>3</sub> ]	429	Nil	Nil	
12	Dissolved Phosphate [as P]	429	Nil	Nil	
13	Dissolved Solids [inorganic]	1,80,359	823	33,752	
14	AOX	<1 kg/T of paper	ND*		

\* ND - Not Detectable

Note: WQMS Effluent data monitoring system for the parameters TSS, BOD, COD, pH & Flow, is connected to Online CPCB / KSPCB servers.

(b) AIR

Stacks attached to (as specified in Consent issued)	Pollutant as per Consent	Pollutant Quantity as per Consent Kgs / day	Pollutants Discharged		Percentages of variation from prescribed		
			Concentration	Achieved	standards with reasons		
ROPE THE SEC			mg / Nm³	Kgs / day			
C R Boiler-1	PM	450	67	183	No deviation as al		
C K Boller-1	H <sub>2</sub> S	30	0.96	2.64			
C R Boiler-2	PM	813	78	301			
C K Boller-2	H <sub>2</sub> S	54	0.89	3.42			
Rotary Lime Kiln -1	PM	72	58	22	within prescribed		
Rotary Lime Kiln -2	PM	143	67	34	limit due to		
FBC Boiler -1	PM	331	76	133	efficient running of		
FBC Boiler -2	PM	446	82	193	ESP attached.		
FBC Boiler -3	PM	499	68	189	The first of the second		
FBC Boiler -4	PM	519	76	230	1		

Note: 1. FBC Boiler No 1 & 2 are standby boiler and operated whenever required.

2. All the above stacks are having real time online emission monitoring equipment's and are connected to CPCB / KSPCB servers.

#### PART-D HAZARDOUS WASTES:

(AS SPECIFIED UNDER HAZARDOUS WASTES MANAGEMENT, HANDLING & TRANSBOUNDARY MOVEMENTS RULES, 2016.)

**HAZARDOUS WASTE REPORT 2021-2022** 

PART - F

PLEASE SPECIFY THE CHARACTERISTICS (IN TERMS OF CONCENTRATION AND QUANTUM) OF HAZARDOUS AS WELL AS SOLID WASTES AND INDICATE DISPOSAL PRACTICE ADOPTED FOR BOTH THESE CATEGORIES OF WASTES.

Hazardous & Solid Wastes with per day generation quantity, characteristics & disposal practice 2021-2022

SI.	DESCRIPTION	Qty per Day 2021-22	Characteristics	DISPOSAL PRACTICE		
Α	Hazardous Wastes					
1	Wastes Residues containing Oil	0.001 MT/Day	Oil-Soaked Cotton Waste	Burnt in Boilers		
2	Used Spent Oil	0.03 KL/Day	Used Machine Oil	Authorized Recyclers M/s Shantadurga Petrochem, Khanapur and Special Oils Kuruvinkoppa, Post B Gudihal- 531204 kalaghatagi Taluk)		
3	Metal and Metal Alloy Wastes in Metallic Non Dispersible Form	0.05 MT/Day	Metals and Non Metals	Authorized Recyclers Jayvel Enterprises Plot No 26A KIADB Malur Industrial area Malur.		
4	Empty Barrels /Containers /Liners	0.17 MT/Day	Plastic Barrels	Authorized Recyclers Indian Enterprises Plot No 13.  1st cross Tubinkere Industrial area Mandya Taluk		
В	Solid Wastes					
1	Dry Sludge from ETP Plant	35.57 MT/Day	Fiber 55% Ash 45%	Being given to Board/Egg Tray manufacturer.		
2	Fly Ash & Bottom Ash from Power Plant	205.91 MT/Day	Silica, Al <sub>2</sub> O <sub>3</sub> , Fe <sub>2</sub> O <sub>3</sub> etc.	Fly ash along with Bottom ash is given to bricks manufacturers & some part of fly ash is being given to Cement Mfrs.		

#### PART- G

IMPACT OF THE POLLUTION CONTROL MEASURES TAKEN ON CONSERVATION OF NATURAL RESOURCES AND CONSEQUENTLY ON THE COST OF REDUCTION IN POWER, STEAM, AND WATER ON SPECIFIC CONSUMPTION.

Resources	% decrease
POWER CONSUMPTION	4.20
STEAM CONSUMTION	8.40
WATER CONSUMPTION in process, Colony supply & supply to the downstream villages.	10.77

PART - H

# ADDITIONAL MEASURES/INVESTMENT PROPOSAL FOR ENVIRONMENTAL PROTECTION INCLUDING ABATEMENT OF POLLUTION.

### ADDITIONAL MEASURES /INVESTMENT PROPOSED FOR WATER SAVING.

SL	SCHEMES DETAILS		INVESTMENT
МО		M3/DAY	Rs. Lakhs
1	Paper machine No 1 excess machine back water filter through vibro screen and use for Talcum preparation	200	10
2	Paper machine No 2 excess machine back water filter through vibro screen and use for Talcum preparation	150	8
3	For dyes on line dilution for PM#2 machine back water line arrangement made to use back water in place of fresh water	100	2
4	Paper machine no2 high pressure water line and low pressure line separated to avoid mixing of high pressure water	200	3
5	VFD for water supply pump to Paper machine No6 &fiber line.	200	8
6	Fixing of LT &Control valve to paper machine No1 save all pit	100	5
7	Stock preparation SP3 couch pit thickener shower holes modification with nozzle type to save water	50	3
8	Heat exchanger to provide for FFE condensate &use cooled water for New CD filter pump sealing	350	25
9	Paper machine No#6 finishing house pulper is provided with machine back water to use in place of fresh water	200	8
10	Paper machine No#6 cooling tower over flow stopped by installing control valve and LT	150	6
	Total Fresh Water Saving M <sup>3</sup> /Day	1700	78

#### PART - I

## Any other particulars in respect of environmental protection and abatement of pollution.

# IMPLEMENTATION OF VARIOUS IN PLANT MEASURES FOR ENVIRONMENTAL PROTECTION INCLUDING ABATEMENT OF POLLUTION:

- All 6 nos of Pulp Washing hydraulic presses cooling water has been collected in a tank and pumped back to filter house for reuse.
- 2. Machine No. 4 back water collection and reuse in pulp mill for pulp dilution.
- 3. Paper machine No3 mark save all water to reuse for pulp dilution in pulp mill.
- Replacement of sealing make up mill water with used water i.e. with ENMAS Boiler ID fan-A hydraulic coupling oil heat exchanger outlet water.
- 5. Collection and recirculation of pump sealing water at BHEL Recovery Boiler.
- Fresh water conservation of ENMAS, Boiler pumps and ID fan fluid coupling cooling water.
- All condensate lines diverted from old condensate tank to new condensate tank and existing MS lines replaced by SS lines.
- System implemented to supply excess back water to Pulp Mill from Paper machine No6.
- Reduction of makeup water consumption for FFE-I water conservation system by diverting RLK-I idler cooling water to water conservation pit.
- 10. Recycling of FFE-II vacuum pump sealing water.
- 11. Conservation of fresh water by utilizing Evaporator condensate.
- 12. Strengthening / modification of FFE-I existing water conservation system by installing a new 5m3 cap tank on ground floor, providing LT and LCV to tank to avoid wastage of water.
- 13. Replacement of pumps at pump house by energy efficient pumps.
- 14. Replacement of pumps at filter house by energy efficient pumps with VFD driven energy saving as well as water saving motor against old inefficient pumps.
- 15. Replacement of underground old corroded water pipe line with new pipe line from Filter house to Jack well over header.
- 16. Replacement of water header at filter house from underground to overhead.
- 17. Strengthening of FFE-II existing water conservation system to further reduce water consumption by providing LT to water collection pit and level control valve to make up water line.
- 18. Modification of steam and condensate system of Air Pre-heater in Enmas Boiler to achieve reduction in steam consumption.

- 19. Replacement of colony pumps at filter house by energy efficient pumps against old energy inefficient pumps.
- 20. Providing conductivity sensor along with drain valve and drain pipe to FFE 1 water outlet pipe to mist cooling tower.
- 21. Usage of super clear water for Vacuum sealing instead of fresh water in paper machine No4&5.
- 22. New type Forbes Marshal rotary joints.
- 23. Additional pulps wash presses in Pulp Mill.
- 24. Hot liquor accumulator for steam & process balancing.
- 25. Installation of EDI mini panel diffusers in aeration tank.
- 26. Revamping of both the ESPs of 1100 TPD Recovery Boiler.
- 27. Installation of energy efficient motors 106 Nos.
- 28. PM-2 Steam & condensate system modification.

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Date

: 26-09-2022

Signature

Name

: Anuj Kumar Tayal

Designation

: Senior Vice President (Technical)

Address

: West Coast Paper Mills Ltd.,

Bangur Nagar, Dandeli- 581325.