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JKPW/ CTS /08.04D / 56 /2019

September 27, 2019

The Member Secretary  
Odisha Pollution Control Board  
Paribesh Bhavan, A/118, Neelkanthnagar ,  
Unit VIII, Bhubaneswar-751012

Sub: Environmental Statement for the year 2018 - 19

Dear Sir,

As per Environment Protection Rules, 1986, Rule 14, we are herewith sending the Environmental Statement for the year 2018 – 19 (April – March) in form V.

Thanking you.

Yours faithfully,  
For J K Paper Limited



Executive Vice President (Works)

Encl: As Above

CT:

1. Regional Officer, OPCB, Kasturi Nagar, Rayagada, Odisha
2. Director (S), Ministry of Environment & Forests, Eastern Regional Office, A-3, Chandrasekharapur, Bhubaneswar-23
3. Mr. Priyadarsini Mohapatra, Sr.General Manager (PR), Bhubaneswar
4. Mr. R. Hebbar, General Manager (Development), New Delhi

**(Form-V)**  
**Environmental Statement**  
**Part-A**

1	Name and Address of the owner/occupier of the industry, operation or process	Shri P. K. Suri Executive Vice President (Works) J K Paper Limited, Unit: JK Paper Mills, Jaykaypur, Rayagada. Odisha
2	Industry Category Primary – (STC Code) Secondary –(SIC Code)	
3	Production Capacity	3,20,000 MTA (Paper +Salable Pulp)
4	Year of Establishment	1962
5	Date of the last environmental Statement submitted	September 25, 2018

**Part-B**  
**Water and Raw material Consumption**

1. Water consumption M<sup>3</sup>/d

Process and Boiler Feed	29237
Domestic	3454

Name of the Products	Water consumption (Process + Boiler feed) per unit of products (M3/T)	
	During the previous financial year (April'17 to March'18)	During the current financial year (April'18 to March'19)
Writing, Printing, MG, MF Paper & Boards and P D sheets	36.15	34.65

2. Raw material Consumption

Name of the raw material	Name of the Products	Consumption of raw material Kgs per ton of nominal finished product / Pulp)	
		During the previous financial year (17-18)	During the current financial year (18-19)
Bamboo	Writing, Printing, MF Paper & Boards & P D sheets	46 Kg/T of Pulp	46 Kg/T of Pulp
Hard wood		2700 Kg/T of Pulp	2676 Kg/T of Pulp
Imported Pulp		1.94 Kg/T of Paper	0.50 Kg/T of Paper
Lime		455.87 Kg/T of Pulp	426.18 Kg/T of Pulp
Caustic lye		68.09 Kg/T of Pulp	29.74 Kg/T of Pulp
Liquid chlorine		12.82 Kg/T of Pulp	12.91 Kg/T of Pulp
Sodium Sulphate		11.59 Kg/T of Pulp	6.13 Kg/T of Pulp
Hydrogen peroxide		10.60 Kg/T of Pulp	6.82 Kg/T of Pulp
HCl Acid		12.67 Kg/T of Pulp	2.01 Kg/T of Pulp
Alum		0.020 Kg/T of Paper	0.050 Kg/T of Paper



**Gen. Manager (EHS)**

ASA & AKD sizing chemical	Package Deal	Package Deal
Ground calcium Carbonate/PCC	203.64 Kg/T of Paper	204.226 Kg/T of Paper
SS Powder	-	-
Soda ash	-	-
Starch	45.60 Kg/T of Paper	43.88 Kg/T of Paper
Titanium Dioxide	-	-
Dyes and Whitening agent	2.751 Kg/T of Paper	2.085 Kg/T of Paper
Coal	631.84 Kg/T of Paper	561.40 Kg/T of Paper
Furnace oil	0.825 Ltr/T of Pulp	1.920 Ltr/T of Pulp

Note: Financial year is April'18 to March'19

### Part-C

#### Pollution Generated (Parameters as specified in the consent issued)

Pollutants	Quantity of pollution generated	Concentration of pollutants generated	% of variation from prescribed standards with reasons
a. Water	Total Effluent per day: 25,283 M <sup>3</sup> /Day		Installed E T Plant operated continuously under strict supervision
Suspended Solids	0.655 (kg / T)	22.8 ( mg/l)	54.4 % better than norm
BOD	0.431 (kg / T)	15.01 ( mg/l)	49.96 % better than norm
COD	4.56 (kg / T)	158.7 ( mg/l)	54.65 % better than norm
AOX	0.119 (kg / T)	3.95 (mg/l)	88.1 % better than norm
pH	-	7.34	-
b. Air-Stack			Installed ESPs of each boilers operated continuously under strict supervision
Particulate Matter	16.15 Kgs / Hr	35.71 Mg/NM <sup>3</sup>	28.58 % better than norm
H <sub>2</sub> S	0.141 Kgs /Hr	5.13 Mg/NM <sup>3</sup>	48.7 % better than norm

**Gen. Manager (EHS)**

**Part-D  
Hazardous wastes**

**(As specified hazardous wastes (Management and Handling) rules, 1989 and thereby amended in 2000**

Hazardous wastes	Total quantity	
	During the previous financial year	During the current financial year
A. From Process: Used oil (litres)	10080 Ltrs	31500 Ltrs
Used Lead cell (No) (Batteries)	212 Nos.	112 Nos.
B. From pollution control facilities	Nil	Nil

**Part-E  
Solid Wastes**

	Total quantity (MT)	
	During the previous financial year (2017-18)	During the current financial year (2018-19)
A. From Process		
1. Bamboo and Hard wood dust(gross)	23705	22334
2. Fly ash	65985	51772
3. Lime sludge on o d basis	6090	7416
4. Slacker Sludge as such	4314	4371
5. NFL rejects as such	7021	5630
B. From pollution control facilities (Effluent Sludge)	7500	7500
C. Quantity recycled or re-utilized (Bamboo and Hard wood dust in boilers)	23705	22334

**Gen. Manager (EHS)**

## 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.)

Name of solid wastes	Characteristics	Method of collection	Method of disposal
<b>a. Hazardous waste</b> Used Oil	Oil Emulsion	Collected in leak proof containers	Sold to authorized parties
Used Batteries	Pb Compounds	Collected as such	Buy back system from authorized parties
<b>Other Solid Wastes</b>	<b>Characteristics</b>	<b>Method of collection</b>	<b>Method of disposal</b>
Bamboo and Hard wood dust	Organic%- 96 - 97 Inorganic%- 3 - 4	Removed from chipper screens and collected by the tractors/ trolley/trucks	Used as fuel in boilers
Fly ash	SiO <sub>2</sub> - 58-62 % R <sub>2</sub> O <sub>3</sub> - 2.5-3.0 % Un burnt Carbon% - 1.5 – 1.9	Collected directly by the trucks	100% used for Fly Ash Brick Manufacturing
Effluent sludge	Organic%- 50-55 Inorganic%-45-50 Moisture %- 62-66	Collected by the tractors/ trucks	Used for card board / low grade pulp sheet by the external agencies
Lime sludge	Alkaline (Alkali as Na <sub>2</sub> O) 0.48 %	Collected directly by the trucks / dumpers	Processed through Lime Kiln Plant for reburn to generate Lime. And few quantity is being used for Land filling in designated -Low laying areas

## Part-G

(Impact of pollution control measures on conservation of natural resources and consequently on the cost of production.)

Consumption of steam, power, and water has been reduced and maintained through process improvements, awareness program and Internal Environmental Auditing (ISO 14001).

  
**Gen. Manager (EHS)**

## Part-H

(Additional measures/investment proposal for environmental protection including abatement of Pollution.)

- Implementation of different water conservation schemes for further reduction of Fresh water consumption.
- Implementation of different Power and steam conservation schemes for further reduction of Power and steam consumption.
- Installation of Methanol Plant to reduce smell
- Installation of 3.4 MW TG to utilize excess steam.
- Install 8 nos. of Rain water Harvesting recharge wells inside factory premises

## Part-I

### Miscellaneous

(Any other particulate in respect of environmental protection and abatement of pollution.)

The following measures were taken for environmental protection and abatement of pollution.

- Installed dust extraction system at lime handling area of our new plant
- Installed dust extraction system at coal handling area of our new plant.
- Fly ash brick making 100 % of ash generated
- Black liquor heat recovery – steam generation 60 –65%
- Double stage oxygen delignification in Pulp mill has been commissioned in our new plant
- Elementary chlorine free bleaching process has been commissioned in our new pulp mill
- Scrubber system in pulp mill to reduce the gas pollution
- Burning of wood and bamboo dust in coal fired boilers
- Increase the waste oil recovery, which is generated due to maintenance of equipments and machineries
- Raw materials from natural forest to man made forest
- More initiatives for energy and water conservation through cost compression cell and environment management team as per ISO -14001
- Augmented our ETP by incorporating one Primary Clariflocculator, Diffused Aeration Basin, New Secondary clarifier, Sludge thickener and centrifuge.
- New Lime Kiln Plant of 300 TPD capacity has been commissioned by phasing out old Lime Kiln Plant of capacity 160 TPD which was commissioned in 2009.
- Chips washing system is in continuous operation since 2009 for resource conservation
- We have adopted rainwater harvesting of rooftop inside factory premises.
- We have adopted high efficient & latest technology of ESP's for our new coal fired boiler and new Liquor fired Boiler.
- Use of solar energy for our colony street light.
- Installed Scientific land fill for disposal of Hazardous Waste.
- A part of treated effluent has been diverted for our plantation, sprinkling, gardening purpose
- Sewage Treatment Plant for colony is installed and commissioned



**Gen. Manager (EHS)**