

### Form-V

Environmental Statement for the financial year ending 31<sup>st</sup> March, 2023

#### Part-A

- |   |  |
|---|--|
| 1. Name and address of the owner/occupier of the industry, operation or process | Mr. Hardev Singh, Director (Technical)<br>Satia Industries Ltd, Rupana |
| 2. Industry category Primary<br>(STD code Secondary SIC code):-                 | Red  |
| 3. Production capacity  | 214800 MT  |
| 4. Year of establishment  | 1984   |
| 5. Date of the Last environmental statement Submitted                           |  |

#### PART-B

##### Water and Raw Material Consumption

(1) Water Consumption (m<sup>3</sup> per annum)

Process: - 6682419

Cooling: - 705366

Domestic: - 37124

Name of product	Water consumption per unit of product (m3)
Writing and printing paper	35.37

##### Raw material consumption

Sr. No.	Name of raw material	Name of product	Consumption of raw material per unit of output
1.	Wheat straw	Writing and printing paper	1.10
2.	Bagasse		NA
3.	Wood pulp		0.80
4.	Imported waste paper		NA

Part-C

Pollution discharged to environment/Unit of output

Sr. No.	Pollutants	Qty. of pollutants discharged	Concentration of pollutants in discharge	Percentage of variation from prescribed stand. With reasons.
a. Water	Effluent Volume	17558 M3/day		
	TSS	526 Kg/Day	30 PPM	
	BOD	438 Kg/Day	25 PPM	
	COD	4040 Kg/Day	220 PPM	
b. Air				
Soda recovery(75TPH)	SPM	82 Kg/Day	34 PPM	
Power Boiler (50TPH)	SPM	59 Kg/Day	41 PPM	
Power Boiler (75 TPH)	SPM	91 Kg/Day	38 PPM	
Power Boiler (75 TPH)	SPM	91 Kg/Day	38 PPM	

Part-D

Hazardous waste

Hazardous Waste/water	Particulars	Total Qty (MT)
ETP Sludge	Solids	4156

Part-E

Solid waste

Sr. No.		Qty (MT)
1.	Ash from rice husk fired boiler	41610 TPD
2.	Lime sludge	80300 TPD

Part-F

Sr. No.	Physical state	Composition	Qty produced per Annum (MT)	Disposal practice
1.	Boiler ash	Mainly Silica	41610	Land filling & sent to Brick Manufacturers
2.	ETP sludge	Fines & fibers	4156	Sold to board Mill for board making
5.	Lime Sludge	Mainly CaCo3	80300	Land filling & sent to Ultratech Cement Ltd

#### Part-G

Pollution control cost Rs.: Say Approx. Rs. 1300-1500 per ton of finished paper.

#### Part-H

M/s Satia industries does not allow black liquor to discharge in ETP. The entire quantity of weak black liquor is processed through MEE to make concentrate here, then it is fired in Recovery Boiler and inorganic part Sodium Carbonate is reacted with Calcium Hydroxide to convert white liquor (mainly Sodium Hydroxide) and this White Liquor reused in digester for Raw materials cooking.

#### Part-I

1. SIL has already employed Oxygen delignification and Chlorine dioxide bleaching to eliminate elemental chlorine bleaching, i.e., the purpose of introducing Elemental Chlorine Free Bleaching (ECF Bleaching with DCS control system) in the process is to reduce pollution load as well as AOX level. Current bleaching Sequence is ODL, D0, (EOP) D1 to make brown pulp into white up to desired level of brightness. The company has improved the washing of unbleached pulp by using ODL followed by Twin Roll Press Technology.
2. Anaerobic treatment plant is running successfully and treating wet wash water of raw materials cleaning and has 2 No. of UASB digesters. Anaerobic treated effluent is passed through tube settler goes to HRSCC (High Rate Solid Contact Clarifier) where the anaerobic culture & TSS is settled, then goes to primary aeration system (zero stage) with Activated Sludge recirculation process where the high Air transfer efficient Jet Aerators are provided to further control pollution load on combined treatment plant.
3. The pulp mill bleach influent and treated water from anaerobic system is mixed together in equalization tank, pumped in to primary clarifier then to aeration tank No. 1 having 1380 diffusers, after this the effluent pass through the aeration tank No. 2 where the 1400 diffusers are provided. Both the aeration system is running Activated sludge recirculation with high capacity & high Air transfer efficiency Turboxy Blowers.
4. SIL has developed Plantation area of 596 acres to maintain green belt and to consume mill treated effluent.
5. Online SPM monitoring system is installed in 2 no. of Biomass based power boiler and Chemical Recovery Boiler and the systems are working satisfactorily.
6. CCTV is installed at ETP and Boiler stacks.
7. Decanter, Sludge presses for sludge removal are running successfully.
8. On-line monitoring system is installed at ETP final discharge for continuous monitoring of various parameters.