

27th July, 2021

To,

The Environmental Engineer,

Andhra Pradesh Pollution Control Board,

Regional Office,

Anantapuram, A.P

Dear Sir,

Please find the enclosed "ENVIRONMENTAL STATEMENT" for the year 2020-2021.

Please acknowledge the receipt for the same.

Thanking you,
Yours sincerely,
For **BERGER PAINTS INDIA LTD** 

**Venkata Apparao. D** Factory Manager ANANTAPURAM GO OF DE LA POLISO DELLA POLISO DELLA POLISO DE LA POLISO DE LA POLISO DE LA POLISO DELLA POLISO

Encl: Environmental Statement 2020-21

#### BERGER PAINTS INDIA LIMITED

#### PART - A

(i) Name and address of the Occupier of the industry

Shri Abhijit Roy

**Managing Director** 

M/s Berger Paints India Ltd

**Operation or Process** 

Paint manufacturing

(ii) Industry Category

Primary SIC Code – 2800

Secondary SIC Code – 2850

(iii) Annual Production Capacity

Water based Emulsion Paints

907 **KLD** 

Water based Distemper Paints

160 MTPD

(iv) Year of Establishment

26.12.2013

(v) Date of the last Environmental Statement submitted

22.09.2020

#### PART B

#### **Water and Raw Material Consumption**

#### i. Water Consumption

Description	Qty As per CFO	Qty Actual Consumed
Process water	320 m3 / D	73.42 m3/D
Cooling tower make up	1 m3 / D	0.98 m3/D
Plant & Process wash, QC	2 m3 / D	1.86 m3/D
Fire fighting make up	1 m3 / D	0.95 m3/D
Domestic	7 m3 / D	6.86 m3/D
Gardening	7 m3 / D	6.8 m3/D



Name of the recoduct	Process water consumption	on (m <sup>3</sup> / KL of Production)
Name of the product	FY 19 -20	FY 20-21
Paints	0.55	0.443

Note:

ii. Raw Material consumption

Annexure I [Page 6]

#### PART C

Pollution Discharged to the Environment per unit of Output (Parameters as specified in the consent issued)

#### **Pollutants**

a. Water

b. Air

Annexure II [page 7]
Annexure III [page 8]

#### PART - D

Hazardous Wastes
(As specified under Hazardous Waste (Management and Handling) Rules, 1989 and list amendments

Presented as **Annexure IV** [page 9]

there of)

#### PART - E

**Solid Wastes** 

Presented as Annexure V [page 10]



#### **PART F**

Please specify the characterisation (in terms of composition and quantum) of Hazardous as well as solid waste and indicate disposal practice adopted for both these categories of waste.

Presented as **Annexure VI** [page 11]

#### PART-G

### IMPACT OF POLLUTION ABATEMENT MEASURES TAKEN ON CONSERVATION OF NATURAL RESOURCES AND ON THE COST OF PRODUCTION

#### A. Impact of Pollution Abatement on Conservation.

#### a. Cleaner Effluent

Effluent is generated only during cleaning operations. Proper production planning, using jet pumps for cleaning the vessels will sufficiently reduce the consumption of fresh water. The effluents are treated and the treated effluents will be used for, toilet flushing, floor washing, ETP chemical preparation etc. Reuse of treated effluent reduces the consumption of fresh water.

#### b. Effective Dust Control:

The dust is only generated during charging and transferring of powder raw material. The same has been effectively controlled with pneumatic charging system. Dust collector devices are installed were ever it is needed. This helps in maintaining good ambient air quality.

Charging to processing is a closed loop system through pneumatic conveying pipelines & equipments, More over bag filters are fitted with pulse jet bag filter 20000m3/hr.

Fugitive emission generated during charging powder to equipment is captured by a suction hood A 30 height stack is attached to it with ID fan

#### c. Natural resources conservation

Several initiatives are undertaken to reduce water, power and fuel consumption.

Water Conservation: Rain water harvesting pits for ground water recharging have also been implemented. Reuse of ETP treated water for toilet flushing. Sequencing of batches to minimize equipment washings.

Energy conservation: LED, Low capacity air compressor with auto shut off valves for filling machines.

#### d. Reduction in noise pollution

Acoustic enclosure has been provided for Diesel Generators and for compressors which has resulted in reduction in noise pollution.

#### B. Impacts of Pollution Abatement on the cost of production

The expenses on the pollution abatement increased the cost of production Rs 40 per ton or KL of production.



#### PART H

Additional measures/investment proposal for environmental protection including abatement of pollution, prevention of pollution

The focus on Environmental Management system forms a part of our "Manufacturing Excellence" which aims at "Zero Waste" generation. The company is determined to improve manufacturing discipline, implementing quality system of international standards, excellent housekeeping and preventive maintenance is implicit therein. Making the workplace environmental friendly and safe. The company is producing environment - friendly water based paints only which are free from Heavy metals (lead free)

Given below are some of the proposed and Implemented initiatives for environmental protection.

- Provision for receipt of powder Raw material in bulker and loading into silo system work under progress. This will reduce dust generation levels to greater extent.
- Disposal of raw material covers in a closed bags in order to reduce the spillage.
- Installation of Breather valve to all the solvent storage tanks.
- Water conservation initiative started.
- Optimized operation of Bulk energy consuming devices such as TSD's, Mixers by installating Timers.



#### **PARTI**

### Any other particulars for improving the quality of the environment

- 1. 100 % Reuse of the Wash Water generated in the Process, thereby reducing the effluent generation.
- 2. Sludge drying bed of ETP,
- 3. Saplings were planted on continual basis.
- 4. Floor cleaning machines in Production floor.
- 5. Installation of Oil seal to prevent leakages from TSD slurry transfer screw pumps.
- 6. Installed Solar panels as an alternate source of electricity. 990 KW capacity Solar panel was installed.
- 7. Battery operated fork lift in production to control emissions of fossil fuel burning.

Signature		
Name	Venkata Apparao D	
Designation	Factory Manager	
Address	Berger Paints India Ltd	
Date	26.07.2021	



#### Annexure I

### **Raw Material Consumption**

S.No	Name of the Raw material	Name of product	Consumption of Raw material per unit of Output (MT/ MT of Production)		
		t	19-20	20-21	
1	Pigment	Emulsion Paints	0.0827	0.129	
2	Extenders	Emulsion Paints	0.357	0.458	
3	Additives	Emulsion Paints	0.049	0.06	
4	Solvents	Emulsion Paints	0.0129	0.0132	
5	Resins	Emulsion Paints	0.224	0.26	
6	Chemicals	Emulsion Paints	0.00193	0.00187	



### Annexure II Water Pollutants

S.No	Parameter	Quantum of pollutants discharged (kg/per day)	Conc. of pollutants in discharges (mg/Lit)	Percentage of variation from prescribed standards	Reasons
1	рН	7.48	7.48	NA	
2	Suspended solids	0.35	22	-78	
3	BOD <sub>3</sub> at 27°C	0.17	14.4	-71.2	
4	Phenolic Compounds	#VALUE!	<0.001	#VALUE!	- ve sign indicates
- 5	Oil & Grease	0.0473	3	-70	the performance
6	Bio Assay	#VALUE!	90% survival	NA	is much better
7	Lead as Pb	#VALUE!	< 0.005	-95	than the
8	Chromium (VI)	#VALUE!	<0.03	-70	prescribed
9	Chromium	#VALUE!	< 0.03	-98.5	standard
10	Copper as Cu	#VALUE!	<0.01	-99.6	
11	Nickel as Ni	#VALUE!	<0.01	-99.6	
12	Zinc as Zn	0.000	0.012	-99.76	
13	COD	2.396	152	-39.2	

#### Annexure III

### **Air Pollutants**

### SPM for DG sets and Dust Collector

Sr. No	Stack attached to	Concentration of Pollutants discharged (mg/Nm³)	Percentage of variation from prescribed Standards with reasons.	Reasons	
1	D.G. 1(g/Kw-Hr)	0.179	-10.5	- ve sign indicates the performance	
2	D.G. 2	61	-18.6	is much better	
3	D.G. 3	62	-17.3	than the prescribed	
4	Dust collector	39	-48	standards	



#### Annexure IV

#### **Hazardous Wastes**

Category	S.No	Waste Source	Waste	Total	Quantity
			Category*	FY 19-20	FY 20-21
А		1			
	From Pro	ocess			
	1	Empty polythene Bags(kgs)	33.3	79570	63234
	2	Used Containers(No's)	33.3	35785	17832
14.	3	Waste Oil(kgs)	5.1	0	1.18
В					
	From po	llution control facility			
	1	ETP Sludge(Ton)	34.3	192.75	97.22

<sup>\*</sup> Category as per Hazardous waste (M& H) Rules 2008



# Annexure V Solid Wastes

	Waste Source	Total Quantity during the Financial Year		
	· ·	Unit	19-20	20-21
Α	From Process	ಿಕ್ಕಾ		
	1.Wooden Scrap	Kg	86490	86750
	2:Papers/Cartons	Kg	57920	72950
	3. Metal Scrap	Kg	26900	9670
(%)	4. HDPE lids	Kg	2310	4520
В	From pollution control facility		NIL	NIL
С	Quantity recycled or re-utilized within the unit		NIL	NIL



### Annexure VI Hazardous waste Characterisation and Composition

S. No.	Waste	Characterisation/ Composition	Method of Disposal
1	Container & Container Liners of Hazardous Waste & Chemicals	HDPE/Polyethylene/cellulous and Organic/Inorganic chemicals	Sent to authorized re- processors/ Recyclers after complete detoxification.



### Solid wastes Characterisation and Composition

S. No.	Waste	Characterisation/ Composition	Method of Disposal
1.	HDPE lids	Not Applicable	Sold to traders
2.	Wooden Scrap	Not Applicable	Sold to traders
3.	Papers/Cartons	Not Applicable	Sold to traders
4.	Metal Scrap	Not Applicable	Sold to traders

