

29th September, 2018

To,

The Environmental Engineer,

Andhra Pradesh Pollution Control Board,

Regional Office, Kurnool,

Dear Sir,

Please find enclosed herewith "ENVIRONN ENTAL STATEMENT" for the year 2017-2018.

Please acknowledge the receipt for the same.

Thanking you,
Yours sincerely,
For BERGER PAINTS INDIA LTD

Mr. Devashish Nath General Manager Works

Encl: Environmental Statement 2017-18

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 Water based Distemper Paints

907KLD 160MTPD

(iv)Year of Establishment

26.12.2013

(v) Date of the last Environmental Statement submitted

29.09.2017

PART B

Water and Raw Material Consumption



i. Water Consumption

Description	Qty As per CFO	Qty Actual Consumed
Process water & Washings	322 m3 / D	95.2 m3/D
Cooling tower make up	1 m3 / D	0.94 m3/D
Fire fighting make up	1 m3 / D	1.00 m3/D
Domestic	7 m3 / D	6.79 m3/D
Gardening	7 m3 / D	6.63m3/D

	Process water consumption (m ³ / KL of Production)	
Name of the product	FY 16 -17	FY 17 -18
Paints	0.82	0.48

ii. Raw Material consumption

Annexure 1 [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 there of)

Presented as Annexure IV [page 9]

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.

Bund Wall for effluent pit in ETP all tanks.

b. Effective Dust Control:

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

Charging process is a closed loop system through pneumatic conveying pipelines, & equipment,

More over bag filters are fitted with pulse jet bag filter 20000m3/hr, number of filter bags present are 152

Fugitive emission generated during charging powder to equipment is captured by a section hood A 30m high stack is attached to it with ID fan.

c. Natural resources conservation

Several initiatives are undertaken to reduce water, power and fuel consumption. Rain water harvesting pits for ground water recharging have also been implemented.

LED, Low capacity air compressor with auto shut off valves for filling machines air line for better control on energy source

Reuse of ETP treated water for toilet flushing.

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 74.24 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 directly from the "Manufacturing Excellence" of "Zero Waste". The company is determined to improve manufacturing discipline, installing 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 &Heavy metals free (lead free)

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

- Installation of Solar panels as an alternate source of electricity.
- Decanter at ETP to remove excess of moisture where by weight of sludge can be reduced.
- Bund wall is proposed for containing the spillages at Emulsion tank farm.
- Battery operated fork lift in production to control emissions of fossil fuel burning.
- Proposed for Floor cleaning machines in Production floor to reduce water consumption and effluent generation.



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. Plantation in around the plant, 42% of plant area has been committed to it & new plats are added on continual basis
- 4. Floor cleaning machines in Production floor.

Signature	for gitte
Name	Devashish Nath
Designation	General Manager Works
Address	Berger Paints India Ltd
Date	29.09.2018



Annexure I

Raw Material Consumption

S.No	Name of the Raw material	Name of product	Consumption of Raw material per unit on Output (MT/ MT of Production)	
0		1	16-17	17-18
1	Pigment	Emulsion Paints	0.079	0.059
2	Extenders	Emulsion Paints	0.421	0.386
3	Additives	Emulsion Paints	0.190	0.117
4	Solvents	Emulsion Paints	0.101	0.008
5	Resins	Emulsion Paints	0.114	0.128
6	Chemicals	Emulsion Paints	0.002	0.008
7	Water	Emulsion Paints	0.093	0.294



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	7.9	8.3	NA	
2	Suspended solids (mg/I),Max	0.542	29	-71.00	
4	Oil & Grease (mg/l),Max	0.084	4.5	-55.00	
5	BOD (3 days at 27°C) (mg/l),Max	0.289	15.45	-69.10	
6	COD (mg/I),Max	2.391	128	NA	
7	Lead as Pb (mg/I),Max	0.000	0.005	-95.00	No Variations - ve sign indicate
8	Hexavalent Chromium as Cr*6(mg/I),Max	0.001	0.03	-70.00	the performanc is much better than the
9	Total Chromium as Cr (mg/l),Max	0.001	0.04	-98.00	prescribed standards.
10	Copper as Cu (mg/l),Max	0.000	0.01	-99.50	Starrage as:
11	Zinc as Zn (mg/l),Max	0.003	0.01	-92.9	
12	Nickel as Ni (mg/l),Max	0.000	0.01	-99.50	
13	Phenolic Compounds as C ₆ H ₅ OH(mg/I),Max	0.000	0.001	-99.90	
14	Bio- Assay test	NA	90% survival of fish after 96hrs in 100% effluent	NA	,



Annexure III

Air Pollutants

SPM for DG sets and Dust Collector

Sr. No	Stack attached to	Quantity of Pollutants discharged (kg/day)	Concentration of Pollutants discharged (mg/Nm³)	Percentage of variation from prescribed Standards with reasons.	Reasons
1	D.G. 1	0.00118	38.5	-61.5	- ve sign indicates the performance is much better than the prescribed standards
2	D.G. 2	0.05242	41.15	-58.85	
3	D.G. 3	0.05324	42.4	-57.6	
4	Dust collector	6.23882	33.5	-66.5	



Annexure IV

Hazardous Wastes

Category	S.No	Waste Source	Waste	Total Quantity	
0 ,			Category*	FY 16-17	FY 17-18
А	From Pro	ocess			
	1	Empty polythene Bags(kg)	34.3	53970	89385
	2	Used Containers(Nos)	34.3	11430	33226
	3	Waste Oil(kl)	5.1	0	1.65
В	From po	llution control facility	<u> </u>		
	1	ETP Sludge(T)	34.3	70.3	71.28

^{*} Category as per Hazardous waste (M& H) Rules 2016



Annexure V Solid Wastes

	Waste Source	Total Quantity during the Financia Year		
		Unit	16-17	17-18
А	From Process 5	·		
	1.Wooden Scrap	Kgs	38440	53860
	2.Papers/Cartons	Kgs	63120	109460
	3. Metal Scrap	Kgs	11510	24950
	^4. HDPE lids	Kgs	13570	9381
В	From pollution control facility		NIL	NIL
С	Quantity recycled or re-utilized within the unit		NIL	NIL



Annexure VI Mazardous 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



