



25th September, 2019

To,

The Environmental Engineer,

Andhra Pradesh Pollution Control Board,

Regional Office, Ananthapur.

Dear Sir,

Please find enclosed herewith "ENVIRONMENTAL STATEMENT" for the year 2018-2019.

Please acknowledge the receipt for the same.

Thanking you,
Yours sincerely,
For BERGER PAINTS INDIA LTD

xfaced.

Mr. Apoorv Chaturvedi General Manager Works

Encl: Environmental Statement 2018-19



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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

29.09.2018

PART B

Water and Raw Material Consumption

i. Water Consumption

Description	Qty As per CFO	Qty Actual Consumed
Process water	320 m3 / D	97.98 m3/D
Cooling tower make up	1 m3 / D	0.9 m3/D
Plant & Process wash, QC	2 m3 / D	1.62 m3/D
Fire fighting make up	1 m3 / D	0.97 m3/D
Domestic	7 m3 / D	6.64 m3/D
Gardening	7 m3 / D	6.8 m3/D



Name of the product	Process water consumption (m ³ / KL of Production	
ivairie of the phoduct	FY 17 -18	FY 18 -19
Paints	, 0.48	0.50

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 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. Reuse of treated effluent reduces the consumption of fresh water.

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 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, number of filter bags present are 152

Fugitive emission generated during charging powder to equipment is captured by a section 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. 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 77.12 per ton or KL of production.



PART H

1

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. 990 KW capacity Solar panel installation work under progress. Expected date of completion is Jan'2020.
- Decanter at ETP to remove excess of moisture where by weight of sludge can be reduced.
- Bund wall is constructed for containing the spillages at Emulsion tank farm.
- Battery operated fork lift in production to control emissions of fossil fuel burning.
- 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.

Floor cleaning machines purchased for Process area, filling area and RM stores area. This equipment clean the floor with minimum water and dust levels are very low.



<u>PART I</u>

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. On Environment day more than 700 saplings planted around and within the plant, 42% of plant area has been committed to it & new plants are added on continual basis
- 4. Floor cleaning machines in Production floor.

Signature	A CATC.
Name	Apoorv Chaturvedi
Designation	Factory Manager
Address	Berger Paints India Ltd
Date	25.09.2019



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 t	17-18	18-19	
1	Pigment	Emulsion Paints	0.059	0.071	
2	Extenders	Emulsion Paints	0.386	0.33	
3	Additives	Emulsion Paints	0.117	0.052	
4	Solvents	Emulsion Paints	0.008	0.0076	
5	Resins	Emulsion Paints	0.128	0.21	
6	Chemicals	Emulsion Paints	0.008	0.002	



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	8.14	8.14	NA	
2	Suspended solids	0.96	52	-48	
3	BOD ₃ at 27°C.	0.28	14.5	-71	
4	Phenolic Compounds	0	<0.001	-99.90	(4)
5	Oil & Grease	0	<1 ppm	10	- ve sign indicates the performance
6	Bio Assay	NA	90% survival	NA	is much better
7	Lead as Pb	0	<0.005	-95.0	than the prescribed
8	Chromium (VI)	0	<0.03	-70	standard
9	Chromium	0	<0.03	-98.5	Standard
10	Copper as Cu	0	<0.01	-99.6	
11	Nickel as Ni	0	<0.01	-99.6	
12	Zinc as Zn	0.0066	0.355	-88.16	
13	COD	2.79	150	·*t -40	

Annexure III

Air Pollutants

SPM for DG sets and Dust Collector

Sr. No	Stack attached to	Quantity of Pollutant\$ discharged (kg/day)	Concentration of Pollutants discharged (mg/Nm³)	Percentage of variation from prescribed Standards with reasons.	Reasons
1	D.G. 1	0.005	17.6	- 82.4	- ve sign indicates the
2	D.G. 2	0.062	38	- 62.0	performance is
3	D.G. 3	0.017	45	-55.0	much better than the prescribed standards
4	Dust collector	0.640	48.6	-51.4	



Annexure IV

Hazardous Wastes

Category	S.No	Waste Source	Waste	Total Quantity	
			Category*	FY 17-18	FY 18-19
Α		* () (i)			
	From Pro	ocess			
	1	Empty polythene Bags(kgs)	33.3	89385	82600
	2,	Used Containers(No's)	33.3	33226	29025
	3	Waste Oil(kgs)	5.1	1.65	0
В		1			
	From po	llution control facility			
	1	ETP Sludge(Ton)	34.3	71.28	63.09

^{*} Category as per Hazardous waste (M& H) Rules 2008



Annexure V

Solid Wastes

	Waste Source	Total Quantity during the Financial Year		
	f .	Unit	17-18	18-19
Α	From Process			
	1.Wooden Scrap	Kg	53860	88170
	2.Papers/Cartons	Kg	109460	119380
	3. Metal Scrap	Kg	24950	14520
F4,0	4. HDPE lids	Kg	9381	1916
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 Dis	
1	Container & Container Liners of Hazardous Waste & Chemicals	HDPE/Polyethylene/cellulous and Organic/Inorganic chemicals	Sent to authorized reprocessors/ 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

