

28th September 2015

To,

The Environmental Engineer,
Andhra Pradesh Pollution Control Board,
Regional Office, Kurnool,

Dear Sir,

Please find enclosed herewith "ENVIRONMENTAL STATEMENT" for the year 2014-2015.

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 2014-15

CC: APPCB, Paryavaran Bhavan

28 SEP 2013

BERGER PAINTS INDIA LIMITED

## PART - A

(i) Name and address of the

Shri Abhijit Roy

Occupier of the industry

**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

272100 KL

Water based Distemper Paints

48000 MT

(iv) Year of Establishment

26.12.2013

(v) Date of the last Environmental

Statement submitted

29.09.2014

### PART B

### Water and Raw Material Consumption

### i. Water Consumption

Description	Qty As per CFO	Qty Actual Consumed
Process water	320 m3 / D	49.38 m3/D
Cooling tower make up	1 m3 / D	0.82 m3/D
Plant & Process wash, QC	2 m3 / D	1.33 m3/D
Fire fighting make up	1 m3 / D	0.78 m3/D
Domestic	7 m3 / D	4.95 m3/D
Gardening	7 m3 / D	4.33 m3/D

NOTE: Production started from the month of September'2014.



Name of the product	Process water consumpti	on (m <sup>3</sup> / KL of Production)
waite of the phoduct	FY 13 -14	FY 14 -15
Paints	. 0	0.50

Note: Production started from the month September'2014.

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.

#### 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.

#### 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

**Zero production for the FY 2013-2014.** The expenses on the pollution abatement increased the cost 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.

Jet Pump in production block's for cleaning of vessels which leads to reduction in Effluent generation

VOC Analyser for precaution & presentiveness at working Zones.



### **PART I**

# 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. ETP is 50KLD as on process with biological treatment (Activated Sludge Process) & ETP can be extended to 100 KLD
- 5. Installed four fixed AAQM stations in the plant at strategic locations
- 6. Floor cleaning machines in Production floor.

Signature	$\langle \times \rangle$
Name	Devashish Nath
Designation	General Manager Works
Address	Berger Paints India Ltd
Date	28.09.2015



# 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)			
			13-14 14			
1	Pigment	Emulsion Paints	0	0.064		
2	Extenders	Emulsion Paints	0	0.433		
3	Additives	Emulsion Paints	0	0.042		
4	Solvents	Emulsion Paints	0	0.0003		
5	Resins	Emulsion Paints	0	0.04		
6	Acids and Chemicals	Emulsion Paints	0	0.01		



# Annexure II Water Pollutants

S.No	Parameter	Quantum of pollutants dischårged (kg/per day)	Conc. of pollutants in discharges (mg/Lit)	Percentage of variation from prescribed standards	Reasons
1	рН	7.7	7.7	NA	
2	Suspended solids	0.141	20	-80	
3	BOD <sub>3</sub> at 27 <sup>o</sup> C	0.013	1.8	-96.4	
4	Phenolic Compounds	0	0.001	-99.99	
5	Oil & Grease	0.042	6	-40.0	
6	Bio Assay	NA	90%	NA	
7	Lead as Pb	0	0.005	-95.0	
8	Chromium (VI)	0	0.03	-70.0	
9	Chromium	0	0.03	-98.5	
10	Copper as Cu	0	0.01	-99.5	
11	Nickel as Ni	0	0.01	-99.5	
12	Zinc as Zn	0	0.013	-99.74	
13	Heavy metals	0	0.04	-96.0	

# 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	0.00023	15	-85%	- ve sign indicates the performance is much better than the prescribed standards
2	D.G. 2	0.00262	17.5	-82.5%	
3	D.G. 3	0.00559	12.5	-87.5%	
4	Dust collector	3.568	25	-75%	



# Annexure IV

# **Hazardous Wastes**

Category	S.No Waste Source		Waste	Total Quantity		
		Category*	Category*	FY 13-14	FY 14-15	
Α						
	From Process					
	1	Empty polythene Bags(kgs)	33.3	0	2330	
	2	Used Containers(No's)	33.3	0	23481	
	3	Waste Oil(kgs)	5.1	0	0	
В	В					
	From po	llution control facility				
	1	ETP Sludge(kg)	34.3	0	0	

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



# Annexure V

# Solid Wastes

	Waste Source	Total Quantity during the Financial Year		
		Unit	13-14	14-15
Α	From Process			
	1.Wooden Scrap	Kgs	0	10870
	2.Papers/Cartons	Kgs	0	22350
	3. Metal Scrap	Kgs	0	72536
	4. HDPE lids	Kgs	0	4507
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

