30th September 2024

To

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

Dear Sir,

Please find enclosed herewith "**ENVIRONMENTAL STATEMENT (FORM V)**" for the year 2023-2024.

Please acknowledge the receipt for the same.

Encl: Environmental Statement 2023-2024

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

Venkata Apparao D
Factory Head

ENVIRONMENTAL STATEMENT (FORM V)
FOR THE FINANCIAL YEAR ENDING 31ST March 2024

PART - A

(i) Name and address of the Occupier of the industry	:	Shri Abhijit Roy Managing Director M/s Berger Paints India Ltd. Kolkata	
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	: 907 KLD : 160 MTPD
(iv) Year of Establishment	:	2014	
(v) Date of the last Environmental Statement submitted	:	29.09.2023	

PART B

Water and Raw Material Consumption

i. Water Consumption

Description	Qty As per CFO	Qty Actual Consumed
Process water	320 m3 / D	84.69 m3/D
Cooling tower make up	1 m3 / D	0.99 m3/D
Plant & Process wash, QC	2 m3 / D	1.83 m3/D
Fire fighting make up	1 m3 / D	0.98 m3/D
Domestic	7 m3 / D	6.84 m3/D
Gardening	7 m3 / D	6.85 m3/D

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Name of the product	Process water consumption (m^3 / KL of Production)	
	FY 22 - 23	FY 23 - 24
Paints	0.476	0.485

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 — **Annexure II** [page 7]
b. Air — **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]

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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 wherever 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 m height stack is attached to it with ID fan

c. Natural resources conservation

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

e. Reduction of water consumption "Project Jal":

Under project JAL, we have implemented reuse of equipment wash water such as mixer wash water and filling tub wash water. There is reduction in specific water consumption from 0.658 kl/kl of paint produced in FY 22-23 to 0.654 kl/kl of paint produced in FY 23-24 by reusing of treated water for container washing & toilet flushing.

PART H

B. Impacts of Pollution Abatement on the cost of production

The expenses on the pollution abatement is ₹ 15.06 per ton or KL of production.

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

The focus on Environmental Management system is evident from the "Manufacturing Excellence" & "minimizing 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 environment 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 sanctioned initiatives for environmental protection.

- **Rainwater harvesting project to harvest and use rainwater in our process - ongoing**
- **Installation of Sewage treatment plant. - ongoing**
- **Volute press for dewatering the ETP sludge. – ongoing**
- **Installation of Ultra filtration unit followed by Reverse Osmosis plant, Multiple Effect Evaporator and Agitated thin film drier.**
- **Miyawaki plantation to grow dense green belt within the plant premises.**

ENVIRONMENTAL STATEMENT (FORM V)
FOR THE FINANCIAL YEAR ENDING 31ST March 2024

PART I

Any other particulars for improving the quality of the environment

1. Reuse of the Wash Water generated in the Process, thereby reducing the effluent generation.
2. 450 saplings were planted within the plant premises.
3. Floor cleaning machines in Production floor to reduce water consumption for cleaning
4. Installation of Oil seal to prevent leakages from TSD slurry transfer screw pumps.
5. Installed Solar panels as an alternate source of electricity. 992 KW capacity Solar panel was installed.
6. Battery operated forklift in production to control emissions of fuel burning.

Signature	
Name	Venkata Apparao D
Designation	Factory Head
Address	Berger Paints India Limited
Date	30.09.2024

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)	
			22-23	23-24
1	Pigment	Emulsion Paints	0.0678	0.0597
2	Extenders	Emulsion Paints	0.2910	0.2739
3	Additives	Emulsion Paints	0.1711	0.1727
4	Water	Emulsion Paints	0.3407	0.3101
5	Emulsion	Emulsion Paints	0.1392	0.1598
6	Chemicals	Emulsion Paints	0.0020	0.0020

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	pH	NA	7.58	NA	- ve sign indicates the performance is much better than the prescribed standard
2	Suspended solids	0.08	55	-45.0	
3	BOD_3 at 27^O C	0.09	16.93	-66.2	
4	Phenolic Compounds	0.00001151	0.001	-99.9	
5	Oil & Grease	0.0016	0.1	-99.0	
6	Bioassay	NA	90 % survival	NA	
7	Lead as Pb	0.00005755	0.005	-95.0	
8	Chromium (VI)	0.0003453	0.03	-70.0	
9	Chromium	0.00001151	0.001	-100.0	
10	Copper as Cu	0.00005755	0.005	-99.8	
11	Nickel as Ni	0.00001151	0.001	-100.0	
12	Zinc as Zn	0.00005755	0.005	-99.9	
13	COD	1.7724	154	-38.4	

Annexure III

Air Pollutants

SPM for DG sets and Dust Collector

Sr. No	Stack attached to	Concentration of Pollutants discharged in mg/Nm^3 (kg/day)	Percentage of variation from prescribed Standards with reasons.	Reasons
1	D.G. 1(g/Kw-Hr)	0.161	-40.7	- ve sign indicates the performance is much better than the prescribed standards
2	D.G. 2	0.1171	-33.5	
3	D.G. 3	0.0996	-32.9	
4	Dust collector	11.67	-	

ENVIRONMENTAL STATEMENT (FORM V)
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Annexure IV

Hazardous Wastes (disposal)

Category	S.No.	Waste Source	Waste Category*	Total Quantity	
				FY 22-23	FY 23-24
A	From Process				
	1	Waste Oil (kl)	5.1	1.41	0.575
	2	Used containers after complete detoxification (MT)	33.1	-	2.89
B	From pollution control facility				
	1	ETP Sludge (MT)	35.3	142.04	133.32

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

Annexure V

Solid Wastes

	Waste Source	Total Quantity during the Financial Year		
		Unit	22-23	23-24
A	**From Process**			
	1.Wooden Scrap	Kg	65,720	72,840
	2.Papers/Cartons	Kg	1,18,500	87,140
	3. Metal Scrap	Kg	48,266	31,884
	4. HDPE lids	Kg	3,417	6,700
B	**From pollution control facility**		NIL	NIL
C	**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	Waste Oil	Hydrocarbons, carbon particles, traces of water etc.	Sold to authorized recyclers routing through APEMCL portal
2	ETP sludge	Organic and Inorganic material arising out of treatment of wastewater.	Sent for Pre-processing at PCB authorized TSDF routing through APEMCL portal

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