



21th Dec, 2020.

To,
The Director,
Ministry of Environment, Forest and Climate Change,
Regional Office (SEZ),
1st and 2nd Floor, Handloom Export Promotion Council,
34, Cathedral Garden Road, Nungambakkam,
Chennai – 34

Sub: Berger Paints India Limited – Half Yearly Compliance Report.

Dear Sir,

Please find our Half - Yearly report (April'20 to Sept'20) on compliance as per the requirement given.

We would be pleased to provide you with additional information if required.

Kindly acknowledge the receipt.

**With Regards,
For Berger Paints India Ltd**


**Venkata Apparao.D
Factory Manager.**

Copy to:

- 1. The Joint Chief Environmental Engineer UH4, D.No. 33-26-14 D/2, Near Sunrise Hospital, Pushpa Hotel Centre, Chalamvari Street, Kasturibaipet, Vijayawada – 520 008**
- 2. The EE, AP Pollution Control Board, Plot No.15, Door. No: 4-2-740-15, BLT Villas, Tirumala Nagar, Tapovanam, Anantapur – 515001, Andhra Pradesh**

BERGER PAINTS INDIA LIMITED

Plot .No.262 Applc Growth Center,Thumakunta Village,Hindupur,Anantapur, Andhra Pradesh-515211
Regd. Office : Berger House, 129, Park Street, Kolkata - 700 017, Phone : 2229 9724-28, 2229 6005-06, Fax : 91-33-2249 9009/9729, www.bergerpaints.com
CIN - L51434WB1923PLC004793, E-mail : consumerfeedback@bergerindia.com

Berger Paints India Limited, Hindupur

Point-Wise Six Month Compliance Report April '20 to Sept '20

Sl. No	Conditions	Compliance Status(under construction stage)	Remarks
A	SPECIFIC CONDITIONS:		
i)	Only water Paint shall be manufactured. No solvent paint shall be manufactured without prior permission obtained from ministry.	Complied	
ii)	No lead and chromium based [paint shall be manufactured.	Complied	
iii)	Adequate stack height shall be provided to HSD/LDO fired steam boilers (5 Nos) to control air emissions. As proposed adequate dust extraction system shall be provided to capture fugitive emissions of fine particles from mixers during powder charging.	Currently we are not operating HSD/LDO fire stream Boiler. For Mixers the plant has a dedicated dust extraction system.	
iv)	The gaseous emissions (SO ₂ , NO _x , CO and HC) and particulate matter from boiler stack shall conform to the norms prescribed by the CPCB/AP pollution Control Board (APPCB) from time to time. At no time, the emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measure are rectified to achieve the desired efficiency. Stack emissions shall be monitored regularly.	Currently we are not operating HSD/LDO fire steam Boiler	
v)	The levels of PM2.5, NO _x CO HC (Methane and Non-methane) and VOCs shall be monitored in the ambient air and displayed at a convenient location near the main gate of the company and at important public places. The company shall upload the results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office MOEF, the respective Zonal office of CPCB and APPCB.	The applicable parameters are displayed at a convenient location near the main gate of the company for display to public.	
vi)	In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals /materials, multi cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions	Adequate dust extraction system and water sprinkler system and Process system to control the fugitive emissions	

Berger Paints India Limited, Hindupur

	in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emission shall conform to the limits stipulated by the APPCB.		
vii)	VOCs detectors shall be installed in the work zone. When monitoring results indicate above the permissible limits, effective measures shall be taken immediately.	It is not applicable for our case since we are not using any solvent. However, we have procured portable VOC digital meter and are using it to check the VOC as per the requirement	
viii)	For further control of fugitive emissions, following steps shall be followed		
a	Closed handling system shall be provided for chemicals	Raw material (powder & liquids) are being charged through closed pipelines from storage area to process area	
b	Reflux condenser shall be provided over reactor.	NA	
c	System of leak detection and repair of pump/pipeline based on preventive maintenance.	PM being carried out	
d	The acid shall be taken from storage tanks to reactor through closed pipeline. Storage tanks shall be vented through trap receiver and condenser operated on chilled water.	NA	
e	Cathodic protection shall be provided to the underground solvent storage tanks.	NA	No underground tanks for solvents
ix)	The gaseous emission from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.	Complied	
x)	Total fresh water requirement from APIIC water supply shall not exceed 524 cum/day and prior permission shall be obtained from the concerned authority and a copy submitted to the ministry Regional office at Bangalore. No ground water shall be used.	Will not be using water more than 524 cum/day.	
xi)	Total industrial waste water generation shall not exceed 84 cum/day. Industrial effluent shall be treated in ETP comprising physiochemical treatment facility, biological treatment and tertiary treatment. Treated effluent shall be recycled/reused with in factory premises after	Complied	

Berger Paints India Limited, Hindupur

	achieving desired water quality for various purposes.		
xii)	No effluent shall be discharged outside the factory premises and Zero discharge concept shall be adopted.	Complied	
xiii)	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arrestors shall be provided on tank farm. Solvent transfer shall be by pumps.	Solvents are not being used in process.	
xiv)	The company shall obtain Authorization for collection, storage and disposal of hazardous waste under hazardous Waste (management, Handling and Transboundary Movement) rules, 2016 and amended as on date for management of Hazardous wastes and prior permission from APPCB shall be obtained for disposal of solid /hazardous wastes in the TSDF. Measures shall be taken from for firefighting facilities in case of emergency.	The solid waste will be disposed to M/s. Coastal Waste Management Project, Nellore (dst) and M/s GM Eco services. Water Sprinkler system has been installed in Scrap Yard.	
xv)	The company shall strictly comply with the rules and guidelines under manufacture, Storage and Import of hazardous chemicals (MSIHC) Rules 1989 as amended time to time. All Transportation of hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.	Complied.	
xvi)	The company shall undertake following waste minimization measures :		
a	Metering and control of quantities of active ingredients to minimize waste.	All the powder and liquid ingredients will be taken from pneumatic conveying system with load cell and flow meter which automatically decreases the wastage.	
b	Reuse of by – products from the process as raw materials or as raw material substitute in other processes.	There is no by product in our process.	
c	Use of automated filling to minimize spillage.	Complied	
d	Use of close feed system into batch reactor.	Closed feeding system for TSD's & mixers is being used	
e	Venting equipment through vapor recovery system	It is not applicable as currently we are not using any solvents	

Berger Paints India Limited, Hindupur

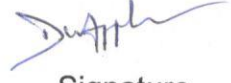
f	Use of high pressure hoses for equipment cleaning to reduce waste water generation.	Complied	
xvii)	Proper spillage management plan shall be prepared and implemented. A copy of spillage management plan shall be submitted to the Ministry's regional office at Bangalore.	Complied	
xviii)	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the OISD 117 norms. Fire hydrant system shall be provided along with fire monitor and flame detection system in the process as well as storage areas.	Complied	
xix)	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Complied	
xx)	Green belt shall be developed in 80,617 sqm out of total land 1, 92, 831 sqm. Thick green belt with suitable plant species shall be developed around the unit to mitigate the odor problem.	Complied More than 16 Acres	
xxi)	Provision shall be made for the housing for the construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.	Complied	
B.	GENERAL CONDITIONS:		
i	The project authorities shall strictly adhere to the stipulations made by the AP Pollution Control Board.	Shall be adhered.	
ii	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environment protection measures required if any.	Will comply in those circumstances	
iii	The locations of ambient air quality monitoring stations shall be decided in consultation with the State pollution Control Board and it shall be ensured that at least one stations is installed in the up wind and downwind direction as well as where maximum ground level concentrations are anticipated.	Complied	Annexure Attached

Berger Paints India Limited, Hindupur

iv	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under environment (protection) Act 1986 rules viz. 75 dBA (day time) and 70 dBA (night time)	Compiled.	Annexure Attached
v	The company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.	Storm water in plant are directed towards rain water harvesting pits	
vi	Training shall be imparted to the employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for the all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.	Complied	Regular Training is given to all employees, Pre-employment and routine medical examination to all employees is under taken
vii	Usage of Personnel protection equipment (PPEs) by all employees/ workers shall be ensured.	Complied	
viii	The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.	Complied	
ix	The company shall undertake all relevant measures for improving the socio economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administrations.	Compiled.	
x	The company shall undertake eco developmental measures including community welfare in the project area for the overall improvement of the environment.	Compiled.	
xi	A separate environmental Management cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Compiled.	
xii	The company shall earmark sufficient funds to implement the conditions stipulated by the Ministry of Environment and Forests as well as state Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment	Adhered.	

Berger Paints India Limited, Hindupur

	management/pollution control measures shall not be diverted for any other purposes.		
xiii	A copy of the clearance letter shall be sent by the project proponent to concerned panchayat, Zilla parishad/Municipal corporation, union local body and the local NGO, if any from who suggestions representations, if any, were received while processing the proposal.	Noted and will be complied	



Signature

Name: **Venkata Apparao.D**

Address: **Berger Paints India Ltd**

Plot No: **262, Industrial Area,**

Hindupur,

Anantapur District.

ENVIRONMENTAL MONITORING REPORT

November, 2020

**PROJECT: BERGER PAINTS INDIA LIMITED,
Industrial Park,
Thumakunta Village,
Hindupuram Mandal,
Anantapuram Dist,
Andhra Pradesh**

CONSULTANT

MINERAL ENGINEERING SERVICES

Mining & Environmental Engineers

(Recognised Environmental Laboratory by MoEF)

25/XXV, Club Road, BALLARI - 583 103.

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ISO 9001 : 2015 AND BS OHSAS 18001 : 2007 Certification Valid upto 18.03.2021

ISO 9001 : 2015
12-Q-1800012-TIC
BS-OHSAS-18001-2007
12-0-1800013-TIC

Table No. 1 a

ANALYSIS REPORT OF AMBIENT AIR QUALITY

MES/AQ/FTR/08/00

Name of the Project : Berger Paints India Limited, Industrial Park, Thumakunta village, Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.

Location : DG Set Back Side (250KVA & 1250KVA)

Barometric pressure : 686 mm of Hg

Temperature : Min 20.0°C Max 30°C

Relative Humidity : Min 38% Max 75%

Duration : 24 Hrs.

Date of Report : 30.11.2020

Report No : MES/PM/ARN/202

Date of Sampling	Concentration					
	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	Ammonia (NH ₃), µg/m ³	Benzene (C ₆ H ₆), µg/m ³
13.11.2020 to 14.11.2020	11	16	56	29	<20	<1
Limits for Industrial , Residential, Rural and other Areas	80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Concentration					
	Lead (Pb), µg/m ³	Nickel (Ni), ng/m ³	Arsenic (As), ng/m ³	Benzo(a)Pyrene (BaP), ng/m ³	Carbon Monoxide* (CO), mg/m ³	Ozone* (O ₃), µg/m ³
13.11.2020 to 14.11.2020	0.11	<0.5	<0.5	<0.5	0.22	26
Limits for Industrial , Residential, Rural and other Areas	1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : * Parameters monitored for period of 1 hr

(M.R. DURGA PRASAD)
GOVT. ANALYST

(M.S. RAJU)
HEAD OF LABORATORY

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Table No. 1 b

ANALYSIS REPORT OF AMBIENT AIR QUALITY

MES/AQ/FTR/08/00

Name of the Project : Berger Paints India Limited, Industrial Park, Thumakunta village, Hindupuram Mandal,
Anantapuram Dist, Andhra Pradesh.

Location : Near ETP Area

Barometric pressure : 686 mm of Hg

Temperature : Min 20.0°C Max 30°C

Relative Humidity : Min 38% Max 75%

Duration : 24 Hrs.

Date of Report : 30.11.2020

Report No : MES/PM/ARN/203

Date of Sampling	Concentration					
	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	Ammonia (NH ₃), µg/m ³	Benzene (C ₆ H ₆), µg/m ³
13.11.2020 to 14.11.2020	10	13	50	26	<20	<1
Limits for Industrial , Residential, Rural and other Areas	80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Concentration					
	Lead (Pb), µg/m ³	Nickel (Ni), ng/m ³	Arsenic (As), ng/m ³	Benzo(a)Pyrene (BaP), ng/m ³	Carbon Monoxide* (CO), mg/m ³	Ozone* (O ₃), µg/m ³
13.11.2020 to 14.11.2020	0.08	<0.5	<0.5	<0.5	0.18	20
Limits for Industrial , Residential, Rural and other Areas	1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : * Parameters monitored for period of 1 hr

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Table No. 1 c

ANALYSIS REPORT OF AMBIENT AIR QUALITY

MES/AQ/FTR/08/00

Name of the Project	: Berger Paints India Limited, Industrial Park, Thumakunta village, Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.
Location	: Near Admin (U/G Water Tank)
Barometric pressure	: 686 mm of Hg
Temperature	: Min 20.0°C Max 30°C
Relative Humidity	: Min 38% Max 75%
Duration	: 24 Hrs.
Date of Report	: 30.11.2020
Report No	: MES/PM/ARN/204

Date of Sampling	Concentration					
	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	Ammonia (NH ₃), µg/m ³	Benzene (C ₆ H ₆), µg/m ³
13.11.2020 to 14.11.2020	11	13	43	22	<20	<1
Limits for Industrial , Residential, Rural and other Areas	80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Concentration					
	Lead (Pb), µg/m ³	Nickel (Ni), ng/m ³	Arsenic (As), ng/m ³	Benzo(a)Pyrene (BaP), ng/m ³	Carbon Monoxide* (CO), mg/m ³	Ozone* (O ₃), µg/m ³
13.11.2020 to 14.11.2020	0.07	<0.5	<0.5	<0.5	0.09	20
Limits for Industrial , Residential, Rural and other Areas	1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : * Parameters monitored for period of 1 hr

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Table No. 1 d

ANALYSIS REPORT OF AMBIENT AIR QUALITY

MES/AQ/FTR/08/00

Name of the Project	: Berger Paints India Limited, Industrial Park, Thumakunta village, Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.
Location	: Near Green Belt Area
Barometric pressure	: 686 mm of Hg
Temperature	: Min 20.0°C Max 30°C
Relative Humidity	: Min 38% Max 75%
Duration	: 24 Hrs.
Date of Report	: 30.11.2020
Report No	: MES/PM/ARN/205

Date of Sampling	Concentration					
	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	Ammonia (NH ₃), µg/m ³	Benzene (C ₆ H ₆), µg/m ³
13.11.2020 to 14.11.2020	9	11	46	23	<20	<1
Limits for Industrial , Residential, Rural and other Areas	80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Concentration					
	Lead (Pb), µg/m ³	Nickel (Ni), ng/m ³	Arsenic (As), ng/m ³	Benzo(a)Pyrene (BaP), ng/m ³	Carbon Monoxide* (CO), mg/m ³	Ozone* (O ₃), µg/m ³
13.11.2020 to 14.11.2020	0.13	<0.5	<0.5	<0.5	0.31	26
Limits for Industrial , Residential, Rural and other Areas	1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : * Parameters monitored for period of 1 hr

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Table No.1 e

ANALYSIS REPORT OF FUGITIVE AIR QUALITY

MES/AQ/FTR/08/00

Project	: Berger Paints India Limited, Industrial Park, Thumakunta (V), Hindupuram (M), Anantapuram Dist, AP				
Locatuon	: 1st Floor water Base				
Barometric pressure	: 686 mm of Hg				
Temperature	: Min 20.0°C Max 30°C				
Relative Humidity	: Min 38% Max 75%				
Date of Report	: 30.11.2020				
Report No	: MES/PM/ARN/206				
Duration : 8 Hrs					
Monitoring Date	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	Particulate Matter		
			SPM µg/m ³	RPM µg/m ³	
13.11.2020	16	20	264	115	
Methods of Measuremant	Improved West & Gaeke	Modified Jacob & Hochheiser	Gravimetric	Gravimetric	
Ref : EPA Notification :GSR176 (E)					
Permissible limits for Industrial Area, (Max)					
	SO ₂	NO ₂	SPM	RPM	
		120	120	500	150

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12-0-1800013-TIC

Table No.1 f

ANALYSIS REPORT OF FUGITIVE AIR QUALITY

MES/AQ/FTR/08/00

Project	: Berger Paints India Limited, Industrial Park, Thumakunta (V), Hindupuram (M), Anantapuram Dist, AP			
Locatuon	: Raw Materal Area Ground Floor			
Barometric pressure	: 686 mm of Hg			
Temperature	: Min 20.0°C Max 30°C			
Relative Humidity	: Min 38% Max 75%			
Date of Report	: 30.11.2020			
Report No	: MES/PM/ARN/207			
		Duration	: 8 Hrs	
Monitoring Date	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	Particulate Matter	
			SPM µg/m ³	RPM µg/m ³
13.11.2020	11	18	315	186
Methods of Measuremant	Improved West & Gaeke	Modified Jacob & Hochheiser	Gravimetric	Gravimetric
Ref : EPA Notification :GSR176 (E)				
Permissible limits for Industrial Area, (Max)				
	SO ₂	NO ₂	SPM	RPM
		120	120	500
				150

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12-Q-1800013-TIC

Table No. 1 g

AMBIENT AIR QUALITY

VOC ANALYSIS REPORT

Project : Berger Paints India Limited, Industrial Park, Thumakunta village,
Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.

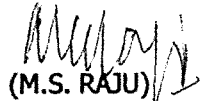
Date of Monitoring : 13.11.20250

Date of Report : 30.11.2020

Sl No	Parameters	WB manufacturing building	Raw Material 1 st floor,	Tank yard	QC Lab
		Result $\mu\text{g}/\text{m}^3$	Result $\mu\text{g}/\text{m}^3$	Result $\mu\text{g}/\text{m}^3$	Result $\mu\text{g}/\text{m}^3$
1	Benzene	0.35	0.09	BDL	0.22
2	Toulene	BDL	BDL	BDL	0.06
3	Ethylbenzene	BDL	BDL	BDL	BDL
4	m-Xylene	BDL	BDL	BDL	BDL

Note: BDL <0.5 $\mu\text{g}/\text{m}^3$


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Table No. 2 a

WATER ANALYSIS REPORT

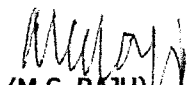
MES/WFTR/11/00

Name of the Project : Berger Paints India Limited, Industrial Park, Thumakunta village,
Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.
Location of Sampling : Raw Effluent water
Date of sampling : 13.11.2020
Date of Report : 30.11.2020
Report No : MES/PM/WR/77
Ref : Environmental (P) Rules, 1986 SCHEDULE I,- 01.01.2016

Sl. No.	Parameters	Method of Testing	Result
			Raw Effluent water
1	Suspended Solids (mg/l), Max	IS 3025 (Part-17)	456
2	Dissolved Solids (inorganic) mg/l, Max.	APHA 21 st Edition	2800
3	pH	IS 3025 (Part-11)	8.07
4	Oil & Grease (mg/l), Max	IS 3025 (Part-39)	18
5	BOD [3 days at 27°C] (mg/l), Max	IS 3025 (Part-44)	314.8
6	COD (mg/l), Max	IS 3025 (Part-58)	2520
7	Lead as Pb (mg/l), Max	IS 3025 (Part-47)	<0.005
8	Hexavalent Chromium as Cr ⁺⁶ (mg/l), Max	IS 3025 (Part-52)	<0.03
9	Total Chromium as Cr(mg/l), Max	IS 3025 (Part-52)	<0.03
10	Copper as Cu (mg/l), Max	IS 3025 (Part-42)	<0.01
11	Zinc as Zn (mg/l), Max	IS 3025 (Part-49)	0.156
12	Nickel as Ni (mg/l), Max	IS 3025 (Part-54)	<0.01
13	Phenolic Compounds as C ₆ H ₅ OH (mg/l), Max	IS 3025 (Part-43)	0.021
14	Bio-assay test	IS 6582 (Part-1)	10% survival of fish after 96 hrs in 100% effluent

Samples Collected & Analysed by Mineral Engineering Services, Ballari


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ISO 9001 : 2015
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12-0-1800013-TIC

Table No. 2 b

WATER ANALYSIS REPORT

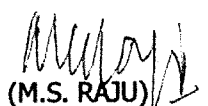
MES/W/FTR/11/00

Name of the Project	: Berger Paints India Limited, Industrial Park, Thumakunta village, Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.
Location of Sampling	: Effluent Treated Plant water
Date of sampling	: 13.11.2020
Date of Report	: 30.11.2020
Report No	: MES/PM/WR/78
Ref	: Environmental (P) Rules, 1986 SCHEDULE I,- 01.01.2016

Sl. No.	Parameters	Method of Testing	Result	General Standards For Effluent Discharge of Environmental Pollutants
			Effluent Treated Plant water	
1	Suspended Solids (mg/l), Max	IS 3025 (Part-17)	24	100
2	Dissolved Solids (inorganic) mg/l, Max.	APHA 21 st Edition	1865	2100
3	pH	IS 3025 (Part-11)	7.62	6.0 to 8.5
4	Oil & Grease (mg/l), Max	IS 3025 (Part-39)	2	10
5	BOD [3 days at 27°C] (mg/l), Max	IS 3025 (Part-44)	13.6	50
6	COD (mg/l), Max	IS 3025 (Part-58)	140	250
7	Lead as Pb (mg/l), Max	IS 3025 (Part-47)	<0.005	0.1
8	Hexavalent Chromium as Cr ⁺⁶ (mg/l), Max	IS 3025 (Part-52)	<0.03	0.1
9	Total Chromium as Cr(mg/l), Max	IS 3025 (Part-52)	<0.03	2.0
10	Copper as Cu (mg/l), Max	IS 3025 (Part-42)	<0.01	3.0
11	Zinc as Zn (mg/l), Max	IS 3025 (Part-49)	0.115	5.0
12	Nickel as Ni (mg/l), Max	IS 3025 (Part-54)	<0.01	3.0
13	Phenolic Compounds as C ₆ H ₅ OH (mg/l), Max	IS 3025 (Part-43)	<0.001	1.0
14	Bio-assay test	IS 6582 (Part-1)	90% survival of fish after 96 hrs in 100% effluent	90% survival of fish after 96 hrs in 100% effluent

Samples Collected & Analysed by Mineral Engineering Services, Ballari


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ISO 9001 : 2015
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BS-OHSAS-18001-2007
12-O-1800013-TIC

Table No. 3

ETP SLUDGE ANALYSIS REPORT

Project : Berger Paints India Limited, Industrial Park, Thumakunta village, Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.		
Sample Type : ETP Sludge		
Location : Near ETP Plant Area		
Date of Samples : 13.11.2020		
Date of Report : 30.11.2020		
Sl. No.	PARAMETERS	Result
1	Calorific value as cal/gm	1.6
2	Total Chromium as Cr(mg/Kg)	<0.03
3	Copper as Cu(mg/Kg)	11.50
4	Hexavalent Chromium as Cr ⁺⁶ (mg/Kg)	<0.05
5	Lead as Pb (mg/Kg)	<0.05
6	Zinc as Zn (mg/Kg)	1256
7	Nickel as Ni (mg/Kg)	<0.01


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ISO 9001 : 2015
12-Q-1800012-TIC
BS-OHSAS-18001-2007
12-Q-1800013-TIC

Table No. 4 a

GROUND WATER ANALYSIS REPORT

MES/W/FTR/13/00

Name of the Project : Berger Paints India Limited, Industrial Park, Thumakunta village,
Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.

Location of Sampling : GW1- Green belt area

Date of sampling : 13.11.2020

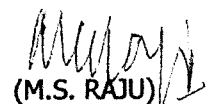
Date of Report : 30.11.2020

Report No : MES/PM/WR/79

Sl. No.	Parameters	Method of Testing	Result
i	Copper (as Cu),mg/l	IS:3025 (Part-42)	0.025
ii	Zinc (as Zn),mg/l	IS:3025 (Part-49)	0.49
iii	Lead (as Pb),mg/l	IS:3025 (Part-47)	<0.005
iv	Nickel (as Ni),mg/l	IS:3025 (Part-54)	<0.01
v	Total Chromium (as Cr),mg/l	IS:3025 (Part-52)	<0.03
vi	Hexavalent Chromium as Cr ⁺⁶ (mg/l)	IS 3025 (Part-52)	<0.03

Samples Collected & Analysed by Mineral Engineering Services, Ballari


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ISO 9001 : 2015
12-Q-1800012-TIC
BS-OHSAS-18001-2007
12-O-1800013-TIC

Table No. 4 b

GROUND WATER ANALYSIS REPORT

MES/W/FTR/13/00

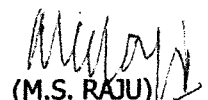
Name of the Project : Berger Paints India Limited, Industrial Park, Thumakunta village,
Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.
Location of Sampling : GW2- U/G Tank Near Parking Area
Date of sampling : 13.11.2020
Date of Report : 30.11.2020
Report No : MES/PM/WR/80

Ref : IS:10500-2012 Norms (Drinking Water Standards)

Sl. No.	Parameters	Method of Testing	Result
i	Copper (as Cu),mg/l	IS:3025 (Part-42)	0.041
ii	Zinc (as Zn),mg/l	IS:3025 (Part-49)	0.288
iii	Lead (as Pb),mg/l	IS:3025 (Part-47)	<0.005
iv	Nickel (as Ni),mg/l	IS:3025 (Part-54)	<0.01
v	Total Chromium (as Cr),mg/l	IS:3025 (Part-52)	<0.03
vi	Hexavalent Chromium as Cr ⁺⁶ (mg/l)	IS 3025 (Part-52)	<0.03

Samples Collected & Analysed by Mineral Engineering Services, Ballari


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ISO 9001 : 2015
12-Q-1800012-TIC
BS-OHSAS-18001-2007
12-Q-1800013-TIC

Table No. 4 c

GROUND WATER ANALYSIS REPORT

MES/W/FTR/13/00

Name of the Project : Berger Paints India Limited, Industrial Park, Thumakunta village,
Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.

Location of Sampling : GW3- Pump house

Date of sampling : 13.11.2020

Date of Report : 30.11.2020

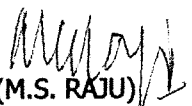
Report No : MES/PM/WR/81

Ref : IS:10500-2012 Norms (Drinking Water Standards)

Sl. No.	Parameters	Method of Testing	Result
i	Copper (as Cu),mg/l	IS:3025 (Part-42)	0.028
ii	Zinc (as Zn),mg/l	IS:3025 (Part-49)	0.39
iii	Lead (as Pb),mg/l	IS:3025 (Part-47)	<0.005
iv	Nickel (as Ni),mg/l	IS:3025 (Part-54)	<0.01
v	Total Chromium (as Cr),mg/l	IS:3025 (Part-52)	<0.03
vi	Hexavalent Chromium as Cr ⁺⁶ (mg/l)	IS 3025 (Part-52)	<0.03

Samples Collected & Analysed by Mineral Engineering Services, Ballari


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ISO 9001 : 2015
12-Q-1800012-TTC
BS-OHSAS-18001-2007
12-0-1800013-TTC

DRINKING WATER ANALYSIS REPORT

Table No. 5 a.

MES/W/FTR/13/00

Name of the Project : Berger Paints India Limited, Industrial Park, Thumakunta village,
Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.

Location of Sampling : DW1- Drinking water first floor

Date of sampling : 13.11.2020

Date of Report : 30.11.2020

Report No : MES/PM/WR/82

Ref : IS:10500-2012 Norms (Drinking Water Standards)

Sl. No.	Parameters	Method of Testing	Desirable Limits	Permissible Limits	Sample
i	Colour (Hazen Units), Max	IS:3025 (Part-4)	5	15	<1
ii	Odour	IS:3025 (Part-5)	Agreeable	Agreeable	Agreeable
iii	pH	IS:3025 (Part-11)	6.5 to 8.5	6.5 - 8.5	7.43
iv	Taste	IS:3025 (Part- 8)	Agreeable	Agreeable	Agreeable
v	Turbidity,NTU, Max	IS:3025 (Part-10)	1	5	0.31
vi	Total Dissolved Solids,mg/l, Max	IS:3025 (Part-16)	500	2000	136
vii	Aluminium (as Al), Max	IS:3025 (Part-55)	0.03	0.2	<0.01
viii	Ammonia (as total Ammonia -N),mg/l, Max	IS:3025 (Part-34)	0.5	0.5	<0.1
ix	Anionic Detergents (as MBAS),mg/l, Max	Annex K of Is:13428	0.2	1.0	<0.1
x	Barium (as Ba), mg/l, Max	IS:15302 & APHA 21 st	0.7	0.7	<0.05
xi	Boron (as B), mg/l, Max	IS:3025 (Part-57)	0.5	1	<0.1
xii	Calcium (as Ca),mg/l, Max	IS:3025 (Part-40)	75	200	20.2
xiii	Chloramines (as Cl ₂), mg/l, Max	APHA 21 st	4.0	4.0	NA
xiv	Chloride as Cl (mg/l),mg/l, Max	IS:3025 (Part-32)	250	1000	36
xv	Copper (as Cu),mg/l, Max	IS:3025 (Part-42)	0.05	1.5	<0.01
xvi	Fluoride (as F),mg/l, Max	IS:3025 (Part-60)	1	1.5	<0.1
xvii	Residual, Free Chlorine,mg/l, Max	IS:3025 (Part-26)	0.2	1	<0.1
xviii	Iron (as Fe),mg/l, Max	IS:3025 (Part-53)	0.3	0.3	<0.05
xix	Magnesium (as Mg),mg/l, Max	IS:3025 (Part-46)	30	100	3.4
xx	Manganese (as Mn),mg/l, Max	IS:3025 (Part-59)	0.1	0.3	<0.03
xxi	Mineral Oil,mg/l, Max	Clause 6 of IS 3025 (part -39)	0.5	0.5	<0.01
xxii	Nitrates (as NO ₃),mg/l, Max	IS:3025 (Part-34)	45	45	1.9
xxiii	Phenolics (as C ₆ H ₅ OH),mg/l, Max	IS:3025 (Part-43)	0.001	0.002	<0.001
xxiv	Selenium (as Se),mg/l, Max	IS:3025 (Part-56)	0.01	0.01	<0.005
xxv	Silver (as Ag), mg/l, Max	Annex J of Is:13428	0.1	0.1	<0.002
xxvi	Sulphates (as SO ₄),mg/l, Max	IS:3025 (Part-24)	200	400	<1.0
xxvii	Sulphide (as H ₂ S), mg/l, Max	IS:3025 (Part-29)	0.05	0.05	<0.01
xxviii	Alkalinity (as CaCO ₃) mg/l, Max	IS:3025 (Part-23)	200	600	66
xxix	Total Hardness (as CaCO ₃),mg/l, Max	IS:3025 (Part-21)	200	600	64
xxx	Zinc (as Zn),mg/l, Max	IS:3025 (Part-49)	5	15	<0.005
xxxi	Cadmium (as Cd),mg/l, Max	IS:3025 (Part-41)	0.003	0.003	<0.002
xxxii	Cyanide (as CN),mg/l, Max	IS:3025 (Part-27)	0.05	0.05	<0.01
xxxiii	Lead (as Pb),mg/l, Max	IS:3025 (Part-47)	0.01	0.01	<0.005
xxxiv	Molybdenum (as Mo), mg/l, Max	APHA 21 st	0.07	0.07	NA
xxxv	Mercury (as Hg),mg/l, Max	IS:3025 (Part-48)	0.001	0.001	<0.0005
xxxvi	Nickel (as Ni),mg/l, Max	IS:3025 (Part-54)	0.02	0.02	<0.01
xxxvii	Pesticides,mg/l, Max	APHA 21 st	Absent	0.001	NA
xxxviii	Polychlorinated biphenyls mg/l, Max	APHA 21 st Edition	0.0005	0.0005	NA
xxxix	Polynuclear Aromatic Hydrocarbons (as PAH),mg/l, Max	APHA 21 st Edition	0.0001	0.0001	NA
XL	Arsenic (as As),mg/l, Max	IS:3025 (Part-37)	0.01	0.05	<0.002
XLI	Total Chromium (as Cr),mg/l, Max	IS:3025 (Part-52)	0.05	0.05	<0.03
XLii	Trihalomethanes,mg/l, Max	APHA 21 st	--	--	NA
XLiii	Radioactive materials,Bq/l,mg/l	APHA 21 st	--	--	NA
XLiv	Total Coliform (/100ml)	IS:1622	Absent	Absent	Absent
XLv	E-Coli (cfu/100ml)	IS:1622	Absent	Absent	Absent

Samples Collected & Analysed by Mineral Engineering Services, Ballari

Note : NA - Not Analysed

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ISO 9001 : 2015
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BS-OHSAS-18001-2007
12-0-1800013-TIC

DRINKING WATER ANALYSIS REPORT

Table No. 5 b

MES/WFTR/13/00

Name of the Project : Berger Paints India Limited, Industrial Park, Thumakunta village,
Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.

Location of Sampling : Drinking water canteen parking area

Date of sampling : 13.11.2020

Date of Report : 30.11.2020

Report No : MES/PM/WR/83

Ref : IS:10500-2012 Norms (Drinking Water Standards)

Sl. No.	Parameters	Method of Testing	Desirable Limits	Permissible Limits	Result
i	Colour (Hazen Units), Max	IS:3025 (Part-4)	5	15	1
ii	Odour	IS:3025 (Part-5)	Agreeable	Agreeable	Agreeable
iii	pH	IS:3025 (Part-11)	6.5 to 8.5	6.5 - 8.5	7.42
iv	Taste	IS:3025 (Part- 8)	Agreeable	Agreeable	Agreeable
v	Turbidity,NTU, Max	IS:3025 (Part-10)	1	5	1.01
vi	Total Dissolved Solids,mg/l, Max	IS:3025 (Part-16)	500	2000	165
vii	Aluminium (as Al), Max	IS:3025 (Part-55)	0.03	0.2	<0.01
viii	Ammonia (as total Ammonia -N),mg/l, Max	IS:3025 (Part-34)	0.5	0.5	<0.1
ix	Anionic Detergents (as MBAS),mg/l , Max	Annex K of Is:13428	0.2	1.0	<0.1
x	Barium (as Ba), mg/l, Max	IS:15302 & APHA 21 st	0.7	0.7	<0.05
xi	Boron (as B), mg/l, Max	IS:3025 (Part-57)	0.5	1	<0.1
xii	Calcium (as Ca),mg/l, Max	IS:3025 (Part-40)	75	200	30.6
xiii	Chloramines (as Cl ₂), mg/l. Max	APHA 21 st	4.0	4.0	NA
xiv	Chloride as Cl (mg/l),mg/l, Max	IS:3025 (Part-32)	250	1000	68
xv	Copper (as Cu),mg/l, Max	IS:3025 (Part-42)	0.05	1.5	<0.01
xvi	Fluoride (as F),mg/l, Max	IS:3025 (Part-60)	1	1.5	<0.1
xvii	Residual, Free Chlorine,mg/l, Max	IS:3025 (Part-26)	0.2	1	<0.1
xviii	Iron (as Fe),mg/l, Max	IS:3025 (Part-53)	0.3	0.3	<0.05
xix	Magnesium (as Mg),mg/l, Max	IS:3025 (Part-46)	30	100	7.6
xx	Manganese (as Mn),mg/l, Max	IS:3025 (Part-59)	0.1	0.3	<0.03
xxi	Mineral Oil,mg/l, Max	Clause 6 of IS 3025 (part -39)	0.5	0.5	<0.01
xxii	Nitrates (as NO ₃),mg/l, Max	IS:3025 (Part-34)	45	45	1.9
xxiii	Phenolics (as C ₆ H ₅ OH),mg/l, Max	IS:3025 (Part-43)	0.001	0.002	<0.001
xxiv	Selenium (as Se),mg/l, Max	IS:3025 (Part-56)	0.01	0.01	<0.005
xxv	Silver (as Ag), mg/l. Max	Annex J of Is:13428	0.1	0.1	<0.002
xxvi	Sulphates (as SO ₄),mg/l, Max	IS:3025 (Part-24)	200	400	6.8
xxvii	Sulphide (as H ₂ S) , mg/l. Max	IS:3025 (Part-29)	0.05	0.05	<0.01
xxviii	Alkalinity (as CaCO ₃) mg/l, Max	IS:3025 (Part-23)	200	600	80
xxix	Total Hardness (as CaCO ₃),mg/l, Max	IS:3025 (Part-21)	200	600	108
xxx	Zinc (as Zn),mg/l, Max	IS:3025 (Part-49)	5	15	<0.005
xxxi	Cadmium (as Cd),mg/l, Max	IS:3025 (Part-41)	0.003	0.003	<0.002
xxxii	Cyanide (as CN),mg/l, Max	IS:3025 (Part-27)	0.05	0.05	<0.01
xxxiii	Lead (as Pb),mg/l, Max	IS:3025 (Part-47)	0.01	0.01	<0.005
xxxiv	Molybdenum (as Mo), mg/l, Max	APHA 21 st	0.07	0.07	NA
xxxv	Mercury (as Hg),mg/l, Max	IS:3025 (Part-48)	0.001	0.001	<0.0005
xxxvi	Nickel (as Ni),mg/l, Max	IS:3025 (Part-54)	0.02	0.02	<0.01
xxxvii	Pesticides,mg/l, Max	APHA 21 st	Absent	0.001	NA
xxxviii	Polychlorinated biphenyls mg/l, Max	APHA 21 st Edition	0.0005	0.0005	NA
xxix	Polynuclear Aromatic Hydrocarbons (as PAH), mg/l, Max	APHA 21 st Edition	0.0001	0.0001	NA
XL	Arsenic (as As),mg/l, Max	IS:3025 (Part-37)	0.01	0.05	<0.002
XLi	Total Chromium (as Cr),mg/l, Max	IS:3025 (Part-52)	0.05	0.05	<0.03
XLii	Trihalomethanes,mg/l, Max	APHA 21 st	--	--	NA
XLiii	Radioactive materials,Bq/l,mg/l	APHA 21 st	--	--	NA
XLiv	Total Coliform (/100ml)	IS:1622	Absent	Absent	Absent
XLv	E-Coli (cfu/100ml)	IS:1622	Absent	Absent	Absent

Samples Collected & Analysed by Mineral Engineering Services, Ballari

Note : NA - Not Analysed

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ISO 9001 : 2015
12-Q-1800012-TTC
BS-OHSAS-18001-2007
12-0-1800013-TTC

DRINKING WATER ANALYSIS REPORT

Table No. 5 c

MES/W/FTR/13/00

Name of the Project : Berger Paints India Limited, Industrial Park, Thumakunta village,
Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.
Location of Sampling : DW- Drinking water Raw Material Area
Date of sampling : 13.11.2020
Date of Report : 30.11.2020
Report No : MES/PM/WR/84
Ref : IS:10500-2012 Norms (Drinking Water Standards)

Sl. No.	Parameters	Method of Testing	Desirable Limits	Permissible Limits	Result
i	Colour (Hazen Units), Max	IS:3025 (Part-4)	5	15	<1
ii	Odour	IS:3025 (Part-5)	Agreeable	Agreeable	Agreeable
iii	pH	IS:3025 (Part-11)	6.5 to 8.5	6.5 - 8.5	6.98
iv	Taste	IS:3025 (Part-8)	Agreeable	Agreeable	Agreeable
v	Turbidity, NTU, Max	IS:3025 (Part-10)	1	5	0.33
vi	Total Dissolved Solids, mg/l, Max	IS:3025 (Part-16)	500	2000	166
vii	Aluminium (as Al), Max	IS:3025 (Part-55)	0.03	0.2	<0.01
viii	Ammonia (as total Ammonia -N), mg/l, Max	IS:3025 (Part-34)	0.5	0.5	<0.1
ix	Anionic Detergents (as MBAS), mg/l, Max	Annex K of IS:13428	0.2	1.0	<0.1
x	Barium (as Ba), mg/l, Max	IS:15302 & APHA 21 st	0.7	0.7	<0.05
xi	Boron (as B), mg/l, Max	IS:3025 (Part-57)	0.5	1	<0.1
xii	Calcium (as Ca), mg/l, Max	IS:3025 (Part-40)	75	200	30.6
xiii	Chloramines (as Cl ₂), mg/l, Max	APHA 21 st	4.0	4.0	NA
xiv	Chloride as Cl (mg/l), mg/l, Max	IS:3025 (Part-32)	250	1000	25
xv	Copper (as Cu), mg/l, Max	IS:3025 (Part-42)	0.05	1.5	<0.01
xvi	Fluoride (as F), mg/l, Max	IS:3025 (Part-60)	1	1.5	0.14
xvii	Residual, Free Chlorine, mg/l, Max	IS:3025 (Part-26)	0.2	1	<0.1
xviii	Iron (as Fe), mg/l, Max	IS:3025 (Part-53)	0.3	0.3	<0.05
xix	Magnesium (as Mg), mg/l, Max	IS:3025 (Part-46)	30	100	5.6
xx	Manganese (as Mn), mg/l, Max	IS:3025 (Part-59)	0.1	0.3	<0.03
xxi	Mineral Oil, mg/l, Max	Clause 6 of IS:3025 (part-39)	0.5	0.5	<0.01
xxii	Nitrates (as NO ₃), mg/l, Max	IS:3025 (Part-34)	45	45	1.8
xxiii	Phenolics (as C ₆ H ₅ OH), mg/l, Max	IS:3025 (Part-43)	0.001	0.002	<0.001
xxiv	Selenium (as Se), mg/l, Max	IS:3025 (Part-56)	0.01	0.01	<0.005
xxv	Silver (as Ag), mg/l, Max	Annex J of IS:13428	0.1	0.1	<0.002
xxvi	Sulphates (as SO ₄), mg/l, Max	IS:3025 (Part-24)	200	400	<1.0
xxvii	Sulphide (as H ₂ S), mg/l, Max	IS:3025 (Part-29)	0.05	0.05	<0.01
xxviii	Alkalinity (as CaCO ₃), mg/l, Max	IS:3025 (Part-23)	200	600	48
xxix	Total Hardness (as CaCO ₃), mg/l, Max	IS:3025 (Part-21)	200	600	100
xxx	Zinc (as Zn), mg/l, Max	IS:3025 (Part-49)	5	15	<0.005
xxxi	Cadmium (as Cd), mg/l, Max	IS:3025 (Part-41)	0.003	0.003	<0.002
xxxii	Cyanide (as CN), mg/l, Max	IS:3025 (Part-27)	0.05	0.05	<0.01
xxxiii	Lead (as Pb), mg/l, Max	IS:3025 (Part-47)	0.01	0.01	<0.005
xxxiv	Molybdenum (as Mo), mg/l, Max	APHA 21 st	0.07	0.07	NA
xxxv	Mercury (as Hg), mg/l, Max	IS:3025 (Part-48)	0.001	0.001	<0.0005
xxxvi	Nickel (as Ni), mg/l, Max	IS:3025 (Part-54)	0.02	0.02	<0.01
xxxvii	Pesticides, mg/l, Max	APHA 21 st	Absent	0.001	NA
xxxviii	Polychlorinated biphenyls mg/l, Max	APHA 21 st Edition	0.0005	0.0005	NA
xxxix	Polynuclear Aromatic Hydrocarbons (as PAH), mg/l, Max	APHA 21 st Edition	0.0001	0.0001	NA
XL	Arsenic (as As), mg/l, Max	IS:3025 (Part-37)	0.01	0.05	<0.002
XLI	Total Chromium (as Cr), mg/l, Max	IS:3025 (Part-52)	0.05	0.05	<0.03
XLii	Trihalomethanes, mg/l, Max	APHA 21 st	--	--	NA
XLiii	Radioactive materials, Bq/l, mg/l	APHA 21 st	--	--	NA
XLiv	Total Coliform (/100ml)	IS:1622	Absent	Absent	Absent
XLv	E-Coli (cfu/100ml)	IS:1622	Absent	Absent	Absent

Samples Collected & Analysed by Mineral Engineering Services, Ballari

Note : NA - Not Analysed

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BS-OHSAS-18001-2007
12-Q-1800013-TIC


Table No. 6

NOISE LEVEL DATA

MES/NOISE/FR/02/00

Name of the Project : Berger Paints India Limited, Industrial Park, Thumakunta village, Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.							
Date of monitoring : 13.11.2020							
Date of Report : 30.11.2020							
Report No : MES/PM/NRN/18							
Code No.	Monitoring stations	Day			Nigt		
		L _{min}	L _{eq}	L _{max}	L _{min}	L _{eq}	L _{max}
N1	WB Manufacturing building 1 st floors	54.3	53.2	78.3	44.3	60.4	70.2
N2	Near two gates outside	55.3	61.5	67.3	43.5	58.3	75.3
N3	RM Area	45.3	68.3	80.0	46.5	60.2	77.3
N4	DG Set Area	58.6	60.2	80.0	55.0	57.3	63.0
Permissible Limits of Ambient Noise Levels as per CPCB Guidelines							
Leq. Limit dB(A)							
Day Night							
Industrial areas 75 70							
Commercial area 65 55							
Residential area 55 45							
Permissible limits as per ILO Code of Practice							
For Unprotected ear - 8 hrs working shift							
Warning limit - 85 dB(A)							
Danger limit - 90 dB(A)							
Worker not to be exposed for more than 115 dB(A)							
With ear protection -							
130 dB(A) 'Impulse' or 120 dB(A) 'Fast'							
No entry when noise level exceeds 140 dB(A)							


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Table No. 7 a

STACK MONITORING REPORT

MES/STK/FTR/03/00

Project : Berger Paints India Limited, Industrial Park, Thumakunta village,
Hindupuram Mandal, Anantapur Dist., Andhra Pradesh.

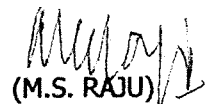
Date of Monitoring : 13.11.2020

Date of Report : 30.11.2020

Report No : MES/PM/STR/23

Sl No	Parameters	units	Result	Limits
			DG set 1	
1	Stack height	Mts	5	--
2	Stack diameter	Mts	0.13	--
3	Capacity of DG	KVA	250	--
4	Stack Temperature	(°C)	425	--
5	Velocity	(m/sec)	19.14	--
6	Quantity of Gases	(Nm ³ /hr)	359	--
7	Nox +HC	(g/Kw-Hr)	2.36	≤ 4.0
8	CO		1.07	≤ 3.5
9	PM		0.155	≤ 0.2


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BS-OHSAS-18001-2007
12-O-1800013-TIC

Table No. 7 b

STACK MONITORING REPORT

MES/STK/FTR/03/00

Project : Berger Paints India Limited, Industrial Park, Thumakunta village,
Hindupuram Mandal, Anantapur Dist., Andhra Pradesh.

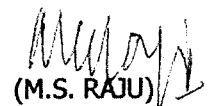
Date of Monitoring : 13.11.2020

Date of Report : 30.11.2020

Report No : MES/PM/STR/24

Sl No	Parameters	units			DG Limits 0.8MW to 75MW
			DG sets 2	DG sets 3	
1	Stack height	Mts	5	5	--
2	Stack diameter	Mts	0.38	0.38	--
3	Capacity of DG	KVA	1250	1250	--
4	Stack Temperature	(°C)	305	325	--
5	Velocity	(m/sec)	19.16	18.92	--
6	Quantity of Gases	(Nm ³ /hr)	6938	6432	--
7	NO _x as (NO ₂) (at 15% O ₂), Dry basis	PPMV	279.24	284.73	710
8	NHC (as C) (at 15% O ₂),	mg/Nm ³	27.00	31.00	100
9	PM (at 15% O ₂),	mg/Nm ³	46.7	58.3	75
10	CO (at 15% O ₂),	mg/Nm ³	63.00	48.00	150


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12-Q-1800013-TIC

Table No. 7 c

STACK MONITORING REPORT

MES/STK/FTR/03/00

Project : Berger Paints India Limited, Industrial Park, Thumakunta village,
Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.

Location : Stack of Dust Collectors


Date of Monitoring : 13.11.2020

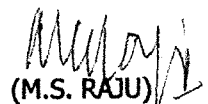
Date of Report : 30.11.2020

Report No : MES/PM/STR/25

Ref ; G.S.K 1214(E)

SI No	Parameters	Result
1	Barometric pressure (mm of Hg)	686
2	Stack diameter (Mts)	0.74
3	Stack Temperature (°C)	78
4	Velocity (m/sec)	13.10
5	Quantity of Gas flow (Nm ³ /hr)	17126
6	Particulate Matter (PM) (mg/Nm ³)	38


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12-0-1800013-TIC

Table No. 8

SOIL ANALYSIS REPORT

MES/SOIL/FTR/03/00

Project : Berger Paints India Limited, Industrial Park, Thumakunta village,

Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.

Location : 1. Near ETP Plant Area, 2. Near Green Belt Area & 3. Near Scrap Yard


Date of Samples : 13.11.2020

Date of Report : 30.11.2020

Report No : MES/PM/SR/01

SL.	PARAMETERS	Result		
		Near ETP Plant Area	Near Green Belt Area	Near Scrap Yard
1	Total Chromium as Cr(mg/Kg)	4.12	2.88	3.00
2	Copper as Cu(mg/Kg)	0.21	0.33	0.40
3	Hexavalent Chromium as Cr+6 (mg/Kg)	0.28	0.41	0.55
4	Lead as Pb (mg/Kg)	0.13	0.28	0.30
5	Zinc as Zn (mg/Kg)	0.17	0.61	0.56
6	Nickel as Ni (mg/Kg)	0.20	0.40	0.29


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BS-OHSAS-18001-2007
12-Q-1800013-TIC

Table No. 9

Illumination Survey

Mane of the Project : Berger Paints India Limited, Industrial Park, Thumakunta village,
Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.

Date of monitoring : 16.06.2020 7.15pm to 8:20 pm


Date of Report : 13.11.2020

instrument used : HTC Lux Meter

Ref Standard : ISO 8995 CIE S 008/E

Sl.No	Location and Distance from light Source (m)	L1	L2	L3	L4	L5	Average illuminance level (Lux)	Limits illuminance level (Lux) Min
1	Admin Block	200	215	220	228	230	218.6	200
2	Engineering Stores	86	94	100	106	107	98.6	100
3	ETP Lab	225	231	360	315	308	287.8	300
4	RMS Area	236	245	308	311	312	282.4	300
5	QC Lab	307	311	216	264	324	284.4	300
6	Processing Area	320	288	216	312	264	280.0	300
7	Filling Area	196	326	244	285	264	263.0	300
8	PMS Area	312	288	264	245	310	283.8	300
9	Security Office	195	264	230	156	188	206.6	200


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