

19th June 2023.

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 (Oct'22 to Mar'23) on compliance to EC conditions as required.

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 GM-Manufacturing

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, Door. No: 6-3-145, First Floor, Revenue ward 6, Ramnagar, Anantapur – 515004, Andhra Pradesh

Pointwise Six-Months Compliance Report Oct'22 to Mar'23

SI. No	Conditions	Compliance Status	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 , NOx, CO and HC) and particulate matter from boiler stack shall confirm 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 PM _{2.5} , 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 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 uploading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emission shall confirm to the limits stipulated by the APPCB.	Adequate dust extraction system and closed loop charging system are implemented to control the fugitive emissions	
vii)	VOCs detectors shall be installed in the work zone. When monitoring results indicate above the permissible limits, effective measures shall be	It is not applicable for our case since we are not using	

For further control of fugitive emissions, following steps shall be followed Closed handling system shall be provided for chemicals Reflux condenser shall be provided over reactor. System of leak detection and repair of pump/pipeline based on preventive maintenance. The acid shall be taken form storage tanks to reactor through closed pipeline. Storage tanks	any solvent. However, we have procured portable VOC digital meter and are using it to check the VOC as per the requirement Raw material (powder & liquids) are being charged through closed pipelines from storage area to process area NA PM being carried out	
Closed handling system shall be provided for chemicals Reflux condenser shall be provided over reactor. System of leak detection and repair of pump/pipeline based on preventive maintenance. The acid shall be taken form storage tanks to	and are using it to check the VOC as per the requirement Raw material (powder & liquids) are being charged through closed pipelines from storage area to process area NA PM being carried	
Closed handling system shall be provided for chemicals Reflux condenser shall be provided over reactor. System of leak detection and repair of pump/pipeline based on preventive maintenance. The acid shall be taken form storage tanks to	Raw material (powder & liquids) are being charged through closed pipelines from storage area to process area NA PM being carried	
Closed handling system shall be provided for chemicals Reflux condenser shall be provided over reactor. System of leak detection and repair of pump/pipeline based on preventive maintenance. The acid shall be taken form storage tanks to	(powder & liquids) are being charged through closed pipelines from storage area to process area NA PM being carried	
System of leak detection and repair of pump/pipeline based on preventive maintenance. The acid shall be taken form storage tanks to	PM being carried	
System of leak detection and repair of pump/pipeline based on preventive maintenance. The acid shall be taken form storage tanks to		
shall be vented through trap receiver and condenser operated on chilled water.	NA	
Cathodic protection shall be provided to the underground solvent storage tanks.	NA	No solvents stored/No underground tanks
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	
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.	
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 achieving desired water quality for various purposes.	Complied	
No effluent shall be discharged outside the factory premises and Zero discharge concept shall be adopted.	Complied Zero discharge concept shall be implemented when Solvent block is installed as per our CFE	
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.	
COUNTY THE PARTY OF THE STATE O	cathodic protection shall be provided to the inderground solvent storage tanks. 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 collution. 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. Total industrial waste water generation shall not exceed 84 cum/day. Industrial effluent shall be reated in ETP comprising physiochemical reatment facility, biological treatment and ertiary treatment. Treated effluent shall be recycled/reused with in factory premises after achieving desired water quality for various purposes. No effluent shall be discharged outside the factory premises and Zero discharge concept shall be adopted. Hazardous chemicals shall be stored in tanks, ank farms, drums, carboys etc. Flame arrestors shall be provided on tank farm. Solvent transfer	cathodic protection shall be provided to the inderground solvent storage tanks. 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 provided to the DG sets to mitigate the noise pollution. 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. Total industrial waste water generation shall not exceed 84 cum/day. Industrial effluent shall be reated in ETP comprising physiochemical reatment facility, biological treatment and ertiary treatment. Treated effluent shall be recycled/reused with in factory premises after achieving desired water quality for various purposes. No effluent shall be discharged outside the factory premises and Zero discharge concept shall be implemented when solvent block is installed as per our CFE Hazardous chemicals shall be stored in tanks, ank farms, drums, carboys etc. Flame arrestors shall be provided on tank farm. Solvent transfer shall be by pumps.

	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.	be disposed to M/s. Coastal Waste Management Project, Nellore (dist.) 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.	None of the materials used in our process fall under the schedule of MSIHC rules	
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.	
ь	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.	Table 10 Control of the Control of t
c	Use of automated filling to minimize spillage.	Complied	
đ	Use of close feed system into batch reactors.	Closed feeding system for TSDs & mixers is implemented	
e	Venting equipment through vapor recovery system	It is not applicable as currently we are not using any solvents	
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	And the second s
xviii)	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting 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	33% of cite area is being maintaine	
	around the unit to mitigate the odor problem.	as exclusione gree belt.	<i>-</i>
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 a 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.	Not applicable	
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 such case	
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
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 confirm to the standards prescribed under environment (protection) Act 1986 rules viz. 75 dBA (day time) and 70 dBA (night time)	Complied.	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.	Strom water drains in plant are directed towards rainwater harvesting/recharge 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, Preemployment 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 carmark 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 management/pollution control measures shall not be diverted for any other purposes.	Adhered.	
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.	Will be complied in such a case	

Signature:

Name: Venkata Apparao D

GM - Manufacturing

Berger Paints India Limited

Hindupur



ISO 45001:2018

(UNIT OF MINERAL ENGINEERING SERVICES)

Accredited by NABL (TC-6172) Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory MoEFCC(CPCB) under E(P) Act 1986 recognition valid upto 23.05.2025

TEST REPORT

Table No. 1 a

AMBIENT AIR QUALITY

Name of the Project : Be

: Berger Paints India Limited, Industrial Park, Thumakunta village, Hindupuram Mandal,

Anantapuram Dist, Andhra Pradesh.

Location

: A1 - DG Set Back Side (250KVA & 1250KVA)

Barometric pressure

: 703 mm of Hg

Temperature

: Min 18.0°C Max 31.0°C

Relative Humidity

: Min 54% Max 76%

Duration

*

*

: 24 Hrs.

Date of Report

: 10.06.2023

Concentration							
Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), μg/m ³	PM _{10,} (μg/m³)	PM _{2.5,} (μg/m³)	Ammonia (NH ₃), µg/m ³	Benzene (C ₆ H ₆), µg/m ³
30.05.2023	ED/23/06/1-0102	11	13	53	27	<20	<1
Limits for Industrial,		80	80	100	60	400	5
Residential, Rural and othe	er Areas	24 Hrs	24 Hrs	24 Hrs	24 Hrs	24 Hrs	Annual

		Concentration							
Date of Sampling	Lab Code	Lead (Pb), µg/m³	Nickel (Ni), ng/m³	Arsenic (As), ng/m ³	Benzo(a) Pyrene (BaP), ng/m ³	Carbon Monoxide* (CO), mg/m³	Ozone* (O ₃), µg/m³		
30.05.2023	ED/23/06/1-0102	<0.1	<0.5	<0.5	<0.5	0.2	28		
Limits for Industrial ,	<u> </u>	1.0	20	6	1	4	180		
Residential, Rural and other Areas		24 Hrs	Annual	Annual	Annual	1 Hr	1 Hr		

M. SACHIN RAJU T.M. - CHEMICAL

Govt. Analyst / Authorised Signatory

948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone: 080-25432969 Tel/fax: 25432968. E-mail: mesbng@gmail.com, www.envtest.in



OF MINERAL ENGINEERING SERVIC

Accredited by NABL (TC-6172) Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory MoEFCC(CPCB) under E(P) Act 1986 recognition valid upto 23.05.2025

TEST REPORT

AMBIENT AIR QUALITY

		Concentration						
Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), μg/m³	Nitrogen Dioxide (NO₂), µg/m³	PM _{10,} (μg/m³)	PM _{2.5,} (μg/m³)	Ammonia (NH ₃), μg/m ³	Benzene (C ₆ H ₆), µg/m ³	
30.05.2023	ED/23/06/1-0103	7	11	45	20	<20	<1	
Limits for Industrial,	r Areas	80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual	

			T AIR QUA		······································				
Name of the Project	: Berger Paints Inc	dia Limited, Inc	lustrial Park, Th	umakunta	village, H	indupuram Ma	andal,		
	Anantapuram D	ist, Andhra Pra	ıdesh.						
Location	: A2 - Near ETP A	rea							
Barometric pressure	: 703 mm of Hg								
Temperature	: Min 18.0°C Max	31.0°C							
Relative Humidity	: Min 54% Max 7	6%							
Duration	: 24 Hrs.								
Date of Report	: 10.06.2023			2,50					
				Concen	tration				
Date of Sampling	Lab Code	Sulphur Dioxide	Nitrogen Dioxide	PM _{10,}	PM _{2.5,}	Ammonia	Benzene		
E.		(SO ₂), μg/m ³	(NO ₂), μg/m ³	(µg/m³) ((µg/m³)	(NH ₃), μg/m ³	(C ₆ H ₆), μg/m		
30.05.2023	ED/23/06/1-0103	7	11	45	20	<20	<1		
Limits for Industrial ,		80	80	100	60	400	5		
Residential, Rural and othe	r Areas	24 Hrs	24 Hrs	24 Hrs	24 Hrs	24 Hrs	Annual		
	T	Concentration							
Date of Sampling	Lab Code	Lead (Pb), µg/m³	Nickel (Ni), ng/m³	Arsenic (As), ng/m ³	Benzo(a) Pyrene (BaP), ng/m³	Carbon Monoxide* (CO), mg/m³	Ozone* (O ₃), μg/m ³		
30.05.2023	ED/23/06/1-0103	<0.1	<0.5	<0.5	<0.5	0.12	20		
Limits for Industrial ,	L	1.0	20	6	1	4	180		
Residential, Rural and of	ther Areas	24 Hrs	Annual	Annual	Annual	1 Нг	1 Hr		
Note : * Parameters n	nonitored for period	of 1 hr	•						
	148 2	120							
					Me Table	Count COHIN RAJU CHEMICAL	4		



ISO 45001:2018

(UNIT OF MINERAL ENGINEERING SERVICES)

Accredited by NABL (TC-6172) Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory MoEFCC(CPCB) under E(P) Act 1986 recognition valid upto 23.05.2025

TEST REPORT

Table No. 1 c

AMBIENT AIR QUALITY

Name of the Project : Berger Pair

: Berger Paints India Limited, Industrial Park, Thumakunta village, Hindupuram Mandal,

Anantapuram Dist, Andhra Pradesh.

Location

: A3 - Near Admin (U/G Water Tank)

Barometric pressure

: 703 mm of Hg

Temperature

: Min 18.0°C Max 31.0°C

Relative Humidity

: Min 54% Max 76%

Duration

: 24 Hrs.

Date of Report

: 10.06.2023

	Concentration						
Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), μg/m ³	Nitrogen Dioxide (NO ₂), μg/m ³	PM _{10,} (μg/m³)	PM _{2.5,} (μg/m³)	Ammonia (NH₃), μg/m³	Benzene (C ₆ H ₆), µg/m³
30.05.2023	ED/23/06/1-0104	12	14	50	29	<20	<1
Limits for Industrial , Residential, Rural and othe	er Areas	80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

	Concentration						
Date of Sampling	Lab Code	Lead (Pb), μg/m³	Nickel (Ni), ng/m ³	Arsenic (As), ng/m³	Benzo(a) Pyrene (BaP), ng/m ³	Carbon Monoxide* (CO), mg/m³	Ozone* (O ₃), µg/m ³
30.05.2023	ED/23/06/1-0104	<0.1	<0.5	<0.5	<0.5	0.2	21
Limits for Industrial ,	<u></u>	1.0	20	6	1	4	180
Residential, Rural and of	ther Areas	24 Hrs	Annual	Annual	Annual	1 Hr	1 Hr

Note: * Parameters monitored for period of 1 hr

M. SACHIN PAJU T.M. - CHEMICAL

Govt. Analyst / Authorised Signatory

948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084. Phone: 080-25432969 Tel/fax: 25432968. E-mail: mesbng@gmail.com, www.envtest.in

Note: This report is subject to the terms and conditions mentioned overleaf.



OF MINERAL ENGINEERING SERVI

Accredited by NABL (TC-6172) Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory MoEFCC(CPCB) under E(P) Act 1986 recognition valid upto 23.05.2025

TEST REPORT

Table No. 1 d

AMBIENT AIR QUALITY

Name of the Project

: Berger Paints India Limited, Industrial Park, Thumakunta village, Hindupuram Mandal,

Anantapuram Dist, Andhra Pradesh.

Location

: A4 - Near Green Belt Area

Barometric pressure : 703 mm of Hg

Temperature

: Min 18.0°C Max 31.0°C

Relative Humidity

: Min 54% Max 76%

Duration

经验的条件设备的存储的特殊的特殊的特殊的特殊的特殊的特殊的特殊的特殊的特殊的特殊的特殊的特殊的特别的

: 24 Hrs.

Date of Report

: 10.06.2023

		Concentration						
Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), μg/m ³	Nitrogen Dioxide (NO₂), µg/m³	PM _{10,} (μg/m³)	PM _{2.5,} (μg/m³)	Ammonia (NH ₃), μg/m ³	Benzene (C₅H₅), µg/m³	
30.05.2023	ED/23/06/1-0105	11	15	48	27	<20	<1	
Limits for Industrial,	er Areas	80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual	

		Concentration						
Date of Sampling	Lab Code	Lead (Pb), μg/m³	Nickel (Ni), ng/m³	Arsenic (As), ng/m³	Benzo(a) Pyrene (BaP), ng/m ³	Carbon Monoxide* (CO), mg/m³	Ozone* (O₃), µg/m³	
30.05.2023	ED/23/06/1-0105	<0.1	<0.5	<0.5	<0.5	0.18	27	
Limits for Industrial ,		1.0	20	6	1	4	180	
Residential, Rural and o	ther Areas	24 Hrs	Annual	Annual	Annual	1 Hr	1 Hr	

M. SACHIN RAJU T.M. - CHENICAL

Govt. Analyst / Authorised Signatory





(UNIT OF MINERAL ENGINEERING SERVICES)

Accredited by NABL (TC-6172) Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory MoEFCC(CPCB) under E(P) Act 1986 recognition valid upto 23.05.2025

TEST REPORT

Table No.1 e

FUGITIVE AIR QUALITY

Project

: Berger Paints India Limited, Industrial Park,

Thumakunta (V), Hindupuram (M), Anantapuram Dist, AP

Locatuon

: A5 - 1st Floor water Base

Barometric pressure

: 703 mm of Hg

Temperature

: Min 18.0°C Max 31.0°C

Relative Humidity

: Min 54% Max 76%

Date of Report

: 10.06.2023

		Duration :	8 Hrs		
Monitoring	Lab Code	Sulphur Dioxide	Nitrogen Dioxide	Particulate Matter	
Date	245 0040	(SO ₂), μg/m ³	(NO ₂), μg/m ³	SPM µg/m³	RPM µg/m³
30.05.2023	ED/23/06/1-0106	7	11	229	57

Methods of Measuremant

& Gaeke

Improved West Modified Jacob & Hochheiser

Gravimetric

Gravimetric

Ref: EPA Notification: GSR176 (E)

Permissible limits for Industrial Area, (Max)

SO₂

NO₂

SPM

RPM

150

120

120

500

M. SACHIN RAJU T.M. - CHEMICAL

Govt. Analyst / Authorised Signatory



(UNIT OF MINERAL ENGINEERING SERV)

Accredited by NABL (TC-6172) Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory MoEFCC(CPCB) under E(P) Act 1986 recognition valid upto 23.05.2025

TEST REPORT

Table No.1 f

FUGITIVE AIR QUALITY

Project

: Berger Paints India Limited, Industrial Park,

Thumakunta (V), Hindupuram (M), Anantapuram Dist, AP

Locatuon

: A6 - Raw Materal Area Ground Floor

Barometric pressure

: 703 mm of Hg

Temperature

: Min 18.0°C Max 31.0°C

Relative Humidity

: Min 54% Max 76%

Date of Report

: 10.06.2023

		Duration :	8 Hrs	44. V. d 1. v 1.	
Monitoring	Lab Code	Sulphur Dioxide	Nitrogen Dioxide	BOTO SANCTON CONTRACTOR CONTRACTO	
Date		(SO ₂), μg/m ³	(NO ₂), μg/m ³	SPM µg/m³	RPM µg/m ³
30.05.2023	ED/23/06/1-0107	8	12	221	45

Methods of Measuremant

& Gaeke

Improved West Modified Jacob & Hochheiser

Gravimetric

Gravimetric

Ref: EPA Notification: GSR176 (E)

Permissible limits for Industrial Area, (Max)

SO2

NO2

SPM

500

RPM

120

120

150

T.M. - CHEMICAL

Govt. Analyst / Authorised Signatory





(UNIT OF MINERAL ENGINEERING SERVICES)

Accredited by NABL (TC-6172) Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory MoEFCC(CPCB) under E(P) Act 1986 recognition valid upto 23.05.2025

TEST REPORT

Table No. 1 g

AMBIENT AIR QUALITY

VOC TEST REPORT

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

Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.

Sample Collected by : Environmental Laboratory Representaive

Date of Monitoring: 30.05.2023

Date of Report

: 10.06.2023

CLN-		WB manufacturing building	Raw Material 1 st	Tank yard	QC Lab Result μg/m³	
SI No	Parameters	Result µg/m³	floor, Result μg/m³	Result μg/m³		
1	Benzene	0.52	0.87	1.32	0.82	
2	Toulene	BDL	BDL	BDL	0.75	
3	Ethylbenzene	BDL	BDL	BDL	BDL	
4	m-Xylene	BDL	BDL	BDL	BDL	

Note: BDL < 0.5 μg/m3

M. SACHIN RAJE T.M. - CHEMICAL

Govt. Analyst / Authorised Signatory



ISO 45001:2018

(UNIT OF MINERAL ENGINEERING SERVICES)

Accredited by NABL (TC-6172) Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory MoEFCC(CPCB) under E(P) Act 1986 recognition valid upto 23.05.2025

TEST REPORT

Table No. 2 a Report No. ED2623061

Name of the Project

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

Sample Collected by

: Environmental Laboratory Representaive

Location of Sampling

: Raw Effluent water

Date of sample collection Date of sample receipt : 31.05.2023 : 02.06.2023 : ED/23/06/1-0026

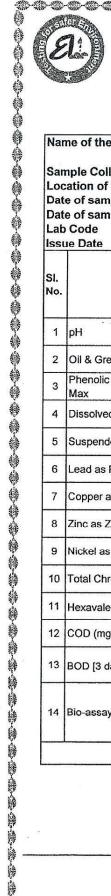
Lab Code Issue Date Ref

12.06.2023 Environmental (P) Rules, 1986 SCHEDULE I,- 01.01.2016

SI. No.	Parameters	Result	Method of Testing
1	pH .	7.95	IS 3025 (P-11)2017
2	Oil & Grease (mg/l), Max	<0.1	IS 3025 (P-39)1991 RA 2019
3	Phenolic Compounds as C ₆ H ₅ OH (mg/l), Max	<0.001	IS 3025 (P-43) Sec 1
4	Dissolved Solids (inorganic) mg/l, Max.	610	IS 3025 (P-16)1984 RA 2017
5	Suspended Solids (mg/l), Max	430	IS 3025 (P-16)1984 RA 2017
6	Lead as Pb (mg/l), Max	<0.005	APHA 23rd Edition Method No 3030K
7	Copper as Cu (mg/l), Max	0.01	APHA 23rd Edition Method No 3030K
8	Zinc as Zn (mg/l), Max	<0.005	APHA 23rd Edition Method No 3030K
9	Nickel as Ni (mg/l), Max	<0.001	APHA 23rd Edition Method No 3030K
10	Total Chromium as Cr(mg/l), Max	<0.001	APHA 23rd Edition Method No 3030K
11	Hexavalent Chromium as Cr ⁺⁶ (mg/l), Max	<0.03	IS 3025 (P-52)
12	COD (mg/l), Max	2341	IS 3025 (P-58) 2006 RA 2017
13	BOD [3 days at 27°C] (mg/l), Max	86.2	IS 3025 (P-44) 1993 RA 2019
14	Bio-assay test	10% survival of fish after 96 hrs in 100% effluent	IS 6582:1971 RA2019
		"" END OF REPORT""	

Awling Lousar ARSHIYAKOUSAR Dy. T.M. Chemical

Govt. Analyst / Authorised Signatory



(UNIT OF MINERAL ENGINEERING SERVICES)

Accredited by NABL (TC-6172) Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory MoEFCC(CPCB) under E(P) Act 1986 recognition valid upto 23.05.2025

TEST REPORT

Table No. 2 b

Report No. ED2723061

Name of the Project

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

Sample Collected by

: Environmental Laboratory Representaive

Location of Sampling

: Effluent Treated Plant water

Date of sample collection

: 31.05.2023

Date of sample receipt Lab Code

: 02.06.2023

Issue Date

: ED/23/06/1-0027

 •	12	.0	6.	20	123
 _					

133uc Dute	. 12.00.2023				
SI. Parameters	Result	General Standards For Effluent Discharge of Environmental Pollutants	Method of Testing		
1 pH	7.95	6.0 to 8.5	IS 3025 (P-11)2017		
2 Oil & Grease (mg/l), Max	<0.1	10	IS 3025 (P-39)1991 RA 2019		
3 Phenolic Compounds as C ₆ H ₅ OH (mg/l), Max	<0.001	1.0	IS 3025 (P-43) Sec 1		
4 Dissolved Solids (inorganic) mg/l, Max.	580	2100	IS 3025 (P-16)1984 RA 2017		
5 Suspended Solids (mg/l), Max	<5	100	IS 3025 (P-16)1984 RA 2017		
6 Lead as Pb (mg/l), Max	<0.005	0.1	APHA 23rd Edition Method No 3030K		
7 Copper as Cu (mg/l), Max	0.01	3.0	APHA 23rd Edition Method No 3030K		
8 Zinc as Zn (mg/l), Max	<0.005	5.0	APHA 23rd Edition Method No 3030K		
9 Nickel as Ni (mg/l), Max	<0.001	3.0	APHA 23rd Edition Method No 3030K		
10 Total Chromium as Cr(mg/l), Max	<0.001	2.0	APHA 23rd Edition Method No 3030K		
11 Hexavalent Chromium as Cr ⁺⁶ (mg/l), Max	<0.03	0.1	IS 3025 (P-52)		
12 COD (mg/l), Max	62.4	250	IS 3025 (P-58) 2006 RA 2017		
13 BOD [3 days at 27°C] (mg/l), Max	8.0	30	IS 3025 (P-44) 1993 RA 2019		
14 Bio-assay test	90% survival of fish after 96 hrs in 100% effluent	90% survival of fish after 96 hrs in 100% effluent	IS 6582:1971 RA2019		
14 Bio-assay test	of fish after 96 hrs in 100%	after 96 hrs in 100%	IS 6582:1971 RA		

"" END OF REPORT""

ARSHIYA KOUSAR

Dy. T.M. Chemical

Govt. Analyst / Authorised Signatory

948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084. Phone: 080-25432969 Tel/fax: 25432968. E-mail: mesbng@gmail.com, www.envtest.in



ENVIRONMENTAL LABORATORY

ISO 45001:2018

(UNIT OF MINERAL ENGINEERING SERVICES)

Accredited by NABL (TC-6172) Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory MoEFCC(CPCB) under E(P) Act 1986 recognition valid upto 23.05.2025

TEST REPORT

Table No. 6

NOISE LEVEL DATA

Name of the Project: Berger Paints India Limited, Industrial Park, Thumakunta village,

Hindupuram Mandal, Anantapuram Dist, Andhra Pradesh.

Sample Collected by: Environmental Laboratory Representaive

Date of sample collection : 30.05.2023

Date of sample receipt : 31.06.2023

Code	14		Day			Nigt	
No.	Monitoring stations	L_{min}	L _{eq}	L _{max}	L _{min}	L _{eq}	L max
N1	WB Manufacturing building 1 st floors	43.4	54.9	67.8	44.3	54.6	61.2
N2	Near Gates No 1 outside	44.1	61.6	70.9	40.9	56.8	65.3
N3	RM Area	40.5	55.2	60.9	42.1	55.0	60.1
N4	DG Set Area	51.7	58.2	70.1	48.5	55.6	62.3
N5	Near Gates No 2 outside	41.0	54.0	60.0	38.0	43.8	53.6

Permissible Limits of Ambient Noise Levels as per CPCB Guidelines

Leq. Limit dB(A)

Day Night

75 70

65 55

45

Permissible limits as per ILO Code of Practice

For Unprotected ear - 8 hrs working shift

Warning limit - 85 dB(A)

Industrial areas

Commercial area

Residential area

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)

M. SACHIN RAJUT T.M. - CHEMICAL

Govt. Analyst / Authorised Signatory



ENVIRONMENTAL LABORATORY

ISO 45001:2018

(UNIT OF MINERAL ENGINEERING SERVICES)

Accredited by NABL (TC-6172) Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory MoEFCC(CPCB) under E(P) Act 1986 recognition valid upto 23.05.2025

TEST REPORT

Table No. 7 a

STACK MONITORING REPORT

Report No. ED00108A023061

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

Hindupuram Mandal, Anantapur Dist., Andhra Pradesh.

Sample Collected by : Environmental Laboratory Representaive

Location of Sampling : DG set 1

Date of sample collection: 31.05.2023

Date of sample receipt: 02.06.2023

Lab Code : ED/23/06/1-00108

Issue Date : 12.06.2023

SI			Result		
No	Parameters	units	DG set 1	Limits	
1	Stack height	Mts	5		
2	Stack diameter	Mts	0.13		
3	Capacity of DG	KVA	250		
4	Stack Temperature	(°C)	365		
5	Velocity	(m/sec)	20.21	_	
6	Quantity of Gases	(Nm³/hr)	846	***	
7	Nox +HC		1.55	≤ 4.0	
8	co ·	(g/Kw-Hr	1.250	≤ 3.5	
9	РМ		0.161	≤ 0.2	

M. SACHIN RAJU T.

Govt. Analyst / Authorised Signatory



TEST REPORT

STACK MONITORING REPORT

	MoEFCC(CPCB) under E(P) Act 1986 recognition valid upto 23.05.2025 TEST REPORT								
	Table No. 7 b								
	STACK MONITORING REPORT								
Dro	Report No. ED00109A02306 Project : Berger Paints India Limited, Industrial Park, Thumakunta village,								
PIO	i a		ıaı Park, Thumakunta ır Dist., Andhra Prades						
San	nple Collected by : Environme	10							
	e of sample collection:31.05								
Date	e of sample receipt : 02.06.2	023							
ssu	ie Date : 12.06.2023								
SI	Parameters	!4-	Resu	lts					
No	raiameters	units	DG sets 2	DG sets 3	DG Limits 0.8				
Lab Code :			ED/23/06/1-00109	ED/23/06/1-00110	10 701111				
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)	344	345	-				
5	Velocity	(m/sec)	17.4	19.3					
6	Quantity of Gases	(Nm³/hr)	6350	7028					
7	NO _x as (NO ₂) (at 15% O ₂), Dry basis	PPMV	230	254	710				
8	NHC (as C) (at 15% O2),	mg/Nm³	50	42	100				
9	PM (at 15% O2),	mg/Nm ³	60 .	54	. 75				
				43	150				

948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084. Phone: 080-25432969 Tel/fax: 25432968. E-mail: mesbng@gmail.com, www.envtest.in

Note: This report is subject to the terms and conditions mentioned overleaf.



ENVIRONMENTAL LABORATORY

ISO 45001:2018

(UNIT OF MINERAL ENGINEERING SERVICES)

Accredited by NABL (TC-6172) Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory MoEFCC(CPCB) under E(P) Act 1986 recognition valid upto 23.05.2025

TEST REPORT

Table No. 7 c

STACK MONITORING REPORT

Report No. ED00111A023061

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

Hindupuram Mandal, Anantapur Dist., Andhra Pradesh.

Sample Collected by: Environmental Laboratory Representaive

Location of Sampling : Stack of Dust Collectors

Date of sample collection: 31.05.2023

Date of sample receipt: 02.06.2023

Lab Code : ED/23/06/1-00111

Issue Date: 12.06.2023

Ref ; G.S.K 1214(E)

SI No	Parameters	Result		
1	Barometric pressure (mm of Hg)	705		
2	Stack diameter (Mts)	0.74		
3	Stack Temperature (°C)	45		
4	Velocity (m/sec)	13.85		
5	Quanitity of Gas flow (Nm³/hr)	19525		
6	Sulphur Dioxide (SO ₂), mg/Nm ³	46		
7.	Nitrogen Dioxide (NO ₂), mg/Nm ³	15		
8	Particulate Matter (PM) (mg/Nm³)	20		

M. SACHIN RAJU T.

Govt. Analyst / Authorised Signatory