

ENVIRONMENTAL MONITORING REPORT



Danapur Village, Hosapete Taluk, Vijayanagara District, PIN-583222, Karnataka.

MAY-2025

Prepared by





GLOBAL ENVIRONMENT & MINING SERVICES LLP

NABL & MOEFCC Recognized Laboratory

(Consulting Engineers, Mine Designers, Geologists & Surveyors) 3rd main road, Basaveswara badavane

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

Tel : 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in **PREFACE**

The industries should monitor environmental parameters as per the frequency and

locations given in the CFE/CFO. And the same should be submitted on every month to the

respective pollution control board.

As part of the conditions and inherent concern on health of the employees and

surroundings M/s. BMM Ispat Ltd., as appointed M/s. Global Environment & Mining

Services LLP, Hosapete, to carry out the environmental pollution monitoring on AAQ

Monitoring, Fugitive monitoring, Noise Monitoring, Water Analysis & Stack monitoring

pollution and submit the same to the Pollution Control Board.

Accordingly, M/s. Global Environment & Mining Services LLP, Hosapete, carried out the

pollution monitoring as per the standard sampling methods prescribed by CPCB, for AAQ

Monitoring, Fugitive monitoring within the plant, Stack Monitoring & Personal Dust

Sampling as per the CFO. These monitoring has been carried out in a frequency as

mentioned in the CFO and the same report is being submitted to the Board.

We sincerely thank to officials of M/s. BMM Ispat Ltd., for their valuable co-ordination &

support during the sampling and reporting.

for GLOBAL Environment & Mining Services LLP

Place: Hosapete Date: 05.06.2025

K. Ramákrishna Reddý (Technical Manager)

1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

The journey of the BMM Group is a reflection of the path tread by every entrepreneur who believes in the human potential and one's own ability to bring about a life affirming change that transcends time. BMM Group was born out of this committed belief of Late Shri. Udai chand Singhi.

Entrenched in the Indian ethos, with an astute understanding of market needs, values and sensibilities *Mr. Dinesh Kumar Singhi* inherited the legacy from his father and has built the BMM Group on sound fundamentals since 1998. He steered the company towards growth by being the first mining company to establish a power generation plant for captive use, and creating a steel plant from the captive ore mine. Over the last 12 years, BMM has been able to add value to every relationship under his able and dynamic leadership.

Today, BMM is a 4900 Crores Company due to its focus on market orientation and optimal usage of technology to achieve process efficiency and value addition. BMM has always believed in the principle of sharing and hence continues to transfer this benefit derived from sustained growth to its employees, partners and associates. The unique value proposition that defines the very fabric of the BMM culture is the firm's belief in unleashing this 'potential in tones' in terms of its human capital, continuous growth and consistent benefits to its stakeholders.

The human potential at BMM is reflected in the depth of domain expertise across diverse sectors and dynamism of youth at various levels in the Organization. Business operations lead by professionals with decades of market understanding and a dynamic team enables BMM to deliver superior product quality. This human potential keeps BMM attuned to scaling new heights and meeting customer expectations. While consistently adding value to its partners, BMM is sensitive to its responsibility towards the environment by implementing best practices in its Business Operations and contribution to society through various social Endeavors.

BMM has a commitment of being a good Corporate Citizen and is committed to achieving business goals through ethical means. BMM hence has been able to have deeper relevance to society by creating value that is inclusive and truly benefits all.





1.2 PROMOTERS OF THE PROJECT

BMM Group, one of the leading Steel, Power & Mining companies in India that has achieved the present level under the leadership and guidance of **Sri. Dinesh Kumar Singhi**, the Founder & Chairman of the group, is promoting the project. His vision is to globalize the company business and do value addition by operating responsibly and in a sustainable manner in exploring, exploiting, excavating and processing minerals followed by setting up steel plant facilities.

BMM is a step towards forward integration has set up new merchant Bar Mill. The works is located at:

BMM ISPAT LIMITED

(Registered Office & Works) #114, Danapur **Hosapete - 583 222** Vijayanagara Dist., Karnataka Phone +91 08394-264000, +91 9686550808/09 Fax - 08394 264010

1.3 <u>Site Location</u>

BMM ISPAT LIMITED is located at Danapur about 15 Kms away from Hosapete in Karnataka. The plant site can be connected by national highway, viz. NH-13. The plant is 1 km away from the NH-13 near Danapur village. The nearest railway station is Hospet; Bangalore is at a distance of 300 kms. Seaport is Belikere and Karwar, the nearest Airport is in the private sector belonging to JSW, a Jindal Group company at Thoranagallu (Vidyanagara).



M/s. BMM ISPAT Ltd., Has accorded Environmental Clearance for 2.0 MTPA Integrated Steel Plant, with the following facilities.

S.N.	Items	Capacity
1	Iron ore beneficiation plant	4.70 MTPA
2	Palletizing Plant	2.40 MTPA
3	DRI Plant	0.70 MTPA
4	Coke Oven	0.80 MTPA
5	Sinter Plant	2.50 MTPA
6	Blast furnace	1.70 MTPA
7	EAF & BOF Steel making shop	2.30 MTPA
8	Continuous casting machines Slab Caster Billet Caster	1.10 MTPA 1.10 MTPA
9	Rolling mills: Hot strip mill Structural/wire rods	1.00 MTPA 1.00 MTPA
10	Oxygen Plant	2x500 TPD
11	Calcining	1,080 TPD
12	Cement Plant	1.40 MTPA
13	Power Plant	230 MW
14	Sponge Iron Division -1	2 x 100 TPD
15	Induction furnace (billets)	9000 tonnes/month
16	Rolling Mill (TMT rods)	9000 tonnes/month
17	Captive Power Plant	25 MW

Out of the above units, presently **4 x 500 TPD Sponge Iron Plants** and **1X70 MW Thermal Power Plants** have been commissioned on August 2011. Beneficiation plant-2, Pellet Plant-2 are commissioned on March 2012. 2X70 MW Thermal based power plants have commissioned on Jan 2013, EAF, Steel Making Shop, CCM, Rolling Mill, Oxygen plants are commissioned on August 2015. Remaining units are under various stages of implementation.

Hence environmental pollution monitoring is being carried out for 4×500 TPD sponge iron plants, 1X70 MW Thermal Power Plant, 1.3MTPA Beneficiation, 1.2MTPA Pellet Plant, 2X70MW Power plant, SMS, and RML.

- 1.4 The report includes environmental monitoring data collected at above site for the month of MAY-2025. The Parameters monitored are:
 - Ambient Air Quality
 - Fugitive Dust Level
 - Stack Emission
 - Ambient Noise Level
 - Water Quality

M/S. BMM ISPAT LIMITED.,

2.0 Fugitive Emission Monitoring

Fugitive air quality was monitored 56 samples were collected from the analyzed for SPM analyzed by gravimetric method. Work Zone Air quality was monitored at all Plant area and material handling area.

3.0 Stack Monitoring

Stack Monitoring was Collected from Enviro Instrument Stack sampler EI-106 stack monitoring was used for drawing the flue gas. Sulphur dioxide and oxides of Nitrogen in the flue gas was sampled by bubbling flue gas solution respectively and the analyses of the pollutants were done as per the Indian Standard procedures prescribed by CPCB/BIS. Stack Emission level was monitored as per the statutory requirement on twice in a month.

DATA ANALYSIS

3.1 <u>BUFFERZONE AMBIENT AIR QUALITY STATUS</u> Danapur Village (A1)

At this location, average of PM10, PM2.5, SO2, NO2 values Average 68.74,21.02,13.15 & $15.69~\mu g/m3$ respectively. All above the values were found within the Limits. And the results given in **Annexure-1**.

Mariyammanahalli Village (A2)

At this location, average of PM10, PM2.5, SO2, NO2 values Average 59.59, 19.16, $12.48 \& 14.59 \,\mu\text{g/m}3$ respectively. All above the values were found within the Limits. And the results given in **Annexure-2**.

Hanumanahalli Village (A3)

At this location, average of PM10, PM2.5, SO2, NO2 values Average 60.22, 20.66, $11.55 \& 13.97 \,\mu\text{g/m}3$ respectively. All above the values were found within the Limits. Results given in **Annexure-3**.

Galemmanagudi Village (A4)

At this location, average of PM10, PM2.5, SO2, NO2 values Average 69.03, 18.86, 14.29 & 16.76 μ g/m3 respectively. All above the values were found within the Limits. Results given in **Annexure-4.**



G Nagalapura Village (A5)

At this location, average of PM10, PM2.5, SO2, NO2 values Average 40.41, 10.93, $11.07 \& 13.20 \,\mu\text{g/m}$ 3respectively. All above the values were found within the Limits. Results given in **Annexure-5**.

Gunda Tanda Village (A6)

At this location, average of PM10, PM2.5, SO2, NO2 values Average 41.22, 12.57, 9.90 & 11.51 μ g/m3respectively. All above the values were found within the Limits. Results given in **Annexure-6.**

5.1 **FUGITIVE DUST CONCENTRATION**

Fortnightly fugitive air quality was monitored all plant area SPM value minimum $177.90 \,\mu\text{g/m}^3$, maximum value $1924.95 \,\mu\text{g/m}^3$ and average value $730.87 \,\mu\text{g/m}^3$. The Fugitive air quality $1^{\text{st}} \& 2^{\text{nd}}$ Fortnight Results given in **Annexure-7 to Annexure-12**.

5.2 STACK MONITORING

Stack emission level was monitored all chimneys' PM values (mg/Nm³) 1st and 2ndFortnight Minimum Value 5.30 mg/Nm³, Maximum Value 44.69 mg/Nm³ & Average Value 26.65 mg/Nm³. 1st & 2nd Fortnight Results are given in **Annexure-13** to **Annexure-42**.

5.3 NOISE LEVEL MEASUREMENT

Noise level was recorded at 30 locations each in Ambient and work zone area using Sound Level Meter (Equinox-EQ 107 Instrument / Lutron) The Day time noise level values were ranging between 43.50 to 73.50 dB (A). The noise level status is given in **Annexure-43 to Annexure-44**.

5.4 Water Sample Collected at 17 locations in side plant and surrounding nearest villages and nearest surface water Sample Collected every Month. The Water Analysis Test Report is given in **Annexure-46 to Annexure-57**.

5.5 **CONCLUSION**

All the monitored Environmental parameters were found to be well within the statutory norms and the same are enclosed as follows.





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HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

Ph

: 08394 355369

e-mail

: gems_hpt@yahoo.com

Website

: www.globalmining.in

ANNEXURE-01 GEMS-LD/TF/11/01

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

Customer Reference

REF:LOI/STORES/25-26 DATE:02.04.2025

Sample collected by Discipline

Global Environment & Mining Services Chemical

Group

Atmospheric Pollution

Sample Type

Ambient Air Quality Monitoring

Particulars of Sample Collected

Respirable Dust Sampler, FPS Sampler

MAY-2025

Location

A1-Danapur Village

Duration of Monitoring

24 Hour

Report Issued Date

05.06.2025

Report Number

GEMS/BMMIL/ NAAQ /2025-26/361

RESULTS

	Parameters			10 n ³]	PM [μg/		SO [µg/	7	N([μg/	_
Reference Method		IS:5182: 2006 IS 519 (Part-23)		IS 5182 (Part 24): 2019 (RF-2024)		IS:5182: 2001 (Part-2) Sec 1:2023		IS:5182: (Part-6) 2006 (RF-2017)		
Date of Sampling	Date of Sample Received	Sample Code	Result	STD	Result	STD	Result	STD	Result	STD
05.05.2025	06.05.2025	695	86.04		29.53		9.86		13.14	
06.05.2025	07.05.2025	725	73.86		15.64		14.64		17.07	
12.05.2025	13.05.2025	927	80.54		15.73		14.22		16.54	
13.05.2025	14.05.2025	970	69.11		21.94		9.53		12.70	
22.05.2025	23.05.2025	1178	71.32	100	20.78	60	15.28	80	16.68	80
23.05.2025	24.05.2025	1264	63.93		28.57		14.79		17.05	
26.05.2025	27.05.2025	1304	51.05		21.62		12.57		14.93	
27.05.2025	28.05.2025	1374	54.08		14.37		14.28		17.41	
	Average		68.74		21.02		13.15		15.69	

SLNO	INSTRUMENT DETAILS						
1	Instrument Name	Fine Particulate Sampler (FPS)					
2	Make & Model	Enviro instruments / EI-142 NL	Greentech instruments / GTI-131				
3	Serial No	R.D.S. / 197-C-21	PM2.5 /PM10 Sampler / 695-DTI-2024				
4	Calibration Date	08.07.2024	05.06.2024				
5	Calibration Due Date	07.07.2025	04.06.2025				

INFERENCE

As per NAAQMS Standards (2009),

Report Status: - Measured Values for the above parameters are within the limit.

End of the Report

Brunda.B Chemist

Authorised Signator K. Ramakrishna Reddy 0/9

Technical Manager

- The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied
- Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

 This report is not to be reproduced wholly or in part & cannot be used as evidence in the Court of law & should not use any advertising media without special permission in writing.
- Total liability of our laboratory is limited to the Invoice amount. Any dispute arising out of this report is subject to Hosapete jurisdiction only. Recognised by Ministry of Environment, Forest and Climate Change for Laboratory Recognised by Government of Karnataka, Maharashtra, Goa for DGPS survey





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ANNEXURE-01 GEMS-LD/TF/11/01

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

Customer Reference

REF:LOI/STORES/25-26 DATE:02.04.2025

Sample collected by

Global Environment & Mining Services

Discipline

Chemical

Group

Atmospheric Pollution

Sample Type

Ambient Air Quality Monitoring

Particulars of Sample Collected

CO Analyzer

Month

MAY-2025

Location

A1-Danapur Village

Duration of Monitoring

1 Hour

Report Issued Date

05.06.2025

Report Number

GEMS/BMMIL/NAAQ/2025-26/361

RESULTS

Sl. No.	Date of Sampling	Sample Code	CO (1 Hour) [mg/m³]	Standard
1	05.05.2025	695	0.10	
2	06.05.2025	725	< 0.01	1
3	12.05.2025	927	< 0.01	1
4	13.05.2025	970	< 0.01	1.0
5	22.05.2025	1178	0.12	4.0
6	23.05.2025	1264	< 0.01	
7	26.05.2025	1304	< 0.01	1
8	27.05.2025	1374	< 0.01	

Note: CO - GEMS/SOP/86/as per CO Analyzer Manual (1 Hour)

ND - Not Detected

SL NO	INS	STRUMENT DETAILS
1	Instrument Name	CO Gas Detector
2	Make & Model	Vasthi Instruments Pvt Ltd & VS-70-70-C0
3	Serial No	180883821
4	Calibration Date	08.07.2024
5	Calibration Due Date	07.07.2025

INFERENCE

As per NAAQMS Standards (2009),

Report Status: - Measured Values for the above parameters are within the limit

End of the Report

Brunda.B Chemist

Authorized Signatory K. Ramakrishna Reddy

Technical Manager

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Location: Danapur

Address:T Kotresh S/o T Thyappa Vyasankere colony Danapur Near VRM Hospital









Location: Danapur

Address:T Kotresh S/o T Thyappa Vyasankere colny Danapur Near VRM Hospital













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> **ANNEXURE-02** GEMS-LD/TF/11/01

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

Customer Reference

REF:LOI/STORES/25-26 DATE:02.04.2025

Sample collected by

Global Environment & Mining Services

Discipline

Chemical

Group

Atmospheric Pollution

Sample Type

Ambient Air Quality Monitoring

Particulars of Sample Collected

Respirable Dust Sampler, FPS Sampler **MAY-2025**

Month Location

A2-Mariyammanahalli Village

Duration of Monitoring

24 Hour

Report Issued Date

05.06.2025

Report Number

GEMS/BMMIL/ NAAQ /2025-26/363

RESULTS

Parameters			PM ₁ [μg/n			/1 _{2.5} /m³]	SC [µg/	_	N([μg/	_
	Reference Method		IS:5182: 2006 (Part-23) (RF-2017)		5182: 2006 IS 5182 (Part 24): IS:5182: 2001 (Part-23) (Part-2)		(Part-2) (Part-6)		2006	
Date of Sampling	Date of Sample Received	Sample Code	Result	STD	Result	STD	Result	STD	Result	STD
05.05.2025	06.05.2025	697	68.19		8.94		14.67		16.80	
06.05.2025	07.05.2025	727	49.41		15.21		13.57		15.89	
12.05.2025	13.05.2025	929	64.17		16.04		9.49		13.27	
13.05.2025	14.05.2025	972	78.18		24.28		10.77		13.97	
22.05.2025	23.05.2025	1180	59.35	100	23.86	60	11.79	80	14.38	80
23.05.2025	24.05.2025	1266	50.99		19.42		9.34		10.65	
26.05.2025	27.05.2025	1306	50.57		24.37		14.80		15.90	
27.05.2025	28.05.2025	1376	55.83		21.14		15.42		15.87	
	Average		59.59		19.16		12.48		14.59	

SL NO	INSTRUMENT DETAILS						
1	Instrument Name	nent Name Respirable Dust Sampler (RDS)					
2	Make & Model	Enviro instruments / El-142 NL	Greentech instruments / GTI-131				
3	Serial No	R.D.S. / 197-C-21	PM2.5 /PM10 Sampler / 696-DTI-2024				
4	Calibration Date	08.07.2024	05.06.2024				
5	Calibration Due Date	07.07.2025	04.06.2025				

INFERENCE

As per NAAQMS Standards (2009),

Report Status: - Measured Values for the above parameters are within the limit.

End of the Report

Brunda.B Chemist

Authorised Signatory 90/9 × K. Ramakrishna Reddy

Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorses ment of products is neither inferred nor implied.

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(Consulting Engineers, Mine designers, Geologist & Surveyors)

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: 08394 355369

e-mail

: gems_hpt@yahoo.com

Website

: www.globalmining.in

ANNEXURE-02 GEMS-LD/TF/11/01

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

Customer Reference

REF:LOI/STORES/25-26 DATE:02.04.2025

Sample collected by

Global Environment & Mining Services

Discipline Group

Chemical

Atmospheric Pollution

Sample Type

Ambient Air Quality Monitoring

Particulars of Sample Collected

CO Analyser

Month

MAY-2025

Location

A2-Mariyammanahalli Village

Duration of Monitoring

1 Hour

Report Issued Date

05.06.2025

Report Number

GEMS/BMM/NAAQ/2025-26/363

RESULTS

SI. No.	Date of Sampling	Sample Code	CO (1 Hour) [mg/m³]	Standard
1	05.05.2025	697	< 0.01	
2	06.05.2025	727	< 0.01	
3	12.05.2025	929	< 0.01	
4	13.05.2025	972	< 0.01	1.0
5	22.05.2025	1180	< 0.01	4.0
6	23.05.2025	1266	< 0.01	
7	26.05.2025	1306	0.12	
8	27.05.2025	1376	< 0.01	

Note: CO - GEMS/SOP/86/as per CO Analyzer Manual (1 Hour)

ND - Not Detected

SL NO INSTRUMENT DETAILS					
1	Instrument Name	CO Gas Detector			
2	Make & Model	Vasthi Instruments Pvt Ltd & VS-70-70-CO			
3	Serial No	180883821			
4	Calibration Date	08.07.2024			
5	Calibration Due Date	07.07.2025			

INFERENCE

As per NAAQMS Standards (2009),

Report Status: - Measured Values for the above parameters are within the limit

End of the Report

Brunda.B Chemist

Authorised Signatory S K. Ramakrishna Reddy

Technical Manager

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Recognised by Ministry of Environment, Forest and Climate Change for Laboratory

Location: Mariyammana Halli

Address: Maruthi G. S/o. Uppara Ramappa 6th ward Venkatapura Road ,MMHalli.









Location: Mariyammana Halli

Address: Maruthi G S/o Uppara Ramappa 6th ward Venkatapura Road ,MMHalli.













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e-mail

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ANNEXURE-03 GEMS-LD/TF/11/01

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry **Customer Reference**

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District. REF:LOI/STORES/25-26 DATE:02.04.2025

Sample collected by

Global Environment & Mining Services

Discipline

Chemical

Group Sample Type Atmospheric Pollution

Particulars of Sample Collected

Ambient Air Quality Monitoring Respirable Dust Sampler, FPS Sampler

Month

MAY-2025

Location

A3-Hanumanahalli Village

Duration of Monitoring Report Issued Date

24 Hour 05.06.2025

Report Number

GEMS/BMMIL/ NAAQ /2025-26/362

RESULTS

Parameters			PM [μg/ι		PM: [μg/ι		SO [μg/ι	7	NC [μg/	_
	Reference Method		IS:5182: 2006 IS 5182 (Part 24): (Part-23) 2019 (RF-2017) (RF-2024)		IS:5182: 2001 (Part-2) Sec 1:2023		IS :5182: (Part-6) 2006 (RF-2017)			
Date of Sampling	Date of Sample Received	Sample Code	Result	STD	Result	STD	Result	STD	Result	STD
05.05.2025	06.05.2025	696	71.15		19.53		9.90		14.14	
06.05.2025	07.05.2025	726	62.71		26.95		11.20		14.79	
12.05.2025	13.05.2025	928	65.00		23.69		14.00		16.32	
13.05.2025	14.05.2025	971	66.64		26.84		15.00		17.09	
22.05.2025	23.05.2025	1179	82.41	100	13.23	60	12.59	80	13.53	80
23.05.2025	24.05.2025	1265	52.19		16.94		11.26		14.08	
26.05.2025	27.05.2025	1305	38.24		20.75		09.46		10.94	
27.05.2025	28.05.2025	1375	43.39		17.31		8.99		10.87	
	Average		60.22		20.66		11.55		13.97	

SL NO	INSTRUMENT DETAILS						
1	Instrument Name Respirable Dust Sampler (RDS)		Fine Particulate Sampler (FPS)				
2	Make & Model	Enviro instruments / EI-142 NL	Greentech instruments / GTI-131				
3	Serial No	R.D.S. / 197-C-21	PM2.5 /PM10 Sampler / 696-DTI-2024				
4	Calibration Date	08.07.2024	05.06.2024				
5	Calibration Due Date	07.07.2025	04.06.2025				

INFERENCE

As per NAAQMS Standards (2009),

Report Status: - Measured Values for the above parameters are within the limit.

End of the Report

Analysed By Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy **Technical Manager**

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Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days. 3.

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(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE – 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

: gems_hpt@yahoo.com e-mail : www.globalmining.in Website

> **ANNEXURE-03** GEMS-LD/TF/11/01

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

Customer Reference

REF:LOI/STORES/25-26 DATE:02.04.2025

Sample collected by

Global Environment & Mining Services

Discipline

Chemical

Group

Atmospheric Pollution

Sample Type

Ambient Air Quality Monitoring

Particulars of Sample Collected Month

CO Analyzer

Location

MAY-2025

A3-Hanumanahalli Village

Duration of Monitoring

1 Hour

Report Issued Date

05.06.2025

Report Number

GEMS/BMM/NAAQ/2025-26/362

SI. No.	Date of Sampling	Sample Code	CO (1 Hour) [mg/m³]	Standard
1	05.05.2025	696	0.12	
2	06.05.2025	726	0.10	
3	12.05.2025	928	0.12	
4	13.05.2025	971	< 0.01	4.0
5	22.05.2025	1179	< 0.01	4.0
6	23.05.2025	1265	< 0.01	
7	26.05.2025	1305	< 0.01	
8	27.05.2025	1375	< 0.01	

Note: CO - GEMS/SOP/86/as per CO Analyzer Manual (1 Hour) ND - Not Detected

SL NO	INSTRUMENT DETAILS			
1	Instrument Name	CO Gas Detector		
2	Make & Model	Vasthi Instruments Pvt Ltd & VS-70-70-CO		
3	Serial No	180883821		
4	Calibration Date	08.07.2024		
5	Calibration Due	07.07.2025		

INFERENCE

As per NAAQMS Standards (2009),

Report Status: - Measured Values for the above parameters are within the limit

End of the Report

Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy

Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

This report is not to be reproduced wholly or in part & cannot be used as evidence in the Court of law & should not use any advertising media without special permission in writing. 3.

Total liability of our laboratory is limited to the Invoice amount. Any dispute arising out of this report is subject to Hosapete jurisdiction only. Recognised by Ministry of Environment, Forest and Climate Change for Laboratory

Location: Hanumanahalli

Address: BMM OHC Hospital Hanumanahalli Near STP









Location: Hanumanahalli

Address: BMM OHC Hospital Hanumanahalli Near STP













(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

Ph

: 08394 355369

e-mail

: gems_hpt@yahoo.com

Website

: www.globalmining.in

ANNEXURE-04 GEMS-LD/TF/11/01

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

Customer Reference

REF:LOI/STORES/25-26 DATE:02.04.2025

Sample collected by

Global Environment & Mining Services

Discipline

Chemical

Group

Atmospheric Pollution

Sample Type

Ambient Air Quality Monitoring

Particulars of Sample Collected

Respirable Dust Sampler, FPS Sampler

Month

MAY-2025

Location **Duration of Monitoring** A4-Galemmanagudi Village 24 Hour

Report Issue Date

05.06.2025

Report Number

GEMS/BMMIL/ NAAQ /2025-26/364

RESULTS

Parameters		PM [μg/		PM [μg/		SC [µg/	_	NC [µg/	_		
	Reference Method		IS:5182 (Part- (RF-2	-23)	IS 5182 (I 201 (RF-2	19	(Part-2) (Part-2)		(Part-6	(S :5182: art-6) 2006 RF-2017)	
Date of Sampling	Date of Sample Received	Sample Code	Result	STD	Result	STD	Result	STD	Result	STD	
05.05.2025	06.05.2025	698	74.54		20.68		12.67		16.50		
06.05.2025	07.05.2025	728	73.98		23.92		9.43		11.32		
12.05.2025	13.05.2025	930	82.53		20.03		15.86	87.0	18.67		
13.05.2025	14.05.2025	973	73.47		13.18		13.41		12.56		
22.05.2025	23.05.2025	1181	67.15	100	25.97	60	18.59	80	19.54	80	
23.05.2025	24.05.2025	1267	61.36		18.29		14.56		18.33		
26.05.2025	27.05.2025	1307	56.95		16.29		14.38		18.83		
27.05.2025	28.05.2025	1377	62.28		12.53		15.40		18.32		
	Average	•	69.03		18.86		14.29		16.76		

SL NO	INSTRUMENT DETAILS							
1	Instrument Name	Respirable Dust Sampler (RDS)	Fine Particulate Sampler (FPS)					
2	Make & Model	Enviro instruments / EI-142 NL	Greentech instruments / GTI-131					
3	Serial No	R.D.S./198-C-21	PM2.5 /PM10 Sampler / 694-DTI-2024					
4	Calibration Date	08.07.2024	05.06.2024					
5	Calibration Due Date	07.07.2025	04.06.2025					

INFERENCE

As per NAAQMS Standards (2009),

Report Status: - Measured Values for the above parameters are within the limit.

End of the Report

Brunda.B

Chemist

Authorised Signatory K. Ramakrishna Reddy **Technical Manager**

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

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3. 4. 5. Total Hability of our laboratory is limited to the Invoice amount. Any dispute arising out of this report is subject to Hosapete jurisdiction only. Recognised by Ministry of Environment, Forest and Climate Change for Laboratory





(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

Ph : 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-04** GEMS-LD/TF/11/01

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

Customer Reference

REF:LOI/STORES/25-26 DATE:02.04.2025 **Global Environment & Mining Services**

Sample collected by

Chemical

Discipline Group

Atmospheric Pollution

Sample Type

Ambient Air Quality Monitoring

Particulars of Sample Collected

CO Analyser

Month

MAY-2025

Location

A4-Galemmanagudi Village

Duration of Monitoring

1 Hour

Report Issued Date

05.06.2025

Report Number

GEMS/BMM/NAAQ/2025-26/364

RESULTS

SI. No.	Date of Sampling	Sample Code	CO (1 Hour) [mg/m³]	Standard
1	05.05.2025	698	0.12	
2	06.05.2025	728	0.14	
3	12.05.2025	930	0.10	
4	13.05.2025	973	< 0.01	4.0
5	22.05.2025	1181	< 0.01	4.0
6	23.05.2025	1267	< 0.01	
7	26.05.2025	1307	< 0.01	
8	27.05.2025	1377	0.12	

Note: CO - GEMS/SOP/86/as per CO Analyzer Manual (1 Hour)

ND - Not Detected

SL NO	NO INSTRUMENT DETAILS				
1	Instrument Name	CO Gas Detector			
2	Make & Model	Vasthi Instruments Pvt Ltd & VS-70-70-CC			
3	Serial No	180883821			
4	Calibration Date	08.07.2024			
5	Calibration Due Date	07.07.2025			

As per NAAQMS Standards (2009), INFERENCE Report Status: - Measured Values for the above parameters are within the limit

End of the Report

Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy

Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

This report is not to be reproduced wholly or in part & cannot be used as evidence in the Court of law & should not use any advertising media without special permission in writing. 2. 3.

Total liability of our laboratory is limited to the Invoice amount. Any dispute arising out of this report is subject to Hosapete jurisdiction only. Recognised by Ministry of Environment, Forest and Climate Change for Laboratory

Location: Galemmanagudi

Address: CD Yellappa S/o Dasappa Galemmanagudi Village near welcome board Hanumahalli post

Tq: Hospet Di: Vijayanagara









Location: Galemmanagudi

Address: CD Yellappa S/o Dasappa Galemmanagudi Village near welcome board Hanumahalli post

Tq: Hospet Di: Vijayanagara













(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE – 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-05** GEMS-LD/TF/11/01

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry

Customer Reference

Sample collected by

Discipline

Group

Sample Type

Particulars of Sample Collected

Month

Location

Duration of Monitoring

Report Issue Date

Report Number

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

REF:LOI/STORES/25-26 DATE:02.04.2025

Global Environment & Mining Services

Chemical

Atmospheric Pollution

Ambient Air Quality Monitoring

Respirable Dust Sampler, FPS Sampler

MAY-2025

A5-G Nagalapura Village

24 Hour

05.06.2025

GEMS/BMMIL/ NAAQ /2025-26/365

RESULTS

	Parameters Reference Method		PM1 [μg/n IS:5182: (Part-: (RF-20	2006 23)	PM [μg/ IS 5182 (20 (RF-2	m3] Part 24): 19	SO2 [μg/n IS:5182: (Part Sec 1:2	13] 2001 -2)	Ν([μg/ IS :5 (Part-6 (RF-2	m3] 182:) 2006
Date of Sampling	Date of Received Sample	Sample Code	Result	STD	Result	STD	Result	STD	Result	STD
05.05.2025	06.05.2025	699	42.15		11.01		12.24		14.71	
06.05.2025	07.05.2025	729	51.64		9.63		13.54		15.39	
12.05.2025	13.05.2025	931	38.29	}	14.65		10.94	}	11.49	
13.05.2025	14.05.2025	974	44.61		8.79		8.22		10.95	
22.05.2025	23.05.2025	1182	41.35	100	12.74	60	10.6	80	13.97	80
23.05.2025	24.05.2025	1268	41.26		8.53		8.93		11.48	
26.05.2025	27.05.2025	1308	31.58		10.57		13.37		15.17	
27.05.2025	28.05.2025	1378	32.42		11.48		10.74		12.43	
	Average		40.41		10.93		11.07		13.20	

SL NO	INSTRUMENT DETAILS						
1	Instrument Name	Respirable Dust Sampler (RDS)	Fine Particulate Sampler (FPS)				
2	Make & Model	Enviro instruments / El-142 NL	Enviro instruments / El-133 MINI				
3	Serial No	R.D.S. / 198-C-21	PM2.5 /PM10 Sampler / 527-F-2024				
4	Calibration Date	08.07.2024	23.09.2024				
5	Calibration Due Date	07.07.2025	22.09.2025				

INFERENCE

As per NAAQMS Standards (2009),

Report Status: - Measured Values for the above parameters are within the limit.

End of the Report

Brunda.B

Chemist

Authorised Signatory K. Ramakrishna Reddy **Technical Manager**

- 1.
- The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

 Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.
- 2. 3. 4. This report is not to be reproduced wholly or in part & cannot be used as evidence in the Court of law & should not use any advertisting media without special permission in writing. Total liability of our laboratory is limited to the Invoice amount. Any dispute arising out of this report is subject to Hosapete jurisdiction only.
- Recognised by Ministry of Environment, Forest and Climate Change for Laboratory





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HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369 Ph

: gems_hpt@yahoo.com e-mail Website : www.globalmining.in

> **ANNEXURE-05** GEMS-LD/TF/11/01

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

Customer Reference

REF:LOI/STORES/25-26 DATE:02.04.2025

Sample collected by Discipline

Global Environment & Mining Services Chemical

Group

Atmospheric Pollution

Sample Type

Ambient Air Quality Monitoring

Particulars of Sample Collected

CO Analyser

Month

MAY-2025

Location

A5- G Nagalapura Village

Duration of Monitoring

1 Hour

Report Issued Date

05.06.2025

Report Number

GEMS/BMM/NAAQ/2025-26/365

RESULTS

SI. No.	Date of Sampling	Sample Code	CO(1 Hour) [mg/m³]	Standard
1	05.05.2025	699	< 0.01	
2	06.05.2025	729	< 0.01	
3	12.05.2025	931	0.10	
4	13.05.2025	974	< 0.01	4.0
5	22.05.2025	1182	< 0.01	4.0
6	23.05.2025	1268	< 0.01	
7	26.05.2025	1308	< 0.01	
8	27.05.2025	1378	< 0.01	

Note: CO - GEMS/SOP/86/as per CO Analyzer Manual (1 Hour) ND - Not Detected

SL NO	INSTRUMENT DETAILS				
1	Instrument Name	CO Gas Detector			
2	Make & Model	Vasthi Instruments Pvt Ltd & VS-70-70-CC			
3	Serial No	180883821			
4	Calibration Date	08.07.2024			
5	Calibration Due Date	07.07.2025			

As per NAAQMS Standards (2009), INFERENCE Report Status: - Measured Values for the above parameters are within the limit

End of the Report

Analysed By Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy ann Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

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3. 4. 5.

Recognised by Ministry of Environment, Forest and Climate Change for Laboratory Recognised by Government of Karnataka, Maharashtra, Goa for DGPS survey

Location: Nagalapura Village

Address: B Manjunath S/o. B Hemanna G Nagalapura Hospet Tq Di: Vijayanagara Near 2nd ward Bus stand Nagalapura









Location: Nagalapura Village

Address: B Manjunath S/o. B Hemanna G Nagalapura Hospet Tq Di : Vijayanagara Near 2nd ward Bus stand Nagalapura













(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369 Ph

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-06** GEMS-LD/TF/11/01

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry

REF:LOI/STORES/25-26 DATE:02.04.2025

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

Customer Reference Sample collected by

Global Environment & Mining Services

Discipline

Chemical

Group

Atmospheric Pollution

Sample Type

Ambient Air Quality Monitoring

Particulars of Sample Collected

Respirable Dust Sampler, FPS Sampler

Month

MAY-2025

Location

A6-Gunda Tanda Village

Duration of Monitoring

24 Hour

Report Issue Date

05.06.2025

Report Number

GEMS/BMMIL/ NAAQ /2025-26/366

RESULTS

Parameters			PM: [μg/1		PM; [μg/1		SO [μg/1	-	NC [μg/	_
Reference Method		IS:5182: 2006 IS (Part-23) (RF-2017)		201	S 5182 (Part 24): 2019 (RF-2024)		IS:5182: 2001 (Part-2) Sec 1:2023		182:) 2006 017)	
Date of Sampling	Date of Received Sample	Sample Code	Result	STD	Result	STD	Result	STD	Result	STD
05.05.2025	06.05.2025	700	31.57		9.50		11.1		14.80	
06.05.2025	07.05.2025	730	36.68		9.94		7.75		9.60	
12.05.2025	13.05.2025	932	51.23		13.76		10.83		11.80	
13.05.2025	14.05.2025	975	47.03		15.63		10.52		11.37	
22.05.2025	23.05.2025	1183	42.10	100	13.81	60	8.15	80	9.40	80
23.05.2025	24.05.2025	1269	33.30		11.62		10.48		11.81	
26.05.2025	27.05.2025	1309	40.72		14.45		12.24		13.62	
27.05.2025	28.05.2025	1379	47.11		11.82		8.16		9.70	
	Average		41.22		12.57		9.90		11.51	

SL NO		INSTRUMENT DETAILS						
1	Instrument Name	Respirable Dust Sampler (RDS)	Fine Particulate Sampler (FPS)					
2	Make & Model	Enviro instruments / EI-142 NL	Enviro instruments / EI-133					
3	Serial No	R.D.S./200-C-21	PM2.5 /PM10 Sampler / 453-A-24					
4	Calibration Date	08.07.2024	01.05.2024					
5	Calibration Due Date	07.07.2025	30.04.2025					

INFERENCE

As per NAAQMS Standards (2009),

Report Status: - Measured Values for the above parameters are within the limit.

End of the Report

Analysed By Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy * 50

Technical Manager

- The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied
- Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

 This report is not to be reproduced wholly or in part & cannot be used as evidence in the Court of law & should not use any advertising media without special permission in writing.
- 3. 4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Hosapete jurisdiction only. Recognised by Ministry of Environment, Forest and Climate Change for Laboratory
- Recognised by Government of Karnataka, Maharashtra, Goa for DGPS survey





(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-06 GEMS-LD/TF/11/01**

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

Customer Reference

REF:LOI/STORES/25-26 DATE:02.04.2025

Sample collected by

Global Environment & Mining Services

Discipline

Chemical

Group

Atmospheric Pollution

Sample Type

Ambient Air Quality Monitoring

Particulars of Sample Collected

CO Analyser

Month

MAY-2025

Location

A6-Gunda Tanda Village

Duration of Monitoring

1 Hour

Report Issued Date

05.06.2025

Report Number

GEMS/BMM/NAAQ/2025-26/366

RESULTS

SI. No.	Date of Sampling	Sample Code	CO (1 Hour) [mg/m³]	Standard
1	05.05.2025	700	< 0.01	
2	06.05.2025	730	< 0.01	
3	12.05.2025	932	< 0.01	1
4	13.05.2025	975	< 0.01	10
5	22.05.2025	1183	< 0.01	4.0
6	23.05.2025	1269	< 0.01	
7	26.05.2025	1309	< 0.01	
8	27.05.2025	1379	< 0.01	

Note: CO - GEMS/SOP/86/as per CO Analyzer Manual (1 Hour)

ND - Not Detected

SL NO	INSTRUMENT DETAILS						
1	Instrument Name	CO Gas Detector					
2	Make & Model	Vasthi Instruments Pvt Ltd & VS-70-70-CO					
3	Serial No	180883821					
4	Calibration Date	08.07.2024					
5	Calibration Due Date 07.07.2025						

INFERENCE

As per NAAQMS Standards (2009),

Report Status: - Measured Values for the above parameters are within the limit

End of the Report

Analysed By Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy **Technical Manager**

1.

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

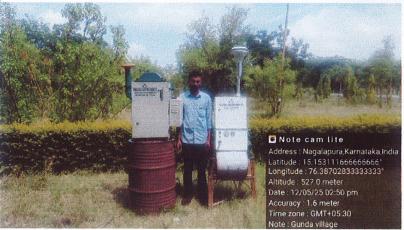
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Recognised by Ministry of Environment, Forest and Climate Change for Laboratory Recognised by Government of Karnataka, Maharashtra, Goa for DGPS survey

AMBIENT AIR QUALITY MONITORING STATION Location: BMM Quatre's Gunda Thanda









AMBIENT AIR QUALITY MONITORING STATION Location: BMM Quatre's Gunda Thanda













(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

e-mail

: gems_hpt@yahoo.com

Website

: www.globalmining.in

ANNEXURE-07 GEMS-LD/TF/11/01

FORTNIGHTLY FUGITIVE AIR QUALITY MONITORING DATA

Name of the Industry 1

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by GLOBAL Environment & Mining Services, Hosapete

Particulars of sample collected

HVS Sampler (HVS-01, HVS-02, HVS-03, HVS-04, HVS-05)

5 Month MAY-2025(1st Fort Night)

Discipline 6

7 Group **Atmospheric Pollution**

Method adopted 8

IS 5182 (Part 4)1999 RA 2014

9 Report Issued Date 05.06.2025

10 Report Number GEMS/BMM/FM/2025-26/420

RESULTS

Sl. No.	Location / Plant	Sample Code	Date Of Monitoring	Date Of Sample Receipt	SPM (µg/m³)	Standard
I. Benef	ficiation Plant-1					
1.	Main Canteen	811	08.05.2025	09.05.2025	607.62	2000
2.	Near Iron Ore Bottom Hopper	809	08.05.2025	09.05.2025	802.88	2000
3.	Iron Ore Screen	810	08.05.2025	09.05.2025	1600.14	2000
II. Pelle	t Plant-I					
4.	Near Pellet Plant	812	08.05.2025	09.05.2025	1653.94	2000
5.	Annual Cooler Pellet Discharge bin	815	08.05.2025	09.05.2025	935.98	2000
6.	Pellet Stock Yard	845	09.05.2025	10.05.2025	409.27	2000
III. Spor	nge Iron Division-1 (kiln 1 & 2)					
7.	Control Room SID-1	860	10.05.2025	11.05.2025	466.41	2000
8.	Near Product bin	861	10.05.2025	11.05.2025	1650.86	2000
9.	Coal Feeding Area	862	10.05.2025	11.05.2025	542.11	2000
IV. Indu	ıction Furnace & Rolling Mill – 1					
10.	IF Office	846	09.05.2025	10.05.2025	1904.09	2000
11.	TMT Stock Yard	847	09.05.2025	10.05.2025	899.67	2000
12.	RML Gasifier	848	09.05.2025	10.05.2025	798.13	2000
V. Powe	er Plant 25 MW-1					
13.	25 MW ESP	863	10.05.2025	11.05.2025	589.59	2000
14.	25 MW ACC	918	12.05.2025	13.05.2025	257.15	2000
VI. Site	Services					
15.	PGP- coal handling system	849	09.05.2025	10.05.2025	726.35	2000
16.	IF Slag Crusher	864	10.05.2025	11.05.2025	539.32	2000
17.	Main Gate	919	12.05.2025	13.05.2025	473.14	2000
18.	Fly ash Dump	771	07.05.2025	08.05.2025	610.06	2000

vote: SP	ote: SPM- Suspended Particulate matter. (µg/m³), INPERENCE: The Measured values are within the minus.								
SL NO	INSTRUMENT DETAILS	HVS-01	HVS-02	HVS-03	HVS-04	HVS-05			
1	Instrument Name	High Volume Sampler	High Volume Sampler	High Volume Sampler	High Volume Sampler	High Volume Sampler			
2	Make & Model	Enviro Instrumets/EI- 043	Enviro Instrumets/EI- 043	Enviro Instrumets/El- 043	Greentech/GTI-251	Greentech/GTI-251			
3	Serial No	H.V.S./39-F-2024	H.V.S./40-F-2024	H.V.S./41-F-2024	460-DTF-2024	461-DTF-2024			
4	Calibration Date	23.09.2024	23.09.2024	23.09.2024	03.06.2024	03.06.2024			
5	Calibration Due Date	22.09.2025	22.09.2025	22.09.2025	02.06.2025	02.06.2025			

End of the Report

Analysed By Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy **Technical Manager**

ent & HOSPET ×

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

The result is ted reters only to the tested samples & applicable parameters, endorsement of products in tenter interest nor implies. We applicable will be destroyed after TDays, Waster Water After Analysis Discard 7 days.

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3





(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

e-mail

: gems_hpt@yahoo.com

Website

: www.globalmining.in

ANNEXURE-08 GEMS-LD/TF/11/01

FORTNIGHTLY FUGITIVE AIR QUALITY MONITORING DATA

Name of the Industry 1

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by GLOBAL Environment & Mining Services, Hosapete

Particulars of sample collected

HVS Sampler (HVS-01, HVS-02, HVS-03, HVS-04, HVS-05)

MAY-2025(2nd Fort Night)

5 Month 6 Discipline

Chemical

7 Group

8 Method adopted Atmospheric Pollution IS 5182 (Part 4)1999 RA 2014

9 Report Issued Date 05.06.2025

10 Report Number GEMS/BMM/FM/2025-26/544

RESULTS

SI. NO.	Location / Plant	Sample Code	Date Of Monitoring	Date Of Sample Receipt	SPM (μg/m³)	Standard
I. Benef	iciation Plant-1				() ()	
1.	Main Canteen	1173	22.05.2025	23.05.2025	1303.38	2000
2.	Near Iron Ore Bottom Hopper	1171	22.05.2025	23.05.2025	361.30	2000
3.	Iron Ore Screen	1172	22.05.2025	23.05.2025	536.83	2000
II. Pelle	t Plant-I					
4.	Near Pellet Plant	1174	22.05.2025	23.05.2025	234.32	2000
5.	Annual Cooler Pellet Discharge bin	1175	22.05.2025	23.05.2025	495.53	2000
6.	Pellet Stock Yard	1299	26.05.2025	27.05.2025	623.09	2000
III. Spor	nge Iron Division-1(kiln 1 & 2)					
7.	Control Room SID-I	1365	27.05.2025	28.05.2025	428.79	2000
8.	Near Product bin	1366	27.05.2025	28.05.2025	952.11	2000
9.	Coal Feeding Area	1367	27.05.2025	28.05.2025	727.80	2000
IV. Indu	ction Furnace & Rolling Mill					
10.	IF Office	1300	26.05.2025	27.05.2025	462.69	2000
11.	TMT Stock Yard	1301	26.05.2025	27.05.2025	275.71	2000
12.	RML Gasifier	1302	26.05.2025	27.05.2025	376.04	2000
V. Powe	er Plant 25 MW-1					
13.	25 MW ESP	1368	27.05.2025	28.05.2025	442.54	2000
14.	25 MW ACC	1445	28.05.2025	29.05.2025	202.08	2000
VI. Site	Services					
15.	PGP- Coal handling system	1303	26.05.2025	27.05.2025	276.98	2000
16.	IF Slag Crusher	1369	27.05.2025	28.05.2025	506.85	2000
17.	Main Gate	1446	28.05.2025	29.05.2025	263.62	2000
18.	Fly ash Dump	1256	23.05.2025	24.05.2025	422.31	2000

Note: SPN	I - Suspended Particulate ma	atter (µg/m³), INFERENCE	: The Measured Values are	within the limits.		
SL NO	INSTRUMENT DETAILS	HVS-01	HVS-02	HVS-03	HVS-04	HVS-05
1	Instrument Name	High Volume Sampler	High Volume Sampler	High Volume Sampler	High Volume Sampler	High Volume Sampler
2	Make & Model	Enviro Instruments/EI-043	Enviro Instruments/EI-043	Enviro Instruments/El-043	Greentech/GTI-251	Greentech/GTI-251
3	Serial No	H.V.S./39-F-2024	H.V.S./40-F-2024	H.V.S./41-F-2024	460-DTF-2024	461-DTF-2024
4	Calibration Date	23.09.2024	23.09.2024	23.09.2024	03.06.2024	03.06.2024
5	Calibration Due Date	22.09.2025	22.09.2025	22.09.2025	02.06.2025	02.06.2025

End of the Report

Analysed By Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy Technical Manager

HOSPET

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

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(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

e-mail

: gems_hpt@yahoo.com

Website

: www.globalmining.in

ANNEXURE-09 GEMS-LD/TF/11/01

FORTNIGHTLY FUGITIVE AIR QUALITY DATA MONITORING

Name of the Industry

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by **GLOBAL Environment & Mining Services**

Particulars of sample collected

HVS Sampler (HVS-01, HVS-02, HVS-03, HVS-04, HVS-05)

Month

MAY-2025 (1st Fort Night)

Discipline

Chemical

7 Group Atmospheric Pollution

8 Method adopted

IS 5182 (Part 4): 1999 RA 2014

9 Report Issued Date 05.06.2025

10 Report Number GEMS/BMM/FM/2025-26/494

RESULTS

		KESULIS				
Sl. No.	Location / Plant	Sample Code	Date Of Monitoring	Date Of Sample Receipt	SPM (µg/m³)	Standard
Blast Fu	irnace					
1.	RMHS	920	12.05.2025	13.05.2025	424.73	2000
2.	Stock House	921	12.05.2025	13.05.2025	1829.63	2000
3.	Gas Network Area	922	12.05.2025	13.05.2025	690.28	2000
4.	Blower Area	961	13.05.2025	14.05.2025	811.12	2000
5.	Gas Cleaning plant (GCP)	962	13.05.2025	14.05.2025	1223.83	2000
6.	Stove Area	963	13.05.2025	14.05.2025	395.65	2000
7.	Control ROOM (CR)	998	14.05.2025	15.05.2025	328.97	2000
8.	Pig Costing Machine (PCM)	964	13.05.2025	14.05.2025	363.15	2000
9.	Slag Granulation Plant (SGP)	965	13.05.2025	14.05.2025	415.76	2000
10.	Cost House Area	999	14.05.2025	15.05.2025	1797.71	2000
SMS Are	ea					
1.	Stock House/Vibro Feeders	1000	14.05.2025	15.05.2025	465.98	2000
2.	Laddle Tapping	1001	14.05.2025	15.05.2025	653.31	2000
3.	Slag pouring Area	1002	14.05.2025	15.05.2025	810.84	2000
MBM						
1.	Near Re-Heating Furnace	1038	15.05.2025	16.05.2025	192.38	2000

Note: SPM -Suspended Particulate matter (µg/m³), INFERENCE: The Measured Values are within the limits.

SL NO	INSTRUMENT DETAILS	HVS-01	HVS-02	HVS-03	HVS-04	HVS-05
1	Instrument Name	High Volume Sampler	High Volume Sampler	High Volume Sampler	High Volume Sampler	High Volume Sampler
2	Make & Model	Enviro Instruments/EI-043	Enviro Instruments/EI-043	Enviro Instruments/EI-043	Greentech/GTI-251	Greentech/GTI-251
3	Serial No	H.V.S./39-F-2024	H.V.S./40-F-2024	H.V.S./41-F-2024	460-DTF-2024	461-DTF-2024
4	Calibration Date	23.09.2024	23.09.2024	23.09.2024	03.06.2024	03.06.2024
5	Calibration Due Date	22.09.2025	22.09.2025	22.09.2025	02.06.2025	02.06.2025

End of the Report

nalysed By Brunda.B Chemist

Authorised Signatory OSPE K. Ramakrishna Reddy

Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

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(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE – 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-10** GEMS-LD/TF/11/01

FORTNIGHTLY FUGITIVE AIR QUALITY DATA MONITORING

1 Name of the Industry BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

Customer Reference

REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by **GLOBAL Environment & Mining Services**

Particulars of sample collected

HVS Sampler (HVS-01, HVS-02, HVS-03, HVS-04, HVS-05)

Month

MAY-2025 (1stFort Night)

Discipline

Chemical

7 Group **Atmospheric Pollution**

8 Method adopted IS 5182 (Part 4): 1999 RA 2014

9 Report Issued Date 05.06.2025

10 Report Number GEMS/BMM/FM/2025-26/311

RESULTS

Sl. No.	Location / Plant	Sample	Date Of	Date Of	SPM	Standard
		Code	Monitoring	Sample Receipt	(μg/m³)	Standard
I. Benefic	ciation Plant-II					
1.	Ball Mill Area (Zero Meter)	625	02.05.2025	03.05.2025	670.11	2000
2.	Near Cone Crusher	627	02.05.2025	03.05.2025	778.65	2000
3.	Concentrate Thickner	626	02.05.2025	03.05.2025	1699.83	2000
II. Pellet	Plant					
4.	PR-6	628	02.05.2025	03.05.2025	616.72	2000
5.	Annual Cooler Pellet Discharge bin	629	02.05.2025	03.05.2025	634.17	2000
6.	Additive Grinding Building	639	03.05.2025	04.05.2025	777.45	2000
III. Spon	ge Iron Division -2 (Kiln 3 & 4)					
7.	Control room	640	03.05.2025	04.05.2025	391.01	2000
8.	Near Weigh bridge (dispatch)	686	05.05.2025	06.05.2025	1506.40	2000
9.	Pellet Storage bin	643	03.05.2025	04.05.2025	1705.42	2000
10.	Transfer House area	641	03.05.2025	04.05.2025	729.70	2000
11.	Production Separation Bin-PSB	642	03.05.2025	04.05.2025	625.70	2000
IV. Spon	ge Iron Division -3 (Kiln 5 & 6)					
12.	Near Control room	687	05.05.2025	06.05.2025	960.03	2000
13.	Near Coal Crusher	689	05.05.2025	06.05.2025	1924.95	2000
14.	Near Product bin	688	05.05.2025	06.05.2025	1740.97	2000
15.	Coal Dryer	717	06.05.2025	07.05.2025	604.12	2000
V. Wagoi	n Tipper/RMHS					
16.	Near Tipping point	690	05.05.2025	06.05.2025	545.26	2000
17.	Monsoon Shed (CPU)	718	06.05.2025	07.05.2025	620.34	2000
18.	MCC Room (2nd Gate)	719	06.05.2025	07.05.2025	546.01	2000
VI. Powe	er Plant-70 MW					
19.	70MW-DM Plant (Near R.O. Plant)	720	06.05.2025	07.05.2025	542.59	2000
20.	2ndgateweigh bridge Near Coal Screen	767	07.05.2025	08.05.2025	1841.55	2000
21.	CFBC boiler	716	06.05.2025	07.05.2025	784.19	2000
VII. 2X70	OMW Power Plant					
22.	Near Boiler	768	07.05.2025	08.05.2025	476.84	2000
23.	Near Coal storage Shed	769	07.05.2025	08.05.2025	565.09	2000
24.	Dolochar Processing Area	770	07.05.2025	08.05.2025	625.37	2000

Note: SPM -Suspended Particulate matter (µg/m³), INFERENCE: The Measured Values are within the limits.

SL NO	INSTRUMENT DETAILS	HVS-01	HVS-02	HVS-03	HVS-04	HVS-05
1	Instrument Name	High Volume Sampler	High Volume Sampler	High Volume Sampler	High Volume Sampler	High Volume Sampler
2	Make & Model	Enviro Instruments/EI-043	Enviro Instruments/EI-043	Enviro Instruments/EI-043	Greentech/GTI-251	Greentech/GTI-251
3	Serial No	H.V.S./39-F-2024	H.V.S./40-F-2024	H.V.S./41-F-2024	460-DTF-2024	461-DTF-2024
4	Calibration Date	23.09.2024	23.09.2024	23.09.2024	03.06.2024	03.06,2024
5	Calibration Due Date	22.09,2025	22.09.2025	22.09.2025	02.06.2025	02.06.2025

End of the Report

Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy Technical Manager

Note:

- The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

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 Recognised by Government of Karnataka, Maharashtra, Goa for DGPS survey
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(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-11** GEMS-LD/TF/11/01

FORTNIGHTLY FUGITIVE AIR QUALITY DATA MONITORING

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District. Name of the Industry

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025 3 Sample collected by **GLOBAL Environment & Mining Services**

HVS Sampler (HVS-01, HVS-02, HVS-03, HVS-04, HVS-05) 4. Particulars of sample collected

5 Month MAY-2025(2ND Fort Night)

6 Discipline Chemical

7 Group Atmospheric Pollution

Method adopted IS 5182 (Part 4): 1999 RA 2014 8

Report Issued Date 05.06.2025

GEMS/BMM/FM/2025-26/515 10 Report Number RESULTS

SPM Date Of Date Of Sample Sl. No. Location / Plant Standard Code Monitoring Sample Receipt $(\mu g/m^3)$ I. Beneficiation Plant-II 2000 Ball Mill Area (Zero Meter) 1056 16.05.2025 17.05.2025 252.61 Near Cone Crusher 16.05.2025 17.05.2025 454.31 2000 1058 Concentrate Thickner 1057 16.05.2025 17.05.2025 342.50 2000 II. Pellet Plant-I PR-6 1059 16.05.2025 17.05.2025 482.66 2000 Annual Cooler Pellet Discharge bin 16.05.2025 17.05.2025 2000 5. 1060 1220.24 Additive Grinding Building 1079 17.05.2025 18.05.2025 562.56 2000 6. III. Sponge Iron Division -2 (Kiln 3&4) 1080 17.05.2025 18.05.2025 888.43 2000 Control room Near Weigh bridge (dispatch) 19.05.2025 20.05.2025 799,49 2000 8 1109 9 Pellet Storage bin 1087 17.05.2025 18.05.2025 844.11 2000 2000 10 Transfer House area 1085 17.05.2025 18.05.2025 1792.17 11. Production Separation Bin-PSB 1086 17.05.2025 18.05.2025 616.25 2000 IV. Sponge Iron Division -2 (Kiln 5&6) 1110 19.05.2025 20.05.2025 947.64 2000 Near Control room 12 13 Near Coal Crusher 1112 19.05.2025 20.05.2025 901.89 2000 Near Product bin 19.05.2025 20.05.2025 2000 14. 1111 864.44 15. Coal Drier 1154 21.05.2025 22.05.2025 368.65 2000 V. Wagon Tipper/RMHS 1113 19.05.2025 20.05.2025 419.55 2000 16. Near Tipping point Monsoon Shed (CPU) 2000 17 1155 21.05.2025 22.05.2025 177.90 18. MCC Room (2nd Gate) 21.05.2025 22.05.2025 233.29 2000 1156 VI. Power Plant-70 MW 21.05.2025 22.05.2025 2000 70MW-DM Plant (Near R.O. Plant) 1157 253.27 19 2000 20. 2ndgateweigh bridge Near Coal Screen 1252 23.05.2025 24.05.2025 720.83 2000 21 CFBC boiler 1158 21.05.2025 22.05.2025 195.27 VII. 2X70MW Power Plant

Note: SPM -Suspended Particulate matter (µg/m³), INFERENCE: The Measured Values are within the limits

SL NO	INSTRUMENT DETAILS	HVS-01	HVS-02	HVS-03	HVS-04	HVS-05
1	Instrument Name	High Volume Sampler	High Volume Sampler	High Volume Sampler	High Volume Sampler	High Volume Sampler
2	Make & Model	Enviro Instruments/EI-043	Enviro Instruments/EI-043	Enviro Instruments/El-043	Greentech/GTI-251	Greentech/GTI-251
3	Serial No	H.V.S./39-F-2024	H.V.S./40-F-2024	H.V.S./41-F-2024	460-DTF-2024	461-DTF-2024
4	Calibration Date	23.09.2024	23.09.2024	23.09.2024	03.06.2024	03.06.2024
5	Calibration Due Date	22.09.2025	22.09.2025	22.09.2025	02.06.2025	.02,0612025/1.

1253

1254

1255

23.05.2025

23.05.2025

23.05.2025

End of the Report

Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy

24.05.2025

24.05.2025

24.05.2025

Technical Manager

559.26

640.95

332.15

2000

2000

2000

22

23.

24

Near Boiler

Near Coal storage Shed

CPP Dolochar Process Area

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

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(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

: gems_hpt@yahoo.com e-mail Website : www.globalmining.in

> **ANNEXURE-12** GEMS-LD/TF/11/01

FORTNIGHTLY FUGITIVE AIR QUALITY DATA MONITORING

Name of the Industry

: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by **GLOBAL Environment & Mining Services**

Particulars of sample collected 4

HVS Sampler (HVS-01, HVS-02, HVS-03, HVS-04, HVS-05)

5 Month

MAY-2025(2nd Fort Night)

6 Discipline Chemical

7 Group Atmospheric Pollution

Method adopted 8

IS 5182 (Part 4): 1999 RA 2014

Report Issued Date

05.06.2025

10 Report Number GEMS/BMM/FM/2025-26/681

RESULTS

Location / Plant	Sample Code	Date Of Monitoring	Date Of Sample Receipt	SPM (μg/m³)	Standard
ace					
RMHS	1447	28.05.2025	29.05.2025	368.67	2000
Stock House	1448	28.05.2025	29.05.2025	950.28	2000
Gas Network Area	1449	28.05.2025	29.05.2025	421.94	2000
Blower Area	1470	29.05.2025	30.05.2025	409.82	2000
Gas Cleaning plant (GCP)	1471	29.05.2025	30.05.2025	899.07	2000
Stove Area	1472	29.05.2025	30.05.2025	511.26	2000
Control ROOM (CR)	1473	29.05.2025	30.05.2025	234.44	2000
Pig Costing Machine (PCM)	1469	29.05.2025	30.05.2025	857.24	2000
	1486	30.05.2025	31.05.2025	698.84	2000
Cost House Area	1469	30.05.2025	31.05.2025	1814.05	2000
Stock House/Vibro Feeders	1487	30.05.2025	31.05.2025	955.29	2000
Laddle Tapping	1488	30.05.2025	31.05.2025	586.12	2000
Slag pouring Area	1489	30.05.2025	31.05.2025	852.55	2000
N. A					
Near Re-Heating Furnace	1494	31.05.2025	31.05.2025	753.06	2000
	RMHS Stock House Gas Network Area Blower Area Gas Cleaning plant (GCP) Stove Area Control ROOM (CR) Pig Costing Machine (PCM) Slag Granulation Plant (SGP) Cost House Area Stock House/Vibro Feeders Laddle Tapping Slag pouring Area	Code Code	Code Monitoring	Code Monitoring Sample Receipt	Code Monitoring Sample Receipt (µg/m²)

Note: SPM -Suspended Particulate matter (µg/m³), INFERENCE: The Measured Values are within the limits.

SLNO	INSTRUMENT DETAILS	HVS-01	HVS-02	HVS-03	HVS-04	HVS-05
1	Instrument Name	High Volume Sampler	High Volume Sampler	High Volume Sampler	High Volume Sampler	High Volume Sampler
2	Make & Model	Enviro Instruments/EI-043	Enviro Instruments/EI-043	Enviro Instruments/EI-043	Greentech/GTI-251	Greentech/GTI-251
3	Serial No	H.V.S./39-F-2024	H.V.S./40-F-2024	H.V.S./41-F-2024	460-DTF-2024	461-DTF-2024
4	Calibration Date	23.09.2024	23.09.2024	23.09.2024	03.06.2024	03.06.2024
5	Calibration Due Date	22.09.2025	22.09.2025	22.09.2025	02.06.2025	02.06.2025

End of the Report

Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy

Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

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(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

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: 08394 355369

: gems_hpt@yahoo.com e-mail Website : www.globalmining.in

> **ANNEXURE-13** GEMS-LD/TF/10/01

Analysis Report of Stack Emission

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District. Name of the Industry 1

REF:LOI/STORES/25-26 DATE:02.04.2025 - 450000125 2 **Customer Reference**

GLOBAL Environment & Mining Services, Hosapete 3 Sample collected by

Particulars of sample collected Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/32308 Instrument Details : Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

Discipline 6 Chemical

7 Atmospheric Pollution Group 8 Sample Type **Stack Monitoring** 9 Sampling Location **Pellet Plant-1 ESP**

10 Month of Sampling **MAY-2025** Date of Sample Received 10.05.2025 11

Date of Sample Analysis 12 : 12.05.2025 Date of Sample Analysis completion 12.05.2025 Report Issued Date 14 05.06.2025

Report Number 15 GEMS/BMMIL/STACK/2025-26/440

Stack Details

Fuel Used Coal & furnace oil 1

Stack Height (mtr) 100.0 Stack Diameter (mtr) 4.4

Emission Details

Sl.	Parameters	Method	Unit			Permissible Limit
	Date of Monitoring			10.05.2025	-	
	Sample Code			865		
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	oC	31		-
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	oC	58		-
3	Velocity of Fuel Gas	IS: 11255 (Part 3) - 1985 (RA 2014)	m/sec	6.21		-
4	Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)	m³/hr	339747		-
5	Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)	Nm³/hr	305352	Shutdown	-
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm ³	30.74		50
7	Sulphur Dioxide	IS: 11255 (Part 2): (RA 2014)	mg/Nm ³	205.0		NS
8	Nitrogen Dioxide	IS:11255 (Part7): 2005 (RA 2017)	mg/Nm ³	36.0		NS
9	Carbon Monoxide	GEMS/SOP/69	%	0.014		NS

Note: NS- Not Specified, RA: Reaffirmed, INFERENCE: The Measured Values are within the limits.

Analysed By Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy

Technical Manager

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: 08394 355369

: gems_hpt@yahoo.com e-mail Website : www.globalmining.in

> **ANNEXURE-14** GEMS-LD/TF/10/01

Analysis Report of Stack Emission

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District. 1 Name of the Industry

2 REF:LOI/STORES/25-26 DATE:02.04.2025 **Customer Reference**

3 GLOBAL Environment & Mining Services, Hosapete Sample collected by

Particulars of sample collected Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/32308

Instrument Details Calibration Date: 25.04.2025 Calibration Due Date: 24.04.2026

Chemical 6 Discipline

7 Atmospheric Pollution Group 8 Sample Type **Stack Monitoring**

2X100 TPD Sponge iron plant Kiln 1 & 2 Sampling Location

10 Month of Sampling **MAY-2025**

Date of Sample Received 09.05.2025&28.05.2025 11 Date of Sample Analysis 10.05.2025&29.05.2025 13 Date of Sample Analysis completion 10.05.2025&29.05.2025

Report Issued Date 05.06.2025 14

GEMS/BMMIL/STACK/2025-26/434 15 Report Number

Stack Details

Fuel Used Coal 1 2 Stack Height (mtr) 60.0 3 Stack Diameter (mtr) 2.00

Emission Details

				Res	sult	
Sl. No.	Parameters	Method	Unit	1 st Fort Night	2 nd Fort Night	Permissible Limit
140.	Date of Monitoring			09.05.2025	28.05.2025	
	Sample Code			853	1450	
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	oC.	30	28	-
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	оС	168	174	-
3	Velocity of Fuel Gas	IS: 11255 (Part 3) - 1985 (RA 2014)	m/sec	7.06	7.27	-
4	Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)	m³/hr	79809	82280	-
5	Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)	Nm³/hr	53909	54623	-
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm ³	23.41	16.79	50
7	Sulphur Dioxide	IS: 11255 (Part 2): (RA 2014)	mg/Nm ³	229	257	NS
8	Nitrogen Dioxide	IS:11255 (Part7): 2005 (RA 2017)	mg/Nm ³	44	54	NS
9	Carbon Monoxide	GEMS/SOP/69	%	0.105	0.256	1

Note: NS- Not Specified. RA: Reaffirmed, INFERENCE: The Measured Values are within the limits. **End of the Report**

> Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy Technical Manager

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: 08394 355369

: gems_hpt@yahoo.com e-mail Website : www.globalmining.in

> **ANNEXURE-15** GEMS-LD/TF/10/01

Analysis Report of Stack Emission

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District. Name of the Industry 1

REF:LOI/STORES/25-26 DATE:02.04.2025 2 **Customer Reference**

Sample collected by 3 **GLOBAL Environment & Mining Services, Hosapete**

4 Particulars of sample collected Vayubodhak/ VBSS2 Sl. No: Stack Monitoring Kit/32308

Calibration Date: 25.04.2025 5 **Instrument Details**

Calibration Due Date: 24.04.2026

6 Discipline Chemical

Atmospheric Pollution 7 Group 8 Sample Type **Stack Monitoring**

9 Month of Sampling MAY-2025(1st Fort Night)

Date of Sample Received 10 08.05.2025 11 Date of Sample Analysis 09.05.2025 12 Date of Sample Analysis completion : 09.05.2025

Report Issued Date 05.06.2025 13

GEMS/BMMIL/STACK/2025-26/423 14 Report Number

SI. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm³	KSPCB Std mg/N m ³
Indu	iction Furnace 1 & 2										
1	Induction Furnace 1	08.05.2025	818	Electric	33	39	5.68	30	1.2	6.65	150
2	Induction Furnace 2	08.052025	812	Power	34	41	5.21	30	1.3	12.24	150

SI. No	Induction Furnance 1 & 2	Gas flow rate at Stack Condition m³/hr	Gas flow rate at NTP Nm³/hr	KSPCB Std
1	Induction Furnance 1	23123	21958	-
2	Induction Furnance 2	24883	23466	-

Parameter	Protocol
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)

End of the Report

Analysed By Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy **Technical Manager**

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HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

Ph : 08394 355369

: gems_hpt@yahoo.com e-mail Website : www.globalmining.in

> **ANNEXURE-16** GEMS-LD/TF/10/01

Analysis Report of Stack Emission

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District Name of the Industry 1

REF:LOI/STORES/25-26 DATE:02.04.2025 2 **Customer Reference**

GLOBAL Environment & Mining Services, Hosapete 3 Sample collected by

Particulars of sample collected Vayubodhak/ VBSS2 4

Sl. No: Stack Monitoring Kit/ 32308

5 **Instrument Details** Calibration Date: 25.04.2025 Calibration Due Date: 24.04.2026

Chemical Discipline

Atmospheric Pollution 7 Group 8 Sample Type **Stack Monitoring**

Rolling Mill Reheating furnace 9 Sampling Location

MAY-2025 10 Month of Sampling

11 Date of Sample Received 03.05.2025&29.05.2025 Date of Sample Analysis 05.05.2025&30.05.2025 12 Date of Sample Analysis completion: 05.05.2025&30.05.2025

14 **Report Issued Date** 05.06.2025

Report Number GEMS/BMMIL/STACK/2025-26/325

Stack Details

Fuel Used Coal 1 30.0 2 Stack Height (mtr) 8.0 3 Stack Diameter (mtr)

Emission Details

				Res	sult	
SI. No.	Parameters	Method	Unit	1 st Fort Night	2 nd Fort Night	Permissible Limit
140.	Date of Monitoring			03.05.2025	29.05.2025	
	Sample Code			648	1477	
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	oC.	35	27	-
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	оС	186	179	-
3	Velocity of Fuel Gas	IS: 11255 (Part 3) - 1985 (RA 2014)	m/sec	8.15	7.78	-
4	Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)	m³/hr	33199	31669	-
5	Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)	Nm³/hr	21449	20832	-
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm ³	43.81	39.53	50
7	Sulphur Dioxide	IS: 11255 (Part 2): (RA 2014)	mg/Nm ³	34	39	NS
8	Nitrogen Dioxide	IS:11255 (Part7): 2005 (RA 2017)	mg/Nm ³	227	235	NS
9	Carbon Monoxide	GEMS/SOP/69	%	0.036	0.049	1

Note: NS- Not Specified. RA: Reaffirmed, INFERENCE: The Measured Values are within the limits.

End of the Report

Analysed B Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddygojs

Technical Manager

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: 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-17 GEMS-LD/TF/10/01**

Analysis Report of Stack Emission

Name of the Industry 1

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by GLOBAL Environment & Mining Services, Hosapete

Particulars of sample collected

Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/ 32308

5 **Instrument Details** Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

6 Discipline Chemical

7 Group **Atmospheric Pollution**

8 Sample Type Stack Monitoring

9 Sampling Location AFBC Boiler ESP (25 MW Power Plant)

10 Month of Sampling **MAY-2025**

11 Date of Sample Received

12 **Date of Sample Analysis**

Date of Sample Analysis completion: -

Stack Diameter (mtr)

Report Issued Date 14

05.06.2025

15 Report Number :

Stack Details

1 **Fuel Used**

Coal

Stack Height (mtr) 2

65.0

3

2.5

Emission Details

			T			T	
				Res	ult	Permissible Limit	
SI. No.	Parameters	Method	Unit	1 st Fort Night	2 nd Fort Night		
140.	Date of Monitoring			-	-		
	Sample Code			-	-		
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	0C			-	
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	°C			-	
3	Velocity of Fuel Gas	IS: 11255 (Part 3) - 1985 (RA 2014)	m/sec			-	
4	Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)	m³/hr			-	
5	Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)	Nm³/hr	Shutdown	Shutdown	-	
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm ³			50	
7	Sulphur Dioxide	IS: 11255 (Part 2): (RA 2014)	mg/Nm ³			NS	
8	Nitrogen Dioxide	IS:11255 (Part7): 2005 (RA 2017)	mg/Nm ³			NS	
9	Carbon Monoxide	GEMS/SOP/69	%			NS	

Note: NS- Not Specified. RA: Reaffirmed,

End of the Report

K. Ramakrishna Reddy **Technical Manager**

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Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

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: 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-18** GEMS-LD/TF/10/01

Analysis Report of Stack Emission

Name of the Industry BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District. 1

REF:LOI/STORES/25-26 DATE:02.04.2025 2 **Customer Reference**

3 Sample collected by **GLOBAL Environment & Mining Services, Hosapete**

Particulars of sample collected : Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/32308

5 **Instrument Details** : Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

6 Discipline Chemical

7 Atmospheric Pollution Group 8 Sample Type **Stack Monitoring**

9 Month of Sampling MAY-2025(1st Fort Night)

10 Date of Sample Received 14.05.2025 11 Date of Sample Analysis 15.05.2025 12 Date of Sample Analysis completion 2 0 15.05.2025

13 Report Issued Date 05.06.2025 14 Report Number GEMS/BMMIL/STACK/2025-26/506

SI. N o	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm³	KSPCB Std mg/Nm³
Chir	nneys attached to Bag Filte	r (De dusting Uni	ts)								
Ben	eficiation Plant -I										
1	Iron Ore dump hopper	14.05.2025	1004	-	31	36	5.37	30	0.4	16.05	50
2	Iron Ore Screen bin	14.05.2025	1005	-	33	35	5.54	30	0.4	18.45	50

SI. No	Beneficiation Plant	Gas flow rate at Stack Condition m³/hr	Gas flow rate at NTP Nm³/hr	KSPCB Std
1	Iron Ore dump hopper	2429	2343	-
2	Iron Ore Screen bin	2505	2407	-

Parameter	Protocol
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)

End of the Report

Analysed By Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy **Technical Manager**

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

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: 08394 355369

: gems_hpt@yahoo.com e-mail Website : www.globalmining.in

> **ANNEXURE-19** GEMS-LD/TF/10/01

Analysis Report of Stack Emission

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District. Name of the Industry 1

REF:LOI/STORES/25-26 DATE:02.04.2025 2 **Customer Reference**

3 Sample collected by **GLOBAL Environment & Mining Services, Hosapete**

Particulars of sample collected : Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/ 32308 : Calibration Date: 25.04.2025 **Instrument Details**

5 Calibration Due Date: 24.04.2026

6 Discipline Chemical

7 Atmospheric Pollution Group

8 Sample Type **Stack Monitoring**

9 Month of Sampling MAY-2025 (1st Fort Night)

10 Date of Sample Received 15.05.2025 11 Date of Sample Analysis 16.05.2025 12 Date of Sample Analysis completion 16.05.2025

13 Report Issued Date 05.06.2025

Report Number GEMS/BMMIL/STACK/2025-26/513

SI. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Use d	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm³	KSPCB Std mg/Nm³
Chin	nneys attached to Bag Filter (De dusting Units	5)								
RMH	IS										
3	Screen, Coal Crusher (CPU)	15.05.2025	1039	-	30	42	5.23	35	1.5	29.89	50
4	Main Crusher	15.05.2025	1040	-	32	36	4.96	25	0.5	15.28	50

SI. No	Beneficiation Plant	Gas flow rate at Stack Condition m³/hr	Gas flow rate at NTP Nm³/hr	KSPCB Std
3	Screen, Coal Crusher (CPU)	33254	31410	-
4	Main Crusher	3506	3369	-

Parameter	Protocol
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)

End of the Report

Analysed By Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy

Technical Manager

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- 2. 3. Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Fifter papers & Thimbles After analysis Discard 7 days.
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: 08394 355369

e-mail

: gems_hpt@yahoo.com

Website

: www.globalmining.in

ANNEXURE-20 GEMS-LD/TF/10/01

Analysis Report of Stack Emission

1 Name of the Industry BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by GLOBAL Environment & Mining Services, Hosapete

4 Particulars of sample collected

Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/ 32308

5 **Instrument Details** Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

Discipline 6

Chemical

7 Group **Atmospheric Pollution**

Sample Type 8

Stack Monitoring

9 Month of Sampling MAY-2025(1st Fort Night)

10 Date of Sample Received 10.05.2025&12.05.2025 12.05.2025&13.05.2025

11 Date of Sample Analysis Date of Sample Analysis completion 12

12.05.2025&13.05.2025

Report Issued Date 13

05.06.2025

14 Report Number GEMS/BMMIL/STACK/2025-26/441

SI. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm³	KSPCB Std mg/Nm³
Chim	nneys attached to Bag Filter (De dust	ing Units)	A. T. S.	Delayer to carry delayer	onesica estre areas	101100-101111		3/3-10-147-147	7.4-37.00-00.7.84447777-00.00		
Pelle	t Plant -I										
5	AGB Main Bag Filter	10.05.2025	866	-	32	36	5.05	6.5	0.50	21.95	50
6	Lime Powder bin top bag Filter/ Powder Coal Main Bag Filter	10.05.2025	867	-	33	38	5.13	3.0	0.30	18.77	50
7	Bentonite Powder bin top bag filter	10.05.2025	868	-	34	39	4.90	3.0	0.30	26.13	50
8	H-4 Conveyor discharge bag filter	Shutdown	-	-	-	-	-	7.0	0.50	-	50
9	P-1 Bag Filter	12.05.2025	924	-	31	39	5.27	7.0	0.50	33.13	50

SI. No	Pellet Plant	Gas flow rate at Stack Condition m³/hr	Gas flow rate at NTP Nm³/hr	KSPCB Std
5	AGB Main Bag Filter	3567	3427	-
6	Lime Powder bin top bag Filter/ Powder Coal Main Bag Filter	1306	1246	-
7	Bentonite Powder bin top bag filter	1247	1185	-
8	H-4 Conveyor discharge bag filter		-	-
9	P-1 Bag Filter	3727	3549	

Parameter	Protocol		
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)		
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)		
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)	_	/

End of the Report

Brunda.B Chemist

Authorised Signatory SPE K. Ramakrishna Reddy Technical Manager 5 + 5

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

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HOSAPETE – 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369 Ph

: gems_hpt@yahoo.com e-mail Website : www.globalmining.in

> **ANNEXURE-21** GEMS-LD/TF/10/01

Analysis Report of Stack Emission

Name of the Industry 1

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by **GLOBAL Environment & Mining Services, Hosapete**

Particulars of sample collected

Vayubodhak/ VBSS2 Sl. No: Stack Monitoring Kit/32308

5 **Instrument Details** Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

6 Discipline

Chemical

7 Group **Atmospheric Pollution**

8 Sample Type **Stack Monitoring**

9 Month of Sampling MAY-2025(1st Fort Night)

Date of Sample Received 10

12.05.2025 &13.05.2025

Date of Sample Analysis

13.05.2025&14.05.2025

Date of Sample Analysis completion 12

13.05.2025&14.05.2025

13 Report Issued Date 05.06.2025

Report Number

GEMS/BMMIL/STACK/2025-26/481

SI. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm³	KSPCB Std mg/Nm³
Chin	nneys attached to Bag Filter	r (De dusting Uni	ts)								
2 X 1	100 TPD Sponge Iron Kiln 1	& 2									
10	Cooler-1 Discharge & Blending Chute	12.05.2025	925		34	37	5.47	30	1.20	28.86	50
11	Cooler-2 Discharge	12.05.2025	926		34	38	5.62	30	1.20	21.78	50
12	Intermediate Bin & Blending	13.05.2025	968		31	36	4.58	30	1.20	29.88	50
13	Product House	13.05.2025	969		33	37	5.87	30	1.20	27.59	50

S1. No	2 X 100 TPD Sponge Iron Kiln 1 & 2	Gas flow rate at Stack Condition m³/hr	Gas flow rate at NTP Nm³/hr	KSPCB Std
10	Cooler-1 Discharge & Blending Chute	22284	21303	-
11	Cooler-2 Discharge	22898	21811	-
12	Intermediate Bin & Blending	19745	19012	-
13	Product House	23891	22872	-

Parameter	Protocol
Particulate Matter (mg/Nm³)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)

End of the Report

Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy **Technical Manager**

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

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: 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-22** GEMS-LD/TF/10/01

Analysis Report of Stack Emission

Name of the Industry 1

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

Sample collected by 3

GLOBAL Environment & Mining Services, Hosapete

Particulars of sample collected

: Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/ 32308

5 **Instrument Details** : Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

6 Discipline

: Chemical

7 Group : Atmospheric Pollution

8 Sample Type **Stack Monitoring**

9 Month of Sampling MAY-2025 (2ndFort Night)

10 Date of Sample Received 29.05.2025

Date of Sample Analysis

30.05.2025

12 Date of Sample Analysis completion : 30.05.2025

13 **Report Issued Date** 05.06.2025

Report Number

GEMS/BMMIL/STACK/2025-26/680

SI. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm³	KSPCB Std mg/Nm³
Indu	iction Furnance 1 & 2										
1	Induction Furnance 1	29.05.2025	1475	Electric	28	38	5.24	30	1.2	5.30	50
2	Induction Furnance 2	29.05.2025	1476	Power	29	42	5.07	30	1.3	10.14	50

SI. No	Induction Furnance 1 & 2	Gas flow rate at Stack Condition m³/hr	Gas flow rate at NTP Nm³/hr	KSPCB Std
1	Induction Furnance 1	21342	20386	-
2	Induction Furnance 2	24219	22788	-

Parameter	Protocol
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)

End of the Report

Brunda.B Chemist

K. Ramakrishna Reddy Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

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: 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-23** GEMS-LD/TF/10/01

Analysis Report of Stack Emission

Name of the Industry 1

: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara

District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by GLOBAL Environment & Mining Services, Hosapete

Particulars of sample collected 4

Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/32308

5 **Instrument Details** : Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

6 Discipline : Chemical

7 Group

: Atmospheric Pollution

8 Sample Type

Month of Sampling

: Stack Monitoring : MAY-2025(2nd Fort Night)

10 Date of Sample Received

: 30.05,2025

11 Date of Sample Analysis

: 31.05.2025

12 Date of Sample Analysis completion : 31.05.2025 13 **Report Issued Date**

05.06.2025

Report Number

GEMS/BMMIL/STACK/2025-26/684

SI. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm³	KSPCB Std mg/Nm³
Chin	nneys attached to Bag Filte	er (De dusting Uni	ts)								
Bene	eficiation Plant										
1	Iron Ore dump hopper	30.05.2025	1492		31	35	5.16	30	0.40	14.64	50
2	Iron Ore Screen bin	30.05.2025	1493		30	34	5.25	30	0.40	16.77	50

SI. No	Beneficiation Plant	Gas flow rate at Stack Condition m³/hr	Gas flow rate at NTP Nm³/hr	KSPCB Std
1	Iron Ore dump hopper	2335	2247	-
2	Iron Ore Screen bin	2377	2293	-

Parameter	Protocol
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)

End of the Report

Brunda.B

Chemist

Authorised Signatory K. Ramakrishna Reddy Technical Manager 15

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: 08394 355369

e-mail

: gems_hpt@yahoo.com

Website : www.globalmining.in

ANNEXURE-24 GEMS-LD/TF/10/01

Analysis Report of Stack Emission

1 Name of the Industry BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by GLOBAL Environment & Mining Services, Hosapete

Particulars of sample collected

Vayubodhak/ VBSS2

5 **Instrument Details** Sl. No: Stack Monitoring Kit/ 32308 Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

Discipline 6

Chemical

7 Group Atmospheric Pollution

8 Sample Type **Stack Monitoring**

9 Month of Sampling MAY-2025(2nd Fort Night)

Date of Sample Received 10

: 31.05.2025

11 Date of Sample Analysis

: 02.06.2025 : 02.06.2025

Date of Sample Analysis completion Report Issued Date 13

05.06.2025

14 Report Number

GEMS/BMMIL/STACK/2025-26/686

SI. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm³	KSPCB Std mg/Nm³
Chin	nneys attached to Bag Filter (De dusting Units	i)								
RMH	łS										
3	Screen, Coal Crusher(CPU)	31.05.2025	1496	-	30	38	5.01	30	1.50	35.41	50
4	Main Crusher	31.05.2025	1497	-	31	36	5.12	25	0.50	13.50	50

SI. No	Beneficiation Plant	Gas flow rate at Stack Condition m³/hr	Gas flow rate at NTP Nm³/hr	KSPCB Std
3	Screen, Coal Crusher (CPU)	31882	30425	-
4	Main Crusher	3617	3472	-

Parameter	Protocol
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)

End of the Report

Brunda.B Chemist

Authorised Signator K. Ramakrishna Reddy **Technical Manager**

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3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

: gems_hpt@yahoo.com

Website

: www.globalmining.in

ANNEXURE-25 GEMS-LD/TF/10/01

Analysis Report of Stack Emission

Name of the Industry

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by GLOBAL Environment & Mining Services, Hosapete

4 Particulars of sample collected Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/ 32308

5 **Instrument Details** Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

6 Discipline Chemical

7 Group **Atmospheric Pollution**

Sample Type 8

Stack Monitoring

9 Month of Sampling MAY-2025 (2nd Fort Night)

Date of Sample Received 10

19.05.2025&20.05.2025

Date of Sample Analysis 11

20.05.2025&21.05.2025

Date of Sample Analysis completion

20.05.2025&21.05.2025

Report Issued Date 13

05.06.2025

Report Number

GEMS/BMMIL/STACK/2025-26/527

SI. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/N m³	KSPCB Std mg/Nm³
Chin	nneys attached to Bag Filter (De dus	ting Units)									
Pelle	et Plant-I										
5	AGB Main Bag Filter	19.05.2025	1106		29	34	5.11	6.5	0.50	23.83	50
6	Lime Powder bin top bag Filter/ Powder Coal Main Bag Filter	19.05.2025	1107		30	35	5.49	3.0	0.30	20.76	50
7	Bentonite Powder bin top bag filter	19.052025	1108		31	36	5.07	3.0	0.30	23.00	50
8	H-4 Conveyor discharge bag filter	-	-		-	-	-	7.0	0.50	-	50
9	P-1 Bag Filter	20.05.2025	1126		25	30	5.24	7.0	0.50	28.73	50

SI. No	Pellet Plant	Gas flow rate at Stack Condition m³/hr	Gas flow rate at NTP Nm³/hr	KSPCB Std
5	AGB Main Bag Filter	3616	3496	-
6	Lime Powder bin top bag Filter/ Powder Coal Main Bag Filter	1396	1344	-
7	Bentonite Powder bin top bag filter	1290	1237	-
8	H-4 Conveyor discharge bag filter	-	-	-
9	P-1 Bag Filter	3706	3636	-

Parameter	Protocol
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)

End of the Report

nalysed By Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy

Technical Manager

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HOSAPETE – 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

: gems_hpt@yahoo.com

Website

: www.globalmining.in

ANNEXURE-26 GEMS-LD/TF/10/01

Analysis Report of Stack Emission

Name of the Industry 1

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by **GLOBAL Environment & Mining Services, Hosapete**

4 Particulars of sample collected Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/ 32308

5 **Instrument Details** Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

6 Discipline Chemical

7 Group **Atmospheric Pollution**

8 Sample Type **Stack Monitoring**

Month of Sampling 9

MAY-2025(2nd Fort Night)

Date of Sample Received 10

27.05.2025&28.05.2025

Date of Sample Analysis

28.05.2025&29.05.2025

Date of Sample Analysis completion 12

28.05.2025&29.05.2025

Report Issued Date 13

05.06.2025

Report Number

GEMS/BMMIL/STACK/2025-26/649

SI. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/N m³	KSPCB Std mg/Nm³
Chim	nneys attached to Bag Filter (E	De dusting Units)								
2 X 1	00 TPD Sponge Iron Kiln 1 &	2									
10	Cooler-1 Discharge & Blending Chute	27.05.2025	1373		28	34	5.63	30	1.20	22.67	50
11	Cooler-2 Discharge	28.05.2025	1451		30	34	5.69	30	1.20	27.56	50
12	Intermediate Bin & Blending	28.05.2025	1452		35	38	4.93	30	1.20	21.40	50
13	Product House	28.05.2025	1453		30	36	5.79	30	1.20	25.14	50

SI. No	2 X 100 TPD Sponge Iron Kiln 1 & 2	Gas flow rate at Stack Condition m³/hr	Gas flow rate at NTP Nm³/hr	KSPCB Std
10	Cooler-1 Discharge & Blending Chute	22934	22145	-
11	Cooler-2 Discharge	23176	22385	-
12	Intermediate Bin & Blending	20078	19110	-
13	Product House	23589	22579	-

Parameter	Protocol
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)

End of the Report

Analysed By Brunda.B Chemist

K. Ramakrishna Reddy Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

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Recognised by Ministry of Environment, Forest and Climate Change for Laboratory Recognised by Government of Karnataka, Maharashtra, Goa for DGPS survey





(Consulting Engineers, Mine designers, Geologist & Surveyors)

3rd Main Road, Basaveswara Badavane, HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369 Ph

e-mail

: gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-27 GEMS-LD/TF/10/01**

Analysis Report of Stack Emission

Name of the Industry 1

: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by

GLOBAL Environment & Mining Services

Particulars of sample collected

: Vayubodhak/ VBSS2

5 **Instrument Details** Sl. No: Stack Monitoring Kit/32308

Calibration Date: 25.04.2025 Calibration Due Date: 24.04.2026

Discipline 6

Chemical

7 Group Atmospheric Pollution

8 Sample Type **Stack Monitoring**

9 **Sampling Location** **Pellet Plant-2 ESP**

10 Month of Sampling : MAY-2025

11 Date of Sample Received

: 02.05.2025&17.05.2025

Date of Sample Analysis 12

: 03.05.2025&19.05.2025

Date Sample Analysis Completion 13

: 03.05.2025&19.05.2025

Report Issued Date 14

05.06.2025

15 Report Number GEMS/BMMIL/STACK/2025-26/312

Stack Details

Fuel Used 1

Coal

2 Stack Height (mtr) 100

3 Stack Diameter (mtr) 4.4

Emission Details

				Res	sult	
Sl. No.	Parameters	Method	Unit	1 st Fort 2 nd Fort Night Night		Permissible Limit
No.	Date of Monitoring			02.05.2025	17.05.2025	
	Sample Code			630	1088	
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	0C	29	29	-
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	0C	69	73	-
3	Velocity of Fuel Gas	IS: 11255 (Part 3) - 1985 (RA 2014)	m/sec	6.09	6.03	-
4	Gas flow rate at Stack Condition	IS-11255(Part 03)1985(RA 2014)	m³/hr	333455	330212	-
5	Gas flow rate at NTP	IS-11255(Part 03)1985(RA 2014)	Nm³/hr	290134	283953	-
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm ³	33.29	34.22	50
7	Sulphur Dioxide	IS: 11255 (Part 2): 1985 (RA 2014)	mg/Nm ³	284	312	NS
8	Nitrogen Dioxide	IS:11255 (Part7): 2005(RA 2017)	mg/Nm ³	88	91	NS
9	Carbon Monoxide	GEMS/SOP/69	%	0.018	0.015	1%

Note: NS- Not Specified. RA: Reaffirmed. INFERENCE: The Measured Values are within the limits. **End of the Report**

> nalysed By Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

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: 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-28** GEMS-LD/TF/10/01

Analysis Report of Stack Emission

Name of the Industry 1

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by **GLOBAL Environment & Mining Services**

Particulars of sample collected

Vayubodhak/ VBSS2

5 **Instrument Details**

Sl. No: Stack Monitoring Kit/32308 Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

6 Discipline

Chemical

7 Group **Atmospheric Pollution**

8 Sample Type **Stack Monitoring**

9 Sampling Location SID Axis 3&4

Month of Sampling 10

MAY-2025

Date of Sample Received 11

05.05.2025&22.05.2025

Date of Sample Analysis 12

06.05.2025&23.05.2025

13 Date Sample Analysis Completion 06.05.2025&23.05.2025

14 Report Issued Date 05.06.2025

Report Number 15

GEMS/BMMIL/STACK/2025-26/359

Stack Details

1 **Fuel Used** Coal

2 Stack Height (mtr) 70.0

3 Stack Diameter (mtr) 3.00

Emission Details

				Res		
SI.	Parameters	Method	Unit	1 st Fort 2 nd Fort Night Night		Permissible Limit
NO.	Date of Monitoring			05.05.2025	22.05.2025	
	Sample Code			691	1170	
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	0C	30	26	-
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	0C	127	129	-
3	Velocity of Fuel Gas	IS: 11255 (Part 3) - 1985 (RA 2014)	m/sec	6.84	6.73	-
4	Gas flow rate at Stack Condition	IS-11255(Part 03)1985(RA 2014)	m³/hr	174115	171353	-
5	Gas flow rate at NTP	IS-11255(Part 03)1985(RA 2014)	Nm³/hr	129426	126471	-
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm ³	32.50	28.58	50
7	Sulphur Dioxide	IS: 11255 (Part 2): 1985 (RA 2014)	mg/Nm ³	374	349	NS
8	Nitrogen Dioxide	IS:11255 (Part7): 2005(RA 2017)	mg/Nm ³	25	21	NS
9	Carbon Monoxide	GEMS/SOP/69	%	0.084	0.079	1%

Note: NS- Not Specified. RA: Reaffirmed. INFERENCE: The Measured Values are within the limits. **End of the Report*

Brunda.B Chemist

K. Ramakrishna Reddy Technical Manager

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Recognised by Government of Karnataka, Mebansektra, Goa for DGPS survey.





(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369 Ph

: gems_hpt@yahoo.com e-mail Website : www.globalmining.in

> **ANNEXURE-29** GEMS-LD/TF/10/01

Analysis Report of Stack Emission

Name of the Industry 1

: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by **GLOBAL Environment & Mining Services**

Particulars of sample collected

Vayubodhak/ VBSS2

5 **Instrument Details**

Sl. No: Stack Monitoring Kit/ 32308 Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

Discipline 6

Chemical

7 Group 8 Sample Type Atmospheric Pollution

9 Sampling Location **Stack Monitoring** SID Axis 5&6

Month of Sampling 10

MAY-2025

Date of Sample Received 11

: 06.05.2025&22.05.2025

Date of Sample Analysis 12

07.05.2025&23.05.2025

13 **Date Sample Analysis Completion**

07.05.2025&23.05.2025 05.06.2025

14 Report Issued Date Report Number 15

GEMS/BMMIL/STACK/2025-26/373

Stack Details

Fuel Used 1

Coal

2 Stack Height (mtr) 70.0

3 Stack Diameter (mtr) 3.00

Emission Details

				Res	sult							
Sl.	Parameters	Method	Unit	1 st Fort Night	2 nd Fort Night	Permissible Limit						
No.	Date of Monitoring			06.05.2025	22.05.2025	Little						
	Sample Code			721	1169							
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	oC.	30	27	-						
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	oC.	134	131							
3	Velocity of Fuel Gas	IS: 11255 (Part 3) - 1985 (RA 2014)	m/sec	6.98	7.10	-						
4	Gas flow rate at Stack Condition	IS-11255(Part 03)1985(RA 2014)	m³/hr	177647	180614	-						
5	Gas flow rate at NTP	IS-11255(Part 03)1985(RA 2014)	Nm³/hr	129865	132507	-						
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm³	35.66	33.52	50						
7	Sulphur Dioxide	IS: 11255 (Part 2): 1985 (RA 2014)	mg/Nm³	868	759	NS						
8	Nitrogen Dioxide	IS:11255 (Part7): 2005 (RA 2017)	mg/Nm ³	51	49	NS						
9	Carbon Monoxide	GEMS/SOP/69	%	0.074	0.086	1%						

Note: NS- Not Specified. RA: Reaffirmed. INFERENCE: The Measured Values are within the limits. **End of the Report**

Brunda.B

Chemist

Authorised Signatory K. Ramakrishna Reddy

Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7 Days, Waste Water Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7Days

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2

GLOBALENVIRONMENT & MINING SERVICESLLP

(Consulting Engineers, Mine designers, Geologist & Surveyors)

3rd Main Road, Basaveswara Badavane,

HOSAPETE – 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

e-mail

: gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-30** GEMS-LD/TF/10/01

Analysis Report of Stack Emission

1 Name of the Industry

Customer Reference

3 Sample collected by

Particulars of sample collected 4

5 **Instrument Details**

Discipline 6

7 Group

8 Sample Type

Sampling Location 9

Month of Sampling 10

Date of Sample Received 11

12 Date of Sample Analysis

13 Date Sample Analysis Completion

Report Issued Date 14

15 Report Number BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

REF:LOI/STORES/25-26 DATE:02.04.2025

GLOBAL Environment & Mining Services

: Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/ 32308

: Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

Chemical

Atmospheric Pollution

Stack Monitoring

1X70 MW-CFBC Boiler ESP

MAY-2025

07.05.2025 &23.05.2025

08.05.2025 &24.05.2025

: 08.05.2025 &24.05.2025

05.06.2025

GEMS/BMMIL/STACK/2025-26/392

Stack Details

Fuel Used 1 Coal 2 Stack Height (mtr) 70.0 3 Stack Diameter (mtr) 3.00

				Res	sult		
SI.	Parameters	Method	Unit	1 st Fort Night	2 nd Fort Night	Permissi ble	
INO.	Date of Monitoring	nitoring		07.05.2025	23.05.2025	Limit	
	Sample Code			772	1257		
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	S: 11255 (Part 1) - 1985 (RA 2014)				
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	оС	116	119	-	
3	Velocity of Fuel Gas	IS: 11255 (Part 3) - 1985 (RA 2014)	m/sec	7.36	7.20	-	
4	Gas flow rate at Stack Condition	IS-11255(Part 03)1985(RA 2014)	m³/hr	187413	183135	-	
5	Gas flow rate at NTP	IS-11255(Part 03)1985(RA 2014)	Nm³/hr	22614	138964	-	
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm ³	34.59	27.39	50	
7	Sulphur Dioxide	IS: 11255 (Part 2): 1985 (RA 2014)	mg/Nm ³	141	165	NS	
8	Nitrogen Dioxide	IS:11255 (Part7): 2005 (RA 2017)	mg/Nm ³	22	27	NS	
9	Carbon Monoxide	GEMS/SOP/69	%	0.013	0.021	1%	

Note: NS- Not Specified. RA: Reaffirmed. INFERENCE: The Measured Values are within the limits.

End of the Report

Analysed By Brunda.B Chemist

Authorised Signatory HC K. Ramakrishna Reddy Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7 Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7Days.

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(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

Ph : 08394 355369

: gems_hpt@yahoo.com e-mail Website : www.globalmining.in

> **ANNEXURE-31 GEMS-LD/TF/10/01**

Analysis Report of Stack Emission

Name of the Industry 1

2 **Customer Reference**

3 Sample collected by

Particulars of sample collected

5 **Instrument Details**

6 Discipline

7 Group

8 Sample Type

9 Sampling Location

10 Month of Sampling

11 Date of Sample Received 12 Date of Sample Analysis

13 Date Sample Analysis Completion

Report Issued Date

15 Report Number

2

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

REF:LOI/STORES/25-26 DATE:02.04.2025

GLOBAL Environment & Mining Services

Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/ 32308

Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

Chemical

Atmospheric Pollution

Stack Monitoring

2X70 MW CFBC Boiler ESP

MAY-2025 :

08.05.2025&27.05.2025

09.05.2025&28.05.2025

09.05.2025&28.05.2025

05.06.2025

GEMS/BMMIL/STACK/2025-26/421

Stack Details

Fuel Used 1

Stack Height (mtr)

3 Stack Diameter (mtr) Coal

110.0 8.00

Emission Details

				Res	sult	
Sl.	Parameters	Method	Unit	1 st Fort Night	2 nd Fort Night	Permissible Limit
No.	Date of Monitoring			08.05.2025	27.05.2025	Linne
	Sample Code			816	1370	
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	0C	29	27	-
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	оС	121	126	-
3	Velocity of Fuel Gas	IS: 11255 (Part 3) - 1985 (RA 2014)	m/sec	6.27	6.81	-
4	Gas flow rate at Stack Condition	IS-11255(Part 03)1985(RA 2014)	m³/hr	1134918	1232860	-
5	Gas flow rate at NTP	IS-11255(Part 03)1985(RA 2014)	Nm ³ /hr	854776	919813	-
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm ³	35.23	32.15	50
7	Sulphur Dioxide	IS: 11255 (Part 2): 1985 (RA 2014)	mg/Nm ³	49	61	600
8	Nitrogen Dioxide	IS:11255 (Part7): 2005 (RA 2017)	mg/Nm³	54	335	300
9	Carbon Monoxide	GEMS/SOP/69	%	0.701	0.018	NS

Note: NS- Not Specified. RA: Reaffirmed INFERENCE: The Measured Values are within the limits

End of the Report

Analysed By Brunda.B Chemist

K. Ramakrishna Reddy Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7 Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7Days.

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(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369 Ph

e-mail

: gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-32 GEMS-LD/TF/10/01**

Analysis Report of Stack Emission

Name of the Industry 1

2 **Customer Reference** 3 Sample collected by

4 Particulars of sample collected

5 **Instrument Details**

6 Discipline

7 Group

8 Sample Type

9 Sampling Location

10 Month of Sampling

11 Date of Sample Received

12 Date of Sample Analysis

Date Sample Analysis Completion 13

Report Issued Date

15 Report Number BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

REF:LOI/STORES/25-26 DATE:02.04.2025

GLOBAL Environment & Mining Services

Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/32308

Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

Chemical

Atmospheric Pollution

Stack Monitoring

SMS

MAY-2025 :

12.05.2025&30.05.2025

13.05.2025&31.05.2025

:

: 13.05.2025&31.05.2025

05.06.2025 GEMS/BMMIL/STACK/2025-26/479

Stack Details

Fuel Used 1

2 Stack Height (mtr) 86

3 Stack Diameter (mtr) 2.4

Emission Details

				Res	sult		
Sl. No.	Parameters	Method	Unit	1 ST Fort Night	2nd Fort Night	Permissi ble	
	Date of Monitoring			12.05.2025	30.05.2025	Limit	
	Sample Code			923	1490		
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	oC.	30	28	-	
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	0C	91	84	-	
3	Velocity of Fuel Gas	IS: 11255 (Part 3) - 1985 (RA 2014)	m/sec	7.32	7.50	-	
4	Gas flow rate at Stack Condition	IS-11255(Part 03)1985(RA 2014)	m³/hr	119253	122113	-	
5	Gas flow rate at NTP	IS-11255(Part 03)1985(RA 2014)	Nm³/hr	97399	101367	-	
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm³	40.05	41.37	50	

Note: NS- Not Specified. RA: Reaffirmed INFERENCE: The Measured Values are within the limits

End of the Report

Brunda.B Chemist Authorised Signator K. Ramakrishna Reddy Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7 Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7Days.

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HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369 Ph

: gems_hpt@yahoo.com e-mail Website : www.globalmining.in

> **ANNEXURE-33** GEMS-LD/TF/10/01

Analysis Report of Stack Emission

Name of the Industry 1

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District. REF:LOI/STORES/25-26 DATE:02.04.2025

2 **Customer Reference**

GLOBAL Environment & Mining Services

3 Sample collected by

Vayubodhak/ VBSS2

Particulars of sample collected

Sl. No: Stack Monitoring Kit/32308

Instrument Details

Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

6 Discipline

5

Chemical

7 Group **Atmospheric Pollution**

8 Sample Type **Stack Monitoring**

9 Sampling Location

Barmill :

10 Month of Sampling

MAY-2025 :

Date of Sample Received 11

13.05.2025&30.05.2025

12 Date of Sample Analysis

: 14.05.2025&31.05.2025

Date Sample Analysis Completion 13

: 14.05.2025&31.05.2025

Report Issued Date

05.06.2025

15 Report Number GEMS/BMMIL/STACK/2025-26/495

Stack Details

Fuel Used 1

2 Stack Height (mtr) 87

3 Stack Diameter (mtr) 3.0

Emission Details

		Emission Be		Res	sult		
SI. No.	Parameters	Method	Unit	1 ST Fort Night	2nd Fort Night	Permissi ble	
	Date of Monitoring			13.05.2025	30.05.2025	Limit	
	Sample Code			966	1491		
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	0C	30	29	-	
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	oC.	171	178	_	
3	Velocity of Fuel Gas	IS: 11255 (Part 3) - 1985 (RA 2014)	m/sec	7.54	7.76	-	
4	Gas flow rate at Stack Condition	IS-11255(Part 03)1985(RA 2014)	m³/hr	191888	197438	-	
5	Gas flow rate at NTP	IS-11255(Part 03)1985(RA 2014)	Nm³/hr	128654	129960	-	
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm ³	43.61	44.69	50	
7	Sulphur Dioxide	IS: 11255 (Part 2): 1985 (RA 2014)	mg/Nm ³	494	384	NS	
8	Nitrogen Dioxide	IS:11255 (Part7): 2005 (RA 2017)	mg/Nm ³	54	49	NS	
9	Carbon Monoxide	GEMS/SOP/69	%	0.701	0.639	NS	

Note: NS- Not Specified. RA: Reaffirmed INFERENCE: The Measured Values are within the limits

End of the Report

Analysed By Brunda.B Chemist

Authorised Signator K. Ramakrishna Reddy NO Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied

Water Samples will be destroyed after 7 Days, Waster Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7Days.

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Recognised by Ministry of Environment, Forest and Climate Change for Laboratory





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HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

Ph : 08394 355369

: gems_hpt@yahoo.com e-mail

Website : www.globalmining.in

> **ANNEXURE-34 GEMS-LD/TF/10/01**

Analysis Report of Stack Emission

Name of the Industry 1

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025 **GLOBAL Environment & Mining Services**

3 Sample collected by

Particulars of sample collected

Vayubodhak/ VBSS2

5 Instrument Details Sl. No: Stack Monitoring Kit/32308

Calibration Date: 25.04.2025 Calibration Due Date: 24.04.2026

6 Discipline

Chemical

7 Group 8 Sample Type Atmospheric Pollution

Stack Monitoring

9 Sampling Location **Blast Furnance - Stove Waste Gas**

Month of Sampling 10

Date of Sample Received 11

MAY-2025 14.05.2025&31.05.2025

12 Date of Sample Analysis

15.05.2025&02.06.2025

13 **Date Sample Analysis Completion** 15.05.2025&02.06.2025

Report Issued Date

05.06.2025

Report Number 15

GEMS/BMMIL/STACK/2025-26/506

Stack Details

1 Fuel Used

2 Stack Height (mtr) 80

3 Stack Diameter (mtr)

2.4

Emission Details

Sl. No	Parameters Date of Monitoring	Method	Unit	Result 1st Fort Night 14.05.2025 1003	2 nd Fort Night 31.05.2025 1495	Permis sible Limit
1	Sample Code Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	oC.	30	28	-
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	oC.	166	162	-
3	Velocity of Fuel Gas	IS: 11255 (Part 3) - 1985 (RA 2014)	m/sec	6.88	7.08	-
4	Gas flow rate at Stack Condition	IS-11255(Part 03)1985(RA 2014)	m³/hr	112099	115379	-
5	Gas flow rate at NTP	IS-11255(Part 03)1985(RA 2014)	Nm³/hr	76034	78854	-
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm ³	23.00	26.67	30.0
7	Sulphur Dioxide	IS: 11255 (Part 2): 1985 (RA 2014)	mg/Nm ³	94	86	200
8	Nitrogen Dioxide	IS:11255 (Part7): 2005 (RA 2017)	mg/Nm³	26	21	150
9	Carbon Monoxide	GEMS/SOP/69	%	0.508	0.471	<1%

Note: NS- Not Specified. RA: Reaffirmed INFERENCE: The Measured Values are within the limits

End of the Report

Analysed By Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7 Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7Days.

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(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE – 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

e-mail : gems_hpt@yahoo.com

Website : www.globalmining.in

> **ANNEXURE-35** GEMS-LD/TF/10/01

Analysis Report of Stack Emission

Name of the Industry 1

: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

Customer Reference 2

REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by **GLOBAL Environment & Mining Services**

Particulars of sample collected 4

: Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/ 32308

5 Instrument Details : Calibration Date: 25.04.2025 Calibration Due Date: 24.04.2026

Discipline 6

Chemical

7 Group Atmospheric Pollution

8 Sample Type **Stack Monitoring**

9 Month of Sampling MAY-2025(1st Fort Night)

10 Date of Sample Received

: 13.05.2025

14.05.2025

11 Date of Sample Analysis

: 14.05.2025

12 Date Sample Analysis Completion 13 Report Issued Date

: 05.06.2025

Report Number 14

: GEMS/BMMIL/STACK/2025-26/496

RESULTS

Sl. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm³	KSPCB Std mg/Nm ³
Chir	Chimneys attached to Bag Filter (De dusting Units)										
Ben	eficiation Plant-2										
1	Iron Ore Cone Crusher	Shut Down	-		-	-	-	30	1.20	-	50
2	Iron Ore Screening	13.05.2025	967		34	37	5.18	30	0.90	19.57	50

SI. No	Beneficiation Plant	Gas flow rate at Stack Condition m³/hr	Gas flow rate at NTP Nm³/hr	KSPCB Std	
1	Iron Ore Cone Crusher	-	-	-	
2.	Iron Ore Screening	11854	11340	-	

Parameter	Protocol
articulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)
s flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)
as flow rate at NTP	IS-11255(Part 03) (RA 2014)

INFERENCE: The Measured Values are within the limits

End of the Report

alvsed By Brunda.B Chemist

Authorised Signator K. Ramakrishna Reddy Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7 Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7Days.

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(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE – 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

e-mail

: gems_hpt@yahoo.com

Website : www.globalmining.in

ANNEXURE-36 GEMS-LD/TF/10/01

Analysis Report of Stack Emission

1 Name of the Industry

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025 **GLOBAL Environment & Mining Services**

3 Sample collected by

Particulars of sample collected

Vayubodhak/ VBSS2

5 **Instrument Details**

Sl. No: Stack Monitoring Kit/ 32308 Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

6 Discipline Chemical

7 Group Atmospheric Pollution

8 Sample Type **Stack Monitoring**

9 Month of Sampling MAY-2025(1st Fort Night)

10 Date of Sample Received

03.05.2025

11 Date of Sample Analysis : 05.05.2025

12 **Date Sample Analysis Completion** 13 Report Issued Date

05.05.2025 05.06.2025

14 Report Number

GEMS/BMMIL/STACK/2025-26/321

RESULTS

Sl. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm³	KSPCB Std mg/Nm ³
Chin	Chimneys attached to Bag Filter (De dusting Units)										
Pelle	Pellet Plant-II										
3	AGB main bag Filter	03.05.2025	644		33	36	5.15	6.5	0.5	25.58	50
4	Lime & Bentonite Powder bin top bag filter	03.05.2025	645		35	40	5.35	6.5	0.5	23.59	50
5	AGB De dusting Bag Filter		-		-	-	-	6	0.6	-	50
6	Powder Coal main bag filter	-	-		-	_	-	6	0.6	-	50
7	RP-6 Conveyor bag Filter	-	-		-	-	-	6	0.3	-	50
8	Pellet discharge bin bag filter	03.05.2025	643		36	41	5.54	20	0.5	30.81	50

SI. No	Pellet Plant	Gas flow rate at Stack Condition m³/hr	Gas flow rate at NTP Nm³/hr	KSPCB Std
3	AGB main bag Filter	3637	3499	-
4	Lime & Bentonite Powder bin top bag filter	3783	3585	-
5	AGB De dusting Bag Filter	-	-	•
6	Powder Coal main bag filter	-	•	-
7	RP-6 Conveyor bag Filter	-	-	-
8	Pellet discharge bin bag filter	3916	3697	-

Parameter	Protocol	
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)	
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)	
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)	

INFERENCE: The measured values are within the limits

End of the Report

Analysed By

Brunda.B Chemist Authorised Signatory K. Ramakrishna Reddy

Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7 Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7Days.

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GLOBALENVIRONMENT & MINING SERVICESLLP

(Consulting Engineers, Mine designers, Geologist & Surveyors)

3rd Main Road, Basaveswara Badavane,

HOSAPETE – 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-37** GEMS-LD/TF/10/01

Analysis Report of Stack Emission

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District. Name of the Industry

Customer Reference REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by **GLOBAL Environment & Mining Services** Particulars of sample collected Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/ 32308

Instrument Details Calibration Date: 25.04.2025 Calibration Due Date: 24.04.2026

Discipline Chemical

Group Atmospheric Pollution 7 Stack Monitoring 8 Sample Type

9 Month of Sampling MAY-2025(1st Fort Night) 10 Date of Sample Received 03.05.2025,05.05.2025,06.05.2025&07.05.2025

Date of Sample Analysis 05.05.2025,06.05.2025,07.05.2025&08.05.2025 11 **Date Sample Analysis Completion** 12 05.05.2025,06.05.2025,07.05.2025&08.05.2025

05.06.2025 13 Report Issued Date

GEMS/BMMIL/STACK/2025-26/324 14 Report Number

RESULTS

Sl. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm³	KSPCB Std mg/Nm ³
	Chimneys attached to Bag Filter (De dusting Units)										
2 X 5	00 TPD Sponge Iron Kiln 1 & 2							,			
9	Cooler Discharge -1	03.05.2025	647		36	39	5.31	30	1.20	5.96	50
10	Cooler Discharge -2	05.05.2025	692		33	36	5.61	30	1.20	26.62	50
11	Coal stock house	05.05.2025	693		35	39	5.26	30	1.20	12.75	50
12	PSB 1 System-1	05.05.2025	694		35	40	5.40	30	1.20	32.42	50
13	PSB 1 System-2	05.05.2025	722		31	36	5.41	30	1.20	33.11	50
14	PSB 2 System-1 MCC	06.05.2025	723		34	39	5.53	30	1.20	27.77	50
15	PSB 1 System-2 Road	06.05.2025	724		35	41	5.74	30	1.20	29.35	50
16	Junction House Old & New	07.05.2025	773		33	38	5.83	30	1.20	30.97	50
17	Storage Bunker	07.05.2025	774		35	39	5.61	30	1.20	21.29	50
18	Dispatch	-	-		-	-	-	30	1.20	-	50

SI. No	2 X 500 TPD Sponge Iron Kiln 1 & 2	Gas flow rate at Stack Condition m³/hr	Gas flow rate at NTP Nm³/hr	KSPCB Std
9	Cooler Discharge -1	21621	20545	-
10	Cooler Discharge -2	22860	21977	-
11	Coal stock house	21426	20351	-
12	PSB 1 System-1	22003	20816	•
13	PSB 1 System-2	22015	21178	•
14	PSB 2 System-1 MCC	22531	21432	•
15	PSB 1 System-2 Road	23377	22081	-
16	Junction House Old & New	23732	22674	•
17	Storage Bunker	22850	21733	-
18	Dispatch	-	-	-

Parameter	Protocol	
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)	
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)	
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)	

INFERENCE: The Measured Values are within the limits

End of the Report

Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy

Technical Manager

- The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

 Water Samples will be destroyed after 7 Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7Days.

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(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE – 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

: gems_hpt@yahoo.com e-mail : www.globalmining.in Website

> **ANNEXURE-38 GEMS-LD/TF/10/01**

Analysis Report of Stack Emission

Name of the Industry

2 **Customer Reference**

3 Sample collected by

4 Particulars of sample collected

5 **Instrument Details**

6 Discipline

7 Group

8 Sample Type

9 Month of Sampling

Date of Sample Received 10

Date of Sample Analysis 11

12 Date Sample Analysis Completion Report Issued Date 13

Report Number 14

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

REF:LOI/STORES/25-26 DATE:02.04.2025

GLOBAL Environment & Mining Services

Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/ 32308

Calibration Date: 25.04.2025 Calibration Due Date: 24.04.2026

Chemical

: Atmospheric Pollution

: Stack Monitoring

: MAY-2025(1st Fort Night)

: 07.05.2025,08.05.2025&09.05.2025

08.05.2025,09.05.2025&10.05.2025

: 08.05.2025,09.05.2025&10.05.2025

05.06.2025

GEMS/BMMIL/STACK/2025-26/422

RESULTS

SI. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/s	Height (m)	Diameter (m)	PM mg/Nm³	KSPCB Std mg/Nm ³
Chim	Chimneys attached to Bag Filter (De dusting Units)										
2X50	0 TPD Sponge Iron Kiln 3&4										
19	DE 3, Axis 3 CD	07.05.2025	766		36	39	5.48	30	1.20	33.95	50
20	DE 4, DE 7, DE 7A Axis 4 CD Junction House (Stand By)	08.05.2025	817		31	36	5.55	30	1.20	35.23	50
21	DE 8 & 12 I-Bin, (Stand By)	09.05.2025	850		31	37	5.69	30	1.90	31.45	50
22	DE 9 &10 PSB 1 & 2 Product Separation bin	09.05.2025	851	•••	33	39	5.26	30	1.90	35.05	50
23	Coal Dryer	09.05.2025	852		34	42	5.86	30	1.20	36.56	50

SI. No	2X500 TPD Sponge Iron Kiln 3&4	Gas flow rate at Stack Condition m³/hr	Gas flow rate at NTP Nm³/hr	KSPCB Std
19	DE 3, Axis 3 CD	22316	21208	-
20	DE 4, DE 7, DE 7A Axis 4 CD Junction House (Stand By)	22614	21717	-
21	DE 8 & 12 I-Bin, (Stand By)	58126	55788	-
22	DE 9 &10 PSB 1 & 2 Product Separation bin	53674	51036	-
23	Coal Dryer	23852	22449	-

INFERENCE: The Measured Values are within the limits.

End of the Report

Brunda.B Chemist

Authorised Signator K. Ramakrishna Reddy 0/5 Technical Manager

- The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

 Water Samples will be destroyed after 7 Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7Days.

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: 08394 355369

: gems_hpt@yahoo.com e-mail Website : www.globalmining.in

> **ANNEXURE-39** GEMS-LD/TF/10/01

Analysis Report of Stack Emission

Name of the Industry

: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

Customer Reference 2

: REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by : GLOBAL Environment & Mining Services

Particulars of sample collected

Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/ 32308

Instrument Details 5

Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

Discipline 6

Chemical

7 Group Atmospheric Pollution

8 Sample Type **Stack Monitoring**

Month of Sampling

MAY-2025 (2ndFort Night)

10 Date of Sample Received

29.05.2025

Date of Sample Analysis

30.05.2025

Date Sample Analysis Completion 12

: 30.05.2025 05.06.2025

Report Issued Date 13 14 Report Number

GEMS/BMMIL/STACK/2025-26/680

RESULTS

Sl. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm³	KSPCB Std mg/Nm³
Chir	Chimneys attached to Bag Filter (De dusting Units)										
Ben	Beneficiation Plant-2										
1	1 Iron Ore Cone Crusher Shut down 50										
2	Iron Ore Screening	29.05.2025	1474		28	33	5.04	30	0.90	20.33	50

SI. No	Beneficiation Plant	Gas flow rate at Stack Condition m³/hr	Gas flow rate at NTP Nm³/hr	KSPCB Std
1	Iron Ore Cone Crusher	-	-	-
2	Iron Ore Screening	11554	11184	-

Parameter	Protocol
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)

INFERENCE: The Measured Values are within the limits.

End of the Report

Brunda.B Chemist Authorised Signatory K. Ramakrishna Reddy Technical Manage

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7 Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7Days.

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: 08394 355369

: gems_hpt@yahoo.com e-mail Website : www.globalmining.in

> **ANNEXURE-40** GEMS-LD/TF/10/01

Analysis Report of Stack Emission

Name of the Industry 1

2 **Customer Reference**

3 Sample collected by

Particulars of sample collected

Instrument Details

Discipline 6

7 Group

13

8 Sample Type

Month of Sampling 9

Date of Sample Received 10

Date of Sample Analysis 11

Date Sample Analysis Completion 12 Report Issued Date

14 Report Number BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

REF:LOI/STORES/25-26 DATE:02.04.2025

GLOBAL Environment & Mining Services

Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/ 32308

Calibration Date: 25.04.2025 Calibration Due Date: 24.04.2026

Chemical

Atmospheric Pollution

Stack Monitoring

MAY-2025(2ndFort Night)

17.05.2025

: 19.05.2025

: 19.05.2025

05.06.2025

GEMS/BMMIL/STACK/2025-26/525

RESULTS

Sl. No	Stack Attached to	Date of Monitoring	Sampl e Code	Fuel Used	Ta °C	TS °C	V m/Sec	Heigh t (m)	Diameter (m)	PM mg/Nm³	KSPCB Std mg/Nm ³
Chin	nneys attached to Bag Filter (De du	sting Units)									
Pelle	t Plant										
3	AGB main bag Filter	17.05.2025	1090		30	35	5.40	6.5	0.50	23.47	50
4	Lime & Bentonite Powder bin top bag filter	17.05.2025	1089		32	37	5.21	6.5	0.50	25.73	50
5	AGB De dusting Bag Filter	-	-		-	-	-	6.0	0.60	-	50
6	Powder Coal main bag filter	-	-		-	-	-	6.0	0.60	-	50
7	RP-6 Conveyor bag Filter	-	-		-	-	-	6.0	0.30	-	50
8	Pellet discharge bin bag filter	17.05.2025	1091		33	38	5.61	2.0	0.50	27.60	50

SI. No	Pellet Plant	Gas flow rate at Stack Condition m³/hr	Gas flow rate at NTP Nm³/hr	KSPCB Std
3	AGB main bag Filter	3301	3177	-
4	Lime & Bentonite Powder bin top bag filter	1587	1521	-
5	AGB De dusting Bag Filter	-	-	-
6	Powder Coal main Bagfilter		-	-
7	RP-6 Conveyor bag Filter	-	-	-
8	Pellet discharge bin Bagfilter	3963	3779	-

Parameter	Protocol	
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)	
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)	
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)	

INFERENCE: -- The Measured Values are within the limits.

End of the Report

nalysed By

Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7 Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7Days.

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GLOBALENVIRONMENT & MINING SERVICESLLP

(Consulting Engineers, Mine designers, Geologist & Surveyors)

3rd Main Road, Basaveswara Badavane, HOSAPETE – 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

: gems_hpt@yahoo.com e-mail Website : www.globalmining.in

> **ANNEXURE-41** GEMS-LD/TF/10/01

Analysis Report of Stack Emission

: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District. Name of the Industry

REF:LOI/STORES/25-26 DATE:02.04.2025 **Customer Reference**

GLOBAL Environment & Mining Services 3 Sample collected by Particulars of sample collected Vayubodhak/ VBSS2 4

Sl. No: Stack Monitoring Kit/32308

5 **Instrument Details** Calibration Date: 25.04.2025 Calibration Due Date: 24.04.2026

6 Discipline Chemical

Atmospheric Pollution 7 Group **Stack Monitoring**

8 Sample Type 9 Month of Sampling MAY-2025(2ndFort Night)

20.05.2025,21.05.2025&22.05.2025 Date of Sample Received 10 Date of Sample Analysis 21.05.2025,22.05.2025&23.05.2025 11

Date Sample Analysis Completion 21.05.2025,22.05.2025&23.05.2025 12

13 Report Issued Date 05.06.2025 GEMS/BMMIL/STACK/2025-26/528 Report Number

RESULTS

Sl. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm³	KSPCB Std mg/Nm³
Chim	Chimneys attached to Bag Filter (De dusting Units)										
2 X 5	30 TPD Sponge Iron Kiln 1 & 2										
9	Cooler Discharge -1	20.05.2025	1127	Coal	26	31	5.20	30	1.2	21.65	50
10	Cooler Discharge -2	20.05.2025	1128	Coal	27	32	5.73	30	1.2	11.81	50
11	Coal stock house	20.05.2025	1129	Coal	28	33	4.96	30	1.2	28.59	50
12	PSB 1 System-1	21.05.2025	1161	Coal	26	31	5.49	30	1.2	30.49	50
13	PSB 1 System-2	21.05.2025	1162	Coal	26	32	5.00	30	1.2	24.49	50
14	PSB 2 System-1 MCC	21.05.2025	1163	Coal	28	34	5.59	30	1.2	30.26	50
15	PSB 1 System-2 Road	21.05.2025	1164	Coal	29	35	5.93	30	1.2	26.79	50
16	Junction House Old & New	22.05.2025	1187	Coal	28	35	5.74	30	1.2	30.79	50
17	Storage Bunker	22.05.2025	1188	Coal	29	34	5.56	30	1.2	20.20	50
18	Dispatch	-	-		-	-	-	30	1.2	-	50

SI. No	2 X 500 TPD Sponge Iron Kiln 1 & 2 Gas flow rate at Star Condition m³/hr		Gas flow rate at NTP Nm³/hr	KSPCB Std
9	Cooler Discharge -1	21188	20707	-
10	Cooler Discharge -2	23350	22700	-
11	Coal stock house	20184	19548	-
12	PSB 1 System-1	22360	21838	-
13	PSB 1 System-2	20349	19798	-
14	PSB 2 System-1 MCC	20400	19702	-
15	PSB 1 System-2 Road	20115	19353	-
16	Junction House Old & New	18772	17971	-
17	Storage Bunker	18161	17490	-
18	Dispatch	-	-	-

Parameter	Protocol	
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)	
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)	
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)	

INFERENCE: The Measured Values are within the limits.

End of the Report

halysed By Brunda.B Chemist

K. Ramakrishna Reddy / 5 Technical Manager

- The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

 Water Samples will be destroyed after 7 Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7Days.

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(Consulting Engineers, Mine designers, Geologist & Surveyors)

3rd Main Road, Basaveswara Badavane, HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-42 GEMS-LD/TF/10/01**

Analysis Report of Stack Emission

Name of the Industry 1

Customer Reference

3 Sample collected by

4 Particulars of sample collected

5 **Instrument Details**

6 Discipline 7 Group

8 Sample Type 9

Month of Sampling Date of Sample Received 10

Date of Sample Analysis 11

Date Sample Analysis Completion 12 13 Report Issued Date

Report Number 14

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

REF:LOI/STORES/25-26 DATE:02.04.2025

GLOBAL Environment & Mining Services

Vayubodhak/ VBSS2

Sl. No: Stack Monitoring Kit/32308

Calibration Date: 25.04.2025

Calibration Due Date: 24.04.2026

Chemical

Atmospheric Pollution

: Stack Monitoring

: MAY-2025(2nd Fort Night)

: 23.05.2025&27.05.2025

: 24.05.2025&28.05.2025

: 24.05.2025&28.05.2025 05.06.2025

GEMS/BMMIL/STACK/2025-26/592

RESULTS

SI. NO	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/s	Height (m)	Diameter (m)	PM mg/Nm³	KSPCB Std mg/Nm ³
Chir	Chimneys attached to Bag Filter (De dusting Units)										
2X5	00 TPD Sponge Iron Kiln 3&4										
19	DE 3, Axis 3 CD	23.05.2025	1258		29	35	5.35	30	1.20	24.72	50
20	DE 4, DE 7, DE 7A Axis 4 CD Junction House (Stand By)	23.05.2025	1259		30	37	5.67	30	1.20	32.26	50
21	DE 8 & 12 I-Bin, (Stand By)	23.05.2025	1260		31	36	5.92	30	1.90	28.58	50
22	DE 9 &10 PSB 1 & 2 Product Separation bin	27.05.2025	1371		28	34	5.40	30	1.90	31.43	50
23	Coal Dryer	27.05.2025	1372		29	38	5.59	30	1.20	37.68	50

SI. No	2X500 TPD Sponge Iron Kiln 3&4	Gas flow rate at Stack Condition m³/hr	Gas flow rate at NTP Nm³/hr	KSPCB Std
19	DE 3, Axis 3 CD	18079	17390	-
20	DE 4, DE 7, DE 7A Axis 4 CD Junction House (Stand By)	19586	18771	-
21	DE 8 & 12 I-Bin, (Stand By)	51041	49267	-
22	DE 9 &10 PSB 1 & 2 Product Separation bin	50225	48290	
23	Coal Dryer	20808	19856	-

Parameter	Protocol	
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)	
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)	
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)	

INFERENCE: The Measured Values are within the limits.

End of the Report

Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7 Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7Days.

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: 08394 355369

: gems_hpt@yahoo.com e-mail Website : www.globalmining.in

> **ANNEXURE-43** GEMS-LD/TF/08/01

NOISE LEVEL MONITORING REPORT

Name of the Industry

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

Customer Reference

REF:LOI/STORES/25-26 DATE:02.04.2025

Sample collected by

Global Environment & Mining Services

Discipline

Chemical

Group

Atmospheric Pollution

Sample Type

Noise Level Monitoring

Particulars of Sample Collected

Lutron: SL-4023SD

Instrument Details

Sl. No: Q679952 Date of Calibration:16.12.2024

Calibration Due Date: 15.12.2025

Month

MAY-2025

Report Issue Date

05.06.2025

Method Adopted

IS 9989-1981 Reaffirmed 2014

Report No

GEMS/BMMIL/NOISE/2025-26/313

SI.	Landin	Date of	Noise Lev Day		
No	Location	Monitoring	Min	Max	Standard
1	Main Gate	02.05.2025	50.0	54.1	75
2	Near ATM	02.05.2025	48.2	55.0	75
3	Transit House	03.05.2025	54.8	63.4	75
4	CAAQMS Station	03.05.2025	49.0	54.8	75
5	Gunda Road	05.05.2025	52.6	62.8	75
6	Gunda Railway Station	05.05.2025	48.2	68.1	75
7	Bagging Shed	06.05.2025	61.4	66.0	75
8	Railway Siding	06.05.2025	53.3	68.4	75
9	4th Gate	07.05.2025	49.9	57.2	75
10	Bricks Plant	07.05.2025	46.8	54.6	75
11	Kempuhalla (Wagon Tippler)	08.05.2025	51.8	63.5	75
12	Danapura Bridge	08.05.2025	58.2	68.1	75
13	2nd Gate	09.05.2025	47.6	58.6	75
14	Project Store	09.05.2025	43.5	53.8	75
15	Dispatch (Truck Parking Area)	10.05.2025	62.4	71.6	75

Note: Each Location above the Noise Level taken Readings 15 Minutes.

INFERENCE

As per CPCB Standards,

Report Status: - Measured Values for the above parameters are within the limit.

End of the Report

Authorised Signatory OSPE K. Ramakrishna Reddy Technical Manager

ent & A

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

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3rd Main Road, Basaveswara Badavane, HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-44 GEMS-LD/TF/08/01**

NOISE LEVEL MONITORING REPORT

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District. Name of the Industry

Customer Reference REF:LOI/STORES/25-26 DATE:02.04.2025

Sample collected by Global Environment & Mining Services

Discipline Chemical

Group Atmospheric Pollution Sample Type **Noise Level Monitoring**

Particulars of Sample Collected Lutron: SL-4023SD Sl. No: Q679952

Instrument Details Date of Calibration:16.12.2024 Calibration Due Date: 15.12.2025

Month **MAY-2025** Report Issue Date 05.06.2025

Method Adopted IS 9989-1981 Reaffirmed 2014 Report No GEMS/BMMIL/NOISE/2025-26/516

			Noi	Noise Level dB (A)				
Sl.	Location	Date of	Day '	Ctandand				
No		Monitoring	Min	Max	Standard			
1	Main Gate	16.05.2025	47.6	54.8	75			
2	Near ATM	16.05.2025	46.2	52.4	75			
3	Transit House	17.05.2025	52.4	57.8	75			
4	CAAQMS Station	17.05.2025	44.8	56.0	75			
5	Gunda Road	19.05.2025	50.8	56.4	75			
6	Gunda Railway Station	19.05.2025	50.0	57.8	75			
7	Bagging Shed	20.05.2025	49.6	59.0	75			
8	Railway Siding	20.05.2025	46.2	64.2	75			
9	4th Gate	21.05.2025	49.5	56.8	75			
10	Bricks Plant	21.05.2025	46.2	55.6	75			
11	Kempuhalla (Wagon Tippler)	22.05.2025	53.2	56.9	75			
12	Danapura Bridge	22.05.2025	60.4	68.2	75			
13	2nd Gate	23.05.2025	52.8	59.8	75			
14	Project Store	23.05.2025	45.8	54.6	75			
15	Dispatch (Truck Parking Area)	23.05.2025	62.4	73.5	75			

Note: Each Location above the Noise Level taken Readings 15 Minutes.

As per CPCB Standards, **INFERENCE**

Report Status: - Measured Values for the above parameters are within the limit.

End of the Report

Authorised Signatory K. Ramakrishna Reddy

Technical Manager

- The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied
- Water Samples will be destroyed after 7Days, Waste Water Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

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(Consulting Engineers, Mine designers, Geologist & Surveyors)

3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

e-mail

: gems_hpt@yahoo.com

Website : www.globalmining.in

ANNEXURE-45 GEMS-LD/TF/08/01

AMBIENT NOISE LEVEL MONITORING REPORT

Name of the Industry

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

Customer Reference

REF:LOI/STORES/25-26 DATE:02.04.2025

Sample collected by

Global Environment & Mining Services

Discipline

Chemical

Group

Atmospheric Pollution

Sample Type

Noise Level Monitoring

Particulars of Sample Collected

: Lutron: SL- 4023SD

Sl. No: Q679953

Instrument Details

Date of Calibration: 16.12.2024

Calibration Due Date: 15.12.2025

Month

MAY-2025

Report Issue Date

05.06.2025

Method Adopted

IS 9989-1981 Reaffirmed 2014

Report No

GEMS/BMMIL/NOISE/2025-26/314

			Noise Level dB (A)									
Sl.	Location	Date of	Day Time				Night Time			<i>a.</i> 1 1		
No		Monitoring	Min	Max	Avg	Standard	Min	Max	Avg	Standard		
1	Danapur Village	02.05.2025	49.9	53.2	51.05		36.2	40.2	38.22	45		
2	Mariyammana Halli	05.05.2025	46.0	54.8	51.46		37.5	41.6	39.54			
3	Hanumana Halli	03.05.2025	43.5	58.2	53.76		36.3	41.2	39.75			
4	Galemmanagudi	06.05.2025	48.2	57.3	54.15	55	36.8	40.7	40.29	45		
5	G.Nagalapura Village	07.05.2025	43.6	52.8	53.94		35.4	40.9	38.12			
6	Gunda Tanda Village	08.05.2025	45.1	53.2	50.72		34.9	39.4	38.10			

Note: Each Location above the Noise Level taken Readings 15 Minutes.

INFERENCE

As per CPCB Standards.

Report Status: - Measured Values for the above parameters are within the limit.

End of the Report

Authorised Signatory K. Ramakrishna Reddy * **Technical Manager**

NOISE: (AMBIENT STANDARDS)

Limit in dB(A) Leq Category of Area Area code Day Time Night Time 75 70 Industrial Area A 55 R Commercial Area 65 C Residential Area 55 45 50 40 D Silence Area

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

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(Consulting Engineers, Mine designers, Geologist & Surveyors)

3rd Main Road, Basaveswara Badavane,

HOSAPETE – 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

: gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-46** GEMS-LD/TF/23/01

Analysis Report of Water Quality Data

1 Name of the Industry BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025 **GLOBAL Environment & Mining Services**

3 Sample collected by Particulars of sample collected 4

Grab Sampling

5 Sampling Procedure GEMS-LD/SOP/32

Chemical

6 Discipline

7 Group Water

Sample Type 8

Ground Water

9 Sample Code 870

10 Date of Sampling 10.05.2025

Sample Received 11

11.05.2025

12 Date of Analysis 12.05.2025

Date of Analysis Completion 13

: 17.05.2025

14 Report Issue Date 15 Report Number

05.06.2025 GEMS/BMMIL/GW/2025-26/445

Results

					Standards as per IS: 10500:2012		
Sl. No.	Parameters	Protocol	Unit	Danapur Village (GW1)	Acceptable Limits	Permissibl e Limit in the Absence of Alternate Source	
1.	рН	APHA 24th Edition 4500 H +B: 2023	,	7.17	6.5 to 8.5	NR	
2.	Conductivity	APHA 24th Edition 2510 B : 2023	μS/cm	2080	-	-	
3.	Total Dissolved Solids	APHA 24th Edition 2540 C: 2023	mg/L	1248	500max	2000 max	
4.	Turbidity (NTU)	APHA 24th Edition 2130 B: 2023	NTU	<1.0	1 max	5max	
5.	Total Suspended Solids	APHA 24th Edition 2540 D: 2023	mg/L	<1.0	-	-	
6.	Sulphate as SO ₄	APHA 24th Edition 4500 SO4 E: 2023	mg/L	49.94	200max	400max	
7.	Phosphorusas P	APHA 24th Edition 4500 P D: 2023	mg/L	<0.1	-	-	
8.	Sodium as Na	APHA 24th Edition 3500 Na B : 2023	mg/L	328.0	-	-	
9.	Potassium as K	APHA 24th Edition 3500 K B : 2023	mg/L	0.0	-	-	
10.	Calcium as Ca	APHA 24th Edition 3500 Ca B : 2023	mg/L	198.38	75max	200max	
11.	Magnesium as Mg	APHA 24th Edition 3500 Mg B : 2023	mg/L	19.90	30max	100max	
12.	Total Hardness as CaCO ₃	APHA 24th Edition 2340 C : 2023	mg/L	576.91	200max	600max	
13.	Chloride as Cl	APHA 24th Edition 4500 Cl B: 2023	mg/L	334.57	250max	1000 max	

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

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: 08394 355369

: gems_hpt@yahoo.com Website : www.globalmining.in

					ANI	NEXURE-40
14.	Fluoride as F	APHA 24thEditin 4500 F D : 2023	mg/L	0.36	1 max	1.5 max
15.	Nitrate Nitrogen as NO ₃	APHA 24th Edition 4500 NO3 E : 2023	mg/L	13.55	45max	NR
16.	Total Alkalinity as CaCO ₃	APHA 24th Edition 2320 B : 2023	mg/L	482.5	200max	600max
17.	Acidity as CaCO ₃	APHA 24th Edition 2310 B: 2023	mg/L	Nil	-	-
18.	Total Iron as Fe	APHA 24th Editon 3500 Fe B : 2023	mg/L	0.14	0.30max	NR
19.	Chromium as Cr	APHA 24th Editon 3500 Cr-B:2023	mg/L	<0.01	0.05 max	NR
20.	Color	APHA 24th Editon -2120 C:2023	Hazen	<5	5max	15max
21.	Total Coli form count	IS: 15185:2016	1 CFU/ 100 ml	Absent	Shall not be detectable in any 100ml sample	-
22.	Escherichia coli count	IS: 15185:2016	1 CFU/ 100 ml	Absent	Shall not be detectable in any 100ml sample	-

Note: GW1: Danapur Village. NR-No relaxation.

INFERENCE

As per Standards IS: 10500:2012

Report Status: - Measured Values for the above parameters are within the limits.

End of the Report

By Analysed By Brunda.B Chemist

Authorised Signator K. Ramakrishna Reddy 🔊 🛪 **Technical Manager**

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

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3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

: 08394 355369

e-mail

: gems_hpt@yahoo.com

Website : www.globalmining.in

ANNEXURE-47 GEMS-LD/TF/23/01

Analysis Report of Water Quality Data

Name of the Industry 1

: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

Sample collected by 3

GLOBAL Environment & Mining Services

Particulars of sample collected 4

Grab Sampling

5 Sampling Procedure GEMS-LD/SOP/32

Discipline 6

Chemical

7 Group

Water

Sample Type 8

Ground Water

9 Sample Code 872

10 Date of Sampling

10.05.2025

11 Sample Received

: 11.05.2025

12 Date of Analysis

12.05.2025

13 Date of Analysis Completion

: 17.05.2025

14 Report Issue Date

05.06.2025

Report Number

GEMS/BMMIL/GW/2025-26/447

Results

				Hanumanah	Standards as per IS: 10500:2012		
Sl. No.	Parameters	Protocol	Unit	alli Village (GW2)	Acceptable Limits	Permissible Limit in the Absence of Alternate Source	
1.	рН	APHA 24th Edition 4500 H +B: 2023	-	7.58	6.5 to 8.5	NR	
2.	Conductivity	APHA 24th Edition 2510 B : 2023	μS/cm	2930	-	-	
3.	Total Dissolved Solids	APHA 24th Edition 2540 C: 2023	mg/L	1758	500max	2000 max	
4.	Turbidity (NTU)	APHA 24th Edition 2130 B: 2023	NTU	<1.0	1 max	5max	
5.	Total Suspended Solids	APHA 24th Edition 2540 D: 2023	mg/L	<1.0	-	-	
6.	Sulphate as SO ₄	APHA 24th Edition 4500 SO4 E: 2023	mg/L	239.42	200max	400max	
7.	Phosphorusas P	APHA 24th Edition 4500 P D: 2023	mg/L	<0.1	-	-	
8.	Sodium as Na	APHA 24th Edition 3500 Na B : 2023	mg/L	389.0	-	-	
9.	Potassium as K	APHA 24th Edition 3500 K B : 2023	mg/L	0.0	-	-	
10.	Calcium as Ca	APHA 24th Edition 3500 Ca B : 2023	mg/L	68.67	75max	200max	
11.	Magnesium as Mg	APHA 24th Edition 3500 Mg B : 2023	mg/L	38.72	30max	100max	
12.	Total Hardness as CaCO ₃	APHA 24th Edition 2340 C : 2023	mg/L	742.56	200max	600max	
13.	Chloride as Cl	APHA 24th Edition 4500 Cl B: 2023	mg/L	497.71	250max	1000 max	

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

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Ph : 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

					A	NNEXURE-47
14.	Fluoride as F	APHA 24thEditin 4500 F D : 2023	mg/L	0.38	1 max	1.5 max
15.	Nitrate Nitrogen as NO ₃	APHA 24th Edition 4500 NO3 E : 2023	mg/L	16.67	45max	NR
16.	Total Alkalinity as CaCO ₃	APHA 24th Edition 2320 B : 2023	mg/L	655.0	200max	600max
17.	Acidity as CaCO ₃	APHA 24th Edition 2310 B : 2023	mg/L	Nil	-	•
18.	Total Iron as Fe	APHA 24th Editon 3500 Fe B : 2023	mg/L	0.08	0.30max	NR
19.	Chromium as Cr	APHA 24th Editon 3500 Cr-B:2023	mg/L	<0.01	0.05 max	NR
20.	Color	APHA 24th Editon -2120 C:2023	Hazen	<5	5max	15max
21.	Total Coli form count	IS : 15185:2016	1 CFU/ 100 ml	Absent	Shall not be detectable in any 100ml sample	¥.
22.	Escherichia coli count	IS: 15185:2016	1 CFU/ 100 ml	Absent	Shall not be detectable in any 100ml sample	-1

Note: GW2: Hanumanahalli Village. NR-No relaxation.

INFERENCE

As per Standards IS: 10500:2012

Report Status: - Measured Values for the above parameters are beyond the limit.

End of the Report

Analysed By Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied. 1. 2. 3. 4. 5. 6.

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Ph : 08394 355369

e-mail : gems_hpt@yahoo.com

Website : www.globalmining.in

> **ANNEXURE-48** GEMS-LD/TF/23/01

Analysis Report of Water Quality Data

1 Name of the Industry BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

Sample collected by 3

GLOBAL Environment & Mining Services

4 Particulars of sample collected

Grab Sampling

5 Sampling Procedure GEMS-LD/SOP/32

6 Discipline Chemical

7 Group Water

8 Sample Type **Ground Water**

9 Sample Code 873

10 Date of Sampling : 10.05.2025

Sample Received

: 11.05.2025

12 Date of Analysis 12.05.2025

13 **Date of Analysis Completion**

: 17.05.2025

14 Report Issue Date

: 05.06.2025

15 Report Number

GEMS/BMMIL/GW/2025-26/448

Results

	T	ATOURIED				
				Galemmana	Standards as per IS: 10500:2012	
SI. No.	Parameters	Protocol	Unit	Gudi Village (GW3)	Acceptable Limits	Permissible Limit in the Absence of Alternate Source
1.	рН	APHA 24th Edition 4500 H +B: 2023	-	7.76	6.5 to 8.5	NR
2.	Conductivity	APHA 24th Edition 2510 B : 2023	μS/cm	2230	-	-
3.	Total Dissolved Solids	APHA 24th Edition 2540 C: 2023	mg/L	1338	500max	2000 max
4.	Turbidity (NTU)	APHA 24th Edition 2130 B: 2023	NTU	<1.0	1 max	5max
5.	Total Suspended Solids	APHA 24th Edition 2540 D: 2023	mg/L	<1.0	-	-
6.	Sulphate as SO ₄	APHA 24th Edition 4500 SO4 E: 2023	mg/L	177.16	200max	400max
7.	Phosphorusas P	APHA 24th Edition 4500 P D: 2023	mg/L	<0.1	-	-
8.	Sodium as Na	APHA 24th Edition 3500 Na B : 2023	mg/L	105.2	-	-
9.	Potassium as K	APHA 24th Edition 3500 K B: 2023	mg/L	0.0	-	•
10.	Calcium as Ca	APHA 24th Edition 3500 Ca B : 2023	mg/L	228.9	75max	200max
11.	Magnesium as Mg	APHA 24th Edition 3500 Mg B : 2023	mg/L	34.99	30max	100max
12.	Total Hardness as CaCO ₃	APHA 24th Edition 2340 C : 2023	mg/L	714.0	200max	600max
13.	Chloride as Cl	APHA 24th Edition 4500 Cl B: 2023	mg/L	488.50	250max	1000 max

Note:

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Fifter papers & Thimbles After analysis Discard 7 days.

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HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

Ph : 08394 355369

e-mail

: gems_hpt@yahoo.com Website : www.globalmining.in

					A	NNEXURE-48
14.	Fluoride as F	APHA 24thEditin 4500 F D : 2023	mg/L	0.34	1 max	1.5 max
15.	Nitrate Nitrogen as NO ₃	APHA 24th Edition 4500 NO3 E : 2023	mg/L	19.17	45max	NR
16.	Total Alkalinity as CaCO ₃	APHA 24th Edition 2320 B : 2023	mg/L	437.5	200max	600max
17.	Acidity as CaCO ₃	APHA 24th Edition 2310 B : 2023	mg/L	Nil	-	-
18.	Total Iron as Fe	APHA 24th Editon 3500 Fe B : 2023	mg/L	0.15	0.30max	NR
19.	Chromium as Cr	APHA 24th Editon 3500 Cr-B:2023	mg/L	<0.01	0.05 max	NR
20.	Color	APHA 24th Editon -2120 C:2023	Hazen	<5	5max	15max
21.	Total Coli form count	IS: 15185:2016	1 CFU/ 100 ml	Absent	Shall not be detectable in any 100ml sample	-
22.	Escherichia coli count	IS : 15185:2016	1 CFU/ 100 ml	Absent	Shall not be detectable in any 100ml sample	-

Note: GW3: Galemmanagudi Village. NR-No relaxation.

INFERENCE

As per Standards IS: 10500:2012

Report Status: - Measured Values for the above parameters are beyond the limits.

End of the Report

Analysed By Brunda.B Chemist

K. Ramakrishna Reddy * Technical Manager

Note:

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HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

Ph : 08394 355369

e-mail : gems_hpt@yahoo.com

Website : www.globalmining.in

ANNEXURE-49 GEMS-LD/TF/23/01

Analysis Report of Water Quality Data

Name of the Industry BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District. 1

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by **GLOBAL Environment & Mining Services** Particulars of sample collected 4 **Grab Sampling**

Sampling Procedure GEMS-LD/SOP/32

6 Discipline Chemical 7 Group Water

8 Sample Type **Ground Water**

9 Sample Code 871

Date of Sampling 10 10.05.2025 Sample Received 11 : 11.05.2025 12 Date of Analysis 12.05.2025 13 **Date of Analysis Completion** : 17.05.2025 14

Report Issue Date : 05.06.2025 15 Report Number GEMS/BMMIL/GW/2025-26/446

Results

		Kesuits				
				Mariyamma	Standards as per IS: 10500:2012	
Sl. No.	Parameters	Protocol	Unit	naHalli Village (GW4)	Acceptable Limits	Permissible Limit in the Absence of Alternate Source
1.	рН	APHA 24th Edition 4500 H +B: 2023	-	7.85	6.5 to 8.5	NR
2.	Conductivity	APHA 24th Edition 2510 B : 2023	μS/cm	1510	-	-
3.	Total Dissolved Solids	APHA 24th Edition 2540 C: 2023	mg/L	906	500max	2000 max
4.	Turbidity (NTU)	APHA 24th Edition 2130 B: 2023	NTU	<1.0	1 max	5max
5.	Total Suspended Solids	APHA 24th Edition 2540 D: 2023	mg/L	<1.0	-	-
6.	Sulphate as SO ₄	APHA 24th Edition 4500 SO4 E: 2023	mg/L	58.74	200max	400max
7.	Phosphorusas P	APHA 24th Edition 4500 P D: 2023	mg/L	<0.1	-	-
8.	Sodium as Na	APHA 24th Edition 3500 Na B : 2023	mg/L	356.0	-	-
9.	Potassium as K	APHA 24th Edition 3500 K B : 2023	mg/L	0.0	-	-
10.	Calcium as Ca	APHA 24th Edition 3500 Ca B : 2023	mg/L	110.63	75max	200max
11.	Magnesium as Mg	APHA 24th Edition 3500 Mg B : 2023	mg/L	34.11	30max	100max
12.	Total Hardness as CaCO ₃	APHA 24th Edition 2340 C : 2023	mg/L	416.97	200max	600max
13.	Chloride as Cl	APHA 24th Edition 4500 Cl B: 2023	mg/L	423.98	250max	1000 max
	T.	T.	1	1	1	40.00

- The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

 Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days. 2.
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GLOBALENVIRONMENT & MINING SERVICES (Consulting Engineers, Mine designers, Geologist & Surveyors)

3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

Ph : 08394 355369

e-mail : gems_hpt@yahoo.com

Website : www.globalmining.in

					Al	NNEXURE-49
14.	Fluoride as F	APHA 24thEditin 4500 F D : 2023	mg/L	0.23	1 max	1.5 max
15.	Nitrate Nitrogen as NO ₃	APHA 24th Edition 4500 NO3 E : 2023	mg/L	15.82	45max	NR
16.	Total Alkalinity as CaCO ₃	APHA 24th Edition 2320 B : 2023	mg/L	450.0	200max	600max
17.	Acidity as CaCO ₃	APHA 24th Edition 2310 B : 2023	mg/L	Nil	-	
18.	Total Iron as Fe	APHA 24th Editon 3500 Fe B : 2023	mg/L	0.15	0.30max	NR
19.	Chromium as Cr	APHA 24th Editon 3500 Cr-B:2023	mg/L	<0.01	0.05 max	NR
20.	Color	APHA 24th Editon -2120 C:2023	Hazen	<5	5max	15max
21.	Total Coli form count	IS: 15185:2016	1 CFU/ 100 ml	Absent	Shall not be detectable in any 100ml sample	-
22.	Escherichia coli count	IS: 15185:2016	1 CFU/ 100 ml	Absent	Shall not be detectable in any 100ml sample	-

Note: GW4: Mariyammanahalli Village. NR-No relaxation

INFERENCE

As per Standards IS: 10500:2012

Report Status: - Measured Values for the above parameters are within the limit.

End of the Report

Brunda.B Chemist

Authorised Signator K. Ramakrishna Reddy Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

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HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

Ph

: 08394 355369

e-mail

: gems_hpt@yahoo.com

Website : www.globalmining.in

ANNEXURE-50 GEMS-LD/TF/23/01

Analysis Report of Water Quality Data

Name of the Industry 1

BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference**

REF:LOI/STORES/25-26 DATE:02.04.2025 **GLOBAL Environment & Mining Services**

3 Sample collected by 4

Grab Sampling

Particulars of sample collected 5 Sampling Procedure

GEMS-LD/SOP/32

Discipline

Chemical

7 Group Water

8 Sample Type

Ground Water

9 Sample Code

Date of Sampling

874 10.05.2025

11 Sample Received 11.05.2025

12 Date of Analysis

: 12.05.2025

13 **Date of Analysis Completion** Report Issue Date

: 17.05.2025 :

Report Number

05.06.2025 GEMS/BMMIL/GW/2025-26/449

Results

		Results				
C)				Gunda		ls as per IS: 0:2012
Sl. No.	Parameters	Protocol	Unit	Thanda (GW5)	Acceptable Limits	Permissible Limit in the Absence of Alternate Source
1.	рН	APHA 24th Edition 4500 H +B: 2023	-	7.87	6.5 to 8.5	NR
2.	Conductivity	APHA 24th Edition 2510 B : 2023	μS/cm	1200	-	-
3.	Total Dissolved Solids	APHA 24th Edition 2540 C: 2023	mg/L	720	500max	2000 max
4.	Turbidity (NTU)	APHA 24th Edition 2130 B: 2023	NTU	<1.0	1 max	5max
5.	Total Suspended Solids	APHA 24th Edition 2540 D: 2023	mg/L	<1.0	-	-
6.	Sulphate as SO ₄	APHA 24th Edition 4500 SO4 E: 2023	mg/L	132.74	200max	400max
7.	Phosphorusas P	APHA 24th Edition 4500 P D: 2023	mg/L	<0.1	-	-
8.	Sodium as Na	APHA 24th Edition 3500 Na B : 2023	mg/L	96.59	-	-
9.	Potassium as K	APHA 24th Edition 3500 KB: 2023	mg/L	0.0	-	-
10.	Calcium as Ca	APHA 24th Edition 3500 Ca B : 2023	mg/L	45.78	75max	200max
11.	Magnesium as Mg	APHA 24th Edition 3500 Mg B : 2023	mg/L	23.08	30max	100max
12.	Total Hardness as CaCO ₃	APHA 24th Edition 2340 C : 2023	mg/L	209.44	200max	600max
13.	Chloride as Cl	APHA 24th Edition 4500 Cl B: 2023	mg/L	105.99	250max	1000 max

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied. 2.

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither interred nor implied.

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Ph : 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

ANNEXURE-50 14. Fluoride as F APHA 24thEditin 4500 F D: 2023 mg/L 0.18 1 max 1.5 max APHA 24th Edition 4500 15. Nitrate Nitrogen as NO₃ mg/L 17.25 45max NR NO3 E: 2023 16. Total Alkalinity as CaCO₃ APHA 24th Edition 2320 B: 2023 mg/L 292.5 200max 600max 17. Acidity as CaCO₃ APHA 24th Edition 2310 B: 2023 mg/L Nil Total Iron as Fe 18. APHA 24th Editon 3500 Fe B: 2023 mg/L 0.10 0.30max NR 19. Chromium as Cr APHA 24th Editon 3500 Cr-B:2023 mg/L < 0.01 0.05 max NR 20. Color APHA 24th Editon -2120 C:2023 Hazen <5 5max 15max Shall not be 1 CFU/ detectable in Total Coli form count 21. IS: 15185:2016 Absent 100 ml any 100ml sample Shall not be 1 CFU/ detectable in 22. Escherichia coli count IS: 15185:2016 Absent 100 ml any 100ml sample

Note: GW5: Gunda Thanda. NR-No relaxation.

INFERENCE

As per Standards IS: 10500:2012

Report Status: - Measured Values for the above parameters are within the limit.

End of the Report

Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy 5 * 9 Technical Manager

Note

2. 3.

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Ph : 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-51 GEMS-LD/TF/23/01**

Analysis Report of Water Quality Data

1 Name of the Industry BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District. 2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025 - 450000125

3 **GLOBAL Environment & Mining Services** Sample collected by

Particulars of sample collected **Grab Sampling**

5 Sampling Procedure GEMS-LD/SOP/32 6 Discipline Chemical

7 Group Water

Sample Type 8 **Ground Water** 9 Sample Code 867

Date of Sampling 10 10.05.2025 11 Sample Received 11.05.2025 12 Date of Analysis 12.05.2025 13 **Date of Analysis Completion** : 17.05.2025

14 Report Issue Date 05.06.2025

15 Report Number GEMS/BMMIL/GW/2025-26/444

Results

				Gunda	Standards as per IS: 10500:2012		
SI. No.	Parameters	Protocol	Unit	Village (GW6)	Acceptable Limits	Permissible Limit in the Absence of Alternate Source	
1.	рН	APHA 24th Edition 4500 H +B: 2023	-	7.95	6.5 to 8.5	NR	
2.	Conductivity	APHA 24th Edition 2510 B : 2023	μS/cm	1710	-	-	
3.	Total Dissolved Solids	APHA 24th Edition 2540 C: 2023	mg/L	1026	500max	2000 max	
4.	Turbidity (NTU)	APHA 24th Edition 2130 B: 2023	NTU	<1.0	1 max	5max	
5.	Total Suspended Solids	APHA 24th Edition 2540 D: 2023	mg/L	<1.0	-	-	
6.	Sulphate as SO ₄	APHA 24th Edition 4500 SO4 E: 2023	mg/L	143.16	200max	400max	
7.	Phosphorusas P	APHA 24th Edition 4500 P D: 2023	mg/L	<0.1	-	-	
8.	Sodium as Na	APHA 24th Edition 3500 Na B : 2023	mg/L	194.83	-	-	
9.	Potassium as K	APHA 24th Edition 3500 K B : 2023	mg/L	0.0	-	-	
10.	Calcium as Ca	APHA 24th Edition 3500 Ca B : 2023	mg/L	48.83	75max	200max	
11.	Magnesium as Mg	APHA 24th Edition 3500 Mg B : 2023	mg/L	51.76	30max	100max	
12.	Total Hardness as CaCO ₃	APHA 24th Edition 2340 C : 2023	mg/L	335.10	200max	600max	
13.	Chloride as Cl	APHA 24th Edition 4500 Cl B: 2023	mg/L	317.06	250max	1000 max	

- 2.
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3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

Ph

: 08394 355369

e-mail

: gems_hpt@yahoo.com

Website : www.globalmining.in

					A	NNEXURE-5
14.	Fluoride as F	APHA 24thEditin 4500 F D : 2023	mg/L	0.41	1 max	1.5 max
15.	Nitrate Nitrogen as NO ₃	APHA 24th Edition 4500 NO3 E : 2023	mg/L	15.83	45max	NR
16.	Total Alkalinity as CaCO ₃	APHA 24th Edition 2320 B : 2023	mg/L	397.5	200max	600max
17.	Acidity as CaCO ₃	APHA 24th Edition 2310 B: 2023	mg/L	Nil	-	-
18.	Total Iron as Fe	APHA 24th Editon 3500 Fe B : 2023	mg/L	0.13	0.30max	NR
19.	Chromium as Cr	APHA 24th Editon 3500 Cr-B:2023	mg/L	<0.01	0.05 max	NR
20.	Color	APHA 24th Editon -2120 C:2023	Hazen	<5	5max	15max
21.	Total Coli form count	IS : 15185:2016	1 CFU/ 100 ml	Absent	Shall not be detectable in any 100ml sample	-
22.	Escherichia coli count	IS: 15185:2016	1 CFU/ 100 ml	Absent	Shall not be detectable in any 100ml sample	1 2 1

Note: GW6: Gunda Village. NR-No relaxation.

INFERENCE

As per Standards IS: 10500:2012

Report Status: - Measured Values for the above parameters are within the limit.

End of the Report

Analysed By Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy

Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

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> **ANNEXURE-52** GEMS-LD/TF/23/01

Analysis Report of Water Quality Data

1 Name of the Industry BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025 3 Sample collected by **GLOBAL Environment & Mining Services**

Particulars of sample collected **Grab Sampling** Sampling Procedure GEMS-LD/SOP/32

6 Discipline Chemical 7 Group Water

Sample Type 8 **RO Drinking Water**

9 Sample Code 876

Date of Sampling 10 10.05.2025 Sample Received 11 : 11.05.2025 12 Date of Analysis 12.05.2025 13 **Date of Analysis Completion** : 17.05.2025 14 Report Issue Date 05.06.2025

Report Number GEMS/BMMIL/RO/2025-26/451

Results

				DO Deletion	Standards as per IS: 10500:2012		
Sl. No.	Parameters	Protocol	Unit	RO Drinking Water	Acceptable Limits	Permissible Limit in the Absence of Alternate Source	
1.	рН	APHA 24th Edition 4500 H +B: 2023		7.40	6.5 to 8.5	NR	
2.	Conductivity	APHA 24th Edition 2510 B : 2023	μS/cm	230	-	-	
3.	Total Dissolved Solids	APHA 24th Edition 2540 C: 2023	mg/L	138	500max	2000 max	
4.	Turbidity (NTU)	APHA 24th Edition 2130 B: 2023	NTU	<1.0	1 max	5max	
5.	Total Suspended Solids	APHA 24th Edition 2540 D: 2023	mg/L	<1.0	2	¥	
6.	Sulphate as SO ₄	APHA 24th Edition 4500 SO4 E: 2023	mg/L	58.23	200max	400max	
7.	Phosphorusas P	APHA 24th Edition 4500 P D: 2023	mg/L	<0.1	-	+	
8.	Sodium as Na	APHA 24th Edition 3500 Na B : 2023	mg/L	18.2	-	-	
9.	Potassium as K	APHA 24th Edition 3500 K B : 2023	mg/L	0.0	-		
10.	Calcium as Ca	APHA 24th Edition 3500 Ca B : 2023	mg/L	53.4	75max	200max	
11.	Magnesium as Mg	APHA 24th Edition 3500 Mg B: 2023	mg/L	1.85	30max	100max	
12.	Total Hardness as CaCO ₃	APHA 24th Edition 2340 C : 2023	mg/L	57.12	200max	600max	
13.	Chloride as Cl	APHA 24th Edition 4500 Cl B: 2023	mg/L	15.66	250max	1000 max	

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Ph

: 08394 355369

e-mail

: gems_hpt@yahoo.com

Website : www.globalmining.in

					Al	NNEXURE-
14.	Fluoride as F	APHA 24thEditin 4500 F D : 2023	mg/L	BDL	1 max	1.5 max
15.	Nitrate Nitrogen as NO ₃	APHA 24th Edition 4500 NO3 E : 2023	mg/L	1.08	45max	NR
16.	Total Alkalinity as CaCO ₃	APHA 24th Edition 2320 B : 2023	mg/L	32.5	200max	600max
17.	Acidity as CaCO ₃	APHA 24th Edition 2310 B : 2023	mg/L	0.00	- 1	-
18.	Total Iron as Fe	APHA 24th Editon 3500 Fe B : 2023	mg/L	0.09	0.30max	NR
19.	Chromium as Cr	APHA 24th Editon 3500 Cr-B:2023	mg/L	<0.01	0.05 max	NR
20.	Color	APHA 24th Editon -2120 C:2023	Hazen	<5	5max	15max
21.	Total Residual chlorine	APHA 24th Editon-4500-Cl B:2023	mg/L	0.00	0.2	1.0
22.	Oil & Grease	APHA 24th Edition 5520 B: 2023	mg/L	0.00	0.6	NR
23.	Cyanides (as CN)	APHA 24th Edition 4500 CN -D : 2023	mg/L	BDL	0.04	NR
24.	Phenolic Compound as phenols	IS:3025 (part 43)-1992, RA-2014, Chloroform extraction method	mg/L	BDL	1.0	-
25.	Boron as B	APHA 24th Edition 4500BB: 2023	mg/L	BDL	0.4	1.0
26.	Escherichia coli count	IS: 15185:2016	1 CFU/ 100 ml	Absent	Shall not be detectable in any 100ml sample	2

Note: W6: R0 Drinking Water. NR-No relaxation. Ab-Absent.

INFERENCE

As per Standards IS: 10500:2012

Report Status: - Measured Values for the above parameters are within the limit.

End of the Report

Brunda.B Chemist

Authorised Signatory 53 K. Ramakrishna Reddy **Technical Manager**

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

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: 08394 355369

e-mail : gems_hpt@yahoo.com

Website : www.globalmining.in

> **ANNEXURE-53** GEMS-LD/TF/23/01

Analysis Report of Water Quality Data

1 Name of the Industry

: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara

District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by **GLOBAL Environment & Mining Services**

4 Particulars of sample collected

Composite Sampling

5 Sampling Procedure GEMS-LD/SOP/32

Discipline 6

: Chemical

7 Group Pollution & Environment

8 Sample Type **Sewage Treatment Plant (Outlet)**

9 Date of Sampling 10.05.2025

10 Sample Received

11.05.2025

11 Date of Analysis

: 12.05.2025

12 Date of Analysis Completion

: 17.05.2025

13 Report Issue Date 05.06.2025

14 Report Number

GEMS/BMMIL/STP/2025-26/452

SI.					Results		As per KSPCB Std
No.	Parameters	Protocol	Unit	STP 45 KLD	STP-1 90 KLD	STP-2 90 KLD	
		Sample code	-	877	878	879	nor ob ota
1.	рН	APHA 24th Edition 4500 H +B: 2023	•	7.36	7.52	7.63	6.5 to 8.5
2.	Total Suspended Solids	APHA 24th Edition 2540 D: 2023	mg/L	14.0	10.0	8.0	<20
3.	Biochemical Oxygen Demand as BOD (3 days at 27°C)	IS 3025 PART 44: 2023	mg/L	4.0	8.0	6.0	<10
4.	Chemical Oxygen Demand as COD	APHA 24th Edition 5220 B: 2023	mg/L	19.65	44.00	39.31	<50
5.	Oil & Grease	APHA 24th Edition 5520 B: 2023	mg/L	2.0	6.0	4.0	10
6.	Color	APHA 24th Editon -2120 C:2023	Hazen	5	5	10	-
7.	Cyanides (as CN)	APHA 24th Edition 4500 CN -D : 2023	mg/L	BDL	BDL	BDL	
8.	Phenolic Compound as phenols	IS:3025 (part 43)-1992, RA-2014, Chloroform extraction method	mg/L	BDL	BDL	BDL	-
9.	Ammonical Nitrogen as N	IS:3025 (part 34)-1988, RA-2023	mg/L	2.80	4.06	3.64	5
10.	Total Nitrogen as N	IS:3025 (part 34)-1988, RA-2023	mg/L	4.56	8.74	6.12	10
11.	Fecal coliform	APHA 24th Edition 9211 B:2023	CFU/ 100ml	31	84	63	<100

Note: BDL-Below detectable Limit. INFERENCE: The Measured values are within the Limit.

STP 45 KLD - Near Fortivia STP-1 90 KLD -Near ISP Area

STP-2 90 KLD -Near Gunda Guest House

End of the Report

Analysed By Brunda.B Chemist

K. Ramakrishna Reddy Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

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Ph : 08394 355369

e-mail : gems_hpt@yahoo.com

Website : www.globalmining.in

ANNEXURE-54 GEMS-LD/TF/23/01

Analysis Report of Water Quality Data

1 Name of the Industry BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by

GLOBAL Environment & Mining Services

Particulars of sample collected

Composite Sampling

5 Sampling Procedure

GEMS-LD/SOP/32

Discipline

Chemical

7 Group

Pollution & Environment

8 Sample Type **Waste Water**

9 Date of Sampling 10.05.2025

10 Sample Received 11.05.2025

11 Date of Analysis

: 12.05.2025

12 Date of Analysis Completion

17.05.2025

13 Report Issue Date : 05.06.2025

Report Number

GEMS/BMMIL/WW/2025-26/455

Results

		11000		Dog		
SI. No.	Parameters	Protocol	Unit	Res Neutralization Pit 70 MW Power Plant	Neutralization Pit 2x70 MW Power Plant	As per KSPCB Std
		San	ple Code	880	881	
1.	рН	APHA 24th Edition 4500 H +B: 2023	-	8.02	8.14	6.5 to 9.0
2.	Total Suspended Solids	APHA 24th Edition 2540 D: 2023	mg/L	38.0	16.0	100
3.	Chemical Oxygen Demand as COD	APHA 24th Edition 5220 B: 2023	mg/L	176.90	157.25	250
4.	Oil & Grease	APHA 24th Edition 5520 B: 2023	mg/L	6.0	4.0	10

Note: BDL-Below detectable Limit.

INFERENCE: The Measured values are within the Limit.

End of the Report

Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy Technical Manager

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HOSAPETE – 583201, Dist., Vijayanagara (Karnataka)

Ph : 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-55 GEMS-LD/TF/23/01**

Analysis Report of Surface Water Quality Data

1 Name of the Industry : BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** : REF:LOI/STORES/25-26 DATE:02.04.2025 3 Sample collected by : GLOBAL Environment & Mining Services

4 Particulars of sample collected : Composite Sampling 5 Sampling Procedure : GEMS-LD/SOP/32

6 Discipline : Chemical

7 Group Pollution & Environment

8 Sample Type : Surface Water 9 Date of Sampling : 10.05.2025 Sample Received 10 : 11.05.2025 Date of Analysis : 12.05.2025 11 12 **Date of Analysis Completion** : 17.05.2025 13 Report Issue Date : 05.06.2025

14. Report Number : GEMS/SW/2025-26/457

SI.				Res	IS 2296 - 1982			
No.	Parameters	Protocol Unit		Danayakanakere Upstream		Danayakanakere Downstream		
		Sa	mple code	882	883	CLASS -B		
1.	рН	APHA 24th Edition 4500 H +B: 2023	-	7.69	7.64	6.5-8.5		
2.	Biochemical Oxygen Demand as BOD (3 days at 27°C)	IS 3025 PART 44: 2023	mg/L	0.00	0.00	3.0		
3.	Fluorides as F	APHA 24thEditin 4500 F D: 2023	mg/L	0.27	0.38	1.3		
4.	Dissolved Oxygen	APHA 24thEditin 4500 O C:2023	mg/L	5.2	5.6	>5.0		
5.	Color	APHA 24th Editon -2120 C:2023	Hazen	<5	<5	300		
6.	Cyanides (as CN)	APHA 24th Edition 4500 CN -D : 2023	mg/L	BDL	BDL	0.05		
7.	Phenolic Compounds (as C ₆ H ₅ OH)	IS:3025 (part 43)-1992, RA-2014, Chloroform extraction method	mg/L	BDL	BDL	0.005		
8.	Chromium (as Cr6+)	APHA 24th Editon 3500 Cr-B:2023	mg/L	< 0.001	<0.001	1.0		
9.	Total Coliform Organisms							
	Total Coli forms	IS: 1622:1981	MPN/ 100 ml	Absent	Absent	500		
	Escherichia coli or E. coli	IS: 1622:1981	MPN/ 100 ml	Absent	Absent	-		

INFERENCE: The measured values are within the Limit

End of the Report

Analysed By Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy

Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

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3. 4. 5. 6. Total liability of our laboratory is limited to the Invoice amount. Any dispute arising out of this report is subject to Hosapete jurisdiction only. Recognised by Ministry of Environment, Forest and Climate Change for Laboratory







(Consulting Engineers, Mine designers, Geologist & Surveyors) 3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

Ph : 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-56** GEMS-LD/TF/23/01

Analysis Report of Surface Water Quality Data

1 Name of the Industry BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025

3 Sample collected by

GLOBAL Environment & Mining Services

Particulars of sample collected

Composite Sampling

5 Sampling Procedure GEMS-LD/SOP/32

6 Discipline Chemical

7 Group Pollution & Environment

8 Sample Type **Surface Water**

9 Date of Sampling 10.05.2025

10 Sample Received

11.05.2025

11 Date of Analysis : 12.05.2025

12 Date of Analysis Completion : 17.05.2025

13 Report Issue Date 05.06.2025

14. Report Number : GEMS/SW/2025-26/459

SI.	Parameters			Results			
No.		Protocol	Unit	KempuHalla Upstream	KempuHalla Downstream	IS 2296 - 1982	
		S	ample code	884	885	CLASS -B	
1.	рН	APHA 24th Edition 4500 H +B: 2023	-	7.35	7.23	6.5-8.5	
2.	Biochemical Oxygen Demand as BOD (3 days at 27°C)	IS 3025 PART 44: 2023	mg/L	0.00	0.00	3.0	
3.	Fluorides as F	APHA 24thEditin 4500 F D: 2023	mg/L	0.42	0.25	1.5	
4.	Dissolved Oxygen	APHA 24thEditin 4500 O C:2023	mg/L	5.4	5.2	>5.0	
5.	Color	APHA 24th Editon -2120 C:2023	Hazen	25	25	300	
6.	Cyanides (as CN)	APHA 24th Edition 4500 CN -D: 2023	mg/L	BDL	BDL	0.05	
7.	Phenolic Compounds (as C ₆ H ₅ OH)	IS:3025 (part 43)-1992, RA-2014, Chloroform extraction method	mg/L	BDL	BDL	0.005	
8.	Chromium (as Cr6+)	APHA 24th Editon 3500 Cr-B:2023	mg/L	< 0.001	< 0.001	1.0	
9.	Total Coliform Organisms,						
	Total Coli forms	IS: 1622:1981	MPN/ 100 ml	Absent	Absent	500	
	Escherichia coli or E. coli	IS: 1622:1981	MPN/ 100 ml	Absent	Absent	-	

INFERENCE: The measured values are within the Limit

End of the Report

Analysed By Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy 0/5 **Technical Manager**

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.

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(Consulting Engineers, Mine designers, Geologist & Surveyors)

3rd Main Road, Basaveswara Badavane,

HOSAPETE - 583201, Dist., Vijayanagara (Karnataka)

Ph : 08394 355369

e-mail : gems_hpt@yahoo.com Website : www.globalmining.in

> **ANNEXURE-57** GEMS-LD/TF/23/01

Analysis Report of Surface Water Quality Data

1 Name of the Industry BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.

2 **Customer Reference** REF:LOI/STORES/25-26 DATE:02.04.2025 3 Sample collected by **GLOBAL Environment & Mining Services**

4 Particulars of sample collected **Composite Sampling** 5 Sampling Procedure GEMS-LD/SOP/32 6 Discipline Chemical/Biological 7 Group **Pollution & Environment**

Sample Type 8 **Surface Water** 9 Date of Sampling 10.05.2025 10 Sample Received : 11.05.2025 11 Date of Analysis : 12.05.2025 12 Date of Analysis Completion : 17.05.2025 13 Report Issue Date : 05.06.2025

14. Report Number GEMS/SW/2025-26/461

Sl. No.	Parameters	Protocol	Unit	Results Tungabhadra dam	IS 2296 -1982 CLASS -B		
		Sa	ample Code	886	CEAOS B		
1.	рН	APHA 24th Edition 4500 H +B: 2023	-	7.32	6.5-8.5		
2.	Biochemical Oxygen Demand as BOD (3 days at 27°C)	IS 3025 PART 44: 2023	mg/L	2.0	3.0		
3.	Fluorides as F	APHA 24thEditin 4500 F D: 2023	mg/L	0.38	1.5		
4.	Dissolved Oxygen	APHA 24thEditin 4500 O C:2023	mg/L	5.4	>5.0		
5.	Color	APHA 24th Editon -2120 C:2023	Hazen	10	300		
6.	Cyanides (as CN)	APHA 24th Edition 4500 CN -D: 2023	mg/L	BDL	0.05		
7.	Phenolic Compounds (as C ₆ H ₅ OH)	IS:3025 (part 43)-1992, RA-2014, Chloroform extraction method	mg/L	BDL	0.005		
8.	Chromium (as Cr6+)	APHA 24th Editon 3500 Cr-B:2023	mg/L	BDL	1.0		
9.	Total Dissolved Solids	APHA 24th Edition 2540 C: 2023	mg/L	440	-		
10.	Total Suspended Solids	APHA 24th Edition 2540 D: 2023	mg/L	16.0	-		
11.	Total Coliform Organisms,						
	Total Coli forms	IS :1622:1981	MPN/ 100 ml	43	500		
	Escherichia coli or E. coli	IS: 1622:1981	MPN/ 100 ml	Absent	-		

Note: BDL-Below detectable Limit

INFERENCE: The measured values are within the Limit.

End of the Report

Brunda.B Chemist

Authorised Signatory K. Ramakrishna Reddy Technical Manager

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.

Water Samples will be destroyed after 7Days, Waste Water After Analysis Discard the Samples, Minerals 3 Months, Filter papers & Thimbles After analysis Discard 7 days.
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