



Danapur Village, Hospet Taluk, Bellary District, PIN-583222, Karnataka



ENVIRONMENT MONITORING REPORT

Stage 2 Units

For

May-2015

Prepared By



GLOBAL ENVIRONMENT & MINING SERVICES

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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 ShriUdaichandSinghi.

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 2000 CroresCompany 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. It is this human potential that 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 Endeavours'.



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, Cement & Mining companies in India that has achieved the present level under the leadership and guidance of Sri Dinesh Kumar Singh, the Founder & Director 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 to set up new Rolling Mill.The corporate office of the project is located as follows:

BMM ISPAT LIMITED

(Registered Office & Works) #114, Danapura

Hospet - 583 222

Bellary Dist., Karnataka
Phone +91 83942 44681/82/83/9972309417
Fax +91 080-30723604.



1.3 BRIEF PROFILE OF THE GROUP MINES.

TMT Bars:

Steel for TMT bars is fully kilned in a furnace. The molten steel is void of slag with the inclusion of argon gas. The chemistry and temperature is homogenized to ensure uniform composition. The liquid steel is then tapped into the concast. (Continuous of Casting Machine).

Billet Quality for TMT Steel:

- No impurities Viz. Slag and refractory inclusions.
- No piping and blowholes.
- Superior Surface finishes without defects.
- Consistent properties throughout its length.

Steel:

The steel plant setup in 2006 as per BMM'S aspirations now produces 75,000 TMT bars annually. BMM ISPAT LTD manufactures high strength TMT steel bars for concrete reinforcement, which are internationally competitive and highly ductile for safety in structures.

Properties of BMM Steel:

- Steel is Corrosion Resistance, owing to its water quenching methods.
- With 0.25%, carbon BMM TMT has an excellent wielding ability.
- Stringent Control over chemical composition prevents brittleness.
- TMT bonds best with concrete to form strong reinforcement.

BMM Cement

BMM Cements Limited an integral part of the BMM Group has successfully commissioned its new cement plant with an annual capacity of one Million Tons per annum.

1.4 Site Location

BMM ISPAT LIMITED is located at Danapur about 15 Kms away from Hospet 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 Danapura 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 (Vidyanagar).

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	3.40 MTPA
2	Palletizing Plant	1.20 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	2.30 MTPA
8	Continuous casting machines	
	Slab Caster	1.10 MTPA
	Billet Caster	1.10 MTPA
9	Rolling mills:	
	Hot strip mill	1.00 MTPA
	Structurals/wire rods	1.00 MTPA
10	Oxygen Plant	2x500 TPD
11	Calcining	1,080 TPD
12	Cement Plant	1.40 MTPA
13	Power Plant	230 MW

Out of the above units presently 4 x 500 TPD Sponge Iron Plants and 1X70 MW Thermal PowerPlants have been commissioned on August 2011 and Beneficiation platn-2, Pellet Plant-2 are commissioned on March 2012.2X70 MW Thermal based power plants have commissioned on Jan 2013 other plants are under construction. Hence environmental monitoring has being carried out for 4 x 500 TPD sponge iron plants, 1X70 MW Thermal Power Plant, 1.3MTPA Beneficiation, 1.2MTPA Pellet Plant and 2X70MW Power plant every Month.

- 1.5 The report includes environmental monitoring data collected at above site for the month of MAY-2015. The Parameters monitored are:
 - Fugitive Dust Level
 - ❖ Stack Emission

Important Note: Ambient Air Quality & Water Quality data are common for both Stage-I & Stage-II. Hence, Please refers Stage-I report for the same.



1.6 Study:

The data collection programmeis givenbelow:

1.7 **Fugitive Emission Monitoring**

Ambient Air Quality was monitored 40samples 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 air quality status given in Annexure - 1/A (1 st Fort night) & $Annexure - 1/B(2^{nd}Fort\ night)$.

1.8 Stack Monitoring

Vayubhodhan Stack sampler VSS1 stack monitoring was used for drawing the flue gas. Sulphur dioxide and oxides of Nitrogen in the flue gas were sampled by bubbling flue gas in 3% H₂O₂ and 0.1N NaOH solution respectively and the analysis 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, and the results given in *Annexure* – $2/A(1^{st} Fort night)$ & *Annexure* – $2/B(2^{nd} Fort night)$

1.9 Stack Emissions Monitoring Methodology

1.10 Sampling Procedure

Pre Sampling Activities

Weigh the properly conditioned thimble/filter and place it into the clean, air tight Container. Designate appropriate label or ID No. to each thimble/filter container. Particulate matter emission of "Stack Monitoring – Material and Methodology for iskinetic Sampling.

Field activity starts with the collection of detailed information from the industry about the products, raw materials, fuels, and stack dimensions.

1.11 Traverse Point Calculation

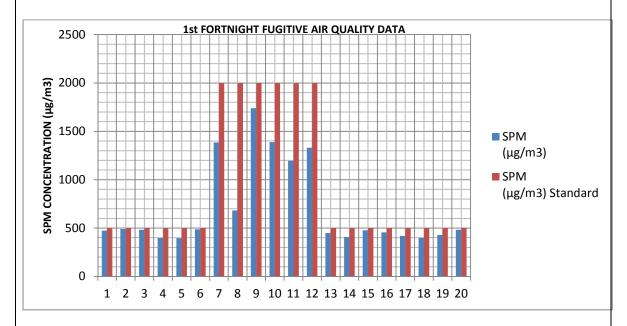
Calculate the traverse point and accordingly mark the distance from tip of the Nozzle, on Pitot tube and probe. Do not forget to add the collar length of port to the calculated traverses. For detailed calculation of "Stack Monitoring— Material and Methodology for iskinetic sampling.

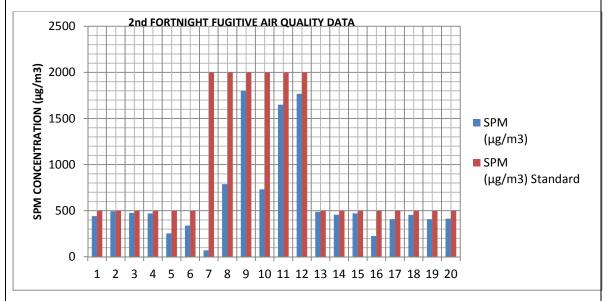


1.12 Determination of Dust Concentration

Determine the mass of dust collected in the thimble by difference i.e. weighing the thimble before and after the run. Dry the thimble in an oven for about 2 hours at 120° C prior to sampling. After sampling, cool, dry and again weigh the thimble along with dust maintaining the same condition as prior to sampling

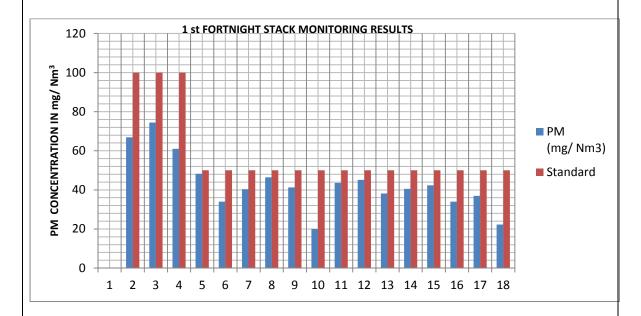
1.13 Fortnightly fugitive air quality was monitored all plant area SPM value minimum 225.9 $\mu g/m^3$, maximum value1800.7 $\mu g/m^3$,and average value 679.93 $\mu g/m^3$. The Fugitive Monitoring results of . 1 st Fortnight & 2 nd Fortnight is mentioned in graph.

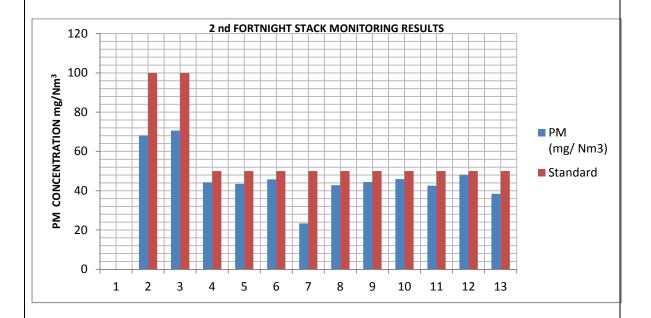






1.14 Stack emission level was monitored all chimneys' PM values (mg/Nm³) 1st and 2nd Fort Night Minimum Value 20.00 mg/Nm³, Maximum Value 74.40 mg/Nm³ & Average Value 44.60 mg/Nm³. The Stack Monitoring results of . 1 st Fortnight & 2 nd Fortnight is mentioned in graph.





1.15Conclusion

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



Annexure-1/A (1 st Fort Night)

FORTNIGHTLY FUGITIVE AIR QUALITY DATA MONITORING MAY-2015

Name of the Industry
 BMM Ispat Ltd., Danapur, Hospet Taluk, Bellary District.
 Sample collected by
 GLOBAL Environment & Mining Services, Hospet.

3. Particulars of sample collected : RDS Sampler (AAS 217 BL)

4. Report to sent : **05.06.2015**

5. Method adopted : IS 5182 (Part 23) : 2006

Sl.NO.	Location / Plant	Date Of Monitoring	Date Of Sample Receipt	SPM (μg/m³)	Standard
I. Benef	ficiation Plant-II				
1.	Ball Mill Area	04.05.2015	05.05.2015	473.1	500
2.	Iron Ore Hopper (Near monsoon shed)	04.05.2015	05.05.2015	490.7	500
3.	Concentrate Thickener	04.05.2015	05.05.2015	482.4	500
II. Pelle	et Plant-II				
4.	PR-6	05.05.2015	06.05.2015	398.0	500
5.	Annual Cooler	05.05.2015	06.05.2015	395.7	500
6.	CGB Building	05.05.2015	06.05.2015	486.9	500
III. Spo	nge Iron Division -2 (Kiln 1 & 2)				
7.	Control room	06.05.2015	07.05.2015	1385.2	2000
8.	Near Weigh bridge (dispatch)	06.05.2015	07.05.2015	682.2	2000
9.	Pellet Storage bin	06.05.2015	07.05.2015	1738.7	2000
IV. Spor	nge Iron Division -2 (Kiln 3 & 4)			•	
10.	Near Control room	07.05.2015	08.05.2015	1388.4	2000
11.	Near Coal crusher	07.05.2015	08.05.2015	1195.8	2000
12.	Near Product bin	07.05.2015	08.05.2015	1330.8	2000
V. Wage	on Tipper/RMHS				
13.	Near Tipping point	08.05.2015	09.05.2015	449.3	500
14.	Monsoon Shed	08.05.2015	09.05.2015	407.9	500
15.	MCC room (2 nd Gate)	08.05.2015	09.05.2015	476.2	500
VI. Pow	ver Plant-70 MW				
16.	70MW-DM Plant (Near R.O. Plant)	09.05.2015	11.05.2015	455.7	500
17.	Coal Screen (near gate weigh bridge)	09.05.2015	11.05.2015	418.2	500
18.	CFBC boiler	09.05.2015	11.05.2015	398.4	500
VII. 2X7	70MW Power Plant				
19.	Near Boiler	11.05.2015	12.05.2015	429.5	500
20.	Near Coal storage Shed	11.05.2015	12.05.2015	482.7	500

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

Analyzed By

Environmental Engg Technical Manager (G.Aarathi) (K.Ramakrishna Reddy)

Quality Manager

(Nizamuddin)

Note:

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

Authorised sign

- 2. Samples will be destroyed after one month from the date of issue of test certificate unless otherwise specified.
- 3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the Court of law & should not used any advertising media without special permission in writing.
- 4. Total liability of our laboratory is limited amount. Any dispute arising out of this report is subject to Hospet jurisdiction only.



Annexure-1/B (2nd Fort Night)

FORTNIGHTLY FUGITIVE AIR QUALITY DATA MONITORING MAY-2015

1. Name of the Industry : BMM Ispat Ltd., Danapur, Hospet Taluk, Bellary District

2. Sample collected by : GLOBAL Environment & Mining Services

3. Particulars of sample collected : RDS Sampler (AAS 217 BL)

4. Report to be sent : **05.06.2015**

5. Method adopted : IS 5182 (Part 23) : 2006

Sl.N 0.	Location / Plant	Date Of Monitoring	Date Of Sample Receipt	SPM (μg/m³)	Standard
I. Ber	eficiation Plant-II				
1.	Ball Mill Area	19.05.2015	20.05.2015	442.1	500
2.	Iron Ore Hopper (Near monsoon shed)	19.05.2015	20.05.2015	493.7	500
3.	Concentrate Thickener	19.05.2015	20.05.2015	476.0	500
II. Pe	llet Plant-II				
4.	PR-6	20.05.2015	21.05.2015	471.0	500
5.	Annual Cooler	20.05.2015	21.05.201	254.4	500
6.	CG Building	20.05.2015	21.05.2015	338.8	500
III. Sp	onge Iron Division -2 (Kiln 1 & 2)				
7.	Control room	21.05.2015	22.05.2015	690.4	2000
8.	Near Weigh bridge (dispatch)	21.05.2015	22.05.2015	789.0	2000
9.	Pellet Storage bin	21.05.2015	22.05.2015	1800.7	2000
IV. Sp	onge Iron Division -2 (Kiln 3 & 4)				
10.	Near Control room	25.05.2015	26.05.2015	730.6	2000
11.	Near Coal crusher	25.05.2015	26.05.2015	1650.6	2000
12.	Near Product bin	25.05.2015	26.05.2015	1768.1	2000
V. Wa	gon Tipper/RMHS				
13.	Near Tipping point	26.05.2015	27.05.2015	487.5	500
14.	Monsoon Shed	26.05.2015	27.05.2015	457.0	500
15.	MCC room (2 nd Gate)	26.05.2015	27.05.2015	471.2	500
VI. Po	ower Plant-70 MW				
16.	70MW-DM Plant (Near R.O. Plant)	27.05.2015	28.05.2015	225.9	500
17.	Coal Screen (near gate weigh bridge)	27.05.2015	28.05.2015	408.1	500
18.	CFBC boiler	27.05.2015	28.05.2015	454.5	500
VII. 2	X70MW Power Plant				
19.	Near Boiler	28.05.2015	29.05.2015	409.1	500
20.	Near Coal storage Shed	28.05.2015	29.05.2015	412.9	500

Note: SPM - Suspended Particulate matter $(\mu g/m^3)$ INFERENCE: The Measured Values are within the limits

Analyzed By
Environmental Engg
(G.Aarathi)

Authorised sign
Technical Manager
(K.Ramakrishna Reddy)

(Nizamuddin)

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STACK MONITORING RESULTS

Annexure - 2/A

1. Name of the Industry : BMM Ispat Ltd., Danapur, Hospet Taluk, Bellary district.

2. Sample collected by : GLOBAL Environment & Mining Services

3. Particulars of sample collected : Vayubodhan Stack sampler VSS 1
 4. Month : May - 2015 (1st Fort Night)

a.		Die			<u>• • • • • • • • • • • • • • • • • • • </u>	, , , , , , , , , , , , , , , , , , ,		D		Results		Standards
Si. No	Stack Attached to	Date of Monitoring	Fuel Used	Ta °C	TS oC	V m/Sec	HEIGHT (m)	Diameter (m)	PM	SO ₂ mg/Nm ³	NO 2 mg/ Nm ³	PM (mg/ Nm ³)
1	Pellet Plant-2 ESP	04.05.2015	<u> </u>			•	Sh	utdown				50
2	2X500TPD Sponge iron kiln1&2 ESP	05.05.2015	Coal	35	146	5.06	70	3.00	66.9	58.43	BDL	100
3	2X500TPD Sponge iron kiln3&4 ESP	06.05.2015	Coal	36	149	5.37	70	3.00	74.4	68.21	3.18	100
4	1 X 70MW-CFBC Boiler ESP	07.05.2015	Coal	35	147	5.50	70	3.00	61.0	52.14	2.54	100
5	2X70MW -CFBC Boiler ESP	08.05.2015	Coal	35	160	6.11	110	8.00	48.2	56.28	3.02	50
Chimney	s attached to Bag Filter (De dusting U	nits)										
Beneficia	ation Plant-2											
1	Iron Ore Cone Crusher	04.05.2015					30	1.20	34.0			50
2	Iron Ore Screening	04.05.2015					30	1.20	40.4			50
Pellet Pla	ant-2											
3	Additive grinding mill				•	•	•		•			50
4	Mixer building						Shutdown					50
5	Pellet discharge point											50
2 X 500 T	ΓPD Sponge Iron Kiln 1 & 2											
6	Cooler Discharge -1	05.05.2015					30	1.20	46.4			50
7	Cooler Discharge -2	06.05.2015		·		•	30	1.20	41.3			50
8	Coal stock house	06.05.2015					30	1.20	20.0			50
9	Production Separation bin-1	06.05.2015					30	1.20	43.6			50
10	Production Separation bin-2	07.05.2015					30	1.20	45.1			50
11	Transfer House	07.05.2015					30	1.20	38.2			50

Parameter	Protocol
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2009)
SO ₂ (mg/Nm3)	IS 11255 (Part 2): 1985 (reaffirmed 2014)
NO ₂ (mg/Nm3)	IS 11255 (Part 7) : 2005 (reaffirmed 2005)

Note:

SO₂ - Sulphur dioxide NO₂ - Nitrogen dioxide PM - Particulate matter

Analyzed By Environmental Eng (G.Aarathi) Verified by Technical Manager (K.Ramakrishna Reddy) **Quality Manager**

(Nizamuddin)

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STACK MONITORING RESULTS

Annexure - 2/A

1. Name of the Industry : BMM Ispat Ltd., Danapur , Hospet Taluk, Bellary district.

2. Sample collected by : GLOBAL Environment & Mining Services

3. Particulars of sample collected : Vayubodhan Stack sampler VSS 1
4. Month : May-2015 (1st Fort Night)

Sl.		Date of	Date of Fuel Ta TS V HEIGHT Diameter			Results		Standards				
No	Stack Attached to	Monitoring	Used	Used °C °C m/Sec	(m)	(m)	PM	SO ₂ mg/Nm ³	NO 2 mg/ Nm ³	PM (mg/Nm³)		
Chim	neys attached to Bag Filter (De dusting Un	its)										
2X50	0 TPD Sponge Iron Kiln 3&4											
12	Coal Primary Screen	08.05.2015					30	1.20		Iatin Onavat	ion	50
13	Coal Stock House -1 & coal stock house-2	09.05.2015				30	1.20	Not in Operation			50	
14	Cooler Discharge -1	07.05.2015					30	1.20	40.5			50
15	Cooler Discharge -2 & PSB transfer tower	08.05.2015					30	1.20	42.3			50
16	Production Bunker & Intermediate bin	09.05.2015					30	1.20	N	lot in Operat	ion	50
17	Production Separation bin	08.05.2015					30	1.20	34.0			50
18	Pellet Stock house	09.05.2015					30	1.20	N	lot in Operat	ion	50
19	Dolochar Stock House 1 & 2	11.05.2015					30	1.20	36.9			50
20	CPU Building	11.05.2015					30	1.20	22.3			50

Parameter	Protocol
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2009)
SO ₂ (mg/Nm3)	IS 11255 (Part 2): 1985 (reaffirmed 2014)
NO ₂ (mg/Nm3)	IS 11255 (Part 7): 2005 (reaffirmed 2005)

<u>Note</u>

SO₂ - Sulphur dioxide NO₂ - Nitrogen dioxide PM - Particulate matter

Analyzed By Environmental Eng (G.Aarathi) Verified by Technical Manager (K.Ramakrishna Reddy) **Quality Manager**

(Nizamuddin)

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STACK MONITORING RESULTS

Annexure - 2/B

1. Name of the Industry : BMM Ispat Ltd., Danapur, Hospet Taluk, Bellary district.

2. Sample collected by : GLOBAL Environment & Mining Services

3. Particulars of sample collected : Vayubodhan Stack sampler VSS 1
 4. Month : May - 2015 (2nd Fort Night)

G:		D i c				, , , , , , , , , , , , , , , , , , ,	HELOHE	D: .		Results		Standards
Si. No	Stack Attached to	Date of Monitoring	Fuel Used	Ta °C	TS °C	w m/Sec	HEIGHT (m)	Diameter (m)	PM	SO ₂ mg/Nm ³	NO 2 mg/ Nm ³	PM (mg/ Nm ³)
1	Pellet Plant-2 ESP	19.05.2015		Shutdown							50	
2	2X500TPD Sponge iron kiln1&2 ESP	20.05.2015	Coal	35	148	5.31	70	3.00	68.1	60.06	BDL	100
3	2X500TPD Sponge iron kiln3&4 ESP	21.05.2015	Coal	34	161	6.25	70	3.00	70.6	54.24	2.46	100
4	1 X 70MW-CFBC Boiler ESP	25.05.2015				•	Sh	utdown				100
5	2X70MW -CFBC Boiler ESP	26.05.2015	Coal	35	152	5.53	110	8.00	44.3	62.38	2.84	50
Chimney	rs attached to Bag Filter (De dusting U	nits)										
Beneficia	ation Plant-2											
1	Iron Ore Cone Crusher	19.05.2015									50	
2	Iron Ore Screening	19.05.2015					30	1.20	1	Not in Operation	OH	50
Pellet Pla	ant-2											
3	Additive grinding mill											50
4	Mixer building						Shutdown					50
5	Pellet discharge point											50
2 X 500 T	TPD Sponge Iron Kiln 1 & 2											
6	Cooler Discharge -1	20.05.2015					30	1.20	43.5			50
7	Cooler Discharge -2	21.05.2015					30	1.20	45.8			50
8	Coal stock house	21.05.2015					30	1.20	23.4			50
9	Production Separation bin-1	21.05.2015					30	1.20	42.8			50
10	Production Separation bin-2	25.05.2015					30	1.20	44.5			50
11	Transfer House	25.05.2015					30	1.20	45.9			50

Parameter	Protocol	Note:	
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2009)	SO ₂ -	Sulphur dioxide
SO ₂ (mg/Nm3)	IS 11255 (Part 2) : 1985 (reaffirmed 2014)	NO_2 -	Nitrogen dioxide
NO ₂ (mg/Nm3)	IS 11255 (Part 7): 2005 (reaffirmed 2005)	PM -	Particulate matter

Analyzed By Environmental Engg (G.Aarathi) **Authorised signatory** Technical Manager

(K.Ramakrishna Reddy)

Quality Manager

(Nizamuddin)

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STACK MONITORING RESULTS

Annexure - 2/B

1. Name of the Industry : BMM Ispat Ltd., Danapur , Hospet Taluk, Bellary district.

2. Sample collected by : GLOBAL Environment & Mining Services

3. Particulars of sample collected : Vayubodhan Stack sampler VSS 1
4. Month : May-2015 (2nd Fort Night)

Sl.		Date of	Fuel	Та	TS	v	HEIGHT	Diameter		Results		Standards
No	Stack Attached to	Monitoring	Used	οС	- -		(m)	(m)	PM	SO ₂	NO 2 mg/ Nm ³	PM (mg/ Nm³)
Chimneys attached to Bag Filter (De dusting Units)												
2X50	0 TPD Sponge Iron Kiln 3&4											
12	Coal Primary Screen	26.05.2015					30	1.20		Iatin Onavat	ion	50
13	Coal Stock House -1 & coal stock house-2	27.05.2015				30	1.20	Not in Operation			50	
14	Cooler Discharge -1	25.05.2015					30	1.20	42.6			50
15	Cooler Discharge -2 & PSB transfer tower	26.05.2015					30	1.20	48.1			50
16	Production Bunker & Intermediate bin	27.05.2015					30	1.20	N	lot in Operat	ion	50
17	Production Separation bin	26.05.2015					30	1.20	38.4			50
18	Pellet Stock house	27.05.2015					30	1.20				50
19	Dolochar Stock House 1 & 2	28.05.2015				30	1.20	Not in Operation		ion	50	
20	CPU Building	28.05.2015					30	1.20				50

Parameter	Protocol
Particulate Matter (mg/Nm3)	IS: 11255 (Part 1) - 1985 (reaffirmed 2009)
SO ₂ (mg/Nm3)	IS 11255 (Part 2): 1985 (reaffirmed 2014)
NO ₂ (mg/Nm3)	IS 11255 (Part 7): 2005 (reaffirmed 2005)

Note:

SO₂ - Sulphur dioxide
 NO₂ - Nitrogen dioxide
 PM - Particulate matter

Analyzed by Environmental Engg (G.Aarathi) Authorised signatory Technical Manager (K.Ramakrishna Reddy) **Quality Manager**

(Nizamuddin)

- 1. The result listed refer only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.
- 2. Samples will be destroyed after one month from the date of issue of test certificate unless otherwise specified.
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