O/C

BMM®
POTENTIAL IN TONNES

BMM/ENV/2021-22/047

To
Member Secretary,
Karnataka State Pollution control Board,
49 Parisara Bhavan,
4th & 5Th Floor, Church Street,
BENGALURU -560001.

Date: 29.09.2021

Through
Environmental Officer,
KSPCB, No.597, 1st cross,
Near Vishnuvardhan Park,
Kuvempunagar,
BALLARI – 583 104

Sir,

Sub: Submission of Environmental statement (Form-V) for the year 2020-21 in respect of M/s.BMM Ispat Ltd, **(Stage-I units)** Danapura, Hosapete Taluk, Ballari Dist., - reg.

Ref: CFO issued by KSPCB vide its Ltr. AW-303323, PCB ID: 10361 dated: 08.08.2017

With reference to above subject, we are herewith submitting Environmental Statement in the prescribed form- V, in respect of M/s BMM ISPAT LTD stage-I units, Danapura village, Hosapete Taluk, Ballari Dist. for the Financial Year ending 31st March 2021.

Kindly acknowledge the receipt of the same.

Thanking You,

Yours faithfully,

NBgoudar 29.09.2021
Authorised Signatory

Encl: Form-V

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B.M.M. ISPAT LTD. DANAPUR

Yours faithfully,

29.09.2021
Authorised Signatory

Encl: Form-V

BMM Ispat Ltd.,

Submission of Environmental statement (Form-V) for the year 2020-21

Stage-I

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

FORM V
(See rule 14)
ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING THE 31ST MARCH-2021

BMM Stage I - Integrated Steel Plant

PART A

i. Name and address of the Occupier: Mr. Vimal Singh
Occupier of the industry — CEO & Occupier
Operation or process: — BMM Ispat Ltd, Danapura
Tq- Hosapete, Dist- Ballari.

ii. Industry category Primary - (STC Code) Secondary - (STC Code)

iii. Production category Units -

1.Iron Ore Beneficiation	:1.3 MTPA
2.Palletizing	: 1.2 MTPA
3.Captive Power Plant	: 25MW
4.Sponge Iron	: 6,000 TPM
5.MS Billets	: 9000 TPM
6.Rolling mill Products	: 9000 TPM
7.Producer gas Unit	: 4x4500Nm3/hr

iv. Year of establishment: Feb 2007

v. Date of the last environmental statement submitted: 25.09.2020.

PART .B

Water and Raw Material Consumption:

Production during 2020-21 (1st April 2020 to 31st March 2021**)**

i. Water consumption in m3/A

- Process :

1	Captive Power Plant	372 m^3 /A
2	Iron Ore Beneficiation	521331 m^3 /A
3	Pelletization plant	85114 m^3 /A
4	Sponge Iron (recycled water)	74694 m^3/A
5	Induction Furnace	95929 m^3 /A
6	Rolling Mill (TMT)	50700 m^3/A

- Cooling : (included in the above list)
- Domestic :14400 m^3/A Please check

Name of Products	Process water consumption per unit of products	
	During the current financial year (2019-20)	During the current financial year (2020-21)
1. Captive Power Plant	Nil. Since unit not in operation.	0.3292 Ltrs/KWh
2. Pelletizing	0.179 m3/T	0.07499 m^3/T
3. Iron Ore Beneficiation	0.431 m3/T	0.4925 m^3/T
4. Sponge Iron	0.916 m3/T	0.9779 m^3/T
5. Induction Furnace	0.909 m3/T	0.8790 m^3/T
6. Rolling Mill	0.379 m3/T	0.6176 m^3/T

ii. Raw material consumption

Name of Unit	Name of raw materials*	Consumption of raw material per unit of Output (Tonnes)	
		During the current financial year (2019-20)	During the current financial year (2020-21)
Captive Power Plant	• Flue Gas from Kiln • Coal • Rice husk • Dolochar • Bed material	Nil (Plant in Shutdown condition)	0.0160 0.00104 0.00026
Palletizing	• Iron Ore Concentrate • Bentonite • Lime stone • Dolomite • Coke • Anthracite coal • Australian Coal • SA Coal • Coal	1.16 0.010 0.0103 0.008 0.009 - - - 0.0029	1.14 0.00998 0.00834 0.00816 0.00558 - - - 0.02833
Iron Ore Beneficiation	• Iron Ore	0.962	0.96
Sponge Iron	• Iron Ore • Coal • Limestone • Dolamite • SA coal • Indonesian Coal • Australian Coal • Dolochar • Indian Coal	1.43 0.94 - 0.0408 0.945 - 0.000216 0.1955 -	1.4248 - - 0.0360 0.9165 - - - -
Induction Furnace & Rolling Mill	• Sponge Iron • Iron,Steel • Briquettes • PCM Skull • Scrap,etc., • Ferro Alloys	0.7703 - 0.046 0.370 0.0155	0.8159 ------- ------- ------- 0.3253 0.0157

* Industry may use codes if disclosing details of raw material would violate contractual Obligations, otherwise all industries have to name the raw materials used.

PART.C

Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (mass/day) Kg/day	Concentration of Pollutants discharged mass/volume mg/Nm³	Percentage of variation from prescribed standards with reasons
a. Water	Zero Discharge of waste water		
b. Air			
1. Sponge Iron Plant			
➢ Sponge Iron Plant -ESP	84.57	61	22.34 % below
2. Induction Furnace			
➢ Induction Furnace- 1	14.58	40.5	72.72 % below
➢ Induction Furnace- 2	14.58	40.5	72.72 % below
3. Pellet Plant	1008	63	40.42 % below
4. Power Plant	Nil (Plant in Shutdown condition)	Nil (Plant in Shutdown condition)	Nil (Plant in Shutdown condition)
➢ Fluidized Bed Combustion Boiler-ESP			
5. Beneficiation Plant	-	-	-

PART.D

HAZARDOUS WASTES

(As specified under Hazardous Wastes (Management & Handling Rules, 1989)

Hazardous Wastes	Total Quantity (Kg)	
	During the current financial year (2019-20)	During the current financial year (2020-21)
1.From Process		
Used Oil		
a) Captive Power Plant	Nil	Nil
b) Pellet Plant	2300 Lts/annum	3498 Lts/annum
c) Beneficiation plant	2120 Lts/annum	1200 Lts/annum
d) Induction Furnace	55 Lts/annum	60 Lts/annum
e) Rolling Mill	210 Lts/annum	400 Lts/annum
f) Sponge Iron	210 Lts/annum	210 Lts/annum
Used Grease		
g) Captive Power Plant	Nil	Nil
h) Pellet Plant	4174 Kg/annum	Nil6370 Kg/annum
i) Beneficiation plant	2656 Kg/annum	2880 Kg/annum
j) Induction Furnace	30 Kg/annum	35 Kg/annum
k) Rolling Mill	120 Kg/annum	360 Kg/annum
l) Sponge Iron	1520 Kg/annum	364 Kg/annum
2. From Pollution Control Facilities	No hazardous waste is generated from Pollution control equipment's	No hazardous waste is generated from Pollution control equipment's

PART. E

SOLID WASTES:

Solid Wastes	Total Quantity (Kg)	
	During the current financial year (2019-20)	**During the current financial year (2020-21)**
I. Captive Power Plant		
a. From process		
b. From Pollution Control Facility	Nil (Plant in Shutdown condition)	Fly Ash-2899MT
c. 1) Quantity of recycled or re-utilised within the unit 2) Sold 3) Disposed	Nil (Plant in Shutdown condition)	All fly ash disposed for brick manufacturing and cement Industry
II. Iron Ore Beneficiation		
a. From process	Nil	Nil
b. From Pollution Control Facility	Nil	Nil
c. 1) Quantity of recycled or re-utilised within the unit 2) Sold 3) Disposed	Disposed in slime ponds	Disposed in slime ponds
III. **Pelletisation plant**		
a. From process	Nil	Nil
b. From Pollution Control Facility	Ash- 25600 MT	Ash- 26341 MT
c. 1) Quantity of recycled or re-utilised within the unit 2) Sold 3) Disposed	All the waste is reused in PP process	All the waste is reused in PP process
IV. Sponge iron plant		
a. From process SID : Char & Dolochar	Nil	Nil
b. From Pollution Control Facility	Flyash - 3000 MT Coal dust - 4976 MT	Flyash - 5866 MT Coal dust 1866 MT
c. 1) Quantity recycled or re-utilised within the unit Char & Dolochar 2) Sold 3) Disposed(Stored)	All the coal dust is reused in ABC chamber in 500TPD kiln for recovery of calorific value. Fly ash is being utilised for brick making and remaining is land filling.	All the coal dust is reused in ABC chamber in 500TPD kiln for recovery of calorific value. Fly ash is being utilised for brick making and remaining is land filling.
V. Induction Furnace		
a. From process	Furnace slag - 30000MT	Furnace slag – 36500 MT
b. From Pollution Control Facility	NIL	NIL

c. 1.Quantity recycled or re-utilised within the unit 2. Sold 3. Disposed	NIL Slag is utilised for land filling & internal road making	NIL Slag is utilised for land filling & internal road making
VI. Rolling Mill		
a. From process b. From Pollution Control Facility	• Mill scale – 1858 MT • Coal Dust – Nil • Coal Ash – 591 MT • Coal Tar - 15.00 MT	• Mill scale – 1637MT • Coal Dust – Nil • Coal Ash – - 416 MT • Coal Tar - Nil
c. 1.Quantity recycled or re-utilised within the unit 2. Sold 3. Disposed	NIL Completely sold to brick manufacturers as fuel	NIL Completely sold to brick manufacturers as fuel
VII. PRODUCER GAS PLANT		
a. From process b. From Pollution Control Facility	•Coal ash (clinker) – 24,885 T •Coal Tar– 1,259 T •Tar sludge – Nil	• Coal ash (clinker) -26,351 MT •Coal Tar– 1,066 MT •Tar sludge – 21.32 MT
c. 1.Quantity recycled or re-utilised within the unit 2. Sold 3. Disposed	All the coal clinker is reused in power plant as fuel. Coal Tar is used a supplementary fuel in pre-heated furnace. -----	Coal Tar – 1,066 MT Coal Ash – 26,351 MT Nil

PART. F

Please specify the characteristics (in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

The fly ash generated in the power plant is being sold to cement industries for cement making through closed containers. Also the fly ash is being used for brick making, for which 2 Nos of fly ash brick manufacturing plants are in operation.

Generated hazardous wastes handled & disposed to KSPCB authorized agencies as per stipulated in Hazardous & Other Waste (Management & Transboundary Movement) Rules.

PART.G

Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production.

Water conservation is practised by recycling/reutilising water from slime ponds and treated DM back wash, seepage recovery from reservoirs. Rain Water harvesting through the 3 guard ponds, and the

collected water will be utilised for dust suppression and iron ore processing. Domestic water is being treated in 3nos. of STP's and the treated water is used for garden development purpose.

All the water is used in various processes through reuse and recycling technique, hence zero liquid discharge policy is adopted.

Company has fixed the specific consumption target for all resources and continuous follow-up is made for improving process efficiency to reduce the specific consumption, thereby controlling on the cost of production.

The industry has concerns for Environment; it has spent Rs. 0.52 crore of rupees for environmental pollution control. The detailed breakup of FY 2020-2021 is given in the below table for stage-I & II

Sl. No.	Description	Expenditure Amount in lakhs
1	Maintenance cost of Pollution Control equipment's at stage-I & II	30.8
2	Cost of Monitoring of environmental parameters	4.0
3	Maintenance of existing Online monitoring Equipment's & Accessories 2020-21	0.4
4	Maintenance of existing Green Belt	10.6
5	Dust suppression cost	6.3
	Total	**52.1**

PART-H

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

Environmental protection measures adopted are as per norms approved by KSPCB.

PART-I

Any other particulars in respect of environmental protection and abatement of pollution

BMM Ispat Ltd is taking care of all aspects of environment, like air, water noise pollution control etc.,

Water pollution control measures: Stage-I & II

1. It is followed zero discharge policy and there is generation of effluent water.
2. Installed 3 nos. STP's to treat the domestic effluent.
3. Reduced fresh water consumption by recycling, reusing and rainwater harvesting etc.,

Air pollution control measures: Stage-I & II

1. Installed 3 nos. of ESP's for various processes and 19 nos. of DE-dusting systems for abating dust emissions & In the Stage II statement 6 NOs. of ESP and 38 NOs of De-dusting system.
2. Installed Dry fog system at transfer chutes & conveyor transfer points.
3. Installed more than 150 nos. of water sprinklers on dumps, on conveyors etc.,
4. Coal is obtained by Rail way wagons. The industry has provided Wagon Tripler and Dry fog system to arrest fugitive dust.
5. The coal is transported to different users point in closed Conveyer system. Dry fog system / Sprinkler Systems are provided at dust generation sources.
6. Provided barricades for iron Ore Storage Area on three sides.
7. Regular water sprinkling on unpaved roads.
8. Installed online stack emission monitoring to ensure the emission within the norms.
9. Installed 2nos. of CAAQMS station at the boundaries of the plant to monitor dust levels.
10. Regular air quality monitoring to ensure dust free the work place environment.

Green belt development: Stage-I & II

1. Own nursery to cater the sapling needs, this year we have planted 25,000 nos. of different species.
2. This year 3822 saplings have been developed and planted in the factory premises.
3. Up to March-2021 is 3, 41,731 samplings have been planted.

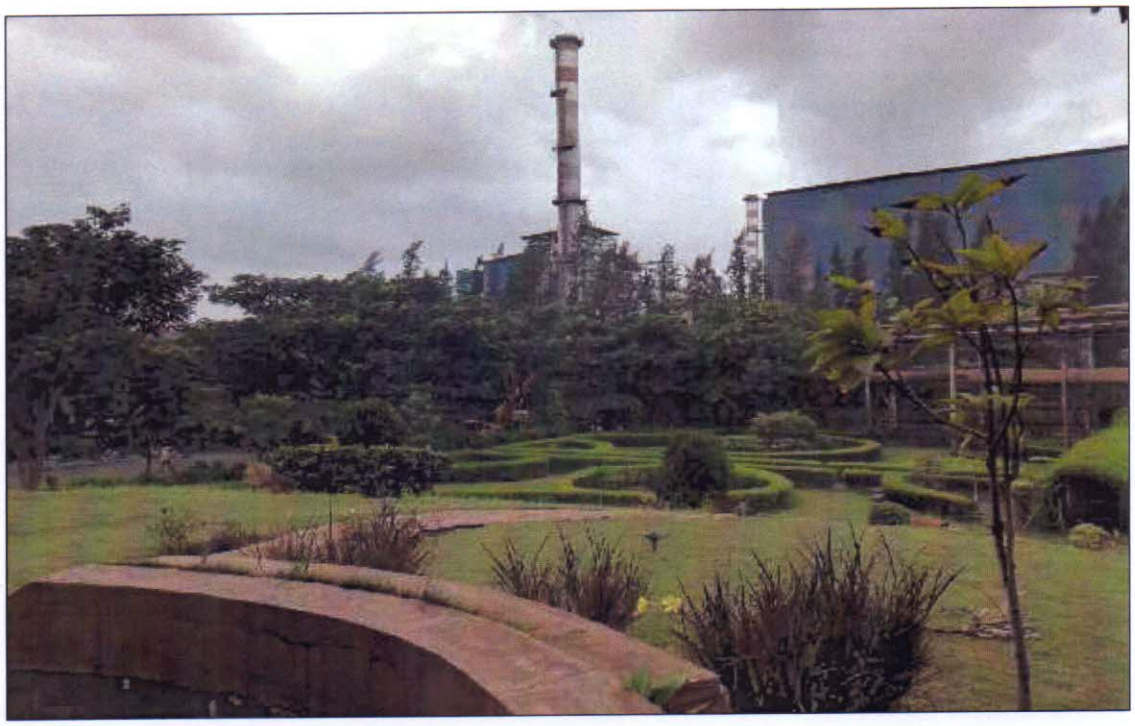
Implemented EMS & OHSAS management:

EMS is implemented and is in being followed with all standard requirements.

Own nursery for development of saplings

Own nursery for development of saplings

Sponge iron Plant view



CPP 70MW Plant view

Concreted roads & Avenue plantations

Concreted roads & Avenue plantations

Concreted roads & Avenue plantations

Plantation along the boundary

Good growth of plantation along the boundary wall

Plantation along the boundary

Plantation along the Boundary of the Railway Track

Plantation along the Boundary of the Railway Track

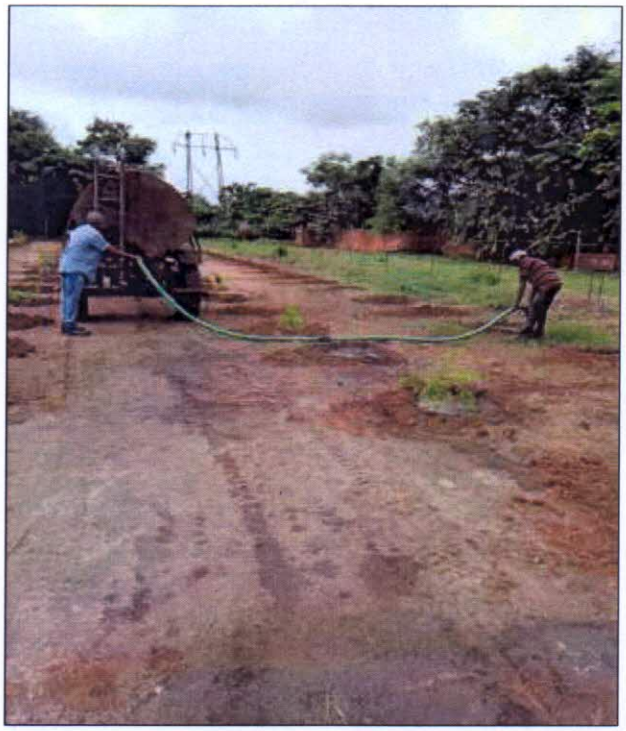
CPP 2X70MW Plant view.

CPP 2X70MW Plant view

Celebration of World Environment Day 2021

Plantation on the occasion of World environment day celebration June 2021

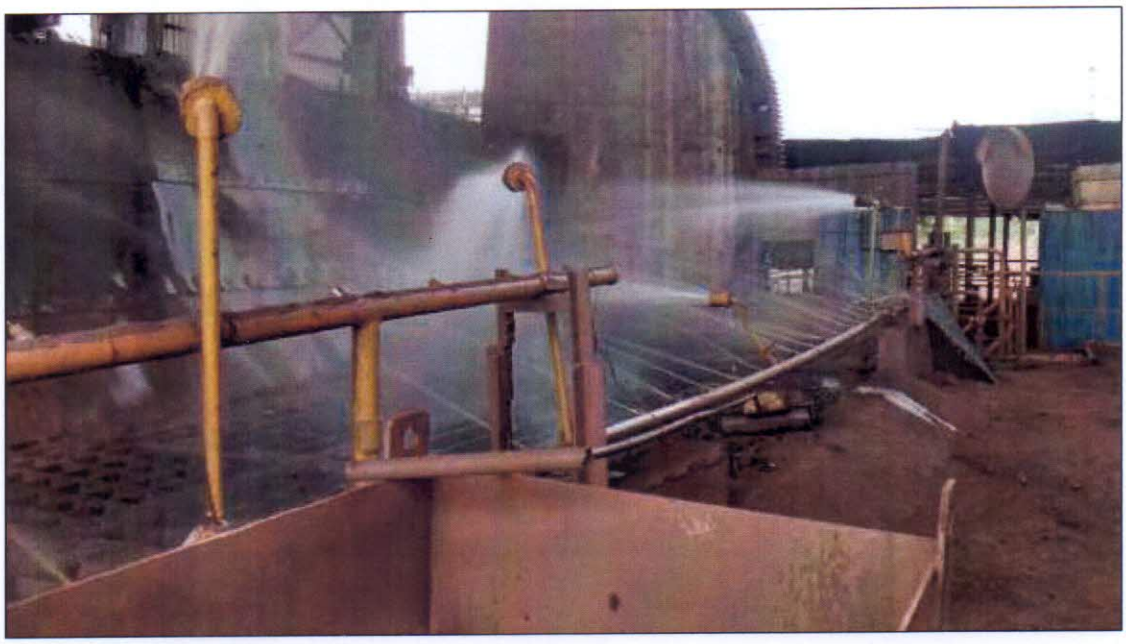
Plantation in progress



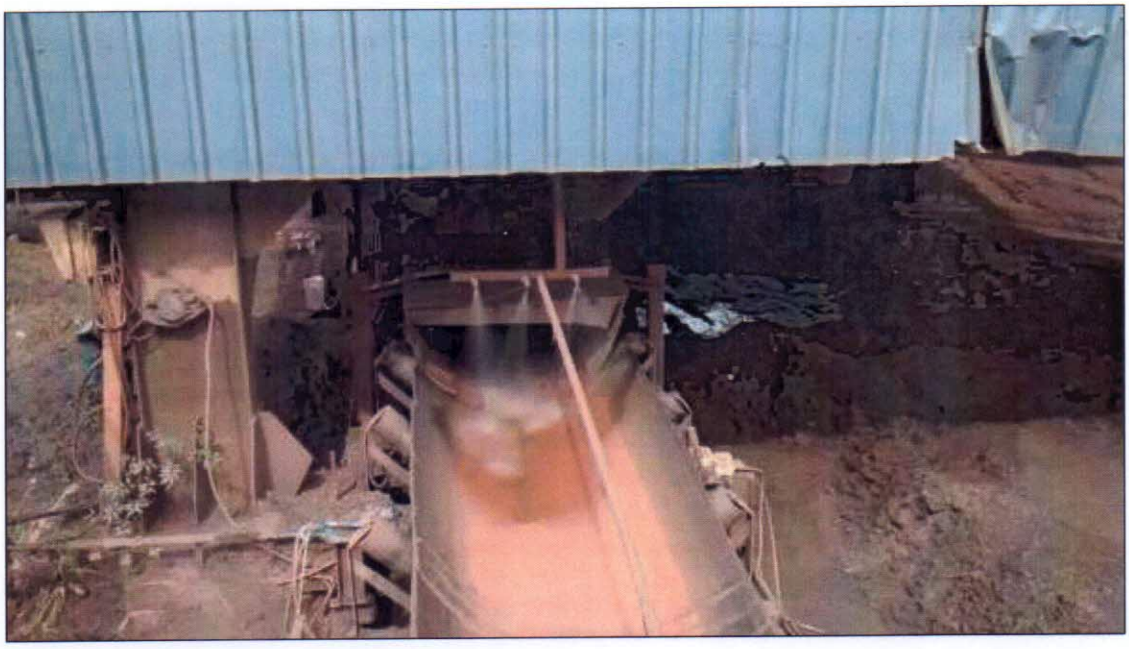
Plantation in progress

Plantation all along the Oxygen plant area

Water Sprinkling System at Monsoon Shed



Water sprinkling system at Wagon Tippler unloading system



Water sprinkling system at Conveyor belt system

Vacuum Operated Road Sweeper Machine

Dust Extraction by Truck Mounted Vacuum Operated Equipment

Plantation all along the BAR Mill area

Plantation all along the SMS area

MRSS Area Over view

Plantation all along the ISP road side

Environment Awareness programme 2021 (Turmeric Ganesha)

Celebration of Earth Day 2021