

Monnet Ispat & Energy Limited

Village Kurud, Chandkhuri Marg, Mandir Hasaud, Raipur (Chhattisgarh) 492 101
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MIEL/MH/ENV/20-21/20

Dated: 13.06.2020

To

Additional Director

Ministry of Environment and Forest, Climate Change,
Regional Office (WCZ), Ground Floor East Wing,
New Secretariat Building, Civil Line, Nagpur-440001

Sub:- Submission of Half Yearly EC Compliance Report for the period from October'2019 to March'2020 of the conditions stipulated in Environment Clearance.

Ref: - Environment Clearance No. J-11011/68/2005-IA II (I), Government of India, Ministry of Environment and Forests, dated 30/05/2005.

Dear Sir,

In reference to above subject, Please find enclosed herewith Half Yearly EC Compliance Report with Environment Monitoring Reports for the period from October' 2019 to March' 2020 against the conditions stipulated in Environment Clearance.

This is for your information and record please.

Thanking you,

Your Faithfully

For MONNET ISPAT & ENERGY Ltd.



Manager - Environment

Encl: As above

CC: The Zonal Officer, Central Pollution Control Board,
Third Floor, Sahkar Bhawan, North T.T. Nagar, Bhopal (M.P.) 462003

The Member Secretary,
Chhattisgarh Environment Conservation Board,
Sector-19 Paryawas Bhawan, Atal Nagar Raipur (C.G.) 492002

The Regional Officer,
Chhattisgarh Environment Conservation Board
Commercial Complex, Housing Board, Kabir Nagar,
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**Six Monthly Reports on Status of Compliance of Stipulated Conditions.
for Expansion of Integrated Steel Complex,
vide letter No. J-11011/ 68/2005-IAII (I), dated 30th May 2005**

Period of Report: 01st Oct' 2019 to 31st Mar' 2020

Sl.No	Specific Conditions	Status
1	The gaseous emission from various process units shall conform to the load/mass based standards notified by this Ministry on 19 th May 1993 and standards prescribed from time to time. The state board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time the emission level shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.	The emissions from various processes are being maintained well within the prescribed standard. To check the emission level time to time, regular monitoring is conducted by us and as well as by the State Pollution Control Board and suitable actions are taken to control the emission level in case of emission level goes beyond the limit. All the process units are interlocked with installed pollution control equipment's, which immediately stop the process activities. Stack monitoring reports is enclosed as Annexure - II
2	The Company shall install continuous air quality monitoring system in major stacks to monitor the SPM, So ₂ , No _x and CO	We have already installed Online SO ₂ , No _x & CO monitoring system in our all stacks.
3	There shall be no discharge of process effluent. As reflected in the EIA/EMP report, the process waste water (1283 m ³ /day) shall be collected in common settling tanks and the treated effluent conforming to the prescribed standards shall be used for dust suppression and horticulture purposes within the plant premises. The boiler blow down shall be used for green belt development. The DM effluent shall be used for dust suppression in ash handling system. The domestic waste water shall be treated in the septic tank and soak pit.	In order to check any discharge of process effluents, the waste water management system encompasses installation of 5 pair settling tanks at different locations of plant premises with proper utilization arrangement for horticulture purpose and water sprinkling on roads, yards and ash silo-areas within the plant premises. Septic tanks and soak pits are provided for treatment of domestic waste water. A full fledged sewerage treatment plant has been installed at New Housing colony and action is being taken to connect sewerage line from the Old Housing to New Housing

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		Colony.
4	In plant control measures for checking fugitive emission from spillage/raw material handling shall be provided. Further, specific measure like provision of dust extraction system at the loading and unloading areas of the plant to control the fugitive emission shall be provided. All conveyor belts and transfer points shall be covered to prevent fugitive emission. Data's on fugitive emission shall be regularly maintained and records maintain.	<p>All the conveyor belts and transfer points are connected with bag filters to control fugitive emission. Water sprinklers have been provided at yards. Pneumatic dust extraction system has been installed for conveying the collected dust from pollution control equipment's.</p> <p>3 Water tankers ply round the clock for sprinkling water on the internal roads and yards in the factory premises for checking fugitive emission.</p> <p>Fugitive emission monitoring report is enclosed as Annexure - V</p>
5	The particulate emission from the waste heat recovery boiler shall be controlled by the installation by ESP of efficiency 99.9% and particulate emission shall not exceed 100mg/Nm ³ . Further the company shall install bag house to control the emission from coal handling plant, kiln, cooler outlet, coal hopper injection, char fine lump, kiln feed building, common ground hopper to control the emission.	<p>All the WHRBs are connected with ESP and working effectively. Bag filters have been installed at coal handling plant, kiln cooler outlet, coal hopper, product hopper and all are working effectively.</p> <p>Stack monitoring reports is enclosed as Annexure - II</p>
6	Secondary emission from the induction furnace during charging and tapping of molten metals shall be controlled by installation of automatic hood and secondary emission control system.	Secondary emission control system with attached hoods has been installed at induction furnaces.
7	The company shall use char generated from the sponge iron plant for captive power generation. Solid waste would be generated in the form of char (240 MT/Day), Fly ash (220-250 MT/Day) and slag (120-220 MT/Day). The char shall be partly sold and partly used as a fuel in the 15 MW power plant. Fly ash shall be used for	The 15 MW power plant is partly char based. Fly ash is being used for manufacturing of bricks in the Company's own bricks plant and partly supplied to outside brick plants and also used for abandoned quarries. The slag is used for filling of low lying area and for road making purpose.

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	manufacturing of bricks in the companies own bricks plant and it shall be partly sold to cement manufactures and will be used for abounded mines. The slag shall be used for filling of low laying area and for road making purpose.	
8	The company shall submit a time bound action plan to the ministry for implementation of specific environmental protection measures envisaged in the environmental management plan.	Already submitted
9	The company shall undertake rain water harvesting measures to harvest the rain water for utilization in the lean season as well as to recharge ground water table.	Rain water harvesting measure has been implemented to preserve the rain water inside the plant premises.
10	Occupational health surveillance of the workers shall be done on a regular basis and records maintain as per the factories act.	Regular Occupational health check up of employees is in vogue. Records are maintained as required. A 13 Bedded Hospital, named "MAINA DEVI HEALTH CENTRE" has become operational since January 2007. It is manned round the clock by medical and paramedical staff and caters to accidents/trauma cases. General medical problems of the employees and their families are also treated at the health center. A records of Health checkup of employees is maintained in the prescribed format as per the provisions of Factory act, 1948.
11	The company shall maintain good house keeping within the plant premises by systematic storage material, stacking and movement, waste disposal and all the internal roads shall be asphalted.	The Company is maintaining good house keeping within the plant premises as well as the raw material storage and mostly the internal roads are tarfelted and are being cleaned and watered regularly. All internal roads have been made pucca and concrete (RCC).

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12	As reflected in the EIA/EMP report, the company shall develop green belt in an area of 23.8 hec. Selection of the plant species should be as per the central pollution control board guidelines.	The Company has developed green belt, lawn & other plantation in an area of approx. 33 hec. Selection of the plant species is as per the Central & State Pollution Control Board guidelines.
13	Recommendations made in the CREP shall be implemented	Already been implemented.
14	The company shall undertake eco-development measure including community welfare measure in the project area for the overall improvement of environment.	For eco-development the Company has taken up rain water harvesting, waste water management, development of green belt, plantation and utilization of waste as per the guidelines. Besides this the Company is undertaking community development programme for the welfare of the persons living in neighbouring villages in the form of regular Health check-ups, providing medical assistance, financial aid for surgical and other critical treatments, financial assistance towards infrastructure development (Painting of Anganwadi building, providing ceiling fans and chairs, installation of 3 Bore wells in Nakta and Mandir Hasaud villages, providing utensils in primary schools of Nakta and Kurud villages, 3 sewing machines for handicapped children), education, religious and cultural functions. Organising regular vocational training to ladies and adolescent girls of adopted villages in different trades like stitching, knitting, making of washing power, liquid soap, phenyl, jam, jelly and pickles etc. Awareness programme for villagers on subjects like health, food & nutrition, HIV/AIDS are conducted regularly besides awareness programme for adolescent girls. Water supply is also made to the

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		ponds of Kurud village. The Company is also undertaking RCC concrete road at a cost of Rs.4 Crores from Village Kurud to Junction point of 4 lane tar felted road at NH-6.
15	The project authorities must strictly adhere to the stipulated made by the Chhattisgarh Environment Conservation Board and State Government.	We adhere to the stipulations made by CECB/State Government.
16	No further expansion or modification in the plant should be carried out with out prior approval of the Ministry of Environment & Forest.	Noted.
17	At least for ambient air quality monitoring stations should be established in the down ward direction as well as where maximum ground level concentration of SPM, So ₂ and No _x are anticipated in consultation with the state pollution control board. Data's on ambient air quality and stack emission should be regularly submitted to this ministry including its regional office at Bhopal and State pollution control board.	We have established four no. of Ambient air quality monitoring stations at all the four directions and stack emission from major stack being monitored and report are being submitted to state pollution control board regularly. Ambient air quality monitoring reports is as enclosed Annexure - I
18	Industrial waste water should be properly collected, treated so as to confirm to the standards prescribed under GSR 422 (E) dated 19 th May 1993 and 31 st December, 1993 or a s amended from time to time. The treated waste water should be utilized for plantation purpose.	It is being treated waste water treated as per the prescribed norms. Analysis report of waste water is enclosed as Annexure - IV
19	The over all noise level in an around the plant area should be kept well within the standards (85dB A) by providing noise control measures including acoustic hood, silencers, enclosures etc. on all sources of noise generation. The ambient noise level should confirm to the standards prescribed	Noise level in and around the plant area are well within the standards (85dB A). We have provided noise control measures including acoustic hood, silencers, enclosures etc at all noise generation point. Concerned employees have been provided protective equipment like ear

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	under EPA rules, 1989 VIZ75dB A (day time), 70 Db (night time).	plugs etc. Noise level monitoring reports is enclosed as Annexure - III
20	The project proponent shall also comply with all the environmental control measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health etc	A 13 Bedded Hospital in the name of Maina Devi Health Centre has become operational since January,2007. It is manned round the clock by medical and paramedical staff and caters to accidents/trauma cases. General medical problems of the employees and their families are also treated at the Health Centre. The Company provides medical assistance to the neighboring villages by mobile van dispensary with a Doctor and paramedical staff. Different health camps are also organized. The Company has also established Bore wells in villages for provision of safe potable water. Monnet D.A.V. Public School has been established to provide education and providing learning opportunities to the wards of the employees as well as the wards of those living in nearby villages. The school was set up in 2001 and is presently running up to the academic session to Class-XII. The school has 1250 students and 62 faculty members. 75% of the students presently studying are from the neighboring villages of Mandir Hasaud, Kurud, Navagaov, Reco, Pallud, Chhatona, Jora, Sherikhedi, Chicha etc. Vocational training to ladies and adolescent girls as well as skill development programmes for Anganwadies karyakartas besides informal education programmes in Anganwadies are organized. Water supply is also made

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		to the ponds of Kurud village during summer. RCC concrete road at a cost of Rs.4 Crores is under progress from Village Kurud to Junction point of 4 lane tar felted road at NH-6.
21	The project authorities will provide separate funds to implement the conditions stipulated by the ministry of environment and forest as well as the state government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.	Separate fund has been earmarked for environmental up gradation.
22	The project authorities should inform the Regional Office as well the Ministry, the date of financial closure and final approval of the project by the concerned authorities and date of commencing the land development work.	It is already complied with.


Tikam Chand Solanki
Manager - Environment

MONNET ISPAT & ENERGY LTD
MANDIR HASAUD, RAIPUR (C.G.)

AMBIENT AIR QUALITY MONITORING REPORT OCTOBER' 2019 TO MARCH' 2020

Month	Parameter in $\mu\text{g}/\text{m}^3$	CAAQMS -1 About 500 mtr form source	CAAQMS -2 About 500 mtr form source	DAV School About 300 mtr form source	SMS-I (South) About 300 mtr form source
Oct'19	PM 2.5	34.29	22.07	30.27	31.32
	PM 10	30.41	23.71	40.51	43.62
	SO ₂	5.2	1.32	5.38	4.12
	Nox	52.19	12.31	6.97	7.88
Nov'19	PM 2.5	29.11	28.85	33.11	35.77
	PM 10	41.66	50.83	43.32	45.28
	SO ₂	11	1.8	9.2	6.29
	Nox	41.92	0	11.28	8.65
Dec'19	PM 2.5	30.54	31.24	35.28	32.51
	PM 10	39.36	42.12	40.61	42.77
	SO ₂	10.63	1.97	5.12	4.65
	Nox	40.34	0	9.32	6.81
Jan'20	PM 2.5	20.04	28.88	37.12	30.88
	PM 10	31.52	46.89	42.37	40.63
	SO ₂	11.01	2.43	4.24	3.45
	Nox	44.18	0	7.51	5.02
Feb'20	PM 2.5	21.65	26.28	31.56	29.71
	PM 10	39.69	56.39	47.61	35.12
	SO ₂	10.08	11.25	7.28	4.21
	Nox	43.73	0	5.31	6.09
Mar'20	PM 2.5	27.11	26.07	35.11	31.22
	PM 10	45.74	48.58	41.22	39.24
	SO ₂	10.67	12.07	6.31	5.77
	Nox	44.85	0	5.84	7.1
Average	PM 2.5	27.12	27.23	33.74	31.90
	PM 10	38.06	44.75	42.61	41.11
	SO ₂	9.77	5.14	6.26	4.75
	Nox	44.54	2.05	7.71	6.93

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Six Monthly Stack Monitoring Report from October' 2019 to March' 2020

Limit 50 Mg/Nm3

Particulate Matter

Month	Name of Stack								
	Sponge Iron			Power		Ferro		Steel - II	
	WHRB - 1	WHRB - 2	WHRB - 3&4	AFBC -1	AFBC -2	Stack - 1	Stack - 2	Stack - 1	Stack - 2
Oct'19	45	36	40	42	43	32	29	32	29
Nov'19	39	35	38	46	40	34	30	29	27
Dec'19	36	39	40	42	0	30	28	25	29
Jan'20	38	42	45	40	39	28	30	27	32
Feb'20	37	40	42	45	37	31	29	25	28
Mar'20	36	38	40	41	40	28	30	26	25
Average	39	38	41	43	33	31	29	27	28



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AMBIENT NOISE LEVEL MONITORING REPORT OCTOBER' 19 TO MARCH' 20

Month	Monitoring Location	Limit Day Time	Limit Night Time	Ambient Noise level Report Value in dB(A)	
				Day Time	Night Time
Oct'19	Time Office (East)	75 dB(A)	70 dB(A)	72.47	66.31
	RMP-I (West)	75 dB(A)	70 dB(A)	73.84	67.44
	SMS-I (South)	75 dB(A)	70 dB(A)	72.11	64.12
	DAV School (Norht)	75 dB(A)	70 dB(A)	70.21	55.54
Nov'19	Time Office (East)	75 dB(A)	70 dB(A)	70.65	63.24
	RMP-I (West)	75 dB(A)	70 dB(A)	73.09	66.61
	SMS-I (South)	75 dB(A)	70 dB(A)	73.11	63.12
	DAV School (Norht)	75 dB(A)	70 dB(A)	70.17	54.35
Dec'19	Time Office (East)	75 dB(A)	70 dB(A)	69.12	58.34
	RMP-I (West)	75 dB(A)	70 dB(A)	72.30	59.42
	SMS-I (South)	75 dB(A)	70 dB(A)	72.69	60.55
	DAV School (Norht)	75 dB(A)	70 dB(A)	69.75	63.12
Jan'20	Time Office (East)	75 dB(A)	70 dB(A)	71.22	65.75
	RMP-I (West)	75 dB(A)	70 dB(A)	71.51	66.24
	SMS-I (South)	75 dB(A)	70 dB(A)	70.24	67.32
	DAV School (Norht)	75 dB(A)	70 dB(A)	68.79	64.21
Feb'20	Time Office (East)	75 dB(A)	70 dB(A)	69.57	60.21
	RMP-I (West)	75 dB(A)	70 dB(A)	70.24	64.72
	SMS-I (South)	75 dB(A)	70 dB(A)	71.16	65.42
	DAV School (Norht)	75 dB(A)	70 dB(A)	69.40	62.11
March'20	Time Office (East)	75 dB(A)	70 dB(A)	68.21	62.45
	RMP-I (West)	75 dB(A)	70 dB(A)	71.25	63.53
	SMS-I (South)	75 dB(A)	70 dB(A)	70.78	66.24
	DAV School (Norht)	75 dB(A)	70 dB(A)	66.24	52.13
Average	Time Office (East)	75 dB(A)	70 dB(A)	70.21	62.72
	RMP-I (West)	75 dB(A)	70 dB(A)	72.04	64.66
	SMS-I (South)	75 dB(A)	70 dB(A)	71.68	64.46
	DAV School (Norht)	75 dB(A)	70 dB(A)	69.09	58.58

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WASTE WATER ANALYSIS REPORT FOR OCTOBER' 2019 TO MARCH' 2020

Month	Parameter	Permissible limits	RMP-I Settling tank Overflow water	RMP-II Settling tank Overflow water	Ferro Settling tank Overflow water
OCT'2019	PH	6.5 – 8.5	7.88	7.19	6.54
	Temperature	.C	34	29	32
	TSS	100mg/l	18	25	23
	BOD	30mg/l	9	14	17
	COD	250mg/l	25	27	21
	Oil & Grease	10mg/l	<10	<10	<10
NOV'2019	PH	6.5 – 8.5	7.89	7.51	6.11
	Temperature	.C	35	28	30
	TSS	100mg/l	31	29	26
	BOD	30mg/l	11	8	12
	COD	250mg/l	18	21	15
	Oil & Grease	10mg/l	<10	<10	<10
DEC'2019	PH	6.5 – 8.5	6.55	6.75	7.21
	Temperature	.C	32	33	28
	TSS	100mg/l	25	20	21
	BOD	30mg/l	10	11	14
	COD	250mg/l	23	17	19
	Oil & Grease	10mg/l	<10	<10	<10
JAN'2020	PH	6.5 – 8.5	7.45	7.22	7.01
	Temperature	.C	27	30	32
	TSS	100mg/l	18	22	19
	BOD	30mg/l	8	12	11
	COD	250mg/l	20	19	21
	Oil & Grease	10mg/l	<10	<10	<10
FEB'2020	PH	6.5 – 8.5	6.75	7.21	6.17
	Temperature	.C	31	32	29
	TSS	100mg/l	17	20	19
	BOD	30mg/l	13	16	11
	COD	250mg/l	21	18	20
	Oil & Grease	10mg/l	<10	<10	<10
MAR'2020	PH	6.5 – 8.5	7.25	6.87	7.13
	Temperature	.C	33	34	31
	TSS	100mg/l	15	17	20
	BOD	30mg/l	10	12	9
	COD	250mg/l	18	15	17
	Oil & Grease	10mg/l	<10	<10	<10


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FUGITIVE DUST EMISSION ANALYSIS REPORT OCTOBER' 2019 TO MARCH' 2020

S.NO.	LOCATION	PERMISSIBLE LIMITs	UNIT	RESULTS					
				OCT'19	NOV'19	DEC'19	JAN'20	FEB'20	MAR'20
1	Kiln - IV Cooler Discharge Area	2000	µg/m3	1629	1232	-	1175	1216	1512
2	Kiln - III Devin Area	2000	µg/m3	1367	1532	1720	1358	1575	1425
3	Power CHP Area	2000	µg/m3	1193	1205	1256	1456	1309	1605
4	Kiln - I Cooler Discharge Area	2000	µg/m3	1358	1700	1432	1147	1705	-
5	Ferro Debin Area	2000	µg/m3	-	1325	1584	1263	1625	-
6	Kilan - II Debin Area	2000	µg/m3	-	1411	-	-	1200	-


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