SIX MONTHLY COMPLIANCE REPORT
(April 2021-September 2021)

PREPARED BY:

MANN STEEL & POWER LIMITED

JAMURIA INDUSTRIAL STATE, IKRA, P.O. JAMURIA, DISTRICT- BURDWAN, WEST BENGAL

PROJECT DETAILS

The project of Mann Steel & Power Limited is located at **Jamuria** Industrial State, IKRA, P.O. Jamuria, and District **Burdwan** in West Bengal.

Mann Steel & Power Limited was granted Environmental Clearance from GoI, MoEF & CC (Impact Assessment Division) Vide letter No. : **F-No.J-11011/695/2009-IA-II (I), dated 31.12.2010** for expansion of their Sponge Iron plant (57,000 TPA) into Integrated Steel Plant (0.18 MTPA) along with Captive Power Plant (24 MW; WHRB 12 MW & FBC 12 MW) and Ferro Alloy Plant (2 x 9 MVA). The extension of the validity of the Environmental Clearance was obtained up to **30th December 2020** with reference to Proposal no. **IA/WB/IND/6154/2010 Dated 7th November 2017**. The proposal was considered in the 26th meeting of Expert Appraisal Committee [EAC](Industry I)held during 11th -13th December 2017 and hence the committee recommended for the extension with all the other terms and conditions same as mentioned in Environmental Clearance Vide letter No. : F-No.J-11011/695/2009-IA-II (I), dated 31.12.2010.

As part of the compliance of statutory requirement environmental quality monitoring has been carried out by M/s Envirocheck, Kolkata, West Bengal. The detail regarding compliance is given herewith in the following pages for the six monthly period of **April 2021-September 2021**.

Project Location:

The Project Location is shown in satellite image:

COMPLIANCE STATUS ON ENVIRONMENTAL CLEARANCE

EXPANSION OF SPONGE IRON PLANT AT JAMURIA INDUSTRIAL ESTATE, DISTRICT-BURDWAN

Vide letter No. : F-No.J-11011/695/2009-IA-II (I), dated 31.12.2010

A. SPECIFIC CONDITIONS

Sl.	Compliance conditions	Compliance status
i.	Efforts shall be made to reduce RSPM levels in the ambient air and a time bound action plan shall be submitted. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), gas cleaning plant, venture scrubber, bag filters etc. shall be provided to keep the emission levels below 50mg/$Nm^3$by installing energy efficient technology.	Reduction in RSPM levels in the ambient air is attained through all genuine efforts. The ambient air quality and stack gas quality levels are examined through regular monitoring. All the major stacks within the factory premises are equipped with Continuous online monitoring facilities and the data are attached in as **Annexure 1**. Air pollution control equipment like Electrostatic precipitator (ESP), Bag Filters, ID fans which are installed to keep the emission levels within limits. The details regarding Air Pollution Equipment are given in **Annexure 2**.
ii.	As proposed, Electrostatic precipitator (ESP) shall be provided to control the particulate emissions from the FBC and WHRB within 50mg/Nm^3. Fume extraction system shall be provided to the steel melting shop to extract the fumes. Bag filters to control the dust emissions from the induction furnaces and pulse jet bag filters at coal and iron crushing area, stock house and cooler discharge area.	Air Pollution Control devices like Electrostatic precipitator (ESP) and Bag filters are already installed within the factory premises to keep the particulate emissions within the standard limit.

Sl.	Compliance conditions	Compliance status
iii.	The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.	The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 are followed strictly. Ambient Air Quality monitoring for assessing the concentrations of PM_{10}, $PM_{2.5}$, SOx, NOx has been done and results are within NAAQ standards. The reports are attached as **Annexure 3**.
iv.	Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/Code of Practice issued by the CPCB shall be followed. New standards for the sponge iron plant issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 should be followed.	Gaseous emission levels including secondary fugitive emissions from all the possible sources is controlled within the latest permissible limits issued by the Ministry and regularly monitored. The latest stack monitoring and Work zone monitoring report is attached as Annexure**-4 and 5**.
v.	Hot gases from DRI kiln shall be passed through Dust Settling Chamber (DSC) to remove coarse solids and After Burning Chamber (ABC) to burn CO completely and used in waste heat recovery boiler (WHRB). The gas then shall be cleaned in ESP before leaving out into atmosphere through ID fan and stack.	Is being complied with.

vi.	Total water requirement shall not exceed, 1632 m^3/ day. Permission from the competent authority shall be obtained to draw the water. Efforts shall further be made to use maximum water from the rain water harvesting sources. Use of air cooled condensers shall be explored and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly. All the effluent should be treated and used for ash handling, dust suppression and green belt development. No effluent shall be discharged and 'zero' discharge shall be adopted. Sanitary sewage should be treated in septic tank followed by soak pit.	The total water requirement does not exceed the prescribed limit and is replenished from Ajay River. Additionally, rain water harvesting structure is installed in the plant for optimal water consumption. The waste water from plant is treated and used for domestic purpose and dust suppression. The unit follows zero discharge policy and no industrial waste water is discharged outside the factory premises.
vii.	Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other source.	Suitable efforts are already been made to make use of rain water by Rain water harvesting system built within the factory premises and the water is utilized for domestic and cooling purpose.

viii.	Regular monitoring of influent and effluent surface, sub-surface and ground water (including chromite) should be ensured and treated waste water should meet the norms prescribed by the State Pollution Control Board or described under the E (P) Act whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office at Bhubaneswar, West Bengal Pollution Control Board (WBPCB) and CPCB.	Regular monitoring and analysis of Ground water, Rain water and Effluent water has been carried out using appropriate methodology and the reports are attached as **Annexure 6 and 7**. Leachate study for the effluent generated is carried on and reports are attached as **Annexure 8**.
ix.	The water consumption shall not exceed as per the standard prescribed for the steel plants.	Water consumption does not exceed and lies within the prescribed limit. Also necessary permission has been obtained for borewell. (See **Annexure 9).**

x.	All the coal fines, char from DRI plant shall be utilized in AFBC boiler of power plant and no char shall be used for briquette making or disposed off anywhere else. AFBC boiler shall be installed simultaneously along with the DRI plant to ensure full utilization of char from beginning. Scrap shall be used in Steel Melting Shop (SMS) and SMS slag and kiln accretions shall be properly utilized. All the other solid waste including broken refractory mass shall be properly disposed off in environment friendly manner.	The generated furnace slag is non-hazardous in nature and being reused in the landfilling purpose and road making. The Slag and sludge analysis reports are attached as **Annexure 10 and 11**. The non-hazardous solid waste generated in the plant are in form of Dolochar /Slag/Coal Dust/ Fly Ash/Mill Scale are Sold/ used in Land Filling/Sold/ used in Land Filling & Brick Making. The solid wastes generated within the plant are re used in the furnace thus preventing the accumulation of wastes within the plant premises. The Hazardous Waste Authorization details including the details of waste generated is attached in **Annexure 12.**
xi.	Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and its subsequent amendments.	Proper utilization of fly ash is ensured as per Notification.
xii.	Vehicular pollution due to transportation of raw material and finished products shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.	Vehicular pollution due to transportation of raw material and finished products is controlled with all possible attempts. Proper maintenance of all the transport vehicles used is done to prevent vehicular pollution. Water Sprinklers are used to suppress the airborne particulates within the factory premises. It is ensured that vehicles have proper PUC.

xiii.	All internal roads shall be black topped. The roads shall be regularly cleaned with mechanical sweepers. A 3-tier avenue plantation using native species shall be developed along the roads. Facilities for parking of trucks carrying raw coal from the linked coalmines shall be created within the unit.	All internal roads are cemented and equipped with appropriate lighting facilities. Avenue plantation of saplings is carried on utilizing native species along the roads (See **Annexure 13**). Suitable efforts are being taken to develop facilities for parking of trucks.
xiv.	Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste should be submitted to the Ministry's Regional Office at Bhubaneswar, WBPCB and CPCB.	Proper handling, storage, utilization and disposal of all the non-hazardous solid waste is ensured with all possible efforts. No waste generated is Hazardous in origin and are reused in the landfilling and road making purpose.
xv.	A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.	Reduction of solid waste and ensuring its optimal use along with its disposal through suitable effort. Scraps, coal fines are the solid wastes generated in the plant are being feed into the furnace. Therefore, there is no generation of solid waste within the plant premises.
xvi.	Risk & Disaster management Plan along with the mitigation measures shall be prepared and a copy submitted to reduce solid waste, its proper utilization and disposal.	Risk & Disaster management Plan along with the mitigation measures is prepared, implemented and maintained properly. See **Annexure 14.**
xvii.	As proposed green belt shall be developed in 33% plant area as per CPCB guidelines in consultation with the DFO.	Is being complied with.

xviii.	All the recommendation made in the Charter on Corporate Social Responsibility for Environmental Protection (CREP) for the steel plants should be implemented.	All the recommendation made in the Charter on Corporate Social Responsibility for Environmental Protection (CREP) for the steel plants are implemented with genuine efforts . The CREP status has been presented in the appropriate format.
xix.	At least 5% of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to Ministry's Regional Office at Bhubaneswar. Implementation of such program should be ensured accordingly in a time bound manner.	Appropriate fund has been allocated for Corporate Social Responsibility. CSR is a regular practice for Maan Steel. See **Annexure 15.**
xx.	The company shall provide housing for construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Proper housing facilities have been built near the plant premises with all the basic amenities.

PART B – GENERAL CONDITIONS

Sl.	Compliance conditions	Compliance Status
i.	The project authorities must strictly adhere to stipulations made by the West Bengal State Pollution Control Board and the State Government.	Being adhered as per the stipulation made by WBPCB and State Government. Consent to Operate obtained from WBPCB is attached as **Annexure–16**.
ii.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment & Forest	Is being complied with.
iii.	The gaseous emissions from various process until shall conform to the load/mass based standards notified by this Ministry on 19th 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 & location.	Is being complied with.
iv.	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, SO2 and NOX are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and the SPCB/CPCB once in six months.	Ambient Air Quality Monitoring being carried on as per direction in consideration of maximum ground level concentration of SPM, SO_2, and NO_x. Latest Ambient Air Quality monitoring report for PM_{10}, $PM_{2.5}$, SO_2, NO_2 and stack monitoring report is enclosed as **Annexure 3 and 4**.
v.	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422(E) dated 19th May, 1993 and 31st December,	Industrial wastewater is properly collected, treated in the Waste water treatment plant present in the plant and there is zero

	1993 or as amended form time to time. The treated wastewater shall be utilized for plantation purpose.	discharge of effluent water in the plant premises.
vi.	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz 75 dBA (daytime) and 70 dBA (nighttime).	The overall noise levels in and around the plant area is kept well within the standards. The latest noise report is attached as **Annexure 17**.
vii.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Occupational Health Surveillance of the workers is being carried out. Occupational safety is well maintained in the plant. Recent Health checkup data and ESIC is attached **Annexure 18**.
viii.	The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	Rain water harvesting structure is installed to harvest the rain water and ensuring its optimal use.
ix.	The project proponent shall also comply with all the environmental protection 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 care etc.	All the environmental protection measures and safeguards recommended in the EIA/EMP report are being complied with. Socio-economic development activities in the surrounding villages are being undertaken.
x.	Requisite amount shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the	Requisite amount of the fund earmarked towards the capital cost and recurring cost/ annum for environmental pollution

	condition stipulated by the MoEF as well as the State Govt. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional office of the Ministry at Bhubaneswar. The funds so provided shall not be diverted for any other purpose.	control measures is utilized to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government.
xi.	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	A copy of clearance letter has been sent to the concerned authority. The EC copies are attached as **Annexure 19**.
xii.	The project proponent shall upload the status of compliance of the stipulated environmental clearance conditions, including results of the monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF at Bhubaneswar. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely PM10, SO2, NOX or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	This condition is complied with.
xiii.	The project proponent shall also submit six monthly reports on the status of the compliance of thestipulated environmental conditions including results of monitored	Six monthly reports are submitted to the MoEF and all the other conditions is maintained.

	data to the regional office of MoEF, the respective Zonal Office of CPCB and the SPCB. The regional office of this ministry at Bhubaneswar/ CPCB/ SPCB shall monitor the stipulated condition.	
xiv.	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986 as amended subsequently, shall also be put on the website of the company alongwith the status of compliance of environmental conditions and shall be also be sent to the respective Regional Office of the MoEF at Bhubaneswar by e-mail.	The Environmental statement (Form V) is being submitted along with the monitoring data to the concerned State Pollution Control Board as prescribed.
xv.	The project proponent shall inform the public that the project has been accorded environmental clearance by the ministry and copies of the clearance letter are available with SPCB and may also be seen at website of MOEF at http:/envfor.nic .in. this shall be advertised within seven days from the date of issue of the clearance letter, atleast in two local newspaper that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the regional office at Bhubaneswar.	The project proponent has informed the public through the website of MoEF. Apart from that advertisements are given in two local newspapers that are understood by local people. See **Annexure 20**.

xvi.	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Complied.

DETAILS OF ENVIRONMENTAL MONITORING

1. AMBIENT AIR QUALITY MONITORING

Ambient Air Quality Monitoring Stations

Ambient air quality monitoring has been carried out on 28th August, 2021 to assess the ambient air quality of Project Site. This will enable to have an analytical understanding about air quality and the changes in the air environment in the study area with respect to the condition prevailing. The location of the ambient air quality monitoring station is given in **Table 1.1**.

Table 1.1 Details of Ambient Air Quality Monitoring Stations

Sl. No.	Location Code	Location Name/ Description	Environmental Setting
1.	AAQ-1	Near Main Gate	Steel and Power Plant
2.	AAQ-2	Near Admin Building	Steel and Power Plant
3	AAQ-3	Back Side of the Plant	Steel and Power Plant
4	AAQ-4	Near DG Room	Steel and Power Plant

Ambient Air Quality Monitoring Methodology

Monitoring was conducted in respect of the following parameters:

- Particulate Matter 2.5 ($PM_{2.5}$)
- Particulate Matter 10 (PM_{10})
- Sulphur Dioxide (SO_2)
- Oxides of Nitrogen (NO_x)

The air samples were analyzed as per standard methods specified by Central Pollution Control Board (CPCB) and IS: 5182. The techniques used for ambient air quality monitoring and minimum detectable levels are given in **Table 1.2**.

Fine Particulate Sampler APM 550 instruments have been used for monitoring Particulate Matter 2.5 (PM2.5 i.e. <2.5 microns), and Respirable Dust Sampler APM 450 was used for sampling Respirable fraction (<10 microns), gaseous pollutants like SO2, and NOx.

Table 1.2 Techniques used for Ambient Air Quality Monitoring

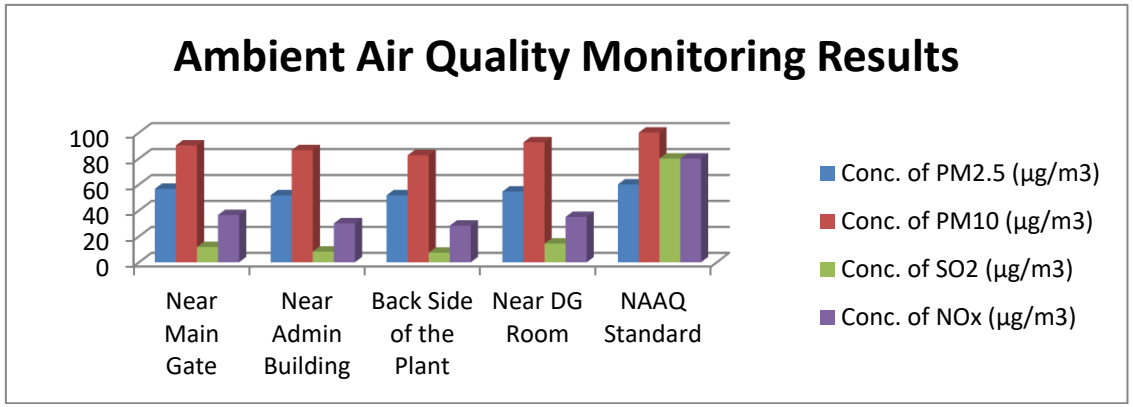
S. No.	Parameter	Technique	Technical Protocol
1	Particulate Matter 2.5 ($PM_{2.5}$)	USEPA 1997a, 40 CFR Part 50, Appendix L	IS-5182 (Part-IV)
2	Particulate Matter 10 (PM_{10})	IS 5182 (PART 23) : 2006	IS-5182 (Part-23)
3	Sulphur dioxide	IS 5182 (Part 2) 2001 & ASTM D 2914-01 reapproved 2007 : Sec 11 (Vol. 11.07) : 2011	IS-5182 (Part- II)
4	Nitrogen dioxide	IS 5182 (Part 6) 2006 & ASTM D 1607-91 reapproved 2005 : Sec 11 (Vol. 11.07) : 2011	IS-5182 (Part-VI)

Ambient Air Quality Monitoring Results

The detailed on-site monitoring results of PM 2.5, PM 10, SO_2 and NO_x are presented in Table 1.3.

Table 1.3 Ambient Air Quality Monitoring Results

Date of sampling (28.02.2020 – 29.02.2020)	Near Main Gate	Near Admin Building	Back Side of the Plant	Near DG Room	NAAQ Standard
Concentration of PM2.5 (µg/m³)	56.66	51.67	51.66	54.58	60
Concentration of PM10 (µg/m³)	90.1	86.51	82.56	92.49	100
Concentration of SO2 (µg/m³)	11.76	8.25	7.42	14.44	80
Concentration of NOx (µg/m³)	36.46	30.04	28.28	35	80



Discussion on Ambient Air Quality in the Study Area

The level of PM_{10} and $PM_{2.5}$, SO_2 and NOx near Main Gate is under the permissible limit (for residential, rural and other areas as stipulated in the National Ambient Air Quality Standards).

2. STACK GAS MONITORING

Stack gas is generated from many combustion sources, including incinerators, kilns and thermal oxidizers. A thermal oxidizer is a process for the treatment of air exhaust and is commonly used during the incineration of waste. When the stack is mixed with air, the exhausting gas is cool enough to be measured by a thermal mass flow meter, thereby getting the benefit of the fast response and wide turn down of the device. Measuring the flow rate of stack gas is required in order to calculate the overall mass of gas over time. This is a requirement for many environmental regulations.
The sample was taken on 28th August, 2021. The details are given in tabular form below:

Table 2.1 Results of the Stack attached to Rotary Kiln(No 3)

Parameters	Results	Methods
Flue Gas Temperature (^{0}C)	105.0	IS : 11255 (Part 1)
Barometric Pressure (mm of Hg.)	753.0	--
Velocity of Gas flow (m/s)	7.12	IS : 11255 (Part 3)
Quantity of Gas flow (Nm^3/hr.)	182290.91	IS : 11255 (Part III)
Concentration of SO_2 (mg/Nm^3)	779.58	IS 11255 (Part 2) 1985 RA 2003
Concentration of CO_2 %(v/v)	11.8	IS 13270 1992 RA 2003
Concentration of CO %(v/v)	<1.0	IS 13270 1992 RA 2003
Concentration of Particulate Matter (mg/Nm^3) (at 11.8% CO_2)	25.40	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98
Concentration of Particulate Matter (mg/Nm^3) (at 12% CO_2)	25.83	(reapproved 2005) : Sec 11(Vol3 11.07) : 2011

Table 2.2 Results of the stack attached to Rotary Kiln (No 1 & 2)

Parameters	Results	Methods
Flue Gas Temperature (^{0}C)	94.0	IS : 11255 (Part 1)
Barometric Pressure (mm of Hg.)	753.0	--
Velocity of Gas flow (m/s)	9.81	IS : 11255 (Part 3)
Quantity of Gas flow (Nm^3/hr.)	48056.01	IS : 11255 (Part III)
Concentration of SO_2 (mg/Nm^3)	759.07	IS 11255 (Part 2) 1985 RA 2003
Concentration of CO_2 %(v/v)	10.2	IS 13270 1992 RA 2003
Concentration of CO %(v/v)	<1.0	IS 13270 1992 RA 2003
Concentration of Particulate Matter (mg/Nm^3) (at 11 % CO_2)	29.46	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98
Concentration of Particulate Matter (mg/Nm^3) (at 12% CO_2)	34.65	(reapproved 2005) : Sec 11(Vol3 11.07) : 2011

Table 2.3 Results of the stack attached to Cooler Discharge of DRI – 1 & 2

Parameters	Results	Methods
Flue Gas Temperature (^{0}C)	42.0	IS : 11255 (Part 1)
Barometric Pressure (mm of Hg.)	753.0	--
Velocity of Gas flow (m/s)	10.56	IS : 11255 (Part 3)
Quantity of Gas flow (Nm^3/hr.)	21160.81	IS : 11255 (Part III)
Concentration of Particulate Matter (mg/Nm^3)	26.72	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98

Table 2.4 Results of Stack attached to Cooler Discharge of DRI –3 (200 TPD) & Product House (common)

Parameters	Results	Methods
Flue Gas Temperature (0C)	40.0	IS : 11255 (Part 1)
Barometric Pressure (mm of Hg.)	753.0	--
Velocity of Gas flow (m/s)	9.11	IS : 11255 (Part 3)
Quantity of Gas flow (Nm3/hr.)	12592.99	IS : 11255 (Part III)
Concentration of Particulate Matter (mg/Nm3)	23.80	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98

Table 2.5 Results of Stack attached to Separation House & I-Bin of DRI – 1, 2 & 3 attached to common stack

Parameters	Results	Methods
Flue Gas Temperature (0C)	39.0	IS : 11255 (Part 1)
Barometric Pressure (mm of Hg.)	753.0	--
Velocity of Gas flow (m/s)	9.10	IS : 11255 (Part 3)
Quantity of Gas flow (Nm3/hr.)	24362.27	IS : 11255 (Part III)
Concentration of Particulate Matter (mg/Nm3)	31.74	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98

Table 2.6 Results of the Stack attached to Induction Furnace (No.1 & 2)

Parameters	Results	Methods
Flue Gas Temperature (0C)	51.0	IS : 11255 (Part 1)
Barometric Pressure (mm of Hg.)	753.0	--
Velocity of Gas flow (m/s)	10.71	IS : 11255 (Part 3)
Quantity of Gas flow (Nm3/hr.)	23033.20	IS : 11255 (Part III)
Concentration of Particulate Matter (mg/Nm3)	16.84	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98

Table 2.7 Results of the Stack attached to D. G. – 500 KVA (SMS Division) (Acoustic Enclosure)

Parameters	Results	Methods
Flue Gas Temperature (^{0}C)	180.0	IS : 11255 (Part 1)
Barometric Pressure (mm of Hg.)	753.0	--
Velocity of Gas flow (m/s)	13.92	IS : 11255 (Part 3)
Quantity of Gas flow (Nm^3/hr.)	1026.28	IS : 11255 (Part III)
Concentration of SO_2 (mg/Nm^3)	76.20	IS 11255 (Part 2) 1985 RA 2003
Concentration of CO_2 %(v/v)	8.4	IS 13270 1992 RA 2003
Concentration of CO %(v/v)	<1.0	IS 13270 1992 RA 2003
Concentration of Particulate Matter (mg/Nm^3)	71.55	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98

Table 2.8 Results of the Stack attached to AFBC Boiler (CPP)

Parameters	Results	Methods
Flue Gas Temperature (^{0}C)	163.0	IS : 11255 (Part 1)
Barometric Pressure (mm of Hg.)	752.0	--
Velocity of Gas flow (m/s)	10.90	IS : 11255 (Part 3)
Quantity of Gas flow (Nm^3/hr.)	99340.28	IS : 11255 (Part III)
Concentration of SO2 (mg/Nm^3)	560.10	IS 11255 (Part 2) 1985 RA 2003
Concentration of NOX (mg/Nm^3)	168.20	IS : 11255 (Part 7) 2005 & ASTM D 1608-98 reapproved 2009 : Sec 11 (Vol. 11.07) : 2011
Concentration of CO2 %(v/v)	10.6	IS 13270 1992 RA 2003
Concentration of CO %(v/v)	<1.0	IS 13270 1992 RA 2003
Concentration of Particulate Matter (mg/Nm^3) (at 10.8 % CO_2)	28.63	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98
Concentration of Particulate Matter (mg/Nm^3) (at 12% CO_2)	32.41	(reapproved 2005) : Sec 11(Vol3 11.07) : 2011

Table 2.9 Results of the Stack attached to Induction Furnace (3 & 4) attached to common stack

Parameters	Results	Methods
Flue Gas Temperature (^{0}C)	54.0	IS : 11255 (Part 1)
Barometric Pressure (mm of Hg.)	752.0	--
Velocity of Gas flow (m/s)	10.13	IS : 11255 (Part 3)
Quantity of Gas flow (Nm^3/hr.)	31222.77	IS : 11255 (Part III)
Concentration of Particulate Matter (mg/Nm^3)	21.75	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec 11(Vol. 3 11.07) : 2011

Table 2.10 Results of the Stack attached to Coal Crushing Unit of DRI – 1, 2 & 3

Parameters	Results	Methods
Flue Gas Temperature (^{0}C)	48.0	IS : 11255 (Part 1)
Barometric Pressure (mm of Hg.)	752.0	--
Velocity of Gas flow (m/s)	9.23	IS : 11255 (Part 3)
Quantity of Gas flow (Nm^3/hr.)	13486.61	IS : 11255 (Part III)
Concentration of Particulate Matter (mg/Nm^3)	21.79	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec 11(Vol. 3 11.07) : 2011

Table 2.11 Results of the Stack attached to Iron Circuit

Parameters	Results	Methods
Flue Gas Temperature (^{0}C)	50.0	IS : 11255 (Part 1)
Barometric Pressure (mm of Hg.)	752.0	--
Velocity of Gas flow (m/s)	10.01	IS : 11255 (Part 3)
Quantity of Gas flow (Nm^3/hr.)	14517.41	IS : 11255 (Part III)
Concentration of Particulate Matter (mg/Nm^3)	26.12	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec 11(Vol. 3 11.07) : 2011

Table 2.12 Results of the Stack attached to Stock House

Parameters	Results	Methods
Flue Gas Temperature (^{0}C)	45.0	IS : 11255 (Part 1)
Barometric Pressure (mm of Hg.)	752.0	--
Velocity of Gas flow (m/s)	9.19	IS : 11255 (Part 3)
Quantity of Gas flow (Nm^3/hr.)	13554.84	IS : 11255 (Part III)
Concentration of Particulate Matter (mg/Nm^3)	24.05	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec 11(Vol. 3 11.07) : 2011

3. WORK ZONE AIR QUALITY MONITORING

Fugitive emissions are emissions of gases or vapors from pressurized equipment due to leaks and other unintended or irregular releases of gases, mostly from industrial activities. As well as the economic cost of lost commodities, fugitive emissions contribute to air pollution and climate change.
The sampling was done on 28th August, 2021 for fugitive analysis. The results are given in tabular form.

Table 3.1 Results of Fugitive Air Analysis Inside the Plant (Near Induction Furnace)

PARAMETERS	METHOD NO.	RESULTS
Concentration of SPM (µg/m^3)	NIOSH 0500 : 1994	481.59
Concentration of *RPM (µg/m^3)	IS 5182 (PART 23) : 2006	210.76
Concentration of *SO2 (µg/m^3)	IS 5182 (Part 2) 2001 & ASTM D 2914-01 reapproved 2007 : Sec 11 (Vol. 11.07) : 2011	13.0
Concentration of *NOx (µg/m^3)	IS 5182 (Part 6) 2006 & ASTM D 1607-91 reapproved 2005 : Sec 11 (Vol. 11.07) : 2011	32.80

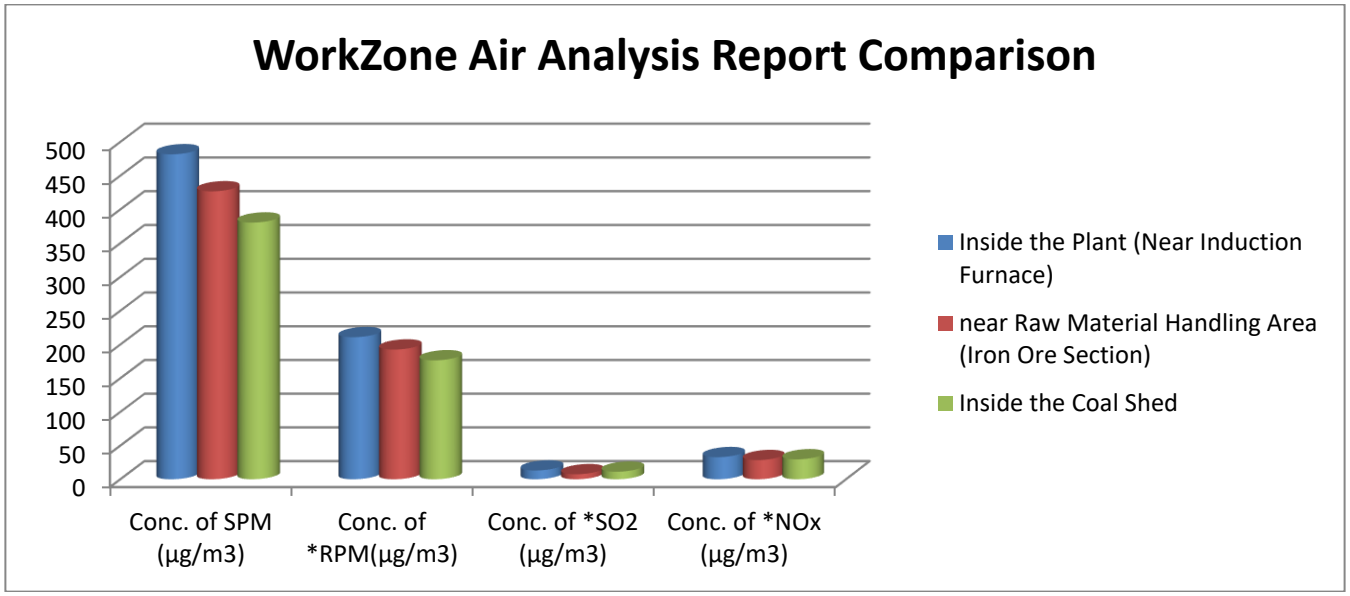
Table 3.2 Results of Fugitive Air analysis near Raw Material Handling Area (Iron Ore Section)

PARAMETERS	METHOD NO.	RESULTS
Concentration of SPM (µg/m^3)	NIOSH 0500 : 1994	426.74
Concentration of *RPM (µg/m^3)	IS 5182 (PART 23) : 2006	192.45
Concentration of *SO2 (µg/m^3)	IS 5182 (Part 2) 2001 & ASTM D 2914-01 reapproved 2007 : Sec 11 (Vol. 11.07) : 2011	7.42
Concentration of *NOx (µg/m^3)	IS 5182 (Part 6) 2006 & ASTM D 1607-91 reapproved 2005 : Sec 11 (Vol. 11.07) : 2011	28.43

Table 3.3 Results of Fugitive Air Analysis Inside the Coal Shed

PARAMETERS	METHOD NO.	RESULTS
Concentration of SPM (µg/m^3)	NIOSH 0500 : 1994	380.50
Concentration of *RPM (µg/m^3)	IS 5182 (PART 23) : 2006	176.48
Concentration of *SO2 (µg/m^3)	IS 5182 (Part 2) 2001 & ASTM D 2914-01 reapproved 2007 : Sec 11 (Vol. 11.07) : 2011	11.14
Concentration of *NOx (µg/m^3)	IS 5182 (Part 6) 2006 & ASTM D 1607-91 reapproved 2005 : Sec 11 (Vol. 11.07) : 2011	29.58

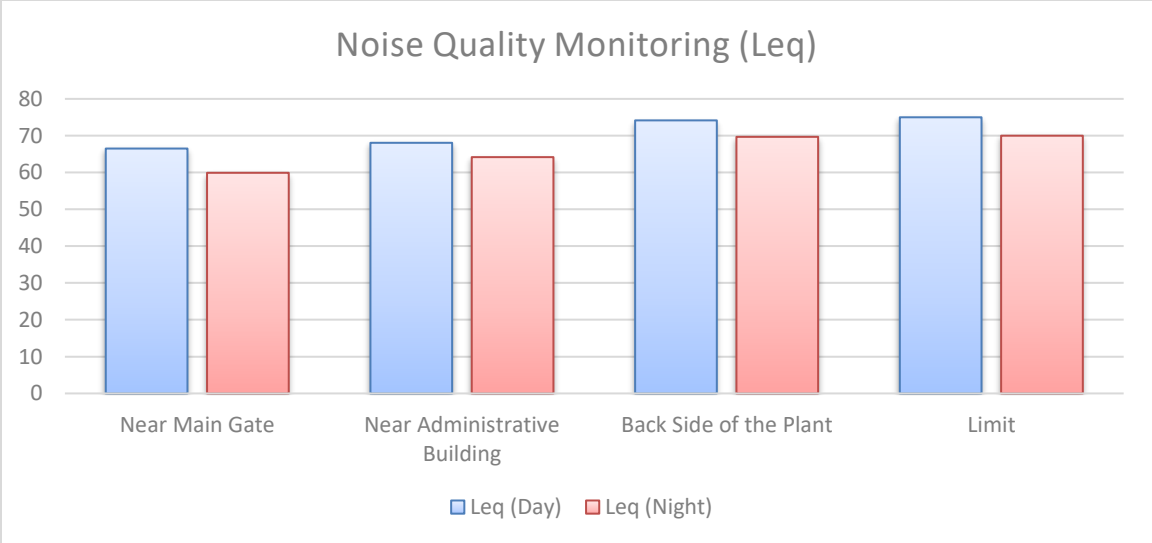
The comparison are given in graphical form



4. AMBIENT NOISE MONITORING

Ambient Noise Monitoring Locations

The main objective of noise monitoring in the study area is to assess the present ambient noise levels in project site due to various construction allied activities and increased vehicular movement. A preliminary reconnaissance survey has been undertaken to identify the major noise generating sources in the area. Ambient noise monitoring was conducted at 3 locations in the month of 28th August, 2021, which is given in **Graphical Presentation.**



The Data are given in Tabular Form:

Table 4.1 Results of Fugitive Air Analysis

Location	Day/ Night	Time Duration	L_{eq}	Limit
Near Main Gate	Day	10:00 am – 10:20 am	66.51	75
	Night	10:00pm – 10:20pm	59.92	70
Near Administrative Building	Day	10:50 am – 11:10 am	68.07	75
	Night	10:30 pm – 10:50pm	64.18	70
Back Side of the Plant	Day	12:00 pm – 12:20 pm	74.16	75
	Night	11:00 pm – 11:20pm	69.69	70

Methodology of Noise Monitoring

Noise levels were measured using integrated sound level meter manufactured by Mastech. The integrating sound level meter is an integrating/ logging type with Octave filter attachment with frequency range of 31.5 to 16000 Hz. This instrument is capable of measuring the Sound Pressure Level (SPL), Leq and octave band frequency analysis.

Discussion on Ambient Noise Levels in the Study Area

Day Time Noise Levels (L_{day}):
Both the day and night time noise level was found within limit prescribed.

5. GROUNDWATER QUALITY MONITORING

Groundwater Quality Monitoring Locations

Keeping in view the importance of groundwater as an important source of drinking water, sample of ground water was collected from the project site for the assessment of impacts of the project on the groundwater quality.

Water sample was collected from the bore wells in the project site. The sample was analyzed for various parameters to compare with the standards for drinking water as per IS: 10500 for ground water sources.

Methodology of Groundwater Quality Monitoring

Sampling of ground water from the bore wells was carried by NABL Accredited Company. Samples

were collected as grab sample and sampling forms are filled in as per the sampling plan. The preservative sample were properly added to preserve as per standard operating procedures (SOP) and stored immediately in ice boxes, which were ensured for appropriate temperatures. Sample for chemical analysis was collected in polyethylene carboys. Sample collected for metal content were acidified to <2 pH with 1 ml HNO_3. A sample for bacteriological analysis was collected in sterilized glass bottles.

Proper care was taken during packing and transportation of samples. All the samples reached the laboratory within the holding times for different parameters. After ensuring the same the samples were forwarded immediately for analysis.

The samples were analyzed as per the standard procedures specified in 'Standard Methods for the Examination of Water and Wastewater' published by American Public Health Association (APHA) and CPCB.

Groundwater Quality Monitoring Results

The detailed groundwater quality monitoring results of the three borewell (by Ecocare) are presented in **Table 5.2**.

Table 5.2 Groundwater Quality Monitoring Results

Sl. No.	Parameters	Unit	Test Method (APHA 23 rd Edition)	Standards (IS:10500)	Results as per Sample No.				
1	pH at 24.4°C	-	4500-H^+ B	6.5 - 8.5	Borewell 1	Borewell 2	Borewell 3	Borewell 4	Borewell 5
					7.41	7.29	7.21	7.40	7.34
2	TDS	mg/l	2540 C	500.0	458.80	471.60	439.50	484.10	434.10
3	Arsenic	mg/l	3500 -As B	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
4	Total Alkalinity (as $CaCO_3$)	mg/l	2320 B	200.0	128.10	134.40	121.80	151.20	140.70
5	Chloride (as Cl^-)	mg/l	4500 – Cl^- B	250.0	36.91	31.08	39.82	36.42	29.14
6	Total Hardness (as $CaCO_3$)	mg/l	2340 C	200.0	159.12	165.24	148.92	167.28	155.04
7	Calcium (as Ca^{2+})	mg/l	3500 - Ca B	75.0	49.06	50.69	42.52	52.33	45.79
8	Sulphate (as $SO4^-$)	mg/l	4500 – SO_4^{2-}E	200.0	53.98	57.48	48.60	58.94	54.58
9	Iron (as Fe)	mg/l	3500 - Fe B	0.3	0.21	0.19	0.23	0.18	0.20
10	Magnesium (as Mg)	mg/l	3500 - Mg B	30.0	8.92	9.42	10.41	8.92	9.91
11	Total Coliform	MPN/ l00ml	9221 B	Not Detectable	Not Detectable	Not Detectable	Not Detectable	Not Detectable	Not Detectable

The detailed groundwater quality monitoring results of the bore well near Main gate (by Envirocheck) are presented in Table 5.3 given below.

SL. NO.	PARAMETERS	TEST METHOD	UNIT	RESULTS
1.	Colour	APHA 23rd Edition, 2120 B : 2017	--	1.0
2.	Odour	IS 3025 (Part 5) : 1983 : 2012	--	Agreeable
3.	pH	IS 3025 (Part 11): 1984, RA 2012	--	6.80
4.	Taste	IS 3025 (Part 4) : 1983 : 2012	--	Acceptable
5.	Turbidity	APHA 23rd Ed., 2130 N : 2017	NTU	1.10
6.	Total	APHA 23rd ED., 2540-C :	mg./l	710.0

	Dissolved Solids	2017		
7.	Aluminium	IS 15302: 2003, RA 2014	mg./l	<0.02
8.	Boron	APHA 23rd Ed., 3500 Al-B : 2017	mg./l	<0.1
9.	Calcium	APHA 23rd Ed., 3500 Ca-B : 2017	mg./l	65.73
10.	Chloride	APHA 23rd Ed., 4500Cl-B/D : 2017	mg./l	66.25
11.	Copper	APHA 23rd Ed., 3111B : 2017	mg./l	<0.04
12.	Fluoride	APHA 23rd Ed., 4500 F-D : 2017	mg./l	<0.1
13.	Free Residual Chlorine	APHA 23rd Ed., 4500 Cl-B : 2017	mg./l	<0.1
14.	Iron	APHA 23rd Ed., 3111B : 2017	mg./l	0.82
15.	Magnesium	APHA 23rd Ed., 3500 Mg-B : 2017	mg./l	11.04
16.	Manganese	APHA 23rd Ed., 3111B : 2017	mg./l	<0.05
17.	Mineral Oil	APHA 23rd Ed., 5520 B : 2017	mg./l	<0.01
18.	Nitrate	APHA 23rd Ed., 4500 NO_3 - E : 2017	mg./l	3.80
19.	Phenolic Compounds	APHA 23rd Ed., 5530 C : 2017	mg./l	<0.001
20.	Selenium	IS 15303: 2003, RA 2014	mg./l	<0.01
21.	Sulphate	APHA 23rd Ed., SO_4-E : 2017	mg./l	58.50
22.	Total Alkalinity	APHA 23rd Ed., 2320 B : 2017	mg./l	260.0
23.	Total Hardness	IS 3025 (Part 21): 2009, RA 2014	mg./l	210.0
24.	Zinc	IS 3025 (Part 49): 1994, RA 2014	mg./l	0.62
25.	Cadmium	APHA 23rd Ed., 3111 B : 2017	mg./l	<0.002
26.	Cyanide	IS 3025 (Part 27): 1986, RA 2014	mg./l	<0.01
27.	Lead	IS 3025 (Part 47): 1994, RA 2014	mg./l	<0.005
28.	Mercury	APHA 23rd Ed., 3111B : 2017	mg./l	<0.001
29.	Arsenic	IS 3025 (Part 37): 1988, RA 2014	mg./l	<0.01
30.	Total Chromium	APHA 23rd Ed., 3111 Cr-B : 2017	mg./l	<0.02

Discussion on Groundwater Quality in the Study Area

All the parameters of ground water are under the prescribed standard.

6. Rain Water Monitoring

Rain Water Monitoring Locations

Rain water can serve as as an important source of water, sample of rain water was collected from the project site. The rain water harvesting structures is present within the plant premises.

Sampling of Rain water was carried out on 28th August, 2021 and analyzed in the NABL accredited Laboratory

namely Envirocheck.

Table 6.1 Rain Water Water Monitoring Results

SL. NO.	PARAMETERS	RESULTS
1.	Temperature (^{0}C)	21.0
2.	Odour	Odourless
3.	Total Suspended Solids (mg./l)	15.0
4.	pH	7.38
5.	Total Hardness (mg./l)	25.0
6.	Calcium (mg./l)	6.41
7.	Magnesium (mg./l)	2.16
8.	Chloride (mg./l)	8.62
9.	Iron (mg./l)	0.06
10.	Salinity (mg./l)	BDL
11.	Haxavalent Chromium (mg./l)	BDL
12.	Total Chromium (mg./l)	BDL
13.	Kjeldhal Nitrogen (mg./l)	1.80
14.	Total Dissolved Solids (mg./l)	50.0
15.	Phosphate (mg./l)	0.80
16.	Zinc (mg./l)	0.10
17.	Sulphide (mg./l)	BDL
18.	Fluoride (mg./l)	BDL
19.	Manganese (mg./l)	BDL
20.	Bi-Carbonate (mg./l)	34.16
21.	Sodium (mg./l)	6.50
22.	Dissolved Oxygen (mg./l)	8.20
23.	COD (mg./l)	BDL
24.	BOD (mg./l)	BDL
25.	Oil & Grease (mg./l)	BDL
26.	Total Coliform (CFU/100 ml.)	Absent
27.	Fecal Coliform (CFU/100 ml.)	Absent

Remarks : a) BDL indicates Below Detection Limit.
b) CFU indicates Colony Forming Unit.

7. Effluent Water Quality Monitoring

Effluent Water sample was collected from Final Domestic Outlet-Soak pit in the project site. The sample was analyzed for various parameters. The details of water sampling locations are given in **Table 4.1**.

Table 4.1 Details of Effluent Water Quality Monitoring Station

S. No.	Location Code	Location Name/ Description
1.	Effluent Water	Domestic Effluent Water (Grab)

Methodology of Effluent Water Quality Monitoring

Sampling of effluent water was carried out on **28th August, 2021**. Samples were collected as grab sample and sampling forms are filled in as per the sampling plan. The preservative sample were

properly added to preserve as per standard operating procedures (SOP) and stored immediately in ice boxes, which were ensured for appropriate temperatures. Sample for chemical analysis was collected in polyethylene carboys.

Proper care was taken during packing and transportation of samples. All the samples reached the laboratory within the holding times for different parameters. After ensuring the same the samples were forwarded immediately for analysis.

The samples were analyzed as per the standard procedures specified in 'Standard Methods for the Examination of Water and Wastewater' published by American Public Health Association (APHA) and CPCB.

The detailed effluent water quality monitoring results are presented in **Table 4.2**

PARAMETERS		**TEST METHODS**		**RESULTS**	**LIMIT***
1.	pH	APHA 23rd Ed., 4500-H+B : 2017	:	6.82	5.5-9.0
2.	Total Suspended Solids (mg./l)	APHA 23rd Ed., 2540 D : 2017	:	32.0	100.0
3.	Oil and Grease (mg./l)	APHA 23rd Ed., 5520 B/D : 2017	:	4.5	10.0
4.	COD (mg./l)	APHA 23rd Ed., 5220 B/C/D : 2017	:	80.0	250.0
5.	BOD [3 days, 270C] (mg./l)	APHA 23rd Ed., 5210-B : 2017	:	26.0	30.0

Discussion on Effluent Water Quality

All the parameters are under the prescribed standard.

ANNEXURE 1

EnviroConnect Forbes Marshall Historical Data

Plant Name	MAAN STEEL & POWER LIMITED
Plant Address	M/S MAAN STEEL & I JAMURIA I MOUZA - I WARD NO P.O. NANI BURDWAI JAMURIA (
Station Name	Stack 1_Combined 95 TPD KILN
From Date	01-10-2021 00:00
To Date	15-12-2021 12:00
Interval	Daily
Function	Average

Parameter	PM	
Unit	mg/Nm3	
Limit	0.00 - 50.00	
01-10-2021 00:00	19.3	
02-10-2021 00:00	17.7	
03-10-2021 00:00	16	
04-10-2021 00:00	15.96	
05-10-2021 00:00	15.96	
06-10-2021 00:00	16	
07-10-2021 00:00	16	
08-10-2021 00:00	15.98	
09-10-2021 00:00	15.97	
10-10-2021 00:00	16.03	
11-10-2021 00:00	16	
12-10-2021 00:00	16.04	
13-10-2021 00:00	16.08	
14-10-2021 00:00	16.01	
15-10-2021 00:00	16.3	
16-10-2021 00:00	16.28	
17-10-2021 00:00	16.08	
18-10-2021 00:00	16.03	
19-10-2021 00:00	16.27	
20-10-2021 00:00	16.11	<
21-10-2021 00:00	16.51	
22-10-2021 00:00	23.17	
23-10-2021 00:00	22.07	
24-10-2021 00:00	16.51	
25-10-2021 00:00	16.53	
26-10-2021 00:00	16.11	
27-10-2021 00:00	16.54	
28-10-2021 00:00	16.25	
29-10-2021 00:00	16.42	
30-10-2021 00:00	16.38	
31-10-2021 00:00	16.39	
01-11-2021 00:00	16.75	
02-11-2021 00:00	16.78	
03-11-2021 00:00	16.81	
04-11-2021 00:00	16.75	
05-11-2021 00:00	16.99	
06-11-2021 00:00	16.99	

07-11-2021 00:00	16.92	
08-11-2021 00:00	16.99	
09-11-2021 00:00	16.86	
10-11-2021 00:00	16.96	
11-11-2021 00:00	16.99	
12-11-2021 00:00	17	
13-11-2021 00:00	16.68	
14-11-2021 00:00	16.77	
15-11-2021 00:00	17	
16-11-2021 00:00	16.98	
17-11-2021 00:00	17	<
18-11-2021 00:00	16.99	
19-11-2021 00:00	16.98	<
20-11-2021 00:00	17	
21-11-2021 00:00	17	<
22-11-2021 00:00	18.15	<
23-11-2021 00:00	19	
24-11-2021 00:00	19	
25-11-2021 00:00	19	
26-11-2021 00:00	19	
27-11-2021 00:00	19	
28-11-2021 00:00	19	
29-11-2021 00:00	17.55	
30-11-2021 00:00	17	
01-12-2021 00:00	17	
02-12-2021 00:00	17	
03-12-2021 00:00	17	
04-12-2021 00:00	17	
05-12-2021 00:00	16.99	
06-12-2021 00:00	17	
07-12-2021 00:00	17	
08-12-2021 00:00	17	
09-12-2021 00:00	17	<
10-12-2021 00:00	17	
11-12-2021 00:00	17	
12-12-2021 00:00	17	
13-12-2021 00:00	17	
14-12-2021 00:00	17	
15-12-2021 00:00	17.03	<

EnviroConnect Forbes Marshall Historical Data

Plant Name	MAAN STEEL & POWER LIMITED
Plant Address	M/S MAAN STEEL & JAMURIA I MOUZA - I WARD NO P.O. NANI BURDWAI JAMURIA (
Station Name	STACK 2_200_TPD DRI KILN
From Date	01-10-2021 00:00
To Date	15-12-2021 13:05
Interval	Daily
Function	Average

Parameter	PM	
Unit	mg/Nm3	
Limit	0.00 - 50.00	
01-10-2021 00:00	12.42	
02-10-2021 00:00	13.68	
03-10-2021 00:00	12.6	
04-10-2021 00:00	12.86	H
05-10-2021 00:00	14.47	H
06-10-2021 00:00	11.73	
07-10-2021 00:00	11.91	
08-10-2021 00:00	14.27	H
09-10-2021 00:00	13.37	
10-10-2021 00:00	14.52	
11-10-2021 00:00	13.95	
12-10-2021 00:00	13.71	
13-10-2021 00:00	17.11	H
14-10-2021 00:00	15.34	H
15-10-2021 00:00	12.14	
16-10-2021 00:00	13.48	H
17-10-2021 00:00	7.93	H
18-10-2021 00:00	11.88	H
19-10-2021 00:00	5.43	
20-10-2021 00:00	5.98	H
21-10-2021 00:00	4.98	H
22-10-2021 00:00	3.87	
23-10-2021 00:00	5.25	
24-10-2021 00:00	8.08	
25-10-2021 00:00	8.33	
26-10-2021 00:00	9	
27-10-2021 00:00	11.28	
28-10-2021 00:00	12	
29-10-2021 00:00	12.01	
30-10-2021 00:00	12.04	
31-10-2021 00:00	12	
01-11-2021 00:00	12	
02-11-2021 00:00	12	
03-11-2021 00:00	12	
04-11-2021 00:00	12	
05-11-2021 00:00	6.72	
06-11-2021 00:00	1	

07-11-2021 00:00	1	
08-11-2021 00:00	1	
09-11-2021 00:00	1	
10-11-2021 00:00	1	
11-11-2021 00:00	3.07	
12-11-2021 00:00	2.22	
13-11-2021 00:00	3.91	
14-11-2021 00:00	6	
15-11-2021 00:00	6	
16-11-2021 00:00	6	
17-11-2021 00:00	8.96	
18-11-2021 00:00	17.15	
19-11-2021 00:00	20.14	
20-11-2021 00:00	19.16	
21-11-2021 00:00	18.52	
22-11-2021 00:00	19.12	
23-11-2021 00:00	26.15	
24-11-2021 00:00	32.24	H
25-11-2021 00:00	32.5	H
26-11-2021 00:00	32.13	H
27-11-2021 00:00	31.31	H
28-11-2021 00:00	30.8	
29-11-2021 00:00	24.93	H
30-11-2021 00:00	22.19	
01-12-2021 00:00	22.39	H
02-12-2021 00:00	22.25	
03-12-2021 00:00	22.47	H
04-12-2021 00:00	21.79	H
05-12-2021 00:00	21.54	
06-12-2021 00:00	22.15	
07-12-2021 00:00	22.14	
08-12-2021 00:00	22.03	
09-12-2021 00:00	22.16	
10-12-2021 00:00	22.04	
11-12-2021 00:00	22.02	
12-12-2021 00:00	22.32	H
13-12-2021 00:00	22.11	
14-12-2021 00:00	21.97	
15-12-2021 00:00	22.02	<

ANNEXURE 2

Air Pollution Equipment details

ANNEXURE - I		
S/L No.	Particulars	Amt (Basic)
1	Bag Filter for DRI	₹ 17,50,000
2	ID Fan 1	₹ 6,00,000
3	ID Fan 2	₹ 4,40,000
4	ESP for DRI 1	₹ 70,00,000
5	ESP for DRI 2	₹ 58,00,000
6	ESP DRI Fabrication	₹ 70,00,000
7	ESP for CPP	₹ 49,00,000
8	ESP PP Fabrication	₹ 72,14,000
9	Wet Scrapper 1	₹ 8,50,000
10	Wet Scrapper 2	₹ 12,11,000
11	Ash Handling for DRI	₹ 15,50,000
12	Ash Handling for CPP	₹ 86,00,000
13	Air Cooled Condenser Mechanical	₹ 4,65,00,000
14	Air Cooled Condenser Erection	₹ 35,00,000
15	Bag Filter for PP	₹ 11,25,000
16	Scrappers	₹ 1,40,000
17	Stack CEMS	₹ 18,20,000
Total		₹ 10,00,00,000

ANNEXURE 3

TEST REPORT

FORMAT NO : ENV/FM/37

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	28.08.2021 – 29.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Ambient Air	
Sample ID No.	:	ENV/77/Aug./A/XIV	Report No.	:	ENV/77/Aug./TR(A)/XIV/21-22				

A] GENERAL INFORMATION

1.	Location of Sampling	:	Near Main Gate
2.	Duration of Sampling	:	24 hrs. (09:00 a.m. – 09:00 a.m.)

B] METEOROLOGICAL INFORMATION

1.	Average Temperature (^{0}C)	:	33.0
2.	Average Relative Humidity (%)	:	72.0
3.	Barometric Pressure (mm of Hg)	:	753.0
4.	Smell or Odour	:	No Remarkable Smell
5.	Weather Condition	:	Clear sky

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS	LIMIT
1.	Concentration of $PM_{2.5}$	$\mu g/m^3$	USEPA 1997a, 40 CFR Part 50, Appendix L	56.66	60.0
2.	Concentration of PM_{10}	$\mu g/m^3$	IS 5182 (PART 23) : 2006	90.10	100.0
3.	Concentration of SO_2	$\mu g/m^3$	IS 5182 (Part 2) 2001 & ASTM D 2914-01 reapproved 2007: Sec. 11 (Vol. 11.07) : 2011	11.76	80.0
4.	Concentration of NO_2	$\mu g/m^3$	IS 5182 (Part 6) 2006 & ASTM D 1607-91 reapproved 2005 : Sec. 11 (Vol. 11.07) : 2011	36.46	80.0

Remarks : Limit as per National Ambient Air Quality Standards Central Pollution Control Board Notification, New Delhi, the 18th November, 2009.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/37

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	28.08.2021 – 29.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Ambient Air	

Sample ID No.	:	ENV/77/Aug./A/XV	Report No.	:	ENV/77/Aug./TR(A)/XV/21-22

A] GENERAL INFORMATION

1.	Location of Sampling	:	Near Administrative Building
2.	Duration of Sampling	:	24 hrs. (09:30 a.m. – 09:30 a.m.)

B] METEOROLOGICAL INFORMATION

1.	Average Temperature (^{0}C)	:	33.0
2.	Average Relative Humidity (%)	:	72.0
3.	Barometric Pressure (mm of Hg)	:	753.0
4.	Smell or Odour	:	No Remarkable Smell
5.	Weather Condition	:	Clear sky

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS	LIMIT
1.	Concentration of $PM_{2.5}$	$\mu g/m^3$	USEPA 1997a, 40 CFR Part 50, Appendix L	51.67	60.0
2.	Concentration of PM_{10}	$\mu g/m^3$	IS 5182 (PART 23) : 2006	86.51	100.0
3.	Concentration of SO_2	$\mu g/m^3$	IS 5182 (Part 2) 2001 & ASTM D 2914-01 reapproved 2007: Sec. 11 (Vol. 11.07) : 2011	8.25	80.0
4.	Concentration of NO_2	$\mu g/m^3$	IS 5182 (Part 6) 2006 & ASTM D 1607-91 reapproved 2005 : Sec. 11 (Vol. 11.07) : 2011	30.04	80.0

Remarks : Limit as per National Ambient Air Quality Standards Central Pollution Control Board Notification, New Delhi, the 18th November, 2009.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/37

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	28.08.2021 – 29.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Ambient Air	

Sample ID No.	:	ENV/77/Aug./A/XVI	Report No.	:	ENV/77/Aug./TR(A)/XVI/21-22

A] GENERAL INFORMATION

1.	Location of Sampling	:	Back Side of the Plant
2.	Duration of Sampling	:	24 hrs. (10:00 a.m. – 10:00 a.m.)

B] METEOROLOGICAL INFORMATION

1.	Average Temperature (^{0}C)	:	33.0
2.	Average Relative Humidity (%)	:	72.0
3.	Barometric Pressure (mm of Hg)	:	753.0
4.	Smell or Odour	:	No Remarkable Smell
5.	Weather Condition	:	Clear sky

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS	LIMIT
1.	Concentration of $PM_{2.5}$	$\mu g/m^3$	USEPA 1997a, 40 CFR Part 50, Appendix L	51.66	60.0
2.	Concentration of PM_{10}	$\mu g/m^3$	IS 5182 (PART 23) : 2006	82.56	100.0
3.	Concentration of SO_2	$\mu g/m^3$	IS 5182 (Part 2) 2001 & ASTM D 2914-01 reapproved 2007: Sec. 11 (Vol. 11.07) : 2011	7.42	80.0
4.	Concentration of NO_2	$\mu g/m^3$	IS 5182 (Part 6) 2006 & ASTM D 1607-91 reapproved 2005 : Sec. 11 (Vol. 11.07) : 2011	28.28	80.0

Remarks : Limit as per National Ambient Air Quality Standards Central Pollution Control Board Notification, New Delhi, the 18th November, 2009.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/37

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	28.08.2021 – 29.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Ambient Air	
Sample ID No.	:	ENV/77/Aug./A/XVII	Report No.	:	ENV/77/Aug./TR(A)/XVII/21-22				

A] GENERAL INFORMATION

1.	Location of Sampling	:	Near D. G. Room
2.	Duration of Sampling	:	24 hrs. (10:30 a.m. – 10:30 a.m.)

B] METEOROLOGICAL INFORMATION

1.	Average Temperature (^{0}C)	:	33.0
2.	Average Relative Humidity (%)	:	72.0
3.	Barometric Pressure (mm of Hg)	:	753.0
4.	Smell or Odour	:	No Remarkable Smell
5.	Weather Condition	:	Clear sky

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS	LIMIT
1.	Concentration of $PM_{2.5}$	$\mu g/m^3$	USEPA 1997a, 40 CFR Part 50, Appendix L	54.58	60.0
2.	Concentration of PM_{10}	$\mu g/m^3$	IS 5182 (PART 23) : 2006	92.49	100.0
3.	Concentration of SO_2	$\mu g/m^3$	IS 5182 (Part 2) 2001 & ASTM D 2914-01 reapproved 2007: Sec. 11 (Vol. 11.07) : 2011	14.44	80.0
4.	Concentration of NO_2	$\mu g/m^3$	IS 5182 (Part 6) 2006 & ASTM D 1607-91 reapproved 2005 : Sec. 11 (Vol. 11.07) : 2011	35.0	80.0

Remarks : Limit as per National Ambient Air Quality Standards Central Pollution Control Board Notification, New Delhi, the 18th November, 2009.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

ANNEXURE 4

TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	28.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Stack Emission		
Sample ID No.	:	ENV/77/Aug./A/I	Report No.	:	ENV/77/Aug./TR(A)/I/21-22					

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	:	Rotary Kiln (No.3)			
Shape of Stack	:	Circular	Height of Stack (mtr.) (from G. L.)	:	45.0
Materials of Construction	:	M.S.	Stack I.D. at sampling point (mtr.)	:	3.50
Capacity	:	200 TPD	Height of sampling port (mtr.) (from G.L.)	:	20.0
Emission Due to	:	Combustion of Coal & Reduction of Fe-Ore			
Fuel Used	:	Coal	Permanent Platform & Ladder	:	Yes
Working Fuel Consumption	:	8.7 Ton/hr.			
Pollution Control Device	:	W.H.R.B and E.S.P			

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.		RESULTS	LIMIT
1.	Flue Gas Temperature	^0C	IS : 11255 (Part 1)	:	105.0	N.A.
2.	Barometric Pressure	mm of Hg.	--	:	753.0	N.A.
3.	Velocity of Gas flow	m/s	IS : 11255 (Part 3)	:	7.12	N.A.
4.	Quantity of Gas flow	$Nm^3/hr.$	IS : 11255 (Part III)	:	182290.91	N.A.
5.	Concentration of SO_2	mg/Nm^3	IS 11255 (Part 2) 1985 RA 2003	:	779.58	N.A.
6.	Concentration of CO_2	% (v/v)	IS 13270 1992 RA 2003	:	11.8	N.A.
7.	Concentration of CO	%(v/v)	IS 13270 1992 RA 2003	:	<1.0	1.0
8.	a) Concentration of Particulate Matter (at 11.8% CO_2)		IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11 (Vol. 3 11.07) : 2011	:	25.40	N.A.
	b) Concentration of Particulate Matter (at 12% CO_2)	mg/Nm^3		:	25.83	50.0

Remarks : Limit as per CPCB [Emission Regulation Part IV : COINDS/26/1986-87].
: N.A. means Not Available.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	28.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Stack Emission	
Sample ID No.	:	ENV/77/Aug./A/II	Report No.	:	ENV/77/Aug./TR(A)/II/21-22				

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	:	Rotary Kiln (No.1 & 2) attached to common stack			
Shape of Stack	:	Circular	Height of Stack (mtr.) (from G. L.)	:	30.0
Materials of Construction	:	M.S.	Stack I.D. at sampling point (mtr.)	:	1.50
Capacity	:	Rated - 95 TPD (each), Running - 95 TPD (each)	Height of sampling port (mtr.) (from G.L.)	:	--
Emission Due to	:	Combustion of Coal & Reduction of Fe-Ore			
Fuel Used	:	Coal	Permanent Platform & Ladder	:	Yes
Working Fuel Consumption	:	3.2 TPH (each kiln)			
Pollution Control Device	:	Individual W.H.R.B and Individual E.S.P			

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.		RESULTS	LIMIT
1.	Flue Gas Temperature	^0C	IS : 11255 (Part 1)	:	94.0	N.A.
2.	Barometric Pressure	mm of Hg.	--	:	753.0	N.A.
3.	Velocity of Gas flow	m/s	IS : 11255 (Part 3)	:	9.81	N.A.
4.	Quantity of Gas flow	$Nm^3/hr.$	IS : 11255 (Part III)	:	48056.01	N.A.
5.	Concentration of SO_2	mg/Nm^3	IS 11255 (Part 2) 1985 RA 2003	:	759.07	N.A.
6.	Concentration of CO_2	% (v/v)	IS 13270 1992 RA 2003	:	10.2	N.A.
7.	Concentration of CO	%(v/v)	IS 13270 1992 RA 2003	:	<1.0	1.0
8.	a) Concentration of Particulate Matter (at 10.2% CO_2)		IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11 (Vol. 3 11.07) : 2011	:	29.46	N.A.
	b) Concentration of Particulate Matter (at 12% CO_2)	mg/Nm^3		:	34.65	50.0

Remarks : Limit as per CPCB [Emission Regulation Part IV : COINDS/26/1986-87].
: N.A. means Not Available.
: During monitoring both Kilns were in operation.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	28.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Stack Emission

Sample ID No.	:	ENV/77/Aug./A/III	Report No.	:	ENV/77/Aug./TR(A)/III/21-22

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	:	Cooler Discharge of DRI – 1 & 2			
Shape of Stack	:	Circular	Height of Stack (mtr.) (from G. L.)	:	30.0
Materials of Construction	:	M.S.	Stack I.D. at sampling point (mtr.)	:	0.87
Capacity	:	95 TPD x 2	Height of sampling port (mtr.) (from G.L.)	:	12.0
Emission Due to	:	Process Activity (Cooling of Sponge Iron)			
Fuel Used	:	N.A.	Permanent Platform & Ladder	:	Yes
Working Fuel Consumption	:	Nil			
Pollution Control Device	:	Common Bag Filter			

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.		RESULTS	LIMIT
1.	Flue Gas Temperature	^0C	IS : 11255 (Part 1)	:	42.0	N.A.
2.	Barometric Pressure	mm of Hg.	--	:	753.0	N.A.
3.	Velocity of Gas flow	m/s	IS : 11255 (Part 3)	:	10.56	N.A.
4.	Quantity of Gas flow	$Nm^3/hr.$	IS : 11255 (Part III)	:	21160.81	N.A.
5.	Concentration of Particulate Matter	mg/Nm^3	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11 (Vol. 3 11.07) : 2011	:	26.72	50.0

Remarks : Limit as per CPCB [Emission Regulation Part IV : COINDS/26/1986-87].
: N.A. means Not Available.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	28.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Stack Emission

Sample ID No.	:	ENV/77/Aug./A/IV	Report No.	:	ENV/77/Aug./TR(A)/IV/21-22

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	:	Cooler Discharge of DRI –3 (200 TPD) & Product House (common) attached to common stack			
Shape of Stack	:	Circular	Height of Stack (mtr.) (from G. L.)	:	30.0
Materials of Construction	:	M.S.	Stack I.D. at sampling point (mtr.)	:	0.72
Capacity	:	200 TPD	Height of sampling port (mtr.) (from G.L.)	:	8.0
Emission Due to	:	Process Activity (Cooling & Handling of Sponge Iron)			
Fuel Used	:	N.A.	Permanent Platform & Ladder	:	Yes
Working Fuel Consumption	:	Nil			
Pollution Control Device	:	Common Bag Filter			

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.		RESULTS	LIMIT
1.	Flue Gas Temperature	^{0}C	IS : 11255 (Part 1)	:	40.0	N.A.
2.	Barometric Pressure	mm of Hg.	--	:	753.0	N.A.
3.	Velocity of Gas flow	m/s	IS : 11255 (Part 3)	:	9.11	N.A.
4.	Quantity of Gas flow	Nm^3/hr.	IS : 11255 (Part III)	:	12592.99	N.A.
5.	Concentration of Particulate Matter	mg/Nm^3	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11 (Vol. 3 11.07) : 2011	:	23.80	50.0

Remarks : Limit as per CPCB [Emission Regulation Part IV : COINDS/26/1986-87].
: N.A. means Not Available.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	28.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Stack Emission

Sample ID No.	:	ENV/77/Aug./A/V	Report No.	:	ENV/77/Aug./TR(A)/V/21-22

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	:	Separation House & I-Bin of DRI – 1, 2 & 3 attached to common stack			
Shape of Stack	:	Circular	Height of Stack (mtr.) (from G. L.)	:	30.0
Materials of Construction	:	M.S.	Stack I.D. at sampling point (mtr.)	:	1.0
Capacity	:	--	Height of sampling port (mtr.) (from G.L.)	:	9.12
Emission Due to	:	Process Activity (Handling of Sponge Iron)			
Fuel Used	:	N.A.	Permanent Platform & Ladder	:	Yes
Working Fuel Consumption	:	Nil			
Pollution Control Device	:	Common Bag Filter			

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.		RESULTS	LIMIT
1.	Flue Gas Temperature	^{0}C	IS : 11255 (Part 1)	:	39.0	N.A.
2.	Barometric Pressure	mm of Hg.	--	:	753.0	N.A.
3.	Velocity of Gas flow	m/s	IS : 11255 (Part 3)	:	9.10	N.A.
4.	Quantity of Gas flow	Nm^3/hr.	IS : 11255 (Part III)	:	24362.27	N.A.
5.	Concentration of Particulate Matter	mg/Nm^3	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11 (Vol. 3 11.07) : 2011	:	31.74	50.0

Remarks : Limit as per CPCB [Emission Regulation Part IV : COINDS/26/1986-87].
: N.A. means Not Available.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	28.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Stack Emission

Sample ID No.	:	ENV/77/Aug./A/VI	Report No.	:	ENV/77/Aug./TR(A)/VI/21-22

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	:	Induction Furnace (No.1 & 2) attached to common stack			
Shape of Stack	:	Circular	Height of Stack (mtr.) (from G. L.)	:	33.0
Materials of Construction	:	M.S.	Stack I.D. at sampling point (mtr.)	:	0.9144
Capacity	:	15 MT/Heat (each)	Height of sampling port (mtr.) (from G.L.)	:	10.66
Emission Due to	:	Melting of Pig Iron, Sponge Iron & Scrap			
Fuel Used	:	N.A. (Electrically Operated)	Permanent Platform & Ladder	:	Yes
Working Fuel Consumption	:	Nil			
Pollution Control Device	:	Bag Filter			

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.		RESULTS	LIMIT
1.	Flue Gas Temperature	^{0}C	IS : 11255 (Part 1)	:	51.0	N.A.
2.	Barometric Pressure	mm of Hg.	--	:	753.0	N.A.
3.	Velocity of Gas flow	m/s	IS : 11255 (Part 3)	:	10.71	N.A.
4.	Quantity of Gas flow	Nm^3/hr.	IS : 11255 (Part III)	:	23033.20	N.A.
5.	Concentration of Particulate Matter	mg/Nm^3	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11 (Vol. 3 11.07) : 2011	:	16.84	50.0

Remarks : Limit as per CPCB [Emission Regulation Part IV : COINDS/26/1986-87].
: N.A. means Not Available.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	28.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Stack Emission

Sample ID No.	:	ENV/77/Aug./A/VII	Report No.	:	ENV/77/Aug./TR(A)/VII/21-22

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	:	D. G. – 500 KVA (SMS Division) (Acoustic Enclosure)			
Shape of Stack	:	Circular	Height of Stack (mtr.) (from G. L.)	:	9.12
Materials of Construction	:	M.S.	Stack I.D. at sampling point (mtr.)	:	0.20
Capacity	:	500 KVA	Height of sampling port (mtr.) (from G.L.)	:	Final Discharging Point
Emission Due to	:	Combustion of H.S.D			
Fuel Used	:	H.S.D	Permanent Platform & Ladder	:	Yes
Working Fuel Consumption	:	75 litr./hr.			
Pollution Control Device	:	Nil			

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.		RESULTS	LIMIT
1.	Flue Gas Temperature	^0C	IS : 11255 (Part 1)	:	180.0	N.A.
2.	Barometric Pressure	mm of Hg.	--	:	753.0	N.A.
3.	Velocity of Gas flow	m/s	IS : 11255 (Part 3)	:	13.92	N.A.
4.	Quantity of Gas flow	$Nm^3/hr.$	IS : 11255 (Part III)	:	1026.28	N.A.
5.	Concentration of SO_2	mg/Nm^3	IS 11255 (Part 2) 1985 RA 2003	:	76.20	N.A.
6.	Concentration of CO_2	% (v/v)	IS 13270 1992 RA 2003	:	8.4	N.A.
7.	Concentration of CO	%(v/v)	IS 13270 1992 RA 2003	:	<1.0	1.0
8.	Concentration of Particulate Matter	mg/Nm^3	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11 (Vol. 3 11.07) : 2011	:	71.55	150.0

Remarks : Limit as per CPCB [Emission Regulation Part IV : COINDS/26/1986-87].
: N.A. means Not Available.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	29.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Stack Emission

Sample ID No.	:	ENV/77/Aug./A/VIII	Report No.	:	ENV/77/Aug./TR(A)/VIII/21-22

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	:	AFBC Boiler (CPP)			
Shape of Stack	:	Circular	Height of Stack (mtr.) (from G. L.)	:	45.0
Materials of Construction	:	M.S.	Stack I.D. at sampling point (mtr.)	:	2.2
Capacity	:	30 TPH	Height of sampling port (mtr.) (from G.L.)	:	30.0
Emission Due to	:	Combustion of Coal & Dolochar			
Fuel Used	:	Coal & Dolochar	Permanent Platform & Ladder	:	Yes
Working Fuel Consumption	:	Coal – 1 TPH Dolochar – 8 TPH			
Pollution Control Device	:	E.S.P			

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.		RESULTS	LIMIT
1.	Flue Gas Temperature	^0C	IS : 11255 (Part 1)	:	163.0	N.A.
2.	Barometric Pressure	mm of Hg.	--	:	752.0	N.A.
3.	Velocity of Gas flow	m/s	IS : 11255 (Part 3)	:	10.90	N.A.
4.	Quantity of Gas flow	$Nm^3/hr.$	IS : 11255 (Part III)	:	99340.28	N.A.
5.	Concentration of SO_2 (at 6% O_2)	mg/Nm^3	IS 11255 (Part 2) 1985 RA 2003	:	560.10	N.A.
6.	Concentration of NO_x (at 6% O_2)	mg/Nm^3	IS : 11255 (Part 7) 2005 & ASTM D 1608-98 reapproved 2009 : Sec 11 (Vol. 11.07) : 2011	:	168.20	N.A.
7.	Concentration of CO_2	% (v/v)	IS 13270 1992 RA 2003	:	10.6	N.A.
8.	Concentration of CO	%(v/v)	IS 13270 1992 RA 2003	:	<1.0	1.0
9.	a) Concentration of Particulate Matter (at 10.8% CO_2)		IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11 (Vol. 3 11.07) : 2011	:	28.63	N.A.
	b) Concentration of Particulate Matter (at 12% CO_2)	mg/Nm^3		:	32.41	150.0

Remarks : Limit as per CPCB [Emission Regulation Part IV : COINDS/26/1986-87].
: N.A. means Not Available.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	29.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Stack Emission

Sample ID No.	:	ENV/77/Aug./A/IX	Report No.	:	ENV/77/Aug./TR(A)/IX/21-22

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	:	Induction Furnace (3 & 4) attached to common stack)			
Shape of Stack	:	Circular	Height of Stack (mtr.) (from G. L.)	:	29.0
Materials of Construction	:	M.S.	Stack I.D. at sampling point (mtr.)	:	1.1
Capacity	:	15 Ton/Heat (each)	Height of sampling port (mtr.) (from G.L.)	:	17.5
Emission Due to	:	Melting of Pig Iron, Sponge Iron & Scrap			
Fuel Used	:	N.A.	Permanent Platform & Ladder	:	Yes
Working Fuel Consumption	:	Nil			
Pollution Control Device	:	Bag Filter			

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.		RESULTS	LIMIT
1.	Flue Gas Temperature	^{0}C	IS : 11255 (Part 1)	:	54.0	N.A.
2.	Barometric Pressure	mm of Hg.	--	:	752.0	N.A.
3.	Velocity of Gas flow	m/s	IS : 11255 (Part 3)	:	10.13	N.A.
4.	Quantity of Gas flow	Nm^3/hr.	IS : 11255 (Part III)	:	31222.77	N.A.
5.	Concentration of Particulate Matter	mg/Nm^3	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11 (Vol. 3 11.07) : 2011	:	21.75	50.0

Remarks : Limit as per CPCB [Emission Regulation Part IV : COINDS/26/1986-87].
: N.A. means Not Available.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	29.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Stack Emission		
Sample ID No.	:	ENV/77/Aug./A/X	Report No.	:	ENV/77/Aug./TR(A)/X/21-22					

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	:	Coal Crushing Unit			
Shape of Stack	:	Circular	Height of Stack (mtr.) (from G. L.)	:	28.0
Materials of Construction	:	M.S.	Stack I.D. at sampling point (mtr.)	:	0.75
Capacity	:	--	Height of sampling port (mtr.) (from G.L.)	:	11.50
Emission Due to	:	During Processing			
Fuel Used	:	N.A.	Permanent Platform & Ladder	:	Yes
Working Fuel Consumption	:	Nil			
Pollution Control Device	:	Bag Filter			

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.		RESULTS	LIMIT
1.	Flue Gas Temperature	^{0}C	IS : 11255 (Part 1)	:	48.0	N.A.
2.	Barometric Pressure	mm of Hg.	--	:	752.0	N.A.
3.	Velocity of Gas flow	m/s	IS : 11255 (Part 3)	:	9.23	N.A.
4.	Quantity of Gas flow	Nm^3/hr.	IS : 11255 (Part III)	:	13486.61	N.A.
5.	Concentration of Particulate Matter	mg/Nm^3	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11 (Vol. 3 11.07) : 2011	:	21.79	50.0

Remarks : Limit as per CPCB [Emission Regulation Part IV : COINDS/26/1986-87].
: N.A. means Not Available.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	29.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Stack Emission

Sample ID No.	:	ENV/77/Aug./A/XI	Report No.	:	ENV/77/Aug./TR(A)/XI/21-22

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	:	Iron Circuit			
Shape of Stack	:	Circular	Height of Stack (mtr.) (from G. L.)	:	28.0
Materials of Construction	:	M.S.	Stack I.D. at sampling point (mtr.)	:	0.75
Capacity	:	--	Height of sampling port (mtr.) (from G.L.)	:	12.0
Emission Due to	:	During Processing			
Fuel Used	:	N.A.	Permanent Platform & Ladder	:	Yes
Working Fuel Consumption	:	Nil			
Pollution Control Device	:	Bag Filter			

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.		RESULTS	LIMIT
1.	Flue Gas Temperature	^{0}C	IS : 11255 (Part 1)	:	50.0	N.A.
2.	Barometric Pressure	mm of Hg.	--	:	752.0	N.A.
3.	Velocity of Gas flow	m/s	IS : 11255 (Part 3)	:	10.01	N.A.
4.	Quantity of Gas flow	Nm^3/hr.	IS : 11255 (Part III)	:	14517.41	N.A.
5.	Concentration of Particulate Matter	mg/Nm^3	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11 (Vol. 3 11.07) : 2011	:	26.12	50.0

Remarks : Limit as per CPCB [Emission Regulation Part IV : COINDS/26/1986-87].
: N.A. means Not Available.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	29.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Stack Emission

Sample ID No.	:	ENV/77/Aug./A/XII	Report No.	:	ENV/77/Aug./TR(A)/XII/21-22

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	:	Stock House			
Shape of Stack	:	Circular	Height of Stack (mtr.) (from G. L.)	:	28.0
Materials of Construction	:	M.S.	Stack I.D. at sampling point (mtr.)	:	0.75
Capacity	:	--	Height of sampling port (mtr.) (from G.L.)	:	12.0
Emission Due to	:	During Processing			
Fuel Used	:	N.A.	Permanent Platform & Ladder	:	Yes
Working Fuel Consumption	:	Nil			
Pollution Control Device	:	Bag Filter			

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.		RESULTS	LIMIT
1.	Flue Gas Temperature	^{0}C	IS : 11255 (Part 1)	:	45.0	N.A.
2.	Barometric Pressure	mm of Hg.	--	:	752.0	N.A.
3.	Velocity of Gas flow	m/s	IS : 11255 (Part 3)	:	9.19	N.A.
4.	Quantity of Gas flow	Nm^3/hr.	IS : 11255 (Part III)	:	13554.84	N.A.
5.	Concentration of Particulate Matter	mg/Nm^3	IS 11255 (Part – 1) 1985 RA 2003 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11 (Vol. 3 11.07) : 2011	:	24.05	50.0

Remarks : Limit as per CPCB [Emission Regulation Part IV : COINDS/26/1986-87].
: N.A. means Not Available.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

ANNEXURE 5

TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	28.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Work Zone		
Sample ID No.	:	ENV/77/Aug./A/XII	Report No.	:	ENV/77/Aug./TR(A)/XII/21-22					

A] GENERAL INFORMATION

1.	Location of Sampling	:	Inside the Plant (Near Induction Furnace Area)
2.	Duration of Sampling	:	08 hrs. (10:40 a.m. – 06:40 p.m.)

B] METEOROLOGICAL INFORMATION

1.	Average Temperature (^{0}C)	:	36.0
2.	Average Relative Humidity (%)	:	68.0
3.	Barometric Pressure (mm of Hg)	:	753.0
4.	Smell or Odour	:	No Remarkable Smell

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS	LIMIT
1.	Concentration of SPM	µg/m^3	NIOSH 0500 : 1994	481.59	5000.0

Remarks : Limit as per The Factory Act – 1949.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	28.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Work Zone		
Sample ID No.	:	ENV/77/Aug./A/XII	Report No.	:	ENV/77/Aug./TR(A)/XII/21-22					

A] GENERAL INFORMATION

1.	Location of Sampling	:	Inside the Plant (Near Induction Furnace Area)
2.	Duration of Sampling	:	08 hrs. (10:40 a.m. – 06:40 p.m.)

B] METEOROLOGICAL INFORMATION

1.	Average Temperature (^{0}C)	:	36.0
2.	Average Relative Humidity (%)	:	68.0
3.	Barometric Pressure (mm of Hg)	:	753.0
4.	Smell or Odour	:	No Remarkable Smell

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS	LIMIT
2.	Concentration of RPM	µg/m^3	IS 5182 (PART 23) : 2006	210.76	N.A.
3.	Concentration of SO_2	µg/m^3	IS 5182 (Part 2) 2001 & ASTM D 2914-01 reapproved 2007: Sec. 11 (Vol. 11.07) : 2011	13.0	N.A.
4.	Concentration of NO_2	µg/m^3	IS 5182 (Part 6) 2006 & ASTM D 1607-91 reapproved 2005 : Sec. 11 (Vol. 11.07) : 2011	32.80	N.A.

Remarks : N.A. means Not Available.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	28.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Work Zone		
Sample ID No.	:	ENV/77/Aug./A/XIII	Report No.	:	ENV/77/Aug./TR(A)/XIII/21-22					

A] GENERAL INFORMATION

1.	Location of Sampling	:	Inside the Coal Shed
2.	Duration of Sampling	:	08 hrs. (11:00 a.m. – 07:00 p.m.)

B] METEOROLOGICAL INFORMATION

1.	Average Temperature (^{0}C)	:	35.0
2.	Average Relative Humidity (%)	:	70.0
3.	Barometric Pressure (mm of Hg)	:	753.0
4.	Smell or Odour	:	No Remarkable Smell

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS	LIMIT
1.	Concentration of SPM	µg/m^3	NIOSH 0500 : 1994	380.50	5000.0

Remarks : Limit as per The Factory Act – 1949.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	28.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Work Zone		
Sample ID No.	:	ENV/77/Aug./A/XIII	Report No.	:	ENV/77/Aug./TR(A)/XIII/21-22					

A] GENERAL INFORMATION

1.	Location of Sampling	:	Inside the Coal Shed
2.	Duration of Sampling	:	08 hrs. (11:00 a.m. – 07:00 p.m.)

B] METEOROLOGICAL INFORMATION

1.	Average Temperature (^{0}C)	:	35.0
2.	Average Relative Humidity (%)	:	70.0
3.	Barometric Pressure (mm of Hg)	:	753.0
4.	Smell or Odour	:	No Remarkable Smell

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS	LIMIT
2.	Concentration of RPM	µg/m^3	IS 5182 (PART 23) : 2006	176.48	N.A.
3.	Concentration of SO_2	µg/m^3	IS 5182 (Part 2) 2001 & ASTM D 2914-01 reapproved 2007: Sec. 11 (Vol. 11.07) : 2011	11.14	N.A.
4.	Concentration of NO_2	µg/m^3	IS 5182 (Part 6) 2006 & ASTM D 1607-91 reapproved 2005 : Sec. 11 (Vol. 11.07) : 2011	29.58	N.A.

Remarks : N.A. means Not Available.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	28.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Work Zone		
Sample ID No.	:	ENV/77/Aug./A/XIV	Report No.	:	ENV/77/Aug./TR(A)/XIV/21-22					

A] GENERAL INFORMATION

1.	Location of Sampling	:	Raw Materials Handling Area (Iron Ore Section)
2.	Duration of Sampling	:	08 hrs. (11:30 a.m. – 07:30 p.m.)

B] METEOROLOGICAL INFORMATION

1.	Average Temperature (^{0}C)	:	35.0
2.	Average Relative Humidity (%)	:	76.0
3.	Barometric Pressure (mm of Hg)	:	753.0
4.	Smell or Odour	:	No Remarkable Smell

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS	LIMIT
1.	Concentration of SPM	µg/m^3	NIOSH 0500 : 1994	426.74	5000.0

Remarks : Limit as per The Factory Act – 1949.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Sampling Date	:	28.08.2021
			Period of Analysis	:	31.08.2021 – 01.09.2021
			Date of Issue	:	03.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Work Zone

Sample ID No.	:	ENV/77/Aug./A/XIV	Report No.	:	ENV/77/Aug./TR(A)/XIV/21-22

A] GENERAL INFORMATION

1.	Location of Sampling	:	Raw Materials Handling Area (Iron Ore Section)
2.	Duration of Sampling	:	08 hrs. (11:30 a.m. – 07:30 p.m.)

B] METEOROLOGICAL INFORMATION

1.	Average Temperature (^{0}C)	:	35.0
2.	Average Relative Humidity (%)	:	76.0
3.	Barometric Pressure (mm of Hg)	:	753.0
4.	Smell or Odour	:	No Remarkable Smell

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS	LIMIT
2.	Concentration of RPM	µg/m^3	IS 5182 (PART 23) : 2006	192.45	N.A.
3.	Concentration of SO_2	µg/m^3	IS 5182 (Part 2) 2001 & ASTM D 2914-01 reapproved 2007: Sec. 11 (Vol. 11.07) : 2011	7.42	N.A.
4.	Concentration of NO_2	µg/m^3	IS 5182 (Part 6) 2006 & ASTM D 1607-91 reapproved 2005 : Sec. 11 (Vol. 11.07) : 2011	28.43	N.A.

Remarks : N.A. means Not Available.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manger)

ANNEXURE 6

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ISO 9001:2015 Certified, OHSAS 45001:2018 Certified

ULR NO – TC510921000001020F

Format No. : EC/TRT/42/FM/06

TEST REPORT

Report Release Date	: 15.12.2021	Sample Ref. No.(ARF)	: EC/ARF/29/211252
Test Report No	: EC/TR/42/12261	Source of Sample	: Steel Plant
Type of Sample	: Ground Water	Sampling Date	: 14.12.2021
Sample Collected by	: Party	Period of Analysis	: 14.12.21 to 15.12.21
Sample Details	: Bore Well No – 1	Sampling Location	: Bore Well No – 1
Name & Address	: **Maan Steel & Power Limited** Jamuria Industrial Area P.O – Ekra, P.S – Jamuria Dist. – Paschim Barddhaman West Bengal	Sample Condition	: Sealed & Preserved
		Sample Stamped as	: "MSPL – 123"
		Sample Drawn By	: Party
		Remarks	: ----
		Sampling Plan & Procedure	: EC/SOP/03/01
		Deviation if any	: None

Sl. No.	Parameters	Unit	Test Method (APHA 23rd Edition)	Standards (IS:10500)	Results
1	pH at 24.5 ^{0}C		4500-H^+ B	6.5 – 8.5	7.41
2	TDS	mg/l	2540 C	500.0	458.80
3	Arsenic	mg/l	3500 – As B	0.01	< 0.01
4	Total Alkalinity (as $CaCO_3$)	mg/l	2320 B	200.0	128.10
5	Chloride (as Cl^-)	mg/l	4500 – Cl^- B	250.0	36.91
6	Total Hardness (as $CaCO_3$)	mg/l	2340 C	200.0	159.12
7	Calcium (as Ca^{2+})	mg/l	3500 – Ca B	75.0	49.06
8	Sulphate (as SO_4^-)	mg/l	4500 – SO_4^{2-} E	200.0	53.98
9	Iron (as Fe)	mg/l	3500 – Fe B	0.3	0.21
10	Magnesium (as Mg)	mg/l	3500 – Mg B	30.0	8.92

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.
3. The Test report shall not be reproduced, without the written approval of laboratory.

Authorised Signatory
Niranjan Lal Agarwalla
B Tech MS (USA), A.M.I.E
Authorised Signatory

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Dist. Burdwan (West Bengal)

ULR NO – TC510921000001020P

Format No. : EC/TRT/42/FM/06

TEST REPORT

Report Release Date	: 15.12.2021	Sample Ref. No.(ARF)	: EC/ARF/29/211252
Test Report No	: EC/TR/42/12261/B	Source of Sample	: Steel Plant
Type of Sample	: Ground Water	Sampling Date	: 14.12.2021
Sample Collected by	: Party	Period of Analysis	: 14.12.21 to 15.12.21
Sample Details	: Bore Well No – 1	Sampling Location	: Bore Well No – 1
Name & Address	: **Maan Steel & Power Limited** Jamuria Industrial Area P.O – Ekra, P.S – Jamuria Dist. – Paschim Barddhaman West Bengal	Sample Condition	: Sealed & Preserved
		Sample Stamped as	: "MSPL – 123"
		Sample Drawn By	: Party
		Remarks	: ----
		Sampling Plan & Procedure	: EC/SOP/03/01
		Deviation if any	: None

Sl. No.	Parameters	Unit	Test Method (APHA 23rd Edition)	Standards (IS:10500)	Results
11	T. Coliform	MPN/100ml	9221 B	Not Detectable	Not Detected

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.
3. The Test report shall not be reproduced, without the written approval of laboratory.

Authorised Signatory

anjan Lal Agarwalla
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Authorised Signatory

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ULR NO – TC510921000001021F

Format No. : EC/TRT/42/FM/06

TEST REPORT

Report Release Date	: 15.12.2021	Sample Ref. No.(ARF)	: EC/ARF/29/211252
Test Report No	: EC/TR/42/12262	Source of Sample	: Steel Plant
Type of Sample	: Ground Water	Sampling Date	: 14.12.2021
Sample Collected by	: Party	Period of Analysis	: 14.12.21 to 15.12.21
Sample Details	: Bore Well No – 2	Sampling Location	: Bore Well No – 2
Name & Address	: **Maan Steel & Power Limited** Jamuria Industrial Area P.O – Ekra, P.S – Jamuria Dist. – Paschim Barddhaman West Bengal	Sample Condition	: Sealed & Preserved
		Sample Stamped as	: "MSPL – 124"
		Sample Drawn By	: Party
		Remarks	: ----
		Sampling Plan & Procedure	: EC/SOP/03/01
		Deviation if any	: None

Sl. No.	Parameters	Unit	Test Method (APHA 23rd Edition)	Standards (IS:10500)	Results
1	pH at 24.6 ^{0}C		4500-H^+ B	6.5 – 8.5	7.29
2	TDS	mg/l	2540 C	500.0	471.60
3	Arsenic	mg/l	3500 – As B	0.01	< 0.01
4	Total Alkalinity (as $CaCO_3$)	mg/l	2320 B	200.0	134.40
5	Chloride (as Cl^-)	mg/l	4500 – Cl^- B	250.0	31.08
6	Total Hardness (as $CaCO_3$)	mg/l	2340 C	200.0	165.24
7	Calcium (as Ca^{2+})	mg/l	3500 – Ca B	75.0	50.69
8	Sulphate (as SO_4^-)	mg/l	4500 – SO_4^{2-} E	200.0	57.48
9	Iron (as Fe)	mg/l	3500 – Fe B	0.3	0.19
10	Magnesium (as Mg)	mg/l	3500 – Mg B	30.0	9.42

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.
3. The Test report shall not be reproduced, without the written approval of laboratory.

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Manoj Talkies, (Basement Floor)
Kumarpur, Asansol - 713304
Dist. Burdwan (West Bengal)

ULR NO – TC510921000001021P Format No. : EC/TRT/42/FM/06

TEST REPORT

Report Release Date	: 15.12.2021	Sample Ref. No.(ARF)	: EC/ARF/29/211252
Test Report No	: EC/TR/42/12262/B	Source of Sample	: Steel Plant
Type of Sample	: Ground Water	Sampling Date	: 14.12.2021
Sample Collected by	: Party	Period of Analysis	: 14.12.21 to 15.12.21
Sample Details	: Bore Well No – 2	Sampling Location	: Bore Well No – 2
Name & Address	: **Maan Steel & Power Limited** Jamuria Industrial Area P.O – Ekra, P.S – Jamuria Dist. – Paschim Barddhaman West Bengal	Sample Condition	: Sealed & Preserved
		Sample Stamped as	: "MSPL – 124"
		Sample Drawn By	: Party
		Remarks	: ----
		Sampling Plan & Procedure	: EC/SOP/03/01
		Deviation if any	: None

Sl. No.	Parameters	Unit	Test Method (APHA 23rd Edition)	Standards (IS:10500)	Results
11	T. Coliform	MPN/100ml	9221 B	Not Detectable	Not Detected

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.
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ULR NO – TC510921000001022F

Format No. : EC/TRT/42/FM/06

TEST REPORT

Report Release Date	: 15.12.2021	Sample Ref. No.(ARF)	: EC/ARF/29/211252
Test Report No	: EC/TR/42/12264	Source of Sample	: Steel Plant
Type of Sample	: Ground Water	Sampling Date	: 14.12.2021
Sample Collected by	: Party	Period of Analysis	: 14.12.21 to 15.12.21
Sample Details	: Bore Well No – 3	Sampling Location	: Bore Well No – 3
Name & Address	: **Maan Steel & Power Limited** Jamuria Industrial Area P.O – Ekra, P.S – Jamuria Dist. – Paschim Barddhaman West Bengal	Sample Condition	: Sealed & Preserved
		Sample Stamped as	: "MSPL – 125"
		Sample Drawn By	: Party
		Remarks	: ----
		Sampling Plan & Procedure	: EC/SOP/03/01
		Deviation if any	: None

Sl. No.	Parameters	Unit	Test Method (APHA 23rd Edition)	Standards (IS:10500)	Results
1	pH at 24.5 ^{0}C		4500-H^+ B	6.5 – 8.5	7.21
2	TDS	mg/l	2540 C	500.0	439.50
3	Arsenic	mg/l	3500 – As B	0.01	< 0.01
4	Total Alkalinity (as $CaCO_3$)	mg/l	2320 B	200.0	121.80
5	Chloride (as Cl^-)	mg/l	4500 – Cl^- B	250.0	39.82
6	Total Hardness (as $CaCO_3$)	mg/l	2340 C	200.0	148.92
7	Calcium (as Ca^{2+})	mg/l	3500 – Ca B	75.0	42.52
8	Sulphate (as SO_4^-)	mg/l	4500 – SO_4^{2-} E	200.0	48.60
9	Iron (as Fe)	mg/l	3500 – Fe B	0.3	0.23
10	Magnesium (as Mg)	mg/l	3500 – Mg B	30.0	10.41

1. Test values are reported based on the samples received.
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ULR NO – TC510921000001022P

Format No. : EC/TRT/42/FM/06

TEST REPORT

Report Release Date	: 15.12.2021	Sample Ref. No.(ARF)	: EC/ARF/29/211252
Test Report No	: EC/TR/42/12264/B	Source of Sample	: Steel Plant
Type of Sample	: Ground Water	Sampling Date	: 14.12.2021
Sample Collected by	: Party	Period of Analysis	: 14.12.21 to 15.12.21
Sample Details	: Bore Well No – 3	Sampling Location	: Bore Well No – 3
Name & Address	: **Maan Steel & Power Limited** Jamuria Industrial Area P.O – Ekra, P.S – Jamuria Dist. – Paschim Barddhaman West Bengal	Sample Condition	: Sealed & Preserved
		Sample Stamped as	: "MSPL – 125"
		Sample Drawn By	: Party
		Remarks	: ----
		Sampling Plan & Procedure	: EC/SOP/03/01
		Deviation if any	: None

Sl. No.	Parameters	Unit	Test Method (APHA 23rd Edition)	Standards (IS:10500)	Results
11	T. Coliform	MPN/100ml	9221 B	Not Detectable	Not Detected

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.
3. The Test report shall not be reproduced, without the written approval of laboratory.

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ULR NO – TC510921000001023F

Format No. : EC/TRT/42/FM/06

TEST REPORT

Report Release Date	: 15.12.2021	Sample Ref. No.(ARF)	: EC/ARF/29/211252
Test Report No	: EC/TR/42/12265	Source of Sample	: Steel Plant
Type of Sample	: Ground Water	Sampling Date	: 14.12.2021
Sample Collected by	: Party	Period of Analysis	: 14.12.21 to 15.12.21
Sample Details	: Bore Well No – 4	Sampling Location	: Bore Well No – 4
Name & Address	: **Maan Steel & Power Limited** Jamuria Industrial Area P.O – Ekra, P.S – Jamuria Dist. – Paschim Barddhaman West Bengal	Sample Condition	: Sealed & Preserved
		Sample Stamped as	: "MSPL – 126"
		Sample Drawn By	: Party
		Remarks	: ----
		Sampling Plan & Procedure	: EC/SOP/03/01
		Deviation if any	: None

Sl. No.	Parameters	Unit	Test Method (APHA 23rd Edition)	Standards (IS:10500)	Results
1	pH at 24.5 ^{0}C		4500-H^+ B	6.5 – 8.5	7.40
2	TDS	mg/l	2540 C	500.0	484.10
3	Arsenic	mg/l	3500 – As B	0.01	< 0.01
4	Total Alkalinity (as $CaCO_3$)	mg/l	2320 B	200.0	151.20
5	Chloride (as Cl^-)	mg/l	4500 – Cl^- B	250.0	36.42
6	Total Hardness (as $CaCO_3$)	mg/l	2340 C	200.0	167.28
7	Calcium (as Ca^{2+})	mg/l	3500 – Ca B	75.0	52.33
8	Sulphate (as SO_4^-)	mg/l	4500 – SO_4^{2-} E	200.0	58.94
9	Iron (as Fe)	mg/l	3500 – Fe B	0.3	0.18
10	Magnesium (as Mg)	mg/l	3500 – Mg B	30.0	8.92

1. Test values are reported based on the samples received.
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ULR NO – TC510921000001023P

Format No. : EC/TRT/42/FM/06

TEST REPORT

Report Release Date	: 15.12.2021	Sample Ref. No.(ARF)	: EC/ARF/29/211252
Test Report No	: EC/TR/42/12265/B	Source of Sample	: Steel Plant
Type of Sample	: Ground Water	Sampling Date	: 14.12.2021
Sample Collected by	: Party	Period of Analysis	: 14.12.21 to 15.12.21
Sample Details	: Bore Well No – 4	Sampling Location	: Bore Well No – 4
Name & Address	: **Maan Steel & Power Limited** Jamuria Industrial Area P.O – Ekra, P.S – Jamuria Dist. – Paschim Barddhaman West Bengal	Sample Condition	: Sealed & Preserved
		Sample Stamped as	: "MSPL – 126"
		Sample Drawn By	: Party
		Remarks	: ----
		Sampling Plan & Procedure	: EC/SOP/03/01
		Deviation if any	: None

Sl. No.	Parameters	Unit	Test Method (APHA 23rd Edition)	Standards (IS:10500)	Results
11	T. Coliform	MPN/100ml	9221 B	Not Detectable	Not Detected

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.
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ULR NO – TC510921000001024F

Format No. : EC/TRT/42/FM/06

TEST REPORT

Report Release Date	: 15.12.2021	Sample Ref. No.(ARF)	: EC/ARF/29/211252
Test Report No	: EC/TR/42/12266	Source of Sample	: Steel Plant
Type of Sample	: Ground Water	Sampling Date	: 14.12.2021
Sample Collected by	: Party	Period of Analysis	: 14.12.21 to 15.12.21
Sample Details	: Bore Well No – 5	Sampling Location	: Bore Well No – 5
Name & Address	: **Maan Steel & Power Limited** Jamuria Industrial Area P.O – Ekra, P.S – Jamuria Dist. – Paschim Barddhaman West Bengal	Sample Condition	: Sealed & Preserved
		Sample Stamped as	: "MSPL – 127"
		Sample Drawn By	: Party
		Remarks	: ----
		Sampling Plan & Procedure	: EC/SOP/03/01
		Deviation if any	: None

Sl. No.	Parameters	Unit	Test Method (APHA 23rd Edition)	Standards (IS:10500)	Results
1	pH at 24.6 ^{0}C		4500-H^+ B	6.5 – 8.5	7.34
2	TDS	mg/l	2540 C	500.0	434.10
3	Arsenic	mg/l	3500 – As B	0.01	< 0.01
4	Total Alkalinity (as $CaCO_3$)	mg/l	2320 B	200.0	140.70
5	Chloride (as Cl^-)	mg/l	4500 – Cl^- B	250.0	29.14
6	Total Hardness (as $CaCO_3$)	mg/l	2340 C	200.0	155.04
7	Calcium (as Ca^{2+})	mg/l	3500 – Ca B	75.0	45.79
8	Sulphate (as SO_4^-)	mg/l	4500 – SO_4^{2-} E	200.0	54.58
9	Iron (as Fe)	mg/l	3500 – Fe B	0.3	0.20
10	Magnesium (as Mg)	mg/l	3500 – Mg B	30.0	9.91

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.
3. The Test report shall not be reproduced, without the written approval of laboratory.

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ULR NO – TC510921000001024P

Format No. : EC/TRT/42/FM/06

TEST REPORT

Report Release Date	: 15.12.2021	Sample Ref. No.(ARF)	: EC/ARF/29/211252
Test Report No	: EC/TR/42/12266/B	Source of Sample	: Steel Plant
Type of Sample	: Ground Water	Sampling Date	: 14.12.2021
Sample Collected by	: Party	Period of Analysis	: 14.12.21 to 15.12.21
Sample Details	: Bore Well No – 5	Sampling Location	: Bore Well No – 5
Name & Address	: **Maan Steel & Power Limited** Jamuria Industrial Area P.O – Ekra, P.S – Jamuria Dist. – Paschim Barddhaman West Bengal	Sample Condition	: Sealed & Preserved
		Sample Stamped as	: "MSPL – 127"
		Sample Drawn By	: Party
		Remarks	: ----
		Sampling Plan & Procedure	: EC/SOP/03/01
		Deviation if any	: None

Sl. No.	Parameters	Unit	Test Method (APHA 23rd Edition)	Standards (IS:10500)	Results
11	T. Coliform	MPN/100ml	922i B	Not Detectable	Not Detected

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.
3. The Test report shall not be reproduced, without the written approval of laboratory.

Authorised Signatory
Niranjan Lal Agarwalla
B Tech MS (USA), A.M.I.E
Authorised Signatory

FORMAT NO. ENV/FM/55

TEST REPORT

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Mouza – Ikhra, Ward No. – 9, P.O. – Nandi, Dist. – Paschim Bardhaman, Pin - 713362	Sampling Date	:	28.08.2021
			Period of Analysis	:	30.08.2021 – 06.09.2021
			Date of Issue	:	08.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Ground Water
Location	:	Near Main Gate (From Borewell)	Report No.	:	ENV/433/W/M/21-22			

SL. NO.	PARAMETERS	TEST METHOD	UNIT	RESULTS
1.	Colour	APHA 23rd Edition, 2120 B : 2017	--	1.0
2.	Odour	APHA 23rd Ed., 2150 B : 2017	--	Agreeable
3.	pH	APHA 23rd Ed., H^+B : 2017	--	6.80
4.	Taste	APHA 23rd Ed., 2160 B : 2017	--	Acceptable
5.	Turbidity	APHA 23rd Ed., 2130 N : 2017	NTU	1.10
6.	Total Dissolved Solids	APHA 23rd ED., 2540-C : 2017	mg./l	710.0
7.	Aluminium	APHA 23rd Ed., 3500 Al-B : 2017	mg./l	<0.02
8.	Boron	APHA 23rd Ed., 3500 Al-B : 2017	mg./l	<0.1
9.	Calcium	APHA 23rd Ed., 3500 Ca-B : 2017	mg./l	65.73
10.	Chloride	APHA 23rd Ed., 4500Cl-B/D : 2017	mg./l	66.25
11.	Copper	APHA 23rd Ed., 3111B : 2017	mg./l	<0.04
12.	Fluoride	APHA 23rd Ed., 4500 F-D : 2017	mg./l	<0.1
13.	Free Residual Chlorine	APHA 23rd Ed., 4500 Cl-B : 2017	mg./l	<0.1
14.	Iron	APHA 23rd Ed., 3111B : 2017	mg./l	0.82
15.	Magnesium	APHA 23rd Ed., 3500 Mg-B : 2017	mg./l	11.04
16.	Manganese	APHA 23rd Ed., 3111B : 2017	mg./l	<0.05
17.	Mineral Oil	APHA 23rd Ed., 5520 B : 2017	mg./l	<0.01
18.	Nitrate	APHA 23rd Ed., 4500 NO_3 - E : 2017	mg./l	3.80
19.	Phenolic Compounds	APHA 23rd Ed., 5530 C : 2017	mg./l	<0.001
20.	Selenium	IS 15303: 2003, RA 2014	mg./l	<0.01
21.	Sulphate	APHA 23rd Ed., SO_4-E : 2017	mg./l	58.50
22.	Total Alkalinity	APHA 23rd Ed., 2320 B : 2017	mg./l	260.0
23.	Total Hardness	APHA 23rd Ed., 2340 C : 2017	mg./l	210.0
24.	Zinc	APHA 23rd Ed., 3111 B : 2017	mg./l	0.62
25.	Cadmium	APHA 23rd Ed., 3111 B : 2017	mg./l	<0.002
26.	Cyanide	APHA 23rd Ed., 4500 CN D/E/F : 2017	mg./l	<0.01
27.	Lead	APHA 23rd Ed., 3111 B : 2017	mg./l	<0.005
28.	Mercury	APHA 23rd Ed., 3111B : 2017	mg./l	<0.001
29.	Arsenic	IS 3025 (Part 37): 1988, RA 2014	mg./l	<0.01
30.	Total Chromium	APHA 23rd Ed., 3111 Cr-B : 2017	mg./l	<0.02

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manager)

FORMAT NO. ENV/FM/55

TEST REPORT

Name of the Industry	:	Maan Steel & Power Ltd.	Type of Industry	:	Integrated Steel Plant
Address	:	Jamuria Industrial Estate, Mouza – Ikhra, Ward No. – 9, P.O. – Nandi, Dist. – Paschim Bardhaman, Pin - 713362	Sampling Date	:	28.08.2021
			Period of Analysis	:	30.08.2021 – 31.08.2021
			Date of Issue	:	08.09.2021

Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Ground Water
Location	:	Near Main Gate (From Borewell)	Report No.	:	ENV/433/W/M/21-22			

SL. NO.	PARAMETERS	TEST METHOD	UNIT	RESULTS
1.	Total Coliform	9222B, APHA 23rd Ed., 2017	CFU/100ml.	<1.0
2.	E. Coli	9222I, APHA 23rd Ed., 2017	CFU/100ml.	<1.0

Remarks : CFU indicates Colony Forming Unit.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

Priyanka Mukherjee

(Priyanka Mukherjee)
(Technical Manager, Microbiology)

TEST REPORT

Name of the Industry	:	Maan Steel & Power Ltd.	Sampling Date	:	28.08.2021
			Period of Analysis	:	30.08.2021 – 04.09.2021
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Date of Issue	:	05.09.2021
Type of Sample	:	Rain Water (From Rain Water Collection Pond)	Report No.	:	ENV/433A/W/M/21-22

SL. NO.	PARAMETERS	UNIT	RESULTS
1.	Temperature	^{0}C	21.0
2.	Odour	--	Odourless
3.	Total Suspended Solids	mg./l	15.0
4.	pH	--	7.38
5.	Total Hardness	mg./l	25.0
6.	Calcium	mg./l	6.41
7.	Magnesium	mg./l	2.16
8.	Chloride	mg./l	8.62
9.	Iron	mg./l	0.06
10.	Salinity	mg./l	BDL
11.	Haxavalent Chromium	mg./l	BDL
12.	Total Chromium	mg./l	BDL
13.	Kjeldhal Nitrogen	mg./l	1.80
14.	Total Dissolved Solids	mg./l	50.0
15.	Phosphate	mg./l	0.80
16.	Zinc	mg./l	0.10
17.	Sulphide	mg./l	BDL
18.	Fluoride	mg./l	BDL
19.	Manganese	mg./l	BDL
20.	Bi-Carbonate	mg./l	34.16
21.	Sodium	mg./l	6.50
22.	Dissolved Oxygen	mg./l	8.20
23.	COD	mg./l	BDL
24.	BOD	mg./l	BDL
25.	Oil & Grease	mg./l	BDL
26.	Total Coliform	CFU/100 ml.	Absent
27.	Fecal Coliform	CFU/100 ml.	Absent

Remarks : a) BDL indicates Below Detection Limit.
b) CFU indicates Colony Forming Unit.

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manager)

ANNEXURE 7

FORMAT NO. ENV/FM/40

TEST REPORT

Name of the Industry	:	Maan Steel & Power Ltd.		Type of Industry	:	Integrated Steel Plant	
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301		Sampling Date	:	28.08.2021	
				Period of Analysis	:	30.08.2021 – 04.09.2021	
				Date of Issue	:	06.09.2021	
Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	:	Domestic Effluent Water (Grab)
Location	:	Final Domestic Outlet-Soak pit	Sample ID No.	: ENV/23A/Aug./W	Report No.	:	ENV/23A/Aug./TR(W)/21-22

SL. NO.	PARAMETERS	TEST METHOD	UNIT	RESULTS	LIMIT
1.	pH	4500 H^+B APHA 23rd Edition, 2017	-	6.82	5.5-9.0
2.	Total Suspended Solids	2540 D APHA 23rd Edition, 2017	mg/l	32.0	100.0
3.	Oil & Grease	5520 Oil B/D APHA 23rd Edition, 2017	mg/l	4.5	10.0
4.	Chemical Oxygen Demand	5200 COD B/C/D APHA 23rd Edition, 2017	mg/l	80.0	250.0
5.	Biochemical Oxygen Demand for 3 days at 27^0C	5210 BOD B APHA 23rd Edition, 2017	mg/l	26.0	30.0

Remarks : Limit as per Schedule VI inserted by Rule 2(d) of the Environment (Protection) Second Amendment Rules, 1993 notified vide G.S.R. 422(E) dated 19.05.1993, published in the Gazette No. 174 dated 19.05.1993.

Reviewed By :

(Durbadal Chakraborty, Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul, Quality Manager)

ANNEXURE 8

LECHATE STUDY REPORT

1.	Name of the Industry	:	Maan Steel & Power Ltd.
2.	Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301
3.	Date of sampling	:	28.08.2021
4.	Report No.	:	ENV/433B/W/M/21-22
5.	Reporting date	:	03.09.2021

Sl. No.	LOCATION	PARAMETERS (mg./ltr.)						
		Fe	Zn.	Cr.	Cu	Ni	Pb	Cd
1.	Near DRI	1.80	0.90	<0.02	0.42	<0.01	<0.005	<0.002
2.	Near Rolling Mill	1.90	1.58	<0.02	0.60	<0.01	<0.005	<0.002
3.	Near SMS	2.10	1.40	<0.02	0.68	<0.01	<0.005	<0.002
4.	Near CPP	0.56	1.20	<0.02	0.40	<0.01	<0.005	<0.002

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manager)

ANNEXURE 9

MAKE UP WATER REQUIREMENT FOR THE PROJECT

Consumption Unit	Fresh Make-Up	Recycled/ Make-Up	Waste water Generation	Utilisation/ Method of disposal
DRI Kilns	300	60	120	Recycle / loss
SMS +Ferro alloys	210	40	85	Recycle/ loss
Rolling Mill	325	65	130	Recycle/ loss
CPP Boiler feed DM Plant CPP cooling	675		190	Recycle
Ash handling	-	200	100	Recycle / loss
Potable/ domestic	40	-	20	Recycle / loss
Miscellaneous		50	30	Recycle / loss
WTP Loss			81	
Dust suppression		115	-	Loss
Greenbelt Development		50	-	Loss
Total	1632	675	675	

After actual running of plant with water audit the amount can be further reduced.

Maan Steel & Power Limited

Director / Authorised Signatory

FORM 4

[See Rules 9(3) and 10(5)]

(EMBLEM OR HOLOGRAM OF THE CONCERNED AUTHORITY)

066784

PERMIT FOR SINKING OF NEW WELL

[U/S 7(3)(b) / 7(4)(b) / 7(5)(a) of the West Bengal Ground Water Resources (Management, Control and Regulation) Act 2005.]

P- 1791

PERMIT NO **P02130310005900000001TSE**

1.	(a) Name of the applicant (user)	:	Shri/Smt. **MAAN STEEL & POWER LTD.**
	(b) Son / Daughter of	:	
	(c) Address of the applicant	:	**JAMURIA INDUSTRIAL ESTATE, NANDI, JAMURIA**
	(d) Category of farmer (Please tick) (in case of irrigation well)	:	Small Farmer / Marginal Farmer / Others
	(e) Serial No. of application Form and date of submission	:	BP/A0149,SL.NO:57; DT. 18.02.2016
	(f) Specimen signature of the user	:	Director / Authorised Signatory
2.	Location particulars---		
	(a) District		BURDWAN
	(b) Block, Mouza, J. L. No. , Plot No.	:	JAMURIA,IKHRA,38,59
	(c) Municipality / Corporation Ward No. / Borough No., Holding No.	:	
3.	Particulars of the proposed well and pumping device---		
	(a) Type of the well	:	TUBEWELL
	(b) Approx. depth of the well (m)	:	100m
	(c) Purpose of the well	:	INDUSTRIAL
	(d) Assembly size (for tube well)	:	100 mm. X 150 mm.
	(e) Approx. strainer length (for tube well)	:	12 m.
	(f) Diameter (for dug well)	:	m.
	(g) Type of pump to be used	:	SUBMERSIBLE
	(h) H. P. of the pump	:	3.5 H.P
	(i) Operational device	:	Electric Motor
	(j) Rate of withdrawal (m3 / hr.)	:	20 m^3/hr
	(k) Maximum allowable running hours per day	:	3 Hour Per Day

This permit authorizes the owner applicant (user) to sink a well in the location specified at S1. (2) for extraction of ground water at a rate not exceeding that as shown at S1. (3) (j) and for running hours / day as shown at S1. (3) (K), and is valid subject to the observance of the conditions stated overleaf.

Place : Burdwan

Date : ~~29/06/2016~~ 28/12/2017

OFFICE SEAL

28/12/2017

Geologist, SWID &
Member Secretary, District Level
Ground Water Resources Development Authority
Burdwan-713101

Signature of the Issuing Authority and Designation

Conditions :

(1) In case of any change of ownership of the proposed well, fresh registration has to be obtained.

(2) No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at S1. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this permit.

(3) In case, any of the particulars / information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.

(4) Any other condition imposed by the concerned Authority.

OFFICE SEAL

B.C.L./4/50,000/'06

CONDITIONALITIES FOR PACKAGE DRINKING WATER PROJECTS AND INDUSTRIES/ INFRASTRUCTURES:

1. Roof Top Rain Water harvesting for Surface Storage.
2. Excavation of pond of size 150 ft. x 50ft. with 2 m. depth.
3. Chemical Quality Test Report from BIS approved Laboratory in each year to be submitted to the Geologist & Member Secretary, DLA.
4. Arrangement of Water Meter at the outlet of Tube Well discharge to be monitored by Govt. Officials as assigned by DLA.
5. The enhanced rate if any in future (including the rates revised retrospectively) of fees/ charges/ taxes for drawls of ground water on annual basis, should be borne by applications for operating their tube wells in a continuous manner.

28/12/2017

Geologist, SWID &
Member Secretary, District Level
Ground Water Resources Development Authority
Burdwan-713101

BP/A 0149 SCM-57

T.R. FORM NO. 7

[See sub-rule (2) (b) of T.R. 3.06]

Challan for Deposit of Money in the account of GOVERNMENT OF WEST BENGAL

1. Name of the Bank & Branch: State Bank of India, Burdwan Main Branch (0048)
2. (a) Name of the Treasury : Burdwan Treasury - II, Burdwan
   (b) Treasury Code: B U B

3. Account Code : 0 7 0 2 8 0 8 0 0 0 0 2 2 7
   (14- Digits must be filled up properly)

4. Detail Head of Account: **0702-80-800 Other receipts -002-other items 27 other -receipts**

5. (a) Amount : Rs 1000/-
   (b) in words : Rupees: One thousand only.

6. By whome tendered - Name & Address:
   Macin Steel & Power Ltd. 58/1 Sarat bone Rd Kol-25

7. Name / Designation & Address of the Departmental Officer on whose behalf / favour money is paid:

   Geologist Member Sacretary,SWID,Burdwan
   Spandan Comlplex, 1st. Floor, Burdwan

8. (a) Particulars & authority of Deposit: **Notification No. 2109 WI-BP dt. 31st July 2006**

   * (b) T.V. No. & Date of A.C. Bill: **T.V. No. 18 dated 21.03.2013 of Burdwan Treasury-II**

OFFICE OF THE GEOLOGIST ... SUB-DIVISION ... BURDWAN ... GOVT OF W.B.

9. Accounts Officer by whome adjustable : Accountant General (A&E), West Bengal.

Verified 28/12/17

Signature of Departmental / Treasury Officer

Depositor's Signature

Date: 28/12/17

Received payment. Rs 1000/-

579

Treasury Receipted Challan No.

Bank Scroll Serial No.

ID NO.-5059143
BASAB BISWAS
S. B. I., BURDWAN BRANCH
28 Dec ...
PAY CASH / TRANSFER / REFERAL
INITIAL

Receipt by Bank / Treasury

Signature with seal of the Bank

Date:

Date:

1* In respect of Challan relating to refund of unspent amount of A.C. Bill

FORM 4

[See Rules 9(3) and 10(5)]

066785

(EMBLEM OR HOLOGRAM OF THE CONCERNED AUTHORITY)

PERMIT FOR SINKING OF NEW WELL

[U/S 7(3)(b) / 7(4)(b) / 7(5)(a) of the West Bengal Ground Water Resources (Management, Control and Regulation) Act 2005.]

P- 1792

PERMIT NO **P02130310000902150O1TSE**

1. (a) Name of the applicant (user) : Shri/Smt. **MAAN STEEL& POWER LTD.**
   (b) Son / Daughter of :
   (c) Address of the applicant : **JAMURIA INDUSTRIAL ESTATE, NANDI, JAMURIA**
   (d) Category of farmer (Please tick) (in case of irrigation well) : Small Farmer / Marginal Farmer / Others
   (e) Serial No. of application Form and date of submission : BP/A0149,SL.NO:55; DT. 18.02.2016
   (f) Specimen signature of the user : Director / Authorised Signatory
2. Location particulars---
   (a) District : BURDWAN
   (b) Block, Mouza, J. L. No. , Plot No. : JAMURIA,IKHRA,38,09/2150
   (c) Municipality / Corporation Ward No. / Borough No., Holding No. :
3. Particulars of the proposed well and pumping device---
   (a) Type of the well : TUBEWELL
   (b) Approx. depth of the well (m) : 100m
   (c) Purpose of the well : INDUSTRIAL
   (d) Assembly size (for tube well) : 100 mm. X 150 mm.
   (e) Approx. strainer length (for tube well) : 12 m.
   (f) Diameter (for dug well) : m.
   (g) Type of pump to be used : SUBMERSIBLE
   (h) H. P. of the pump : 3.5 H.P
   (i) Operational device : Electric Motor
   (j) Rate of withdrawal (m3 / hr.) : 20 m^3/hr
   (k) Maximum allowable running hours per day : 3 Hour Per Day

This permit authorizes the owner applicant (user) to sink a well in the location specified at S1. (2) for extraction of ground water at a rate not exceeding that as shown at S1. (3) (j) and for running hours / day as shown at S1. (3) (K), and is valid subject to the observance of the conditions stated overleaf.

28/12/2017

Geologist, SWID & Ex-Officio Member Secretary, District Level Ground Water Resources Development Authority Burdwan-713101

Signature of the Issuing Authority and Designation

Place : Burdwan

Date : ~~29/06/2016~~ 28/12/2017

OFFICE SEAL

Conditions :

(1) In case of any change of ownership of the proposed well, fresh registration has to be obtained.
(2) No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at S1. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this permit.
(3) In case, any of the particulars / information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
(4) Any other condition imposed by the concerned Authority.

OFFICE SEAL

B.C.L./4/50,000/'06

CONDITIONALITIES FOR PACKAGE DRINKING WATER PROJECTS AND INDUSTRIES/ INFRASTRUCTURES:

1. Roof Top Rain Water harvesting for Surface Storage.
2. Excavation of pond of size 150 ft. x 50ft. with 2 m. depth.
3. Chemical Quality Test Report from BIS approved Laboratory in each year to be submitted to the Geologist & Member Secretary, DLA.
4. Arrangement of Water Meter at the outlet of Tube Well discharge to be monitored by Govt. Officials as assigned by DLA.
5. The enhanced rate if any in future (including the rates revised retrospectively) of fees/ charges/ taxes for drawls of ground water on annual basis, should be borne by applications for operating their tube wells in a continuous manner.

28/12/2017

Geologist, SWID &
Member Secretary, District Level
Ground Water Resources Development Authority
Burdwan-713101

B7 | A0149 Sl no 55

T.R. FORM NO. 7

[See sub-rule (2) (b) of T.R. 3.06]

Challan for Deposit of Money in the account of GOVERNMENT OF WEST BENGAL

1. Name of the Bank & Branch: State Bank of India, Burdwan Main Branch (0048)
2. (a) Name of the Treasury : Burdwan Treasury - II, Burdwan
   (b) Treasury Code: B U B

3. Account Code : 0 7 0 2 8 0 8 0 0 0 0 2 2 7
   (14- Digits must be filled up properly)

4. Detail Head of Account: **0702-80-800 Other receipts -002-other items 27 other -receipts**

5. (a) Amount : Rs 10000/-
   (b) in.words : Rupees: one thousand only.

6. By whome tendered - Name & Address:
   Maan Steel & Power Ltd 58/1 Sarat Bose Rd V-25

7. Name / Designation & Address of the Departmental Officer on whose behalf / favour money is paid:

   Geologist Member Sacretary,SWID,Burdwan
   Spandan Comlplex, 1st. Floor, Burdwan

8. (a) Particulars & authority of Deposit: **Notification No. 2109 WI-BP dt. 31st July 2006**

   * (b) T.V. No. & Date of A.C. Bill: **T.V. No. 18 dated 21.03.2013 of Burdwan Treasury-II**

OFFICE OF THE GEOLOGIST * GEOLOGICAL SUB-DIVISION NO.1 BURDWAN * SWID GOVT. OF W.B.

9. Accounts Officer by whome adjustable : Accountant General (A&E), West Bengal.

Verified 28/12/17

Signature of Departmental / Treasury Officer

Depositor's Signature
Date: 28/12/17

576

Received payment.

Treasury Receipted Challan No.

ID NO.-50... BASAB BISWAS S.B.I., BURDWAN BRANCH 28 DEC ... PAY CASH / TRANSFER / REFERAL INITIAL SIGN

Bank Scroll Serial No.

Receipt by Bank / Treasury

Signature with seal of the Bank

Date:

Date:

1* In respect of Challan relating to refund of unspent amount of A.C. Bill

FORM 4

[See Rules 9(3) and 10(5)]

066786

(EMBLEM OR HOLOGRAM OF THE CONCERNED AUTHORITY)

PERMIT FOR SINKING OF NEW WELL

[U/S 7(3)(b) / 7(4)(b) / 7(5)(a) of the West Bengal Ground Water Resources (Management, Control and Regulation) Act 2005.]

P- 1793

PERMIT NO **P02130310007500000001TSE**

1.	(a) Name of the applicant (user)	:	Shri/Smt. **MAAN STEEL & POWER LTD.**
	(b) Son / Daughter of	:	
	(c) Address of the applicant	:	**JAMURIA INDUSTRIAL ESTATE, NANDI, JAMURIA**
	(d) Category of farmer (Please tick) (in case of irrigation well)	:	Small Farmer / Marginal Farmer / Others
	(e) Serial No. of application Form and date of submission	:	BP/A0149,SL.NO:54; DT. 18.02.2016
	(f) Specimen signature of the user	:	Director / Authorised Signatory
2.	Location particulars---		
	(a) District	:	BURDWAN
	(b) Block, Mouza, J. L. No. , Plot No.	:	JAMURIA,IKHRA,38,75
	(c) Municipality / Corporation Ward No. / Borough No., Holding No.	:	
3.	Particulars of the proposed well and pumping device---		
	(a) Type of the well	:	TUBEWELL
	(b) Approx. depth of the well (m)	:	100m
	(c) Purpose of the well	:	INDUSTRIAL
	(d) Assembly size (for tube well)	:	100 mm. X 150mm.
	(e) Approx. strainer length (for tube well)	:	12 m.
	(f) Diameter (for dug well)	:	m.
	(g) Type of pump to be used	:	SUBMERSIBLE
	(h) H. P. of the pump	:	3.5 H.P
	(i) Operational device	:	Electric Motor
	(j) Rate of withdrawal (m3 / hr.)	:	20 m^3/hr
	(k) Maximum allowable running hours per day	:	3 Hour Per Day

This permit authorizes the owner applicant (user) to sink a well in the location specified at S1. (2) for extraction of ground water at a rate not exceeding that as shown at S1. (3) (j) and for running hours / day as shown at S1. (3) (K), and is valid subject to the observance of the conditions stated overleaf.

OFFICE OF THE GEOLOGIST * GEOLOGICAL SUB-DIVISION NO. IIA, BURDWAN * OFFICE SEAL GOVT. OF W.B.

28/12/2017

Geologist, SWID &

Member Secretary, District Level

Signature of the Issuing Authority and Designation.

Ground Water Resources Development Authority

Burdwan-713101

Place : Burdwan

Date : ~~29/06/2016~~ 28/12/2017

Conditions :

(1) In case of any change of ownership of the proposed well, fresh registration has to be obtained.

(2) No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at S1. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this permit.

(3) In case, any of the particulars / information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.

(4) Any other condition imposed by the concerned Authority.

OFFICE OF THE SWID * GEOLOGICAL SUB-DIVISION NO. IIA, BURDWAN * OFFICE SEAL GOVT. OF W.B.

B.C.L./4/50,000/'06

CONDITIONALITIES FOR PACKAGE DRINKING WATER PROJECTS AND INDUSTRIES/ INFRASTRUCTURES:

1. Roof Top Rain Water harvesting for Surface Storage.
2. Excavation of pond of size 150 ft. x 50ft. with 2 m. depth.
3. Chemical Quality Test Report from BIS approved Laboratory in each year to be submitted to the Geologist & Member Secretary, DLA.
4. Arrangement of Water Meter at the outlet of Tube Well discharge to be monitored by Govt. Officials as assigned by DLA.
5. The enhanced rate if any in future (including the rates revised retrospectively) of fees/ charges/ taxes for drawls of ground water on annual basis, should be borne by applications for operating their tube wells in a continuous manner.

28/12/2017

Geologist, SWID &
Member Secretary, District Level
Ground Water Resources Development Authority
Burdwan-713101

BP/A 0149 Sl-54

T.R. FORM NO. 7

[See sub-rule (2) (b) of T.R. 3.06]

Challan for Deposit of Money in the account of GOVERNMENT OF WEST BENGAL

1. Name of the Bank & Branch: State Bank of India, Burdwan Main Branch (0048)
2. (a) Name of the Treasury : Burdwan Treasury - II, Burdwan
   (b) Treasury Code: B U B

3. Account Code : 0 7 0 2 8 0 8 0 0 0 0 2 2 7
   (14- Digits must be filled up properly)

4. Detail Head of Account: **0702-80-800 Other receipts -002-other items 27 other -receipts**

5. (a) Amount : Rs 1000/-
   (b) in words : Rupees: one thousand only.

6. By whome tendered - Name & Address:
   Maan Steel & Power Ltd. 58, Sarat Bose Rd. K-25

7. Name / Designation & Address of the Departmental Officer on whose behalf / favour money is paid:

   Geologist Member Sacretary,SWID,Burdwan
   Spandan Comlplex, 1st. Floor, Burdwan

8. (a) Particulars & authority of Deposit: **Notification No. 2109 WI-BP dt. 31st July 2006**

   * (b) T.V. No. & Date of A.C. Bill: **T.V. No. 18 dated 21.03.2013 of Burdwan Treasury-II**

OFFICE OF THE GEOLOGIST SWID GOVT. OF WEST BENGAL GEOLOGICAL SUB-DIVISION NO.IIA, BURDWAN

9. Accounts Officer by whome adjustable : Accountant General (A&E), West Bengal.

Verified 28/12/13

570

Signature of Departmental / Treasury Officer

Depositor's Signature

Date: 28/12/13

Received payment.

Treasury Receipted Challan No.

ID NO.-5059145 BASAB BISWAS S. B. I., BURDWAN BRANCH 28 DEC ... PAY CASH / TRANSFER / REFERAL SIGN..... INITIAL.....

Bank Scroll Serial No.

Rs 1000/-

Receipt by Bank / Treasury

Signature with seal of the Bank

Date:

Date:

1* In respect of Challan relating to refund of unspent amount of A.C. Bill

FORM 4

[See Rules 9(3) and 10(5)]

(EMBLEM OR HOLOGRAM OF THE CONCERNED AUTHORITY) 066783

PERMIT FOR SINKING OF NEW WELL

[U/S 7(3)(b) / 7(4)(b) / 7(5)(a) of the West Bengal Ground Water Resources (Management, Control and Regulation) Act 2005.]

P- 1790

PERMIT NO P02130310009200000001TSE

1.	(a) Name of the applicant (user)	:	Shri/Smt MAAN STEEL & POWER LTD.
	(b) Son / Daughter of	:	
	(c) Address of the applicant	:	JAMURIA INDUSTRIAL ESTATE, NANDI, JAMURIA
	(d) Category of farmer (Please tick) (in case of irrigation well)	:	Small Farmer / Marginal Farmer / Others
	(e) Serial No. of application Form and date of submission	:	BP/A0149,SL.NO:56; DT. 18.02.2016
	(f) Specimen signature of the user	:	Director / Authorised Signatory
2.	Location particulars---		
	(a) District		BURDWAN
	(b) Block, Mouza, J. L. No., Plot No.	:	JAMURIA,IKHRA,38,92
	(c) Municipality / Corporation Ward No. / Borough No., Holding No.	:	
3.	Particulars of the proposed well and pumping device---		
	(a) Type of the well	:	TUBEWELL
	(b) Approx. depth of the well (m)	:	100m
	(c) Purpose of the well	:	INDUSTRIAL
	(d) Assembly size (for tube well)	:	100 mm. X 150 mm.
	(e) Approx. strainer length (for tube well)	:	12 m.
	(f) Diameter (for dug well)	:	m.
	(g) Type of pump to be used	:	SUBMERSIBLE
	(h) H. P. of the pump	:	3.5 H.P
	(i) Operational device	:	Electric Motor
	(j) Rate of withdrawal (m3 / hr.)	:	20 m^3/hr
	(k) Maximum allowable running hours per day	:	3 Hour Per Day

This permit authorizes the owner applicant (user) to sink a well in the location specified at S1. (2) for extraction of ground water at a rate not exceeding that as shown at S1. (3) (j) and for running hours / day as shown at S1. (3) (K), and is valid subject to the observance of the conditions stated overleaf.

Place : Burdwan

Date : 28/12/2017 ~~29/06/2016~~

OFFICE SEAL

28/12/2017

Geologist, SWID & Member Secretary, District Level Ground Water Resources Development Authority Burdwan-713101

Signature of the Issuing Authority and Designation.

Conditions :

(1) In case of any change of ownership of the proposed well, fresh registration has to be obtained.

(2) No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at S1. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this permit.

(3) In case, any of the particulars / information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.

(4) Any other condition imposed by the concerned Authority.

OFFICE SEAL

B.C.L./4/50,000/'06

CONDITIONALITIES FOR PACKAGE DRINKING WATER PROJECTS AND INDUSTRIES/ INFRASTRUCTURES:

1. Roof Top Rain Water harvesting for Surface Storage.
2. Excavation of pond of size 150 ft. x 50ft. with 2 m. depth.
3. Chemical Quality Test Report from BIS approved Laboratory in each year to be submitted to the Geologist & Member Secretary, DLA.
4. Arrangement of Water Meter at the outlet of Tube Well discharge to be monitored by Govt. Officials as assigned by DLA.
5. The enhanced rate if any in future (including the rates revised retrospectively) of fees/ charges/ taxes for drawls of ground water on annual basis, should be borne by applications for operating their tube wells in a continuous manner.

28/12/2017

Geologist, SWID &
Member Secretary, District Level
Ground Water Resources Development Authority
Burdwan-713101

BF/A 0149 sl 56

T.R. FORM NO. 7

[See sub-rule (2) (b) of T.R. 3.06]

Challan for Deposit of Money in the account of GOVERNMENT OF WEST BENGAL

1. Name of the Bank & Branch: State Bank of India, Burdwan Main Branch (0048)
2. (a) Name of the Treasury : Burdwan Treasury - II, Burdwan
   (b) Treasury Code: B U B

3. Account Code : 0 7 0 2 8 0 8 0 0 0 0 2 2 7
   (14- Digits must be filled up properly)

4. Detail Head of Account: **0702-80-800 Other receipts -002-other items 27 other -receipts**

5. (a) Amount : Rs 1000/-
   (b) in words.: Rupees: one thousand only.

6. By whome tendered - Name & Address:
   Maan Steel & Power Ltd., 58/1 Sarat bose Rd. Kol-25

7. Name / Designation & Address of the Departmental Officer on whose behalf / favour money is paid:

   Geologist Member Sacretary,SWID,Burdwan
   Spandan Comlplex, 1st. Floor, Burdwan

8. (a) Particulars & authority of Deposit: **Notification No. 2109 WI-BP dt. 31st July 2006**

   * (b) T.V. No. & Date of A.C. Bill: **T.V. No. 18 dated 21.03.2013 of Burdwan Treasury-II**

9. Accounts Officer by whome adjustable : Accountant General (A&E), West Bengal.

OFFICE OF THE GEOLOGIST SWID GOVT OF INDIA BURDWAN

571

Verified 28/12/17

Signature of Departmental / Treasury Officer

Depositor's Signature
Date: 28/12/17

Received payment

ID NO.-5059143
BASAB BISWAS
S. B. I, BURDWAN BRANCH
28 DEC ...
PAY CASH / TRANSFER / REFERAL
SIGN. INITIAL

Treasury Receipted Challan No.

Bank Scroll Serial No.

Receipt by Bank / Treasury

Signature with seal of the Bank

Date:

Rs 1000/-

Date:

1** In respect of Challan relating to refund of unspent amount of A.C. Bill

P-348

72198

FORM 4

[See Rules 9(3) and 10(5)]

(EMBLEM OR HOLOGRAM OF THE CONCERNED AUTHORITY)

PERMIT FOR SINKING OF NEW WELL

[U/S 7(3)(b) / 7(4)(b) / 7(5)(a) of the West Bengal Ground Water Resources (Management, Control and Regulation) Act, 2005.]

PERMIT NO P021303100000001250 1TSE.

1.	(a) Name of the applicant (user)	:	Shri/Smt. *Amit Agarwal (Director)*
	(b) Son / Daughter of	:	*C/O Maan Steel & Power Ltd.*
	(c) Address of the applicant	:	*Vill+P.O ~~Bamunara~~ Ikra, Jamuria Industrial Estate*
	(d) Category of farmer (Please tick) (in case of irrigation well)	:	Small Farmer / Marginal Farmer / Others
	(e) Serial No. of application Form and date of submission	:	BP/A 0126,Sl No.28, Dated 26.06.09
	(f) Specimen signature of the user	:	
2.	Location particulars---		
	(a) District		
	(b) Block, Mouza, J. L. No. , Plot No.	:	*Jamuria, Ikra, 38,125*
	(c) Municipality / Corporation Ward No. / Borough No., Holding No.	:	
3.	Particulars of the proposed well and pumping device---		
	(a) Type of the well	:	*LDTW*
	(b) Approx. depth of the well (m)	:	*100mt(Approx)*
	(c) Purpose of the well	:	*Industrial*
	(d) Assembly size (for tube well)	:	mm. X mm. *150* *75*
	(e) Approx. strainer length (for tube well)	:	m. *15 mt.*
	(f) Diameter (for dug well)	:	m.
	(g) Type of pump to be used	:	*Submersible*
	(h) H. P. of the pump	:	*5 H.P*
	(i) Operational device	:	*Electric Motor*
	(j) Rate of withdrawal (m3 / hr.)	:	*15- 20 M^3/hr*
	(k) Maximum allowable running hours per day	:	*3-4hrs/day*

Mohinai 11/07/11

Geologist Member Secretary, District level Ground, Water Resource Development Authority, Burdwan

MAAN STEEL & POWER LTD.

Amit Agarwal

Director / Authorised Signatory.

Signature of the ... ed in th

This permit authorizes the owner applicant (user) to sink a well in the location specified at S1. (2) for extraction of ground water at a rate not exceeding that as shown at S1. (3) (j) and for running hours / day as shown at S1. (3) (K), and is valid subject to the observance of the conditions stated overleaf.

OFFICE OF THE GEOLOGIST ★ Geological Sub Div. No. II ★ Burdwan
OFFICE SEAL
S.W.I.D. Govt. of W.B.

Place : Burdwan

Date : 4/07/11.

Mohinai 4/07/11.

Signature of the Issuing Authority and Designation

Geologist Member Secretary, District level Ground, Water Resource Development Authority, Burdwan

Conditions :

(1) In case of any change of ownership of the proposed well, fresh registration has to be obtained.

(2) No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at S1. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this permit.

(3) In case, any of the particulars / information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.

(4) Any other condition imposed by the concerned Authority.

OFFICE OF THE GEOLOGIST ★ Geological Sub Div. No. II ★ Burdwan
S.W.I.D. OFFICE SEAL Govt. of W.B.

B.C.L./4/50,000/'06

ANNEXURE 10

TEST REPORT

Name of the Industry	:	Maan Steel & Power Ltd.	Sampling Date	:	28.08.2021
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Date of Issue	:	06.09.2021
Type of Sample	:	Slag	Report No.	:	ENV/433C/SL/M/21-22

Sl. No.	**PRAMETERS**	**LOCATION**		
		Slag of 4 x 15 MT Induction Furnace	**Slag of Rotary Kiln – 3 Accrilation due to Shut Down**	**Slag of Rotary Kiln – 1 Accrilation due to Shut Down**
1.	Total Chromium (mg./kg.)	1.50	1.12	1.10
2.	Lead (mg./kg.)	1.48	1.20	1.20
3.	Arsenic (mg./kg.)	<0.1	<0.1	<0.1
4.	Mercury (mg./kg.)	<0.01	<0.01	<0.01
5.	Cadmium (mg./kg.)	<0.02	<0.02	<0.02
6.	Barium (mg./kg.)	<1.0	<1.0	<1.0
7.	Selenium (mg./kg.)	<0.1	<0.1	<0.1
8.	Silver (mg./kg.)	<0.1	<0.1	<0.1

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manager)

ANNEXURE 11

TEST REPORT

Name of the Industry	:	Maan Steel & Power Ltd.	Sampling Date	:	28.08.2021
Address	:	Jamuria Industrial Estate, Jamuria, Paschim Burdwan – 713301	Date of Issue	:	06.09.2021
Type of Sample	:	Sludge	Report No.	:	ENV/433D/S/M/21-22

Sl. No.	**LOCATION**	**PARAMETERS (mg./kg.)**		
		Bed Sludge of GCT of Rotary Kiln-3	**Bed Sludge of GCT of Rotary Kiln-1 & 2**	**E.S.P Bed Sludge of Rotary Kiln – 1 & 2**
1.	pH	6.50	6.42	6.40
2.	Electrical Conductivity (µs/cm)	0.60	1.10	0.80
3.	Loss of Drying-105^{0}C Loss of Drying-550^{0}C	15.0% 3.5%	12.0% 3.2%	11.0% 3.0%
4.	Arsenic (mg./kg.)	<0.1	<0.1	<0.1
5.	Lead (mg./kg.)	2.60	2.40	2.90
6.	Zinc (mg./kg.)	380.0	180.0	320.0
7.	Nickel (mg./kg.)	18.50	90.0	150.0
8.	Total Chromium (mg./kg.)	5.6	7.2	8.20
9.	Hexavalent Chromium (mg./kg.)	1.80	1.90	1.65
10.	Manganese (mg./kg.)	60.0	62.0	80.0
11.	Mercury (mg./kg.)	<0.01	<0.01	<0.01
12.	Copper (mg./kg.)	<0.1	<0.1	<0.1
13.	Cobalt (mg./kg.)	<1.0	<1.0	<1.0
14.	Antimony (mg./kg.)	<1.0	<1.0	<1.0

Reviewed By :

(Durbadal Chakraborty)
(Dy. Quality Manager)

Approved By :

(Dr. Ajoy Paul)
(Quality Manager)

ANNEXURE 12

FORM 1

[See Rules 6(1)]

Application Required For Grant/Renewal Of Authorisation For Generation Or Collection Or Storage Or Transport Or Reception Or Recycling Or Reuse Or Recovery Or Pre Processing Or Co- Processing Or Utilisation Or Treatment Or Disposal Of Hazardous And Other Waste

Part A: General(to be filled by all)

1. (a)	Name and address of the unit and location of facility:	Maan Steel & Power Limited Jamuria industrial Estate
(b)	Name of the Occupier of the facility or operator of disposal facility with designation,Tel,Fax and e-mail:	Shyam Sunder Agarwal/Director/9903923011/agarwalshagun@maan.co.in
(c)	Authorisation required for(Please tick mark appropriate activity or activities:)	Storage,Disposal
(d)	In case of renewal of authorization previous authorization numbers and dates and provide copies of annual returns of last three including the compliance reports with respect to the conditions of Prior Environmental Clearance, wherever applicable:)	Not Attatched
2	Nature and quantity of Hazardous waste handled in T/Annum (or) KL/Annum	

	Name of Process	Name of Hazardous Waste (Category No)	Quantity	Waste Type	Waste Storage	Waste Disposal	Source of generation of waste	Physical status	Quantity stored at any time	Quantity accumulated as on 31st March
	Handling of hazardous chemicals and wastes	31647.1 Empty barrels / containers / liners contaminated with hazardous chemicals/wastes	0.020 KL/Annum	Recyclable	MS Drums	Recovery and Reuse-Authorized recyclers	DG used oil	Oily	0.020	0.020 KL
	Handling of hazardous chemicals and wastes	31647.1 Empty barrels / containers / liners contaminated with hazardous chemicals/wastes	0.005 T/Annum	Incinerable	MS Drums	Common Hazardous waste TSDF Facility, Haldia	D G used filter	Solid	0.005	0.005 T
	Handling of hazardous chemicals and wastes	31647.1 Contaminated cotton rags or other cleaning materials	0.020 T/Annum	Incinerable	Store in dedicated area	Incineration captive	Oil contaminated cotton & jute	Oily	0.020	0.020 T

3 a)	Year of commissioning and commencement of Production?	
b)	Whether the industry works 1 shift/2 shifts/round the clock?	Round the clock

4	Provide copy of the Emergency Response Plan (ERP) which should address procedures for dealing with emergency situations (viz. Spillage or release or fire) as specified in the guidelines of Central Pollution Control Board. Such ERP shall comprise the following, but not limited to: • Containing and controlling incidents so as to minimise the effects and to limit danger to the persons, environment and property; • Implementing the measures necessary to protect persons and the environment; • Description of the actions which should be taken to control the conditions at events and to limit their consequences, including a description of the safety equipment and resources available; • Arrangements for training staff in the duties which they are expected to perform; • Arrangements for informing concerned authorities and emergency services; and • Arrangements for providing assistance with off-site mitigatory action. (To be attached separately)	Not Attatched
5	Provide undertaking or declaration to comply with all provisions including the scope of submitting bank guarantee in the event of spillage, leakage or fire while handling the hazardous and other waste (To be attached separately)	Not Attatched

Part B: To be filled by hazardous waste generators

a	Products and by-products manufactured (names and product wise quantity per annum):	
b	Process description including process flow sheet indicating Inputs and Outputs (raw materials, chemicals, products, by-products,wastes, emissions, wastewater etc.) Please attach separate sheets:)	Not Attatched
c)	**Characterstics(waste-wise) and Quantic of waste generation per annum:**	

Schedule	Name of Process	Name of Hazardous Waste (Category No)	Quantity	Characterisitics of each waste	The details of utilization with in the plants such as Reuse/ Recycling/ Recovery/Reprocessing etc	If not utilised within the plant, provide details of what is done with this waste	Details of arrangements for transportation to actual users/ TSDF	Details of the environmental safeguards and environmental facilities provided for safe handling

d)	Hazardous and other wastes generated from storage of hazardous chemicals as defined under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.	,Jamuria industrial Estate

Part C: To be filled by Treatment, storage and disposal facility operators

1)	**Provide details of the facility including:**	
i)	Location of site with layout map:	
ii)	Safe storage of the waste and storage capacity	
iii)	The treatment processes and their capacities	
iv)	Secured Landfills	
v)	Incineration, if any	
vi)	Leachate Collection and Treatment System	
vii)	Fire Fighting Systems	
viii)	Environmental management plan including monitoring	
ix)	Arrangement for transportation of waste from generators	
2)	Provide details of Any other activities undertaken at the Treatment, storage and disposal facility site.	Not Attatched
3)	Attach a Copy of prior Environmental Clearance	Not Attatched

Part D: To be filled by recyclers or pre-processors or co-processors or users of hazardous or other wastes

1.	Nature and quantity of different wastes received per annum from domestic sources or imported or both:		
	Hazardous Wastes Type	Quantity	Source (Domestic/Imported)
2.	Installed capacity as per registration issued by the District Industries Centre or any other authorised Government agency. Provide copy:		Not Attatched
3.	Provide details of secured storage of wastes including the storage capacity		Not Attached
4.	Process description including process flow sheet indicating equipment details, inputs and outputs (input wastes, chemicals, products, by-products, waste generated, emissions, waste water, etc.) Attach separate sheets:		Not Attatched
5.	Provide details of end users of products or by-products		Not Attached
6.	Provide details of pollution control systems such as Effluent Treatment Plant, scrubbers, etc. including mode of disposal of waste		Not Attached
7.	Provide details of occupational health and safety measures		
8.	Has the facility been set up as per Central Pollution Control Board guidelines? If yes, provide a report on the compliance with the guidelines:		, Not Attached
9.	Arrangements for transportation of waste to the facility		

Place: **Signature of the Applicant**

Date: **Name and Designation**

ANNEXURE 13

No. 4 ~~Estimate~~ BILL

Mob 9434189129
7001537943

JOY GURU NURSERY & HORTICULTURE FARM

All Kinds of Best Quality Plants Grower & Supplier

Garden-Sripur More, Near Gunjan Park, Ningha

Name MAANSTEEL & POWER LTD.

Address Jamri a industrial area mouza.

Sl. No.	Particulars	Qnty.	Rate	Amount Rs.	P
1.	Arjunarni	125	5/-	625 =	00
2.	Mingiri —	125	5/-	625 =	00
3	Chattan	50	10/-	500 =	00
4	Kaufal —	50	15/-	750 =	00
5.	Ashok —	50	10/-	500 =	00
				3000 =	00

Date 13/7/25

S. Sen
Signature

6

BILL

Mob : 9434189129
7001537943

JOY GURU NURSERY & HORTICULTURE FARM

All Kinds of Best Quality Plants Grower & Supplier

Garden-Sripur More, Near Gunjan Park, Ningha

Name: M.A.A.M Steel & Power Ltd.

Address: Jamuria Industrial mouza

Sl. No.	Particulars	Qnty.	Rate	Amount Rs.	P
1	Chatim	100	10/-	1000/-	00
2	Sonagum	100	5/-	500/-	00
3	Kantal	50	15/-	750/-	00
	Mingi	50	5/-	250/-	00
				2500/-	00

JOY GURU NURSERY & HORTICULTURE FARM

242 CHALLAN

Mob : 9434189129
8016013691

JOY GURU NURSERY & HORTICULTURE FARM

All Kinds of Best Quality Plants Grower & Supplier

Garden Sitpur More, Near Gunjan Park, Mingha

Name .....

Address .....

Date .....

Sl No.	Particulars	Qnty.	Rate
1	Chatan	100 f-	
2	Sonajn	100 f-	
3	Kantal	50 f-	
4	Neem	50 f-	
		300 f-	

WB38 - L 9457

JOY GURU NURSERY & HORTICULTURE FA

Customer's Sig.

Signature Proprietor

ANNEXURE 14

1. INTRODUCTION

It is said prevention is better than cure. All possible measures are to be taken to prevent any undesirable incident. Also it is said expect the unexpected. Hope for the best and prepare for the Worst. Emergency / Disaster planning is an integral part of the overall loss control program. This is important for effective management of an accident / incident to minimize environmental impacts and loss to people & property in and around the installation.

Any accident, which has potential to develop into Emergency and can threaten large no of person or large area of plant on site affect the safety of public, property and environment. Therefore Emergency procedures are planned to protect plant, property, public and environment.

An emergency occurring in the plant is one that may affect several sections within it and / or may cause serious injury, loss of lives, extensive damage to property or serious disruption inside or outside the works. It will require the best use of internal and the external resources to handle it effectively. Though an emergency is usually the result of a malfunction of the otherwise normal operating plant and machinery, it may also be precipitated by the intervention of an outside event such as a cyclone, flood, or deliberate acts of arson or sabotage.

These incidents may cause serious injuries, loss of lives and extensive damage to properties of the Organisation. The resources to tackle such major emergencies will require pooling of materials and manpower from the whole factory as well as from the outside for early control and mitigation of the emergency.

2. OBJECTIVES

To ensure all personnel on site are aware of their responsibilities, when an Emergency occurs at the Organisation. A quick and effective response during an emergency can have a tremendous significance on whether the situation is controlled with little loss or turns into a major emergency. The main objectives of the Onsite and Disaster Management Plan are

- To localise the emergency and if possible control/eliminate it at the quickest possible time.
- To minimise the consequences of an emergency.
- To minimise the plant down time by following the prudent utility practices.
- To minimise the effects on environment due to consequences of plant emergencies.
- To prevent spreading of the damage in other areas.
- To give necessary warning to plant personnel and neighbourhood.
- To maximize the resource utilisation and combined efforts towards the emergency operations.
- To mobilize the internal resources and utilize them in the most effective way.
- To arrange rescue of persons, transport and treatment of casualties.
- To seek necessary help from industries in the neighbourhood or local authorities.
- To provide information to government agencies and to provide information to the public.

Also the objectives includes but not limited to the compliance of the statutory requirements under the various statutes such as The Factories Act-1948, The Manufacture, Storage and Import of Hazardous Chemicals Rules-1989, and The West Bengal Factories Rules etc.

ANNEXURE 15

CSR

Sl.No.	Name of the Organisation	Date	Amount	Purpose
1	Proposed University at Malda	07/12/2007	₹ 2,00,000	University
2	Shristir Ekush Shatak	05/10/2010	₹ 10,000	Function
3	32nd Malda District Conference of SFI	21/12/2010	₹ 5,000	Conference
4	Ikhrah Basanti Bijoy High School	27/01/2011	₹ 15,000	School
5	Shree Leelanand Paglababa	05/03/2011	₹ 1,00,000	School
6	Marwari Yuva Manch	18/03/2011	₹ 21,000	Society
7	CRY	20/03/2011	₹ 1,200	Society
8	Shree Leelanand Paglababa	16/05/2011	₹ 2,00,000	School
9	Indian Red Cross	23/06/2011	₹ 5,025	Society
10	Sri Sri Thakur Bari Nav Nirman Samity	10/07/2011	₹ 51,000	Society
11	Narayani Dham Deosar	22/07/2011	₹ 5,001	Society
12	Shree Jharia Dhanbad Gosala	04/11/2011	₹ 43,750	Society
13	Shree Balaji Jagran Mandal	17/12/2011	₹ 11,000	Society
14	Baba Baidnath Seva Samiti	25/07/2012	₹ 35,000	Society
15	East India Charitable Trust	19/12/2012	₹ 5,000	Trust
16	Shree Leelanand Paglababa	16/08/2012	₹ 18,900	School
17	Narayani Dham Deosar	14/08/2013	₹ 5,001	Society
18	Narayani Dham Deosar	31/07/2014	₹ 11,000	Society
19	Shree Leelanand Paglababa	30/01/2015	₹ 22,500	School
20	Action Aid Associated	09/03/2015	₹ 7,200	Society
21	Shree Leelanand Paglababa	16/05/2015	₹ 22,500	School
22	Rainbow Textiles (Blanket Purchase)	29/09/2015	₹ 95,536	Blanket
23	Cash for Transporting blanket	5/10/2015	₹ 9,064	Blanket
24	Punjabee Bradree	07/11/2017	₹ 60,000	Society
25	Kurpai Unnayany Society	01/12/2017	₹ 21,000	School
26	Aashrivad Foundation Trust 52 decimal of land	2017-18	₹ 1,00,00,000	Old Age Home
27	Durgapur Seva Samiti	06-04-2018	₹ 11,00,000	Society
28	Maharaja Agression	26.07.2018	₹ 11,00,000	Society
29	Kurpai Unnayany Society	07-09-2018	₹ 21,000	School
30	Shree Leelanand Paglababa	21-01-2019	₹ 31,500	School
31	Shree Leelanand Paglababa	25-02-2019	₹ 2,26,000	School
32	Aashrivad Foundation Trust 52 decimal of land (18-19)	18-19	₹ 25,00,000	Old Age Home
33	Aashrivad Foundation Trust 52 decimal of land (19-20)	19-20	₹ 15,00,000	Old Age Home
	Total		**₹ 1,74,59,177**	

ANNEXURE 16

WEST BENGAL POLLUTION CONTROL BOARD

'Paribesh Bhawan'
Bldg. No. - 10A, Block - LA, Sector-III
Salt Lake City, Kolkata-700 098

Consent Letter Number : CO128909

Memo Number : 155-as-co-8/10/0105 Date : 07/01/2020

Consent to Operate

under

Section 25 & 26 of the **Water (Prevention and Control of Pollution) Act, 1974** and
Section 21 of the **Air (Prevention and Control of Pollution) Act, 1981**

The West Bengal Pollution Control Board (hereinafter referred to as State Board) under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974, as amended and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended and Rules and Orders made thereunder, hereby grants its consent to :

M/s. Maan Steel & Power Limited.
at 58/1, Sarat Bose Road, Kolkata-700025
(Address of Regd. office/Head/Office/City Office)

(hereinafter referred to as Applicant) for its unit located at Jamuria Industrial Estate, Mouza-Ikna, P.O.-Nandi, P.S.-Jamuria, Dist-Paschim Bardhaman, Pin-713362.

(Detailed address of the manufacturing unit)

for a period from the date of issue to 30/09/2023.

to operate the industrial unit and to discharge liquid effluent and to emit gaseous effluent from the premises/land of the industrial unit, in accordance with the conditions as mentioned in the Annexure to this consent letter provided on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not exceed the permissible limit as specified in the Table I & II of this consent letter and in the Environmental (Protection) Act, 1986.

Breach of the conditions and / or failure to comply with the directions as set out in the Annexure shall render the applicant liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alter the conditions of this consent letter giving one month's notice to the applicant.

Seal

For and on behalf of the State Board

(~~Member Secretary/Chief Engr./ Sr. Env. Engr.~~ / Env. Engr. / ~~Asst. Env. Engr.~~)

07/01/20

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

ANNEXURE

Consent to M/s. Maan Steel & Power Limited

for its unit at Jamuria Industrial Estate, Mouza-Ikra, P.O.-Nandi, P.S.-Jamuria, Dist-Paschim Bardhaman, Pin-713362

Conditions :

01. This Consent is valid for the manufacture of :-

Sl. No.	Name of major products and by-products	Quantity manufactured per month
01	Sponge Iron (by 3rd DRI Kiln)	5000.0 MT
02	Billet	9000.0 MT
03	TMT	16730.0 MT
04	Power	12.0 MW
05	Miss Roll TMT	150.0 MT
06		
07		
08		
09		
10		
11		
12		

02. The *Applicant* shall remain responsible for quantity and quality of liquid effluent and air emissions.

03. **Daily** discharge of industrial liquid effluent shall not exceed — KL.

04. **Daily** discharge of domestic liquid effluent shall not exceed 4.5 KL.

05. **Daily** discharge of mixed (industrial & domestic) liquid effluent shall not exceed — KL.

06. The *Applicant* shall discharge liquid effluent to — (place of discharge) through — nos. outlets / outfalls.

07. To bring into any altered or new outlet/outfall or to change the place of discharge, the Applicant shall have to inform the Board and obtain prior permission of the Board in this effect.

08. The *Applicant* shall provide comprehensive facility for treatment of industrial liquid waste and domestic liquid waste (sewage, sullage and liquid effluent generated from canteen), and operate and maintain the same continuously so that the quality of final effluent conforms to the *Standard* as given in Table-I in page 03.

Asansol 07/01/20

(~~Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.~~)

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

Continued.....

0128909

(3)

Consent to M/s. Maan Steel & Power Limited.

for its unit at Jamuria Industrial Estate, Mouza-Ikra, P.O.-Nandi, P.S.-Jamuria, Dist-Paschim Bardhaman, Pin-713362

Table-I

Outlet No.	Nature of effluent	Parameters	Standard	Frequency of effluent sampling
01	Domestic	pH	Between : 5.5 to 9.0	Yearly
		Total Suspended Solids	Not to exceed : 100 mg/l.	
		Biochemical Oxygen Demand (3day at 27°C)	Not to exceed : 30 mg/l.	
		Chemical Oxygen Demand	Not to exceed : 250 mg/l.	
		Oil & Grease	Not to exceed : 10 mg/l.	

09. The *Applicant* falls in the .....Category of the Water (Prevention and Control of Pollution) Cess Act, 1977 and Rules made thereunder and the Applicant shall comply with the provisions of the said Act and Rules made thereunder.

10. **Daily** water consumption for the following purposes should not exceed :-

- Industrial cooling, spraying in mine pits and boiler feed water → 350.00 KL
  (Water used for gardening should be included in this category of use)
- Domestic purpose → 6.00 KL
- Processing whereby water gets polluted and the pollutants are easily biodegradable → — KL
- Processing whereby water gets polluted and the pollutants are not easily biodegradable → — KL

The *Applicant* shall regularly submit to the Board the Returns of Water Consumption in the prescribed form and pay the Cess as specified under Section 3 of the said Act.

07/01/20..

(~~Member Secretary/Chief Engr./ Sr. Env. Engr.~~ / Env. Engr. / ~~Asst. Env. Engr.~~)

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

Contd.....

Consent to M/s. Maan Steel & Power Ltd.

for its unit at Jamuria Industrial Estate, Mouza-Ikra, P.O.-Nandi, P.S.-Jamuria, Dist-Paschim Bardhaman, Pin-713362

11. The *Applicant* shall install suitable device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the *State Board.*

12. All the stacks connected to various sources of emissions must be designated by numbers such as S-1, S-2, S-3, etc., and this must be painted/displayed to faciliate identification.

13. The *Applicant* shall install comprehensive control system consisting of pollution control equipment as is warranted with reference to generation of air emissions and operate and maintain the same continuously so as to achieve the level of pollutants of the *Standard* as given in Table-II below : See Annexure-I

Table-II

Stack No.	Stack height from G.I., (in mts.)	Stack attached to (sources and control system. if any):	Volume $Nm^3/hr.$	Velocity of gas emission m/sec	Concentrations of parameters not to exceed					Frequency of emission sampling
					SPM (mg/Nm^3)	CO (%v/v)				
S-I										
S-2										
S-3										
S-4										
S-5										
S-6										
S-7										
S-8										
S-9										
S-10										

Nandi 07/01/20

(~~Member Secretary/Chief Engr./ Sr. Env. Engr.~~ / Env. Engr. / ~~Asst. Env. Engr.~~)

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

Continued.....

C0128909

Consent to M/s. Maan Steel & Power Ltd.

for its unit at Jamuria Industrial Estate, Mouza-Ikna, P.O.-Nandi, P.S.- Jamuria, Dist- Paschim Bardhaman, Pin-713362.

14. The *Applicant* shall provide ports in the stack(s) and other necessary permanent facilities such as ladder, platform, etc. for monitoring/sampling the air emissions and the same shall be made available for inspection and use by the *State Board's* staff as well as *State Board's* authorised agencies.

15. The *Applicant* shall observe the following fuel consumption pattern :-

Sl. No	Type of fuel	Quantity consumed per day	Fuel burning operation where the fuel is used
01	Coal	14,350 MT/Month	3rd DRI Kiln/AFBC Boiler
02			
03			
04			
05			

16. The *Applicant* shall maintain the generation and treatment/disposal of non-hazardous solid waste as specified below :-

Type of waste	Quantity	Treatment	Disposal
Dolo Char	4000 MT/month	—	To be used in AFBC Boiler
Fly Ash/Slag/Mill Scale	158 MT/254 MT/ 76 MT/Day	—	Land Filling and Brick Making.

17. The *Applicant* shall take adequate measures for control of noise levels from its own sources within the premises within the limit given below :-

Time	Limit in dB(A) L_{eq}
Day Time (06 a.m. to ~~09~~ 10 p.m.)	75
Night Time (~~09~~ 10 p.m. to 06 a.m.)	70

18. The *Applicant* shall at all times maintain good house-keeping, proper working order, and operate efficiently for control of pollution from all sources so as not to cause nuisance to surrounding areas/inhabitants and to achieve compliance with the terms and conditions of the consent.

19. The *Applicant* shall bring about at least 33% of the available open land under the green coverage / plantation.

20. The *Applicant* shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by the *Applicant* to maintain compliance with the terms and conditions of the consent. In absence of such an alternate electric power source, the *Applicant* shall stop, reduce or otherwise control production to abide by the terms and conditions of the Consent regarding pollution level.

21. The *Applicant* shall install a separate energy meter showing the consumption of energy for operation of pollution control devices.

22. The *Applicant* shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.

23. The *Applicant* shall provide drainage system for conveying industrial and domestic liquid waste. Storm-water drain shall be kept separate from the drainage system meant for industrial and domestic liquid waste.

Nandi 27/01/20

(~~Member Secretary/Chief Engr./ Sr. Env. Engr.~~ / Env. Engr. / ~~Asst. Env. Engr.~~)

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

Continued.....

Consent to M/s. Maan Steel & Power Ltd.

for its unit at Jamuria Industrial Estate, Mouza – Ikna, P.O. – Nandi, P.S. – Jamuria, Dist – Paschim Bardhaman, Pin – 713362

24. The *Applicant* shall maintain a separate register showing consumption of chemicals used in pollution control systems.

25. The *Applicant* shall get the samples of hazardous wastes/leachates analysed at least once in ..... from the laboratory recognised of the West Bengal Pollution Control Board and ensure that they conform to the limits stipulated. Test reports shall be sent to the Board.

26. The *Applicant* shall provide adequate and safe facility for collection of air, waste water and solid waste samples by the *State Board's* staff as well as *State Board's* authorised agencies.

27. The *Applicant* shall submit to the *State Board* by the 30th September of every year the Environmental Statement Report for the financial year ending 31st March of the current year in the prescribed form (Form -V) as required under the provisions of rule 14 of the Environment (Protection) [Second Amendment] rules, 1992.

28. The *Applicant* shall allow the Officers of the *State Board* to enter into the applicant's premises at any reasonable time to inspect the pollution control systems as well as monitoring and measuring devices in connection with prevention & control of pollution.

29. The *Applicant* shall maintain an Inspection Book in the factory premises which shall be made available to Officers & employees of the *State Board* for inspection, review and to write down any direction or observation as is deemed necessary during the inspection from time to time.

30. The *Application* shall furnish to the *State Board* all information in respect of quality, quantity, rate of discharge, place of discharge of liquid effluent and air emissions.

31. The *Applicant* shall maintain adequate number of qualified and trained personnel among his staff for proper maintenance and operation of the effluent treatment and / or emission control devices and for overall environment management of the industry.

32. The *Applicant* shall have to make registration for the use of groundwater if any, with Central Ground Water Authority.

33. The *Applicant* shall intimate to the *State Board* immediately of any occurrence or apprehension of occurrence of discharge of any poisonous, noxious or pollutants in excess of quality as well as quality as mentioned earlier to any receiving water body/receiving system or to atmosphere owing to accident or other unforeseen incident/event including natural disaster. The *Applicant* Shall (i) take all steps adequate to prevent such accident discharge/release of poisonous, noxious or pollutants and to limit their consequences to persons and the environment, (ii) provide to the persons working on the site with the information, training and equipment including antidotes necessary to ensure their safety and mitigate the accidental release of poisonous noxious or pollutants to the environment.

34. The *Applicant* shall make an application to the *State Board* in the prescribed form for renewal of the consent at least 60 (sixty) days before the date of expiry of this Consent.

35. The *Applicant* shall not make any alternation/modification/expansion in the existing manufacturing process and equipment as well as the pollution control system without prior approval of the Board.

36. The *Applicant* shall comply with the conditions as laid down in the Manufacture, Storage and Import of hazardous Chemicals Rules, 1989 and Hazardous Wastes (Management & Handling) Rules, 1989.

Additional Conditions See Annexure – II.

07/01/20

(~~Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.~~)

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

Annexure -II

Annexure to Consent Letter Number – **CO128909**

Additional Conditions issued **to** to **M/s. Maan Steel & Power Ltd.** at existing factory premises – Mouza-Ikrah, P.O-Nandi, P.S-Jamuria, Dist- Paschim Bardhaman, Pin -713362.

1. The unit should comply all the conditions issued in earlier Environmental Clearance, Consent to Establish and Consent to Operate.
2. The unit should obtain all the statutory licenses as applicable from other concerned Govt. Department.
3. This consent may be revoked at any time on violation of environmental norms.
4. The unit shall submit a status of compliance of the conditions stipulated in EC.
5. **This consent to Operate is valid for operation of 3rd DRI Plant (1x200TPD Kiln) with WHRB-20TPH , WHRB-1&2 attached with DRI Kiln-1&2, AFBC Boiler-30TPH, Induction Furnaces- 2x15 Ton/batch each for SMS & Rolling Mill Plant.**
6. **This Consent to Operate is also valid for 3rd DRI Kiln with existing facility and validity has been extended for period upto 30.09.2023 in continuation of previous issued CFO Sl.No.CO107574 vide memo no.531-as-co-s/10/0105 dated 14.08.2018**

27/01/20

Environmental Engineer
West Bengal Pollution Control Board

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

Annexure – I

Annexure to Consent Letter Number – **CO128909**

Additional Conditions issued to **M/s. Maan Steel & Power Ltd.** at existing factory premises – Mouza-Ikrah, P.O-Nandi, P.S-Jamuria, Dist- Paschim Bardhaman, Pin -713362.

Stack No.	Stack height from G.L (in mts.)	Stack attached to (sources and control system, if any)	Volume Nm^3/hr	Velocity of gas emission m/sec	Concentration of parameters not to exceed				Frequency of emission sampling
					PM (mg/Nm^3)	CO (% v/v)			
S-1	40.0 m #	Individual stack, individual 3 field ESP of 3rd Rotary Kiln of capacity 200TPD- 1(one) no and **WHRB-1(one) no.-20TPH installed recently.**	-	-	50	-			Quarterly
S-2	35.0 m (common)	common stack, individual 3 field ESP of 1st & 2nd Rotary Kiln of capacity 100TPD each- 2(two) nos and **WHRB-2(two) nos.-10TPH each installed recently.**	-	-	100	-			Quarterly
S-3	35.00	Individual stack, individual 4 field ESP of AFBC Boiler - **1(one) no.-30TPH**	-	-	30				Quarterly
S-4	30.0 m (common)	Induction Furnaces (2x 15 MT/batch) with bag filter	-	-	150	-			Quarterly
S-5	30.0 m	Coal Handling Plant – Capacity-50TPH with bag filter	-	-	50	-			Quarterly

As given conditios in CFO Sl.No.CO107574

07/01/20

Environmental Engineer
West Bengal Pollution Control Board

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

WEST BENGAL POLLUTION CONTROL BOARD

'Paribesh Bhawan'
Bldg. No. - 10A, Block - LA, Sector-III
Salt Lake City, Kolkata-700 098

CO110163

apply for renewal of consent 60 (Sixty) days before expiry

Consent Letter Number : CO110163

Memo Number : 1905 -WPBA/Red(Bwn)/Cont(667)/10 Date : 04-9-18

Consent to Operate

under

Section 25 & 26 of the **Water (Prevention and Control of Pollution) Act, 1974** and
Section 21 of the **Air (Prevention and Control of Pollution) Act, 1981**

The West Bengal Pollution Control Board (hereinafter referred to as State Board) under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974, as amended and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended and Rules and Orders made thereunder, hereby grants its consent to :

M/S. Maan Steel & Power Ltd.

.....(Address of Regd. office/Head/Office/City Office)

(hereinafter referred to as Applicant) for its unit located at Jamuria Industrial Estate, P.O. Nandi, P.S. Jamuria, Dist- Paschim Bardhaman, Pin-713362

.....(Detailed address of the manufacturing unit)

for a period from ..... to upto 30-09-2023

to operate the industrial unit and to discharge liquid effluent and to emit gaseous effluent from the premises/land of the industrial unit, in accordance with the conditions as mentioned in the Annexure to this consent letter provided on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not exceed the permissible limit as specified in the Table I & II of this consent letter and in the Environmental (Protection) Act, 1986.

Breach of the conditions and / or failure to comply with the directions as set out in the Annexure shall render the applicant liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alter the conditions of this consent letter giving one month's notice to the applicant.

West Bengal Pollution Control Board Asansol Regional Office Seal

For and on behalf of the State Board

04/09/18

(Member Secretary/Chief Engr./ Sr. Env. Engr./ Env. Engr. / Asst. Env. Engr.)

ANNEXURE

Consent to M/S. Maan Steel & Power Ltd.

for its unit at Jamuria Industrial Estate, P.O. Nandi, P.S. Jamuria,

Dist- Paschim Bardhaman, Pin-713362

Conditions :

01. This Consent is valid for the manufacture of :-

Sl. No.	Name of major products and by-products	Quantity manufactured per month
01	M.S. Billets	10950 MT
02	Sponge Iron	5780 MT
03		
04		
05		
06		
07		
08		
09		
10		
11		
12		

02. The *Applicant* shall remain responsible for quantity and quality of liquid effluent and air emissions.

03. **Daily** discharge of industrial liquid effluent shall not exceed NIL KL.

04. **Daily** discharge of domestic liquid effluent shall not exceed 30.0 KL.

05. **Daily** discharge of mixed (industrial & domestic) liquid effluent shall not exceed NIL KL.

06. The *Applicant* shall discharge liquid effluent to Municipal Drain (place of discharge) through 01(One) nos. outlets / outfalls.

07. To bring into any altered or new outlet/outfall or to change the place of discharge, the Applicant shall have to inform the Board and obtain prior permission of the Board in this effect.

08. The *Applicant* shall provide comprehensive facility for treatment of industrial liquid waste and domestic liquid waste (sewage, sullage and liquid effluent generated from canteen), and operate and maintain the same continuously so that the quality of final effluent conforms to the *Standard* as given in Table-I in page 03.

04/09/18

(Member Secretary/Chief Engr./ Sr. Env. Engr. / ~~Env. Engr.~~ / Asst. Env. Engr.)

Continued.....

Consent to M/S. Maan Steel & Power Ltd.

for its unit at Jamuria Industrial Estate, P.O. Nandi, P.S. Jamuria,

Dist- Paschim Bardhaman, Pin-713362

Table-I

Outlet No.	Nature of effluent	Parameters	Standard	Frequency of effluent sampling
01	Domestic	pH	Between : 5.5 to 9.0	Yearly
		Total Suspended Solids	Not to exceed : 100 mg/l.	
		Biochemical Oxygen Demand (3day at 27°C)	Not to exceed : 30 mg/l.	
		Chemical Oxygen Demand	Not to exceed : 250 mg/l.	
		Oil & Grease	Not to exceed : 10 mg/l.	

09. The *Applicant* falls in the Red Category of the Water (Prevention and Control of Pollution) Cess Act, 1977 and Rules made thereunder and the Applicant shall comply with the provisions of the said Act and Rules made thereunder.

10. **Daily** water consumption for the following purposes should not exceed :-

- Industrial cooling, spraying in mine pits and boiler feed water (Water used for gardening should be included in this category of use) → 250 KL
- Domestic purpose → 30 KL
- Processing whereby water gets polluted and the pollutants are easily biodegradable → NIL KL
- Processing whereby water gets polluted and the pollutants are not easily biodegradable → NIL KL

The *Applicant* shall regularly submit to the Board the Returns of Water Consumption in the prescribed form and pay the Cess as specified under Section 3 of the said Act.

04/10/18

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Continued.....

Consent to M/S. Maan Steel & Power Ltd.

for its unit at Jamuria Industrial Estate, P.O. Nandi, P.S. Jamuria,

Dist-Paschim Bardhaman

11. The *Applicant* shall install suitable device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the *State Board.*

12. All the stacks connected to various sources of emissions must be designated by numbers such as S-1, S-2, S-3, etc., and this must be painted/displayed to faciliate identification.

13. The *Applicant* shall install comprehensive control system consisting of pollution control equipment as is warranted with reference to generation of air emissions and operate and maintain the same continuously so as to achieve the level of pollutants of the *Standard* as given in Table-II below :

Table-II

Stack No.	Stack height from G.I., (in mts.)	Stack attached to (sources and control system. if any):	Volume $Nm^3/hr.$	Velocity of gas emission m/sec	Concentrations of parameters not to exceed					Frequency of emission sampling
					SPM (mg/Nm^3)	CO (%v/v)				
S-I										
S-2										
S-3			Refer Annexure - 'A'							
S-4										
S-5										
S-6										
S-7										
S-8										
S-9										
S-10										

04/09/18.

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Continued.....

Consent to M/S. Maan Steel & Power Ltd.

for its unit at Jamuria Industrial Estate, P.O. Nandi, P.S. Jamuria,

Dist- Paschim Bardhaman, Pin-713362

14. The *Applicant* shall provide ports in the stack(s) and other necessary permanent facilities such as ladder, platform, etc. for monitoring/sampling the air emissions and the same shall be made available for inspection and use by the *State Board's* staff as well as *State Board's* authorised agencies.

15. The *Applicant* shall observe the following fuel consumption pattern :-

Sl. No	Type of fuel	Quantity consumed per day	Fuel burning operation where the fuel is used
01	Coal	214 MT	Rotary Kilns (02 nos.)
02	HSD	190 Lt.	DG Sets (02 nos.)
03			
04			
05			

16. The *Applicant* shall maintain the generation and treatment/disposal of non-hazardous solid waste as specified below :- Refer Annexure -'B'

Type of waste	Quantity	Treatment	Disposal

17. The *Applicant* shall take adequate measures for control of noise levels from its own sources within the premises within the limit given below :-

Time	Limit in dB(A) L_{eq}
Day Time (06 a.m. to 09 p.m.)	65
Night Time (09 p.m. to 06 a.m.)	55

18. The *Applicant* shall at all times maintain good house-keeping, proper working order, and operate efficiently for control of pollution from all sources so as not to cause nuisance to surrounding areas/inhabitants and to achieve compliance with the terms and conditions of the consent.

19. The *Applicant* shall bring about at least 33% of the available open land under the green coverage / plantation.

20. The *Applicant* shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by the *Applicant* to maintain compliance with the terms and conditions of the consent. In absence of such an alternate electric power source, the *Applicant* shall stop, reduce or otherwise control production to abide by the terms and conditions of the Consent regarding pollution level.

21. The *Applicant* shall install a separate energy meter showing the consumption of energy for operation of pollution control devices.

22. The *Applicant* shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.

23. The *Applicant* shall provide drainage system for conveying industrial and domestic liquid waste. Storm-water drain shall be kept separate from the drainage system meant for industrial and domestic liquid waste

04/09/18

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Continued.....

Consent to M/S. Maan Steel & Power Ltd.

for its unit at Jamuria Industrial Estate, P.O. Nandi, P.S. Jamuria,

Dist- Paschim Bardhaman, Pin-713362

24. The *Applicant* shall maintain a separate register showing consumption of chemicals used in pollution control systems.

25. The *Applicant* shall get the samples of hazardous wastes/leachates analysed at least once in 5 Years from the laboratory recognised of the West Bengal Pollution Control Board and ensure that they conform to the limits stipulated. Test reports shall be sent to the Board.

26. The *Applicant* shall provide adequate and safe facility for collection of air, waste water and solid waste samples by the *State Board's* staff as well as *State Board's* authorised agencies.

27. The *Applicant* shall submit to the *State Board* by the 30th September of every year the Environmental Statement Report for the financial year ending 31st March of the current year in the prescribed form (Form -V) as required under the provisions of rule 14 of the Environment (Protection) [Second Amendment] rules, 1992.

28. The *Applicant* shall allow the Officers of the *State Board* to enter into the applicant's premises at any reasonable time to inspect the pollution control systems as well as monitoring and measuring devices in connection with prevention & control of pollution.

29. The *Applicant* shall maintain an Inspection Book in the factory premises which shall be made available to Officers & employees of the *State Board* for inspection, review and to write down any direction or observation as is deemed necessary during the inspection from time to time.

30. The *Application* shall furnish to the *State Board* all information in respect of quality, quantity, rate of discharge, place of discharge of liquid effluent and air emissions.

31. The *Applicant* shall maintain adequate number of qualified and trained personnel among his staff for proper maintenance and operation of the effluent treatment and / or emission control devices and for overall environment management of the industry.

32. The *Applicant* shall have to make registration for the use of groundwater if any, with Central Ground Water Authority.

33. The *Applicant* shall intimate to the *State Board* immediately of any occurrence or apprehension of occurrence of discharge of any poisonous, noxious or pollutants in excess of quality as well as quality as mentioned earlier to any receiving water body/receiving system or to atmosphere owing to accident or other unforeseen incident/event including natural disaster. The *Applicant* Shall (i) take all steps adequate to prevent such accident discharge/release of poisonous, noxious or pollutants and to limit their consequences to persons and the environment, (ii) provide to the persons working on the site with the information, training and equipment including antidotes necessary to ensure their safety and mitigate the accidental release of poisonous noxious or pollutants to the environment.

34. The *Applicant* shall make an application to the *State Board* in the prescribed form for renewal of the consent at least 60 (sixty) days before the date of expiry of this Consent.

35. The *Applicant* shall not make any alternation/modification/expansion in the existing manufacturing process and equipment as well as the pollution control system without prior approval of the Board.

36. The *Applicant* shall comply with the conditions as laid down in the Manufacture, Storage and Import of hazardous Chemicals Rules, 1989 and Hazardous Wastes (Management & Handling) Rules, 1989.

Additional Conditions Please See Annexure -'C' attached.

04/09/18

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Consent Letter Sl. No.: CO110163

WEST BENGAL POLLUTION CONTROL BOARD
Paribesh Bhawan; Bldg. No.-10A, Block – L.A., Sector – III
Salt Lake City, Kolkata – 700 106

Name of the Unit: **M/s Maan Steel & Power Ltd.**
Located at Jamuria Industrial Estate, P. O. – Nandi, P. S. – Jamuria, Dist. – Paschim Bardhaman, Pin - 713362

ANNEXURE – 'A'

The Applicant shall install comprehensive control system consisting of pollution control equipment as is warranted with reference to generation of air emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the Standard as given in Table – II below:

Sl. No.	Stack height from GL (Meters)	Stack attached to (sources and control system, if any)	Volume (Nm^3/hr)	Velocity of gas emission (m / sec)	Concentrations of parameters not to exceed		Frequency of emission sampling
					SPM (mg/ Nm^3)	CO (% v/ v)	
1.	35.0	Rotary Kilns (1 & 2)	------	------	100	1	Quarterly
2.	30.0	Induction Furnace – 1	------	------	150	---	Quarterly
3.	30.0	Induction Furnace – 2	------	------	150	-----	Quarterly
4.	30.0	Cooler Discharge	------	------	50	------	Quarterly
5.	30.0	Product Separation	------	------	50	------	Quarterly
6.	30.0	Raw Material Handling	------	------	50	-------	Quarterly
7.	30.0	Stock House	------	------	50	-------	Quarterly
8.	13.0	DG Set (500 KVA)	------	------	150	1	Quarterly
9.	13.0	DG Set (250 KVA)	------	------	150	1	Quarterly

ANNEXURE – 'B'

The Applicant shall maintain the generation and treatment / disposal of non-hazardous solid waste as specified below:

Sl. No.	Type of Waste	Quantity (MT / month)	Treatment	Disposal
1.	Dolochar	3700	----------	Sold out to outside party
2.	Slag	1872	----------	Land filling
3.	Coal Dust	2000	----------	Sold out to outside party

For and on behalf of the Board

04/05/18

Environmental Engineer
Asansol Regional Office, WBPCB

ANNEXURE – 'C'

Consent Letter Sl. No.: C0110163

WEST BENGAL POLLUTION CONTROL BOARD
Paribesh Bhawan; Bldg. No.-10A, Block – L.A., Sector – III, Salt Lake City, Kolkata – 700 098

Name of the Unit: **M/s Maan Steel & Power Ltd.**
Located at Jamuria Industrial Estate, P. O. – Nandi, P. S. – Jamuria, Dist. – Paschim Bardhaman, Pin - 713362

ADDITIONAL CONDITIONS

1. Proper & effective steps should be taken so as to ensure that manufacturing activities do not affect the residents of the neighbourhood in any way.
2. The unit will have to take pollution control measures regarding air, water and noise to keep the parameters within the permissible limit as laid down by WBPCB.
3. This consent shall be revoked at any time on the valid ground of any complaint (for violation of Environmental Acts) against the unit regarding air, water pollution and any other environmental hazards caused by the unit.
4. Solid waste should be disposed off in an environment friendly manner.
5. No additional machinery / equipment can be installed without permission from the State Board.
6. No nuisance should be caused to the neighbourhood residence due to activity of the unit.
7. The unit should obtain permission for the two (02) DG sets of 500 KVA and 250 KVA from the Directorate of Electricity as per 47A rule of Indian Electricity Rules 1956 & submit a copy of the same to the State Board accordingly.
8. The unit should comply with the provision of GSR 371 (E) dated 17.05.2002 issued by Ministry of Environment and Forest, Govt. of India.
9. The unit should comply with the sixteen-point direction issued by the State Board vide memo no. 1044 – 4 / WPB / CE – II / GEN / 2008 dated 01.06.2012.
10. The unit should obtain Hazardous Waste Authorisation under the provision of Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 and submit the copy of same to the State Board accordingly.

For and on behalf of the Board

04/09/18

Environmental Engineer
Asansol Regional Office, WBPCB

ANNEXURE 17

FORMAT NO. : ENV/FM/56

TEST REPORT

1.	Name of the Industry	:	Maan Steel & Power Ltd.
2.	Address	:	Jamuria Industrial Estate, Jamuria, Paschim Bardhaman
3.	Type of Industry	:	Integrated Steel Plant
4.	Sampling Plan & Procedure	:	ENV/SOP/01
5.	Deviation from the Sampling Method & Plan	:	No
6.	Sample ID No	:	172/EC/M/N
7.	Report ID No	:	172/EC/M/TR(N)/21-22
8.	Date of Study	:	28/08/2021
9.	Reporting Date	:	06/09/2021
10.	Method No.	:	IS: 9989 – 1981
11.	Time of Duration of Noise	:	20 Minutes
12.	Height from Ground Level	:	4 feet
13.	Sample Monitoring by	:	Mr. Pappu Hazra

RESULT OF NOISE LEVEL STUDY

DAY TIME

1. Location of Study : Near Main Gate

Time (A.M)	Minimum dB(A)	Maximum dB(A)	Leq dB(A)
10:00 – 10:20	63.1	68.4	66.51

NIGHT TIME

2. Location of Study : Near Main Gate

Time (P.M)	Minimum dB(A)	Maximum dB(A)	Leq dB(A)
10:00 – 10:20	57.9	61.3	59.92

DAY TIME

3. Location of Study : Near Administrative Building

Time (A.M)	Minimum dB(A)	Maximum dB(A)	Leq dB(A)
10:50 – 11:10	64.5	70.0	68.07

NIGHT TIME

4. Location of Study : Near Administrative Building

Time (P.M)	Minimum dB(A)	Maximum dB(A)	Leq dB(A)
10:30 – 10:50	60.3	66.2	64.18

DAY TIME

5. Location of Study : Back Side of the Plant

Time (P.M)	Minimum dB(A)	Maximum dB(A)	Leq dB(A)
12:00 – 12:20	70.2	76.2	74.16

NIGHT TIME

6. Location of Study : Back Side of the Plant

Time (P.M)	Minimum dB(A)	Maximum dB(A)	Leq dB(A)
11:00 – 11:20	67.6	71.1	69.69

* * Mean of L_{eq} - Equivalent to Sound Energy		
Limit in Leq dB(A)		
Category Area	Day Time dB(A)	Night Time dB(A)
A. Industrial Area	75	70
B. Commercial Area	65	55
C. Residential Area	55	45
D. Silence Zone	50	40
**Day Time is reckoned in between 6:00 A.M & 10:00 P.M	**Night Time is reckoned in between 10:00 P.M & 6:00 A.M	

(Central Pollution Control Board, Ministry of Environment & Forests Government of India) &
(Department of Environment, Government of West Bengal)

PERMISSIBLE NOISE EXPOSURE FOR INDUSTRIAL WORKERS

Hours	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114
(2 minutes or less)	-

** The Noise Pollution (Regulation and Control Rules, 2000
** S.O. 123 (E) Dated : 14th February, 2000

Reviewed By:
Dy. Quality Manager

Approved By:
Quality Manager

>End of Report<

ANNEXURE 18

GENERAL HEALTH CHECK UP CAMP

Commercial

MAAN STEEL & POWER LIMITED

SL NO	NAME OF THE EMPLOYEE	AGE	D.O.B	SEX	D.O.J	DATE OF ANALYSIS	DIAGNOSIS
1	Hitesh Panmar	50	12/06/70	M		16/10/2021	BP $\frac{140}{80}$, Sugar (R) 102 Normal Symptoms
2	Pranaw Kumar			M		16/10/2021	BP $\frac{140}{90}$, Sugar (R) 116 Headache, Acidity.
3	Arun Choudhry	47	10/08/74	M	20.2.20	16/10/2021	BP $\frac{130}{90}$, Sugar (R) 105 Acidity, Gastric.
4	Akhilesh Chobey	36	01/03/85	M		16/10/2021	BP $\frac{136}{96}$, Sugar (R) 110 Normal Symptoms
5	Keshav Kumar	39	30/11/79	M	01/09/14	16/10/2021	BP $\frac{130}{80}$, Sugar (R) 146, Acidity, Normal Symptoms
6	Apu Manik	33	31/03/88	M	01/09/14	16/10/2021	BP $\frac{120}{80}$, Sugar (R) 126, Headache, Both Eye pain.
7	Gouranga Sundar Halder	50	27/07/71	M	10.9.19	16/10/2021	BP $\frac{145}{90}$, Sugar (R) 142, Hypertention, Sleeping Problem.
8	Sujay Sengupta	42	31/01/79	M	2.4.18	16/10/2021	BP $\frac{145}{95}$, Sugar (R) 140, Heavy weight. Reffer to Full Body checkup.
9	Pawan Agarwal	38	12/12/83	M	21/01/18	16/10/2021	BP $\frac{140}{100}$, Sugar (R) 120, Acidity, Blood For Lipid Profile.
10	Rameshwar Ghatak	40	17/10/81	M	1.9.19	16/10/2021	BP $\frac{112}{70}$, Sugar (R) 102, Weakness.
11	Vinod Singh	38	25/06/83	M	15.03.20	16/10/2021	BP $\frac{140}{95}$, Sugar (R) 130, Headache, Sleeping Problem.
12	Moloy Sarokar	44	29/12/77	M	10/01/20	16/10/2021	BP $\frac{140}{90}$, Sugar (R) 145, Hypertention, Blood For Lipid Profile
13	Bhairab Bhandari	36	04/08/85	M	11/05/20	16/10/2021	BP $\frac{126}{90}$, Sugar (R) 125, Normal Symptoms
14	Subhajit Choudhry	36	22/05/85	M	11/05/20	16/10/2021	BP $\frac{150}{70}$, Sugar (R) 102, Weakness, Gastric
15	Srijib Goswami	36	22/10/85	M	11/05/20	16/10/2021	BP $\frac{126}{80}$, Sugar (R) 104, Acidity, Normal System.
16	Rajaryan Nonia	23	05/01/88	M	11/05/20	16/10/2021	BP $\frac{120}{70}$, Sugar (R) 90 Normal Symptom.
17	Rajendranath Dutta	40	24/03/81	M	10.9.20	16/10/2021	BP $\frac{136}{80}$, Sugar (R) 125, Fever, Body pain.
18	Subham Khetan	26	01/09/95	M	10/12/20	16/10/2021	BP $\frac{110}{80}$, Sugar (R) 104, Gastric, Acidity Normal symptoms
19	Amalendu Ghoshal	44	11/04/71	M	05/01/20	16/10/2021	BP $\frac{130}{90}$, Sugar (R) 140, Acidity, Normal System,
20	Harikesh Tiwari	41	10/03/80	M		16/10/2021	BP $\frac{140}{90}$, Sugar (R) 140 Acidity, Constipation Blood for LFT.
21	Tapan Sebait	31	02/05/90	M	17/10/20	16/10/2021	BP $\frac{135}{90}$, Sugar (R) 102, Fever, Body pain.
22	Kiran Maji	25	09/05/96	M	01/06/19	16/10/2021	BP $\frac{110}{70}$, Sugar (R) 104, Acidity, Gastric Normal symptoms
23	Sudama Tiwari			M	~~7.11.19~~	16/10/2021	BP $\frac{150}{90}$, Sugar (R) 116, Gastric, Acidity.
24	Rabishankar Singh	37	07/09/84	M	7.11.19	16/10/2021	BP $\frac{140}{80}$, Sugar (R) 125, Blood For (MP) Widal Fever.
25	M.D. Hassan	29	16/03/92	M	1.7.19	16/10/2021	BP $\frac{120}{90}$, Sugar (R) 120, Acidity, Normal symptom.

Dr. CHANDAN SEN
Reg.No.- WBMC 68796

GENERAL HEALTH CHECK UP CAMP

MAAN STEEL & POWER LIMITED

Commercial

SL NO	NAME OF THE EMPLOYEE	AGE	D.O.B	SEX	D.O.J	DATE OF ANALYSIS	DIAGNOSIS
26	Ranjan Ray	49	04/10/72	M	01/03/20	16/10/2021	BP 135/90, Sugar(R) 140, Blood for fasting PP.
27	Chhotan Kundu	36	09/09/85	M	08/02/21	16/10/2021	BP 125/80, Sugar(R) 85, Normal Symptoms
28	Pawan Singh	31	28/08/90	M	01/05/19	16/10/2021	BP 130/85, Sugar(R) 120, Acidity, Normal symptom
29	Subhendu Hazra	29	04/02/92	M	05/11/20	16/10/2021	BP 120/70, Sugar(R) 90, Gastric, Headache.
30	Samiran Singha	42	05/07/79	M	06/09/20	16/10/2021	BP 140/85, Sugar(R) 110, Headache, Gastric.
31	Subrata Choudhry			M	1.4.21	16/10/2021	BP 135/90, Sugar(R) 130, Normal System
32	Ujjal Dutta			M	10.9.21	16/10/2021	BP 126/80, Sugar(R) 102, Fever, Body pain Blood for MP optimal widal
33	Syed Israrul Hasan			M	30.9.21	16/10/2021	BP 135/95, Sugar(R) 136, Headache, Acidity.
34	Nirmal Jeet Kr. Singh	52	29/01/69	M	01/09/12	16/10/2021	BP 130/90, Sugar(R) 154, Blood for fasting PP
35	Vivek Sharma	45	01/02/76	M	03/01/17	16/10/2021	BP 130/90, Sugar(R) 140, Acidity, Blood for LFT.
36	Brijraj Mishra	55	24/06/65	M	15.3.21	16/10/2021	BP 130/90, Sugar(R) 139 Weakness, Body pain.
37	Ajeet Kumar	22	05/11/98	M	01/07/19	16/10/2021	BP 110/70 Sugar(R) 96, Cold cough, Acidity.
38	Lov Kr. Singh	27	25/12/93	M	01/04/19	16/10/2021	BP 126/90, Sugar(R) 122, Acidity, Headach, Normal symptoms
39	Mahendra Kr. Rawani	25	10/02/96	M	11/02/21	16/10/2021	BP 126/80, Sugar(R) 115, Gastric, Normal Symptoms
40	Ganesh Ch. Roy	42	08/01/79	M	01/07/17	16/10/2021	BP 110/80, Sugar(R) 86, Acidity, Normal System.
41	Mithun Shit	33	31/03/88	M	01/08/17	16/10/2021	BP 130/80, Sugar(R) 105, Blood for sugar F(RP) Rutine test.
42	Subhash Kr. Shaw	27	01/02/94	M	01/08/18	16/10/2021	BP 120/70, Sugar(R) 96, Acidity, Gastric, Blood for LFT.
43	Tarun Bera	32	08/02/89	M	01/09/18	16/10/2021	BP 130/90, Sugar(R) 136, Acidity, Normal system.
44	Arun Das	27	15/05/94	M	08/09/18	16/10/2021	BP 130/80, Sugar(R) 97, Headach, Gastric Normal system
45	Sunil Kr. Jha	39	02/01/82	M	01/07/19	16/10/2021	BP 136/90, Sugar(R) 107, Fever, Headache Body pain,
46	Suresh Kr. Pattanayak	28	09/06/92	M	10/08/19	16/10/2021	BP 126/70, Sugar(R) 136, Pain Abdomen Gastric Blood for LFT.
47	Ranjan ~~Roy~~ Karo	29	20/12/91	M	26/11/19	16/10/2021	BP 120/80, Sugar(R) 86, Acidity, Gastric Normal symptom
48	Dinesh Mahato	47	04/01/74	M	01/09/12	16/10/2021	BP 116/80, Sugar(R) 102, Fever, cold cough Blood for Rutine test.
49	Pappu Kr.	31	16/12/89	M	01/09/19	16/10/2021	BP 126/70, Sugar(R) 110, Gastro problem Blood for LFT.
50	Ashutosh Choudhry	43	—	M	—	16/10/2021	BP 136/90, Sugar(R) 130, Acidity, Headache Symptom Normal.

DR. CHANDAN SEN
Reg.No.- WBMC 68796

GENERAL HEALTH CHECK UP CAMP

MAAN STEEL & POWER LIMITED

Driver & Helper & others

SL NO	NAME OF THE EMPLOYEE	AGE	D.O.B	SEX	D.O.J	DATE OF ANALYSIS	DIAGNOSIS
1	Santosh Kr. Yadav	31	07/10/90	M	01/08/18	16/10/2021	BP $\frac{130}{80}$, Sugar(R) 106, Normal Symptoms
2	Gaurav Paswan	24	04/04/97	M	01/09/18	16/10/2021	BP $\frac{126}{70}$, Sugar(R) 100, Acidity, Gastric
3	Sanjay Bauri	32	02/11/89	M	01/09/18	16/10/2021	BP $\frac{126}{80}$, Sugar(R) 107, Acidity, constipation.
4	Tapan Dutta	47	05/02/74	M	01/08/18	16/10/2021	BP $\frac{136}{90}$, Sugar(R) 125, Acidity, Headache.
5	Kishor Keshri	26	09/01/95	M	01/08/18	16/10/2021	BP $\frac{126}{90}$, Sugar(R) 102, Acidity, Normal System
6	Mukesh Shaw	30	18/09/91	M	01/09/18	16/10/2021	BP $\frac{120}{90}$, Sugar(R) 125, Normal Symptom
7	Guddu Yadav	22	12/06/99	M	01/08/19	16/10/2021	BP $\frac{110}{70}$, Sugar(R) 82, Acidity, Normal System
8	Pahlu Ray	59	01/01/62	M	01/08/19	16/10/2021	BP $\frac{140}{95}$, Sugar(R) 142, Acidity, Gastric, Blood for LFT.
9	Kartick Mondal	28	08/03/93	M	15/10/19	16/10/2021	BP $\frac{126}{90}$, Sugar(R) 90, Acidity, Gastric, Normal Symptoms
10	Shibu Badyakar	32	21/02/89	M	11/05/20	16/10/2021	BP $\frac{120}{90}$, Sugar(R) 102, Fever, Body pain.
11	Haradhan Bauri	29	15/03/92	M	17/02/20	16/10/2021	BP $\frac{116}{80}$, Sugar(R) 99, Normal Symptoms
12	Rupai Chatterjee	35	27/02/86	M	1.7.19	16/10/2021	BP $\frac{136}{90}$, Sugar(R) 109, Constipation, Pain Abdomen.
13	Fulchand Ruidas	46	03/04/75	M	1.7.19	16/10/2021	BP $\frac{140}{90}$, Sugar(R) 130, Headache Normal Symptoms
14	Kundan Dom	23	05/03/98	M	1.7.19	16/10/2021	BP $\frac{120}{80}$, Sugar(R) 90, Weakness, Fever
15	Billet Mahato	49	10/12/72	M	01/09/17	16/10/2021	BP $\frac{140}{90}$, Sugar(R) 120, Whole Body catching Blood for CBC.
16	Kajal Badyakar	38	03/04/83	M	01/06/20	16/10/2021	BP $\frac{126}{90}$, Sugar(R) 136, Acidity, Normal Symptom
17	Raj Kr. Bhagat	31	01/02/90	M	01/06/20	16/10/2021	BP $\frac{120}{70}$, Sugar(R) 96, Acidity, Normal System
18	Bhopal Yadav	58	01/01/63	M	1.9.18	16/10/2021	BP $\frac{160}{90}$, Sugar(R) 145, Hyperxtention, Blood for F.PP
19	Kamdev Roy	39	01/01/81	M	1.6.19	16/10/2021	BP $\frac{116}{80}$, Sugar(R) 105, Normal Symptom
20	Mangal Roy	25	01/04/96	M	01/12/20	16/10/2021	BP $\frac{126}{80}$, Sugar(R) 124, Fever, cold cough.
21	Sanjit Bauri	25	16/02/96	M	11/12/20	16/10/2021	BP $\frac{116}{80}$, Sugar(R) 124, Normal Symptoms
22	Balaram Ray	21	07/03/2000	M	14/01/21	16/10/2021	BP $\frac{120}{80}$, Sugar(R) 86, Nomal Symptoms
23	Manoj yadav	34	01/01/87	M	25/02/21	16/10/2021	BP $\frac{130}{90}$, Sugar(R) 111, Acidity, Headache.
24	Biru Badyakar	38	24/08/83	M	10.4.21	16/10/2021	BP $\frac{130}{90}$, Sugar(R) 92, Fever, Body pain. Blood for widall (H.P.)
25	Sayan Nandi	26	10/10/95	M	01/04/21	16/10/2021	BP $\frac{110}{70}$, Sugar(R) 95, Normal Symptom

Dr. CHANDAN SEN
Reg.No.- WBMC 68796

GENERAL HEALTH CHECK UP CAMP

MAAN STEEL & POWER LIMITED Driver & Helper & others

SL NO	NAME OF THE EMPLOYEE	AGE	D.O.B	SEX	D.O.J	DATE OF ANALYSIS	DIAGNOSIS
26	MD. Salim Khan	21	13/04/2000	M	13/04/21	16/10/2021	BP 126/70, Sugar (R) 85, Normal Symptoms
27	Loknath Bauri	26		M	21.4.21	16/10/2021	BP 120/70, Sugar (R) 75, Acidity, Normal Symptoms
28	Dinesh Dom	24		M	8.7.21	16/10/2021	BP 116/80, Sugar (R) 90, Acidity, Headache
29	Rajat Gope	24	05/04/97	M	12/12/19	16/10/2021	BP 120/90, Sugar (R) 98, Gastric, Pain Abdomen
30	Ambuj Krishnanand Pathak	25		M	14.7.21	16/10/2021	BP 130/90, Sugar (R) 92, Gastric, constipation Blood for LFT.
31	Arobind yadav	22	01/01/99	M	1.1.20	16/10/2021	BP 116/70, Sugar (R) 84, Acidity, Normal Symptoms
32	Biswanath Bauri	27		M	17.8.21	16/10/2021	BP 130/80, Sugar (R) 96, Headache, Body pain cold cough.
33	Suresh Verma	40	16/08/81	M	01/09/12	16/10/2021	BP 130/90, Sugar (R) 126, Normal Symptoms
				Commercial			
	Pradeep Sinha	62	15.01.63	M	1.09.18	16.10.21	BP 120/80, Sugar (R) 125, Body Pain, Acidity
	Moloy Dutta.	44	24.10.76	M	01.05.19	16.10.21	BP 130/90 Sugar (R) 77 weakness, Body Pain
	Akhilesh Kumar.	33	01.01.88	M	01.09.18	16.10.21	BP 130/90, Sugar (R) 111, Acidity, Gastric Normal system
	Hariom Singh	22	01.01.97	M	01.05.19	16.10.21	BP 110/80, Sugar (R) 80 weakness, Body Pain Normal. system
	Ajit Singh	37	25.5.88.	M	2.11.11	16.10.21	BP 120/80, Sugar (R) 86, Acidity, Cold Cough Normal system

Dr. CHANDAN SEN
Reg.No.- WBMC 68796

Chandan Sen

ESIC
Employees' State Insurance Corporation

Insurance

0

Monthly Contribution > Online Challan Form

Transaction Details

* Required Fields

Transaction status:	Transaction Success
Employer's Code No:	74000514500000599
Employer's Name:	MAAN STEEL & POWER LTD.
Challan Period:	Nov-2021
Challan Number :	07421138548669
Challan Created Date	13-12-2021 20:25:26
Challan Submitted Date	14-12-2021 17:36:42
Amount Paid:	125476.00
Transaction Number:	71626186

Print Close

ANNEXURE 19

F. No. J-11011/695/2009- IA-II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj,
New Delhi - 110003
E-mail: sharath.kr@gov.in
Tel: 011-24695319

Dated: 15th January, 2018

To

The Director
M/s Maan Steel and Power Limited
Jamuria Industrial State, Ikra, P.O Jamuria,
District Burdwan, West Bengal-713362.

Subject: Proposed for 0.18 MTPA Integrated Steel Plant, 24 MW Captive Power Plant and 2 x 9 MVA Ferro Alloys located at Jamuria Industrial State, Ikra, P.O Jamuria, District Burdwan, West Bengal of M/s Maan Steel And Power Limited- Extension of validity of Environmental Clearance regarding.

Sir,

This has reference to your online application vide proposal no. **IA/WB/IND/6154/2010** dated **7th November, 2017** seeking extension of validity of Environmental Clearance granted vide File No. J-11011/695/2009- IA.II(I) dated 31st December 2010.

2.0 M/s Maan Steel & Power Limited is located at Jamuria Industrial Estate in Paschim Burdwan district of WB. The earlier project is continuing to run with 2x95 TPD DRI Kilns and producing 57,000 TPA sponge iron.

3.0 The company has obtained EC for the expansion of the unit to 0.18 MTPA Integrated Steel Plant, based on additional 4x100 TPD DRI kilns, and 4x15T IF with 2x30T LRF and matching CCM, 550 TPD Rolling mill, 24 MW Captive Power Plant & 2x9 MVA Ferro Alloy Plant. The validity of EC is up to 30th December 2017.

4.0 CTE for all the facilities as per EC has been received from WBPCB vide letter No 124863, dt. 20.10 2014, and remains valid up to 31.08.2019. The company has so far commissioned only 2x15T IF with CCM and running the plant along with 2x95 TPD DRI Kilns which is existing prior to EC.CTE of 2x200 TPD DRI Kiln has been permitted by WBPCB against 4x100 TPD.

5.0 It was informed that now the situation has changed; Tata Capital Financial Services Limited (TCFSL)vide letter No-CF\TL\Kol\1455825, 14th September 2017 has sanctioned Term Loan for Rs.20.00 crores for a tenure of 78 Months; Punjab National Bank vide letter dated 27th Nov.2017 have sanctioned Rs 50 cores to the company; and the company has also spent Rs. 11.20 Crores towards expansion of Sponge iron, billet, CPP & RM unit till 13.10.2017.

6.0 The proposal was considered during the 26th meeting of Expert Appraisal Committee [EAC] (Industry-I) held during 11th – 13th December, 2017. After detailed deliberations, the committee recommended for extension of validity of EC up to 30thDecember 2020.

8.0 Based on the recommendations of the Expert Appraisal Committee [EAC] (Industry-I), ministry hereby decided to grant extension of validity of the environmental clearance up to 30th December 2020 subject to following conditions:

i. Project Proponent shall strictly adhere to time schedule submitted to the Ministry regarding completion of the balance works.

ii. All other terms and conditions mentioned in the Environment Clearance vide File No. J-11011/695/2009- IA.II(I) dated 31st December 2010 will remain same.

iii. The PP shall obtain fresh environmental clearance in case of change in scope of the project if any.

This issues with the approval of competent authority

15/1/18

(Sharath Kumar Pallerla)
Scientist 'F' / Director

Copy to:-

1. **The Secretary**, Department of Environment, Government of West Bengal, Secretariat Kolkata.
2. **The Additional Principal Chief Conservator of Forests (C)**, Ministry of Environment, Forest and Climate Change, Regional Office (EZ), A/3, Chandrasekharpur, Bhubneshwar-751 023.
3. **The Chairman, Central Pollution Control Board,** Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
4. **The Chairman**, West Bengal State Pollution Control Board, Paribesh Bhawan, 10A-Block LA, Sector –III, Salt Lake City, KOLKATTA – 700 098.
5. **The District Collector,** Burdwan District, Government of West Bengal.
6. **Guard File/Record File/Monitoring File.**
7. MoEF&CC Website

15/1/18

(Sharath Kumar Pallerla)
Scientist 'F'/Director

F. No. J-11011/695/2009-IA-II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi – 110 003
E-mail: ms.industry-mef@nic.in
Tele/fax: 011 – 2436 3973
Dated: December 31st, 2010

To,

M/s Maan Steel & Power Limited
Room No. 4C.13, Elgin Road
Kolkata- 700 200, West Bengal

Fax: 033- 22827947
E-mail: globalexperts@rediffmail.com

Sub: Expansion of Sponge Iron Plant (57,000 TPA) into Integrated Steel Plant (0.18 MTPA) along with Captive Power Plant (24 MW; WHRB 12 MW & FBC 12 MW) and Ferro Alloy Plant (2x9 MVA) at Jamuria Industrial Estate, Ikra, P.O. Jamuria, District Burdwan in West Bengal by M/s Maan Steel & Power Limited - regarding Environmental Clearance

Sir,

This has reference to your letter no. MSPL/ENV-05/2010-11dated 14th October, 2010 received in the Ministry on 20th October, 2010 along with a copy of EIA/EMP reports seeking environment clearance under the provisions of EIA Notification, 2006.

2. The Ministry of Environment and Forests has examined the application for the above project. It is noted that M/s Maan Steel & Power Limited have proposed for the expansion of Sponge Iron Plant (57,000 TPA) by addition of Steel melting shop and rolling mill to Integrated Steel Plant (0.18 MTPA) along with Captive Power Plant (24 MW; WHRB 12 MW & FBC 12 MW) and Ferro Alloy Plant (2x9 MVA) at Jamuria Industrial Estate, in District Burdwan in West Bengal. About 18000 TPA of Steam coal / pearl coke will be required which will be purchased from open market and also from import. Total land acquired is 40.94 acres and green belt will be developed in 13.5 acres. No R&R is involved. No national park/wildlife sanctuary/reserve forests are located within 10 km. radius of the project site. Total cost of the project is Rs. 342.30 Crores. Rs 13.70 Crores and Rs 1.19 Crores are earmarked towards capital cost and recurring cost/annum for environment pollution control measures.

3. Following are the details of the facilities to be installed and products to be manufactured:

EXISTING UNITS :				
Major Units	**Capacity**	**Products**	**Production (TPA)**	**End Use**
DRI kiln	2x95 TPD	Sponge Iron	57,000	SMS
PROPOSED EXPANSION :				
DRI KILN	4X100 TPD	Sponge Iron	1,20,000	SMS

SMS-IF-LRF/AOD -Billet Caster	4x15 T 2x30 T Matching	MS Billets	1,92,000	Rolling Mills
Rolling Mills	550 TPD	Rods/bars/light Structurals	1,80,000	Sale
CPP-WHRB +CPP-FBC	12 MW 12 MW	Power	24 MW	Internal use
Ferro Alloys	2x9 MVA	Ferro-Mn / Silico-Mn	30,000	Internal use/sale

4. To control particulate emissions electrostatic precipitator (ESP) will be provided to DRI kilns and FBC boiler. Hot fume gases for the kiln will be passed through dust settling chamber (DSC) and after burning chamber (ABC) to remove the coarse solids and burn CO and then passed through waste heat recovery boiler (WHRB) and Electrostatic precipitator (ESP) before letting out into the atmosphere through ID fan and stack. Fume extraction system with duct, gas cooler, bag house, ID fans and stack will be provided to Induction Furnace. Fugitive dust will be controlled by dust suppression and dust extraction system. Regular water sprinkling will be carried out to minimize the fugitive dust emission during transportation.

5. Total water requirement of 1,632 m^3/day will be met from the River Ajay. The treated effluent will be used for dust suppression and green belt development. Domestic effluent will be treated in septic tank followed by soak pit. No effluent will be discharged outside the premises and 'Zero' discharge will be adopted. All the storm water will be collected and stored in water harvesting pond. Out of 45 MW power requirement, 24 MW will be generated captively and 21 MW will be sourced from grid. Char and coal fumes will be utilized as fuel feed in FBC power plant.

6. The solid waste generated in the form of Char and coal fines will be used in FBC boiler. Scrap will be recycled in steel melting shop. Scales from rolling mill and Iron ore fines from raw material handling system will be sold to sinter plant. Kiln dust, kiln accretion, bottom ash will be used for land filling. Fly ash will be used as per Fly Ash Notification and collected in dry form. Waste/used/spent oil and used batteries will be sold to authorized recyclers/re-processors.

7. All the Integrated Steel plants are listed at S.No. 3(a) under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central level.

8. The proposal was considered by the Expert Appraisal Committee-1 (industry) in its 16th meeting held during 22nd - 24th November, 2010. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions. Public hearing is not required due to project being located in Jamuria Industrial Estate as per Section (iii), Stage (3), Para (i)(b) of EIA Notification 2006

9. Based on the information submitted by you, presentation made by you and consultant, Global Experts, Bhubaneswar, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September 2006 subject to strict compliance of the following Specific and General conditions:

A. SPECIFIC CONDITIONS :

i. Efforts shall be made to reduce RSPM levels in the ambient air and a time bound action plan shall be submitted. On-line ambient air quality monitoring and continuous stack

SMS-IF-LRF/AOD -Billet Caster	4x15 T 2x30 T Matching	MS Billets	1,92,000	Rolling Mills
Rolling Mills	550 TPD	Rods/bars/light Structurals	1,80,000	Sale
CPP-WHRB +CPP-FBC	12 MW 12 MW	Power	24 MW	Internal use
Ferro Alloys	2x9 MVA	Ferro-Mn / Silico-Mn	30,000	Internal use/sale

4. To control particulate emissions electrostatic precipitator (ESP) will be provided to DRI kilns and FBC boiler. Hot fume gases for the kiln will be passed through dust settling chamber (DSC) and after burning chamber (ABC) to remove the coarse solids and burn CO and then passed through waste heat recovery boiler (WHRB) and Electrostatic precipitator (ESP) before letting out into the atmosphere through ID fan and stack. Fume extraction system with duct, gas cooler, bag house, ID fans and stack will be provided to Induction Furnace. Fugitive dust will be controlled by dust suppression and dust extraction system. Regular water sprinkling will be carried out to minimize the fugitive dust emission during transportation.

5. Total water requirement of 1,632 m^3/day will be met from the River Ajay. The treated effluent will be used for dust suppression and green belt development. Domestic effluent will be treated in septic tank followed by soak pit. No effluent will be discharged outside the premises and 'Zero' discharge will be adopted. All the storm water will be collected and stored in water harvesting pond. Out of 45 MW power requirement, 24 MW will be generated captively and 21 MW will be sourced from grid. Char and coal fumes will be utilized as fuel feed in FBC power plant.

6. The solid waste generated in the form of Char and coal fines will be used in FBC boiler. Scrap will be recycled in steel melting shop. Scales from rolling mill and Iron ore fines from raw material handling system will be sold to sinter plant. Kiln dust, kiln accretion, bottom ash will be used for land filling. Fly ash will be used as per Fly Ash Notification and collected in dry form. Waste/used/spent oil and used batteries will be sold to authorized recyclers/re-processors.

7. All the Integrated Steel plants are listed at S.No. 3(a) under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central level.

8. The proposal was considered by the Expert Appraisal Committee-1 (industry) in its 16th meeting held during 22nd - 24th November, 2010. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions. Public hearing is not required due to project being located in Jamuria Industrial Estate as per Section (iii), Stage (3), Para (i)(b) of EIA Notification 2006

9. Based on the information submitted by you, presentation made by you and consultant, Global Experts, Bhubaneswar, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September 2006 subject to strict compliance of the following Specific and General conditions:

A. SPECIFIC CONDITIONS :

i. Efforts shall be made to reduce RSPM levels in the ambient air and a time bound action plan shall be submitted. On-line ambient air quality monitoring and continuous stack

monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), gas cleaning plant, venturi scrubber, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm^3 by installing energy efficient technology.

ii. As proposed, Electrostatic precipitator (ESP) shall be provided to control the particulate emissions from the FBC and WHRB within 50 mg/Nm^3. Fume extraction system shall be provided to the steel melting shop to extract the fumes. Bag filters to control the dust emissions from the induction furnaces and pulse jet bag filters at coal and iron crushing area, stock house and cooler discharge area.

iii. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.

iv. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/Code of Practice issued by the CPCB shall be followed. New standards for the sponge iron plant issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 should be followed.

v. Hot gases from DRI kiln shall be passed through Dust Settling Chamber (DSC) to remove coarse solids and After Burning Chamber (ABC) to burn CO completely and used in waste heat recovery boiler (WHRB). The gas then shall be cleaned in ESP before leaving out into the atmosphere through ID fan and stack.

vi. Total water requirement shall not exceed 1,632 m^3/day. Permission from the competent authority shall be obtained to draw the water. Efforts shall further be made to use maximum water from the rain water harvesting sources. Use of air cooled condensers shall be explored and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly. All the effluent should be treated and used for ash handling, dust suppression and green belt development. No effluent shall be discharged and 'zero' discharge shall be adopted. Sanitary sewage should be treated in septic tank followed by soak pit.

vii. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.

viii. Regular monitoring of influent and effluent surface, sub-surface and ground water (including chromite) should be ensured and treated wastewater should meet the norms prescribed by the State Pollution Control Board or described under the E (P) Act whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office at Bhubaneswar, West Bengal Pollution Control Board (WBPCB) and CPCB.

ix. The water consumption shall not exceed as per the standard prescribed for the steel plants.

x. All the coal fines, char from DRI plant shall be utilized in AFBC boiler of power plant and no char shall be used for briquette making or disposed off anywhere else. AFBC boiler shall be installed simultaneously along with the DRI plant to ensure full utilization of char from the beginning. Scrap shall be used in steel melting shop (SMS) and SMS slag and

kiln accretions shall be properly utilized. All the other solid waste including broken refractory mass shall be properly disposed off in environment-friendly manner.

xi. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and its subsequent amendments.

xii. Vehicular pollution due to transportation of raw material and finished products shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.

xiii. All internal roads shall be black topped. The roads shall be regularly cleaned with mechanical sweepers. A 3-tier avenue plantation using native species shall be developed along the roads. Facilities for parking of trucks carrying raw coal from the linked coalmines shall be created within the Unit.

xiv. Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste should be submitted to the Ministry's Regional Office at Bhubaneswar, WBPCB and CPCB.

xv. A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.

xvi. Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office at Bhubaneswar, WBPCB and CPCB within 3 months of issue of environment clearance letter.

xvii. As proposed, green belt shall be developed in 33 % of plant area as per the CPCB guidelines in consultation with the DFO.

xviii. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants should be implemented.

xix. At least 5 % of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhubaneswar. Implementation of such program should be ensured accordingly in a time bound manner.

xx. The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

B. GENERAL CONDITIONS:

i. The project authorities must strictly adhere to the stipulations made by the West Bengal State Pollution Control Board and the State Government.

ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.

iii. The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th 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.

iv. At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, SO_2 and NO_x are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and the SPCB/CPCB once in six months.

v. Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended form time to time. The treated wastewater shall be utilized for plantation purpose.

vi. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).

vii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

viii. The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.

ix. The project proponent shall also comply with all the environmental protection 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 care etc.

x. Requisite amount shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bhubaneswar. The funds so provided shall not be diverted for any other purpose.

xi. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.

xii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF at Bhubaneswar. The respective Zonal Office of

CPCB and the SPCB. The criteria pollutant levels namely; PM10, SO_2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

xiii. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bhubaneswar / CPCB / SPCB shall monitor the stipulated conditions.

xiv. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEF at Bhubaneswar by e-mail.

xv. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment and Forests at http:/envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Bhubaneswar.

xvi. Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.

10. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

11. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

12. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.

P. Ahujarai

(Dr. P.L. Ahujarai)
Scientist -F

ANNEXURE 20

वर्ष 8 अंक 337
पृष्ठ 12
धनबाद, सोमवार
24 जनवरी, 2011
आसनसोल संस्करण
मूल्य ₹ 4.00

विश्व का सर्वाधिक पढ़ा जाने वाला अखबार

दैनिक जागरण

NOTICE

This is to inform all concerns that Environmental clearance has been granted by Ministry of Environment & Forests, Govt. of India vide letter No. J-11011/695/2009-IA-II (I) dt. 31-12-2010 to **M/s Maan Steel & Power Ltd.** At Jamuria Industrial Estate, IKRA, P.O-Jamuria, Distt.- Burdwan in West Bengal for their Expansion of 0.18 MTPA Integrated Steel Plant along with 24 MW Captive Power Plant.

ভারতে সান্ধ্যদিক প্রচারিত প্রথম শ্রেণির বাংলা দৈনিক

আনন্দবাজার পত্রিকা

কলকাতা ১১ মাঘ ১৪১৭ মঙ্গলবার ২৫ জানুয়ারি ২০১১ শহর সংস্করণ ৩.৫০ টাকা

দক্ষিণবঙ্গ

আনন্দবাজার পত্রিকা কলকাতা মঙ্গলবার ২৫ জানুয়ারি ২০১১

DABE

নোটিশ

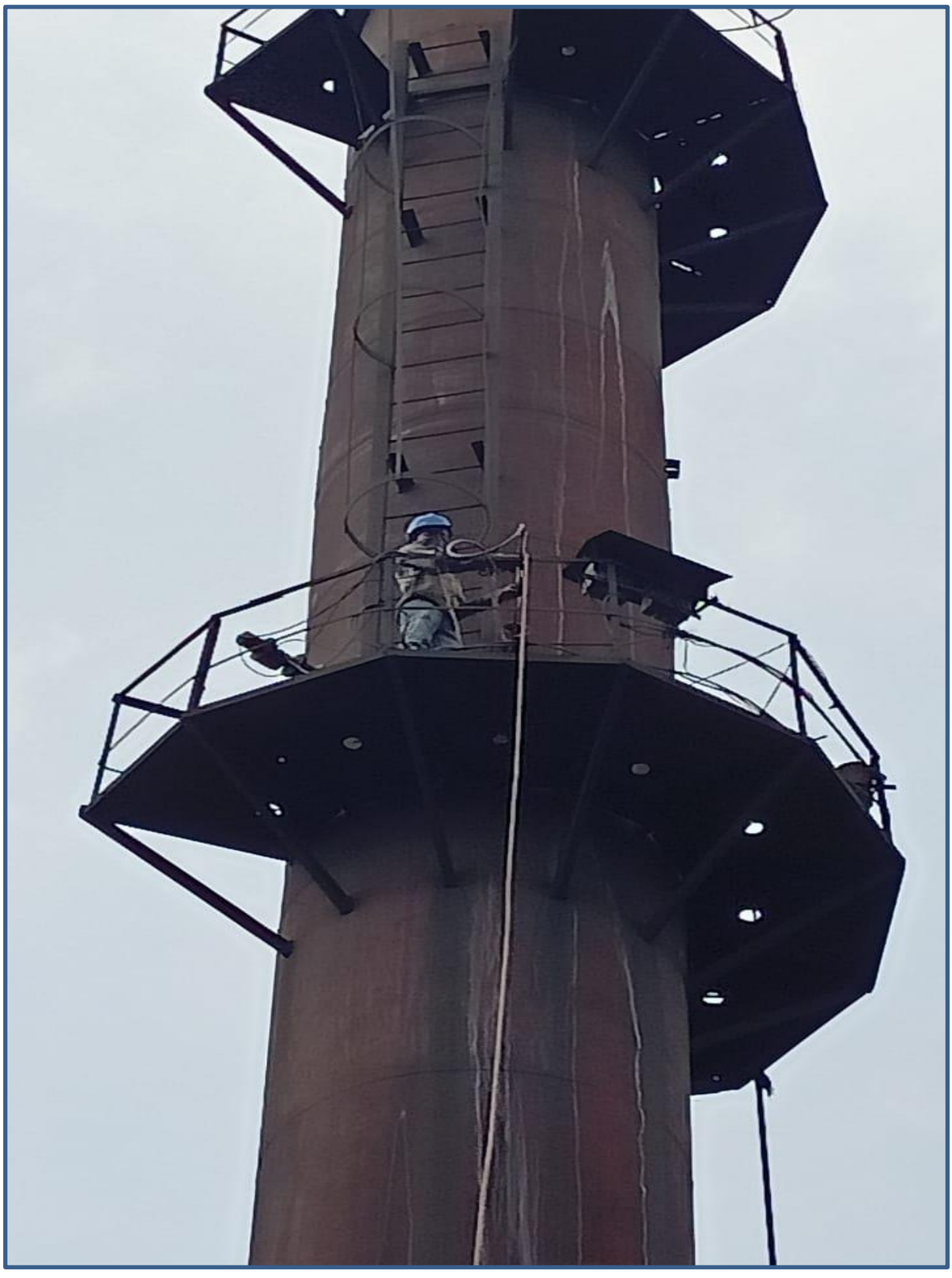
This is to inform all concerns that Environmental clearance has been granted by Ministry of Environment & Forests, Govt. of India vide letter No. J-11011/695/2009-IA-II (I) dt. 31-12-2010 to M/s Maan Steel & Power Ltd. At Jamuria Industrial Estate, IKRA, P.O. Jamuria, Distt.-Burdwan in West Bengal for their Expansion of 0.18 MTPA Integrated Steel Plant along with 24 MW Captive Power Plant.

PHOTOGRAPHS

Ambient Air Quality Monitoring

AMBIENT NOISE MONITORING

STACK GAS MONITORING



Sludge collection

Slag Collection

Effluent water collection

Laechate collection

Water Sprinkler

LED Lightening in Workplace

Green Belt Development

Health-Care Facilities

24-hour Ambulance facilities