

File No: MSPL-U1 /EC-Compliance / Nov'25

Dated: 11.11.2025

To,
The Deputy Director of Forest
Ministry of Environment, Forest & Climate Change
Integrated Regional Office: (IRO)
IB – 198, IB Block, Sector -- III
Bidhannagar, Kolkata- 700106
West Bengal

Subject: Six Monthly Compliance Report for the Period of April '2025 to Sptember'25 of M/s Maithan Steel & Power Limited (Unit –I) located at Vill-Bonra, Tehsil & PS- Neturia, Dist-Purulia, West Bengal.

Ref: EC File No: IA-J-11011-554/2017-IA. II (I) dated 20th November, 2023

Respected Sir / Madam (s),

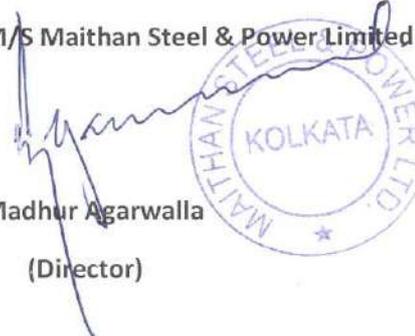
This has reference to the above subject, we are hereby submitting the six monthly compliance reports for the period from April '2025 to Sptember'25 of accorded Environment Clearance (EC) vide letter No: IA-J-11011-554/2017-IA. II (I) dated 20th November, 2023 of Unit-I of Maithan Steel & Power Ltd. located at Vill-Bonra, Tehsil & PS- Neturia, Dist-Purulia, West Bengal in soft copy through mail as well as same shall be uploaded on Ministry's Parivesh Portal within stipulated time.

Hope you will find the same in order.

Thanking you

Yours faithfully

For, M/S Maithan Steel & Power Limited


Madhur Agarwalla
(Director)



C.C:

1. The Regional Director, Central Pollution Control Board (Eastern Zonal Office), G97V + H5Q, Kasba New Market, Sector E, East Kolkata Twp, Kolkata, West Bengal – 700107.
2. The Environment Engineer, Asansol Regional Office, West Bengal Pollution Control Board, Kalyanpur Satellite Township Projects, Dr. B.C. Roy Road, P.O-Dakshin Dhadka, Asansol, Dist – Paschim Bardhaman, WB – 713302.

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MAITHAN STEEL & POWER LIMITED



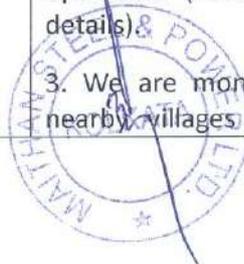
**Six Monthly EC Compliance Report of
M/s Maithan Steel & Power Ltd. (Unit-I)
For the period of April'25 – September'25**

(MoEF & CC letter no. IA-J-11011/554/2017-IA-II (I) dated 20.11.2023)



**Compliance Status of Environment Clearance No. IA-J-11011/554/2017-IA-II (I)
dated 20.11.2023 of M/s Maithan Steel & Power Ltd. located at Vill - Bonra,
P.S – Neturia, Dist- Purulia, West Bengal**

A.	Compliance Conditions	Compliance Status
Sl. No	Specific Conditions	
i	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.	Noted & Agreed.
ii	The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.	<p>Complied.</p> <p>We are submitting the six monthly Compliance in Parivesh Portal within the stipulated time. Environmental protection measures like installation of PCD, plantation, implementation of ZLD etc. will be duly complied as per commitments made to the Ministry. All the recommendations will be followed as mentioned in the EIA report during the installation of each proposed unit.</p> <p>i. Installation of ESP & Bag Filters to achieve 30 mg/ Nm³ emission standard.</p> <p>ii. Designing of RWH & garland drain.</p> <p>iii. Provision of PPE kit and implementation of all Safety norms.</p> <p>iv. Installation of effluent treatment plant (ETP) etc.</p>
iii	The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.	<p>Noted & will be Complied.</p> <p>Maithan Steel & Power Ltd. has established Waste Heat Recovery Power plant to generate power by utilizing waste heat of DRI gas and capacity will be increased after completion of EC accorded project. The action plan to implement the Carbon Sequestration initiatives will be prepared and the implementation report will be submitted to the Ministry.</p>
iv	Saontal Motha (~ 0.2 km, SSW), Dhangajor (~ 0.9 km, ENE), Goaladih (~0.9 km, West) and Bonra (~ 1.0 km, NW) and other sensitive areas falls within the study area of the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.	<p>Complied.</p> <p>The organisation has taken following steps to minimise the impact on the local habitation:</p> <p>1. Industry has installed adequate & effective pollution control measures like ESP, bag filters , scrubbers etc. to safe guard environment.</p> <p>2. Plantation activity is being carried out systematically including all along the periphery to reduce adverse effect on local habitat due to plant operation. (Please refer Annexure-1 for Plantation details)</p> <p>3. We are monitoring Ambient air quality of the nearby villages like Bonra, Murulia, Saontal and</p>

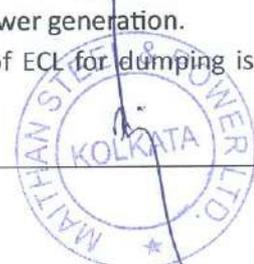


		Moutha in addition to inside plant. Monitoring results are well within the permissible limit. Monitoring Reports are enclosed as Annexure- 2 .
v	Machkanda Jora is at distance of 0.8 km in the East direction of the project site within the study area from the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.	Noted for compliance.
vi	The water requirement of 2750 KLD shall be obtained from Damodar River only after obtaining necessary permission from the Competent Authority. No ground water abstraction is permitted.	Being Complied. We have obtained permission from DVC to fulfil Water requirement of the plant. We are not abstracting ground water. (Please refer Annexure- 3A for permission copy of DVC and Annexure- 3B for water consumption).
vii	Three tier Green Belt shall be developed in at least 33% of the project area as per the plan committed all along the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards Saontal Motha (~ 0.2 km, SSW), Dhangajor (~ 0.9 km, ENE), Goaladih (~0.9 km, West) and Bonra (~ 1.0 km, NW) and other sensitive areas. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.	Being Complied. Green belt development is already continued inside the plant project premises and a dedicated team of workers is continuously engaged for planting trees and saplings. At present existing land area is 18.15 ha (13.78 ha + 4.37 ha= 18.15 ha) out of which 6.0 ha area to be developed as green belt. More than 3899 trees are planted inside and outside the plant premises within the 2021-22 financial year, 1651 saplings are planted in the year 2022-23 financial year, 966 nos. of saplings are planted in 2023-24 and 2932 nos. of saplings are planted for the financial year 2024-25. After that we have planted 4545 nos. saplings during the period April, 25 to Sep, 25 . Therefore, total nos. of trees are 13,993 nos. in the green belt covering approx. 5.60 ha area. Further action plan regarding the green belt as per the EC directives will be prepared and the implementation report will be submitted to the concerned IRO office of the MoEF&CC. Thick plantation have been carried out all along the periphery of the industry which is being act as green barrier. (Please refer Annexure-1 for details of Plantation).
Viii	All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 2.17 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.	Being complied. The public hearing issues will be complied as per the provision mentioned in the said OM of MoEF&CC. The timeline as committed to the Ministry will be adhered to. Please refer Annexure-4 for details of CER activities carried out during the period April,25 to Sep,25.
ix	The PP shall undertake village adoption programme, prepare and implement the action plan to develop them into model villages.	Noted & will be complied. However, industry is engaged in socio-economic development of nearby villages at present and funds are being utilised in phase wise manner.
x	PP shall install digital display board at the plant gate.	Complied. (Please refer Annexure-5 for photograph)

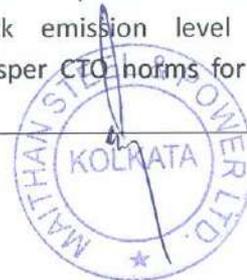
xi	PP shall prepare a comprehensive housekeeping plan and implement on regular basis.	Noted and being followed. A dedicated housekeeping team is engaged for proper housekeeping.
xii	PP shall provide PTFE Bag Filters in the existing as well as proposed expansion project. The Bag Filters in the existing 200 TPD DRI Plant (PTM type) shall be replaced with PTFE Bags within a year.	Complied. Please refer WO copy as Annexure-6.
B	General Conditions	
I	Statutory compliance	
i	The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.	Complied. Before starting the construction activity , Consent to Establish (NOC) permission is obtained from the West Bengal Pollution Control Board for the EC accorded project vide NOC Memo no. 525-2N-70/2022 (E) dated 02.05.2025. (Please refer Annexure-7).
II	Air quality monitoring and preservation	
	Conditions	
i	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 04 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories	Being complied and will be complied too. At present the Online Continuous Emission Monitoring System (OCEMS) for all the process stack of the existing units are as per CPCB guidelines and 24X7 online data is transferred to RTDAS server continuously through online portal. (Please refer Annexure-8A for OCEMS data). Besides this, quarterly monitoring of all stacks are done by third party monitoring agency having NABL accredited laboratory. (Please refer Annexure-8B for stack emission monitoring report). At present Ambient Air Quality is monitored at four locations (Inside location-04 & Outside plant location-04) by third party monitoring agency having NABL accredited laboratory. (Please refer Annexure-2 for AAQ report). CAAQMS is established.
ii	The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area covering upwind and downwind directions.	Being Complied. The management of MSPL (Maithan Steel & Power Limited) is monitoring criteria pollutants level namely- PM ₁₀ , PM _{2.5} , SO ₂ , NO _x (ambient levels as well as stack emissions of PM) by third party monitoring agency having NABL accredited laboratory and the same is displayed at main gate of the industry for disclosure to the public and also uploaded with compliance report on the website of the company.
iii	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Being Complied. (Please refer Annexure-9 for Fugitive Emission Report).



iv	Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.	<p>Complied.</p> <p>Sampling facility at all the stacks have been / will be provided as per the CPCB guidelines for manual monitoring.</p>
v	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	<p>Being Complied.</p> <p>The industry has taken following steps to minimise ambient & fugitive emission level:</p> <ol style="list-style-type: none"> 1. Installed efficient APCM such as ESP, Bag Filter, scrubber at all dust generating points/ stack. 2. Engaged movable tractor tanker for water sprinkling at raw material yard / roads to control fugitive emission as well as vehicular emission. 3. All conveyer belts are covered. <p>Observed that stack emission results & Fugitive emission results are well within the limit. (Please refer Annexure- 2 & 9 for AAQ & Fugitive Emission Report).</p>
vi	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	<p>Being Complied.</p> <p>From visual observation of stack emissions and differential pressure check in bag house, damage of bags is detected & damage bags are replaced taking shut down of cooler discharge, Raw Material Handling Plant, Intermediate Bin, Product House. In running condition bags are cleaned by pulse air jet using cleaning timer cycle.</p>
vii	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.	<p>Noted & to be complied.</p> <p>We are in process of engaging mechanical sweeping machine to clean plant roads, shop floors, roofs regularly.</p> <p>However, dedicated housekeeping team is engaged round the clock to maintain cleanliness inside the plant.</p>
viii	Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.	<p>Being Complied.</p> <p>Truck transporting materials especially fine materials are / will be covered with tarpaulin and being/ will be made sure to prevent spillage proof.</p> <p>(Please refer photographs of covered transportation of Raw Material as Annexure-10).</p>
ix	Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.	<p>Being Complied</p> <p>For the current operational plant (2X100 & 01 X 350 TPD sponge iron plant, 20 MW CPP & 02 X 9 MVA SEAF), APC dust is dumped in abandoned mine area and the dolochar that is generated are used in the AFBC of CPP for power generation.</p> <p>(Permission copy of ECL for dumping is enclosed as Annexure-11).</p>



x	The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.	Complied. The primary and secondary fume extraction system is installed in the Submerged Arc Furnace of the Ferro Alloy Unit. (Please refer photographs of fume extraction system as Annexure-12).
xi	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.	Agreed & will be complied. The wind shelter fence will be constructed at the raw material stock piles and will be completed within a stipulated time.
xii	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.	Being Complied. Natural ventilation is implemented in the existing project. The best practices will be followed in construction work of the future expansion project as well.
xiii	Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.	Complied.
xiv	The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.	Complied All required environmental protection measures such as green belt development all along plant boundary, pollution control equipments such as ESPs, Bag Filters, covered conveyers and dust suppression systems etc. are provided and operated duly ensuring environmental safeguard measures to minimise the impact on the surrounding ecology. Apart from that, sufficient numbers of mobile sprinkler system are deployed inside the project premises and also in the surrounding villages to arrest the fugitive dust emission.
xv	Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.	Complied. All APCM are cleaned & maintained properly. Bag filters are working efficiently. Hence, stack monitoring results are within the limit. (Please refer Annexure- 8 for stack monitoring).
xvi	Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.	Complied. Mobile Water mist system have been procured and now it is working properly. (Please refer photographs of water mist system as Annexure-13).
xvii	The particulate matter emissions from the process stacks shall be less than 30 mg/Nm ³ and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.	Being Complied. The Management is very much concerned about keeping the stack emission level within the permissible limit as per CTO norms for the existing operational plant.



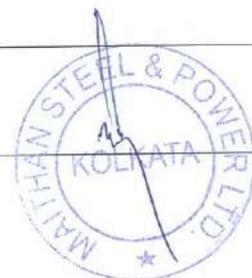
		Online Continuous Emission Monitoring system (OCEMS) is attached with the major stacks connected to the operational plant.
xviii	<p>Following additional arrangements to control fugitive dust shall be provided:</p> <p>a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.</p> <p>b. Proper covered vehicle shall be used while transport of materials.</p> <p>c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.</p>	<p>Being Complied.</p> <p>Industry has taken following pollution abatement measures:</p> <ol style="list-style-type: none"> 1. Installed Fixed type water sprinklers at various transfer points & raw material yard. / water mist canon at raw material yard. 2. Installed Dry fogging system at bag house area, hoppers etc. 2. Installed water sprinkling system on conveyer belts. 3. Movable water tanker is available round the clock for road dust suppression and reduce vehicular emission. <p>b. Raw Materials are coming to the plants through fully covered trucks by tarpaulin.</p> <p>c. Noted for compliance.</p> <p>(Please refer Annexure-14).</p>
xix	Briquetting and Jigging plant shall be installed in Ferro Alloys Plant.	<p>Complied.</p> <p>Jigging Plant in Ferro Alloys unit already installed and in operation.</p> <p>(Please refer photographs of Jigging plant as Annexure-15).</p>
xx	The PP shall minimize the evaporation losses in jigging operation to less than 10% using suitable advanced process.	Complied and Jigging Plant is under operation
xix	The 4th hole extraction system shall be provided in the Sub Merged Arc Furnaces and EAF.	Complied.
xxii	Industry is going to use silica quartz in large quantities and going to produce Silico Manganese and Ferro Silicon alloy steel. Therefore, it is necessary to control silica/quartz exposures at production Departments, not only emission norms as per Indian Factories Act. The permissible limit for silica/quartz should be within 10 mg/m ³ for total dust as per Indian Factories Act. Therefore, it is recommended to monitor personal and area exposures for silica quartz dust in the process plants.	Noted for compliance.
xxiii	During operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.	Noted for compliance.
xxiv	The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m ³ ,	Noted for compliance.



	<p>respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.</p> <p>i. The industry should estimate the total dust emitted from the stacks in tonnes/month and submit this to IRO MoEFCC, once in six months.</p> <p>ii. The PP to install CO sensors with alarm system, at strategic locations inside the Plant.</p>	
III	Water quality monitoring and preservation	
i	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Our plant is based on ' Zero Liquid Discharge '. In existing plant Water is used only for cooling purpose which is reused in process and the treated domestic waste water is reused for developing green belt and dust suppression system with movable water tanker.
ii	The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.	Being Complied. Ground water analysis is being carried out inside plant and nearby village area by third party having NABL accredited laboratory. Please refer Annexure-16 for ground water quality analysis report.
iii	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.	Complied. (Please refer photographs in Annexure-17)
iv	Water meters shall be provided at the inlet to all unit processes in the plants.	Complied. Water meter has been installed at our inlet and the same practice will be continued for the future expansion project as well.
v	The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.	Complied. Water is only used for cooling purpose. In this process, certain quantity of water gets evaporated and remaining water goes to cooling tower. Cooling tower blow down, boiler blow down & DM plant regeneration water is again reused in DRI plant for cooling purpose and also for dust suppression. Water is recirculated in the system Hence, the industry is practicing cascade use of water in a systematic way.



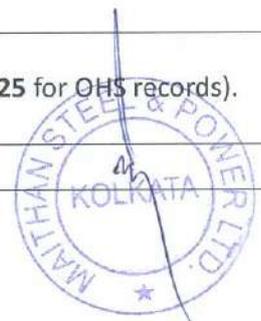
vi	The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.	Complied. Operational process is dry. Waste water generated from Cooling tower blow down, boiler blow down & DM plant regeneration which is recycled & reused in DRI plant for cooling purpose and partially for dust suppression. Sewage treatment plant has been established.
vii	All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.	Complied.
viii	Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.	Noted for compliance. (Please refer Annexure-18 showing harvesting structure in lay out).
ix	Air Cooled condensers shall be used in the captive power plant.	Noted
IV	Noise monitoring and prevention	
i	Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	Complied. (Please refer Annexure-19 for noise monitoring results).
ii	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.	Complied. Ambient noise level is well below the permissible limit. (Please refer Annexure-20).
iii	PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.	Complied. (Please refer Annexure-19 for work zone noise monitoring result & Annexure-21 for heat stress analysis report).
V	Energy Conservation measures	
i	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;	Complied. Solar street lights have been installed. (Please refer Annexure-22 for photographs).
ii	Provide LED lights in their offices and residential areas.	Complied.
iii	The project proponent shall provide waste heat recovery system on the DRI Kilns.	Complied. Industry has already established 12 MW Waste Heat Recovery based power plant. Total 24 MW to be generated after completion of expansion project.
iv	The dolochar generated shall be used for power generation.	Being followed
v	Tar shall be recovered from producer gas and shall be sold to registered processors and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns.	Not Applicable



vi	The PP shall implement the guidelines on sponge iron plants issued by the CPCB/SPCB in this regard.	Being followed
VI	Waste management	
i	Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil.	Being complied. Waste oil/used oil is collected in drums and disposed off through TSDF /authorised recyclers During this period no disposal was done.
ii	Kitchen waste shall be composted or converted to biogas for further use.	Being complied. Kitchen waste is composted and used as manure for plantation.
iii	100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.	Being complied. Fly ash is being disposed to cement and brick manufacturers for further utilization. Please refer Annexure-23 for WO /agreement.
iv	The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at https://cpcb.nic.in/technical-guidelines-3/ . All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.	Being followed.
v	A proper action plan must be implemented to dispose of the electronic waste generated in the industry.	Being complied. E-Waste is disposed off through authorized recycler. There is no generation of E-Waste during this period.
vi	Solid waste utilization a. PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making. b. PP shall recycle/reuse solid waste generated in the plant as far as possible. c. Used refractories shall be recycled as far as possible.	a) Not Applicable b) Being complied c) Used refractories is being disposed off through refractory unit.
vii	SMS slag after metal recovery in waste recycling facility shall be conditioned and used for road making, railway track ballast and other applications. The project proponent shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. The project proponent shall establish linkage for 100% reuse of rejects from Waste Recycling Plant.	Not Applicable



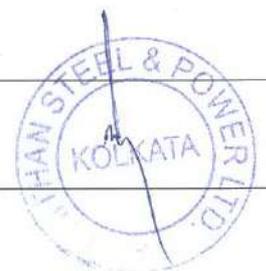
viii	Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.	Not Applicable
ix	Waste recycling Plant shall be installed to recover scrap, metallic and flux for recycling to sinter plant and SMS.	Not Applicable
x	The ESP dust must be agglomerated before disposal in exhausted mines. The dust must be recycled inside the Plant, wherever possible	Being complied ESP dust is being dumped into abandoned open cast mines.
VII	Green Belt	
i	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.	Noted. To be complied in time bound manner.
ii	Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.	Noted.
iii	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.	Being Complied. Industry has developed polyculture plantation in the plant to maintain bio diversity and soil quality including arresting of soil erosion. Green Belt development is continual process in our plant. Also, concrete roads are made inside plant.
VIII	Public hearing and Human health issues	
i	i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Being complied. We have prepared On Site Emergency Preparedness Plan including HIRA. (Please refer Annexure-24).
ii	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.	Complied. (Please refer Annexure-21).
iii	Provision shall be made for the housing of 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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Complied.
iv	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.	Complied. (Please refer Annexure-25 for OHS records).
IX	Environment Management	



i	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.	Being complied. Industry has undertaken many socio-economic development plan and implementing the same in time bound manner in line with the Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. The cost incurred in CER is being carried out for social development and welfare measures in the surrounding villages. (Please refer Annexure-4 for details of CER activities carried out).
ii	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.	Being complied. (Please refer Annexure-26 for Environment Policy duly approved by the Board of Directors).
iii	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	Complied. A Separate Environment Management Cell has been formed to look after all environmental issues.
iv	Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.	Complied. Performance test of pollution control systems have been carried out which shows well effectiveness of all pollution control devices. Reports are attached as Annexure-27 .
X	Miscellaneous	
i	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	Complied. Already submitted.
ii	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Complied. Already submitted.
iii	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	Being complied.



iv	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	Being complied. Environment monitoring is being carried out by third party having NABL approved laboratory.
v	Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented	Being followed
vi	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Being complied. Six Monthly Compliance report is being submitted to Ministry's website.
vii	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Being Complied. Industry is submitting environmental statement for each financial year in Form-V. Environmental statement for the financial year 2024-25 has been submitted through WBPCB portal.
viii	The project proponent 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, commencing the land development work and start of production operation by the project.	Complied. Financial closure date is 20-10-2022; final approval of the project by the concerned authorities is 08.10.2021 & commencing the land development work is 12.01.2022. Expected commencement of production by 31.03.2026.
ix	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Being complied in phase wise manner.
x	The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.	Not Applicable. There is no Schedule-I species within the 10 KM radius from the plant site as per Flora & Fauna list provided by the Forest Department, Govt. of West Bengal.
xi	The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.	Noted. Industry is continuously implementing recommendations in EIA/EMP. Also, implementing action plan to attend PH issues in time bound manner.
xii	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Noted
xiii	Concealing factual data or submission of false/fabricated data may result in revocation of this	Noted & being complied.



xii	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Noted
xiii	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted & being complied.
xiv	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
xv	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Noted
xvi	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.	Noted.
xvii	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted



Maithan Steel & Power Limited (Unit-I)

Plantation Details

Period: April' 25 – September' 25

Months	Plant Area	Species	Total No. of Saplings
June-25	Beside coal shed, Near project office, Near WTP, Boundary wall of 350 yard, Admin area, near Main gate, Day bin of 350 boundary wall	Shisham, Radhachura, Jarul, Sahgun, Debbaru, Chatim, Ficus, Mehogini, Simul,	4183
July-25		Bakul, Arjun, Sirish, Neem, Cronocorpus, Red Guava,	160
Aug- 25		Mango, Karanj, Ticoma, Bougaivillea,	202
Total			4545

Total Plantation as on 31.03.2025 : 9448 nos.

Plantation during April'25 to September,25 – 4545 nos.

Total plantation as on 30.09.2025 : 13,993 nos.

(Unit-I)
Green Belt inside Plant



New Plantation as a part of continuous development of Greenbelt.



Annexure-2

Ambient Air Quality Monitoring Results



Eco Care



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Specialised House on Environmental Monitoring, Analysis, Assessment & Management

ISO 9001:2015 Certified, OHSAS 45001:2018 Certified

ULR NO – TC1513625000001438F

TEST REPORT

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08381	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 23.08.25 to 24.08.25
Sample Collected by : Mr.Sumit Sarkar & Team	Sample Registration Date : 25.08.2025
Sample Details : Ambient Air	Period of Analysis : 25.08.25 to 26.08.25
Name & Address : Maithan Steel & Power Ltd	Sample Condition : Sealed & Preserved
(Unit – I)	Remarks : ---
Bonra, Neturia	Sample Drawn By : ECO CARE
Dist – Purulia	Sampling Plan &
West Bengal,723121	Procedure : EC/SOP/03/01
	Deviation if any : None

1	Average Temperature	30.6 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	59 %	4	Weather Condition	Clear Day

1. Sampling Location : Near Main Gate (East Side of Plant)

SL NO	TESTS	PROTOCOL	Limit as per NAAQS	RESULT
1	Particulate Matter PM ₁₀ µg/m ³	IS 5182:Part 23:2006	100 (24 hrs)	76.14
2	Particulate Matter PM _{2.5} µg/m ³	EPA CFR40(pt 50), Appendix 1	60 (24 hrs)	36.56
3	Sulphur Dioxide (SO ₂) µg/m ³	IS 5182:Part 2:2001	80 (24 hrs)	9.10
4	Nitrogen Dioxide (NO ₂) µg/m ³	IS 5182:Part 6:2006	80 (24 hrs)	25.11
5	Ammonia (NH ₃) µg/m ³	INDO PHENOL BLUE METHOD	400 (24 hrs)	16.13
6	Ozone , (O ₃) µg/m ³	CHEMICAL METHOD	180 (1hour)	8.17

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 30 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

MADHUSUDAN KARMAKAR
LABORATORY IN-CHARGE
AUTHORISED SIGNATORY

End of Test Report



ULR NO – TC1513625000001439F

Test Report

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08382	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 23.08.25 to 24.08.25
Sample Collected by : Mr. Sumit Sarkar & Team	Sample Registration Date : 25.08.2025
Sample Details : Ambient Air	Period of Analysis : 25.08.25 to 26.08.25
Name & Address : Maithan Steel & Power Ltd	Sample Condition : Sealed & Preserved
(Unit – I)	Remarks : ---
Bonra, Neturia	Sample Drawn By : ECO CARE
Dist – Purulia	Sampling Plan &
West Bengal, 723121	Procedure : EC/SOP/03/01
	Deviation if any : None

1	Average Temperature	30.6 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	59 %	4	Weather Condition	Clear Day

2. Sampling Location : Near 100 TPD Kiln (West Side of Plant)

SL NO	TESTS	PROTOCOL	Limit as per NAAQS	RESULT
1	Particulate Matter PM ₁₀ µg/m ³	IS 5182:Part 23:2006	100 (24 hrs)	82.05
2	Particulate Matter PM _{2.5} µg/m ³	EPA CFR40(pt 50), Appendix 1	60 (24 hrs)	28.14
3	Sulphur Dioxide (SO ₂) µg/m ³	IS 5182:Part 2:2001	80 (24 hrs)	9.48
4	Nitrogen Dioxide (NO ₂) µg/m ³	IS 5182:Part 6:2006	80 (24 hrs)	26.12
5	Ammonia (NH ₃) µg/m ³	INDO PHENOL BLUE METHOD	400 (24 hrs)	19.81
6	Ozone , (O ₃) µg/m ³	CHEMICAL METHOD	180 (1 hour)	8.32

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End of Test Report



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ULR NO – TC151362500001440F

Test Report

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08383	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 23.08.25 to 24.08.25
Sample Collected by : Mr. Sumit Sarkar & Team	Sample Registration Date : 25.08.2025
Sample Details : Ambient Air	Period of Analysis : 25.08.25 to 26.08.25
Name & Address : Maithan Steel & Power Ltd	Sample Condition : Sealed & Preserved
(Unit – I)	Remarks : ----
Bonra, Neturia	Sample Drawn By : ECO CARE
Dist – Purulia	Sampling Plan & Procedure : EC/SOP/03/01
West Bengal,723121	Deviation if any : None

1	Average Temperature	30.6 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	59 %	4	Weather Condition	Clear Day

3. Sampling Location : Near Power Plant (North Side of Plant)

SL NO	TESTS	PROTOCOL	Limit as per NAAQS	RESULT
1	Particulate Matter PM ₁₀ µg/m ³	IS 5182:Part 23:2006	100 (24 hrs)	78.16
2	Particulate Matter PM _{2.5} µg/m ³	EPA CFR40(pt 50), Appendix I	60 (24 hrs)	31.52
3	Sulphur Dioxide (SO ₂) µg/m ³	IS 5182:Part 2:2001	80 (24 hrs)	10.42
4	Nitrogen Dioxide (NO ₂) µg/m ³	IS 5182:Part 6:2006	80 (24 hrs)	24.48
5	Ammonia (NH ₃) µg/m ³	INDO PHENOL BLUE METHOD	400 (24 hrs)	17.96
6	Ozone , (O ₃) µg/m ³	CHEMICAL METHOD	180 (1 hour)	8.07

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Test Report

Report Release Date	: 04.09.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250865
Test Report No	: EC/TR/42/08381	Source of Sample	: Steel Plant
Type of Sample	: Suspended Dust & Gases	Sampling Date	: 23.08.25 to 24.08.25
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 25.08.2025
Sample Details	: Ambient Air	Period of Analysis	: 25.08.25 to 26.08.25
Name & Address	: Maithan Steel & Power Limited (Unit - I) Bonra, Neturia Dist - Purulia West Bengal,723121	Sample Condition	: Sealed & Preserved
		Remarks	: ----
		Sample Drawn By	: ECO CARE
		Deviation if any	: None

1	Average Temperature	30.6 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	59 %	4	Weather Condition	Clear Day

1. Sampling Location : Near Main Gate (East Side of Plant)

SL NO	TESTS	PROTOCOL	Limit as per NAAQS	RESULT
1	Carbon Monoxide (CO) µg/m ³	NDIR SPECTROSCOPY	2000	108

2. Sampling Location : Near 100 TPD Kiln (West Side of Plant)

SL NO	TESTS	PROTOCOL	Limit as per NAAQS	RESULT
1	Carbon Monoxide (CO) µg/m ³	NDIR SPECTROSCOPY	2000	123

3. Sampling Location : Near Power Plant (North Side of Plant)

SL NO	TESTS	PROTOCOL	Limit as per NAAQS	RESULT
1	Carbon Monoxide (CO) µg/m ³	NDIR SPECTROSCOPY	2000	126

4. Sampling Location : Near Ferro Plant (South Side of Plant)

SL NO	TESTS	PROTOCOL	Limit as per NAAQS	RESULT
1	Carbon Monoxide (CO) µg/m ³	NDIR SPECTROSCOPY	2000	118

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ULR NO – TC1513625000001441F

Test Report

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08384	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 26.08.25 to 27.08.25
Sample Collected by : Mr. Sumit Sarkar & Team	Sample Registration Date : 27.08.2025
Sample Details : Ambient Air	Period of Analysis : 27.08.25 to 28.08.25
Name & Address : Maithan Steel & Power Ltd	Sample Condition : Sealed & Preserved
(Unit – I)	Remarks : ----
Bonra, Neturia	Sample Drawn By : ECO CARE
Dist – Purulia	Sampling Plan & Procedure : EC/SOP/03/01
West Bengal,723121	Deviation if any : None

1	Average Temperature	31.4 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	56 %	4	Weather Condition	Clear Day

4.Sampling Location : Near Ferro Plant (South Side of Plant)

SL NO	TESTS	PROTOCOL	Limit as per NAAQS	RESULT
1	Particulate Matter PM ₁₀ µg/m ³	IS 5182:Part 23:2006	100 (24 hrs)	73.18
2	Particulate Matter PM _{2.5} µg/m ³	EPA CFR40(pt 50), Appendix 1	60 (24 hrs)	23.86
3	Sulphur Dioxide (SO ₂) µg/m ³	IS 5182:Part 2:2001	80 (24 hrs)	9.41
4	Nitrogen Dioxide (NO ₂) µg/m ³	IS 5182:Part 6:2006	80 (24 hrs)	25.33
5	Ammonia (NH ₃) µg/m ³	INDO PHENOL BLUE METHOD	400 (24 hrs)	17.05
6	Ozone , (O ₃) µg/m ³	CHEMICAL METHOD	180 (1 hour)	8.02

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ULR NO – TC1513625000001541F

Test Report

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08451	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 23.08.25 to 24.08.25
Sample Collected by : Mr. Sumit Sarkar & Team	Sample Registration Date : 25.08.2025
Sample Details : Ambient Air	Period of Analysis : 25.08.25 to 26.08.25
Name & Address : Maithan Steel & Power Ltd	Sample Condition : Sealed & Preserved
(Unit – I)	Remarks : ---
Bonra, Neturia	Sample Drawn By : ECO CARE
Dist – Purulia	Sampling Plan &
West Bengal,723121	Procedure : EC/SOP/03/01
	Deviation if any : None

1	Average Temperature	30.6 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	59 %	4	Weather Condition	Clear Day

5. Sampling Location : Murulia Village

SL NO	TESTS	PROTOCOL	Limit as per NAAQS	RESULT
1	Particulate Matter PM ₁₀ µg/m ³	IS 5182:Part 23:2006	100 (24 hrs)	79.26
2	Particulate Matter PM _{2.5} µg/m ³	EPA CFR40(pt 50), Appendix 1	60 (24 hrs)	26.32
3	Sulphur Dioxide (SO ₂) µg/m ³	IS 5182:Part 2:2001	80 (24 hrs)	12.42
4	Nitrogen Dioxide (NO ₂) µg/m ³	IS 5182:Part 6:2006	80 (24 hrs)	24.65
5	Ammonia (NH ₃) µg/m ³	INDO PHENOL BLUE METHOD	400 (24 hrs)	21.45
6	Ozone , (O ₃) µg/m ³	CHEMICAL METHOD	180 (1 hour)	18.68

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ULR NO – TC1513625000001542F

Test Report

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08452	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 23.08.25 to 24.08.25
Sample Collected by : Mr. Sumit Sarkar & Team	Sample Registration Date : 25.08.2025
Sample Details : Ambient Air	Period of Analysis : 25.08.25 to 26.08.25
Name & Address : Maithan Steel & Power Ltd	Sample Condition : Sealed & Preserved
(Unit – I)	Remarks : ---
Bonra, Neturia	Sample Drawn By : ECO CARE
Dist – Purulia	Sampling Plan &
West Bengal,723121	Procedure : EC/SOP/03/01
	Deviation if any : None

1	Average Temperature	30.6 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	59 %	4	Weather Condition	Clear Day

6. Sampling Location : Saonthal Village

SL NO	TESTS	PROTOCOL	Limit as per NAAQS	RESULT
1	Particulate Matter PM ₁₀ µg/m ³	IS 5182:Part 23:2006	100 (24 hrs)	65.96
2	Particulate Matter PM _{2.5} µg/m ³	EPA CFR40(pt 50), Appendix 1	60 (24 hrs)	23.72
3	Sulphur Dioxide (SO ₂) µg/m ³	IS 5182:Part 2:2001	80 (24 hrs)	15.10
4	Nitrogen Dioxide (NO ₂) µg/m ³	IS 5182:Part 6:2006	80 (24 hrs)	19.49
5	Ammonia (NH ₃) µg/m ³	INDO PHENOL BLUE METHOD	400 (24 hrs)	16.57
6	Ozone , (O ₃) µg/m ³	CHEMICAL METHOD	180 (1 hour)	18.21

1. Test values are reported based on the samples received.
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ULR NO – TC1513625000001543F

Test Report

Report Release Date	: 04.09.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250865
Test Report No	: EC/TR/42/08453	Source of Sample	: Steel Plant
Type of Sample	: Suspended Dust & Gases	Sampling Date	: 23.08.25 to 24.08.25
Sample Collected by	: Mr. Sumit Sarkar & Team	Sample Registration Date	: 25.08.2025
Sample Details	: Ambient Air	Period of Analysis	: 25.08.25 to 26.08.25
Name & Address	: Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal, 723121	Sample Condition	: Sealed & Preserved
		Remarks	: ----
		Sample Drawn By	: ECO CARE
		Sampling Plan & Procedure	: EC/SOP/03/01
		Deviation if any	: None

1	Average Temperature	30.6 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	59 %	4	Weather Condition	Clear Day

7. Sampling Location : Mautha Village

SL NO	TESTS	PROTOCOL	Limit as per NAAQS	RESULT
1	Particulate Matter PM ₁₀ µg/m ³	IS 5182:Part 23:2006	100 (24 hrs)	67.84
2	Particulate Matter PM _{2.5} µg/m ³	EPA CFR40(pt 50), Appendix 1	60 (24 hrs)	25.52
3	Sulphur Dioxide (SO ₂) µg/m ³	IS 5182:Part 2:2001	80 (24 hrs)	17.79
4	Nitrogen Dioxide (NO ₂) µg/m ³	IS 5182:Part 6:2006	80 (24 hrs)	27.47
5	Ammonia (NH ₃) µg/m ³	INDO PHENOL BLUE METHOD	400 (24 hrs)	14.12
6	Ozone , (O ₃) µg/m ³	CHEMICAL METHOD	180 (1 hour)	15.29

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End of Test Report



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ULR NO – TC151362500001544F

Test Report

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08454	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 23.08.25 to 24.08.25
Sample Collected by : Mr. Sumit Sarkar & Team	Sample Registration Date : 25.08.2025
Sample Details : Ambient Air	Period of Analysis : 25.08.25 to 26.08.25
Name & Address : Maithan Steel & Power Ltd	Sample Condition : Sealed & Preserved
(Unit – I)	Remarks : ---
Bonra, Neturia	Sample Drawn By : ECO CARE
Dist – Purulia	Sampling Plan &
West Bengal, 723121	Procedure : EC/SOP/03/01
	Deviation if any : None

1	Average Temperature	30.6 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	59 %	4	Weather Condition	Clear Day

8. Sampling Location : Bonra Village

SL NO	TESTS	PROTOCOL	Limit as per NAAQS	RESULT
1	Particulate Matter PM ₁₀ µg/m ³	IS 5182:Part 23:2006	100 (24 hrs)	62.14
2	Particulate Matter PM _{2.5} µg/m ³	EPA CFR40(pt 50), Appendix 1	60 (24 hrs)	27.05
3	Sulphur Dioxide (SO ₂) µg/m ³	IS 5182:Part 2:2001	80 (24 hrs)	09.74
4	Nitrogen Dioxide (NO ₂) µg/m ³	IS 5182:Part 6:2006	80 (24 hrs)	20.73
5	Ammonia (NH ₃) µg/m ³	INDO PHENOL BLUE METHOD	400 (24 hrs)	18.72
6	Ozone , (O ₃) µg/m ³	CHEMICAL METHOD	180 (1 hour)	22.17

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 30 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
MADHUSUDAN KARMAKAR
LABORATORY IN-CHARGE
AUTHORISED SIGNATORY

End of Test Report



No. MD/DVRR/W-6/146(MSPL-Unit-I)/2023/ 547-52

Date: 20.09.2024

To,

The Director
Maithan Steel & Power Limited
P.O.- Bonra, PS: Neturia
District-Purulia
West Bengal-723121

Sub:- Concurrence for drawl of additional 0.2089 MGD (enhancement from 0.396 MGD to 0.6049 MGD) raw water from River Damodar downstream of Panchet Reservoir regarding:

**Ref : (i) Your application No. MSPL-U2/22-23/68 dated 15.03.2023
(ii) WBIDC Letter No-WBIDC/DVRRCC/23-24/642 dated 12.06.2023
(iii) DVRRC Letter No MD/DVRR/W-6(148)/2024/505-28 dated 13.09.2024.**

Sir,

Please refer the letter under reference (i) vide which request was made for allocation of **additional 0.2089 MGD (enhancement from 0.396 MGD to 0.6049 MGD)** of raw water from Damodar River downstream of Panchet Reservoir for expansion of project Maithan Steel & Power Limited, Unit-I, Bonra P.S- Neturia, District-Purulia, West Bengal. NOC was obtained from Executive Director, West Bengal Industrial Corporation Limited vide letter under reference (ii). On the recommendation of the 33rd Sub-Committee of DVRRC, the proposal has been accepted by Damodar Valley Reservoir Regulation Committee (DVRRC) in its 148th meeting held on 04.09.2024 at Ranchi. The Minutes of the 148th DVRRC meeting has already been circulated to the concerned officials vide letter under reference (iii). The earlier allocation of 0.396 MGD was concurred vide this Office Letter No MD/DVRR/WA-6(Part-VIII)/MAITHAN STEEL & POWER LTD./2019/ 657-62 dated 08.03.2019. **The concurrence of DVRRC for allocation of additional 0.2089 MGD (enhancement from 0.396 MGD to 0.6049 MGD) of raw water is hereby conveyed** for drawl from River Damodar downstream of Panchet Reservoir subject to the following conditions :

- (A) Exact location for drawl of water may be decided in consultation with DVC. The water shall be drawn from the reservoir as and when available and intake structure/conveyance system should be designed accordingly. As sufficient water in the reservoir may not be available during certain days in the year particularly during summer months, you may have to make your own arrangement for captive storage to meet water requirement in such situations.
- (B) Adequate care should be taken in design and construction of the intake structure to ensure availability of water even during summer months. The intake structure should also be able to withstand the high levels in the river.
- (C) The intake point and concurrence of water drawl of additional 0.2089 MGD (enhancement from 0.396 MGD to 0.6049 MGD) is project specific. The water drawn shall, in no way be utilized by the firm for any other purposes.

(D) You shall have to execute an Agreement with DVC and pay charges to DVC for the water drawn by it as per the terms and conditions in force. The allocation will come into effect from the day of execution of the agreement with DVC. The allocation of water will be treated as cancelled, if your office does not apply to DVC for executing an Agreement for drawl of water within a period of 3 (three) months from the date of issue of this letter.

(E) Drawl of water should start within 24 months from the date of issue of this letter. In case of non drawl after lapse of 24 months from the date of issue of this letter, the allocation shall deemed to be cancelled and the firm will have to apply afresh for revalidation of allocation.

The present allocation is temporarily allocated subject to fulfilment of all the primary formalities within the stipulated time period.

Yours faithfully



(Shashi Rakesh)
Member Secretary, DVRRC

Copy to:

1. Chief Engineer (West), I&WD, Government of West Bengal, Kanainatsal, Sripally, Purba Bardhaman, West Bengal- 713103.
2. Executive Director, West Bengal Industrial Development Corporation, Protiti, 23, Abanindranath Thakur Sarani (Camac Street), Kolkata-700017.
3. Executive Director (Civil) & HoP, Damodar Valley Corporation, Maithon.
4. Senior Manager (Civil) & Manager Reservoir Operation, Damodar Valley Corporation, Maithon.
5. Senior Manager (Civil), Water Tariff Cell, Damodar Valley Corporation, Maithon- It is requested that while executing the Agreement, all the suggestions as recommended by DVRRC during 148th DVRRC Meeting pertaining to allocation of water for M&I uses may be implemented.

एरिया नंबर 2
मैथन डैम - ८२८२०७
दूरभाष: ०६५४०-२७४२१४ ,
ई मेल: sehocmaithon-cwc@gov.in
◆जल संरक्षण-सुरक्षित भविष्य◆



Area No 2,
Maithon Dam-828207
Tel: 06540-274214
E-mail: sehocmaithon-cwc@gov.in

◆Conserve Water- Save Life◆

Water Bill Details of DVC					
Unit	Month	No. of Days	Water Quantity (KL)	Per Day Consumption (KL)	
Unit-1	Sep-25	30	10413.5698	347.119	
	Aug-25	31	15692.0351	506.195	
	Jul-25	31		0.00	
	Jun-25	30	15990.7616	533.025	
	May-25	31	16264.240	524.65	
	Apr-25	30	21000.000	700.00	
		Avg. Water Consumption Daily		79360.6065	435.17

Maithan Steel & Power Ltd. Unit-I**Bonra, Purulia (WB)****Corporate Environmental Responsibility (CER)****Public Consultation Action Plan as per MoEF & CC O.M dated 30.09.2020**

Sl. No.	Concerns Raised During the Public Hearing	Physical Activity to be done	Budget in Lakhs			Total Budget (In Lakhs)
			1 st Year	2 nd Year	3 rd Year	
1	Skill Development & Woman empowerment	Skill Development: Vocational training at plant, Seminar on farming & animal husbandry. Women Empowerment: Helping self-help groups and financial assistance to women to start their livelihood.	25.0	25.0	25.0	75.0
2	Water Conservation and Drainage system	Restoration of local ponds and construction of rainwater harvesting structures in the local community.	8.0	8.0	4.0	20.0
3	Solar Light Installation	Installation of Solar Light installation in local villages.	2.0	2.0	2.0	6.0
4	Infrastructure Development	Road Construction, Repair of school buildings, Village Road Repairing.	30.0	25.0	15.0	70.0
5	Avenue Plantation	Plantation of saplings along roads, highways, pathway and on the roads towards primary health centres and schools in the villages.	2.5	1.5	1.0	5.0
Budge as per PH issues to be spent mostly in the nearby villages like Bonra, Dhangajor, Goaladih etc			67.5	61.5	47.0	176.0
Budget as activities targeted under Model Village Development Programme (Saontal Motha)			23.00	11.50	8.50	43.0
Total Amount (Rs.)			90.50	73.00	53.5	217.0

Corporate Environment Responsibility (CER) Expenditure Details

Period: April,25 to Sep,25

Sl. No.	Concern raised during the Public Hearing	Physical Activity to be done	Total CER Budget (in Lakh) 1 st & 2 nd Year	Expenses incurred (in lakh)	Expenses incurred (in lakh)	Total (in lakh)
				2024-25	Apr,25 - Sep,25	
1	Skill Development & Woman empowerment	Skill Development: Donation to Panchakot College (Vocational training at plant, Seminar on farming & animal husbandry). Women Empowerment: Helping self-help groups and financial assistance to women to start their livelihood.	50.00	11.00	1.51	11.51
2	Water Conservation and Drainage system	Restoration of local ponds and construction of rainwater harvesting structures in the local community.	16.00	7.00	0.25	7.25
3	Solar Light Installation	Installation of Solar Light installation in local villages.	4.00	1.59	---	1.59
4	Infrastructure Development	Repair of school buildings, distribution of meal at community hall, Village Road Repairing.	55.0	29.27	9.94	39.21
5	Avenue Plantation	Plantation of saplings along roads, highways, pathway and on the roads towards primary health centres and schools in the villages.	4.0	1.90	2.77	4.67
Total Amount (Rs.)			129.0	50.76	13.47	64.23

Maithan Steel & Power Ltd.

(Unit -I)

Digital Display Board at Main Gate





MAITHAN STEEL & POWER LIMITED

UNIT 1- P.O.BONRA, P.S.:NETURIA -723121, DIST. PURULIA(W.B) E-MAIL : info@maithansteel.com
 UNIT 2- CHITTARANJAN ROAD P.O.&P.S.:SALANPUR-713357 DIST. PASCHIM BARDHAMAN(W.B.)
 RGD. OFFICE 9,A.J.C.BOSE ROAD, IDEAL CENTRE,6TH FLOOR KOLKATA-700017
 CIN : U27102WB2001PLC093321

PURCHASE ORDER

Details of Supplier RT ENVIRO SOLUTIONS 250-C, VAIBHAV NAGAR EXT INDORE, BHICHOLI HAPSI,INDORE - 452016,INDORE State Name : MADHYA PRADESH State Code : 23 GSTIN/Unique ID: 23AJBPT8487G1ZT PAN No. : AJBPT8487G Contact Detail : Mo. No. : 6232666855, Email : rtenvirosolutions@gmail.com		P.O. No 25-26/P225016-001 P.O. Date :16-OCT-25 Amend No: 0 Amend Dt: 16-OCT-25	
Contact Person : MR. ROHIT TIWARI Contact No : 6232666855 Email Id : rtenvirosolutions@gmail.com		REF NO. : RT/2025-26/2019 REF. DATE : 25-SEP-25	
Billing To Address MAITHAN STEEL & POWER LIMITED UNIT-I,P.O. : BONRA,,P.S. : NETURIA,NETURIA - 723121,,PURULIA,INDIA State Name : WEST BENGAL State Code 19 GSTIN : 19AADCM1188M1Z0 PAN No. : AADCM1188M CIN No. :U27102WB2001PLC Contact Detail : Mo. No. : +91 8651540007, Email : info@maithansteel.com		Shipping To Address MAITHAN STEEL & POWER LTD (UNIT-1) P.O. : BONRA,P.S. : NETURIA,,PURULIA,INDIA State Name : WEST BENGAL State Code :19 GSTIN/Unique ID: 19AADCM1188M1Z0 PAN No. : AADCM1188M Contact Detail : Mo. No. : +91 8651540007, Email : info@maithansteel.com	

Dear Sir / Madam,
 With reference to your above mentioned Offer and subsequent discussion we had with you, we are pleased to place our Purchase Order in your favour for supply of following items as per terms and conditions mentioned herein :

SrNo	HSN No./ Item Code	Item Details	UM	Order Qty	Unit Rate Disc. (INR)	Total Value (INR)
1	59119090 S21010079	BAG FILTER BAG DIA-155MM X 3050 LONG SNAP TYPE BAG- DIA-155MM X 3050 LONG SNAP TYPE ,MATERIAL TYPE PTFE MOC - FILTER BAG 100 % POLYESTER ,NON- WOVEN NEEDLE FELT HEAT SET, SINGEDN CALENDARED FINISH WITH PTFE . GSM:550 , TEMP. MAX 150 DEG. C - SURGE TEMP: 150 DEG C. MAX, THK : 1.8-2.0 MM AIR PERMEABILITY: 10-14 M3/M2/M STITCHING PATTERNS: 03 SEAMS. DESIGN: TOP OPEN & BOTTOM CLOSED WITH 75 MM REINFORCEMENT QUALITY: EXCELLENT	NOS	110.00	250.00	27,500.00
2	8421 S21010080	CAGE FOR BAG FILTER BAG DIA-140MM X 3040MM LONG (SNAP TYPE) FILTER BAG CAGE : 142 X 3040 MM , MOC : 3 MM HOT DIP GI WIRE, HAVING 10 VERTICAL WIRE, RING SPACING-175MM, FINISH: HR PAINT SNAP TYPE WITH VENTURI.	NOS	110.00	420.00	46,200.00

In Words Rs - Eighty Five Thousand Three Hundred Sixteen Only		Gross Value		73,700.00					
		IGST		11,616.00					
		Order Amount		85,316.00					
HSN/SAC	Taxable value	CGST		SGST		IGST		CESS	
		Rate	Amt.	Rate	Amt.	Rate	Amt.	Rate	Amt.
59119090	27,500.00					12.00	3,300.00	0.00	0.00
8421	46,200.00					18.00	8,316.00	0.00	0.00
Total :	73,700.00						11,616.00		0.00

Total Tax (in word) : Rs - Eleven Thousand Six Hundred Sixteen Only .

* Please quote PURCHASE ORDER reference in Invoice and all correspondence
 * Please return the accepted copy of this PO duly signed and stamped in each pages as a token of Receipt, if no written order acceptance is given to us within 7 days , we shall deem that the P.O has been accepted by you.

PREPARED BY SANJAY KUMAR YADAV	APPROVED BY P R MONGA	For MAITHAN STEEL & POWER LIMITED Authorised Signatory
---------------------------------------	------------------------------	---



MAITHAN STEEL & POWER LIMITED

UNIT 1- P.O.BONRA, P.S.:NETURIA -723121, DIST. PURULIA(W.B) E-MAIL : info@maithansteel.com

UNIT 2- CHITTARANJAN ROAD P.O.&P.S.:SALANPUR-713357 DIST. PASCHIM BARDHAMAN(W.B.)

RGD. OFFICE 9,A.J.C.BOSE ROAD, IDEAL CENTRE,6TH FLOOR KOLKATA-700017

CIN : U27102WB2001PLC093321

PO No : P225016-001

PURCHASE ORDER

Date : 16-OCT-25

* The supplier shall comply with provision of the E.H.S (Environment Health & Safety) related documents during the supply of material as per Govt.guidelines if applicable.

* Please submit all your despatch documents , i.e "Bill/Challan/GST Invoice etc along with supply of material."

Commercial Terms and Conditions :-

PRICE BASIS	: EX- WORKS INDORE , THE PRICE WILL REMAIN FIRM TILL EXECUTION OF ORDER , NO PRICE ESCALATION ACCEPTABLE.
TAXES & DUTIES	: GST AS APPLICABLE.
PAYMENT TERMS	: 75% AGAINST PROFORMA INVOICE SUBJECT TO READINESS OF THE MATERIAL, 25% PAYMENT SHALL BE MADE AFTER THE RECEIVE OF MATERIAL AT OUR SITE.
FREIGHT CHARGES	: EXTRA AS ACTUAL.
DELIVERY PERIOD	: WITHIN 10 TO 12 DAYS FROM THE DATE OF THE RECEIPT OF PURCHASE ORDER.
MODE OF DISPATCH	: BY ROAD THROUGH AUTHORISED TRANSPORT "ARC OR TCI FREIGHT/EXPRESS"UPTO OUR SITE & "FREIGHT TO PAY BASIS".
GUARANTEE/WARRANTY	: AS PER STANDARD NORMS.
QUALITY	: QUALITY & QUANTITY WILL BE CHECKED AT OUR SITE.
INSPECTION	: AT OUR SITE I.
REJECTION, IF ANY	: MATERIAL WILL BE REJECTED & RETURNED IF NOT FOUND SUITABLE TO US.
DOC REQUIRED	: ALL DOCUMENTS TO BE SUBMITTED i.e. GST E-INVOICE , CHALLAN , WAY BILL (IF APPLIED) AT THE TIME OF DELIVERY.

ANNEXURE - I

Other Terms and Conditions:

* **Firm Price:** The contract price shall remain firm and binding during the tenure of the contract and shall not be subject to any escalation whatsoever not with-standing any change in the cost of materials/labour/ transportation cost / otherwise which may take place as per the scope of supply.

* **Terms of Delivery:** Timely delivery of the material shall be the essence of the contract and any failure on that score will entail the Buyer to Purchase the material from the market at the prevailing market rate at the cost and risk of the Seller without any prejudice to the right of the Buyer to the cancel of the order. On request of the MSPL , Seller will arrange for necessary insurance of the materials. Any loss or any breakage or damage to the material during any damage during transit due to any cause whatsoever shall be bourn by the Seller.

* **Inspection:** Inspection from "MSPL" shall be held at their own factory and their report shall be final and binding on both the parties and / or In case of forging, casting etc. if any defect is detected during the machining operations such casting/ forging will be rejected on seller account and / or In case inspection is to be carried out at your site, then at least 10 days advance information to be given to us for sending our inspector(s). Inspected material duly approved by our inspector may be dispatched along with "MSPL" inspection certificate or joint inspection report, as the case may be and / or In case any drawing/ sketch is involved in the supply, you should be in position to provide the same to our inspector at the time of inspection for the verification and / or In case any specific test report by any institute/ laboratory is required, same shall accompany the dispatch document, failing which the material will be liable for rejection at our end and / or You shall carry out internal inspection prior to being offered for inspection by "MSPL". Records of internal inspection test certificates shall be submitted to "MSPL" based on your internal inspection; we may carry out the inspection at your works or issue you a inspection waiver.

* **Rejection on Quality / Deduction for Inferior Quality:** In case of rejection due to poor quality and / or poor workmanship and / or damages noticed on our inspection at site, the same has to be collected back by supplier at his cost. Otherwise, the charges for returning the rejected quantity shall be deducted from supplier's Bills and/ or In case of non-confirmity to the quality and qty as per this P.O or received in damaged or broken condition or otherwise not satisfactory, owing to any reason thereof, the MSPL shall be the sole judge and entitled to reject the material, cancel the contract and buy its requirement in the open market on sellers risk; cost. MSPL shall recover the loss, if any, from the Seller reserving always the right to forfeit the deposit, (if any) placed by the seller for the due fulfillment of the contract. The Seller will make arrangements to remove the rejected materials; otherwise rejected materials will be lying entirely at Sellers risk and responsibility. Any demurrage, wharf age or similar charges which MSPL have to undergo on account of the Sellers failure to book the goods in accordance with the order or due to late delivery of the L.R, shall be borne by the Seller and / or In case of any deviation in quality of materials supplied, prorata deduction shall be made from supplier's bill, considering the percentage of deviation.

* **Non Performance:** If the supplier fails to deliver the material as per delivery period of this P.O. leading to delay in execution of the company's work, MSPL reserves the right to procure the items from elsewhere at supplier's cost to complete the company's work, such additional cost to be borne by the supplier, limiting to 5% of the total P.O. value.

* **Dispute, Arbitration & Jurisdiction:** All disputes which cannot be settled amicable under or in relation to the contract shall be resolve by reference to two Arbitrators under provision of Indian Arbitration and Conciliation Act 1996. Execution of the contract shall be governed by Indian Laws and regulation and subjected to jurisdiction of Law at Kolkata.

* **Alternation / Modification / Amendment :** Any alternation, modification, extension, deletion, amendment or any other change to this Purchase order will not be valid, unless confirmed by us in writing. Unless permitted by us in writing you will not divulge, publish or cause to be publish by any means whatsoever, the details concerning of this order or goods covered thereby.

PREPARED BY	APPROVED BY	For MAITHAN STEEL & POWER LIMITED
SANJAY KUMAR YADAV	P R MONGA	Authorised Signatory



LiFE
Lifestyle for
Environment

WEST BENGAL POLLUTION CONTROL BOARD

(Department of Environment, Government of West Bengal)

Paribesh Bhawan, 10A, Block - LA, Sector III, Bidhannagar

Kolkata - 700 106, Ph.: (033) 2202-3000, Fax : (033)2202-3099

Website: www.wbpcb.gov.in, Email: net.wbpcb-wb@bangla.gov.in

Memo No **525**-2N-70/2022(E)

Date **02.05.2025**

To

M/s. Maithan Steel and Power Ltd., Unit - I

9, AJC Bose Road, Shakespeare Sarani, Kolkata - 700017, West Bengal.

Sub: Your application for Consent to Establish (CTE) for proposed expansion of the existing 1,76,000 TPA Sponge Iron to 4,20,000 TPA, 30,000 TPA Ferro Alloys (Fe-Mn, Si-Mn, Fe-Si & Pig Iron combined) to 70,000 TPA and Captive Power Plant from 20 MW to 32 MW (WHRB-24 MW & AFBC -8 MW) along with existing iron ore Sinter Plant of 80,000 TPA & 2,40,000 TPA Iron Ore Washery Plant located at P.O. - Bonra, P.S. - Neturia, District - Purulia, Pin - 723121, West Bengal.

Ref: EC issued vide no. **EC23A1003WB5773006N**, dated **20/11/2023**

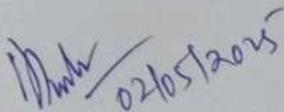
Sirs,

In reference to your Consent to Establish application for project mentioned above, this is to inform you that the West Bengal Pollution Control Board has scrutinized and processed your WBOCMMS application no. **6430532** having project cost of **Rs. 9500 (in Lakhs)** for which payment of necessary fees duly received.

Since, above mentioned project obtained Environmental Clearance (EC) from **MoEF & CC, New Delhi**, no CTE is required to be obtained from the West Bengal Pollution Control Board as per the provision of Gazette Notification issued by MoEF & CC vide no. GSR 702 and GSR 703 dated 12-11-2024.

All the conditions as stipulated in the abovementioned Environmental Clearance should be strictly complied with. You are required to obtain all necessary permission/clearances from various Government Authorities, as applicable for the project.

You are also required to obtain Consent to Operate (CTO) from the State Board as per the provision of the sub-section (1) of Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 and sub-section (1) of Section 21 of the Air (Prevention & Control of Pollution) Act, 1981.


02/05/2025

Chief Engineer (EIM Cell)

MAITHAN STEEL & POWER

LIMITED STACK_1_DRI_KILN_Maithan_Bonra_WB

Start Date - 2025-04-01

End Date - 2025-09-30

Average - 15 Minutes

VILL.: BORA, P.O.: BONRA





ULR NO – TC1513625000001419F

TEST REPORT

Report Release Date	: 04.09.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250865
Test Report No	: EC/TR/42/08362	Source of Sample	: Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 22.08.2025
Sample Collected by	: Mr.Sumit Sarkar & Team	Sample Registration Date	: 23.08.2025
Sample Details	: Stack Emission	Period of Analysis	: 23.08.25 to 25.08.25
Customer Name & Address	: Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sampling Location	: E.S.P Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 527
		Sample Drawn By	: ECO CARE
		Sampling Plan & Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1 Particular of the Plant	: Steel Plant (Sponge Division)
2 Emission Due to	: Reduction of Iron Ore & Oxidation of Coal
3 Stack Connected to	: Rotary Kiln No.1 & 2 (100 TPD *2)
4 Material of Construction	: M.S
5 Stack Height from G.L.	: 33.0 m
6 Height of Sampling Port from G.L.	: 20.0 m
7 Height of Sampling Port from L.D.Z.	: ----
8 Dimension of Stack at Sampling Port	: 1.8 m
9 Shape of the Stack	: Circular Ø
10 Working Load	: Iron Ore - 5.8 MT/hr/each kiln

FUEL CHARACTERISTIC REPORT

1 Source of Energy	: Coal ,As reducing agent
2 Energy Consumption	: 3.6 MT/hr/each kiln
3 Calorific Value (K-Cal/Kg)	: ----

RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

		UNIT	METHOD
1 Flue Gas Temperature	128	°C	IS 11255 : Part 3
2 Barometric Pressure	753	mm Hg	IS 11255 : Part 3
3 Velocity of Flue Gas	7.19	m/sec	IS 11255 : Part 3
4 Flue Gas Quantity	48540	NM ³ / hr	IS 11255 : Part 3
5 Concentration of Particulate Matter	28.54	mg/NM ³	IS 11255 : Part 1
6 Concentration of Carbon Dioxide	9.2	%	IS 13270
7 Concentration of SO ₂	134.78	mg/NM ³	IS 11255 : Part 2
8 Concentration of NO _x	73.69	mg/NM ³	IS 11255 : Part 7

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

End of Test Report

MADHUSUDAN KARMAKAR
LABORATORY IN-CHARGE
AUTHORISED SIGNATORY



Eco Care



Phone : (0341) 3580061

Email : ecocareasansol@rediffmail.com

Manoj Talkies Basement, Kumarpur

Asansol - 713304

Dist. Paschim Bardhaman (W.B.)

Specialised House on Environmental Monitoring, Analysis, Assessment & Management

ISO 9001:2015 Certified, OHSAS 45001:2018 Certified

ULR NO – TC1513625000001420F

TEST REPORT

Report Release Date	: 04.09.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250865
Test Report No	: EC/TR/42/08363	Source of Sample	: Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 22.08.2025
Sample Collected by	: Mr.Sumit Sarkar & Team	Sample Registration Date	: 23.08.2025
Sample Details	: Stack Emission	Period of Analysis	: 23.08.2025
Customer Name & Address	: Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 528
		Sample Drawn By	: ECO CARE
		Sampling Plan & Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Steel Plant (Sponge Division)
2	Emission Due to	: Process Activity
3	Stack Connected to	: Bag Filter at Product House
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 30.0 m
6	Height of Sampling Port from G.L.	: 7.62 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 0.60 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 100 TPD * 2

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

		UNIT	METHOD
1	Flue Gas Temperature	42	°C
2	Barometric Pressure	753	mm Hg
3	Velocity of Flue Gas	7.47	m/sec
4	Flue Gas Quantity	7134	NM ³ / hr
5	Concentration of Particulate Matter	27.24	mg/NM ³
6	Concentration of Carbon Dioxide	---	%
7	Concentration of SO ₂	---	mg/NM ³
8	Concentration of NO _x	---	mg/NM ³

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End of Test Report



ULR NO – TC151362500001421F

TEST REPORT

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08364	Source of Sample : Steel Plant
Type of Sample : Dust & Gaseous Emission	Sampling Date : 22.08.2025
Sample Collected by : Mr.Sumit Sarkar & Team	Sample Registration Date : 23.08.2025
Sample Details : Stack Emission	Period of Analysis : 23.08.2025
Customer Name & Address : Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sampling Location : Bag Filter Stack
	Sample Condition : Sealed & Preserved
	Sample Stamped as : TH – 529
	Sample Drawn By : ECO CARE
	Sampling Plan & Procedure : EC/SOP/03/01
	Remarks : ----
	Deviation if any : None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1 Particular of the Plant	: Steel Plant (Sponge Division)
2 Emission Due to	: Process Activity
3 Stack Connected to	: Bag Filter at Cooler Discharge
4 Material of Construction	: M.S
5 Stack Height from G.L.	: 30.0 m
6 Height of Sampling Port from G.L.	: 15.0 m
7 Height of Sampling Port from L.D.Z.	: ----
8 Dimension of Stack at Sampling Port	: 0.50 m
9 Shape of the Stack	: Circular Ø
10 Working Load	: 100 TPD * 2

FUEL CHARACTERISTIC REPORT

1 Source of Energy	: ----
2 Energy Consumption	: ----
3 Calorific Value (K-Cal/Kg)	: ----

RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

		UNIT	METHOD
1 Flue Gas Temperature	52	°C	IS 11255 : Part 3
2 Barometric Pressure	753	mm Hg	IS 11255 : Part 3
3 Velocity of Flue Gas	7.85	m/sec	IS 11255 : Part 3
4 Flue Gas Quantity	5045	NM ³ / hr	IS 11255 : Part 3
5 Concentration of Particulate Matter	29.26	mg/NM ³	IS 11255 : Part 1
6 Concentration of Carbon Dioxide	---	%	IS 13270
7 Concentration of SO ₂	---	mg/NM ³	IS 11255 : Part 2
8 Concentration of NO _x	---	mg/NM ³	IS 11255 : Part 7

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ULR NO – TC151362500001422F

TEST REPORT

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08365	Source of Sample : Steel Plant
Type of Sample : Dust & Gaseous Emission	Sampling Date : 23.08.2025
Sample Collected by : Mr.Sumit Sarkar & Team	Sample Registration Date : 25.08.2025
Sample Details : Stack Emission	Period of Analysis : 25.08.2025
Customer Name & Address : Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sampling Location : Bag Filter Stack
	Sample Condition : Sealed & Preserved
	Sample Stamped as : TH – 530
	Sample Drawn By : ECO CARE
	Sampling Plan & Procedure : EC/SOP/03/01
	Remarks : ----
	Deviation if any : None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1 Particular of the Plant	: Steel Plant (Sponge Division)
2 Emission Due to	: Process Activity
3 Stack Connected to	: Bag Filter at I.Bin (Intermediate Bin)
4 Material of Construction	: M.S
5 Stack Height from G.L.	: 30.0 m
6 Height of Sampling Port from G.L.	: 20.0 m
7 Height of Sampling Port from L.D.Z.	: ----
8 Dimension of Stack at Sampling Port	: 0.60 m
9 Shape of the Stack	: Circular Ø
10 Working Load	: ----

FUEL CHARACTERISTIC REPORT

1 Source of Energy	: ----
2 Energy Consumption	: ----
3 Calorific Value (K-Cal/Kg)	: ----

RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

		UNIT	METHOD
1 Flue Gas Temperature	38	°C	IS 11255 : Part 3
2 Barometric Pressure	753	mm Hg	IS 11255 : Part 3
3 Velocity of Flue Gas	6.92	m/sec	IS 11255 : Part 3
4 Flue Gas Quantity	6693	NM ³ / hr	IS 11255 : Part 3
5 Concentration of Particulate Matter	22.14	mg/NM ³	IS 11255 : Part 1
6 Concentration of Carbon Dioxide	---	%	IS 13270
7 Concentration of SO ₂	---	mg/NM ³	IS 11255 : Part 2
8 Concentration of NO _x	---	mg/NM ³	IS 11255 : Part 7

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ULR NO – TC1513625000001423F

TEST REPORT

Report Release Date	: 04.09.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250865
Test Report No	: EC/TR/42/08366	Source of Sample	: Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 23.08.2025
Sample Collected by	: Mr.Sumit Sarkar & Team	Sample Registration Date	: 25.08.2025
Sample Details	: Stack Emission	Period of Analysis	: 25.08.2025
Customer Name & Address	: Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 531
		Sample Drawn By	: ECO CARE
		Sampling Plan & Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Steel Plant (Sponge Division)
2	Emission Due to	: Process Activity
3	Stack Connected to	: Bag Filter at I.Bin (Intermediate Bin) No-2
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 30.0 m
6	Height of Sampling Port from G.L.	: 20.0 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 1.275 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: ----

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

		UNIT	METHOD	
1	Flue Gas Temperature	42	°C	IS 11255 : Part 3
2	Barometric Pressure	753	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.57	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	32642	NM ³ / hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	28.16	mg/NM ³	IS 11255 : Part 1
6	Concentration of Carbon Dioxide	---	%	IS 13270
7	Concentration of SO ₂	---	mg/NM ³	IS 11255 : Part 2
8	Concentration of NO _x	---	mg/NM ³	IS 11255 : Part 7

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ULR NO – TC1513625000001424F

TEST REPORT

Report Release Date	: 04.09.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250865
Test Report No	: EC/TR/42/08367	Source of Sample	: Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 26.08.2025
Sample Collected by	: Mr.Sumit Sarkar & Team	Sample Registration Date	: 27.08.2025
Sample Details	: Stack Emission	Period of Analysis	: 27.08.25 to 28.08.25
Customer Name & Address	: Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sampling Location	: E.S.P Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 532
		Sample Drawn By	: ECO CARE
		Sampling Plan & Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1 Particular of the Plant	: Steel Plant (Sponge Division)
2 Emission Due to	: Reduction of Iron Pellet & Oxidation of Coal
3 Stack Connected to	: Rotary Kiln No.3 (350 TPD)
4 Material of Construction	: RCC
5 Stack Height from G.L.	: 55.0 m
6 Height of Sampling Port from G.L.	: 27.2 m
7 Height of Sampling Port from L.D.Z.	: ----
8 Dimension of Stack at Sampling Port	: 3.84 m
9 Shape of the Stack	: Circular Ø
10 Working Load	: 350 TPD

FUEL CHARACTERISTIC REPORT

1 Source of Energy	: Coal , As Reducing Agent
2 Energy Consumption	: 14.7 MT /hr
3 Calorific Value (K-Cal/Kg)	: ----

RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

		UNIT	METHOD
1 Flue Gas Temperature	134	°C	IS 11255 : Part 3
2 Barometric Pressure	753	mm Hg	IS 11255 : Part 3
3 Velocity of Flue Gas	5.24	m/sec	IS 11255 : Part 3
4 Flue Gas Quantity	154833	NM ³ / hr	IS 11255 : Part 3
5 Concentration of Particulate Matter	27.52	mg/NM ³	IS 11255 : Part 1
6 Concentration of Carbon Dioxide	10.8	%	IS 13270
7 Concentration of SO ₂	226.62	mg/NM ³	IS 11255 : Part 2
8 Concentration of NO _x	145.24	mg/NM ³	IS 11255 : Part 7

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Dist. Paschim Bardhaman (W.B.)

ULR NO – TC151362500001426F

TEST REPORT

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08368	Source of Sample : Steel Plant
Type of Sample : Dust & Gaseous Emission	Sampling Date : 26.08.2025
Sample Collected by : Mr.Sumit Sarkar & Team	Sample Registration Date : 26.08.2025
Sample Details : Stack Emission	Period of Analysis : 27.08.2025
Customer Name & Address : Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sampling Location : E.S.P Stack(C.P.P)
	Sample Condition : Sealed & Preserved
	Sample Stamped as : TH – 533
	Sample Drawn By : ECO CARE
	Sampling Plan & Procedure : EC/SOP/03/01
	Remarks : ----
	Deviation if any : None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1 Particular of the Plant	: Steel Plant , Power Div (C.P.P)
2 Emission Due to	: Combustion of Coal & Dolochar
3 Stack Connected to	: AFBC Boiler (30 TPH)
4 Material of Construction	: R.C.C
5 Stack Height from G.L.	: 56.0 m
6 Height of Sampling Port from G.L.	: 31.0 m
7 Height of Sampling Port from L.D.Z.	: ----
8 Dimension of Stack at Sampling Port	: 1.57 m
9 Shape of the Stack	: Circular Ø
10 Working Load	: 30 TPH

FUEL CHARACTERISTIC REPORT

1 Source of Energy	: Coal & Dolochar
2 Energy Consumption	: 60 TPD & 180 TPD
3 Calorific Value (K-Cal/Kg)	: ----

RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

		UNIT	METHOD
1 Flue Gas Temperature	142	°C	IS 11255 : Part 3
2 Barometric Pressure	753	mm Hg	IS 11255 : Part 3
3 Velocity of Flue Gas	8.53	m/sec	IS 11255 : Part 3
4 Flue Gas Quantity	42332	NM ³ / hr	IS 11255 : Part 3
5 Concentration of Particulate Matter	26.54	mg/NM ³	IS 11255 : Part 1
6 Concentration of Carbon Dioxide	9.6	%	IS 13270
7 Concentration of SO ₂	162.26	mg/NM ³	IS 11255 : Part 2
8 Concentration of NO _x	94.27	mg/NM ³	IS 11255 : Part 7

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ULR NO – TC1513625000001426F

TEST REPORT

Report Release Date	: 04.09.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250865
Test Report No	: EC/TR/42/08369	Source of Sample	: Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 26.08.2025
Sample Collected by	: Mr.Sumit Sarkar & Team	Sample Registration Date	: 27.08.2025
Sample Details	: Stack Emission	Period of Analysis	: 27.08.25 to 28.08.25
Customer Name & Address	: Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 534
		Sample Drawn By	: ECO CARE
		Sampling Plan & Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Steel Plant (Ferro Alloys Div)
2	Emission Due to	: Reduction of Manganese Ore
3	Stack Connected to	: S.E.A.F No.1 & 2 (9 MVA each)
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 32.0 m
6	Height of Sampling Port from G.L.	: 20.0 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 2.5 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 8.5 MVA each Furnace

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: Electricity
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

		UNIT	METHOD	
1	Flue Gas Temperature	78	°C	IS 11255 : Part 3
2	Barometric Pressure	753	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	5.82	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	86603	NM ³ / hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	22.62	mg/NM ³	IS 11255 : Part 1
6	Concentration of Carbon Dioxide	2.2	%	IS 13270
7	Concentration of SO ₂	---	mg/NM ³	IS 11255 : Part 2
8	Concentration of NO _x	---	mg/NM ³	IS 11255 : Part 7

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End of Test Report



ULR NO – TC1513625000001420F

TEST REPORT

Report Release Date	: 04.09.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250865
Test Report No	: EC/TR/42/08443	Source of Sample	: Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 23.08.2025
Sample Collected by	: Mr.Sumit Sarkar & Team	Sample Registration Date	: 25.08.2025
Sample Details	: Stack Emission	Period of Analysis	: 25.08.2025
Customer Name & Address	: Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 543
		Sample Drawn By	: ECO CARE
		Sampling Plan & Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Steel Plant (Sponge Division)
2	Emission Due to	: Process Activity
3	Stack Connected to	: Bag Filter at Product House
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 30.0 m
6	Height of Sampling Port from G.L.	: 7.62 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 0.60 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 350 TPD

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

		UNIT	METHOD	
1	Flue Gas Temperature	44	°C	IS 11255 : Part 3
2	Barometric Pressure	753	mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.68	m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	7287	NM ³ / hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	23.49	mg/NM ³	IS 11255 : Part 1
6	Concentration of Carbon Dioxide	---	%	IS 13270
7	Concentration of SO ₂	---	mg/NM ³	IS 11255 : Part 2
8	Concentration of NO _x	---	mg/NM ³	IS 11255 : Part 7

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ULR NO – TC1513625000001421F

TEST REPORT

Report Release Date	: 04.09.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250865
Test Report No	: EC/TR/42/08444	Source of Sample	: Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 26.08.2025
Sample Collected by	: Mr.Sumit Sarkar & Team	Sample Registration Date	: 27.08.2025
Sample Details	: Stack Emission	Period of Analysis	: 27.08.2025
Customer Name & Address	: Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sampling Location	: Bag Filter Stack
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 544
		Sample Drawn By	: ECO CARE
		Sampling Plan & Procedure	: EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

GENERAL INFORMATION PROVIDED BY CUSTOMER

1	Particular of the Plant	: Steel Plant (Sponge Division)
2	Emission Due to	: Process Activity
3	Stack Connected to	: Bag Filter at Cooler Discharge
4	Material of Construction	: M.S
5	Stack Height from G.L.	: 30.0 m
6	Height of Sampling Port from G.L.	: 15.0 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 0.60 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 350 TPD

FUEL CHARACTERISTIC REPORT

1	Source of Energy	: ----
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

		UNIT	METHOD
1	Flue Gas Temperature	58	°C
2	Barometric Pressure	753	mm Hg
3	Velocity of Flue Gas	7.96	m/sec
4	Flue Gas Quantity	7235	NM ³ / hr
5	Concentration of Particulate Matter	24.43	mg/NM ³
6	Concentration of Carbon Dioxide	---	%
7	Concentration of SO ₂	---	mg/NM ³
8	Concentration of NO _x	---	mg/NM ³

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ULR NO – TC1513625000001449F

Test Report

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08392	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 22.08.2025
Sample Collected by : Mr. Sumit Sarkar & Team	Sample Registration Date : 22.08.2025
Sample Details : Fugitive Air	Period of Analysis : 23.08.25 to 25.08.25
Name & Address : Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sample Condition : Sealed & Preserved
	Remarks : ----
	Sample Drawn By : ECO CARE
	Sampling Plan & Procedure : EC/SOP/03/01
	Deviation if any : None

1	Average Temperature	32.0 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	58 %	4	Weather Condition	Clear Day

4. Sampling Location : Raw Material Handling Area

SL NO	TESTS	PROTOCOL	Unit	RESULT	*Standard
1	Concentration of Suspended Particulate Matter	IS : 5182 (Part – 4)	µg/m ³	1480.21	3000
2	Sulphur Dioxide (SO ₂)	IS 5182:Part 2:2001	µg/m ³	9.25	200
3	Nitrogen Dioxide (NO ₂)	IS 5182:Part 6:2006	µg/m ³	25.64	150

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ULR NO – TC1513625000001448F

Test Report

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08391	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 22.08.2025
Sample Collected by : Mr. Sumit Sarkar & Team	Sample Registration Date : 22.08.2025
Sample Details : Fugitive Air	Period of Analysis : 23.08.25 to 25.08.25
Name & Address : Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sample Condition : Sealed & Preserved
	Remarks : ---
	Sample Drawn By : ECO CARE
	Sampling Plan & Procedure : EC/SOP/03/01
	Deviation if any : None

1	Average Temperature	32.0 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	58 %	4	Weather Condition	Clear Day

3. Sampling Location : New Cooler Discharge of Kiln No. 1 & 2

SL NO	TESTS	PROTOCOL	Unit	RESULT	*Standard
1	Concentration of Suspended Particulate Matter	IS : 5182 (Part – 4)	µg/m ³	1546.21	3000
2	Sulphur Dioxide (SO ₂)	IS 5182:Part 2:2001	µg/m ³	9.21	200
3	Nitrogen Dioxide (NO ₂)	IS 5182:Part 6:2006	µg/m ³	25.14	150

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Authorised Signatory
MADHUSUDAN KARMAKAR
LABORATORY IN-CHARGE
AUTHORISED SIGNATORY

End of Test Report



Eco Care



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Manoj Talkies Basement, Kumarpur

Asansol - 713304

Dist. Paschim Bardhaman (W.B.)

Specialised House on Environmental Monitoring, Analysis, Assessment & Management
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ULR NO – TC1513625000001447F

Test Report

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08390	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 22.08.2025
Sample Collected by : Mr. Sumit Sarkar & Team	Sample Registration Date : 22.08.2025
Sample Details : Fugitive Air	Period of Analysis : 23.08.25 to 25.08.25
Name & Address : Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sample Condition : Sealed & Preserved
	Remarks : ----
	Sample Drawn By : ECO CARE
	Sampling Plan & Procedure : EC/SOP/03/01
	Deviation if any : None

1	Average Temperature	32.0 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	58 %	4	Weather Condition	Clear Day

2. Sampling Location : Product House of Kiln No. 1 & 2

SL NO	TESTS	PROTOCOL	Unit	RESULT	*Standard
1	Concentration of Suspended Particulate Matter	IS : 5182 (Part – 4)	µg/m ³	1608.5	3000
2	Sulphur Dioxide (SO ₂)	IS 5182:Part 2:2001	µg/m ³	8.23	200
3	Nitrogen Dioxide (NO ₂)	IS 5182:Part 6:2006	µg/m ³	26.10	150

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ULR NO – TC1513625000001446F

Test Report

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08389	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 22.08.2025
Sample Collected by : Mr. Sumit Sarkar & Team	Sample Registration Date : 22.08.2025
Sample Details : Fugitive Air	Period of Analysis : 23.08.25 to 25.08.25
Name & Address : Maithan Steel & Power Ltd (Unit -I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sample Condition : Sealed & Preserved
	Remarks : ----
	Sample Drawn By : ECO CARE
	Sampling Plan & Procedure : EC/SOP/03/01
	Deviation if any : None

1	Average Temperature	32.0 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	58 %	4	Weather Condition	Clear Day

1. Sampling Location : In between Kiln No. 1 & 2

SL NO	TESTS	PROTOCOL	Unit	RESULT	*Standard
1	Concentration of Suspended Particulate Matter	IS : 5182 (Part – 4)	µg/m ³	1422.93	3000
2	Sulphur Dioxide (SO ₂)	IS 5182:Part 2:2001	µg/m ³	8.16	200
3	Nitrogen Dioxide (NO ₂)	IS 5182:Part 6:2006	µg/m ³	28.19	150

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ULR NO – TC1513625000001450F

Test Report

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08393	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 26.08.2025
Sample Collected by : Mr. Sumit Sarkar & Team	Sample Registration Date : 26.08.2025
Sample Details : Fugitive Air	Period of Analysis : 27.08.25 to 28.08.25
Name & Address : Maithan Steel & Power Ltd	Sample Condition : Sealed & Preserved
(Unit – I)	Remarks : ---
Bonra, Neturia	Sample Drawn By : ECO CARE
Dist – Purulia	Sampling Plan &
West Bengal,723121	Procedure : EC/SOP/03/01
	Deviation if any : None

1	Average Temperature	32.0 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	58 %	4	Weather Condition	Clear Day

5. Sampling Location : Near 350 TPD Kiln No. 3

SL NO	TESTS	PROTOCOL	Unit	RESULT	*Standard
1	Concentration of Suspended Particulate Matter	IS : 5182 (Part – 4)	µg/m ³	1723.25	3000
2	Sulphur Dioxide (SO ₂)	IS 5182:Part 2:2001	µg/m ³	10.14	200
3	Nitrogen Dioxide (NO ₂)	IS 5182:Part 6:2006	µg/m ³	26.08	150

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ULR NO – TC151362500001451F

Test Report

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08394	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 23.08.2025
Sample Collected by : Mr. Sumit Sarkar & Team	Sample Registration Date : 23.08.2025
Sample Details : Fugitive Air	Period of Analysis : 25.08.25 to 26.08.25
Name & Address : Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia	Sample Condition : Sealed & Preserved
Dist – Purulia	Remarks : ---
West Bengal,723121	Sample Drawn By : ECO CARE
	Sampling Plan & Procedure : EC/SOP/03/01
	Deviation if any : None

1	Average Temperature	32.5 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	55 %	4	Weather Condition	Clear Day

6. Sampling Location : Product Housing of 350 TPD Kiln No.3

SL NO	TESTS	PROTOCOL	Unit	RESULT	*Standard
1	Concentration of Suspended Particulate Matter	IS : 5182 (Part – 4)	µg/m ³	1616.14	3000
2	Sulphur Dioxide (SO ₂)	IS 5182:Part 2:2001	µg/m ³	9.42	200
3	Nitrogen Dioxide (NO ₂)	IS 5182:Part 6:2006	µg/m ³	25.13	150

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Authorised Signatory

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End of Test Report



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ULR NO – TC151362500001452F

Test Report

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08395	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 23.08.2025
Sample Collected by : Mr. Sumit Sarkar & Team	Sample Registration Date : 23.08.2025
Sample Details : Fugitive Air	Period of Analysis : 25.08.25 to 26.08.25
Name & Address : Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sample Condition : Sealed & Preserved
	Remarks : ----
	Sample Drawn By : ECO CARE
	Sampling Plan & Procedure : EC/SOP/03/01
	Deviation if any : None

1	Average Temperature	32.5 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	55 %	4	Weather Condition	Clear Day

7. Sampling Location : Near Cooler Discharge of 350 TPD Kiln

SL NO	TESTS	PROTOCOL	Unit	RESULT	*Standard
1	Concentration of Suspended Particulate Matter	IS : 5182 (Part – 4)	µg/m ³	1210.16	3000
2	Sulphur Dioxide (SO ₂)	IS 5182:Part 2:2001	µg/m ³	8.61	200
3	Nitrogen Dioxide (NO ₂)	IS 5182:Part 6:2006	µg/m ³	24.74	150

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Authorised Signatory
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LABORATORY IN-CHARGE
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End of Test Report



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ULR NO – TC1513625000001453F

Test Report

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08396	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 23.08.2025
Sample Collected by : Mr. Sumit Sarkar & Team	Sample Registration Date : 23.08.2025
Sample Details : Fugitive Air	Period of Analysis : 25.08.25 to 26.08.25
Name & Address : Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sample Condition : Sealed & Preserved
	Remarks : ----
	Sample Drawn By : ECO CARE
	Sampling Plan & Procedure : EC/SOP/03/01
	Deviation if any : None

1	Average Temperature	32.5 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	55 %	4	Weather Condition	Clear Day

8. Sampling Location : Raw Material Charging Area (Ferro Plant)

SL NO	TESTS	PROTOCOL	Unit	RESULT	*Standard
1	Concentration of Suspended Particulate Matter	IS : 5182 (Part – 4)	µg/m ³	1532.11	3000
2	Sulphur Dioxide (SO ₂)	IS 5182:Part 2:2001	µg/m ³	7.64	200
3	Nitrogen Dioxide (NO ₂)	IS 5182:Part 6:2006	µg/m ³	25.41	150

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ULR NO – TC1513625000001454F

Test Report

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08397	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 23.08.2025
Sample Collected by : MrSumit Sarkar &Team	Sample Registration Date : 23.08.2025
Sample Details : Fugitive Air	Period of Analysis : 25.08.25 to 26.08.25
Name & Address : Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sample Condition : Sealed & Preserved
	Remarks : ----
	Sample Drawn By : ECO CARE
	Sampling Plan & Procedure : EC/SOP/03/01
	Deviation if any : None

1	Average Temperature	32.5 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	55 %	4	Weather Condition	Clear Day

9. Sampling Location : Near 9 MVA Furnace No.- 2 (Ferro Plant)

SL NO	TESTS	PROTOCOL	Unit	RESULT	*Standard
1	Concentration of Suspended Particulate Matter	IS : 5182 (Part – 4)	µg/m ³	985.67	3000
2	Sulphur Dioxide (SO ₂)	IS 5182:Part 2:2001	µg/m ³	7.42	200
3	Nitrogen Dioxide (NO ₂)	IS 5182:Part 6:2006	µg/m ³	26.73	150

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ULR NO – TC1513625000001455F

Test Report

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08398	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 26.08.2025
Sample Collected by : Mr. Sumit Sarkar & Team	Sample Registration Date : 26.08.2025
Sample Details : Fugitive Air	Period of Analysis : 27.08.25 to 28.08.25
Name & Address : Maithan Steel & Power Ltd	Sample Condition : Sealed & Preserved
(Unit – I)	Remarks : ----
Bonra, Neturia	Sample Drawn By : ECO CARE
Dist – Purulia	Sampling Plan &
West Bengal,723121	Procedure : EC/SOP/03/01
	Deviation if any : None

1	Average Temperature	31.5 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	52 %	4	Weather Condition	Clear Day

10. Sampling Location : Boiler Area (Captive Power Plant)

SL NO	TESTS	PROTOCOL	Unit	RESULT	*Standard
1	Concentration of Suspended Particulate Matter	IS : 5182 (Part – 4)	µg/m ³	1080.65	3000
2	Sulphur Dioxide (SO ₂)	IS 5182:Part 2:2001	µg/m ³	8.32	200
3	Nitrogen Dioxide (NO ₂)	IS 5182:Part 6:2006	µg/m ³	24.45	150

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ULR NO – TC1513625000001456F

Test Report

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08399	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 26.08.2025
Sample Collected by : Mr. Sumit Sarkar & Team	Sample Registration Date : 26.08.2025
Sample Details : Fugitive Air	Period of Analysis : 27.08.25 to 28.08.25
Name & Address : Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal, 723121	Sample Condition : Sealed & Preserved
	Remarks : ----
	Sample Drawn By : ECO CARE
	Sampling Plan & Procedure : EC/SOP/03/01
	Deviation if any : None

1	Average Temperature	31.5 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	52 %	4	Weather Condition	Clear Day

11. Sampling Location : Near 9 MVA Furnace No.2 (Ferro Plant)

SL NO	TESTS	PROTOCOL	Unit	RESULT	*Standard
1	Concentration of Suspended Particulate Matter	IS : 5182 (Part – 4)	µg/m ³	991.15	3000
2	Sulphur Dioxide (SO ₂)	IS 5182:Part 2:2001	µg/m ³	8.56	200
3	Nitrogen Dioxide (NO ₂)	IS 5182:Part 6:2006	µg/m ³	23.88	150

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ULR NO – TC1513625000001457F

Test Report

Report Release Date	: 04.09.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250865
Test Report No	: EC/TR/42/08400	Source of Sample	: Steel Plant
Type of Sample	: Suspended Dust & Gases	Sampling Date	: 26.08.2025
Sample Collected by	: Mr.Sumit Sarkar &Team	Sample Registration Date	: 26.08.2025
Sample Details	: Fugitive Air	Period of Analysis	: 27.08.25 to 28.08.25
Name & Address	: Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sample Condition	: Sealed & Preserved
		Remarks	: ----
		Sample Drawn By	: ECO CARE
		Sampling Plan &	
		Procedure	: EC/SOP/03/01
		Deviation if any	: None

1	Average Temperature	31.5 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	52 %	4	Weather Condition	Clear Day

12. Sampling Location : C.H.P Area(Captive Power Plant)

SL NO	TESTS	PROTOCOL	Unit	RESULT	*Standard
1	Concentration of Suspended Particulate Matter	IS : 5182 (Part – 4)	µg/m ³	1632.34	3000
2	Sulphur Dioxide (SO ₂)	IS 5182:Part 2:2001	µg/m ³	9.16	200
3	Nitrogen Dioxide (NO ₂)	IS 5182:Part 6:2006	µg/m ³	26.32	150

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ULR NO – TC1513625000001458F

Test Report

Report Release Date : 04.09.2025	Sample Ref. No.(ARF) : EC/ARF/29/250865
Test Report No : EC/TR/42/08401	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 26.08.2025
Sample Collected by : Mr. Sumit Sarkar & Team	Sample Registration Date : 26.08.2025
Sample Details : Fugitive Air	Period of Analysis : 27.08.25 to 28.08.25
Name & Address : Maithan Steel & Power Ltd (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Sample Condition : Sealed & Preserved
	Remarks : ----
	Sample Drawn By : ECO CARE
	Sampling Plan & Procedure : EC/SOP/03/01
	Deviation if any : None

1	Average Temperature	31.5 °C	2	Barometric Pressure	753 mm of Hg
3	Average Relative Humidity	52 %	4	Weather Condition	Clear Day

13. Sampling Location : Near C.H.P Area(Captive Power Plant)

SL NO	TESTS	PROTOCOL	Unit	RESULT	*Standard
1	Concentration of Suspended Particulate Matter	IS : 5182 (Part – 4)	µg/m ³	1841.04	3000
2	Sulphur Dioxide (SO ₂)	IS 5182:Part 2:2001	µg/m ³	7.8	200
3	Nitrogen Dioxide (NO ₂)	IS 5182:Part 6:2006	µg/m ³	25.54	150

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End of Test Report

Maithan Steel & Power Ltd.

(Unit-1)

Material Transportation by Trucks Covered by Tarpaulin



MAITHAN STEEL & POWER LIMITED



Ref. No.: MSPLU-2/19-20/383

February 5, 2020

To,

The General Manager,

Eastern Coalfields Ltd.,

Sodepur Area, Sodepur.

Subject: Permission to dump rejected non-hazardous rejected Charcoal and ESP Dust in abandoned Mines of ECL under your jurisdiction.

Sir,

We would like to introduce ourselves as manufacturers of High quality Sponge Iron having our plant at Mouza & PO Bonra, Dist. Purulia.

Our plant discharges non-hazardous Charcoal and ESP dust from Sponge Iron division. These materials can be used for land filling and also filling of abandoned mines under your jurisdiction.

Hence, we request you to grant us permission to dump the above mentioned non-hazardous material namely, Charcoal and ESP dust in the abandoned mines of ECL under Sodepur Area.

The cost of transportation, heaping and other contingencies shall be borne by us.

We look forward to hear from you.

Thanking you in anticipation,

Yours faithfully,

For Maithan Steel & Power Ltd.

K. Agarwalla

(Director)

05/02/2020
महाप्रबंधक का सचिवालय
Gm's Secretariat
सोदपुर क्षेत्र
SODEPUR AREA
दिनांक.....
Date.....

Registered Office

9, A.J.C. Bose Road,
Ideal Centre, 6th floor,
Kolkata -700 017

Works : Unit : I

P.O. Bonra, P.S. : Neturia -723121,
Dist. Purulia (W.B.)
Ph : +91 8651540007

Works : Unit : II

Chittaranjan Road
P.O. & P.S. : Salanpur - 713357
Dist. Paschim Bardhaman (W.B.)



EASTERN COALFIELDS LIMITED

(A Subsidiary of Coal India Limited)

Office of the Agent, Dhemomain Group

Sodepur Area

ECL/SDPA/AGENT/DMC/ 20/1748

Dated:- 10.02.2020

To,
K. Agarwalla,
Director,
Maithan Steel & Power Limited

**Sub:- Permission to dump rejected non-hazardous rejected Charcoal and
ESP Dust in abandoned Mines of ECL**

Dear Sir,

Kindly refer to your letter reference no. MSPLU/19-20/383 dated:- 05.02.2020. In this regard the undersigned would like to state that although we do not have any abandoned Open Cast Mines for dumping, we have, however, an illegal Open Cast quarry near Biched Bandh, Bada dighari Mouza which is urgently required to be filled up, to enhance the safety aspect of our underground workings lying just below the site.

You may very well avail the opportunity to fill up this illegal quarry, taking due care of all environmental aspects of the concerned area, Note that, the Mine Management shall not be responsible for any incident/accident or environment degradation occurring due to dumping of your above mentioned waste.

Yours sincerely

10.2.2020
Agent

Dhemomain Group
DHEMO MAIN COLLIERY

Copy:-

- 1) General Manager, Sodepur Area
- 2) Area Manager (PC&D), Sodepur Area
- 3) Area Survey Officer, Sodepur Area

Maithan Steel & Power Ltd.

(Unit-I- Ferro Alloy Plant)

Primary Fume Extraction System at SEAF



Secondary Fume Extraction System at SEAF



Maithan Steel & Power Ltd.

(Unit-I)

Water Mist Canon



MAITHAN STEEL & POWER LIMITED



(Unit-I)
Other Pollution Abatement Measures



Covered Conveyer Belt



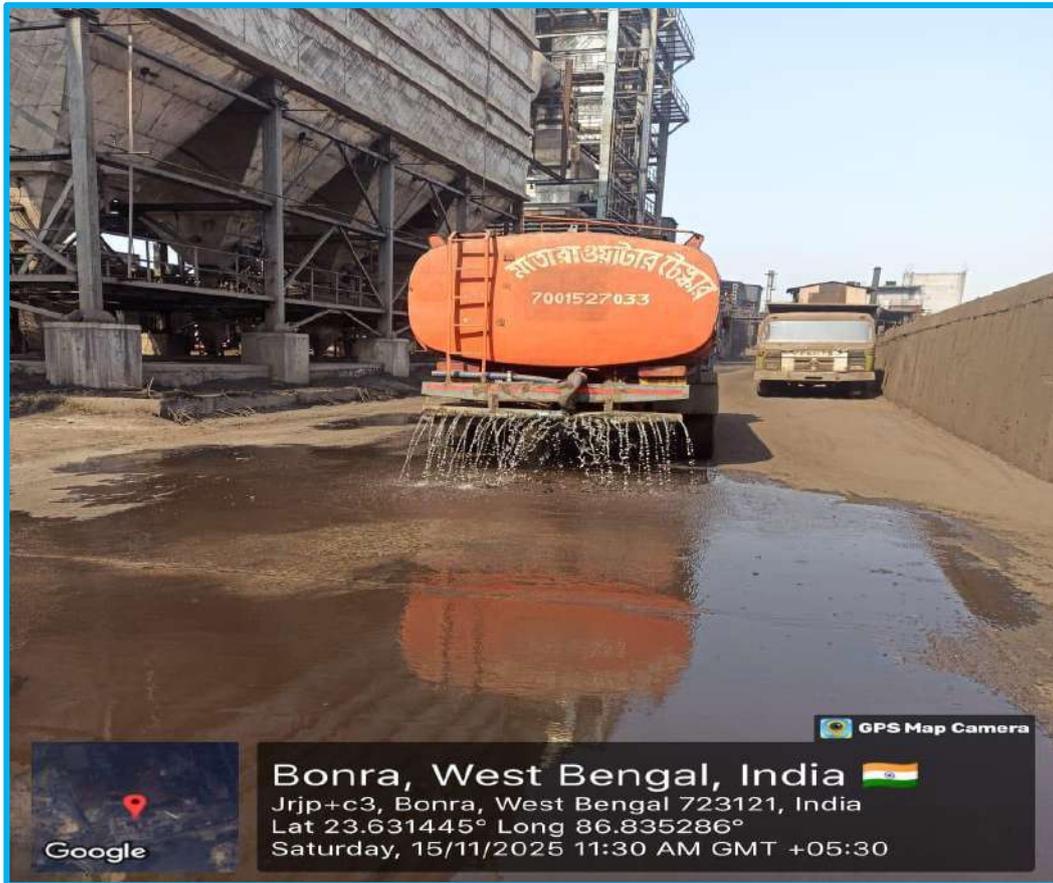
Water Sprinkling on Conveyer Belt

Water Sprinkling on Dry Dust before shifting



Mechanical Water Sprinkling on internal roads

Water Sprinkling on Roads by Water Tanker



Maithan Steel & Power Ltd.

(Unit-1)

Jigging Plant



Maithan Steel & Power Ltd.

(Unit-1)

Jigging Plant



Maithan Steel & Power Ltd.

(Unit-I)

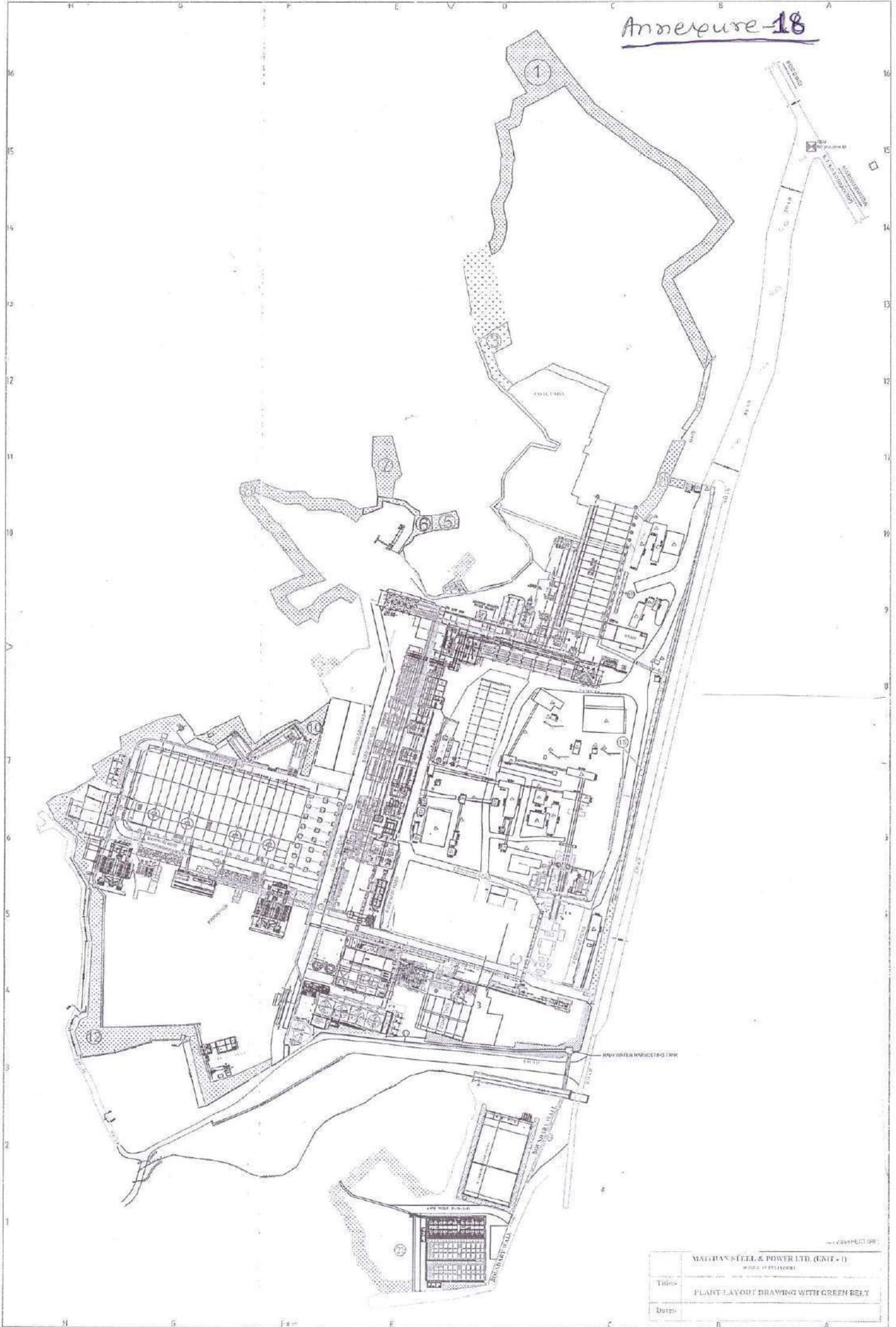
Garland Drain



COLLECTION PIT



Annexure-18



	MADRAS STEEL & POWER LTD. (UNIT - I)
Title:	PLANT LAYOUT DRAWING WITH GREEN BELT
Date:	

Annexure- 19

Work Zone

Noise Monitoring Results



Annexure-19

Phone : (0341) 3580061

TC-15136

Email : ecocareasansol@rediffmail.com

Manoj Talkies Basement, Kumarpur

Asansol - 713304

Dist. Paschim Bardhaman (W.B.)

Specialised House on Environmental Monitoring, Analysis, Assessment & Management

ISO 9001:2015 Certified, OHSAS 45001:2018 Certified

ULR No – TC1513625000001556F

TEST REPORT

Report Release Date	: 04.09.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250865
Test Report No	: EC/TR/42/08466	Source of Sample	: Steel Plant
Type of Sample	: Noise	Sampling Date	: 21.08.2025
Sample Collected by	: Mr.Sumit Sarkar & Team	Period of Analysis	: ----
Sample Details	: Work Zone Noise	Sample Condition	: ----
Customer Name & Address	: Maithan Steel & Power Ltd. (Unit – I) Bonra, Neturia Dist – Purulia West Bengal,723121	Remarks	: ----
		Sample Drawn By	: ECO CARE
		Sampling Plan & Procedure	: EC/SOP/03/01
		Deviation if any	: None

METEOROLOGICAL INFORMATION

1	Average Temperature (°C)	31.4
2	Average Relative Humidity (%)	58.0
3	Barometric Pressure (mm of Hg)	753
4	Weather Condition	Clear Day

WORK ZONE NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL		
	Minimum	Maximum	Leq – Mean
1. 2 x 100 TPD Kiln ESP Area	64.20 dB(A)	70.40 dB(A)	67.30 dB(A)
2. 350 TPD Kiln ESP Area	66.60 dB(A)	71.90 dB(A)	69.20 dB(A)
3. Turbine Floor (C.P.P)	63.30 dB(A)	69.40 dB(A)	66.30 dB(A)
4. 9 MVA Furnace Area, (Ferro)	59.10 dB(A)	68.60 dB(A)	63.90 dB(A)
5. Jigging Plant	67.70 dB(A)	73.10 dB(A)	70.40 dB(A)

1. Test values are reported based on the samples received.
2. The Test report shall not be reproduced, without the written approval of laboratory


 Authorised Signatory

MADHUSUDAN KARMAKAR
 LABORATORY IN-CHARGE
 AUTHORISED SIGNATORY

End of Test Report



Annexure- 20
Phone : (0341) 3580061

Email : ecocareasansol@rediffmail.com
Manoj Talkies Basement, Kumarpur
Asansol - 713304
Dist. Paschim Bardhaman (W.B.)

Specialised House on Environmental Monitoring, Analysis, Assessment & Management
ISO 9001:2015 Certified, OHSAS 45001:2018 Certified

ULR No – TC1513625000001442F

TEST REPORT

Report Release Date	: 04.09.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250865
Test Report No	: EC/TR/42/08385	Source of Sample	: Steel Plant
Type of Sample	: Noise	Sampling Date	: 23.08.2025
Sample Collected by	: Mr.Sumit Sarkar & Team	Period of Analysis	: ----
Sample Details	: Ambient Noise	Sample Condition	: ----
Customer Name & Address	: Maithan Steel & Power Limited (Unit - I) Bonra, Neturia Dist - Purulia West Bengal,723121	Remarks	: ----
		Sample Drawn By	: ECO CARE
		Sampling Plan & Procedure	: EC/SOP/03/01
		Deviation if any	: None

METEOROLOGICAL INFORMATION

1	Average Temperature (°C)	31.4
2	Average Relative Humidity (%)	58.0
3	Barometric Pressure (mm of Hg)	753
4	Weather Condition	Clear Day

AMBIENT NOISE QUALITY REPORT

Sampling Location		NOISE LEVEL		
		Minimum	Maximum	Leq – Mean
1. Near Main Gate (East side of Plant)	Day	59.10 dB(A)	72.50 dB(A)	65.80 dB(A)
	Night	48.60 dB(A)	64.80 dB(A)	56.70 dB(A)
2. Near 100 TPD Kiln (West side of Plant)	Day	63.10 dB(A)	73.50 dB(A)	68.30 dB(A)
	Night	58.60 dB(A)	71.80 dB(A)	65.20 dB(A)
3. Near Power Plant (North side of Plant)	Day	60.10 dB(A)	72.30 dB(A)	66.20 dB(A)
	Night	57.60 dB(A)	70.80 dB(A)	64.20 dB(A)
3. Near Ferro Plant (South side of Plant)	Day	64.10 dB(A)	73.40 dB(A)	68.75 dB(A)
	Night	59.60 dB(A)	70.90 dB(A)	65.25 dB(A)

1. Test values are reported based on the samples received.
2. The Test report shall not be reproduced, without the written approval of laboratory

Authorised Signatory

End of Test Report

MADHUSUDAN KATVAKAR
LABORATORY IN-CHARGE
AUTHORISED SIGNATORY



MAITHAN STEEL & POWER LTD
VILL + P.O - BONRA, P.S - NETURIA, DIST - PURULLIA, W.B

Unit-1

Heat Stress Analysis Report

Date : 11.07.2025

SL.NO.	NAME	Date of Birth (DD/MM/YY)	DESIGNATION	DEPT.	SEX (M/F)	WEIGHT (TKGS.)	HEIGHT (FT)	BMI TYPE	Blood Group	Chest	Pulse Rate Before (BP M)	Pulse Rate After (BP M)	Raise in Pulse Rate	Body Temp before in Work area	Body temp After in Work Area	Rise in core body Temp.	Blood Pressure Before (mm/hg)	Blood Pressure After (mm/hg)	Raise in blood pressure (mm/hg)	Respiration Time	SP02 LEVEL (%)	Anemia	Result (Fit/Unfit)	Remarks
1	Manas Chatterjee	28.10.1990	Filter	Ferro Alloys	M	51	5.3	Under Weight	AB+	Clear	72	103	31	96.9	98.5	1.6	122/80	122/82	0/2	14	98%	Nil	Fit	
2	Sushovan Mondal	29.10.1990	Electrician	Ferro Alloys	M	59	5.5	NORMAL	O+	Clear	68	70	2	96.8	97.1	0.3	120/80	118/78	-2/-2	14	97%	Nil	Fit	
3	Rakesh Nayak	30.10.1990	Electrician	Ferro Alloys	M	43	5.2	Under Weight	O+	Clear	122	94	-28	94.8	95.8	1.0	100/60	106/65	6/5	14	97%	Nil	Fit	Low BP
4	Debraj Chatteraj	31.10.1990	Engineer	CPP	M	72	5.4	NORMAL	A+	Clear	82	88	6	95.8	99.0	3.2	118/78	120/78	2/0	14	98%	Nil	Fit	
5	Sunit Mondal	12.03.1997	CRO	DRI	M	54	5.6	NORMAL	AB+	Clear	76	94	18	95.8	97.1	1.3	120/80	120/80	0/0	12	98%	Nil	Fit	
6	Joydeb Modak	25.12.1982	F.O	DRI	M	75	5.4	NORMAL	O+	Clear	70	85	15	97.6	98	0.4	120/78	120/80	0/0	14	98%	Nil	Fit	
7	Subhajit Mondal	22.05.1998	SI	Ferro Alloys	M	74	5.7	NORMAL	A+	Clear	80	86	6	94.7	97.1	2.4	116/76	118/76	2/0	14	99%	Nil	Fit	
8	Sourav Banerjee	13.09.1989	Engineer	DRI	M	69	5.6	NORMAL	B+	Clear	92	96	4	97	97.2	0.2	120/80	120/80	0/0	14	98%	Nil	Fit	
9	Deepak Kumar Chaudhary	01.02.1996	Jr. Engineer	DRI	M	69	5.8	NORMAL	O+	Clear	83	91	11	97.1	96.3	-0.8	115/75	120/80	5/5	14	98%	Nil	Fit	
10	Arijit Das	21.10.1990	TG Opt.	CPP	M	62	5.6	NORMAL	O+	Clear	64	70	6	97.8	97.1	-0.7	110/70	118/78	8/8	14	98%	Nil	Fit	Low BP
11	Bholaanath Gorai	22.10.1990	Welder	CPP	M	76	5.9	NORMAL	O+	Clear	83	88	5	97.2	96.0	-1.2	120/80	120/80	0/0	14	93%	Nil	Fit	
12	Sayan Chatterjee	20.07.1999	Engineer	Civil	M	71	5.8	NORMAL	O+	Clear	78	85	8	97.1	95.1	2.0	120/80	118/76	02-Apr	14	94%	Nil	Fit	
13	Narendranath Maji	14.02.2000	ASI	Ferro Alloys	M	59	5.4	NORMAL	A+	Clear	87	88	6	98.6	97.3	-1.3	120/80	118/80	-2/0	14	99%	Nil	Fit	
14	Phulan Mahato	01.01.2001	F. Opt	Ferro Alloys	M	62	5.5	NORMAL	B+	Clear	86	88	5	95.1	96.2	1.1	118/78	120/82	2/4	14	98%	Nil	Fit	
15	Pradip Kumar Mishra	15.10.1990	F. Opt	Ferro Alloys	M	70	5.5	NORMAL	AB+	Clear	87	93	6	97.3	99.3	2	118/78	120/81	2/3	14	98%	Nil	Fit	
16	Ahujit Bit	26.10.1990	Filter	CPP	M	65	5.6	NORMAL	A+	Clear	78	88	10	95.7	99.2	4	120/80	124/82	4/2	14	98%	Nil	Fit	

[Handwritten Signature]



MAITHAN STEEL & POWER LTD
VILL + P.O - BONRA, P.S- NETURIA, DIST - PURULIA, W.B

Unit-1

Heat Stress Analysis Report

Date : 11.07.2025

SL.NO.	NAME	Date of Birth (DD/MM/YY YY)	DESIGNATION	DEPT.	SEX (M/F)	WEIGHT (Kgs)	HEIGHT (Ft)	BMI TYPE	Blood Group	Chest	Pulse Rate Before (BP M)	Pulse Rate After (BP M)	Raise in Pulse Rate	Body Temp before in Work area	Body temp. After in Work Area	Rise in core body Temp.	Blood Pressure Before (mm/hg)	Blood Pressure After (mm/hg)	Raise in blood pressure (mm/hg)	Respiration Time	SP02 LEVEL (%)	Anemia	Result (Fit/Unfit)	Remarks
17	Sanjoy Mondal	27.10.1990	Welder	Ferro Alloys	M	50	5.4	Under Weight	B+	Clear	102	96	-6	96.3	96.5	0.2	118/78	120/80	2/2	14	99%	Nil	Fit	
18	Tushar Kanta Giri	16.10.1990	CRO	Ferro Alloys	M	50	5.2	NORMAL	B+	Clear	99	96	-3	97.6	97.3	-0.3	110/70	115/76	5/6	14	99%	Nil	Fit	
19	Surya Narayan Panda	17.10.1990	CRO	Ferro Alloys	M	74	5.6	Over Weight	O+	Clear	84	86	2	94.7	97.2	2.5	124/80	124/82	0/2	14	98%	Nil	Fit	
20	Manish Kumar Jha	18.10.1990	BO	CPP	M	72	5.6	NORMAL	A+	Clear	97	96	-1	97.8	98.6	0.8	118/78	122/80	4/2	14	96%	Nil	Fit	
21	Chandi Sutradhar	19.10.1990	BO	CPP	M	65	5.7	NORMAL	AB+	Clear	86	90	4	97.6	99.0	1.4	124/80	120/80	-4/0	14	97%	Nil	Fit	
22	Sadhan Chandra Layek	20.10.1990	SI	CPP	M	54	5.3	NORMAL	A+	Clear	84	87	3	95.4	96.8	1.4	116/76	118/78	2/2	14	98%	Nil	Fit	Low BP
23	Anirban Choumi	10.03.1991	Welder	DRI	M	61	5.5	NORMAL	A+	Clear	70	95	25	99	96	-3	100/68	110/70	10/2	14	98%	Nil	Fit	
24	Saroj Kuria	02.04.1991	Electrician	DRI	M	52	5.5	NORMAL	O+	Clear	86	90	4	94.8	98.2	3.4	120/80	120/80	0/0	14	95%	Nil	Fit	
25	Ayjan Kundu	20.10.1995	F.O	DRI	M	79	5.8	NORMAL	O+	Clear	76	92	16	96.4	97.8	1.4	110/76	117/78	7/2	14	97%	Nil	Fit	
26	Mukesh Kumar Mandal	23.10.1990	Electrician	CPP	M	50	5.6	Under Weight	O+	Clear	92	94	2	98.0	97.3	-1	122/80	124/82	2/2	14	99%	Nil	Fit	
27	Jitendra Prasad Tripathi	24.10.1990	Fitter	CPP	M	73	5.2	Over Weight	B+	Clear	117	94	-23	94.7	97.6	3	120/80	120/80	0/0	14	99%	Nil	Fit	
28	Prem Narayan Mondal	21.11.1981	CSO	Admin	M	70	5.8	NORMAL	B+	Clear	84	90	6	95.0	96.5	2	124/82	127/86	03-Apr	14	96%	Nil	Fit	
29	Chandachur Mandal	25.10.1990	Engineer	CPP	M	71	5.8	NORMAL	A+	Clear	86	94	8	97.3	99.0	2	110/70	110/70	0/0	14	98%	Nil	Fit	
30	Ayvon Kumar Mondal	01.11.1990	Engineer	CPP	M	58	5.2	NORMAL	B+	Mild cough	83	90	7	96.2	98.6	2.4	116/78	118/78	2/0	16	97%	Nil	Fit	

Category	Normal	Moderate	High
BP	120/80	121-139/81-85	≥ 140/90

Category	Under weight	Nor. Weight	Over. Weight	Obesity
BP	≤ 18.5	18.5-24.9	25-29.9	≥ 30

DR. M. P. PASWAN
GENERAL PHYSICIAN & SURGEON
DIABETES ADVISER

Regn. No.-30228 BMCR

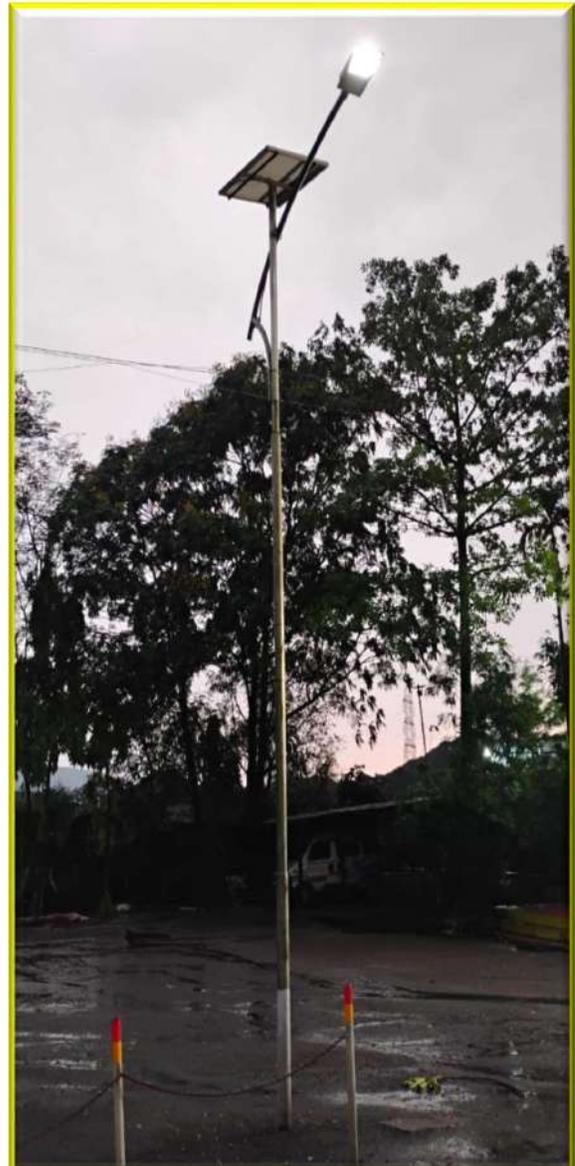
(Signature)

Signature of the Factory Medical Officer

Maithan Steel & Power Ltd.

(Unit-I)

Solar Street Lights





VINOD KUMAR AGARWAL

141/F/1/D, B. T. ROAD, KOLKATA - 700 108

Ph. 2577 - 0645 Mob. : 9830610221

email : vinod_concord5419@yahoo.co.in

GSTIN No. : 19ADAPA6424D1Z4

To
The GM
M.S.P.L
Bora, Bonra,
Purulia, West Bengal – 723121

Date:- 18.07.24

Sub: - Lifting of total Fly Ash of your plant through G.T.Enterprise.

Respected Sir,

We want to lift the total Fly Ash of your plant, We have accounts of Fly Ash in various cement plants. We want to send this cargo there and We will even send this cylo dust to Bangladesh.

We have given the responsibility of picking up and delivering this dust to G.T.Enterprise (Neturia, Purulia, West Bengal).

Thanking You,

VINOD KUMAR AGARWAL

Proprietor

PURCHASE ORDER
(Domestic PO)



Page : 1/3

Format No :
Company
ULTRATECH CEMENT LIMITED
(UNIT: SONAR BANGLA CEMENT
WORKS)
VILLAGE DHALO
WEST BENGAL - 742227
INDIA
Phone :
Fax :
Contact: PATIT PABAN MONDAL
Email : p.mondal@centurycement.com

Vendor Code : 603872
VINOD KUMAR AGARWAL
141/F/1/D, B.T. ROAD,
KOLKATA - 700108
INDIA
Phone : 03325770645
Fax :
Email : vinod_concord5149@yahoo.co.in
Mobile : 9830610221
Contact :

Purchase Order : SO/SOE/8369000080
Document Date : 06.05.2024
Validity Period : -

Dear Sirs,

We are pleased to place our order on you for the following materials /services subject to terms & conditions and instructions specified here.

Item	Indent No Date	Material Code Material Description	Item Qty	UoM	Item Price INR	Disnt %	Net Value (INR) (Inc Dis & Oth)
10	50568695 06.05.2020	FLYASHDRYE FLYASH DRY WBPDCI - BKTPP	3000.000	MT	120.00		360000.00
Total value of PO in INR(Excluding Duties and Taxes) :							360,000.00

Rupees Three Lakhs Sixty Thousand

TERMS & CONDITIONS

Central GST : 2.5 %
State GST : 2.5 %
Freight : EXTRA
Packing & Forwarding : NIL
Handling Charges : NIL
Incoterms : EXW / DPL,DURGAPUR
Dispatch Mode : By Road
Delivery Address : ULTRATECH CEMENT LIMITED
UNIT: SONAR BANGLA CEMENT WORKS
VILLAGE DHALO
WEST BENGAL - 742227
Delivery Period : 12.05.2020
Packing Instruction :
Insurance : Your Account
Payment Terms : Within 30 Days After Receipt Of Material

GST DETAILS

GSTIN No : 19AAACL6442L1Z7
Income Tax PAN Number :
Vendor's PAN No : ADAPA6424D

Regd Off : Ahura Centre , 2nd Floor , B Wing , Mahakali Caves Road , Andheri(east) , Mumbai-400093.
:L26940mh2000plc128420

Cin

Vendor's GSTIN No : 19ADAPA6424D1Z4
Quotation dt. 04.05.2024

Mat. Price	Rs.120.00 /- Per MT
Add: Freight-	Rs.405.00 /- Per MT
Total	Rs.525.00 /- Per MT

2. GST extra as applicable.

3. You shall deliver Dry Fly Ash at our site. Transportation shall be arranged by you. We shall pay you Rs. 405/MT extra against transportation.

4. Weighment slip of WBPDC, Bakreshwar as the case may be is mandatory with every bulker for entrance & unload the bulker at our plant.

5. Transit insurance shall be on supplier scope.

6. Weighment as per Sonar Bangla Cement weigh bridge shall be treated as final & binding for making the payment to you against material & transportation.

7. Jurisdiction:

In respect of all the disputes/litigation arising out of this Order/Contract appropriate Court at Jangipur, District: Murshidabad (W.B.) alone shall have Jurisdiction.

ORDER ACCEPTANCE:

You will provide order acceptance within 7 working days from date of receipt of Order by sending duplicate copy duly stamped and signed by you (i.e. scan by email / hard copy by mail), failing which the Order will be treated as accepted by you

ACCIDENT/DAMAGES COMPENSATION :

In case the accident involving the suppliers vehicle is caused due to negligence or otherwise either by the suppliers employee or by any workforce engaged by the supplier, then the supplier shall bear all costs incurred by UTCL for such incidents and UTCL shall proceed against the supplier for damages.

PRODUCT HARMFUL EFFECTS:

Along with the material supply you shall also provide information on harmful effects of product supplied by you on environment and safety aspects during handling.

VAT CLAUSE:

In case the VAT credit is disallowed to buyer due to non-compliance of selling dealer, then the entire liability with interest and penalty will be recovered from seller.

CENVAT INVOICE CLAUSE:

In case the Excise Invoice/Service Tax Invoice is not received by us within 6 months from the date of such invoice due to any reason being attributable on your (supplier/service provider) part, the excise duty or service tax charged in such invoice will not be paid to you. And in case, the advance payment is made to you including taxes on the basis of proforma invoice, then the tax collected by you on the proforma invoice shall be reimbursed to us.

GST:

You will raise the Tax Invoice in the format prescribed as per GST Laws along with prescribed documents for movements of goods and ensure to upload the required data timely in GSTR-1 and GSTR-3.

Regd Off : Ahura Centre , 2nd Floor , B Wing , Mahakali Caves Road , Andheri(east) , Mumbai-400093. Cin :L26940mh2000pic128420



If GST is payable under reverse charge by UltraTech, then same should be mentioned on Invoice by you.

In case of any advance payment, you shall raise the necessary document and ensure the compliances as required under GST Law.

In case of any loss to UltraTech on account of non-compliance from your end e.g. incorrect declaration, failure/delay in deposit, failure/delay in upload of transaction, confiscation of goods by Govt. due to improper documents during movement etc. the same shall be recovered from you along with interest/penalty, if any.

Where ever applicable, UTCL shall deduct tax at source under the GST Laws at the rates prescribed.

On the implementation of GST, you will pass on the direct/indirect benefits accruing to you. This would include benefit pertaining to input tax, reduction in your cost of input material due to GST, reduction in effective tax rates etc.

TEST CERTIFICATE:

You will ensure that material is accompanied by all relevant certificate, failing which the material may be liable for rejection

CONFIDENTIALITY TERMS: -

"Confidential Information" means and includes, all information of any nature (including without limitation, documents, drawings, models, apparatus, sketches, designs, specifications and list furnished to the Recipient by the Disclosing Party and any tangible embodiments of the Disclosing Party's Confidentiality Information created by the Recipient, which a Party may have or acquire before or after the Purchase Order Date and during the contractual period, however conveyed (whether in writing, verbally, in a machine-readable format, or by any other means, and whether directly or indirectly), which relates to the business, products, price, developments, personnel, suppliers and customers of a Party and its Affiliates (whether or not designated as Confidential Information by the disclosing Party), and all information designated as confidential or which ought reasonably to be considered confidential;

Confidentiality under the clause shall be survived upon the expiry or termination of the Purchase Order. In case of violation of confidentiality agreement, Purchase Order shall be terminated at the option of the Disclosing Party. Recipient shall indemnify the Disclosing Party for the liquidated damages caused to the Disclosing Party, without prejudice to the right to claim penalty before the competent court.

We require order acknowledgement immediately.

For **ULTRATECH CEMENT LIMITED**
(UNIT: SONAR BANGLA CEMENT WORKS)

Prepared by

Checked by

Authorized Signatories



ACC**ACC Limit**

Unit : SINDRI CEMENT WORKS)
 Unit Address : PO-ACC COLONY DIST-DHRANBAD

SINDRI , PIN :828124,
 Jharkhand , India

Cont. Person :
 Tel. No. :
 Fax No. :
 E-Mail :

GSTN No. : 20AAACT1507C1ZB
 PAN No : AAACT1507C

Vendor Code : 31003153
 VINOD KUMAR AGARNAL,
 141/B/1/D
 B T ROAD,
 KOLKATA , PIN:700108
 West Bengal, India

GSTN No : 19ADAPA6424D1Z4
 PAN No : ADAPA6424D
 Tel No : 033 25770645
 FAX No :
 E-Mail : vinod_concord5419@yahoo.co
 Contact: MR VINOD KUMAR AGARNAL

Purchase Order

SAP PO No/Plant 1200730351/M205
 PO Date : 22.11.2023
 PO Type : REV(Revised)
 Issuing Authority : Plant Procurement Team
 Vendor's Ref/Qtn No :

Created by: Ankita Biswas
 Please Quote the GSTN Number, PO No., Line
 Item No, Name of the Works/Unit and the
 Contact Person in all correspondences
 (including the Delivery Challan/Invoice)
 Please provide copy of valid MEMBER
 certificate along with the copy of invoice
 and other documents.

With reference to your quotation and subsequent negotiations, we are pleased to place this Purchase Order on you for the supply of following items/services
 subject to terms and conditions stated below and printed overleaf/attached with this purchase order

PO Item No / PR No / Dept	Item Code	Description & Specification	Delivery Date	Taxes/Duties Value	Qty	UOM	Price in INR	Total Discount	Amount in INR
00001	10800000041	<p>FLY ASH - DRY HSN Code:26219000 FLY ASH - DRY FROM BOKARO THERMAL POWER STATION</p> <p>DRIVER SHALL BE MORE THAN 25 YEARS OF AGE AND HELPER SHALL BE MORE THAN 16 YEARS OF AGE. DRIVER SHOULD HAVE VALID DRIVING LICENSE. DRIVER SHALL NOT TRANSPORT ANY UNAUTHORISED PASSENGERS IN OR ON THE VEHICLE</p> <p>Gross Price after Disc in INR 3,875,000.00</p> <p>Header Text: THIS IS A TRIAL ORDER</p> <p>Enclosed: Annexure I : Health & Safety Annexure II : Corporate Social Responsibility Annexure III : Safety Rules Annexure IV : Health and Safety,</p>	31.12.2024	Integrated GST 5%	5,000.000	TO	<p>775.00 PER 1 TO</p>	<p>INR 0.00</p>	3,875,000.00

SHREE CEMENT EAST PRIVATE LIMITED

Registered Office: 21, Strand Road, Kolkata – 700001, West Bengal

CIN: U26999WB2021PTC245736 Ph: 01462-228101-6 Fax: 01462228117/228119 E-mail: sclgroup@shreecement.com

SCEPL/PURULIA/INDENT/22-23/LOI

Date: 30th Aug, 2022

M/s. G.T. Enterprise,

Vill Garh Panchakat

PO Ramkanali

Purulia, West Bengal 723142

PURCHASE- ORDER

Email ID : samirpandit1980@gmail.com

Kind Attn: Mr. Somen Pandit (9932337296)

Sub: LOI for Supply of Fly Ash for our Cement Project at **Purulia (W.B.)**.

Ref: As per email dated- 26-Aug-22 subsequent discussions.

Dear Sir,

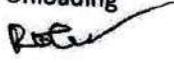
This is in reference to above mentioned offers & subsequent correspondences/ discussions you had with us; we are pleased to place this LOI on following terms and conditions:

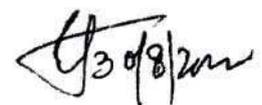
1. **Specifications & Price & Taxes:** The basic order value shall be as mentioned below:

Amount in Rs.					
Sl #.	Description	Qty.	UOM	Basic Price	Total Amount
1.	Filling Material (Fly Ash)	20000	MT	65	13,00,000
Total Order Value					13,00,000
Rupees in words: Thirteen Lakh Only.					

- 1.1 Price Basis : **FOR Site Basis.**
- 1.2 Freight & Insurance : **Vendor's scope.**
- 1.3 GST : Extra (as applicable) against proper Tax Invoice as per relevant GST Act to avail the ITC, failing which GST. amount shall be debited to your A/c.
- 1.4 TCS Provision : As per Section 206 C (1H) of Income Tax Act 1961, vendor is liable to collect TCS as per prescribed rate. Hence SCEPL will responsible to pay TCS only when it is charged in your invoice otherwise there is no responsibility of SCEPL. Accordingly, TCS (if applicable) shall be paid extra against proper Invoice as well as submission of TCS Certificate (Form 27 D) within 30 days from quarter end.
2. Delivery : As per SCEPL schedule/ confirmation from Civil concern (Sh. Manjunath Goda- 7349213785).
3. Payment Term : Within 15 days after submission of invoices (Lotwise).
4. Loading & Unloading : **Vendor's scope.**







5. **Weighment Clause:** Weighment tolerance of 0.5% shall allowed if weighment slip given by supplier otherwise SCEPL weighment shall be final for payment.
6. **Our Billing & Shipping address**

Supplier shall raise Invoice in following name & address:

SHREE PURULIA CEMENT PLANT

A Unit of Shree Cement East Private Limited

Mouza - Digha, Tehsil - Raghunathpur, Village - Digha and Parbatpur,

Village - Digha and Parbatpur, Purulia, West Bengal, **723121**

Goods should be accompanied proper Tax Invoice with all prescribed mandatory field/ nomenclature; as per respective GST Act & amendment thereof (if any) - to avail Input Tax Credit, failing which any monetary impact (if any), shall be debited to the supplier.

7. **Taxation Details:**

GST No	: 19ABGCS2209B1ZO
PAN No	: ABGCS2209B

8. Covenant : With reference to the discussion we had, it is very categorically discussed and agreed mutually by both of us that there are no pending issues of whatsoever nature related to various previous orders placed by us on your company which includes Liquidity Damages Waiver, Technical Issues etc.
9. Set Off : In addition to any rights and remedies available to SCEL provided by law, upon the occurrence and during continuance of any Event of Default or any breach of contract, SCEPL is authorized at any time and from time to time, without prior notice to the Supplier / Contractor / Service Provider, to set off and appropriate any and all deposits at any time held by SCEPL to the account of the Supplier / Contractor / Service Provider against any and all obligations owing to SCEPL hereunder or under any Agreement, now or hereafter existing.

Our System Order will follow shortly.

Please return one copy of this LOI, duly signed & sealed as a token of your acceptance.

Yours faithfully,

For **SHREE PURULIA CEMENT PLANT,**
(A Unit of Shree Cement East Private Limited)


AUTHORIZED SIGNATORY

Acceptance:

We read & understood the terms and conditions mentioned above. We hereby accept the same.

(Authorized Signatory)

M/s. G.T. ENTERPRISE, PURULIA





MAITHAN STEEL & POWER LIMITED

P.O.:- Bonra, P.S.:- Neturia - 723121, Dist.:- Purulia (WB)

HAZARD IDENTIFICATION AND RISK ASSESSMENT (HIRA) AND ONSITE EMERGENCY PLAN

Prepared By

A handwritten signature in black ink, appearing to read 'Gulshan Prajapati', written over a white background.

Mr. Gulshan Prajapati
Safety Officer-HSE

Checked By

A handwritten signature in black ink, appearing to read 'Sourav Agarwal', written over a white background.

Mr. Sourav Agarwal
Factory Manager



Initiated By

Maithan Steel & Power Ltd.

Mr. Mritunjoy Chandra

A handwritten signature in black ink, appearing to read 'Mritunjoy Chandra', written over a white background.
Director

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PURPOSE:

The purpose of this procedure is to:

1. Ensure that risk management is embedded in MSPL Company's culture and practices;
2. Ensure a systematic approach to risk management;
3. Ensure that hazards are identified, risks are evaluated and appropriate control measures are implemented and monitored;
4. Describe specific risk assessment methodologies that can be applied and against which compliance can be measured.

OBJECTIVES:

The objectives of environmental risk assessment are governed by the following, which excludes natural calamities:

- ✓ Identification of potential hazardous areas so that adequate safety measures can be adopted to reduce the likelihood of accidental events.
- ✓ Identification of the stakeholders and evaluation of their risk along with proposing adequate control techniques.
- ✓ Managing the emergency situation or a disastrous event, if any, during the plant operation.

SCOPE:

This procedure shall apply to all workplace hazards and risks, and all activities are undertaken by MSPL and include:

1. The routine, and non-routine, activities of all persons having access to the workplace;
2. Hazards associated with plant, machinery, and equipment;
3. Hazards associated with substances and materials in the workplace;
4. Hazards originating outside of the workplace that could adversely affect the work environment;
5. Hazards associated with inclement weather or emergency situations;
6. The complete lifecycle of facilities from specification through to decommissioning and disposal.

PROCEDURE:

Abbreviations:

ALARP:	As Low As Reasonably Practicable
FRA:	Fire Risk Assessment
HAC:	Hazardous Area Classification
HAZOP:	Hazard and Operability Study
HIRA:	Hazard Identification and Risk Assessment
JSA:	Job Safety Analysis
HSE:	Health, Safety and Environment
MAWP:	Maximum Allowable Working Pressure
MMI:	Man-Machine Interface
MSDS:	Material Safety Data Sheet
OEM:	Original Equipment Manufacturer
O&M:	Operations and Maintenance
PFD:	Process Flow Diagram
PPE:	Personal Protective Equipment
RACI:	Responsible, Accountable, Consulted, Informed
SOP:	Standard Operating Procedure



EMPLOYEE RESPONSIBILITIES:

All employees of the company are required to observe and abide by this procedure.

Definition of Environmental Risks:

The following terms related to environmental risks are defined before reviewing the environmental risks:

Harm:

Damage to the person, property, or environment.

Hazard:

Something with the potential to cause harm; this could be characteristics of material being processed or malfunctioning of the equipment. An environmental hazard is thus going to be a set of circumstances, which leads to the direct or indirect degradation of environment and damage to the life and property.

Risk:

The probability of the harm or likelihood of harmful occurrence. Being released and its severity. Environmental risk is a measure of the potential threat to the environment, life and property.

Risk Ranking:

The numerical value is given to the level of risk based on the risk matrix.

Severity:

Severity describes the highest level of damage possible when an accident occurs from a particular hazard.

Probability:

Probability is the likelihood or chance that the risk could arise.

Routine Activity:

Routine works are jobs and tasks done at certain defined intervals, to facilitate the normal operation of the plant.

Non-Routine Activity:

Non-routine work are jobs and tasks that are performed irregularly or being performed for the first time.

Since these tasks and jobs are not performed regularly, it can be difficult to understand all of the hazards associated with the job. Non-routine work includes jobs or tasks that are, (but not limited to):

- ✓ Performed infrequently
- ✓ Outside of normal duties
- ✓ Do not have a documented procedure
- ✓ Performed in a different way from the documented procedure
- ✓ Have never been performed before
- ✓ Routine tasks that carry a high level of risk



Controls:

Precautions put in place to reduce the risk.

Consequence:

Effect due to occurrence of the event, which may endanger the environment permanently or temporarily and or loss of life and property.

Environmental Disaster:

The consequence is so severe that it can extensively damage a one or all the four components of the environment namely a) Physic -Chemical b) Biological c) Human and d) Aesthetics

Residual risk:

Residual risk is the risk remaining, associated with a job or an activity after the precautions are taken.

Associated Studies:

There are a number of associated studies that are outside the scope of this procedure that can never the less provide useful input into the identification of risks and controls.

➤ Hazard Operability Study (HAZOP):

A HAZOP is a structured and systematic assessment of processes or operations to identify and evaluate problems that may represent risks to personnel or equipment by examining the impact of deviations from normal operations.

➤ Hazardous Area Classification (HAC):

A HAC assessment involves the evaluation of a manufacturing or process facility to identify areas where potentially flammable atmospheres can occur, to enable the selection of equipment that will minimize the chances of ignition.

➤ Fire Risk Assessment(FRA):

A FRA is used to identify what needs to be done to prevent fires and protect personnel. It is a structured process for identifying fire hazards, the personnel at risk and what can be done to eliminate or reduce the risks.

Risk Management Process:

The risk management process can be divided into five steps:

1. Identify the hazards.
2. Identify who is at risk or what can be damaged and how.
3. Evaluate the risk and identify any additional control measures necessary to reduce the risk to As Low as Reasonably Practicable (ALARP).
4. Implement control measures in the workplace.
5. Monitor and review the effectiveness of the control measures.



The aim should be to eliminate the hazard or risk wherever practicable. Where it is not possible to eliminate the risk then a hierarchy of controls can be applied ranging from substitution (i.e., the use of less hazardous substances, materials, equipment or processes), through to the application of engineering or administrative controls, and finally the use of personal protective equipment (PPE).

MSPL employs the use of three interrelated processes for the assessment and control of workplace risks:

1. Hazard Identification and Risk Assessment (HIRA);
2. Man-Machine Interface (MMI);
3. Job Safety Analysis (JSA).

At the highest level in the risk assessment hierarchy is the HIRA. This is used to evaluate the hazards, risks, and controls associated with MSPL facilities and jobs. The MMI and JSA processes shall be used to provide another level of detail.

Where the HIRA process identifies risks associated with the operation and maintenance of machinery then the MMI process shall be applied. This process is defined to specifically address the hazards, risks, and controls associated with operating and maintaining machinery.

Where the HIRA process identifies non-routine jobs, or jobs that have the potential for high severity consequences, then the JSA process shall be applied. This process breaks jobs up into a series of sequential activities and is used to assess the hazards, risks, and controls associated with each activity.

Hazard Identification and Risk Assessment (HIRA)

The objective of the HIRA process is to provide a systematic basis for the identification of hazards, risks, and controls associated with MSPL facilities and activities and to ensure that all risks are maintained ALARP that could occur as a result of failures in process, procedures, or equipment. Increasing industrial accidents, loss of life & property, public scrutiny, statutory requirements and intense industrial processes, all contribute to a growing need to ensure that risk management is conducted and implemented. It is intended to be a working document that MSPL personnel can use to help them understand the workplace risks and manage them effectively. The identification, implementation and, maintenance of effective controls is key to ensuring that all work place risks are appropriately managed. Employee and contractor participation, consultation and communication are key to a successful outcome.

Applicability

The HIRA process shall address:

1. Routine, and non-routine, activities;
2. Hazards associated with plant, machinery, and equipment;
3. Hazards associated with substances and materials in the workplace;
4. Hazards originating outside of the workplace that could adversely affect the work environment;
5. Hazards associated with inclement weather or emergency situations;
6. The complete life cycle of facilities from specification through to decommissioning.

The HIRA process can be broken down into the following basic steps:

1. Select the job which is to be considered.
2. Describe the job which is to be carried out.
3. Brainstorm all the potential hazards and risks associated with the job.
4. For each credible risk define the worst-case outcome and the existing controls.
5. Assess the probability, severity, and level of risk with the existing controls in place.
6. Agree on any remedial actions or additional controls required.
7. Assess the residual risk following the implementation of the proposed actions or controls.
8. Select the next area of the plant or the next job until the HIRA is complete.



The checklist of potential hazards and controls can be used by HIRA assessment teams. This checklist is only intended to be prompt and is not a substitute for the effective implementation of the HIRA process by knowledgeable and experienced personnel. The teams should have access to any supporting information or documentation that might add value to the assessment such as details of previous incidents, Process Flow Diagrams (PFDs), Material Safety Data Sheets (MSDS) plant layouts, etc.

The MSPL qualitative risk matrix shall be used to assess the probability of occurrence and potential severity of the scenarios considered, which will, in turn, define the level of risk (i.e., no risk, low risk, medium risk or high risk). The risk is assessed based on the potential impact on people, assets, the environment, and company reputation.

Risk Acceptance

Based on the risk level, as derived from the MSPL risk matrix and assigned during the HIRA assessment, the following actions shall be taken to ensure effective risk management.

High Risk

If the residual risk is high, then the operation or activity shall be stopped until additional controls can be implemented or an alternative process or activity can be found that will reduce the risk to an acceptable level.

Medium Risk

If the residual risk is medium, then the assessment team needs to be satisfied that the identified controls are implemented and effective and that no additional controls can be identified to further reduce the risk (i.e., the risk is ALARP).

Low Risk

If the residual risk is low, it is still important to make sure that the identified controls are implemented and effective and to be aware of further opportunities for improvement.

Man-Machine Interface (MMI)

Whenever personnel interface with machinery there is always the potential for severe injuries and, in the worst case, fatalities. To address these specific concerns MSPL has introduced the MMI process. To avoid confusion and ensure consistency this has been aligned to the HIRA methodology. Hazards, risks, and controls are identified in the same way for both the HIRA and MMI processes and the MSPL risk matrix is used in both cases to assess the probability of occurrence, the severity of consequences and risk levels.

Where the MMI process differs is that it requires some basic information on the machine, its condition and operation to be provided prior to starting the assessment sessions. This should be based on the information given in the MSPL and include:

1. Manufacturer's details;
2. Machine type, model number, serial number;
3. Machine description;
4. Energy sources;
5. Safety features;
6. Utilization;
7. Modification history;
8. Availability of operating and maintenance(O&M) manuals;
9. Training records for O&M personnel.



Applicability:

The MMI process shall be applied where the HIRA identifies hazards and risks associated with the operation and maintenance of machinery. It shall be applicable to all machinery either owned, operated or maintained by MSPL and shall address both operation and maintenance activities.

The MMI process can be broken down into the following basic steps:

1. Select the system or subsystem of the machine which is to be considered.
2. Describe the function of the system or subsystem.
3. Brainstorm all the potential hazards and risks associated with the system or subsystem.
4. For each credible risk define the worst-case outcome and the existing controls.
5. Assess the probability, severity, and level of risk with the existing controls in place.
6. Agree on any remedial actions or additional controls required.
7. Assess the residual risk following the implementation of the proposed actions or controls.
8. Select the next system or subsystem until the MMI is complete.

Job Safety Analysis (JSA)

Job Safety Analysis is an important tool that is used to identify hazards and risks before a job is performed and before they can result in injuries or damage. The aim is to eliminate them or put controls in place to minimize them. Jobs are broken down into a series of steps or tasks. The hazards, risks, and controls associated with each task are then identified. The JSA is used to provide input into the preparation of:

- Standard Operating Procedures(SOPs);
- Maintenance procedures;
- Method statements;
- Work permits;
- Tool box talks;
- Training materials for new employees;
- Refresher training for established employees.

Applicability:

A JSA shall be carried out:

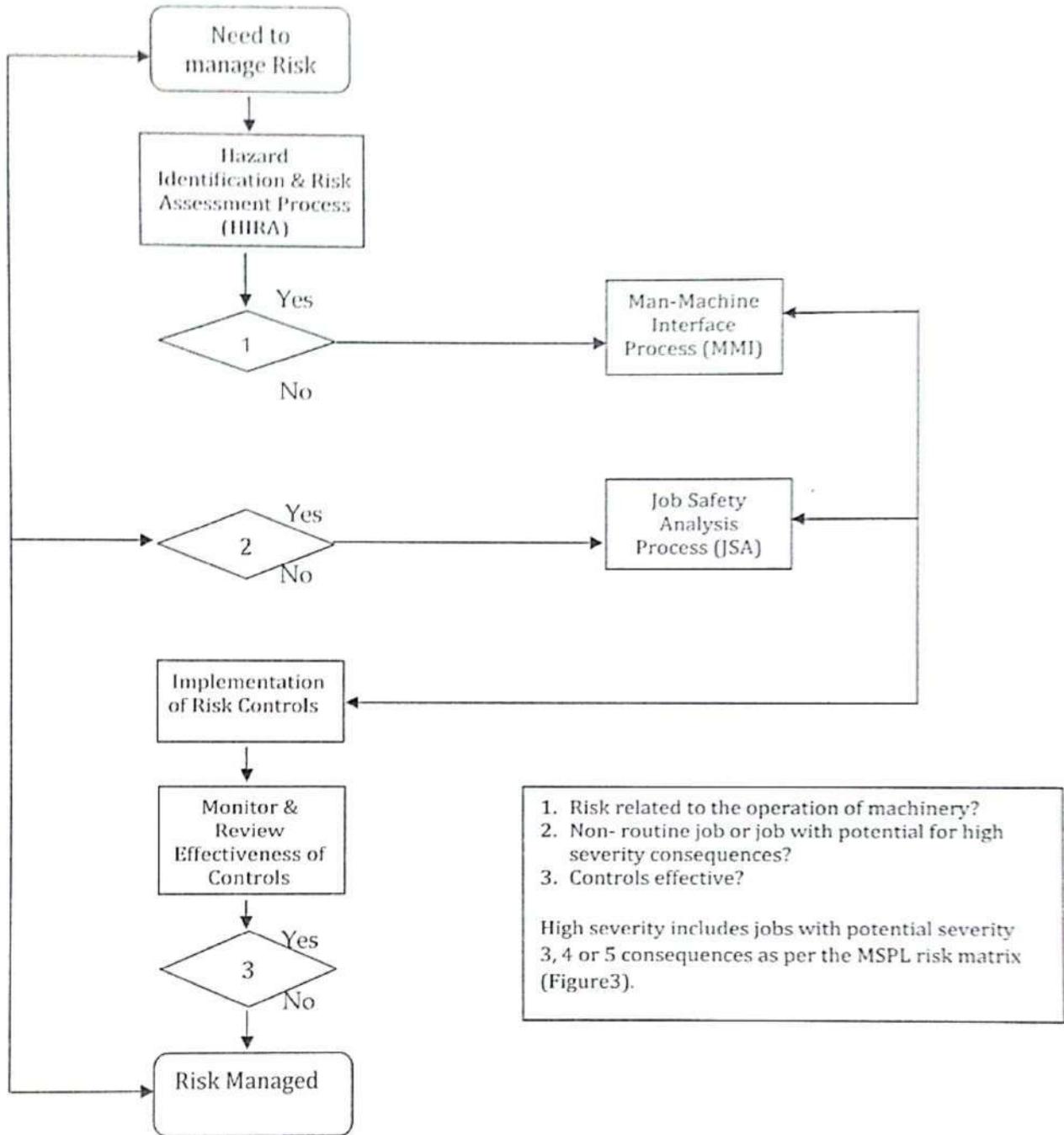
1. For non-routine jobs that are not covered in HIRA.
2. For any job requiring vessel entry;
3. For jobs with potential severity 3, 4 or 5 consequences as per the MSPL risk matrix;
4. Where there has been a history of previous incidents or injuries.
5. For all contractor activities.

The tasks are listed in the worksheet and then the analysis proceeds task by task until all the tasks have been considered. Following review and discussion by the team the following information is added to the worksheet for each task:

- The potential safety issue, hazard or risk;
- The potential causes that could lead to the realization of the hazard or risk;
- The potential severity of the consequences as per the MSPL risk matrix;
- The controls that need to be implemented;
- The party is responsible for implementing the controls.



Overall Risk Management Process



Checklist of Potential Hazards:

Safety Hazards	<ul style="list-style-type: none"> • Slipping and tripping hazards (e.g., poorly maintained floors) • Moving parts of machinery (e.g., belts, flywheels, pinch points) • Working at height (e.g., on roofs, from elevated platforms) • Pressurized systems(e.g., vessels) • Vehicles(e.g., Backhoe, loaders, trailers, cranes) • Electricity(e.g., poor wiring, worn cords) • Suspended loads • Inadequate lighting • Confined spaces
Occupational Health Hazards	<ul style="list-style-type: none"> • Noise Exposure (e.g., hand-held tools, compressors, engines) • Respiratory Exposure(e.g., dust, fumes, mists, vapors) • Ergonomics (e.g., repetition, forceful exertions, awkward postures, vibration, lifting and handling loads) • Ionizing radiation (e.g., x-rays, radioactive materials) • Extreme temperatures • Biological Exposure (e.g., molds, bodily fluids, bacteria, viruses)
Chemical Hazards	<ul style="list-style-type: none"> • Inhalation • Skin Contact • Absorption • Injection • Ingestion
Fire Hazards	<ul style="list-style-type: none"> • Fire/Explosion • Hot Work (e.g., grinding, cutting, welding, etc.)
Weather Hazards	<ul style="list-style-type: none"> • Heat • Flood • Wind

Hierarchy of Controls:

Elimination	<ul style="list-style-type: none"> • Task elimination • Hazard elimination
Substitution	<ul style="list-style-type: none"> • Safer substances • Safer equipment • Safer work processes
Engineering Controls	<ul style="list-style-type: none"> • Guards • Barricades • Interlocks • Isolation • Automation • Redesign
Administrative Controls	<ul style="list-style-type: none"> • Standard operating procedures • Safe working practices • Training • Supervision • Warning signs and signals • Job rotation



PPE	<ul style="list-style-type: none"> • Safety glasses, goggles, visors • Gloves • Hardhats • Safety shoes, boots • Aluminized Jackets • Dust masks • Respirators • Ear protection • Safety harnesses
Emergency Response	<ul style="list-style-type: none"> • Escape routes • Rescue equipment • Firefighting equipment • Medical support • Emergency communications

Severity Rating

Severity	Description	Rating
Catastrophic	Numerous fatalities, irretrievable property damage and productivity	5
Fatal	Approximately one single fatality or major property damage if hazard is realized	4
Serious	Non-fatal injury, permanent disability	3
Minor	Disabling however permanent injury	2
Negligible	Minor abrasions, bruises, cut, first aid type injury	1

Likelihood rating

Likelihood	Description	Rating
Most Likely	The presumably result of the hazard/event being realized	5
Possible	Has a good probability of occurring and is not unusual	4
Conceivable	Might occur at some time in future	3
Remote	Has not been identified to occur after several years	2
Inconceivable	Is practically not possible and has never occurred	1

Risk Matrix

		LIKELIHOOD				
		1	2	3	4	5
SEVERITY	1	1	2	3	4	5
	2	2	4	6	8	10
	3	3	6	9	12	15
	4	4	8	12	16	20
	5	5	10	15	20	25



Risk Rating

Risk	Description	Action
15 - 25	HIGH	A HIGH risk needs immediate action to manage the hazard as detailed within the hierarchy of control. Actions taken to be documented on the risk assessment form as well as date for completion.
5 - 12	MEDIUM	A MEDIUM risk needs a planned approach to manage the hazard and applies temporary measure if needed. Action to be documented on the risk assessment form as well as date of completion.
1 - 4	LOW	A LOW risk could also be considered as acceptable and any reduction might not be necessary. However, if risk can be resolved quickly and expeditiously, control measures got to be enforced and recorded.

Hazard Identification

The operation of DRI is the hazardous activities which may affect the workforce working within in the plant premises. Following hazard may occur for the proposed project:

- i) Heat related hazards
- ii) Hazard due to Dust emission
- iii) Electrical hazard
- iv) Explosion hazard
- v) Accident due to fall of Machinery
- vi) Operation of Equipment
- vii) Movement of heavy vehicles, loading and unloading
- viii) Noise related hazard

CLASSIFICATION OF MAJOR HAZARDOUS SUBSTANCES

Hazardous substances may be classified into three main classes' namely flammable substances, unstable substances and toxic substances. The ratings for a large number of chemicals based on flammability, reactivity and toxicity have been given in NFPA Codes 49 and 345 M. The major hazardous materials to be stored, transported, handled and utilized within the facility have been summarized in the Table.

CATEGORY-WISE SCHEDULE OF STORAGE

Materials	Hazardous Properties
HSD	U 1202. Dangerous Goods Class 3 - Flammable Liquid

PROPERTIES OF FUELS USED IN THE PLANT

Chemical	Codes/Label	TLV	FBP	MP	FP	UEL	LEL
			°C			%	
HSD	Flammable	-	371	-	54.4	6	0.7

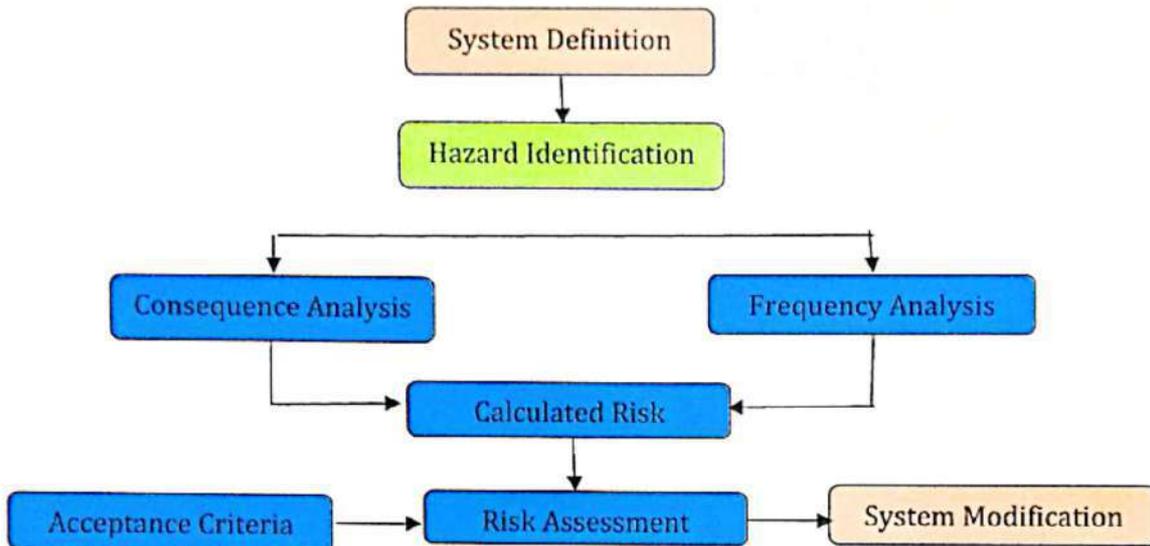
TLV: Threshold Limit Value
FP: Flashpoint

FBP: Final Boiling Point MP: Melting Point
UEL: Upper Explosive Limit LEL: Lower Explosive Limit



HAZARD ASSESSMENT AND EVALUATION

An assessment of the conceptual design is done for the identification and examination of hazards related to feed stock materials, major process components, utility and support systems, environmental factors, proposed operations, facilities and safeguards.



Hazard Identification Methodology

Some quantities of greases, oils and lubricants are used and if spilled can easily become a slipping hazard on walking or working surfaces.

Sharp edges or burrs on steel products or metal bands pose laceration and puncture hazards to workers involved in finishing, shipping and scrap-handling operations.

Foreign-body eye hazards are prevalent in most areas, particularly those involving raw material handling.

Preliminary Hazard Analysis (PHA)

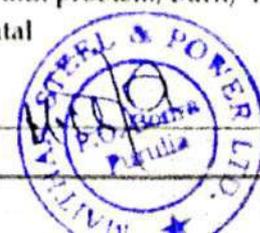
A preliminary hazard analysis is carried out initially to identify the major hazards associated with storages and the processes of the plant which is followed by consequence analysis to quantify these hazards. Finally, the vulnerable zones are plotted for which risk reducing measures are deduced and implemented. Preliminary hazard analysis for fuel storage area and whole plant is given in the below table.

PRELIMINARY HAZARD ANALYSIS FOR STORAGE AREA

Unit	Description of Plausible Hazard	Impact
HSD	Pool fire/fire ball may occur due to rupture in the tank and subsequent release and instantaneous ignition.	Fire/Explosion

PRELIMINARY HAZARD ANALYSIS FOR THE WHOLE PLANT IN GENERAL

Unit / Activity	Description of Plausible Hazard	Impact
DRI	a. Moving Equipment Parts b. Smoke/ Dust c. Inhalable agents (gases, Vapours, dusts and fumes) d. Falls from height e. Extreme temperatures	Suffocation, Injury to worker & health problem, Burn/ injuries & Fatal



	f. Moving machinery, on-site transport(conveyor belt) g. Fire & Explosion h. Fire in stock yard i. Failures due to automation	
Transportation of material	a. High concentration of traffic during duty hours b. Heterogeneous traffic c. Violation of traffic rules/ speed limit d. Road Condition e. Condition of vehicle	Accident and fatal.
Storage and handling of HSD	Pool fire/ fire ball may occur in case of direct contact with flame.	Fire may propagate to the nearby areas leading into fire hazard.
Lifting operation with crane	Fall hazard	Injury, damage to equipment
Cutting	Fire, gas leakage, explosion, fall hazard	Burn injury, discomfort, chemical poisoning, physical injury
Welding	Fire, electrocution, fall hazard	Burn injury, electrical shock, physical injury

The Brief about nature of various Hazards in MSPL is given in Table.

PROPERTIES OF FUELS USED IN THE PLANT

Nature of Hazard	Sources
Fire Hazard	Release/leakage of Oxygen, Fire in HSD storage.
Explosion Hazard	Release/leakage of LPG Cylinders.
Toxic Hazard	Release of LPG Cylinders.
Cold Burns	Exposure to liquid oxygen and liquid argon.
Accidents due to Material Handling Equipment	Connected with all Material Handling Equipment

Fire Explosion and Toxicity Index (FE&TI) for Storage Unit

Dow's Fire and Explosion Index (F and E) is a product of Material Factor (MF) and hazard factor (F3) while MF represents the flammability and reactivity of the substances, the hazard factor (F3), is itself a product of General Process Hazards (GPH) and Special Process Hazards (SPH). The application of FE&TI helps to make a quick assessment of the type and quantification of the hazard. However, this does not give a precise idea.

The degree of hazard potential is identified based on the numerical value of F&EI as per the criteria given below:

F&EI Range	Degree of Hazard
0-60	Light
61-96	Moderate
97-127	Intermediate
128-158	Heavy
159-up	Severe



By comparing the indices F&EI and TI, the unit in question is classified into three categories established for the purpose as shown in Table.

FIRE EXPLOSION AND TOXICITY INDEX

Category	Fire and Explosion Index (F&EI)	Toxicity Index (TI)
I	F&EI < 65	TI < 6
II	65 < or = F&EI < 95	6 < or = TI < 10
III	F&EI > or = 95	TI > or = 10

Certain basic minimum preventive and protective measures are recommended for these three hazard categories.

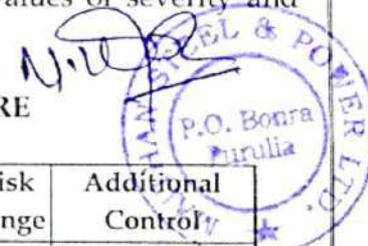
Failure Mode Effect Analysis for Process Units

Failure mode effects analysis (FMEA) is one of the most important and widely used tools for reliability analysis. FMEA identifies corrective actions, which are required to reduce failures to assure the highest possible yield safety and reliability. Even though it is a widely used reliability technique, it has some limitations in prioritizing the failure modes and output may be large for even simple systems, which may not deal easily with time sequence, environmental and maintenance components. The risk management measures for the proposed project activities require adoption of the best safety practice at the respective construction zones within the project boundary. In addition, the design and engineering of the proposed facilities would take into consideration of the proposed project protection measures for the air and water environment.

FMEA Implementation: Failure mode effect analysis is executed by a multidisciplinary team of experts with the help of process flow chart. Criteria of ranking of severity, occurrence and detection are selected based on the past failure records of the furnace. Risk rating is calculated using values of severity and likelihood number and presented in Table.

RISK CALCULATION & PROPOSED MITIGATION MEASURE

Components/ Process	Failure Mode	Failure Effect	Failure Cause	Existing Control	S	L	R	Risk Range	Additional Control
Conveyor feed belt	Friction	Fire	Improper Maintenance	Belt Sway Switch	3	2	6	M	Lubricating the rotating parts regularly
Automatic lubricating system	Failed to Operate	Mechanical Failure	Improper Maintenance	Monitoring system	2	2	4	L	Periodic Maintenance
Double cone dust valves	Failed to Operate	Improper dust cleaning	Corrosion	Reliable Supplier	2	1	2	L	Periodic Maintenance
Moving Machinery, onsite transport	Mechanical	Conveying System &	Improper	Inspection	3	3	9	M	Periodic Maintenance & Mechanical



	Failure	Rotary Failure	Monitoring						Strength testing
Kiln	Presence of Oil & Grease and other impurities	Sudden catching of fires and flames	Improper Maintenance	Inspection	2	2	4	L	Periodic Maintenance
Transformer	Oil spillage & Overheating	Bursting	Excess connected load	Inspection	3	2	6	M	BDB testing of transformer oil and maintenance of bushing and Radiator.

The Hazard Identification and Risk Analysis (HIRA) along with mitigation measures for each hazard identified is shown in the below Table.

HAZARD IDENTIFICATION AND RISK ANALYSIS (HIRA)

Type of Hazard	Source	Risk related to Hazard	Mitigation measures
Heat	DRI	Burn/Heat stress	Use of helmet, heat resistant clothing, heat resistant gloves, Use of Goggles by the workers. Rotation of workers on shift basis.
Dust and Gaseous emission	DRI, Raw material and product storage yard, Transportation of raw material.	Pulmonary disease	Use of Nose Mask, Water sprinkling arrangement at requisite places, Operation of Bag filters and dust extraction system as required. Stack monitoring and work zone monitoring to ensure the gaseous emission and dust emission within the prescribed standard.
Electrical	Motors, Panels, Sub Station; Electrically operated equipment	Electrical shock and burn	Electrical area to be separated and assess given to authorized personnel. Spark proof motors used. Insulated cover provided in the electrical area. Proper earthing has been provided.
Accident related to fall of machinery	Moving machinery, rotary parts and on-site transport	Injury	Safety check of operation of equipment at regular intervals. Properly trained workers appointed to operate machineries, Workers
Storage & Handling of HSD	Leak, Spill, Fire explosion, Toxicity	Injury, Burn	PPEs provided to the personnel working in the area. Fire extinguishers provided
Noise & Vibration	D.G Set, raw material, scrap and product handling, rotating equipment.	Hearing loss/ Fatigue	Noise monitoring, Audiometric examination of workers, Workers provided with PPE like ear plug, muff isolation, substitution and engineering control installation of acoustical booth rotation of workers and minimize the time enclose fans, insulate ventilation pipes, cover and enclose scarp and storage.



Chemical Hazard	Chemical Lab	Poisoning, skin rashes and disorders of the lung, kidney and liver.	Regular maintenance of all connections and monitoring of the same. Strict supervision of all activities involving the use of hazardous substances is very important. Provision for on-site medical facility and first aid for medical emergencies before further treatment, like Medical support and ambulance Material Safety Data Sheets (MSDS) of all hazardous substances to be well distributed and displayed for awareness and knowledge in handling such substances SOPs for handling of chemicals. Mandatory use of personal protective equipment.
Mechanical/Operational Hazard	DRI	slips, trips and falls on the same level; falls from height; unguarded machinery; falling objects; moving machinery, dusts and fumes); noise and vibration; manual handling and repetitive work; failures due to automation;	All installations will be safely designed, built, maintained, modified and operated. Integrated warning system including public address system to ensure working personnel are timely alerted before testing and after testing. Cranes and suspended loads to be grounded. Regular monitoring of site and coordinated supervision is very instrumental in eliminating all probable risks. Efficient control and IT teams deployed for overall monitoring and coordination through CCTVs and other technology Timely training to all workers and staff in their specific work areas. Mandatory use of personal protective equipment (PPE).

Safety Measures: The work place and surrounding area are need to kept clean and free from all obstructions. Solid waste, Hazardous waste like oily cotton, oily rags and empty barrels are properly stored away from any source of fire. Spill of oil and grease is immediately cleaned to reduce accidental fall.

Provision of PPEs: Personal protective equipment like heat resistant gloves, goggles, face masks, apron, Safety boots, helmets, Nose masks has been provided to the workers working in the hazard prone area.

Loading and transportation of Materials:

1. Overloading of the trucks is strictly prohibited and material is properly distributed and tied as far as possible.
2. Care to be taken by the drivers while moving back to avoid any accident.
3. The maximum speed limit of the heavy vehicle is <10 km/hr inside plant premises.

Operating Machineries:

- I. Only the authorized person should operate the machine or equipment.
- II. The repairing, cleaning and oiling of machineries will do when the machineries are not in use.
- III. Before switching on electricity, gas, acid, air or gas this is ensured by the safety supervisor that no person should be injured nearby.
- IV. All the exposed part of the moving machines like pulley, belt, chains, and rotating collars is properly guarded.
- V. The machine guard and safety device is confirming the statutory provisions required for the machine.



Vehicular Traffic:

- I. All vehicles will comply with all the traffic regulations within the plant and they will not exceed the safe speed limits i.e., 10 km/ hr.
- II. Sitting on the side flaps or standing in a truck while in motion is strictly prohibited.
- III. Overloading of the trucks is strictly prohibited.
- IV. Overall, an integrated approach combining good engineering and maintenance practices, safe job procedures, worker training and use of personal protective equipment (PPE) is required to control hazards.

OBJECTIVES OF ON SITE EMERGENCY PLAN

The main objective of the plan is to take immediate action to meet any emergency situation for speedy and efficient rescue and relief operation. The main step in an onsite emergency plan is described below:

1. Cordon and isolate the affected area for smooth rescue operation.
2. Rescue and treat casualties and safeguards the rests.
3. Minimize damage to persons, property and surrounding.
4. Contain and ultimately bring the situation under control
5. Secure and safe rehabilitation of the affected area.
6. Provide necessary information to statutory agendas.
7. Provides authoritative information to the news media.
8. Ward off unsocial elements and prying onlookers.
9. Counter rumor mongering and panic by relevant accurate information.

EMERGENCY ORGANISATION

Responsibility will be automatically delegated in absence of concern person/s in following manner.

SITE CONTROLLER:	Manager/Shift In-charge
INCIDENT CONTROLLER:	HSE Dept., Security Dept.
ADVISORY COMMITTEE:	All HOD'S
COMMUNICATION COMMITTEE:	Administration/ IT Dept.

CODIFICATION OF SIRENS

SR. NO.	SIRENS	INDICATES	AUTHORITY
1.	30 SECOND CONTINUOUS	ON SITE EMERGENCY (ALERT)	INCIDENT CONTROLLER
2.	1 MINUTE CONTINUOUS	EMERGENCY CONTROLLED (ALL CLEAR)	SITE CONTROLLER
3.	30 SECOND CONTINUOUS (3 TIMES)	DISASTER (ALERT)	INCIDENT CONTROLLER



KEY PERSONNEL & THEIR RESPONSIBILITIES

Key Personnel's Responsibility during normal working hours:-

1. Site Controller:

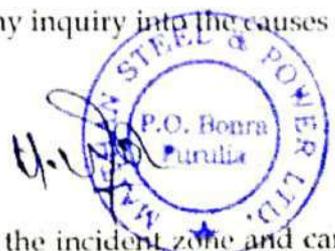
He will retain overall responsibility for the factory and its personnel. As soon as he is informed of the emergency, he shall proceed to the control room and meet the Administrative Manager. His duties shall be:

- a. Assess the magnitude of the situation and decide if staff needs to be evacuated to their assembly points.
- b. Exercise direct operational control over areas other than those affected.
- c. Maintain a continuous review of possible development and assess in consultation with Incident Controller and other Key personnel as to whether shutting down of the plant or any section of the plant and evacuation of persons is required.
- d. Control rehabilitation of affected areas on discontinuation of emergency.

2. Incident Controller:

On hearing of an emergency siren he will rush to the scene of the occurrence and take overall charge. On arrival he will assess the scale of emergency and decide if major emergency exists or is likely and inform the Communication Officer accordingly.

- I. Direct all operations within the affected areas with the help of advisory committee for safety of personnel, plant, property and loss of materials.
 - a. Direct the shutting down and evacuation of plant and areas likely to be adversely affected by the emergency.
 - b. Ensure that all Key personnel and outside help are called in.
- II. Provide advice and information to the Fire squad & Security Team and the local fire service as and when they arrive.
- III. Ensure that all non-essential workers/staff of the areas affected are evacuated to the appropriate assembly points, and the areas are searched for casualties.
- IV. In the event of failure of electric supply and internal telephones, set up communication point and establish contact with Emergency Control Centre.
- V. Report on all significant developments to the Administrative manager.
- VI. Have regard to the need for preservation of evidence so as to facilitate any inquiry into the causes and circumstances, which caused or escalated the emergency.



4. Security Officer:

On hearing alarm advice fire squad and security staff in the factory of the incident zone and cancel the alarm. He will also announce through telephone or messengers to the Admin Manager/Head,

Incident Controller and Site Controller that incident has occurred in such and such zone. He will open the gates nearest to the incident and stand by to direct the emergency service.

If told of a large escape of Metal/Fire, he shall inform the Incident Controller by telephone and stand-by the telephone to receive further messages. On hearing the emergency alarm, he will immediately contact Site Controller and on his advice call the local fire brigade. In case fire is discovered but no alarm is sounding he shall receive information about location from the person discovering the fire and thereafter immediately consult the Site Incident Controller and make announcement on telephone telling the staff location of the incident and to evacuate to their assembly points. He will continue to operate the switchboard advising the calls connected with the incident to the Communications Officer.

5. Departmental Heads:

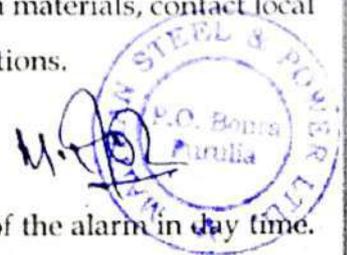
The Departmental head wherein the incident has taken place will report to Incident Controller and provide assistance as required. They will decide which members of their staff they require at the scene.

He will also work as liaison Officer and will be stationed at the Main Entrance (Security Office near Main Gate) during the emergency. He will handle police, press and other inquiries, receive reports from roll-call leaders from assembly points and pass on the absentee information to the Incident Controller. His responsibilities shall include -

- I. To ensure that casualties receive adequate attention, to arrange additional help if required and information relatives.
- II. To control traffic movements into the factory and ensuring that alternative transport is available when need arises.
- III. When emergency is prolonged, arrange for the relief of personnel and organise refreshments / catering facility.
- IV. From information received, advise the Site Controller of the situation, recommending (if necessary) evacuation of staff from assembly points.
- V. Recruit suitable staff to act as runners between the Incident Controller and himself if the telephone and other system of communication fail due to whatsoever reasons.
- VI. Maintain prior agreed inventory in the control centre.
- VII. In case of prolonged emergency involving risk to outside areas by wind-blown materials, contact local Meteorological Office to receive early notification of changes in weather conditions.

6. First-Aid Teams:

Members of first-aid Teams will report to the Incident Controller on hearing of the alarm in day time. The Emergency vehicle driver, if safe to do so, shall collect the emergency vehicle and park nearest to the scene of the incident. First aider shall inform the incident controller that the Emergency Vehicle is



leaving the site, giving the name of the patient and destination i.e. hospital or doctor's room and request the Incident Controller to inform the destination (hospital, etc.) advising them about the casualties reaching there.

7. Factory Fire Squad Personnel:

The duty Fire fighting Squad under the command of the HSE Dept./Security Dept. shall be responsible for fire fighting. On hearing the alarm, they shall proceed to the place of incident. The men at security gate shall find out the location of the emergency and proceed to the site of the occurrence. At the site, all the squad members will respond to the advice and information given by the Incident Controller. On arrival of the local fire brigade, they will also assist in fire-fighting work with the advice of the Incident Controller.



Unit-1

Health Check-up Report (Form No-17)

Date : 25/07/2025

Sl NO.	NAME	Date of Birth (DD/MM/YYYY)	DESIGNATION	DEPARTMENT	SEX (M/F)	WEIGHT (Kgs)	HEIGHT (ft)	Blood Group	Chest	Pulse Rate (BPM)	Blood Pressure (mm/Hg)	Respiration Time	Oxygen Level (%)	Anemia	Result (Fit / Unfit)	Remarks
1	Vivek Singhania	19.03.1978	DGM	Commercial	M	74	5.6	A+	Clear	77	116/78	14	91%	Nil	Fit	
2	Bappa Khan	15.02.1987	Asst. Manager	Commercial	M	78.6	5.8	B+	Clear	92	120/78	14	97%	Nil	Fit	
3	Anirban Chowdhury	10.03.1991	Welder	DRI	M	76	5.3	B+	Clear	80	120/80	14	99%	Nil	Fit	
4	Saroj Kulia	02.04.1991	Electrician	DRI	M	72	5.2	O+	Clear	95	122/80	14	95%	Nil	Fit	
5	Arijun Kundu	20.10.1995	F.O	DRI	M	69	5.5	A+	Clear	77	120/80	14	98%	Nil	Fit	
6	Sudip Roy	12.01.1972	Manager	Commercial	M	64.5	5.8	B+	Clear	79	116/76	14	98%	Nil	Fit	
7	Dinesh Mondal	15.02.1995	Assistant Engineer	Electrical	M	76	5.8	B+	Clear	91	116/76	14	96%	Nil	Fit	
8	Mohan Singh	02.10.1986	Shift Incharge	Electrical	M	73	5.8	B+	Clear	89	116/76	14	96%	Nil	Fit	
9	Sumit Chowdhury	22.05.2001	Assistant Engineer	Electrical	M	72	5.7	O+	Clear	85	120/80	14	95%	Nil	Fit	
10	Pran Narayan Mondal	21.11.1981	CSO	Admin	M	70	5.8	B+	Clear	84	124/82	14	95%	Nil	Fit	
11	Sayan Chatterjee	20.07.1999	Engineer	Civil	M	71	5.6	O+	Clear	78	120/80	14	97%	Nil	Fit	
12	Mrimoy Mukherjee	23.11.2001	W/B Operator	Weigh Bridge	M	68	5.10	AB+	Clear	86	116/70	14	99%	Nil	Fit	
13	Niladr Kundu	10.03.1989	Executive	Dispatch	M	72	5.7	A+	Clear	86	125/85	14	99%	Nil	Fit	
14	Sourav Banerjee	13.09.1989	Engineer	DRI	M	86	5.6	O+	Clear	79	135/88	14	98%	Nil	Fit	
15	Deepak Kumar Chaudhary	01.02.1996	Jr. Engineer	DRI	M	69	5.3	O+	Clear	62	115/75	14	98%	Nil	Fit	
16	Sumit Mondal	12.03.1997	CRO	DRI	M	58	5.7	B+	Clear	72	116/76	14	98%	Nil	Fit	

(Signature)

Unit-1

Health Check-up Report (Form No-17)

Date : 25/07/2025

Sl NO.	NAME	Date of Birth (DD/MM/YYYY)	DESIGNATION	DEPARTMENT	SEX (M/F)	WEIGHT (Kgs)	HEIGHT(Ft)	Blood Group	Chest	Pulse Rate(BPM)	Blood Pressure (mm/hg)	Respiration Time	Oxygen Level (%)	Anemia	Result (Fit/Unfit)	Remarks
17	Joydeb Modak	25.12.1982	FO	DRI	M	56	5.4	A+	Clear	82	100/60	14	99%	Nil	Fit	Low Blood Pressure
18	Subhajit Mondal	22.05.1998	SI	Ferro Alloys	M	60	5.4	B+	Clear	66	118/78	14	97%	Nil	Fit	
19	Narendranath Maji	14.02.2000	ASI	Ferro Alloys	M	81.1	5.1	O+	Clear	86	160/90	16	99%	Nil	Fit	High Blood Pressure
20	Phulan Mahato	01.01.2001	F. Opt	Ferro Alloys	M	60.8	5.3	B+	Clear	89	120/80	14	94%	Nil	Fit	
21	Pradip Kumar Mishra	15.10.1990	F. Opt	Ferro Alloys	M	85.95	5.4	B+	Clear	80	140/90	16	93%	Nil	Unfit	High Blood Pressure
22	Tushar Kanta Giri	16.10.1990	GRO	Ferro Alloys	M	74.9	5.6	O+	Clear	81	125/84	14	97%	Nil	Fit	
23	Surya Narayan Panda	17.10.1990	GRO	Ferro Alloys	M	75.1	5.6	O+	Clear	92	130/84	14	98%	Nil	Fit	
24	Manish Kumar Jha	18.10.1990	BO	CPP	M	71.2	5.5	B+	Clear	81	120/80	14	94%	Nil	Fit	
25	Chandi Sutaradar	19.10.1990	BO	CPP	M	63.85	5.4	B+	Clear	81	135/85	14	97%	Nil	Unfit	High Blood Pressure
26	Sachin Chandra Layek	20.10.1990	SI	CPP	M	83.65	5.8	B+	Clear	102	124/82	14	99%	Nil	Fit	
27	Arijit Das	21.10.1990	TC Opt	CPP	M	90.55	5.8	B9	Clear	89	120/80	14	98%	Nil	Fit	
28	Bhola Nath Gorai	22.10.1990	Welder	CPP	M	68.9	5.8	O+	Clear	71	122/82	14	99%	Nil	Fit	
29	Rakesh Nayak	30.10.1990	Electrician	Ferro Alloys	M	85	5	O+	Clear	108	120/80	14	97%	Nil	Fit	

Unit-1

Health Check-up Report (Form No-17)

Date : 25/07/2025

SL NO.	NAME	Date of Birth (DD/MM/YYYY)	DESIGNATION	DEPARTMENT	SEX (M/F)	WEIGHT (Kgs.)	HEIGHT(Ft.)	Blood Group	Chest	Pulse Rate(BPM)	Blood Pressure (mm/hg)	Respiration Time	Oxygen Level (%)	Anemia	Result (Fit/Unfit)	Remarks
30	Debraj Chatterji	31.10.1990	Engineer	CPP	M	70	5.8	O+	Clear	87	118/78	14	97%	Nil	Fit	
31	Ayoun Kumar Mondal	01.11.1990	Engineer	CPP	M	71	5.3	B+	Clear	85	116/78	14	98%	Nil	Fit	
32	Mukesh Kumar Mondal	23.10.1990	Electrician	CPP	M	69.7	5.5	O+	Clear	88	122/82	14	93%	Nil	Fit	
33	Jitendra Prasad Tripathi	24.10.1990	Fitter	CPP	M	65.4	5.61	B+	Clear	82	120/80	14	98%	Nil	Fit	
34	Chandrachur Mondal	25.10.1990	Engineer	CPP	M	50.5	5.1	O+	Clear	72	120/80	14	98%	Nil	Fit	
35	Abhijit Bis	26.10.1990	Fitter	CPP	M	67	5.5	O+	Clear	72	100/74	14	72%	Nil	Fit	Low Blood Pressure
36	Santroy Mondal	27.10.1990	Welder	Ferro Alloys	M	55.15	5.4	A+	Clear	57	118/76	14	96%	Nil	Fit	
37	Manas Chatterjee	28.10.1990	Fitter	Ferro Alloys	M	82.05	5.8	O+	Clear	116	122/80	14	98%	Nil	Fit	
38	Sushovan Mondal	29.10.1990	Electrician	Ferro Alloys	M	48	5.12	AB+	Clear	65	110/70	14	94%	Nil	Fit	

Category	BP
Normal	120 / 80 or less
Moderate	121-139 / 81-89
High	≥ 140 / 90
Category	BMI
Underweight	≤ 18.5
Normal Weight	18.5 - 24.9
Overweight	25 - 29.9
Obesity	≥ 30

DR. M. P. PASWAN
GENERAL PHYSICIAN & SURGEON
DIABETES ADVISER
Regn. No.-30228 BMCR



Signature with date of the Factory Medical Officer / The Certifying Surgeon

Dr. S. K. Sarkar
M.B.B.S., M.C.C.P.

Consultant Physician
Ex. Asst. Director (Medicine)
Bumpur ISP Hospital



RESIDENCE :
GOPALPUR, G. T. ROAD,
ASANSOL-713304
DIST. PASCHIM BARDHAMAN
(WEST BENGAL)

11/1/24

This is to certify that I have examined

..... Rajat Mondal

Age 22 years. M/F Male

S/o. / D/o. / W/o. Dr. Sanku Mondal

Address Bumpur

He/She has no vertigo and no convulsive disorder. His/Her pulse rate is

..... 72 Blood Pressure 120/80

Blood Group O+ Height 5'6" Weight 77kg

Chest+/CVS/CNS/Abdomen/others clinically NAD.

He/She is mentally and physically fit. He/She is fit to work at height also.

Signature

11/1/24
(Dr. S. K. Sarkar)
R. N. No. 11212

DR. S. K. SARKAR
MBBS, M.C.C.P.
Ex. Asst. Director (Medical)
Bumpur Hospital, SAIL, ISP



LIFE CARE CLINIC



CLINIC : SANCTORIA COLONY MORE, P.O. DISHERGARH, PASCHIM BARDHAMAN

Dr. S. N. Ahmad

CONSULTANT PHYSICIAN

B.A.M.S. - 9039 (Patna)

RMP - 13377 (Cal.)

F.W.H.E. (T) - 3563/2011 (Patna)

Residence :

Dishergharh Bhagaband Road

P.O. Dishergharh

Paschim Bardhaman - 713333

☎ ☎ : +91 9434579444

CHAMBER : 9:00 A.M. to 2:00 P.M. & 5:00 P.M. to 10:00 P.M.

Name Sanjay Kumar Date 30/10/2025

R To whom it may concern
certify that Sanjay Kumar
32 yrs male S/o Late Arjun
Pandit of Goyalapara, Sanctoria,
Dishergharh, Kultim,
Paschim Bardhaman (WB)
713333, is free from any
Physically and other health
Problems that will affect
the effectiveness of work.

He is good health
and is able to perform to
their full capacities with
out any hindrance.

Dr. S. N. Ahmad 30/10
CONSULTANT PHYSICIAN
B.A.M.S. - 9039 (Patna)
RMP - 13377 (Cal.)
F.W.H.E. (T) - 3563/2011 (Patna)

MEDICAL CERTIFICATE OF FITNESS

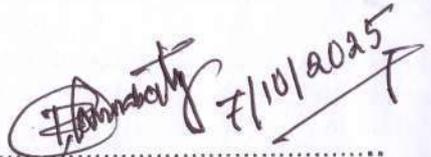
I have examined Shri / Kumari / Smt. Bishal Mondal
Son / Daughter of Shri Parimal Mondal aged
21 Years, of Village: Sodra P.O.
Salampur P.S. Kulti
Dist. Paschim Bardhaman State West Bengal PIN 713357 and certify that, he
/ she is free from deafness, defective vision (including colour vision) or any other
infirmity, mental or physical, likely to interfere with the efficiency of his / her work and
found him / her possessing good health. His blood group - O(-)ve
Height - 5'2" Weight - 50 kg. B.P - 115/80 mmHg Pals - 78/m
This certificate is being given to him / her for the purpose of private Job

Bishal Mondal

Signature of Candidate

(To be signed in presence of the Medical Officer)

Dr. Pradip Kumar Chakraborty
BHMS (KOL)
Reg. No.-26244

Signature of Medical Officer:  7/10/2025

Name of Medical Officer: Dr. Pradip Kumar Chakraborty

Registration No. 26244

Dated: 07/10/2025

Seal

Dr. Pradip Kumar Chakraborty
BHMS (KOL)
Reg. No.-26244

Note: Medical certificate granted by a qualified medical practitioner holding at least M.B.B.S. Degree and registered with Medical Council of India, shall only be valid. The date of issue of the medical certificate should be within **one year** from the date of application.

CERTIFICATE OF MEDICAL FITNESS

Name (in Block Letters): DIPAK MAL

Father's Name: AKAL MAL

Height: 5'5" Weight: 55kg Chest: 32 in

Heart & Lungs: S/Audible (B/L) air entry (+)

Vision: L: (6/6) cont glass R: (6/6) cont glass

Colour Vision: Within normal limit

Hearing: Within normal limit

Hernia / Hydrocele / Piles: not palpable

Remarks: He is physically & mentally fit

I certify that I have carefully examined Sri/Smt. DIPAK MAL

son/daughter of Sri Akal mal who has signed in

my presence. He / She has no mental and physical disease and is fit.

Signature of the Candidate

Place: SALTORA
Date: 06/11/21

Signature of Medical Officer/Practitioner

with legible seal

Registration No. 76812 (WBMC)

Dr. BIJIT SINHA
MBBS (Cal)
Reg. No.-76812(WBMC)
SALTORA BPHC
MEDICAL OFFICER

Prescribed Medical Standards for Admission
The candidate should possess good health and physique with sound mind. He / she should not be suffering from any disease, physical or mental infirmity.
Allowable Defects in Eyesight
Myopia or Myopic Astigmatism: Total strength of correcting lens not exceeding 3.5 Dioptre and acuteness of vision after correction (a) 6/9 in one eye and (b) 6/6 in another.
Hyper-metropia not exceeding 14 Dioptre or Hypermetropic Astigmatism: Strength of correcting lens not exceeding 4 Dioptre and acuteness of vision after correction (a) 6/9 in one eye and (b) 6/6 in another.
The candidates should not be colour blinds.
Competent Authority for Issuing medical Certificate
• Registered Medical Practitioners / Government Medical Officer / Medical Officer of a Government Undertaking with seal and registration number of the certifying medical officer / practitioner.

MEDICAL CERTIFICATE OF FITNESS

I have examined Shri / Kumari / Smt. Prabhakar Chalan
Son / Daughter of Shri Husiar Chalan aged
30.7 Years, of Village: Gangadhar palli P.O.
Pamposh P.S. Pamposh
Dist. Bundergarh State Odisha (RKL-A) PIN 769004 and certify that, he
/ she is free from deafness, defective vision (including colour vision) or any other
infirmity, mental or physical, likely to interfere with the efficiency of his / her work and
found him / her possessing good health.

This certificate is being given to him / her for the purpose of Private job

Prabhakar Chalan

Signature of Candidate

Dr. Pradip Kumar Chakraborty
BHMS (KOL)
Reg. No. -26244

(To be signed in presence of the Medical Officer)

Signature of Medical Officer: Dr. Pradip Kumar Chakraborty 13/11/2025

Name of Medical Officer: Dr. Pradip Kumar Chakraborty

Registration No. 26244

Dr. Pradip Kumar Chakraborty
BHMS (KOL)
Reg. No. -26244

Dated: 13/11/2025

at 5 P.m.

Seal

Note: Medical certificate granted by a qualified medical practitioner holding at least M.B.B.S. Degree and registered with Medical Council of India, shall only be valid. The date of issue of the medical certificate should be within **one year** from the date of application.

Environmental Policy

The goal of M/s Maithan Steel & Power Plant is to apply the Environment Management System to its operations based on preventive approach and to improve the system with its mission, vision and values.

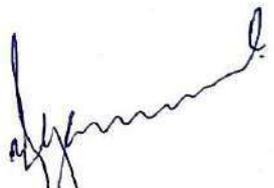
Our goal is the '**Protection of the Environment**' and the '**Efficient use of Natural Resources**' for the Sustainable Growth of Business.

We will strive to become a role model for the Steel Industry by going beyond compliance through:

- Identify, assess and manage our environment impact;
- Regularly monitor, review and report our environmental performance;
- Develop and rehabilitate abandoned sites through afforestation and landscaping;
- Enhance awareness, skill and competence of our employees and contractors to demonstrate their involvement, responsibility and accountability for sound environmental performance;
- Effective implementation of Environmental Management System to attain Zero Liquid Discharge;
- Proper Management of Wastes.

Rev No: 02

Date: 27th September 2022


Director

Registered Office:

9, A.J.C. Bose Road, Ideal Centre,
6th Floor, Kolkata - 700 017,
☎ +91 33 4085 7200

CIN: U27102WB2001PLC093321

Works: Unit-I

P.O. Bonra, P.S.: Neturia - 723121,
Dist.: Purulia, (WB)

 www.maithansteel.com

Works: Unit-II

Chittaranjan Road, Dendua More,
P.O. & P.S.: Salanpur - 713357,
Dist.: Paschim Bardhaman (WB)

☎ 8651540007



ULR NO – TC1513625000001545F

Test Report

Report Release Date	: 04.09.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250865
Test Report No	: EC/TR/42/08455	Source of Sample	: Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 22.08.2025
Sample Collected by	: Mr.Sumit Sarkar & Team	Period of Analysis	: 23.08.25 to 25.08.25
Customer Name & Address	: Maithan Steel & Power Ltd (Unit 1) Bonra , Neturia Dist - Purulia West Bengal 723121	Sampling Location	: Before & After ESP
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 527,535
		Sample Drawn By	: ECO CARE
		Sampling Plan & Procedure	: EC/SOP/03/01
		Remarks	: ---
		Deviation if any	: None

General Informance Provided By Customer

1	Particular of the Plant	: Steel Plant (Sponge Division)
2	Emission Due to	: Reduction of Iron Ore & Oxidation of Coal
3	Stack Connected to	: Rotary Kiln No-1& 2(100TPD*2)ESP Inlet & Outlet
4	Material of Construction	: M.S
5	Stack Height from G.L.	: ---
6	Dimension of Stack at Sampling Port	: ---
7	Shape of the Stack	: ---
8	Working Load	: 100 TPD*2

Performance Test of Air Pollution Control Device

Parameters	ESP Inlet	ESP Outlet	Unit	Method
1 Flue Gas Temperature	149	128	°C	IS 11255 : Part 3
2 Moisture	4.9	3.8	%	
3 Barometric Pressure	753	753	mm Hg	IS 11255 : Part 3
4 Static Pressure	-23.18	-6.9	mm Hg	
5 Velocity of Flue Gas	12.36	7.19	m/sec	IS 11255 : Part 3
6 Flue Gas Quantity	48982	48540	NM ³ / hr	IS 11255 : Part 3
7 Concentration of Particulate Matter	4246.19	28.54	mg/NM ³	IS 11255 : Part 1
8 Concentration of Carbon Dioxide	9.2	9.2	%	IS 13270
9 Concentration of Carbon Monoxide	64.23	63.67	mg/Nm ³	IS 13270
10 Concentration of O ₂	7.4	7.4	%	
11 Concentration of SO ₂	139.09	134.78	mg/Nm ³	

* ESP Efficiency = 99.33 %

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 30 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

MADHUSUDAN KARMAKAR
LABORATORY IN-CHARGE
AUTHORISED SIGNATORY



Eco Care



Phone : (0341) 3580061

TC-15136

Email : ecocareasansol@rediffmail.com

Manoj Talkies Basement, Kumarpur

Asansol - 713304

Dist. Paschim Bardhaman (W.B.)

Specialised House on Environmental Monitoring, Analysis, Assessment & Management

ISO 9001:2015 Certified, OHSAS 45001:2018 Certified

ULR NO – TC1513625000001549F

Test Report

Report Release Date	: 04.09.2025	Sample Ref. No.(ARF)	: EC/ARF/29/250865
Test Report No	: EC/TR/42/08459	Source of Sample	: Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 26.08.2025
Sample Collected by	: Mr.Sumit Sarkar & Team	Period of Analysis	: 27.08.25 to 28.08.25
Customer Name & Address	: Maithan Steel & Power Ltd (Unit 1) Bonra , Neturia Dist - Purulia West Bengal 723121	Sampling Location	: Before & After ESP
		Sample Condition	: Sealed & Preserved
		Sample Stamped as	: TH – 532,540
		Sample Drawn By	: ECO CARE
		Sampling Plan & Procedure	: EC/SOP/03/01
		Remarks	: ---
		Deviation if any	: None

General Informance Provided By Customer

1	Particular of the Plant	: Steel Plant (Sponge Division)
2	Emission Due to	: Reduction of Iron Ore & Oxidation of Coal
3	Stack Connected to	: Rotary Kiln No-3(350TPD) ESP Inlet & Outlet
4	Material of Construction	: M.S
5	Stack Height from G.L.	: ----
6	Dimension of Stack at Sampling Port	: ----
7	Shape of the Stack	: ----
8	Working Load	: 350 TPD

Performance Test of Air Pollution Control Device

Parameters	ESP Inlet	ESP Outlet	Unit	Method
1 Flue Gas Temperature	152	134	°C	IS 11255 : Part 3
2 Moisture	5.3	4.6	%	
3 Barometric Pressure	753	753	mm Hg	IS 11255 : Part 3
4 Static Pressure	-13.28	-5.3	mm Hg	
5 Velocity of Flue Gas	11.43	5.24	m/sec	IS 11255 : Part 3
6 Flue Gas Quantity	155762	154833	NM ³ / hr	IS 11255 : Part 3
7 Concentration of Particulate Matter	4926.59	27.52	mg/NM ³	IS 11255 : Part 1
8 Concentration of Carbon Dioxide	10.8	10.8	%	IS 13270
9 Concentration of Carbon Monoxide	96.26	92.44	mg/Nm ³	IS 13270
10 Concentration of O ₂	7.2	7.2	%	
11 Concentration of SO ₂	146.28	145.24	mg/Nm ³	

* ESP Efficiency = 99.44 %

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 30 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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