



Ref. No. – TSG/EC/2024-25/May-25/01

Date - 16/05/2025

To,

Deputy Director General of Forests (C)
Ministry of Environment, Forest and Climate Change
Integrated Regional Office, 2nd Floor, Headquarter- Jharkhand State Housing Board
Harmu Chowk, Ranchi, Jharkhand – 834002

Subject: Half yearly environmental clearance compliance report of Tata Steel Limited, Gamharia for the period from October 2024 to March 2025

Reference:

1. Environment clearance vide letter no. J/11011/681/2007 – IA II (I) dt. 11.10.2007
2. Environment clearance vide letter no. J/11011/611/2010 – IA II (I) dt. 25.10.2011

Sir,

We are herewith submitting half yearly compliance report along with environmental monitoring report of Tata Steel Limited, Gamharia situated at Adityapur Industrial Area, Village: Jhurkuli, Tehsil: Gamharia, District: Saraikela-Kharsawan. The compliance report is for the period from October 2024 to March 2025.

This is for your kind information and necessary records please.

Thanking you,

Yours sincerely

For **Tata Steel Limited, Gamharia**

(Ravi Ranjan Prasoon)

Head - Environment TSG

Cc:

1. The Zonal Head, CPCB, Kolkata
2. The Member Secretary, JSPCB
3. The Regional Officer, JSPCB

TATA STEEL LIMITED

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Corporate Identity Number L27100MH1907PLC000260

Half yearly Environment Clearance Compliance Status (From Oct 24 to Mar 2025)	EC Accord No : F. No. J-11011/681/2007 - IA II (I)
	Issue date: 11.10.2007

S.N.	EC Conditions	Compliance Status
	Specific conditions	
i	Electrostatic precipitator (ESP) to captive power plant, bag house to sinter plant and bag filter to blast furnace shall be provided to control gaseous emissions within the permissible limits of Jharkhand SPCB or prescribed under E (P) A whichever is more stringent. Agglomerative dust suppression system shall be provided to coal crusher screens, coal transfer points and sinter plant. Fume extraction system shall be provided to steel melting shop. Sprinklers shall be provided in dust prone areas including roads.	<p>Complied. Adequate Pollution control devices are installed at all required locations to maintain emissions within permitted norms. The equipment installed are as below –</p> <p>Captive Power Plant (CPP): Electrostatic precipitator (ESPs) are provided in all WHRBs and Coal based boilers. Water sprinkling arrangement, Dry fog system, sprinklers and rain guns are provided in coal handling area including crushers, screens and transfer points.</p> <p>Sinter Plant: ESPs are provided in sinter process and product circuit to control emissions. In Flux Crusher and screen circuits bag filters are provided. Dry fog Dust Suppression system is provided in ground hopper and rain gun sprinklers are installed in material storage yard for dust suppression during material handling.</p> <p>Blast furnace: Bag filters are installed in Raw Material Handling Area and Cast House. Gas Cleaning Plant (GCP) is installed for blast furnace gas cleaning. 7 Nos of Mist beam water cannon are provided in RMHS and cast House area for suppression of dust during material handling.</p> <p>Steel Melting Shop: The steel melting shop is provided with Fume Extraction System. Bag filters are provided in all raw material handling circuits for control of fugitive dust.</p> <p>Water sprinklers are installed at all dust prone areas viz. slag handling area, material storage yards etc.</p> <p>List of details APC systems installed is attached as Annexure-3.</p>
ii	Secondary fugitive emissions from arc furnace and sinter plant shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guideline/ Code of Practice issued by the CPCB shall be followed.	<p>Complied. Secondary emissions from SMS and Sinter Plant are controlled through high-capacity Fume Extraction System (FES) and Bag Filters respectively. Work-zone Air Quality monitoring is carried out by NABL accredited agency at regular intervals and values are maintained within permitted levels. Guidelines / Code of Practice of the statutory bodies issued from time to time are regularly followed.</p> <p>Work-Zone Air Quality monitoring reports are attached</p>

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		as Annexure-5.
iii	Total water requirement from River Subranarekha shall not exceed 12,110 m ³ /day as per the permission accorded by the State Govt. No ground water shall be used. All the wastewater shall be recycled and reused for industrial applications, dust suppressions, ash disposal and green belt development and no wastewater shall be discharged outside the premises. Domestic effluent shall be treated in septic tank followed by dispersion trench/ soak pits.	Complied. Water needed for the process is drawn from Subranarekha river as per the permission granted by Water Resources department, Govt. of Jharkhand. All wastewater generated is reused back in the process after appropriate treatment in the Effluent Treatment Plant (ETP). ETP treated water is used for slag granulation, coke quenching, in cooling circuit of Pellet Plant, spraying over roads for dust suppression, plantation and horticulture activities. Domestic effluent is treated through sewage treatment plant with Capacity 250 KLD and septic tank / soak pit arrangement. The treated effluent is used within the plant for various process such as plantation, gardening etc.
iv	Continuous monitoring of Total Organic Compounds (TOCs) shall be done at the outlet of ETP (BOD plant).	Complied. As there is no "Recovery type Coke Oven" in the plant the requirement for BOD Plant and Continuous Monitoring of TOC isn't needed. Online monitoring facility of pH, Temperature, TSS, COD & BOD is provided at the outlet of centralized effluent treatment plant.
v	Ground water monitoring around the solid waste disposal site/ secured landfill (SLF) shall be carried out regularly and report submitted to the Ministry's Regional Office at Bhuvanewar, CPCB and Jharkhand SPCB.	Complied. Ground water monitoring is carried out by NABL accredited agency at regular intervals around the solid waste disposal site. Monitoring reports are submitted to statutory bodies as directed in the condition. Ground water monitoring report attached as Annexure-6

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vi	<p>All the solid wastes shall be properly utilized. Rolling mill scrap shall be recycled as steel scrap. Mill scale shall be sold to cement industry. Grinding dust and dust from steel melting shop and fume extraction system shall be used in blast furnace. Dust from blast furnace gas cleaning plant shall be sold to smokeless fuel industry. Slag/ coke from blast furnace shall be used in sinter plant or used in making fly ash bricks. Slag from arc furnace shall be used in road construction. Waste oil shall be used in blast furnace.</p>	<p>Being Complied. Solid waste generated within the plant are segregated and most of the waste are recycled back in process.</p> <p>(i) Rolling mill scrap is partially recycled as steel scrap in SMS and partially sold as scrap to outside vendor.</p> <p>(ii) Mill scale is used in sinter making process at Sinter Plant.</p> <p>(iii) FES Dust from SMS is being used in sinter plant.</p> <p>(iv) Flue Dust from blast furnace, Bag Filter Dust and wet GCP dust is also used in Sinter plant.</p> <p>(v) 100% Blast furnace slag is sold to open market. (Used by major cement industry).</p> <p>(vi) Metal is recovered from slag of arc furnace and recycled.</p> <p>(vii) Used Oil / Waste Oil / Spent oil is collected and stored in designated place and sold to authorized recycler.</p>
vii	<p>All the char from DRI plant shall be utilized in AFBC boiler of power plant and no char shall be accumulated anywhere else.</p>	<p>Complied. Char from DRI is used in Power Plant as a partial replacement of Coal which reduces CO2 emission from the process. Char is also reused in sponge Iron Plant to improve bed fluidity. Excess quantity of char is sold to outside users.</p>
viii	<p>All the fly ash shall be provided to cement and brick manufacturers for further utilization and bottom ash shall be used for land filling. Proper utilization of fly ash shall be ensured as per Fly ash Notification, 1999 and subsequent amendment in 2003.</p>	<p>Complied. Fly ash and bottom bricks are provided to local fly ash brick manufacturers for the production of fly ash bricks. TSG has successfully obtained the Stabilization certification for the legacy ash mound from the Jharkhand State Pollution Control Board (JSPCB). This achievement marks a significant milestone within the Tata Steel ecosystem. TSG also achieved 100% utilization of ash in a 3-year cycle as per the Fly Ash Notification 2021. Stabilization Certificate is attached as Annexure – 18</p>
ix	<p>Permission and recommendation of the State Forest Department regarding impact of proposed expansion on the protected forest located at 2.5 km shall be obtained and all the recommendation shall be implemented.</p>	<p>Agreed.</p>
x	<p>Permission and recommendations of the Chief Wildlife Warden regarding impact of the proposed expansion of the iron and steel Plant on Dalma Sanctuary shall be obtained and all the recommendations shall be implemented.</p>	<p>Complied. As per letter No. 1221 dated 26.07.2004 from Chief Conservator of Forests – cum – Chief Wildlife Warden, Jharkhand Dalma sanctuary is beyond 15KM from the plant and hence away from the impact zone. Letter is attached Annexure - 11</p>
	<p>General Conditions</p>	

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i	The project authorities must strictly adhere to the stipulation made by the Jharkhand Pollution Control Board (Jharkhand SPCB) and the State Government.	Agreed.
ii	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.	Agreed. Expansion or modification in the plant shall not be carried out without prior approval of MoEFCC.
iii	The gaseous emissions from various process units shall conform load the load/ mass-based standards notified by this Ministry on 19 th May, 1993 and standards prescribed from time to time. The State Board may specify more stringent standards for the relevant parameters, keeping in view the nature of the industry and its size and location. Online stack monitoring facilities for all the stacks including new sinter plant and powerhouse and sufficient air pollution control devices shall be provided to keep the emission levels below the permissible limit and reports submitted to the Jharkhand SPCB & CPCB. At no time, the emission level shall go beyond the prescribed standards. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.	<p>Complied. Monitoring of gaseous pollutants in all major stacks is periodically done and record maintained. The monitoring reports are sent to statutory bodies at regular intervals. Online stack monitoring facility is provided in all major stacks. Adequate pollution control devices such as ESPs, bag filters are provided for control of stack dust emission and Particulate matter emissions are maintained within norms.</p> <p>Stack monitoring result attached as Annexure-1.</p>
iv	At least four ambient air quality monitoring stations shall be established in the downwind direction as well as where maximum ground level concentration of SPM, SO ₂ and NO _x are anticipated in consultation with the Jharkhand SPCB. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and the Jharkhand SPCB/ CPCB once in six months.	<p>Complied. Four Continuous Ambient Air Quality Monitoring Stations (CAAQMS) have been installed inside the plant premises in consultation with JSPCB. Ambient Air Quality Monitoring and stack monitoring is carried out by JSPCB accredited agency and report is submitted to JSPCB / CPCB & Regional office of MOEFCC on half-yearly basis.</p> <p>Stack monitoring result attached as Annexure-1. Ambient air monitoring result attached as Annexure-2.</p>

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v	<p>In - plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Dust extraction system and dry fogging system shall be provided to control air emissions at material transfer and sizing plants. ESP and bag filters shall be provided wherever required to keep the emission levels below permissible limit. Gas cleaning plant shall be provided to BF. Further, specific measures like water sprinkling shall be carried out and fugitive emissions shall be controlled, regularly monitored and records maintained.</p>	<p>Being Complied. Adequate pollution control equipment (APCE) is installed in different units for control of pollution. The type of Pollution Control Equipment installed in different locations are as below –</p> <ul style="list-style-type: none"> a) DRI – Bag Filters b) Power plant – ESPs, Bag Filters c) Sinter Plant – ESPs, Dry Fog System, Bag Filters d) Steel Melting Shop – Fume Extraction Systems, bag filters e) Blast Furnace – Bag Filters, Dry and Wet Gas Cleaning Plant <p>Dust conditioning systems are provided at required locations to minimize generation of dust during unloading of hoppers / silos. Fixed and mobile sprinklers are deployed at dust generation points for control of fugitive dust. Monitoring records are maintained.</p> <p>List of details APC systems installed, and other environmental initiatives is attached as Annexure-3</p>
vi	<p>Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December 1993 or as amend from time to time. The treated wastewater shall be utilized for plantation purpose.</p>	<p>Complied. Industrial effluent generated at various locations within the plant is collected and treated in centralized Effluent Treatment Plant (ETP) of 7200 KLD. Treated water is reused back in Pellet Plant, Blast furnace, Coke Oven etc for various purposes including slag granulation, Coke quenching, spraying over roads for dust suppression and plantation and horticulture activities.</p> <p>ETP treated water analysis report is attached as Annexure-7.</p>
vii	<p>The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).</p>	<p>Being Complied. Noise generation sources are isolated with appropriate acoustic enclosures. Equipment is fitted with silencers and acoustic hoods to minimize noise at source. Ambient noise level is maintained within the norms specified under Environment Protection Act, 1986.</p> <p>Ambient Noise monitoring report is attached as Annexure-8.</p>

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viii	Green belt shall be developed in 33% area within and around the plant premises as per the CPCB guidelines in consultation with DFO.	Complied. Continuous efforts are made to plant more trees within the plant area. Plan is drawn and executed every year during monsoon for plantation of saplings of different species viz. Gulmohar, Peltophorum, Mahogany, Kadam, Neem, Pipal, Bargad, Jamun, Mango, Guava, Alstonia etc. In addition, we adopted Miyawaki plantation method for developing dense forest inside plant. Details of green Belt developed, and landscape area given in Annexure-4.
ix	The company shall develop surface as well as ground water harvesting structures to harvest the rainwater for utilization in the lean season besides recharging the ground water table.	Being Complied. Rainwater harvesting plan as approved by Ground Water Directorate, Jharkhand is implemented within the plant. Rainwater harvesting structures have been set-up at Sinter plant, Power plant, DRI & Mill area.
x	Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Complied. Health check-up for workers is done at periodic intervals and records maintained. The test conducted includes LFT, audiometric tests, ophthalmic investigations, X ray, routine urine and blood tests.
xi	Recommendations made in the Corporate Responsibility for Environment Conservation (CREP) issued for the steel plants shall be implemented.	Complied. Recommendations made in Corporate Responsibility for Environment Conservation (CREP) for steel plants is regularly reviewed and implemented. CREP compliance Status is attached as Annexure-10
xii	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/ EMP report. Further, the company must undertake socio-economic development activities in the surrounding village like community development program, educational program, drinking water supply and health care etc.	Being Complied. Environment protection measures stated in EIA/EMP are systematically implemented. Company through its dedicated CSR team undertakes multiple socio-economic initiatives in surrounding panchayats. The CSR department follows a logical process to extend the required and most needed benefits to its local community through its short-term and long-term plans. Key CSR activities in Tata Steel Limited, Gamharia are attached as Annexure - 9

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xiii	<p>As mentioned in the EIA/ EMP, Rs. 90.00 Crores and 2.10 Crores earmarked towards the capital cost and recurring cost/ annum for environmental pollution control measures shall be judiciously utilized to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purpose.</p>	Complied. Separate funds for environment management are allocated and spent for betterment of environment.
xiv	<p>The Regional Office of this Ministry at Bhubaneswar / CPCB/ Jharkhand SPCB will monitor the stipulated conditions. A six-monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.</p>	Complied. Half-yearly compliance report along with monitoring data are regularly submitted to regional office, MoEFCC, CPCB and JSPCB as per stipulated guidelines. Previous Compliance report (Refer. No. TSG/EC/2024-25/Nov-24/01 Dated. 19/11/2024) was submitted on 25/11/2024. Copy of submission on Parivesh Portal is Attached as Annexure - 14
xv	<p>The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the OSPCB/ Committee and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspaper that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office.</p>	Complied.
xvi	<p>Project authorities should inform the Regional Office as well as Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.</p>	Complied. Date of Financial closure: 2007 Date of issue of consent to establish by JSPCB: - 17.11.2007 vide letter no. - 4250

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COMPLIANCE OF STIPULATED CONDITIONS OF ENVIRONMENTAL CLEARANCE

SN	EC Conditions	Compliance Status
A	Specific conditions	
i	Efforts shall be made to mitigate RSPM levels in the ambient air and a time bound action plan shall be submitted. On-line ambient air quality monitoring and continuous stack monitoring facilities for all stacks shall be provided.	<p>Being Complied. Several Steps are taken to mitigate RSPM levels in ambient air. Measures taken for control of dust levels in ambient air includes the following –</p> <ul style="list-style-type: none"> Fixed type sprinklers including rain guns are installed in raw material handling areas. 7 Nos of Water mist canon is installed in the RMHS and slag dumping area of MBF to control fugitive emission during material handling. Mobile sprinklers are provided to reduce fugitive dust from roads. Source emissions are controlled by effective operation of pollution control systems viz. ESPs, Bag filters, dry fog systems etc. Broad leaved trees are planted in open areas within the department and plant periphery. Construction of RCC roads inside plant. All the paved roads are cleaned by vacuum road sweeper to arrest dust emission due to vehicular movement. Raw material stock yards are covered with tarpaulin. Construction of Four Nos Coal Storage Shed at DRI, MBF, CPP & Coke Oven Installation of New Bag Filter at MBF-2 RMHs, Coke Circuit, Sinter Storage Bins, SMS-3 RMHs to control fugitive emission. <p>4 Continuous Ambient Air Quality Monitoring Stations (CAAQMS) are installed in different corners of the plant for ambient air quality monitoring.</p> <p>09 online gas analyzers and 23 online dust monitors are also installed at different stacks for monitoring of emission from the stack.</p> <p>Stack monitoring result attached as Annexure-1 Ambient Air monitoring result attached as Annexure-2</p>
ii	Stack monitoring facilities for all the major stacks and adequate air pollution control systems to control particulate emissions within the prescribed limits from coke oven shall be provided. Carbon mono-oxide (CO) shall also be monitored along with other parameters and standards notified under the Environment (Protection) Act shall be followed. ESP shall be installed to control	<p>Complied. Stack monitoring facilities are provided at all major stacks. 09 online gas analyzers and 23 online dust monitors are installed covering all major stacks for monitoring of emission from the stacks.</p> <p>Adequate pollution control devices are installed to control the particulate matter emission from coke oven and pellet plant.</p> <p>PM, SO₂, and NO_x in flue gas of Coke Oven is monitored at regular intervals. The monitoring reports are</p>

Tata Steel Limited

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	the particulate emissions from the pellet plant. The reports shall be submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB.	regularly submitted to MoEFCC Ranchi, CPCB and JSPCB. Stack monitoring result attached as Annexure-1
iii	Multistage scrubber shall be installed to control gaseous and dust emissions from the coke oven stack. Measures shall be taken to prevent leakages from coke oven plant.	Complied. Coke Oven installed is of 'Non-Recovery Type' and hence dust and gaseous emission from the plant is very negligible. Non-recovery type ovens work on negative pressure and leakages in the system is insignificant.
iv	The prescribed emission standards for coke oven plants, as notified vide notification no. GSR 46 (E) dated 3 rd February 2006 and subsequently amended shall be complied with.	Complied. The prescribed emission standard is for 'Recovery type', whereas the Coke Ovens installed at TSG is of non-recovery type and hence not applicable.
v	In-plant control measures like bag filters, de-dusting and dust suppression systems shall be provided to control fugitive emissions from all the vulnerable sources. Dust extraction and suppression systems shall be provided at all the transfer points, coal handling plant and coke sorting plant of coke oven plant. Bag filters shall be provided to hoods and dust collectors to coal and coke handling to control dust emissions. Water sprinkling system shall be provided to control secondary fugitive dust emissions generated during screening, loading, unloading, handling and storage of raw materials etc.	Being Complied. Adequate pollution control devices are installed at all required locations. Water sprinkling arrangements are provided to control secondary fugitive dust generated from vehicular movement, ground hoppers etc. List of details APC systems installed, and other environmental initiatives is attached as Annexure-3.
vi	Secondary fugitive emissions shall be controlled within the prescribed limits, regularly monitored and records maintained. Guidelines / code of Practice issued by the CPCB in this regard shall be followed.	Complied. Secondary emissions from SMS and Sinter Plant are controlled through high-capacity Fume Extraction System (FES) and Bag Filters respectively. Work-zone Air Quality monitoring is carried out by NABL accredited agency at regular intervals and values are maintained within permitted levels. Guidelines / Code of Practice of the statutory bodies issued from time to time are regularly followed. Work-Zone Air Quality monitoring reports are attached as Annexure-5.

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vii	Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall be made to control dust emissions during loading and unloading of the raw material and finished product. Efforts shall also be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw materials including fly ash shall be transported in the closed containers only and shall not be overloaded. Vehicular emissions shall be regularly monitored and records kept.	Being Complied. Fugitive emissions due to movement of vehicles are controlled through water spraying. Fixed and mobile type sprinklers are deployed at strategic locations to maintain fugitive dust levels. Dust extraction system is installed in conveyor belts for control of dust during material transfer. Material carrying vehicles are closely monitored to prevent any overloading. Vehicles carrying fines and other materials are covered with tarpaulin to prevent emission during transport.
viii	Total requirement of the water for the proposed expansion shall not exceed 3,440 m ³ /day. All the treated wastewater shall be recycled for dust suppression and green belt development. Domestic wastewater shall be treated in septic tank followed by soak pit and used for green belt development. Zero effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.	Complied. Water needed for the process is drawn from Subranarekha river as per the permission granted by Water Resources department, Govt. of Jharkhand. All wastewater generated is reused back in the process after appropriate treatment in the Effluent Treatment Plant (ETP). ETP treated water is used for slag granulation, coke quenching, in cooling circuit of Pellet Plant, spraying over roads for dust suppression, plantation and horticulture activities. Domestic effluent is treated through sewage treatment plant with Capacity 250 KLD and septic tank / soak pit arrangement. The treated effluent is used within the plant for various process such as plantation, gardening etc.
ix	Efforts shall be made to make use of rain water harvesting. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.	Complied. Rainwater harvesting plan as approved by Ground Water Directorate, Jharkhand is implemented within the plant. Rainwater harvesting structures have been set-up at Sinter plant, Power plant, DRI & Mill area.
x	Waste from the hard coke unit, shall be used as fuel in the captive power plant or sold. The iron ore sludge shall be sold to the bricks manufacturing units. Coal and coke fines shall be recycled and reused in the process. The waste oil shall be properly disposed off as per the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008.	Complied. Coke breeze from Coke Oven Plant is 100% re-used internally in Sinter Plant. Waste Oil generated within the plant is disposed of periodically to authorized recycler.

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xi	As proposed, green belt shall be developed in 33% of the plant area within and around the project site to mitigate the impact of fugitive emissions as per the CPCB guidelines in consultation with local DFO.	Complied. Continuous efforts are made to plant more trees within the plant area. Plan is drawn and executed every year during monsoon for plantation of saplings of different species viz. Gulmohar, Peltophorum, Mahogany, Kadam, Neem, Pipal, Bargad, Jamun, Mango, Guava, Alstonia etc. In addition, we adopted Miyawaki plantation method for developing dense forest inside plant. Details of green Belt developed, and landscape area given in Annexure-4.
xii	The recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Coke Oven Plant shall be implemented.	Complied. The recommendation of CREP applicable to integrated Iron & Steel Industry is implemented and reviewed regularly. CREP Compliance status is attached Annexure 10
xiii	Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB within 3 months of issue of environmental clearance letter.	Complied. Risk & disaster management plan has been prepared & submitted to JSPCB.
xiv	At least 5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on locals need and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhubaneswar. Implementation of such program should be ensured accordingly in a time bound manner. The action plan shall include major items like school, vocational training etc.	Being Complied. Environment protection measures stated in EIA/EMP are systematically implemented. Company through its dedicated CSR team undertakes multiple socio-economic initiatives in surrounding panchayats. The CSR department follows a logical process to extend the required and most needed benefits to its local community through its short-term and long-term CSR plans. Key CSR activities in Tata Steel Limited, Gamharia are attached as Annexure - 9
xv	The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, 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. Required infrastructure as directed in EC were provided during project and commissioning stages of the plant.

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xvi	The company shall submit within three months their policy towards Corporate Environment Responsibility which should inter-alia address (i) Standard operating process/procedure to bring into focus any infringement/deviation/violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of noncompliance / violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.	Complied. The company has a well-defined IMS (Integrated Management System) covering all aspects of environmental governance. Standard Operating Procedure (SOP) / Work Instruction (WI) are prepared for all key environmental activities. An environment management cell comprising of scientists and engineers are established to oversee the environmental functions with the plant.
B	General Conditions:	
i	The project authorities shall strictly adhere to the stipulations made by the Jharkhand Pollution Control Board (JSPCB) and State Govt.	Agreed.
ii	At no time, the emissions shall exceed the prescribed limits. In the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	Complied. Measures are taken to maintain emissions within permitted norms. The performance of pollution control equipment is constantly evaluated through scheduled O & M practices. Preventive maintenance schedules are drawn for equipment to reduce unforeseen break downs or failures.
iii	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Complied. No expansion or modification in the plant shall be carried out without prior approval of MoEFCC.
iv	The gaseous emissions from various process units shall conform to the load/mass-based standards notified by this Ministry on 19 th May, 1993 and standards prescribed from time to time. The state Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.	Complied. These features are taken care of in Design & Engineering of the project and emissions are maintained within norms.

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v	The project authorities shall strictly comply with the rules and regulations under Manufacture, Storage and import of Hazardous Chemicals Rules, 1989 as amended in October 1994 and January 2000. Authorization from JSPCB shall be obtained for collection, treatment, storage, and disposal of hazardous wastes.	Complied. The provisions of Hazardous Chemicals Rules 1989 and its amendment are strictly followed. Handling and disposal of hazardous waste is also done as per Hazardous and Other Wastes Rules, 2016. The unit has obtained valid authorization for its handling from JSPCB. Hazardous Waste Authorization copies are attached as Annexure - 20
vi	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008. Authorization from Jharkhand Pollution Control Board must be obtained for collection/treatment/storage/disposal of hazardous wastes.	Complied. Responsibilities applicable under Hazardous Wastes (Management, Handling & Trans-boundary movement) Rules, 2008 and its last amendment in 2016 are strictly complied. Hazardous wastes generated in the plant are disposed to authorized recyclers.
vii	The overall noise levels in and around the plant area shall be kept well within the standards 85 dB(A) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dB(A) (day time) and 70 dB(A) (night time).	Being Complied. Acoustic hoods, Silencers, Mufflers, and enclosures are provided at high noise generation areas for control of noise pollution. Noise level in and around the plant monitored and precautionary steps are taken in high noise areas. Ambient Noise Monitoring Report is attached as Annexure - 8
viii	The company shall develop rainwater harvesting structures to harvest the rainwater for utilization in the lean season besides recharging the ground water table.	Being Complied. Rainwater harvesting plan as approved by Ground Water Directorate, Jharkhand is implemented within the plant. Rainwater harvesting structures have been set-up at Sinter plant, Power plant, DRI & Mill area.
ix	Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Complied. Health check-up for workers is done at periodic intervals and records maintained. The test conducted includes LFT, audiometric tests, ophthalmic investigations, X ray, routine urine and blood tests.
x	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report.	Complied. Environmental protection measures proposed in the EIA/EMP of the project are systematically implemented.
xi	A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the environmental management and monitoring functions.	Complied. A multi-disciplinary team of engineers and environmental scientists is set up to oversee the environmental management function of the plant. An environmental laboratory is also established to conduct various analysis of air and water.

Half yearly Environment Clearance Compliance Status (From Oct 2024 to Mar 2025)	EC Accord No: F. No: J-11011/611/2010-IA-II (I)
	Issue date : 25-10-2011

xii	As proposed, Rs. 50 Crores and Rs. 2.5 Crores shall be earmarked towards total capital cost and recurring cost/annum for environmental pollution control measures and judiciously used to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. A time bound implementation schedule shall be submitted to the Ministry and its Regional Office at Bhubaneswar to implement all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	Complied. The funds provided for EMP are not diverted for any other purpose.
xiii	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/ municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	Complied.
xiv	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF, the respective Zonal Office of CPCB and the PCB. The criteria pollutant levels namely; RSPM (PM2.5 and PM10), SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	<p>Complied. Status of compliance of the EC conditions is being uploaded in the website of the company. The status of the same is periodically updated and sent to various government bodies including MoEFCC, CPCB and JSPCB twice in a year. The monitored data of stack emissions, ambient air quality and effluent quality is displayed in the electronic display board near the main gate of the company.</p> <p>EC Compliance Report uploaded on the website and photographs of the electronic display board are attached as Annexures 12 and 13.</p>
xv	The Project Proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to Regional Office of MoEF, the respective Zonal Office of CPCB and JPCB. The Regional Office of this Ministry/CPCB/JSPCB shall monitor the stipulated conditions.	<p>Complied. Compliance and monitoring reports are submitted in PARIVESH portal once in every six months as stipulated.</p> <p>Acknowledgement copy is attached as Annexure - 15</p>

Half yearly Environment Clearance Compliance Status (From Oct 2024 to Mar 2025)	EC Accord No: F. No: J-11011/611/2010-IA-II (I)
	Issue date : 25-10-2011

xvi	<p>The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MoEF by e-mail.</p>	<p>Complied. Environmental Statement for each financial year is submitted regularly to JSPCB before 30th of September every year. Last Environment Statement (Refer. No. TSG/EMD/ES/FY'24 dated 19/09/24) is submitted on 24/09/2024.</p> <p>ES copy is attached as Annexure - 16</p>
xvii	<p>The Project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the JSPCB and may also be seen at website of the Ministry of Environment and Forests at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office.</p>	<p>Complied. The issuance of environmental clearance was advertised in local newspaper - Prabhat Khabar & Avenue Mail dated 01.07.2012.</p> <p>Paper cutting of Prabhat Khabar is attached as Annexure - 17</p>
xvii i	<p>Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.</p>	<p>Complied.</p> <p>Date of financial closure: 01.02.12. NOC issue date by JSPCB: 18.01.12. Land development job started on: 15.02.12</p>

Stack Emission Monitoring Report

S.No	Unit	Stack Attached to	Month	Report No.	Sampling on	Sampling Time	Flue Gas Temp. (Deg.C)	Stack Gas Velocity (m/s)	Gas Flow (Nm3/hr)	PM (mg/Nm3)	SO2 (mg/Nm3)	NOX (mg/Nm3)
1	CPP	25MW	Dec-24	RN-240715001S01	30.12.2024	11:05 am - 12:20 pm	117	7.0	191053	55.4	462.7	355.1
2		25MW		RN-240715001S12	21.01.2025	11.44 am - 12.28 pm	116	11.8	321618	73.2	482.1	334.1
3	CPP	WHRB - 1 & 40 TPH		RN-240715001S17	24.01.2025	11:00am - 11:25am	164	9.2	176366	36.8	377.2	85.5
4		WHRB - 2 & 3 (DRI-2&3)		RN-240715001S01	02.01.2025	11.46am - 12.20pm	120	6.8	144906	37.4	317.1	52.8
5		WHRB - 4 & 5 (DRI-4&5)		RN-240715001S02	03.01.2025	12.00 pm - 12.45 pm	80	5.3	125812	34.2	369.1	139.5
6		Coke Oven WHRB - 1		RN-240715001S08	13.01.2025	12:02 pm - 01:04 pm	108	8.9	165640	19.6	80.0	45.5
7		Coke Oven WHRB - 2		RN-240715001S09	28.01.2025	11:30 am - 12:32 pm	172	8.5	135553	21.7	86.8	69.6
8	SMS	FES of SMS - 1 & 2	Jan-25	RN-240715001S10	20.01.2025	12:06 pm - 12:42 pm	61	6.5	398068	22.4	54.8	91.6
9		FES of SMS - 3		RN-240715001S23	30.01.2025	11:00 am - 11:31am	61	7.7	472763	21.6	66.5	131.8
10	WRM	Reheating Furnace		RN-240715001S03	06.01.2025	11.16am - 12.06pm	390	11.0	30480	27.4	59.7	132.9
11	Blooming Mill	Reheating Furnace		RN-240715001S19	27.01.2025	01:00 pm - 01:55pm	351	9.5	49824	25.4	78.4	159.4
12	Sinter Plant	Process ESP		RN-240715001S06	09.01.2025	11.30am - 12.02pm	102	7.4	349051	44.4	62.8	118.6
13		Tail ESP		RN-240715001S21	28.01.2025	02:00pm - 02:38 pm	115	7.9	335092	24.6	-	-
14	Pellet Plant	Kiln Stack		RN-24715001S15	23.01.2025	12:00 pm - 12:50 pm	158	11.0	750523	21.3	94.2	104.6
15	MBF-1	Cast House		RN-240715001S07	10.01.2025	11:34am - 12:08pm	45	6.8	69976	20.7	27.9	30.8
16		Ground Hopper		RN-240715001S08	10.01.2025	01:40pm - 02:27 pm	40	11.3	23885	18.9	-	-
17		Stock House		RN-240715001S13	21.01.2025	01:35pm - 02:12pm	47	13.9	156649	19.6	-	-
18	MBF-2	Stoves		RN-240715001S18	27.01.2025	11:00am - 11:32am	130	7.0	75151	20.2	51.3	65.7
19		Cast House		RN-24715001S14	22.01.2025	10:00 am - 10:43am	42	12.2	230147	22.1	30.8	30.0
20		PCI Stack		RN-240715001S11	20.01.2025	02:00pm - 02:42 pm	72	15.1	35758	24.0	-	-
21		Stock House		RN-24715001S13	27.01.2025	01:35pm - 02:12pm	47	13.9	156649	20.8	-	-
22		RMHS		RN-24715001S15	22.01.2025	12:20pm - 12:52 pm	50	7.3	36233	18.8	-	-
23		25MW		RN-240715001S06	11.02.2025	10:22 am - 11:00 am	119	13.4	362024	78.9	494.7	346.5
24	CPP	WHRB - 1 & 40 TPH	Feb-25	RN-240715001S10	18.02.2025	11:00am - 11:47am	157	11.0	213970	41.2	389.8	97.9
25		WHRB - 2 & 3 (DRI-2&3)		RN-240715001S01	03.02.2025	11:00am - 11:29am	120	8.0	170491	39.7	338.4	59.5
26		WHRB - 4 & 5 (DRI-4&5)		RN-240715001S02	04.02.2025	10:30 am - 11:27 am	161	9.2	177581	35.8	381.7	151.9
27		Coke Oven WHRB - 1		RN-240715001S07	12.02.2025	11:40 am - 12:20 pm	210	13.6	199562	21.9	84.8	52.2
28		Coke Oven WHRB - 2		RN-240715001S08	13.02.2025	11:28 am - 12:15 pm	157	11.0	181227	19.6	93.2	82.0
29	SMS	FES of SMS - 1 & 2		RN-240715001S03	05.02.2025	11:00 am - 11:36 am	61	6.5	398068	24.7	59.6	98.3
30		FES of SMS - 3		RN-240715001S09	14.02.2025	10:43 am - 11:50 am	108	10.9	584986	20.4	87.8	138.5
31	WRM	Reheating Furnace		RN-240715001S12	20.02.2025	11:20am - 11:55am	396	14.7	40372	29.0	66.1	145.3
32	Blooming Mill	Reheating Furnace		RN-240715001S18	26.02.2025	10:20am - 11:05am	435	11.6	53542	27.0	91.0	171.8
33	Sinter Plant	Process ESP		RN-240715001S04	06.02.2025	11:00am - 12:30pm	120	7.4	593512	48.2	69.2	131.0
34		Tail ESP		RN-240715001S11	19.02.2025	11:00am - 11:38am	115	7.9	335092	26.9	-	-
35	Pellet Plant	Kiln Stack		RN-240715001S05	07.02.2025	11:30am - 12.04pm	122	8.6	640764	23.6	115.5	111.3
36	MBF-1	Cast House		RN-240715001S14	21.02.2025	12:00pm - 12:33pm	54	7.0	70074	23.0	32.7	37.5
37		Ground Hopper		RN-240715001S13	20.02.2025	01:00pm - 01:33pm	44	15.8	33006	18.4	-	-
38		Stock House		RN-240715001S15	21.02.2025	10:00am - 10:57am	58	9.2	32763	19.2	-	-
39	MBF-2	Stoves		RN-240715001S22	28.02.2025	10:00am - 11:12am	132	7.3	77739	18.7	63.9	78.1
40		Cast House		RN-240715001S23	28.02.2025	12:10pm - 12:51pm	44	12.8	241259	22.3	35.6	36.7
41		PCI Stack		RN-240715001S19	26.02.2025	12:30pm - 01:33pm	74	15.8	37264	23.1	-	-
42		Stock House		RN-240715001S16	25.02.2025	10:10am - 10:50am	45	13.4	151617	21.2	-	-
43		RMHS		RN-240715001S17	25.02.2025	12:00pm - 12:36pm	48	6.5	32463	20.3	-	-
44	CPP	25MW	Mar-25	RN-240715001S14	24.03.2025	11:00 am - 11:45 am	116	11.8	321618	81.2	684.2	351.2
45		30MW		RN-240715001S	12.03.2025	10:13 am - 11:31am	383	6.7	184047	27.6	541.4	234.1
46		WHRB - 2 & 3 (DRI-2&3)		RN-240715001S02	05.03.2025	10:00am - 11:08am	123	8.3	175542	42.5	343.0	68.1
47		WHRB - 4 & 5 (DRI-4&5)		RN-240715001S03	05.03.2025	12:30 am - 01:24 pm	165	9.7	185522	39.1	385.1	156.6
48		Coke Oven WHRB - 1		RN-240715001S10	20.03.2025	10:00 am - 10:50 am	190	11.8	130146	24.2	283.6	56.0
49		Coke Oven WHRB - 2		RN-240715001S11	20.03.2025	11:30 am - 12:10 pm	188	12.1	134016	22.4	195.4	90.6
50	SMS	FES of SMS - 1 & 2		RN-240715001S01	07.03.2025	11:00 am - 11:58 am	63	9.2	559599	25.6	63.0	103.0
51		FES of SMS - 3		RN-240715001S17	26.03.2025	11:10 am - 11:53 am	108	12.2	653524	23.2	92.4	147.1
52	WRM	Reheating Furnace		RN-240715001S04	11.03.2025	11:00am - 11:38am	401	13.4	36525	24.3	70.7	153.0
53	Blooming Mill	Reheating Furnace		RN-240715001S08	17.03.2025	11:00am - 11:50am	425	10.7	50092	29.3	94.4	176.0
54	Sinter Plant	Process ESP		RN-240715001S	06.03.2025	10:30am - 11:00am	145	7.9	593099	80.4	72.1	132.4
55	Pellet Plant	Kiln Stack		RN-240715001S18	27.03.2025	10:55am - 11:32am	131	6.2	451662	24.8	124.7	128.5
56	MBF-1	Cast House		RN-240715001S15	25.03.2025	12:00pm - 01:02pm	51	8.9	89883	25.3	36.1	42.2
57		Stock House		RN-240715001S16	25.03.2025	10:00am - 10:58am	60	9.2	32540	22.0	-	-
58	MBF-2	Stoves		RN-240715001S05	13.03.2025	11:05am - 11:40am	138	6.7	70532	18.4	68.5	86.7
59		Cast House		RN-240715001S06	15.03.2025	11:00am - 11:45am	110	11.8	183732	24.6	39.0	41.4
60		PCI Stack		RN-240715001S07	15.03.2025	12:30am - 01:07pm	70	14.2	33843	25.9	-	-
61		Stock House		RN-240715001S12	21.03.2025	11:00am - 11:40am	45	13.4	151617	20.6	-	-
62		RMHS		RN-240715001S13	18.03.2025	02:50pm - 03:26pm	46	7.0	58906	23.1	-	-



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	3	3		
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission								
Report Issue Date: 08-01-2025									Test Report No.: RN-240715001 S01											
Sample ID: 250106AP01001									Sample Description: Stack Emission											
Challan No./P.O. No.: 3000173714/J02									Challan No./P.No. Date: 15-07-2024											
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																				
Type of Industry: Iron & Steel									Customer Representative: Shweta Kumari											
Sample Drawn by: IEM Team									Sampling Date: 02-01-2025 (11:46 am - 12:20 pm)											
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																				
Field Meteorological Information					A. Temp.(°C): 17				R.H. (%): 46				W.C.: Sunny				W.D.: NW to SE			
Sample Receiving Date: 06-01-2025					Testing Started: 06-01-2025					Testing Ended: 08-01-2025										

General Physical Information

Stack Identification	Common	Stack Height from Ground Level (m)	63
Emission Due to	Reheating Furnace	Port Hole Height from Ground Level (m)	20.2
Plat Form	Permanent	Inner Dimension of Stack (m)	3.2
Stack Description	DRI 2,3 (WHRB)	Type of Fuel Used	Waste Heat
Shape of Stack	Circular	Quantity of Fuel	-----
Construction Material	RCC	Production Capacity	-----
Sampling Port	Available	Pollution Control Device (if any)	ESP

Flue Gas Temperature (°C): 120	Flue Gas Velocity (m/s): 6.8	Flue Gas Volumetric Flow Rate (Nm ³ /hr): 144905.8
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Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	37.4	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	317.1	---
3.	Oxides of Nitrogen (NO _x)	IS 11255 (Part-7)	mg/Nm ³	52.8	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	12.8	---
5.	Carbon Monoxide (CO)	IS 13270:1992	Ppm	330	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	12	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 198:1966(1C).
Abbreviation	MDL: Minimum Detection Limit. BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (S. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	3	4		
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission								
Report Issue Date: 08-01-2025									Test Report No.: RN-240715001 S02											
Sample ID: 250106AP05001									Sample Description: Stack Emission											
Challan No./P.O. No.: 3000173714/J02									Challan No./P.No. Date: 15-07-2024											
Issued to:																				
M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																				
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik											
Sample Drawn by: IEM Team									Sampling Date: 03-01-2025 (12:00 pm - 12:45 pm)											
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																				
Field Meteorological Information						A. Temp.(°C): 16			R.H. (%): 48			W.C.: Sunny			W.D.: NW to SE					
Sample Receiving Date: 06-01-2025						Testing Started: 06-01-2025						Testing Ended: 08-01-2025								

General Physical Information

Stack Identification	Common	Stack Height from Ground Level (m)	63
Emission Due to	---	Port Hole Height from Ground Level (m)	22.2
Plat Form	Permanent	Inner Dimension of Stack (m)	3.2
Stack Description	DRI 4,5 (WHRB)	Type of Fuel Used	Coal
Shape of Stack	Circular	Quantity of Fuel	-----
Construction Material	RCC	Production Capacity	-----
Sampling Port	Available	Pollution Control Device (if any)	ESP

Flue Gas Temperature (°C): 80 Flue Gas Velocity (m/s): 5.3 Flue Gas Volumetric Flow Rate (Nm³/hr): 125811.7

Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	34.2	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	369.1	---
3.	Oxides of Nitrogen (NO _x)	IS 11255 (Part-7)	mg/Nm ³	139.5	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	12.2	---
5.	Carbon Monoxide (CO)	IS 13270:1992	ppm	338	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	10.2	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 195:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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- In case of feedback/ complaints, please send an email at gem@iemcohi@gmail.com

On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	3	5	
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission							
Report Issue Date: 15-01-2025										Test Report No.: RN-240715001 S03									
Sample ID: 250113AP05001										Sample Description: Stack Emission									
Challan No./P.O. No.: 3000173714/J02										Challan No./P.No. Date: 15-07-2024									
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																			
Type of Industry: Iron & Steel										Customer Representative: Shweta Kumari									
Sample Drawn by: IEM Team										Sampling Date: 06-01-2025 (11:16 am - 12:06 pm)									
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																			
Field Meteorological Information					A. Temp.(°C): 18			R.H. (%): 52			W.C.: Sunny			W.D.: North to South					
Sample Receiving Date: 13-01-2025					Testing Started: 13-01-2025					Testing Ended: 15-01-2025									

General Physical Information

Stack Identification	Single	Stack Height from Ground Level (m)	55
Emission Due to	Reheating	Port Hole Height from Ground Level (m)	30
Plat Form	Permanent	Inner Dimension of Stack (m)	1.5
Stack Description	WRM STACK	Type of Fuel Used	BF/LDO
Shape of Stack	Circular	Quantity of Fuel	-----
Construction Material	Metal	Production Capacity	-----
Sampling Port	Yes	Pollution Control Device (if any)	None

Flue Gas Temperature (°C): 390	Flue Gas Velocity (m/s): 11.0	Flue Gas Volumetric Flow Rate (Nm ³ /hr): 30479.9
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Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	27.4	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	59.7	---
3.	Oxides of Nitrogen (NO ₂)	IS 11255 (Part-7)	mg/Nm ³	132.9	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	12.4	---
5.	Carbon Monoxide (CO)	IS 13270:1992	ppm	78	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	11.6	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	3	8
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission					
Report Issue Date: 15-01-2025									Test Report No.: RN-240715001 S06								
Sample ID: 250113AP11001									Sample Description: Stack Emission								
Challan No./P.O. No.: 3000173714/J02									Challan No./P.No. Date: 15-07-2024								
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																	
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik								
Sample Drawn by: IEM Team									Sampling Date: 09-01-2025 (11:30 am - 12:02 pm)								
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series & IS 13270 Series																	
Field Meteorological Information					A. Temp.(°C): 17			R.H. (%): 55			W.C.: Sunny			W.D.: North to South			
Sample Receiving Date: 13-01-2025					Testing Started: 13-01-2025					Testing Ended: 15-01-2025							

General Physical Information

Stack Identification	Single	Stack Height from Ground Level (m)	78
Emission Due to	-----	Port Hole Height from Ground Level (m)	31.2
Plat Form	Permanent	Inner Dimension of Stack (m)	6.195
Stack Description	Sinter plant Process ESP	Type of Fuel Used	Bf gas
Shape of Stack	Circular	Quantity of Fuel	-----
Construction Material	RCC	Production Capacity	-----
Sampling Port	Yes	Pollution Control Device (if any)	ESP

Flue Gas Temperature (°C): 395	Flue Gas Velocity (m/s): 7.4	Flue Gas Volumetric Flow Rate (Nm ³ /hr): 349050.7
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Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	44.4	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	62.8	---
3.	Oxides of Nitrogen (NO ₂)	IS 11255 (Part-7)	mg/Nm ³	118.6	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	10.4	---
5.	Carbon Monoxide (CO)	IS 13270:1992	ppm	3632	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	15.8	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Saurabh

Sample Drawn By: Rahul Singh & team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by

Authorized Signatory

T. Ahmady

(Tauqeer Ahmady)

Technical Manager

S. C. Jain

(Dr. S. C. Jain)

Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	3	9	
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission							
Report Issue Date: 15-01-2025										Test Report No.: RN-240715001S07									
Sample ID: 250113AP12001										Sample Description: Stack Emission									
Challan No./P.O. No.: 3000173714/J02										Challan No./P.No. Date: 15-07-2024									
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>																			
Type of Industry: Iron & Steel										Customer Representative: Kishor Pramanik									
Sample Drawn by: IEM Team										Sampling Date: 10-01-2025 (11:34 am - 12:08 pm)									
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																			
Field Meteorological Information					A. Temp.(°C): 18			R.H. (%): 55			W.C.: Sunny			W.D.: North to South					
Sample Receiving Date: 13-01-2025					Testing Started: 13-01-2025					Testing Ended: 15-01-2025									

General Physical Information

Stack Identification	Single	Stack Height from Ground Level (m)	30
Emission Due to	Furnace	Port Hole Height from Ground Level (m)	25
Plat Form	Permanent	Inner Dimension of Stack (m)	2
Stack Description	MBF-1 CAST HOUSE	Type of Fuel Used	Coke
Shape of Stack	Circular	Quantity of Fuel	-----
Construction Material	Metal	Production Capacity	-----
Sampling Port	Available	Pollution Control Device (if any)	Bag Filter

Flue Gas Temperature (°C): 45 Flue Gas Velocity (m/s): 6.8 Flue Gas Volumetric Flow Rate (Nm³/hr): 69976.3

Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	20.7	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	27.9	---
3.	Oxides of Nitrogen (NO ₂)	IS 11255 (Part-7)	mg/Nm ³	30.8	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	---	---
5.	Carbon Monoxide (CO)	IS 13270:1992	ppm	---	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	---	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 195:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	4	0		
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission								
Report Issue Date: 15-01-2025										Test Report No.: RN-240715001 S08										
Sample ID: 250113AP12002										Sample Description: Stack Emission										
Challan No./P.O. No.: 3000173714/J02										Challan No./P.No. Date: 15-07-2024										
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																				
Type of Industry: Iron & Steel										Customer Representative: Kishor Pramanik										
Sample Drawn by: IEM Team										Sampling Date: 10-01-2025 (01:40 pm - 02:27 pm)										
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																				
Field Meteorological Information						A. Temp.(°C): 18			R.H. (%): 55			W.C.: Sunny			W.D.: North to South					
Sample Receiving Date: 13-01-2025						Testing Started: 13-01-2025						Testing Ended: 15-01-2025								

General Physical Information			
Stack Identification	Single	Stack Height from Ground Level (m)	30
Emission Due to	Crushing	Port Hole Height from Ground Level (m)	22
Plat Form	Permanent	Inner Dimension of Stack (m)	0.9
Stack Description	MBF-1 Ground Hopper	Type of Fuel Used	RMHS
Shape of Stack	Circular	Quantity of Fuel	-----
Construction Material	Metal	Production Capacity	-----
Sampling Port	Available	Pollution Control Device (if any)	Bag Filter

Flue Gas Temperature (°C): 40	Flue Gas Velocity (m/s): 11.3	Flue Gas Volumetric Flow Rate (Nm ³ /hr): 23884.9
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Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	18.9	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	---	---
3.	Oxides of Nitrogen (NO _x)	IS 11255 (Part-7)	mg/Nm ³	---	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	---	---
5.	Carbon Monoxide (CO)	IS 13270:1992	ppm	---	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	---	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MOL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	4	1		
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission								
Report Issue Date: 22-01-2025									Test Report No.: RN-240715001 S09											
Sample ID: 250120AP01001									Sample Description: Stack Emission											
Challan No./P.O. No.: 3000173714/102									Challan No./P.No. Date: 15-07-2024											
Issued to:																				
M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																				
Type of Industry: Iron & Steel									Customer Representative: Shweta Kumari											
Sample Drawn by: IEM Team									Sampling Date: 13-01-2025 (12:02 pm - 01:04 pm)											
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																				
Field Meteorological Information					A. Temp.(°C): 16			R.H. (%): 49			W.C.: Sunny				W.D.: North to South					
Sample Receiving Date: 20-01-2025					Testing Started: 20-01-2025					Testing Ended: 22-01-2025										

General Physical Information

Stack Identification	Single	Stack Height from Ground Level (m)	45
Emission Due to	Oven	Port Hole Height from Ground Level (m)	35
Plat Form	Permanent	Inner Dimension of Stack (m)	2.9
Stack Description	COKE OVEN WHRB UNIT-1	Type of Fuel Used	Coal
Shape of Stack	Circular	Quantity of Fuel	-----
Construction Material	Metal	Production Capacity	-----
Sampling Port	Available	Pollution Control Device (if any)	--

Flue Gas Temperature (°C): 108	Flue Gas Velocity (m/s): 8.9	Flue Gas Volumetric Flow Rate (Nm ³ /hr): 165640.0
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Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	19.6	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	80	---
3.	Oxides of Nitrogen (NO _x)	IS 11255 (Part-7)	mg/Nm ³	45.5	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	7.6	---
5.	Carbon Monoxide (CO)	IS 13270:1992	Ppm	56	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	9.1	---

—End of Report—

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	4	2
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission					
Report Issue Date: 29-01-2025									Test Report No.: RN-240715001 S10								
Sample ID: 250127AP02001									Sample Description: Stack Emission								
Challan No./P.O. No.: 3000173714/J02									Challan No./P.No. Date: 15-07-2024								
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>																	
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik								
Sample Drawn by: IEM Team									Sampling Date: 20-01-2025 (12:06 pm - 12:42 pm)								
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																	
Field Meteorological Information					A. Temp.(°C): 19			R.H. (%): 55			W.C.: Sunny			W.D.: West to East			
Sample Receiving Date: 27-01-2025					Testing Started: 27-01-2025					Testing Ended: 29-01-2025							

General Physical Information

Stack Identification	Common	Stack Height from Ground Level (m)	46.1
Emission Due to	Furnace	Port Hole Height from Ground Level (m)	36
Plat Form	Permanent	Inner Dimension of Stack (m)	5
Stack Description	SMS 1&2	Type of Fuel Used	Electricity
Shape of Stack	Circular	Quantity of Fuel	-----
Construction Material	Metal	Production Capacity	-----
Sampling Port	Yes	Pollution Control Device (if any)	FES

Flue Gas Temperature (°C): 61	Flue Gas Velocity (m/s): 6.5	Flue Gas Volumetric Flow Rate (Nm ³ /hr): 398067.5
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Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	22.4	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	54.8	---
3.	Oxides of Nitrogen (NO ₂)	IS 11255 (Part-7)	mg/Nm ³	91.6	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	16	---
5.	Carbon Monoxide (CO)	IS 13270:1992	ppm	128	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	14.4	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2 °C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDE: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	4	3		
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission								
Report Issue Date: 29-01-2025									Test Report No.: RN-240715001 S11											
Sample ID: 250127AP03001									Sample Description: Stack Emission											
Challan No./P.O. No.: 3000173714/J02									Challan No./P.No. Date: 15-07-2024											
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																				
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik											
Sample Drawn by: IEM Team									Sampling Date: 20-01-2025 (02:00 pm - 02:42 pm)											
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																				
Field Meteorological Information					A. Temp.(°C): 19			R.H. (%): 55			W.C.: Sunny				W.D.: West to East					
Sample Receiving Date: 27-01-2025					Testing Started: 27-01-2025					Testing Ended: 29-01-2025										

General Physical Information

Stack Identification	Single	Stack Height from Ground Level (m)	30.2
Emission Due to	Furnace	Port Hole Height from Ground Level (m)	30
Plat Form	Permanent	Inner Dimension of Stack (m)	1
Stack Description	MBF - 2 PCI	Type of Fuel Used	RMHS
Shape of Stack	Circular	Quantity of Fuel	----
Construction Material	Metal	Production Capacity	----
Sampling Port	Available	Pollution Control Device (if any)	Bag Filter

Flue Gas Temperature (°C): 72	Flue Gas Velocity (m/s): 15.1	Flue Gas Volumetric Flow Rate (Nm ³ /hr): 35758.4
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Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	24	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	---	---
3.	Oxides of Nitrogen (NO ₂)	IS 11255 (Part-7)	mg/Nm ³	---	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	---	---
5.	Carbon Monoxide (CO)	IS 13270:1992	ppm	---	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	---	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 156:1966(C).
Abbreviation	MDL: Minimum Detection Limit; BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	4	4		
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission								
Report Issue Date: 29-01-2025										Test Report No.: RN-240715001S12										
Sample ID: 250127AP05001										Sample Description: Stack Emission										
Challan No./P.O. No.: 4511010303										Challan No./P.No. Date: 04-07-2022										
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>																				
Type of Industry: Iron & Steel										Customer Representative: Kishor Pramanik										
Sample Drawn by: IEM Team										Sampling Date: 21-01-2025 (11:44 am -12:28 pm)										
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																				
Field Meteorological Information					A. Temp.(°C): 20			R.H. (%): 53			W.C.: Sunny				W.D.: SW to NE					
Sample Receiving Date: 27-01-2025					Testing Started: 27-01-2025					Testing Ended: 29-01-2025										

General Physical Information

Stack Identification	Single	Stack Height from Ground Level (m)	79.7
Emission Due to	Boiler	Port Hole Height from Ground Level (m)	26.5
Plat Form	Permanent	Inner Dimension of Stack (m)	3.6
Stack Description	25 MW	Type of Fuel Used	Coal
Shape of Stack	Circular	Quantity of Fuel	----
Construction Material	RCC	Production Capacity	----
Sampling Port	Yes	Pollution Control Device (if any)	ESP

Flue Gas Temperature (°C): 116	Flue Gas Velocity (m/s): 11.8	Flue Gas Volumetric Flow Rate (Nm ³ /hr): 321618.3
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Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	73.2	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	482.1	---
3.	Oxides of Nitrogen (NO ₂)	IS 11255 (Part-7)	mg/Nm ³	334.1	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	%	10.2	---
5.	Carbon Monoxide (CO)	IS 13270:1992	%	58	---
6.	Oxygen (O ₂)	IS 13270:1992	%	14	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65± 5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S.C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	4	5	
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission							
Report Issue Date: 29-01-2025									Test Report No.: RN-240715001 S13										
Sample ID: 250127AP05002									Sample Description: Stack Emission										
Challan No./P.O. No.: 3000173714/J02									Challan No./P.No. Date: 15-07-2024										
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>																			
Type of Industry: Iron & Steel									Customer Representative: Shweta Kumari										
Sample Drawn by: IEM Team									Sampling Date: 21-01-2025 (01:35 pm - 02:12 pm)										
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																			
Field Meteorological Information					A. Temp.(°C): 20			R.H. (%): 53			W.C.: Sunny				W.D.: SW to NE				
Sample Receiving Date: 27-01-2025					Testing Started: 27-01-2025					Testing Ended: 29-01-2025									

General Physical Information

Stack Identification	Single	Stack Height from Ground Level (m)	30
Emission Due to	-----	Port Hole Height from Ground Level (m)	23
Plat Form	Permanent	Inner Dimension of Stack (m)	2.1
Stack Description	MBF-2 Stock House	Type of Fuel Used	
Shape of Stack	Circular	Quantity of Fuel	-----
Construction Material	Metal	Production Capacity	-----
Sampling Port	Yes	Pollution Control Device (if any)	Bag Filter

Flue Gas Temperature (°C): 47	Flue Gas Velocity (m/s): 13.9	Flue Gas Volumetric Flow Rate (Nm ³ /hr): 156648.5
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Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	20.8	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	---	---
3.	Oxides of Nitrogen (NO ₂)	IS 11255 (Part-7)	mg/Nm ³	---	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	---	---
5.	Carbon Monoxide (CO)	IS 13270:1992	ppm	---	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	---	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	4	6
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission					
Report Issue Date: 29-01-2025										Test Report No.: RN-240715001 S14							
Sample ID: 250127AP08001										Sample Description: Stack Emission							
Challan No./P.O. No.: 3000173714/J02										Challan No./P.No. Date: 15-07-2024							
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>																	
Type of Industry: Iron & Steel										Customer Representative: Kishor Pramanik							
Sample Drawn by: IEM Team										Sampling Date: 22-01-2025 (10:00 am - 10:43 am)							
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																	
Field Meteorological Information						A. Temp.(°C): 21			R.H. (%): 53			W.C.: Sunny			W.D.: SW to NE		
Sample Receiving Date: 27-01-2025						Testing Started: 27-01-2025						Testing Ended: 29-01-2025					

General Physical Information

Stack Identification	Single	Stack Height from Ground Level (m)	30
Emission Due to	Furnace	Port Hole Height from Ground Level (m)	25
Plat Form	Permanent	Inner Dimension of Stack (m)	2.7
Stack Description	MBF - 2 CAST HOUSE STACK	Type of Fuel Used	Coke
Shape of Stack	Circular	Quantity of Fuel	----
Construction Material	Metal	Production Capacity	----
Sampling Port	Available	Pollution Control Device (if any)	Bag Filter

Flue Gas Temperature (°C): 42	Flue Gas Velocity (m/s): 12.2	Flue Gas Volumetric Flow Rate (Nm ³ /hr): 230146.7
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Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	22.1	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	30.8	---
3.	Oxides of Nitrogen (NO _x)	IS 11255 (Part-7)	mg/Nm ³	30	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	---	---
5.	Carbon Monoxide (CO)	IS 13270:1992	ppm	---	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	---	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 195:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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Reviewed by

Authorized Signatory


(Tauqeer Ahmar)
Technical Manager


Dr. S. C. Jain
Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	4	7
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission					
Report Issue Date: 29-01-2025									Test Report No.: RN-240715001 S15								
Sample ID: 250127AP08002									Sample Description: Stack Emission								
Challan No./P.O. No.: 3000173714/J02									Challan No./P.No. Date: 15-07-2024								
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>																	
Type of Industry: Iron & Steel									Customer Representative: Shweta Kumari								
Sample Drawn by: IEM Team									Sampling Date: 22-01-2025 (12:20 pm - 12:52 pm)								
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																	
Field Meteorological Information					A. Temp.(°C): 21			R.H. (%): 53			W.C.: Sunny			W.D.: SW to NE			
Sample Receiving Date: 27-01-2025					Testing Started: 27-01-2025					Testing Ended: 29-01-2025							

General Physical Information

Stack Identification	Single	Stack Height from Ground Level (m)	30
Emission Due to	Furnace	Port Hole Height from Ground Level (m)	24.5
Plat Form	Permanent	Inner Dimension of Stack (m)	1.4
Stack Description	MBF-2 (RMHS)	Type of Fuel Used	RMHS
Shape of Stack	Circular	Quantity of Fuel	----
Construction Material	Metal	Production Capacity	----
Sampling Port	Yes	Pollution Control Device (if any)	Bag Filter

Flue Gas Temperature (°C): 50	Flue Gas Velocity (m/s): 7.3	Flue Gas Volumetric Flow Rate (Nm ³ /hr):36232.5
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Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	18.8	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	---	---
3.	Oxides of Nitrogen (NO _x)	IS 11255 (Part-7)	mg/Nm ³	---	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	---	---
5.	Carbon Monoxide (CO)	IS 13270:1992	ppm	---	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	---	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit. BDL: Below Detection Limit
Norms** is specified	---
Remark	---


Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	4	8
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission						
Report Issue Date: 29-01-2025									Test Report No.: RN-240715001 S16									
Sample ID: 250127AP10001									Sample Description: Stack Emission									
Challan No./P.O. No.: 3000173714/J02									Challan No./P.No. Date: 15-07-2024									
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																		
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik									
Sample Drawn by: IEM Team									Sampling Date: 23-01-2025 (12:00 pm - 12:50 pm)									
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																		
Field Meteorological Information						A. Temp.(°C): 20			R.H. (%): 48			W.C.: Sunny				W.D.: SE to NW		
Sample Receiving Date: 27-01-2025						Testing Started: 27-01-2025						Testing Ended: 29-01-2025						

General Physical Information

Stack Identification	Single	Stack Height from Ground Level (m)	78
Emission Due to	Kiln	Port Hole Height from Ground Level (m)	31
Plat Form	Permanent	Inner Dimension of Stack (m)	6.0
Stack Description	Pellet Plant (Kiln Stack)	Type of Fuel Used	Coal
Shape of Stack	Circular	Quantity of Fuel	----
Construction Material	RCC	Production Capacity	----
Sampling Port	Yes	Pollution Control Device (if any)	ESP

Flue Gas Temperature (°C): 158	Flue Gas Velocity (m/s): 11.0	Flue Gas Volumetric Flow Rate (Nm ³ /hr): 750523.1
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Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	21.3	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	94.2	---
3.	Oxides of Nitrogen (NO _x)	IS 11255 (Part-7)	mg/Nm ³	104.6	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	15.8	---
5.	Carbon Monoxide (CO)	IS 13270:1992	ppm	68	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	15.8	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	4	9
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission					
Report Issue Date: 29-01-2025									Test Report No.: RN-240715001 S17								
Sample ID: 250127AP12001									Sample Description: Stack Emission								
Challan No./P.O. No.: 3000173714/J02									Challan No./P.No. Date: 15-07-2024								
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>																	
Type of Industry: Iron & Steel									Customer Representative: Shweta Kumari								
Sample Drawn by: IEM Team									Sampling Date: 24-01-2025 (11:00 am - 11:25 am)								
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																	
Field Meteorological Information					A. Temp.(°C): 21			R.H. (%): 58			W.C.: Sunny			W.D.: SE to NW			
Sample Receiving Date: 27-01-2025					Testing Started: 27-01-2025					Testing Ended: 29-01-2025							

General Physical Information

Stack Identification	Common	Stack Height from Ground Level (m)	63
Emission Due to	kiln	Port Hole Height from Ground Level (m)	32
Plat Form	Available	Inner Dimension of Stack (m)	3.2
Stack Description	WHRB (1&40 TPH) DRI-1	Type of Fuel Used	Coal
Shape of Stack	Circular	Quantity of Fuel	-----
Construction Material	RCC	Production Capacity	-----
Sampling Port	Available	Pollution Control Device (if any)	ESP

Flue Gas Temperature (°C): 164 Flue Gas Velocity (m/s): 9.2 Flue Gas Volumetric Flow Rate (Nm³/hr): 176366.2

Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	36.8	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	377.2	---
3.	Oxides of Nitrogen (NO _x)	IS 11255 (Part-7)	mg/Nm ³	85.5	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	11.2	---
5.	Carbon Monoxide (CO)	IS 13270:1992	ppm	---	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	---	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 195:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. B. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	5	0		
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission								
Report Issue Date: 03-02-2025									Test Report No.: RN-240715001 S18											
Sample ID: 250131AP01001									Sample Description: Stack Emission											
Challan No./P.O. No.: 3000173714/J02									Challan No./P.No. Date: 15-07-2024											
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>																				
Type of Industry: Iron & Steel									Customer Representative: Shweta Kumari											
Sample Drawn by: IEM Team									Sampling Date: 27-01-2025 (11:00 am - 11:32 am)											
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																				
Field Meteorological Information						A. Temp.(°C): 20			R.H. (%): 57			W.C.: Sunny			W.D.: NW to SE					
Sample Receiving Date:31-01-2025						Testing Started: 31-01-2025						Testing Ended: 03-02-2025								

General Physical Information

Stack Identification	Single	Stack Height from Ground Level (m)	50
Emission Due to	Furnace	Port Hole Height from Ground Level (m)	30
Plat Form	Permanent	Inner Dimension of Stack (m)	2.3
Stack Description	MBF-2 Stove	Type of Fuel Used	BF gas
Shape of Stack	Circular	Quantity of Fuel	-----
Construction Material	RCC	Production Capacity	-----
Sampling Port	Yes	Pollution Control Device (if any)	Dry gas cleaning plant

Flue Gas Temperature (°C): 130	Flue Gas Velocity (m/s): 7.0	Flue Gas Volumetric Flow Rate (Nm ³ /hr): 75151.1
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Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	20.2	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	51.3	---
3.	Oxides of Nitrogen (NO _x)	IS 11255 (Part-7)	mg/Nm ³	65.7	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	12.8	---
5.	Carbon Monoxide (CO)	IS 13270:1992	ppm	17.6	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	8.8	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 106:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	5	1
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission					
Report Issue Date: 03-02-2025										Test Report No.: RN-240715001 S19							
Sample ID: 250131AP01002										Sample Description: Stack Emission							
Challan No./P.O. No.: 3000173714/J02										Challan No./P.No. Date: 15-07-2024							
Issued to:																	
M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																	
Type of Industry: Iron & Steel										Customer Representative: Kishor Pramanik							
Sample Drawn by: IEM Team										Sampling Date: 27-01-2025 (01:00 pm - 01:55 pm)							
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																	
Field Meteorological Information						A. Temp.(°C): 20			R.H. (%): 57			W.C.: Sunny			W.D.: NW to SE		
Sample Receiving Date:31-01-2025						Testing Started: 31-01-2025						Testing Ended: 03-02-2025					

General Physical Information

Stack Identification	Single	Stack Height from Ground Level (m)	80
Emission Due to	Reheating Furnace	Port Hole Height from Ground Level (m)	22
Plat Form	Permanent	Inner Dimension of Stack (m)	2
Stack Description	BLOOMING MILL STACK	Type of Fuel Used	BF gas/ LSD
Shape of Stack	Circular	Quantity of Fuel	-----
Construction Material	Metal	Production Capacity	-----
Sampling Port	Available	Pollution Control Device (if any)	None

Flue Gas Temperature (°C): 351	Flue Gas Velocity (m/s): 9.5	Flue Gas Volumetric Flow Rate (Nm ³ /hr): 49823.8
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Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	25.4	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	78.4	---
3.	Oxides of Nitrogen (NO ₂)	IS 11255 (Part-7)	mg/Nm ³	159.4	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	12.6	---
5.	Carbon Monoxide (CO)	IS 13270:1992	ppm	73	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	13.2	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	5	2		
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission								
Report Issue Date: 03-02-2025										Test Report No.: RN-240715001 S20										
Sample ID: 250131AP05001										Sample Description: Stack Emission										
Challan No./P.O. No.: 3000173714/J02										Challan No./P.No. Date: 15-07-2024										
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>																				
Type of Industry: Iron & Steel										Customer Representative: Shweta Kumari										
Sample Drawn by: IEM Team										Sampling Date: 28-01-2025 (11:30 am - 12:32 pm)										
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																				
Field Meteorological Information						A. Temp.(°C): 19			R.H. (%): 55			W.C.: Sunny			W.D.: North to South					
Sample Receiving Date:31-01-2025						Testing Started: 31-01-2025						Testing Ended: 03-02-2025								

General Physical Information

Stack Identification	Single	Stack Height from Ground Level (m)	45
Emission Due to	Oven	Port Hole Height from Ground Level (m)	32
Plat Form	Permanent	Inner Dimension of Stack (m)	2.9
Stack Description	Coke Oven WHRB 2	Type of Fuel Used	Coal
Shape of Stack	Circular	Quantity of Fuel	-----
Construction Material	Metal	Production Capacity	-----
Sampling Port	Yes	Pollution Control Device (if any)	-----

Flue Gas Temperature (°C): 172 Flue Gas Velocity (m/s): 8.5 Flue Gas Volumetric Flow Rate (Nm³/hr): 135552.8

Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	21.7	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	86.8	---
3.	Oxides of Nitrogen (NO _x)	IS 11255 (Part-7)	mg/Nm ³	69.6	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	6.5	---
5.	Carbon Monoxide (CO)	IS 13270:1992	ppm	62	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	10	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 55±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit. BDL: Below Detection Limit
Norms** is specified	---
Remark	---

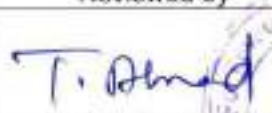

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	5	3		
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission								
Report Issue Date: 03-02-2025									Test Report No.: RN-240715001 S21											
Sample ID: 250131AP05002									Sample Description: Stack Emission											
Challan No./P.O. No.: 3000173714/J02									Challan No./P.No. Date: 15-07-2024											
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																				
Type of Industry: Iron & Steel									Customer Representative: Shweta Kumari											
Sample Drawn by: IEM Team									Sampling Date: 28-01-2025 (2:00 pm to 2:38 pm)											
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																				
Field Meteorological Information					A. Temp.(°C): 19			R.H. (%): 55			W.C.: Sunny				W.D.: North to South					
Sample Receiving Date:31-01-2025					Testing Started: 31-01-2025					Testing Ended: 03-02-2025										

General Physical Information

Stack Identification	Single	Stack Height from Ground Level (m)	50
Emission Due to	---	Port Hole Height from Ground Level (m)	26.5
Plat Form	Available	Inner Dimension of Stack (m)	4.49
Stack Description	Sinter Plant Dedusting	Type of Fuel Used	-----
Shape of Stack	Circular	Quantity of Fuel	-----
Construction Material	RCC	Production Capacity	-----
Sampling Port	Yes	Pollution Control Device (if any)	ESP

Flue Gas Temperature (°C): 115	Flue Gas Velocity (m/s): 7.9	Flue Gas Volumetric Flow Rate (Nm ³ /hr): 335092.2
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Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	24.6	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	---	---
3.	Oxides of Nitrogen (NO ₂)	IS 11255 (Part-7)	mg/Nm ³	---	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	---	---
5.	Carbon Monoxide (CO)	IS 13270:1992	ppm	---	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	---	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	5	4
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission						
Report Issue Date: 03-02-2025									Test Report No.: RN-240715001 S22									
Sample ID: 250131AP08001									Sample Description: Stack Emission									
Challan No./P.O. No.: 3000173714/J02									Challan No./P.No. Date: 15-07-2024									
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																		
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik									
Sample Drawn by: IEM Team									Sampling Date: 29-01-2025 (11:30 am to 12:07 pm)									
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																		
Field Meteorological Information						A. Temp.(°C): 18			R.H. (%): 60			W.C.: Sunny				W.D.: North to South		
Sample Receiving Date:31-01-2025						Testing Started: 31-01-2025						Testing Ended: 03-02-2025						

General Physical Information

Stack Identification	Single	Stack Height from Ground Level (m)	30
Emission Due to	---	Port Hole Height from Ground Level (m)	27
Plat Form	Permanent	Inner Dimension of Stack (m)	1.2
Stack Description	MBF-1 STOCK HOUSE	Type of Fuel Used	-----
Shape of Stack	Circular	Quantity of Fuel	-----
Construction Material	Metal	Production Capacity	-----
Sampling Port	Available	Pollution Control Device (if any)	Bag Filter

Flue Gas Temperature (°C): 47	Flue Gas Velocity (m/s): 13.9	Flue Gas Volumetric Flow Rate (Nm ³ /hr): 51150.5
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Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	19.6	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	---	---
3.	Oxides of Nitrogen (NO ₂)	IS 11255 (Part-7)	mg/Nm ³	---	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	---	---
5.	Carbon Monoxide (CO)	IS 13270:1992	ppm	---	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	---	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by

Authorized Signatory

T. Ahmad

Dr. S. C. Jain

(Tauqeer Ahmad)

(Dr. S. C. Jain)

Technical Manager

Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	5	5		
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission								
Report Issue Date: 03-02-2025									Test Report No.: RN-240715001 S23											
Sample ID: 250131AP10001									Sample Description: Stack Emission											
Challan No./P.O. No.: 3000173714/J02									Challan No./P.No. Date: 15-07-2024											
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																				
Type of Industry: Iron & Steel									Customer Representative: Shweta Kumari											
Sample Drawn by: IEM Team									Sampling Date: 30-01-2025 (11:00 am to 11:31 am)											
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																				
Field Meteorological Information					A. Temp.(°C): 19			R.H. (%): 58			W.C.: Sunny				W.D.: NW to SE					
Sample Receiving Date:31-01-2025					Testing Started: 31-01-2025					Testing Ended: 03-02-2025										

General Physical Information

Stack Identification	Single	Stack Height from Ground Level (m)	43
Emission Due to	Furnace	Port Hole Height from Ground Level (m)	33.3
Plat Form	Permanent	Inner Dimension of Stack (m)	5
Stack Description	SMS - 3	Type of Fuel Used	Electricity
Shape of Stack	Circular	Quantity of Fuel	----
Construction Material	Metal	Production Capacity	----
Sampling Port	Yes	Pollution Control Device (if any)	FES

Flue Gas Temperature (°C): 61	Flue Gas Velocity (m/s): 7.7	Flue Gas Volumetric Flow Rate (Nm ³ /hr): 472762.7
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Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Norms**
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	21.6	---
2.	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)	mg/Nm ³	66.5	---
3.	Oxides of Nitrogen (NO ₂)	IS 11255 (Part-7)	mg/Nm ³	131.8	---
4.	Carbon Dioxide (CO ₂)	IS 13270:1992	% v/v	8.6	---
5.	Carbon Monoxide (CO)	IS 13270:1992	ppm	40.4	---
6.	Oxygen (O ₂)	IS 13270:1992	% v/v	11.2	---

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 156:1956(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by

Authorized Signatory

T. Ahmad
(Tauqeer Ahmad)
Technical Manager

(Dr. S. C. Jain)
(Dr. S. C. Jain)
Director

Ambient Air Quality Monitoring																
SN.	Sampling location	Month	Report No.	Sampling on	Parameters											
					SO2 (ug/m3)	NO2 (ug/m3)	PM10 (ug/m3)	PM2.5 (ug/m3)	CO (ug/m3)	Ozone (ug/m3)	Lead (ug/m3)	Ammonia (ug/m3)	Benzene (ug/m3)	Benzo(a)pyrene (ng/m3)	Arsenic (ng/m3)	Nickel (ng/m3)
1	Plant North Side Boundary	Dec-25	RN-240715001A04	17-12-2024	23.8	32.9	86.6	37.8	BDL (MDL 1.8)	23.2	0.3	35.0	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
2			RN-240715001A05	25-12-2024	24.6	46.7	124.1	41.9	BDL (MDL 1.8)	22.8	0.2	34.9	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
3	Plant West Side Boundary		RN-240715001A09	30-12-2024	22.7	42.7	106.8	46.3	BDL (MDL 1.8)	22.4	0.3	31.2	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
4			RN-240715001A01	16-12-2024	21.7	35.9	94.9	45.7	BDL (MDL 1.8)	24.2	0.3	46.3	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
5	Plant East Side Boundary		RN-240715001A06	25-12-2024	22.3	36.5	255.8	55.3	BDL (MDL 1.8)	25.6	0.3	55.0	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
6			RN-240715001A02	16-12-2024	17.5	35.1	89.1	33.6	BDL (MDL 1.8)	21.6	0.2	38.2	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
7	Plant South Side Boundary		RN-240715001A07	25-12-2024	17.7	30.8	162.3	51.3	BDL (MDL 1.8)	21.7	0.2	33.9	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
8			RN-240715001A10	30-12-2024	21.1	35.6	158.1	55.0	BDL (MDL 1.8)	23.4	0.2	30.0	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
9	Plant North Side Boundary		RN-240715001A03	16-12-2024	22.2	37.2	91.6	48.1	BDL (MDL 1.8)	20.9	0.2	45.4	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
10			RN-240715001A08	25-12-2024	21.4	38.7	164.1	59.8	BDL (MDL 1.8)	22.3	0.2	43.0	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
11			RN-240715001A11	30-12-2024	20.1	37.5	124.0	41.4	BDL (MDL 1.8)	25.0	0.2	49.4	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
12	Plant West Side Boundary		Jan-25	RN-240715001A01	02-01-2025	18.8	36.6	144.2	24.4	BDL (MDL 1.8)	19.3	0.4	34.5	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)
13		RN-230715001A07		08-01-2025	23.5	31.5	86.3	38.9	BDL (MDL 1.8)	24.9	0.4	36.4	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
14	Plant East Side Boundary	RN-230714001A10		15-01-2025	24.3	45.0	124.4	42.5	BDL (MDL 1.8)	24.8	0.3	35.4	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
15		RN-230714001A15		20-01-2025	22.4	41.3	106.5	47.4	BDL (MDL 1.8)	24.1	0.4	32.6	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
16	Plant South Side Boundary	RN-240715001A04		03-01-2025	19.3	34.1	207.2	62.2	BDL (MDL 1.8)	28.2	0.4	52.1	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
17		RN-230715001A08		08-01-2025	21.3	34.4	95.4	46.2	BDL (MDL 1.8)	26.3	0.4	46.7	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
18	Plant North Side Boundary	RN-230714001A11		15-01-2025	22.1	34.9	255.3	56.5	BDL (MDL 1.8)	27.2	0.4	56.5	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
19		RN-230714001A16		20-01-2025	23.0	33.3	188.7	52.4	BDL (MDL 1.8)	25.8	0.3	53.0	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
20	Plant West Side Boundary	RN-240715001A02		02-01-2025	21.5	32.9	90.5	29.7	BDL (MDL 1.8)	23.3	0.3	41.9	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
21		RN-230715001A08		15-01-2025	17.1	33.6	89.6	34.1	BDL (MDL 1.8)	23.7	0.3	38.6	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
22	Plant East Side Boundary	RN-230714001A17		21-01-2025	17.5	29.2	161.8	52.5	BDL (MDL 1.8)	23.3	0.3	35.4	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
23		RN-230714001A21		28-01-2025	20.7	34.1	158.6	55.5	BDL (MDL 1.8)	25.5	0.3	30.4	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
24	Plant South Side Boundary	RN-240715001A03	02-01-2025	23.3	41.9	111.4	27.6	BDL (MDL 1.8)	28.3	0.4	38.3	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)	
25		RN-230715001A09	08-01-2025	21.9	35.8	91.3	49.2	BDL (MDL 1.8)	22.6	0.3	22.6	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)	
26	Plant North Side Boundary	RN-230714001A18	21-01-2025	21.1	37.0	164.4	60.4	BDL (MDL 1.8)	24.3	0.3	43.5	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)	
27		RN-230714001A22	28-01-2025	19.8	36.1	123.7	42.5	BDL (MDL 1.8)	26.7	0.3	50.8	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)	
36	Plant West Side Boundary	Feb-25	RN-240715001A01	04-02-2025	19.7	39.0	146.8	26.6	BDL (MDL 1.8)	35.6	0.5	35.6	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
37			RN-230715001A09	12-02-2025	24.2	34.9	89.4	41.6	BDL (MDL 1.8)	37.8	0.5	37.8	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
38	Plant East Side Boundary		RN-230714001A13	19-02-2025	25.2	47.4	127.0	44.7	BDL (MDL 1.8)	36.5	0.4	36.5	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
39			RN-230714001A19	25-02-2025	23.0	42.0	118.5	41.5	BDL (MDL 1.8)	35.8	0.5	35.8	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
40	Plant South Side Boundary		RN-240715001A02	04-02-2025	20.2	36.5	209.8	64.4	BDL (MDL 1.8)	53.2	0.5	53.2	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
41			RN-230715001A10	12-02-2025	22.0	37.8	98.5	48.9	BDL (MDL 1.8)	48.1	0.5	48.1	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
42	Plant North Side Boundary		RN-230714001A14	19-02-2025	23.0	37.3	257.9	58.7	BDL (MDL 1.8)	57.6	0.5	57.6	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
43			RN-230714001A20	25-02-2025	22.1	38.0	189.8	57.0	BDL (MDL 1.8)	53.5	0.4	53.5	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
44	Plant West Side Boundary		RN-240715001A03	04-02-2025	22.4	35.3	93.1	31.9	BDL (MDL 1.8)	43.0	0.4	43.0	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
45			RN-230715001A07	11-02-2025	17.8	37.0	92.7	36.8	BDL (MDL 1.8)	40.0	0.4	40.0	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
46	Plant East Side Boundary		RN-230714001A15	20-02-2025	18.4	31.6	164.4	54.7	BDL (MDL 1.8)	36.5	0.4	36.5	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
47			RN-230714001A21	26-02-2025	20.1	36.1	128.5	46.2	BDL (MDL 1.8)	38.2	0.4	38.2	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
48	Plant South Side Boundary		RN-240715001A01	03-02-2025	24.2	44.3	114.0	29.8	BDL (MDL 1.8)	39.4	0.5	39.4	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
49			RN-230715001A08	11-02-2025	22.6	39.2	94.4	51.9	BDL (MDL 1.8)	48.2	0.4	48.2	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
50	Plant North Side Boundary		RN-230714001A16	20-02-2025	22.0	39.4	167.0	62.6	BDL (MDL 1.8)	44.6	0.4	44.6	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
51			RN-230714001A22	26-02-2025	22.0	41.6	126.3	47.2	BDL (MDL 1.8)	45.5	0.4	45.5	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
60	Plant West Side Boundary	Mar-25	RN-240715001A03	07.03.2025	22.4	43.5	138.6	31.4	BDL (MDL 1.8)	22.3	0.6	38.5	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
61			RN-230715001A07	11.03.2025	26.8	39.6	93.1	44.2	BDL (MDL 1.8)	28.0	0.6	40.5	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
62	Plant East Side Boundary		RN-230715001A13	17.03.2025	27.9	52.0	118.8	49.5	BDL (MDL 1.8)	27.8	0.5	39.4	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
63			RN-230715001A19	24.03.2025	25.6	46.7	122.2	44.1	BDL (MDL 1.8)	27.0	0.6	38.5	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
64	Plant South Side Boundary		RN-240715001A04	07.03.2025	22.9	41.0	201.6	69.2	BDL (MDL 1.8)	31.2	0.6	56.1	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
65			RN-230715001A08	11.03.2025	24.6	42.5	98.2	51.5	BDL (MDL 1.8)	29.4	0.6	50.8	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
66	Plant North Side Boundary		RN-230715001A14	17.03.2025	25.7	41.8	249.7	63.5	BDL (MDL 1.8)	30.2	0.6	60.5	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
67			RN-230715001A20	24.03.2025	24.7	42.7	193.5	59.6	BDL (MDL 1.8)	29.5	0.5	56.2	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
68	Plant West Side Boundary		RN-240715001A01	06.03.2025	25.1	39.8	84.9	36.7	BDL (MDL 1.8)	26.3	0.5	45.9	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
69			RN-230715001A09	12.03.2025	20.4	41.7	96.4	39.4	BDL (MDL 1.8)	26.8	0.5	42.7	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
70	Plant East Side Boundary		RN-230715001A15	18.03.2025	21.1	36.1	156.2	59.5	BDL (MDL 1.8)	26.3	0.5	39.4	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
71			RN-230715001A21	25.03.2025	22.7	40.8	132.2	48.8	BDL (MDL 1.8)	24.4	0.5	40.9	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
72	Plant South Side Boundary		RN-240715001A02	06.03.2025	26.9	48.8	105.8	34.6	BDL (MDL 1.8)	31.3	0.6	42.3	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
73			RN-230715001A10	12.03.2025	25.2	43.9	98.3	54.5	BDL (MDL 1.8)	25.7	0.5	50.9	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
74	Plant North Side Boundary		RN-230715001A16	18.03.2025	24.7	43.9	158.8	67.4	BDL (MDL 1.8)	27.3	0.5	47.5	BDL (MDL 0.06)	BDL (MDL 0.18)	BDL (MDL 2)	BDL (MDL 4)
75			RN-230715001A22	25.03.2025	24.6	46.3	130.0	49.0	BDL (MDL 1.8)	28.7	0.5	48.2	BDL (MDL 0.06)	BDL (MDL 0.1		



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	1	5		
Discipline: Chemical					Group: Atmospheric Pollution							Sub-Group: Ambient Air							
Report Issue Date: 29-01-2025									Test Report No.: RN-240715001A15										
Sample ID: 250127AP01001									Sample Description: Ambient Air										
Challan No./P.O. No.: 3000173714/J02									Challan No./ P.No. Date: 15-07-2024										
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																			
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik										
Sample Drawn by: IEM Team									Sampling Date: 20-01-2025 to 21-01-2025										
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series																			
Sampling Location: STATION-1 PLANT NORTH SIDE BOUNDARY																			
Field Meteorological Information				A. Temp.(°C): 17				R.H.(%): 54				W.C.: Sunny				W.D.: West to East			
Sample Receiving Date: 27-01-2025					Testing Started: 27-01-2025					Testing Ended: 29-01-2025									

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	100	115.4
2.	Particulate Matter (PM _{2.5})	IS 5182 Part 24: 2019	µg/m ³	60	38.8
3.	Sulphure Dioxide (SO ₂)	IS 5182 Part 02: 2001 RA 2017	µg/m ³	80	22.3
4.	Nitrogen Dioxide (NO ₂)	IS 5182 Part 06: 2006 RA 2017	µg/m ³	80	38.6
5.	Ammonia (NH ₃)	IS 5182 Part 25: 2018	µg/m ³	400	34.4
6.	Ozone (O ₃)	IS 5182 Part 09: 1974	µg/m ³	180	23.9
7.	Arsenic (As)	USEPA IO 3.2: 1999	ng/m ³	--	BDL (MDL-2)
8.	Lead (Pb)	IS 5182 Part 22: 2004	µg/m ³	1.0	0.4
9.	Nickel (Ni)	IS 5182 Part 28: 2020	ng/m ³	--	BDL (MDL-4)

---End of Report---

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL:Below Detection Limit
Norms** is Specified	National Ambient Air Quality Standards (NAAQS), 2009.
Remark	Sample Comply with prescribed specification Except Parameter PM ₁₀ & PM _{2.5}

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Ambient Air	
Report Issue Date: 29-01-2025			Test Report No.: RN-240715001A15		
Sample ID: 250127AP01001			Sample Description: Ambient Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 20-01-2025 to 21-01-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: STATION-1 PLANT NORTH SIDE BOUNDARY					
Field Meteorological Information		A. Temp.(°C): 17		R.H.(%): 54	
		W.C.: Sunny		W.D.: West to East	
Sample Receiving Date: 27-01-2025		Testing Started: 27-01-2025		Testing Ended: 29-01-2025	

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Limits	Result
10.	Benzene (C ₆ H ₆)	IS 5182 Part 11: 2006	µg/m ³	--	BDL (MDL-0.06)
11.	Benzo (a) Pyrene (Bap) Particulate Phase Only	IS 5182 Part 12: 2004	ng/m ³	--	BDL (MDL-0.18)
12.	Carbon Monoxide	IEM/SOP/Air-01:2022	mg/m ³	--	BDL(MDL-1.8)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL:Below Detection Limit
Norms** is Specified	National Ambient Air Quality Standards (NAAQS), 2009.
Remark	N/A

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	1	6	
Discipline: Chemical					Group: Atmospheric Pollution							Sub-Group: Ambient Air							
Report Issue Date: 29-01-2025									Test Report No.: RN-240715001A16										
Sample ID: 250127AP01002									Sample Description: Ambient Air										
Challan No./P.O. No.: 3000173714/J02									Challan No./ P.No. Date: 15-07-2024										
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																			
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik										
Sample Drawn by: IEM Team									Sampling Date: 20-01-2025 to 21-01-2025										
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series																			
Sampling Location: STATION-2 PLANT WEST SIDE BOUNDARY																			
Field Meteorological Information					A. Temp.(°C): 17			R.H.(%): 54			W.C.: Sunny			W.D.: West to East					
Sample Receiving Date: 27-01-2025					Testing Started: 27-01-2025					Testing Ended: 29-01-2025									

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	100	186.7
2.	Particulate Matter (PM _{2.5})	IS 5182 Part 24: 2019	µg/m ³	60	54.3
3.	Sulphure Dioxide (SO ₂)	IS 5182 Part 02: 2001 RA 2017	µg/m ³	80	21.4
4.	Nitrogen Dioxide (NO ₂)	IS 5182 Part 06: 2006 RA 2017	µg/m ³	80	34.6
5.	Ammonia (NH ₃)	IS 5182 Part 25: 2018	µg/m ³	400	52.1
6.	Ozone (O ₃)	IS 5182 Part 09: 1974	µg/m ³	180	26.4
7.	Arsenic (As)	USEPA IO 3.2: 1999	ng/m ³	--	BDL (MDL-2)
8.	Lead (Pb)	IS 5182 Part 22: 2004	µg/m ³	1.0	0.3
9.	Nickel (Ni)	IS 5182 Part 26: 2020	ng/m ³	--	BDL (MDL-4)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	National Ambient Air Quality Standards (NAAQS), 2009.
Remark	Sample Comply with prescribed specification Except Parameter PM ₁₀ & PM _{2.5}

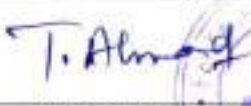

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Ambient Air	
Report Issue Date: 29-01-2025			Test Report No.: RN-240715001A16		
Sample ID: 250127AP01002			Sample Description: Ambient Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 20-01-2025 to 21-01-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: STATION-2 PLANT WEST SIDE BOUNDARY					
Field Meteorological Information		A. Temp.(°C): 17		R.H.(%): 54	
		W.C.: Sunny		W.D.: West to East	
Sample Receiving Date: 27-01-2025		Testing Started: 27-01-2025		Testing Ended: 29-01-2025	

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Limits	Result
10.	Benzene (C ₆ H ₆)	IS 5182 Part 11: 2006	µg/m ³	--	BDL (MDL-0.06)
11.	Benzo (a) Pyrene (Bap) Particulate Phase Only	IS 5182 Part 12: 2004	ng/m ³	--	BDL (MDL-0.18)
12.	Carbon Monoxide	IEM/SOP/Air-01:2022	mg/m ³	--	BDL(MDL-1.8)

---End of Report---

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL:Below Detection Limit
Norms** is Specified	National Ambient Air Quality Standards (NAAQS), 2009.
Remark	N/A.

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Reviewed by

Authorized Signatory

	
(Tauqueer Ahmad)	(Dr. S. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	1	7
Discipline: Chemical					Group: Atmospheric Pollution							Sub-Group: Ambient Air						
Report Issue Date: 29-01-2025									Test Report No.: RN-240715001A17									
Sample ID: 250127AP04001									Sample Description: Ambient Air									
Challan No./P.O. No.: 3000173714/J02									Challan No./ P.No. Date: 15-07-2024									
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>																		
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik									
Sample Drawn by: IEM Team									Sampling Date: 21-01-2025 to 22-01-2025									
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series																		
Sampling Location: STATION-3 PLANT EAST SIDE BOUNDARY																		
Field Meteorological Information					A. Temp.(°C): 17				R.H.(%): 51				W.C.: Sunny				W.D.: SW to NE	
Sample Receiving Date: 27-01-2025					Testing Started: 27-01-2025					Testing Ended: 29-01-2025								

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	100	161.8
2.	Particulate Matter (PM _{2.5})	IS 5182 Part 24: 2019	µg/m ³	60	52.5
3.	Sulphure Dioxide (SO ₂)	IS 5182 Part 02: 2001 RA 2017	µg/m ³	80	17.5
4.	Nitrogen Dioxide (NO ₂)	IS 5182 Part 06: 2006 RA 2017	µg/m ³	80	29.2
5.	Ammonia (NH ₃)	IS 5182 Part 25: 2018	µg/m ³	400	35.4
6.	Ozone (O ₃)	IS 5182 Part 09: 1974	µg/m ³	180	23.3
7.	Arsenic (As)	USEPA IO 3.2: 1999	ng/m ³	--	BDL (MDL-2)
8.	Lead (Pb)	IS 5182 Part 22: 2004	µg/m ³	1.0	0.3
9.	Nickel (Ni)	IS 5182 Part 26: 2020	ng/m ³	--	BDL (MDL-4)

---End of Report---

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL:Below Detection Limit
Norms** is Specified	National Ambient Air Quality Standards (NAAQS), 2009.
Remark	Sample Comply with prescribed specification Except Parameter PM ₁₀ & PM _{2.5}

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by

Authorized Signatory

T. Ahmad

S. C. Jain

(Tauqeer Ahmad)

(Dr. S. C. Jain)

Technical Manager

Director



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Ambient Air	
Report Issue Date: 29-01-2025			Test Report No.: RN-240715001A17		
Sample ID: 250127AP04001			Sample Description: Ambient Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 21-01-2025 to 22-01-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: STATION-3 PLANT EAST SIDE BOUNDARY					
Field Meteorological Information		A. Temp.(°C): 17	R.H.(%): 51	W.C.: Sunny	W.D.: SW to NE
Sample Receiving Date: 27-01-2025		Testing Started: 27-01-2025		Testing Ended: 29-01-2025	

----Test Results----

Sl. No.	Parameters	Test Method	Unit	Limits	Result
10.	Benzene (C ₆ H ₆)	IS 5182 Part 11: 2006	µg/m ³	—	BDL (MDL-0.06)
11.	Benzo (a) Pyrene (Bap) Particulate Phase Only	IS 5182 Part 12: 2004	ng/m ³	—	BDL (MDL-0.18)
12.	Carbon Monoxide	IEM/SOP/Air-01:2022	mg/m ³	—	BDL(MDL-1.8)

----End of Report----

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL:Below Detection Limit
Norms** is Specified	National Ambient Air Quality Standards (NAAQS), 2009.
Remark	N/A

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Reviewed by

Authorized Signatory

T. Ahmad

(Tauqeer Ahmad)

Technical Manager

(Dr S. C. Jain)

(Dr S. C. Jain)

Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	1	8
Discipline: Chemical					Group: Atmospheric Pollution					Sub-Group: Ambient Air							
Report Issue Date: 29-01-2025									Test Report No.: RN-240715001A18								
Sample ID: 250127AP04002									Sample Description: Ambient Air								
Challan No./P.O. No.: 3000173714/J02									Challan No./ P.No. Date: 15-07-2024								
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																	
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik								
Sample Drawn by: IEM Team									Sampling Date: 21-01-2025 to 22-01-2025								
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series																	
Sampling Location: STATION-4 PLANT SOUTH SIDE BOUNDARY																	
Field Meteorological Information					A. Temp.(°C): 17			R.H.(%): 51			W.C.: Sunny			W.D.: SW to NE			
Sample Receiving Date: 27-01-2025					Testing Started: 27-01-2025					Testing Ended: 29-01-2025							

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	100	164.4
2.	Particulate Matter (PM _{2.5})	IS 5182 Part 24: 2019	µg/m ³	60	60.4
3.	Sulphure Dioxide (SO ₂)	IS 5182 Part 02: 2001 RA 2017	µg/m ³	80	21.1
4.	Nitrogen Dioxide (NO ₂)	IS 5182 Part 06: 2006 RA 2017	µg/m ³	80	37.0
5.	Ammonia (NH ₃)	IS 5182 Part 25: 2018	µg/m ³	400	43.5
6.	Ozone (O ₃)	IS 5182 Part 09: 1974	µg/m ³	180	24.3
7.	Arsenic (As)	USEPA IO 3.2: 1999	ng/m ³	--	BDL (MDL-2)
8.	Lead (Pb)	IS 5182 Part 22: 2004	µg/m ³	1.0	0.3
9.	Nickel (Ni)	IS 5182 Part 26: 2020	ng/m ³	--	BDL (MDL-4)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL:Below Detection Limit
Norms** is Specified	National Ambient Air Quality Standards (NAAQS), 2009.
Remark	Sample Comply with prescribed specification Except Parameter PM ₁₀ & PM _{2.5}

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by

Authorized Signatory


(Tauqeer Ahmad)

Technical Manager


(S. C. Jain)

Director



Test Report

Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Ambient Air
Report Issue Date: 29-01-2025	Test Report No.: RN-240715001A18	
Sample ID: 250127AP04002	Sample Description: Ambient Air	
Challan No./P.O. No.: 3000173714/J02	Challan No./ P.No. Date: 15-07-2024	
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108		
Type of Industry: Iron & Steel	Customer Representative: Kishor Pramanik	
Sample Drawn by: IEM Team	Sampling Date: 21-01-2025 to 22-01-2025	
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series		
Sampling Location: STATION-4 PLANT SOUTH SIDE BOUNDARY		
Field Meteorological Information	A. Temp.(°C): 17	R.H.(%): 51
	W.C.: Sunny	W.D.: SW to NE
Sample Receiving Date: 27-01-2025	Testing Started: 27-01-2025	Testing Ended: 29-01-2025

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Limits	Result
10.	Benzene (C ₆ H ₆)	IS 5182 Part 11: 2006	µg/m ³	--	BDL (MDL-0.06)
11.	Benzo (a) Pyrene (Bap) Particulate Phase Only	IS 5182 Part 12: 2004	ng/m ³	--	BDL (MDL-0.18)
12.	Carbon Monoxide	IEM/SOP/Air-01 2022	mg/m ³	--	BDL(MDL-1.8)

---End of Report---

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL:Below Detection Limit
Norms** is Specified	National Ambient Air Quality Standards (NAAQS), 2009.
Remark	N/A


Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by	Authorized Signatory
 (Tauqeer Ahmad) Technical Manager	 (Dr. S. C. Jain) Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	2	1		
Discipline: Chemical					Group: Atmospheric Pollution							Sub-Group: Ambient Air							
Report Issue Date: 03-02-2025									Test Report No.: RN-240715001A21										
Sample ID: 250131AP04001									Sample Description: Ambient Air										
Challan No./P.O. No.: 3000173714/J02									Challan No./ P.No. Date: 15-07-2024										
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>																			
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik										
Sample Drawn by: IEM Team									Sampling Date: 28-01-2025 to 29-01-2025										
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series																			
Sampling Location: STATION-3 PLANT EAST SIDE BOUNDARY																			
Field Meteorological Information				A. Temp.(°C): 20				R.H.(%): 59				W.C.: Sunny				W.D.: North to South			
Sample Receiving Date: 31-01-2025					Testing Started: 31-01-2025					Testing Ended: 03-02-2025									

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	100	125.4
2.	Particulate Matter (PM _{2.5})	IS 5182 Part 24: 2019	µg/m ³	60	43.5
3.	Sulphure Dioxide (SO ₂)	IS 5182 Part 02: 2001 RA 2017	µg/m ³	80	19.4
4.	Nitrogen Dioxide (NO ₂)	IS 5182 Part 06: 2006 RA 2017	µg/m ³	80	32.7
5.	Ammonia (NH ₃)	IS 5182 Part 25: 2018	µg/m ³	400	36.8
6.	Ozone (O ₃)	IS 5182 Part 09: 1974	µg/m ³	180	24.3
7.	Arsenic (As)	USEPA IO 3.2: 1999	ng/m ³	--	BDL (MDL-2)
8.	Lead (Pb)	IS 5182 Part 22: 2004	µg/m ³	1.0	0.3
9.	Nickel (Ni)	IS 5182 Part 26: 2020	ng/m ³	--	BDL (MDL-4)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL:Below Detection Limit
Norms** is Specified	National Ambient Air Quality Standards (NAAQS), 2009.
Remark	Sample Comply with prescribed specification Except Parameter PM ₁₀ & PM _{2.5}

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by

Authorized Signatory

	
(Tauqeer Ahmad)	(Dr. S. C. Jain)
Technical Manager	Director



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Ambient Air	
Report Issue Date: 03-02-2025			Test Report No.: RN-240715001A21		
Sample ID: 250131AP04001			Sample Description: Ambient Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 28-01-2025 to 29-01-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: STATION-3 PLANT EAST SIDE BOUNDARY					
Field Meteorological Information		A. Temp.(°C): 20	R.H.(%): 59	W.C.: Sunny	W.D.: North to South
Sample Receiving Date: 31-01-2025		Testing Started: 31-01-2025		Testing Ended: 03-02-2025	

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Limits	Result
10.	Benzene (C ₆ H ₆)	IS 5182 Part 11: 2006	µg/m ³	--	BDL (MDL-0.06)
11.	Benzo (a) Pyrene (Bap) Particulate Phase Only	IS 5182 Part 12: 2004	ng/m ³	--	BDL (MDL-0.18)
12.	Carbon Monoxide	IEM/SOP/Air-01/2022	mg/m ³	--	BDL(MDL-1.8)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	National Ambient Air Quality Standards (NAAQS), 2009.
Remark	N/A

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by

Authorized Signatory

T. Ahmad

S. C. Jain

(Tauqeer Ahmad)

(Dr) S. C. Jain)

Technical Manager

Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	2	2		
Discipline: Chemical					Group: Atmospheric Pollution							Sub-Group: Ambient Air							
Report Issue Date: 03-02-2025									Test Report No.: RN-240715001A22										
Sample ID: 250131AP04002									Sample Description: Ambient Air										
Challan No./P.O. No.: 3000173714/J02									Challan No./ P.No. Date: 15-07-2024										
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>																			
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik										
Sample Drawn by: IEM Team									Sampling Date: 28-01-2025 to 29-01-2025										
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series																			
Sampling Location: STATION-4 PLANT SOUTH SIDE BOUNDARY																			
Field Meteorological Information				A. Temp.(°C): 20				R.H.(%): 59				W.C.: Sunny				W.D.: North to South			
Sample Receiving Date: 31-01-2025					Testing Started: 31-01-2025					Testing Ended: 03-02-2025									

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	100	123.2
2.	Particulate Matter (PM _{2.5})	IS 5182 Part 24: 2019	µg/m ³	60	44.5
3.	Sulphure Dioxide (SO ₂)	IS 5182 Part 02: 2001 RA 2017	µg/m ³	80	21.3
4.	Nitrogen Dioxide (NO ₂)	IS 5182 Part 06: 2006 RA 2017	µg/m ³	80	38.2
5.	Ammonia (NH ₃)	IS 5182 Part 25: 2018	µg/m ³	400	44.1
6.	Ozone (O ₃)	IS 5182 Part 09: 1974	µg/m ³	180	25.6
7.	Arsenic (As)	USEPA IO 3.2: 1999	ng/m ³	—	BDL (MDL-2)
8.	Lead (Pb)	IS 5182 Part 22: 2004	µg/m ³	1.0	0.3
9.	Nickel (Ni)	IS 5182 Part 26: 2020	ng/m ³	—	BDL (MDL-4)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL:Below Detection Limit
Norms** is Specified	National Ambient Air Quality Standards (NAAQS), 2009.
Remark	Sample Comply with prescribed specification Except Parameter PM ₁₀ & PM _{2.5}

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Ambient Air	
Report Issue Date: 03-02-2025			Test Report No.: RN-240715001A22		
Sample ID: 250131AP04002			Sample Description: Ambient Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 28-01-2025 to 29-01-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: STATION-4 PLANT SOUTH SIDE BOUNDARY					
Field Meteorological Information		A. Temp.(°C): 20		R.H.(%): 59	
		W.C.: Sunny		W.D.: North to South	
Sample Receiving Date: 31-01-2025		Testing Started: 31-01-2025		Testing Ended: 03-02-2025	

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Limits	Result
10.	Benzene (C ₆ H ₆)	IS 5182 Part 11: 2006	µg/m ³	--	BDL (MDL-0.06)
11.	Benzo (a) Pyrene (Bap) Particulate Phase Only	IS 5182 Part 12: 2004	ng/m ³	--	BDL (MDL-0.18)
12.	Carbon Monoxide	IEM/SOP/Air-01:2022	mg/m ³	--	BDL(MDL-1.8)

---End of Report---

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL:Below Detection Limit
Norms** is Specified	National Ambient Air Quality Standards (NAAQS), 2009.
Remark	N/A

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Page 2 of 2

Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director

List of major Air Pollution Control (APC) Systems installed.

SN	Unit	Stack attached to	APC
1	CPP	DRI based WHRB-1	ESP
2		DRI based WHRB-2	ESP
3		DRI based WHRB-3	ESP
4		DRI based WHRB-4	ESP
5		DRI based WHRB-5	ESP
6		25 MW_CPP	ESP
7		30 MW_CPP	ESP
8		40 TPH_CPP	ESP
9	Sinter Plant	SINTER PLANT PROCESS	ESP
10		SINTER PLANT DEDUSTING	ESP
11		FLUX CRUSHER_SINTER PLANT	BAG-FILTER
12		FLUX SCREEN_SINTER PLANT	BAG-FILTER
13	Pellet Plant	PELLET PLANT PROCESS	ESP
14		PCI_PELLET PLANT	BAG-FILTER
15		DRYER_PELLET PLANT	BAG-FILTER
16		TG BUILDING_PELLET PLANT	BAG-FILTER
17	SMS	SMS-1&2 _FES	BAG-FILTER
18		LRF-1 & 3	BAG-FILTER
19		SMS-3 _FES	BAG-FILTER
20		RMHS-2 _SMS-2	BAG-FILTER
21		RMHS-3 _SMS-3	BAG-FILTER
22	MBF	MBF-1_CAST HOUSE	BAG-FILTER
23		MBF-1_STOCK HOUSE (1)	BAG-FILTER
24		MBF-1_STOCK HOUSE (2)	BAG-FILTER
25		MBF-1_GROUND HOPPER	BAG-FILTER
26		MBF-2_CAST HOUSE	BAG-FILTER
27		MBF-2_STOCK HOUSE	BAG-FILTER
28		MBF-2_PCI	BAG-FILTER
29		MBF-2_RMHS	BAG-FILTER
30		MBF-2_DRY GCP	BAG-FILTER
31	DRI	DE-1_DRI-1 PRODUCT CIRCUIT	BAG-FILTER
32		DE-1A_DRI-1,2,3 PRODUCT CIRCUIT	BAG-FILTER
33		DE-2_DRI-1,2,3 PSB	BAG-FILTER
34		DE-2A_DRI-1,2,3 PSB	BAG-FILTER
35		DE-3_DRI-4 & 5 PRODUCT CIRCUIT	BAG-FILTER
36		DE-4 _DRI-4 & 5 PSB	BAG-FILTER
37		DE-5 _DRI-3 PRODUCT CIRCUIT	BAG-FILTER
38		DE-6 _DRI-2 PRODUCT CIRCUIT	BAG-FILTER
39		DE-7_ INTERMEDIATE BIN DRI-1,2,3	BAG-FILTER
40		DE-8 _DRI-1,2,3 PSB	BAG-FILTER



Installation of New Bag Filter at MBF-2 RMHs



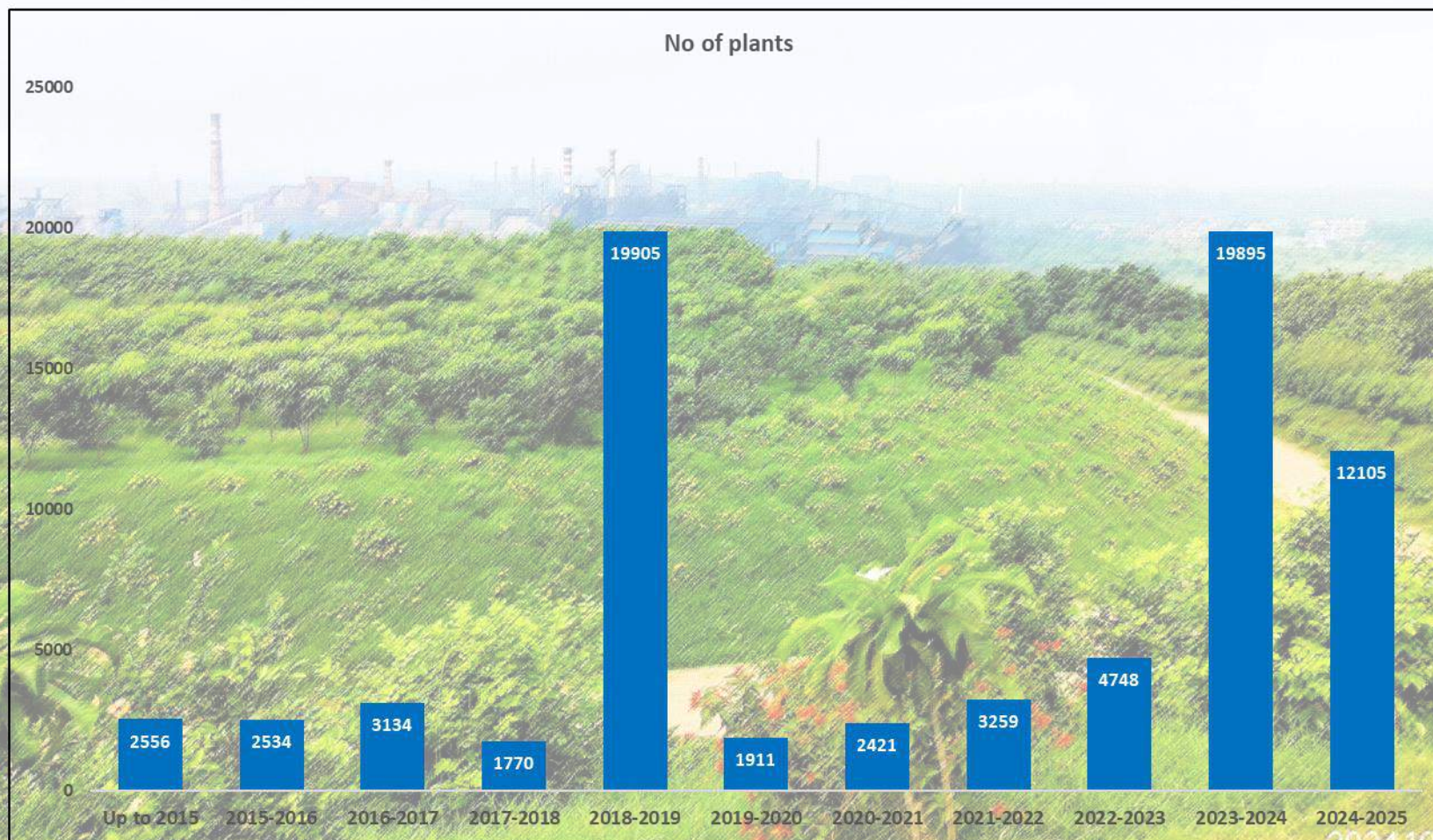
Adequate APCS have been Installed at different

Sewage Treatment Plant (250 KLD)



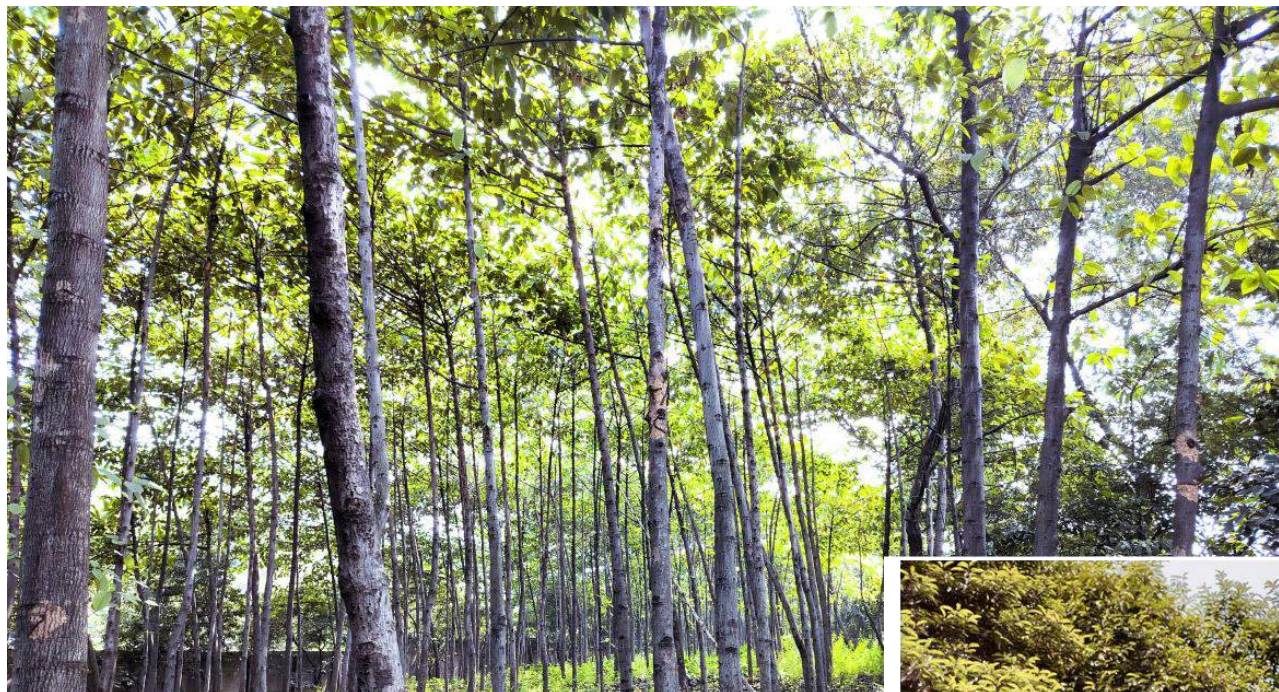
Effluent Treatment Plant (7200KLD)





Green Belt developed inside the Plant







Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Work Environment	
Report Issue Date: 12-02-2025			Test Report No.: RN-240715001FE01		
Sample ID: 250210AP06001			Sample Description: Work Zone Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 06-02-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: Sinter Plant Near Linear Cooler Area					
Field Meteorological Information		A. Temp.(°C): 21		R.H.(%): 59	
		W.C.: Sunny		W.D.: NE to SW	
Sample Receiving Date: 10-02-2025		Testing Started: 10-02-2025		Testing Ended: 12-02-2025	

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	---	1676.2
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	37.5
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06: 2006 RA 2017	µg/m ³	---	71.5
4.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL (MDL- 1.8)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	--
Remark	--

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by **Authorized Signatory**


 (Tauqeer Ahmad)
 Technical Manager


 (Dr. S. C. Jain)
 Director



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Work Environment	
Report Issue Date: 12-02-2025			Test Report No.: RN-240715001F02		
Sample ID: 250210AP06002			Sample Description: Work Zone Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 06-02-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: Sinter Plant Near Crusher Area					
Field Meteorological Information		A. Temp.(°C): 21	R.H.(%): 59	W.C.: Sunny	W.D.: NE to SW
Sample Receiving Date: 10-02-2025		Testing Started: 10-02-2025		Testing Ended: 12-02-2025	

---Test Results---



Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	---	1889.6
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	43.8
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06: 2006 RA 2017	µg/m ³	---	84.4
4.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL (MDL- 1.8)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	--
Remark	--

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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	(Tauqeer Ahmad) Technical Manager	(Dr. S. C. Jain) Director

On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Work Environment	
Report Issue Date: 12-02-2025			Test Report No.: RN-240715001FE03		
Sample ID: 250210AP10001			Sample Description: Work Zone Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 07-02-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: PELLET PLANT NEAR OFFICE AREA					
Field Meteorological Information		A. Temp.(°C): 19		R.H.(%): 54	
		W.C.: Sunny		W.D.: North to South	
Sample Receiving Date: 10-02-2025		Testing Started: 10-02-2025		Testing Ended: 12-02-2025	

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	---	1161.2
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	34.8
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-08: 2006 RA 2017	µg/m ³	---	71.3
4.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL (MDL- 1.8)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit.
Norms** is Specified	--
Remark	--

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Reviewed by

Authorized Signatory

T. Ahmad

(Tauqeer Ahmad)

Technical Manager

S. C. Jain

(Dr. S. C. Jain)

Director



Test Report

Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Work Environment
Report Issue Date: 12-02-2025	Test Report No.: RN-240715001FE04	
Sample ID: 250210AP10002	Sample Description: Work Zone Air	
Challan No./P.O. No.: 3000173714/J02	Challan No./ P.No. Date: 15-07-2024	
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108		
Type of Industry: Iron & Steel	Customer Representative: Kishor Pramanik	
Sample Drawn by: IEM Team	Sampling Date: 07-02-2025	
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series		
Sampling Location: PELLET PLANT NEAR ESP HOPPER		
Field Meteorological Information	A. Temp.(°C): 19	R.H.(%): 54
	W.C.: Sunny	W.D.: North to South
Sample Receiving Date: 10-02-2025	Testing Started: 10-02-2025	Testing Ended: 12-02-2025

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	---	1463.5
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	38.3
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06: 2006 RA 2017	µg/m ³	---	71.9
4.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL (MDL- 1.8)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	--
Remark	--

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Reviewed by	Authorized Signatory
	
(Tauqeer Ahmad)	(Dr. S. C. Jain)
Technical Manager	Director



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Work Environment	
Report Issue Date: 12-02-2025			Test Report No.: RN-230714001FE05		
Sample ID: 250210AP20001			Sample Description: Work Zone Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 04-02-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: : DRI 4,5 NEAR PSB DISPATCH ROOM					
Field Meteorological Information		A. Temp.(°C): 22	R.H.(%): 48	W.C.: Sunny	W.D.: NW to SE
Sample Receiving Date: 10-02-2025		Testing Started: 10-02-2025		Testing Ended: 12-02-2025	

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Suspended Particulate Matter (SPM)	IS 5182 Part 04	µg/m ³	---	1739.8
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	38.9
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-08: 2006 RA 2017	µg/m ³	---	61.6
4.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL (MDL- 1.8)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	--
Remark	--

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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	(Tauqueer Ahmad)	(Dr. S. C. Jain)
	Technical Manager	Director



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Work Environment	
Report Issue Date: 12-02-2025			Test Report No.: RN-240715001FE06		
Sample ID: 250210AP20002			Sample Description: Work Zone Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 04-02-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: : DRI 4,5 NEAR RMHS					
Field Meteorological Information		A. Temp.(°C): 22	R.H.(%): 48	W.C.: Sunny	W.D.: NW to SE
Sample Receiving Date: 10-02-2025		Testing Started: 10-02-2025		Testing Ended: 12-02-2025	

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Suspended Particulate Matter (SPM)	IS 5182 Part 04	µg/m ³	---	1431.7
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	36.8
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06: 2006 RA 2017	µg/m ³	---	70
4.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL(MDL-1.8)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	--
Remark	--

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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	 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
	Technical Manager	Director



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Work Environment	
Report Issue Date: 12-02-2025			Test Report No.: RN-240715001FE07		
Sample ID: 250210AP20003			Sample Description: Work Zone Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 04-02-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: : DRI 4,5 NEAR ESP HOPPER					
Field Meteorological Information		A. Temp.(°C): 22	R.H.(%): 48	W.C.: Sunny	W.D.: NW to SE
Sample Receiving Date: 10-02-2025		Testing Started: 10-02-2025		Testing Ended: 12-02-2025	

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Suspended Particulate Matter (SPM)	IS 5182 Part 04	µg/m ³	---	1607.6
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	35.5
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06: 2006 RA 2017	µg/m ³	---	64.2
4.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL(MDL-1.8)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	--
Remark	--

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Work Environment	
Report Issue Date: 12-02-2025			Test Report No.: RN-230714001FE08		
Sample ID: 250210AP21001			Sample Description: Work Zone Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 05-02-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: SMS-1 &2 NEAR GROUND HOPPER					
Field Meteorological Information		A. Temp.(°C): 23	R.H.(%): 58	W.C.: Sunny	W.D.: NE to SW
Sample Receiving Date: 10-02-2025		Testing Started: 10-02-2025		Testing Ended: 12-02-2025	

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	---	1452.9
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	27.9
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06: 2006 RA 2017	µg/m ³	---	56.5
4.	Lead (Pb)	IS 5182 Part-22	µg/m ³	---	0.07
5.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL(MDL-1.8)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	--
Remark	--


Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Work Environment	
Report Issue Date: 12-02-2025			Test Report No.: RN-230714001FE09		
Sample ID: 250210AP21002			Sample Description: Work Zone Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 05-02-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: SMS 1 & 2 NEAR EAF PLATFORM					
Field Meteorological Information		A. Temp.(°C): 23	R.H.(%): 58	W.C.: Sunny	W.D.: NE to SW
Sample Receiving Date: 10-02-2025		Testing Started: 10-02-2025		Testing Ended: 12-02-2025	

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	---	1350.5
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	32.6
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06: 2006 RA 2017	µg/m ³	---	63.4
4.	Lead (Pb)	IS 5182 Part-22	µg/m ³	---	0.08
5.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL(MDL-1.8)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	--
Remark	--

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Page 1 of 1

Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director

Corporate office - A-8, Modi Heights, Opp-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Laboratory Site - ILNo. - A-13, Saket Vihar, Near Soltrai Bhawan, Harma Housing Colony,
Ranchi-834002, Jharkhand, India

Ph - 8407804253, 8407804251, Email - iem2012@rediffmail.com



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Work Environment	
Report Issue Date: 19-02-2025			Test Report No.: RN-240715001FE10		
Sample ID: 250217AP03001			Sample Description: Work Zone Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 11-02-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: 25 MW NEAR COAL CRUSHER AREA					
Field Meteorological Information		A. Temp.(°C): 22		R.H.(%): 61	
		W.C.: Sunny		W.D.: NE to SW	
Sample Receiving Date: 17-02-2025		Testing Started: 17-02-2025		Testing Ended: 19-02-2025	

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	---	1597.3
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	37.7
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06: 2006 RA 2017	µg/m ³	---	58.7
4.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL(MDL-1.8)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	--
Remark	--

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Reviewed by

Authorized Signatory

T. Ahmad

(Tauqeer Ahmad)

Technical Manager



(Dr. S. C. Jain)

Director



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Work Environment	
Report Issue Date: 19-02-2025			Test Report No.: RN-240715001FE11		
Sample ID: 250217AP03002			Sample Description: Work Zone Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 11-02-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: 25 MW NEAR STACK					
Field Meteorological Information		A. Temp.(°C): 22		R.H.(%): 61	
		W.C.: Sunny		W.D.: NE to SW	
Sample Receiving Date: 17-02-2025		Testing Started: 17-02-2025		Testing Ended: 19-02-2025	

----Test Results----

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	---	1691.6
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	43.9
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06: 2006 RA 2017	µg/m ³	---	74.6
4.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL(MDL-1.8)

----End of Report----

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	--
Remark	--

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Work Environment	
Report Issue Date: 19-02-2025			Test Report No.: RN-240715001FE12		
Sample ID: 250217AP06001			Sample Description: Work Zone Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 12-02-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: COKE OVEN NEAR OFFICE					
Field Meteorological Information		A. Temp.(°C): 22		R.H.(%): 59	
		W.C.: Sunny		W.D.: North to South	
Sample Receiving Date: 17-02-2025		Testing Started: 17-02-2025		Testing Ended: 19-02-2025	

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	---	1553.3
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	39
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06: 2006 RA 2017	µg/m ³	---	67.8
4.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL (MDL- 1.8)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	--
Remark	--

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Reviewed by	Authorized Signatory
	
(Tauqeer Ahmad)	(Dr. S. C. Jain)
Technical Manager	Director



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Work Environment	
Report Issue Date: 19-02-2025			Test Report No.: RN-240715001FE13		
Sample ID: 250217AP06002			Sample Description: Work Zone Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 12-02-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: COKE OVEN NEAR DISPATCH AREA					
Field Meteorological Information		A. Temp.(°C): 22		R.H.(%): 59	
		W.C.: Sunny		W.D.: North to South	
Sample Receiving Date: 17-02-2025		Testing Started: 17-02-2025		Testing Ended: 19-02-2025	

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	---	1753.4
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	36.8
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06: 2006 RA 2017	µg/m ³	---	68.4
4.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL (MDL- 1.8)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	--
Remark	--

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Reviewed by

Authorized Signatory

T. Ahmad

(Tauqeer Ahmad)

Technical Manager

S. C. Jain

(Dr. S. C. Jain)

Director



Test Report

Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Work Environment
Report Issue Date: 19-02-2025	Test Report No.: RN-240715001FE14	
Sample ID: 250217AP21001	Sample Description: Work Zone Air	
Challan No./P.O. No.: 3000173714/J02	Challan No./ P.No. Date: 15-07-2024	
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>		
Type of Industry: Iron & Steel	Customer Representative: Kishor Pramanik	
Sample Drawn by: IEM Team	Sampling Date: 14-02-2025	
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series		
Sampling Location: SMS-3 NEAR GROUND HOPPER		
Field Meteorological Information	A. Temp.(°C): 22	R.H.(%): 60
	W.C.: Sunny	W.D.: NW to SE
Sample Receiving Date: 17-02-2025	Testing Started: 17-02-2025	Testing Ended: 19-02-2025

----Test Results----

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	---	1485.2
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	30.2
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06: 2006 RA 2017	µg/m ³	---	61.1
4.	Lead (Pb)	IS 5182 Part-22	µg/m ³	---	0.06
5.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL (MDL- 1.8)

----End of Report----

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	--
Remark	--

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Reviewed by

Authorized Signatory

T. Ahmad

(Tauqeer Ahmad)

Technical Manager

Dr. S. C. Jain

(Dr. S. C. Jain)

Director



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Work Environment	
Report Issue Date: 19-02-2025			Test Report No.: RN-240715001FE15		
Sample ID: 250217AP21002			Sample Description: Work Zone Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: <div>M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108</div>					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 14-02-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: SMS-3 EAF PLATFORM					
Field Meteorological Information		A. Temp.(°C): 22		R.H.(%): 60	
		W.C.: Sunny		W.D.: NW to SE	
Sample Receiving Date: 17-02-2025		Testing Started: 17-02-2025		Testing Ended: 19-02-2025	

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	---	1386.6
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	35.2
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06: 2006 RA 2017	µg/m ³	---	68.2
4.	Lead (Pb)	IS 5182 Part-22	µg/m ³	---	0.08
5.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL(MDL-1.8)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	---
Remark	---

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Reviewed by

Authorized Signatory

T. Ahmad

(Tauqeer Ahmad)

Technical Manager



(Dr. S. C. Jain)

Director



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Work Environment	
Report Issue Date: 26-02-2025			Test Report No.: RN-240716001FE16		
Sample ID: 250224AP20001			Sample Description: Work Zone Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 20-02-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: : WRM NEAR MILL STAND					
Field Meteorological Information		A. Temp.(°C): 21		R.H.(%): 52	
		W.C.: Sunny		W.D.: North to South	
Sample Receiving Date: 24-02-2025		Testing Started: 24-02-2025		Testing Ended: 26-02-2025	

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	---	1360.5
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	34.8
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06: 2006 RA 2017	µg/m ³	---	65.1
4.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL (MDL- 1.8)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	--
Remark	--

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Reviewed by

Authorized Signatory

T. Ahmad
(Tauqeer Ahmad)

Technical Manager

S. C. Jain
(Dr. S. C. Jain)

Director



Test Report

Discipline: Chemical		Group: Atmospheric Pollution		Sub-Group: Work Environment	
Report Issue Date: 26-02-2025			Test Report No.: RN-240715001FE17		
Sample ID: 250224AP21001			Sample Description: Work Zone Air		
Challan No./P.O. No.: 3000173714/J02			Challan No./ P.No. Date: 15-07-2024		
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108					
Type of Industry: Iron & Steel			Customer Representative: Kishor Pramanik		
Sample Drawn by: IEM Team			Sampling Date: 21-02-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series					
Sampling Location: MBF-1 NEAR RMHS					
Field Meteorological Information		A. Temp.(°C): 20		R.H.(%): 55	
		W.C.: Sunny		W.D.: North to South	
Sample Receiving Date: 24-02-2025		Testing Started: 24-02-2025		Testing Ended: 26-02-2025	

---Test Results---

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	---	1661.3
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	41.6
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06: 2006 RA 2017	µg/m ³	---	81
4.	Lead (Pb)	IS 5182 Part-22	µg/m ³	---	0.07
5.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL (MDL- 1.8)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	--
Remark	--

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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	 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
	Technical Manager	Director



Test Report

Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Work Environment
Report Issue Date: 26-02-2025	Test Report No.: RN-240715001FE18	
Sample ID: 250224AP21002	Sample Description: Work Zone Air	
Challan No./P.O. No.: 3000173714/J02	Challan No./ P.No. Date: 15-07-2024	
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108		
Type of Industry: Iron & Steel	Customer Representative: Kishor Pramanik	
Sample Drawn by: IEM Team	Sampling Date: 21-02-2025	
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series		
Sampling Location: MBF-1 NEAR CAST HOUSE PLATFORM		
Field Meteorological Information	A. Temp.(°C): 20	R.H.(%): 55
	W.C.: Sunny	W.D.: North to South
Sample Receiving Date: 24-02-2025	Testing Started: 24-02-2025	Testing Ended: 26-02-2025

----Test Results----

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	---	1129.1
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	37.2
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06: 2006 RA 2017	µg/m ³	---	72.4
4.	Lead (Pb)	IS 5182 Part-22	µg/m ³	---	0.06
5.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL (MDL- 1.8)

----End of Report----

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	--
Remark	--

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Reviewed by

Authorized Signatory

T. Ahmad

(Tauqeer Ahmad)

Technical Manager

S. C. Jain

(Dr. S. C. Jain)

Director



Test Report

Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Work Environment
Report Issue Date: 04-03-2025	Test Report No.: RN-240715001FE19	
Sample ID: 250301AP08001	Sample Description: Work Zone Air	
Challan No./P.O. No.: 3000173714/J02	Challan No./ P.No. Date: 15-07-2024	
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108		
Type of Industry: Iron & Steel	Customer Representative: Kishor Pramanik	
Sample Drawn by: IEM Team	Sampling Date: 25-02-2025	
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series		
Sampling Location: MBF-2 NEAR CAST HOUSE PLATFORM		
Field Meteorological Information	A. Temp.(°C): 23	R.H.(%): 58
	W.C.: Sunny	W.D.: North to South
Sample Receiving Date: 01-03-2025	Testing Started: 01-03-2025	Testing Ended: 04-03-2025

----Test Results----

Sl. No.	Parameters	Test Method	Unit	Norms**	Result
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006 RA 2017	µg/m ³	---	1117.2
2.	Sulphure Dioxide (SO ₂)	IS 5182 Part-02: 2001 RA 2017	µg/m ³	---	37.3
3.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06: 2006 RA 2017	µg/m ³	---	69
4.	Lead (Pb)	IS 5182 Part-22	µg/m ³	---	0.06
5.	Carbon Monoxide (CO)	IEM/SOP/2022/01	mg/m ³	---	BDL (MDL- 1.8)

----End of Report----

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	--
Remark	--

Tested By: Akaniksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Reviewed by

Authorized Signatory

T. Ahmad

(Tauqeer Ahmad)

Technical Manager

S. C. Jain

(Dr. S. C. Jain)

Director



Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	0	7	4	5
Discipline: Chemical						Group: Water						Sub-Group: Ground Water						
Report Issue Date: 03-04-2025										Test Report No.: RN-230714001GW1								
Sample ID: 250331WA02001 & 250331RC01001										Sample Description: Ground Water - Bore well								
Challan No./P.O. No.: 3000173714/J02										Challan No./ P.No. Date: 15-07-2024								
Issued to:																		
M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																		
Type of Industry: Iron & Steel										Customer Representative: Kishor Pramanik								
Sample Drawn by: IEM Team										Sampling Date: 28-03-2025								
Protocol: CPCB Guideline& IS Method 3025 Part-01																		
Sampling Location: BAGANPDDA																		
Sample Receiving date: 31-03-2025						Testing Started: 31-03-2025						Testing Ended: 03-04-2025						

---Test Result---

Sl. No.	Tested Parameters	Unit	Method No.	Norms**		Results
				Acceptable	Permissible	
1.	PH Value	---	IS 3025 (Part - 11)	6.5 to 8.5	No Relaxation	6.9
2.	Conductivity	µs/cm	IS 3025 (Part - 14)	--	--	340
3.	Turbidity	NTU	IS 3025 (Part - 10)	1	5	<1
4.	Colour	Hazen	IS 3025 (Part - 04)	5	15	<5
5.	Odour	---	IS 3025 (Part - 05)	Agreeable	Agreeable	Agreeable
6.	Total Dissolved Solids	mg/l	IS 3025 (Part - 16)	500	2000	232
7.	Calcium (as Ca)	mg/l	IS 3025 (Part - 40)	75	200	37.7
8.	Total Alkalinity (as CaCO ₃)	mg/l	IS 3025 (Part - 23)	200	600	134
9.	Total Hardness (as CaCO ₃)	mg/l	IS 3025 (Part - 21)	200	600	150
10.	Chloride (as Cl)	mg/l	IS 3025 (Part - 32)	250	1000	30
11.	Sulphate (as SO ₄)	mg/l	IS 3025 (Part - 24)	200	400	38.9
12.	Magnesium (as Mg)	mg/l	APHA 3500 Mg B. 2017	30	100	13.6
13.	Copper	mg/l	APHA 3111 B.2017	0.05	1.5	BDL (MDL - 0.02)
14.	Chromium	mg/l	APHA 3111 B.2017	0.05	No Relaxation	BDL (MDL - 0.2)
15.	Zinc	mg/l	APHA 3111 B.2017	5	15	0.95
16.	Nickel	mg/l	APHA 3111 B.2017	0.3	No Relaxation	BDL (MDL - 0.02)
17.	Mercury	mg/l	APHA 3112 C.2017	0.001	No Relaxation	BDL (MDL - 0.05)
18.	Arsenic	mg/l	APHA 3114 C.2017	0.01	No Relaxation	BDL (MDL - 0.02)
19.	Manganese	mg/l	APHA 3111 B.2017	0.1	No Relaxation	BDL (MDL - 0.02)

---End Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	IS 10500 :2012
Remark	Sample Comply with prescribed specifications.

Tested By: Yashomati Kuman & Sanjay Kumar

Sample Drawn By: Rahul Singh & Team

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Reviewed by	Authorized Signatory
(Tauqeer Ahmad)	(Dr. S. C. Jain)
Technical Manager	Director



Test Report

Test Report

Discipline: Chemical	Group: Water	Sub-Group: Ground Water
Report Issue Date: 03-04-2025	Test Report No.: RN-230714001GW1	
Sample ID: 250331WA02001 & 250331RC01001	Sample Description: Ground Water - Bore well	
Challan No./P.O. No.: 3000173714/J02	Challan No./ P.No. Date: 15-07-2024	
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108		
Type of Industry: Iron & Steel	Customer Representative: Kishor Pramanik	
Sample Drawn by: IEM Team	Sampling Date: 28-03-2025	
Protocol: CPCB Guideline& IS Method 3025 Part-01		
Sampling Location: BAGANPDDA		
Sample Receiving date: 31-03-2025	Testing Started: 31-03-2025	Testing Ended: 03-04-2025

---Test Result---

Sl. No.	Tested Parameter	Unit	Method No.	Norms**		Results
				Acceptable	Permissible	
1.	Taste	---	IS 3025 (Part - 07)	Agreeable	Agreeable	Agreeable
2.	Nitrite Nitrogen	mg/l	IS 3025 (Part - 34)	--	--	BDL (MDL 0.1)
3.	Fluoride (as F ⁻)	mg/l	APHA 4500 F D. 2017	1.0	1.5	0.32
4.	Iron	mg/l	APHA 3111 B.2017	1.0	No Relaxation	0.32
5.	Lead	mg/l	APHA 3111 B.2017	0.01	No Relaxation	BDL (MDL - 0.2)

---END Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature $27 \pm 2^{\circ}\text{C}$ and Relative Humidity $65 \pm 5\%$ in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	IS 10500 :2012
Remark	Sample Comply with prescribed specification.

Tested By: Yashmati Kumari & Sanjay Kumar

Sample Drawn By: Rahul Singh & Team

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Reviewed by

Authorized Signatory

T. Ahmad

(Dr. S. C. Jain)

(Taugeer Ahmad)

(Dr. S. C. Jain)

Technical Manager

Director



Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	0	7	4	6
Discipline: Chemical						Group: Water						Sub-Group: Ground Water						
Report Issue Date: 03-04-2025									Test Report No.: RN-230714001GW2									
Sample ID: 250331WA02002 & 250331RC01002									Sample Description: Ground Water - Bore well									
Challan No./P.O. No.: 3000173714/J02									Challan No./ P.No. Date: 15-07-2024									
Issued to:																		
M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																		
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik									
Sample Drawn by: IEM Team									Sampling Date: 28-03-2025									
Protocol: CPCB Guideline& IS Method 3025 Part-01																		
Sampling Location: JHARGOVINDPUR																		
Sample Receiving date: 31-03-2025						Testing Started: 31-03-2025						Testing Ended: 03-04-2025						

---Test Result---

Sl. No.	Tested Parameters	Unit	Method No.	Norms**		Results
				Acceptable	Permissible	
1.	PH Value	---	IS 3025 (Part - 11)	6.5 to 8.5	No Relaxation	7.1
2.	Conductivity	µs/cm	IS 3025 (Part - 14)	--	--	260
3.	Turbidity	NTU	IS 3025 (Part - 10)	1	5	<1
4.	Colour	Hazen	IS 3025 (Part - 04)	5	15	<5
5.	Odour	---	IS 3025 (Part - 05)	Agreeable	Agreeable	Agreeable
6.	Total Dissolved Solids	mg/l	IS 3025 (Part - 16)	500	2000	172
7.	Calcium (as Ca)	mg/l	IS 3025 (Part - 40)	75	200	25.7
8.	Total Alkalinity (as CaCO ₃)	mg/l	IS 3025 (Part - 23)	200	600	86
9.	Total Hardness (as CaCO ₃)	mg/l	IS 3025 (Part - 21)	200	600	135
10.	Chloride (as Cl)	mg/l	IS 3025 (Part - 32)	250	1000	21
11.	Sulphate (as SO ₄)	mg/l	IS 3025 (Part - 24)	200	400	25.1
12.	Magnesium (as Mg)	mg/l	APHA 3500 Mg B. 2017	30	100	17.3
13.	Copper	mg/l	APHA 3111 B. 2017	0.05	1.5	BDL (MDL - 0.02)
14.	Chromium	mg/l	APHA 3111 B. 2017	0.05	No Relaxation	BDL (MDL - 0.2)
15.	Zinc	mg/l	APHA 3111 B. 2017	5	15	0.86
16.	Nickel	mg/l	APHA 3111 B. 2017	0.3	No Relaxation	BDL (MDL - 0.02)
17.	Mercury	mg/l	APHA 3112 C. 2017	0.001	No Relaxation	BDL (MDL - 0.05)
18.	Arsenic	mg/l	APHA 3114 C. 2017	0.01	No Relaxation	BDL (MDL - 0.02)
19.	Manganese	mg/l	APHA 3111 B. 2017	0.1	No Relaxation	BDL (MDL - 0.02)

---End Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	IS 10500 :2012
Remark	Sample Comply with prescribed specification.

Tested By: Yashmati Kumari & Sanjay Kumar

Sample Drawn By: Rahul Singh & Team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

Test Report

Discipline: Chemical	Group: Water	Sub-Group: Ground Water
Report Issue Date: 03-04-2025	Test Report No.: RN-230714001GW2	
Sample ID: 250331WA02002 & 250331RC01002	Sample Description: Ground Water - Bore well	
Challan No./P.O. No.: 3000173714/J02	Challan No./ P.No. Date: 15-07-2024	
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108		
Type of Industry: Iron & Steel	Customer Representative: Kishor Pramanik	
Sample Drawn by: IEM Team	Sampling Date: 28-03-2025	
Protocol: CPCB Guideline& IS Method 3025 Part-01		
Sampling Location: JHARGOVINDPUR		
Sample Receiving date: 31-03-2025	Testing Started: 31-03-2025	Testing Ended: 03-04-2025

---Test Result---

Sl. No.	Tested Parameter	Unit	Method No.	Norms**		Results
				Acceptable	Permissible	
1.	Taste	---	IS 3025 (Part - 07)	Agreeable	Agreeable	Agreeable
2.	Nitrite Nitrogen	mg/l	IS 3025 (Part - 34)	--	--	BDL (MDL 0.1)
3.	Fluoride (as F)	mg/l	APHA 4500 F D. 2017	1.0	1.5	0.26
4.	Iron	mg/l	APHA 3111 B.2017	1.0	No Relaxation	0.28
5.	Lead	mg/l	APHA 3111 B.2017	0.01	No Relaxation	BDL (MDL - 0.2)

---END Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature $27 \pm 2^{\circ}\text{C}$ and Relative Humidity $65 \pm 5\%$ in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	IS 10500 :2012
Remark	Sample Comply with prescribed specification.

Tested By: Yashmati Kumari & Sanjay Kumar

Sample Drawn By: Rahul Singh & Team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by Authorized Signatory

T. Ahmad
(Tauqeer Ahmad) (Dr. S. C. Jain)

Technical Manager Director



Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	0	7	4	7
Discipline: Chemical						Group: Water						Sub-Group: Ground Water						
Report Issue Date: 03-04-2025									Test Report No.: RN-230714001GW3									
Sample ID: 250331WA02003 & 250331RC01003									Sample Description: Ground Water - Bore well									
Challan No./P.O. No.: 3000173714/J02									Challan No./ P.No. Date: 15-07-2024									
Issued to:																		
M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																		
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik									
Sample Drawn by: IEM Team									Sampling Date: 28-03-2025									
Protocol: CPCB Guideline& IS Method 3025 Part-01																		
Sampling Location: NEEMDIH																		
Sample Receiving date: 31-03-2025						Testing Started: 31-03-2025						Testing Ended: 03-04-2025						

---Test Result---

Sl. No.	Tested Parameters	Unit	Method No.	Norms**		Results
				Acceptable	Permissible	
1.	PH Value	---	IS 3025 (Part - 11)	6.5 to 8.5	No Relaxation	7.3
2.	Conductivity	µs/cm	IS 3025 (Part - 14)	--	--	370
3.	Turbidity	NTU	IS 3025 (Part - 10)	1	5	<1
4.	Colour	Hazen	IS 3025 (Part - 04)	5	15	<5
5.	Odour	---	IS 3025 (Part - 05)	Agreeable	Agreeable	Agreeable
6.	Total Dissolved Solids	mg/l	IS 3025 (Part - 16)	500	2000	254
7.	Calcium (as Ca)	mg/l	IS 3025 (Part - 40)	75	200	45.7
8.	Total Alkalinity (as CaCO ₃)	mg/l	IS 3025 (Part - 23)	200	600	152
9.	Total Hardness (as CaCO ₃)	mg/l	IS 3025 (Part - 21)	200	600	176
10.	Chloride (as Cl)	mg/l	IS 3025 (Part - 32)	250	1000	34
11.	Sulphate (as SO ₄)	mg/l	IS 3025 (Part - 24)	200	400	40.3
12.	Magnesium (as Mg)	mg/l	APHA 3500 Mg B. 2017	30	100	12.6
13.	Copper	mg/l	APHA 3111 B.2017	0.05	1.5	BDL (MDL - 0.02)
14.	Chromium	mg/l	APHA 3111 B.2017	0.05	No Relaxation	BDL (MDL - 0.2)
15.	Zinc	mg/l	APHA 3111 B.2017	5	15	0.82
16.	Nickel	mg/l	APHA 3111 B.2017	0.3	No Relaxation	BDL (MDL - 0.02)
17.	Mercury	mg/l	APHA 3112 C.2017	0.001	No Relaxation	BDL (MDL - 0.05)
18.	Arsenic	mg/l	APHA 3114 C.2017	0.01	No Relaxation	BDL (MDL - 0.02)
19.	Manganese	mg/l	APHA 3111 B.2017	0.1	No Relaxation	BDL (MDL - 0.02)

---End Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	IS 10500 :2012
Remark	Sample Comply with prescribed specification.

Tested By: Yashomati Kumari & Sanjay Kumar
Sample Drawn By: Rahul Singh & Team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

Discipline: Chemical	Group: Water	Sub-Group: Ground Water
Report Issue Date: 03-04-2025	Test Report No.: RN-230714001GW3	
Sample ID: 250331WA02003 & 250331RC01003	Sample Description: Ground Water - Bore well	
Challan No./P.O. No.: 3000173714/J02	Challan No./ P.No. Date: 15-07-2024	
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108		
Type of Industry: Iron & Steel	Customer Representative: Kishor Pramanik	
Sample Drawn by: IEM Team	Sampling Date: 28-03-2025	
Protocol: CPCB Guideline& IS Method 3025 Part-01		
Sampling Location: NEEMDIH		
Sample Receiving date: 31-03-2025	Testing Started: 31-03-2025	Testing Ended: 03-04-2025

---Test Result---

Sl. No.	Tested Parameter	Unit	Method No.	Norms**		Results
				Acceptable	Permissible	
1.	Taste	---	IS 3025 (Part - 07)	Agreeable	Agreeable	Agreeable
2.	Nitrite Nitrogen	mg/l	IS 3025 (Part - 34)	--	--	BDL (MDL 0.1)
3.	Fluoride (as F)	mg/l	APHA 4500 F D. 2017	1.0	1.5	0.43
4.	Iron	mg/l	APHA 3111 B.2017	1.0	No Relaxation	0.82
5.	Lead	mg/l	APHA 3111 B.2017	0.01	No Relaxation	BDL (MDL - 0.2)

---END Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature $27 \pm 2^{\circ}\text{C}$ and Relative Humidity $65 \pm 5\%$ in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	IS 10500 :2012
Remark	Sample Comply with prescribed specification.

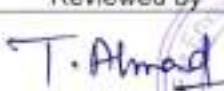

Tested By: Yashomati Kumari & Sanjay Kumar

Sample Drawn By: Rahul Singh & Team

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Reviewed by	Authorized Signatory
	
(Tauqeer Ahmad)	(Dr. S. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	0	7	4	8
Discipline: Chemical						Group: Water						Sub-Group: Ground Water						
Report Issue Date: 03-04-2025										Test Report No.: RN-230714001GW4								
Sample ID: 250331WA02004 & 250331RC01004										Sample Description: Ground Water - Bore well								
Challan No./P.O. No.: 3000173714/302										Challan No./ P.No. Date: 15-07-2024								
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																		
Type of Industry: Iron & Steel										Customer Representative: Kishor Pramanik								
Sample Drawn by: IEM Team										Sampling Date: 28-03-2025								
Protocol: CPCB Guideline& IS Method 3025 Part-01																		
Sampling Location: JHARKHULI																		
Sample Receiving date: 31-03-2025						Testing Started: 31-03-2025						Testing Ended: 03-04-2025						

---Test Result---

Sl. No.	Tested Parameters	Unit	Method No.	Norms**		Results
				Acceptable	Permissible	
1.	PH Value	---	IS 3025 (Part - 11)	6.5 to 8.5	No Relaxation	7.2
2.	Conductivity	µs/cm	IS 3025 (Part - 14)	---	---	285
3.	Turbidity	NTU	IS 3025 (Part - 10)	1	5	<1
4.	Colour	Hazen	IS 3025 (Part - 04)	5	15	<5
5.	Odour	---	IS 3025 (Part - 05)	Agreeable	Agreeable	Agreeable
6.	Total Dissolved Solids	mg/l	IS 3025 (Part - 16)	500	2000	190
7.	Calcium (as Ca)	mg/l	IS 3025 (Part - 40)	75	200	28.9
8.	Total Alkalinity (as CaCO ₃)	mg/l	IS 3025 (Part - 23)	200	600	98
9.	Total Hardness (as CaCO ₃)	mg/l	IS 3025 (Part - 21)	200	600	141
10.	Chloride (as Cl)	mg/l	IS 3025 (Part - 32)	250	1000	25
11.	Sulphate (as SO ₄)	mg/l	IS 3025 (Part - 24)	200	400	28
12.	Magnesium (as Mg)	mg/l	APHA 3500 Mg B. 2017	30	100	16.8
13.	Copper	mg/l	APHA 3111 B.2017	0.05	1.5	BDL (MDL - 0.02)
14.	Chromium	mg/l	APHA 3111 B.2017	0.05	No Relaxation	BDL (MDL - 0.2)
15.	Zinc	mg/l	APHA 3111 B.2017	5	15	0.91
16.	Nickel	mg/l	APHA 3111 B.2017	0.3	No Relaxation	BDL (MDL - 0.02)
17.	Mercury	mg/l	APHA 3112 C.2017	0.001	No Relaxation	BDL (MDL - 0.05)
18.	Arsenic	mg/l	APHA 3114 C.2017	0.01	No Relaxation	BDL (MDL - 0.02)
19.	Manganese	mg/l	APHA 3111 B.2017	0.1	No Relaxation	BDL (MDL - 0.02)

---End Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	IS 10500 :2012
Remark	Sample Comply with prescribed specification.

Tested By: Yashomati Kuman & Sanjay Kumar
Sample Drawn By: Rahul Singh & Team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

Discipline: Chemical	Group: Water	Sub-Group: Ground Water
Report Issue Date: 03-04-2025	Test Report No.: RN-230714001GW4	
Sample ID: 250331WA02004 & 250331RC01004	Sample Description: Ground Water - Bore well	
Challan No./P.O. No.: 3000173714/J02	Challan No./ P.No. Date: 15-07-2024	
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108		
Type of Industry: Iron & Steel	Customer Representative: Kishor Pramanik	
Sample Drawn by: IEM Team	Sampling Date: 28-03-2025	
Protocol: CPCB Guideline& IS Method 3025 Part-01		
Sampling Location: JHARKHUU		
Sample Receiving date: 31-03-2025	Testing Started: 31-03-2025	Testing Ended: 03-04-2025

---Test Result---

Sl. No.	Tested Parameter	Unit	Method No.	Norms**		Results
				Acceptable	Permissible	
1.	Taste	---	IS 3025 (Part - 07)	Agreeable	Agreeable	Agreeable
2.	Nitrite Nitrogen	mg/l	IS 3025 (Part - 34)	--	--	BDL (MDL 0.1)
3.	Fluoride (as F)	mg/l	APHA 4500 F D. 2017	1.0	1.5	0.34
4.	Iron	mg/l	APHA 3111 B.2017	1.0	No Relaxation	0.24
5.	Lead	mg/l	APHA 3111 B.2017	0.01	No Relaxation	BDL (MDL - 0.2)

---END Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature $27 \pm 2^{\circ}\text{C}$ and Relative Humidity $65 \pm 5\%$ in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	IS 10500 :2012
Remark	Sample Comply with prescribed specification.

Tested By: Yashmati Kumari & Sanjay Kumar

Sample Drawn By: Rahul Singh & Team

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Reviewed by	Authorized Signatory
	
(Tauqeer Ahmad)	(Dr. S. C. Jain)
Technical Manager	Director

Effluent Treated Water Quality Report

Month	Sampling location	Report No.	Sampling on	pH	TSS	BOD	COD	O&G	NH3	CN-	Phenol
					(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Dec-25	ETP OUTLET	RN-240715001WW2	18-12-2024	7.7	23	15	60	BDL(MDL-4)	5.7	BDL (MDL 0.01)	0.3
Jan-25	ETP OUTLET	RN-240715001WW2	20-01-2025	7.8	21	13	56	BDL(MDL-4)	4.8	BDL (MDL 0.01)	0.3
Feb-25	ETP OUTLET	RN-240715001WW2	26-02-2025	7.4	24	11	48	BDL(MDL-4)	42.0	BDL (MDL 0.01)	0.2
Mar-25	ETP OUTLET	RN-240715001WW2	27-03-2025	7.9	24	10	44	BDL(MDL-4)	5.4	BDL (MDL 0.01)	0.3



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	3	2
Discipline: Chemical				Group: Pollution & Environment								Sub-Group: Waste Water					
Report Issue Date: 23-01-2025									Test Report No.: RN-240715001WW2								
Sample ID: 250120PE01002									Sample Description: Waste Water (Effluent)								
Challan No./P.O. No.: 3000173714/J02									Challan No./ P.No. Date: 15-07-2024								
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																	
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik								
Sample Drawn by: IEM Team									Sampling Date: 20-01-2025								
Protocol: CPCB Guideline& IS Method 3025 Series																	
Sampling Location: ETP OUTLET																	
Sample Receiving date: 20-01-2025						Testing Started: 20-01-2025						Testing Ended: 23-01-2025					

---Test Result---

Sl. No.	Tested Parameters	Unit	Method No.	Norms**	Results
1.	pH value at 25°C	---	IS 3025 (Part-11)	5.5-9.0	7.8
2.	Total Suspended Solids (TSS)	mg/l	IS 3025 (Part-17)	100	21
3.	Biochemical Oxygen Demand (BOD)	mg/l	IS 3025 (Part-44)	30	13
4.	Chemical Oxygen Demand (COD)	mg/l	IS 3025 (Part-58)	250	56

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature $27 \pm 2^\circ\text{C}$ and Relative Humidity $65 \pm 5\%$ in all testing area as per IS 196:1966(C).
Abbreviation	MDL- Minimum Detection Limit, BDL - Below Detection Limit
Norms** is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Yashomati Kumari

Sample Drawn By: Rahul Singh & Team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director



Test Report

Discipline: Chemical	Group: Pollution & Environment	Sub-Group: Waste Water
Report Issue Date: 23-01-2025	Test Report No.: RN-240715001WW2	
Sample ID: 250120PE01002	Sample Description: Waste Water (Effluent)	
Challan No./P.O. No.: 3000173714/J02	Challan No./ P.No. Date: 15-07-2024	
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108		
Type of Industry: Iron & Steel	Customer Representative: Kishor Pramanik	
Sample Drawn by: IEM Team	Sampling Date: 20-01-2025	
Protocol: CPCB Guideline& IS Method 3025 Series		
Sampling Location: ETP OUTLET		
Sample Receiving date: 20-01-2025	Testing Started: 20-01-2025	Testing Ended: 23-01-2025

---Test Result---

Sl. No.	Tested Parameters	Unit	Method No.	Limit	Results
5.	Ammonical Nitrogen as N	mg/l	IS 3025 (Part-34)	50	4.8
6.	Phenols as C ₆ H ₅ OH	mg/l	IS 3025 (Part-43)	1	0.28
7.	Oil & Grease	mg/l	IS 3025 (Part-39)	10	BDL(MDL-4)
8.	Cyanide as CN	mg/l	IS 3025 (Part-27)	0.2	BDL(MDL-0.1)

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL- Minimum Detection Limit, BDL - Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Yashomati Kumari

Sample Drawn By: Rahul Singh & Team

Specific Contractual Notes:-

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director

Ambient Noise Monitoring Report (dB(A))

Sampling on	Plant North Side Boundary		Plant South Side Boundary		Plant East Side Boundary		Plant West Side Boundary	
	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
Dec-24	70.2	56.5	67.5	63.3	69.3	65.0	64.8	61.2
Jan-25	71.1	57.7	68.4	64.5	70.2	66.2	65.7	62.4
Feb-25	72.9	60.3	70.2	67.1	69.7	62.4	67.5	65.0
Mar-25	73.8	61.9	71.1	68.7	70.6	64.0	68.3	66.4



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	2	7
Discipline: Chemical			Group: Atmospheric Pollution						Sub-Group: Ambient Noise Levels (Excluding Vibration)									
Report Issue Date: 22-01-2025									Test Report No.: RN-240715001N3									
Sample ID: 250120AP03001									Sample Description: Ambient Noise									
Challan No./P.O. No.: 3000173714/J02									Challan No./ P.No. Date: 15-07-2024									
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																		
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik									
Sample Drawn by: IEM Team									Sampling Date: 15-01-2025 to 16-01-2025									
Protocol: CPCB Guideline & IS Method 9989:1981																		
Sampling Location: STATION-1 PLANT NORTH SIDE BOUNDARY																		
Field Meteorological Information				A. Temp.(°C): 18			R.H. (%): 52			W.C.: Sunny				W.D.: SE to NW				

---Test Result---

Sl. No	Parameter	Method	Unit	Day Time	Night Time	Norms**
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	71.1	57.7	Day - 75 Night - 70

---End of Reports---

Note: -

1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
2. Night time shall mean from 10.00 p.m. to 6.00 a.m.
3. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
4. dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
5. A "decibel" is a unit in which noise is measured. "A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.
6. Leq: It is an energy mean of the noise level, over a specified period.

Env. Condition of Lab.	Laboratory is maintaining Temperature $27 \pm 2^\circ\text{C}$ and Relative Humidity $65 \pm 5\%$ in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	As per Noise Pollution (Regulation and Control) Rules - 2000
Remark	Sample Comply with Prescribed Specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

Specific Contractual Notes: -

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by

Authorized Signatory

T. Ahmad

S. C. Jain

(Tauqeer Ahmad)

Technical Manager

S. C. Jain

Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	2	8	
Discipline: Chemical			Group: Atmospheric Pollution						Sub-Group: Ambient Noise Levels (Excluding Vibration)										
Report Issue Date: 22-01-2025									Test Report No.: RN-240715001N4										
Sample ID: 250120AP03002									Sample Description: Ambient Noise										
Challan No./P.O. No.: 3000173714/J02									Challan No./ P.No. Date: 15-07-2024										
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																			
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik										
Sample Drawn by: IEM Team									Sampling Date: 15-01-2025 to 16-01-2025										
Protocol: CPCB Guideline & IS Method 9989:1981																			
Sampling Location: STATION-2 PLANT WEST SIDE BOUNDARY																			
Field Meteorological Information			A. Temp.(°C): 18			R.H. (%): 52			W.C.: Sunny			W.D.: SE to NW							

---Test Result---

Sl. No	Parameter	Method	Unit	Day Time	Night Time	Norms**
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	65.7	62.4	Day - 75 Night - 70

---End of Reports---

Note: -

1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
2. Night time shall mean from 10.00 p.m. to 6.00 a.m.
3. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
4. dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
5. A "decibel" is a unit in which noise is measured. "A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.
6. Leq: It is an energy mean of the noise level, over a specified period.

Env. Condition of Lab.	Laboratory is maintaining Temperature $27 \pm 2^\circ\text{C}$ and Relative Humidity $65 \pm 5\%$ in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	As per Noise Pollution (Regulation and Control) Rules - 2000
Remark	Sample Comply with Prescribed Specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

Specific Contractual Notes: -

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6. In case of feedback/complaints, please send an email at iem2012@gmail.com

On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by

Authorized Signatory

 (Tauqueer Ahmad) Technical Manager	 (Dr. S. C. Jain) Director
---	---



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	2	9	
Discipline: Chemical			Group: Atmospheric Pollution							Sub-Group: Ambient Noise Levels (Excluding Vibration)									
Report Issue Date: 22-01-2025									Test Report No.: RN-240715001N5										
Sample ID: 250120AP03003									Sample Description: Ambient Noise										
Challan No./P.O. No.: 3000173714/J02									Challan No./ P.No. Date: 15-07-2024										
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																			
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik										
Sample Drawn by: IEM Team									Sampling Date: 15-01-2025 to 16-01-2025										
Protocol: CPCB Guideline & IS Method 9989:1981																			
Sampling Location: STATION-4 PLANT SOUTH SIDE BOUNDARY																			
Field Meteorological Information			A. Temp.(°C): 18			R.H. (%): 52			W.C.: Sunny					W.D.: SE to NW					

---Test Result---

Sl. No	Parameter	Method	Unit	Day Time	Night Time	Norms**
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	68.4	64.5	Day - 75 Night - 70

---End of Reports---

Note: -

1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
2. Night time shall mean from 10.00 p.m. to 6.00 a.m.
3. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
4. dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
5. A "decibel" is a unit in which noise is measured. "A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.
6. Leq: It is an energy mean of the noise level, over a specified period.

Env. Condition of Lab.	Laboratory is maintaining Temperature $27 \pm 2^\circ\text{C}$ and Relative Humidity $65 \pm 5\%$ in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit.
Norms** is specified	As per Noise Pollution (Regulation and Control) Rules - 2000
Remark	Sample Comply with Prescribed Specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

Specific Contractual Notes -

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Reviewed by	Authorized Signatory
 (Tauqueer Ahmad)	 (S. C. Jain)
Technical Manager	Director



Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	0	3	0
Discipline: Chemical			Group: Atmospheric Pollution						Sub-Group: Ambient Noise Levels (Excluding Vibration)									
Report Issue Date: 03-01-2025									Test Report No.: RN-240715001N6									
Sample ID: 250131AP03001									Sample Description: Ambient Noise									
Challan No./P.O. No.: 3000173714/J02									Challan No./ P.No. Date: 15-07-2024									
Issued to: M/s Tata Steel Limited (Formerly Tata Steel Long Products Limited) Gamaharia Phase-V, Adityapur Industrial Area, Seraikela-Kharsawan, Jharkhand-832108																		
Type of Industry: Iron & Steel									Customer Representative: Kishor Pramanik									
Sample Drawn by: IEM Team									Sampling Date: 28-01-2025 to 29-01-2025									
Protocol: CPCB Guideline & IS Method 9989:1981																		
Sampling Location: STATION-3 PLANT EAST SIDE BOUNDARY																		
Field Meteorological Information			A. Temp.(°C): 20			R.H. (%): 59			W.C.: Sunny			W.D.: North to South						

---Test Result---

Sl. No	Parameter	Method	Unit	Day Time	Night Time	Norms**
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	70.2	66.2	Day - 75 Night - 70

---End of Reports---

Note: -

1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
2. Night time shall mean from 10.00 p.m. to 6.00 a.m.
3. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
4. dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
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6. Leq: It is an energy mean of the noise level, over a specified period.

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is specified	As per Noise Pollution (Regulation and Control) Rules - 2000
Remark	Sample Comply with Prescribed Specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Singh & Team

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Reviewed by	Authorized Signatory
 (Tauqeer Ahmad)	 (Dr. S. C. Jain)
Technical Manager	Director

CSR Activity Gamharia

TSL Gamharia



Key CSR Activities in TSL Gamharia



Education

- Primary Learning Centre (PLC) is continuous running in 5 location of different villages of gamharia Block. 205 student were getting benefit from these centre in which 125 are female.
- Pre-Matric coaching (PMC) is continuous running in 2 location of Gauri and Tetuladanga villages in which 24 student written Matriculation examination. Result awaited.
- 5 NRBC (Non-residential bridge course) started in gamharia block with objective to bridging the drop out student that engage in slag picker and other activity and enrolled them to regular schooling.150 student get benefited from these centre.
- 6 girls selected in Super30 who are supported for their education expenses and provided laptop enrolled for online classes.14 girls currently getting benefit under super30 project.
- Toilet Block for male and female constructed in Dugdha middle school.
- Primary School and Anganwadi of Bara Gamharia and Dugdha repaired and Bala painting work in Anganwadi completed



Key CSR Activities in TSL Gamharia



Public Health

- Mobile public health (mPHU) running in 4 location of gamharia that provide basic curative disease with diagnosis of Blood Pressure ,Sugar etc .383 patients get benefited till march'25
- 22 Eye camp concluded in fy25 in which 570 person get screen and 119 were find having mature cataract that surgery need to perform.40 patient surgery completed.



Key CSR Activities in TSL Gamharia



Livelihood- Agriculture

- Two capacity building training programme on livestock management and modern breed improvement practises in Kolabira Agriculture Centre organised.
- An orientation session on Vegetable Marketing & Supply Chain with farmers of Sapra Cluster by Kolabira center.
- Training and exposure on exotic fruit production provided to farmer in Khunti district.
- 10 cow support provided to farmers in agri and allied initiative to strengthen dairy development within the village.
- Agri equipment such as mini Power tiller, Chaff cutter machine , HDPE pipe for irrigation purpose provided to farmers



Key CSR Activities in TSL Gamharia



Livelihood- Skill Development

- Kaushalyan: 100 students completed the 45 days crash course of computer learning program.
- 3 girls from jhurkuli completed hospitality course in which 2 accept placement of Hotel Cruse, Adityapur.
- A training program for stitching provided to woman belongs to marginalize family through partner agency M/s Arka Jain University.
- 40 student were mobilize for Tata Strive business loan in which 2 were selected in final, fund disbursement still pending.
- Sing Baaja distributed to youth club having 18 member to save culture and arrange alternate livelihood opportunities.
- Chhau Dance material distributed to the Bara Gamharia Kala Mandir.



Key CSR Activities in TSL Gamharia



Sports

- Training in Archery feeder centre of TSF is continuing. M/S Sarna Umul Pinderabera, a women entrepreneur group created for Nutrition supply to 25 trainees.
- Strength of the feeder centre increased from 24 to 59 till March '25.
- Panchayat level Girls Football tournament organized at Saldih village, 8 team participated with 112 girls of different villages of Gamharia , Team of Pinderabera won the trophy beating Women's Power Srirampur.
- U-16 football tournament for boys organized in Nimdih of Bara Gamharia in which 10 team participated. In final Tetuldanga team won beating the Nimdih team..



Key CSR Activities in TSL Gamharia



Infrastructure development

- A youth club (30*30 Feet) construction by Tata Steel Foundation in Jhurkuli village.
- 20 Solar Street light installed in different tola of Chhota gamharia panchayat. It reduce dependence on electricity and provide safety during nighttime to people moving for their work.
- Repairing of Chhota gamharia community centre completed.
- Repairing of panchayat bhavan of dugdha panchayat completed.



**Compliance status report for the conditions prescribed in the
Corporate Responsibility for Environmental Protection (CREP) of TSG**

SN.	Condition	Compliance status/Action taken
1	Coke Oven Plant: To meet the parameters PLD (% leaking doors), PLL (% leaking lids), PLO (% leaking off take) of the notified standards under EPA. To rebuild at least 40% of the coke oven batteries* in next 10 years by December 2012.	Our Coke Oven Plant is non-recovery type coke oven and this requirement is not applicable.
2	Steel Melting Shop: Steel Melting Shop Fugitive Emission Status To reduce 30% by March 2004 and 100% by March 2008 (including installation of secondary de-dusting facilities).	Dedicated secondary Fume Extractive System are installed in EAF & LRF and fugitive emissions are significantly reduced. To measure the stack emission dedicated online dust Monitors are installed in the respective stacks and it's data uploading to JSPCB & CPCB Server on real time basis.
3	Blast Furnace - Direct inject of reducing agents in blast furnace	Pulverized Coal injection (PCI) system installed and commissioned along with bag filter as an air pollution control measures (bag filter with stack) to reduce fugitive emission during direct injection.
4	<p>Solid Waste / Hazardous Waste Management: Utilization of Steel Melting Shop (SMS) / Blast Furnace (BF) slag as per the following.</p> <ul style="list-style-type: none"> • By 2004 – 70% • By 2006 – 80% and • By 2007 – 100% <p>Hazardous Waste: - Charge of tar sludge / ETP sludge to coke oven by June 2003. - Inventorization of Hazardous waste as per Hazardous waste (M & H) Rules, 1989 as amended in 2000 and implementation of the rules by December 2003. (Tar sludge, acid sludge, waste lubricating oil and type fuel fall in the category of HZ).</p>	<p>Solid waste generated within the plant are segregated and most of the waste are recycled back in process.</p> <ul style="list-style-type: none"> (i) Rolling mill scrap is partially recycled as steel scrap in SMS and partially sold as scrap to outside vendor. (ii) Mill scale is used in sinter making process at Sinter Plant. (iii) FES Dust from SMS is being used in sinter plant. (iv) Flue Dust from blast furnace, Bag Filter Dust and wet GCP dust is also used in Sinter plant. (v) 100% Blast furnace slag is sold to open market. (Used by major cement industry). (vi) Metal is recovered from slag of arc furnace and recycled. (vii) Used Oil / Waste Oil / Spent oil is collected and stored in designated place and sold to authorized recycler.

**Compliance status report for the conditions prescribed in the
Corporate Responsibility for Environmental Protection (CREP) of TSG**

		Hazardous Waste: Our coke oven plant is non-recovery type and hence Tar sludge & ETP sludge is not applicable. The waste oil and other hazardous wastes generated is being disposed to authorized vendors as per the Hazardous Waste Management Rule 2016.
5	Water Conservation / Water Pollution - To reduce specific water consumption to 5 m ³ / t for long products and 8 m ³ / t for flat products by December 2005.	We maintained Zero Effluent Discharge. There are only evaporation losses. We are presently manufacturing only long products and our specific water consumption is well within the prescribed limit
6	Installation of continuous stack monitoring	Stack monitoring facilities are provided at all major stacks. 7 online gas analysers and 23 online dust monitors are installed covering all major stacks for monitoring of emission from the stacks as per CTO condition and the real time data of PM, SO ₂ & NO _x are transmitted to JSPCB / CPCB servers. Apart from the above, manual monitoring is being conducted by a NABL accredited external laboratory on monthly basis. The monitoring results are well within the permissible limits.
7	To operate the existing pollution control equipment efficiently and to keep proper record of run hours, failure time and efficiency with immediate effect. Compliance report in this regard be submitted to CPCB / SPCB every three months.	The pollution control equipments are being operated efficiently and proper records are maintained for running hours, failure time and efficiency. Any failure leads to APC is resulted exceedance alarm from CPCB server and justification along with corrective action reports are being submitted to RTDMS Portal.
8	To implement the recommendations of Life Cycle Assessment (LCA) study sponsored by MoEF by December 2003.	Being Complied

**Compliance status report for the conditions prescribed in the
Corporate Responsibility for Environmental Protection (CREP) of TSG**

9	<p>The industry will initiate the steps to adopt the following clean technologies measures to improve the performance of industry towards production, energy and environment.</p> <ul style="list-style-type: none"> • Energy recovery of top Blast Furnace (BF) gas. • Use of Tar- free runner linings. • De- dusting of Cast house at tap holes, runners, skimmers ladle and charging points. • Suppression of fugitive emissions using nitrogen gas or other inert gas • To study the possibility of slag and fly ash transportation back to the abandoned mines, to the abandoned mines, to fill up the cavities through empty railway wagons while they return back to the mines and its implementation. • Processing of the waste containing flux & ferrous wastes through waste recycling plant. • To implement rainwater harvesting • Reduction Green House Gases by: <ol style="list-style-type: none"> 1. Reduction in power consumption 2. Use of by –products gases for power generation 3. Promotion of Energy Optimisation technology including energy/ audit • To set targets for Resource Conservation such as Raw material, energy and water consumption to match International Standards. • Up-gradation in the monitoring and analysis facilities for air and water pollution. Also, to impart elaborate training to the manpower so that realistic data is obtained in the environmental monitoring laboratories. 	<ul style="list-style-type: none"> • Our BF gas pressure (plant capacity is 0.65 MTPA only) is not adequate to install TRT. • Our coke oven plant is non-recovery type and hence not applicable. • The de-dusting system commissioned at MBF-I & II cast house covering tap holes, runners, skimmers ladles and charging points. • Water sprinkling system, Dry & Wet fog systems and the compressed air are used for suppression of fugitive emissions at RMHs area. • Since we are purchasing raw materials from outside sources, it is not applicable. • The waste containing flux & ferrous waste is utilized to the maximum extent possible in the Pellet & Sinter plant. 100 % of waste containing flux and ferrous is utilized in the pellet & Sinter plant. • Rainwater harvesting structures are created within the premises to harvest rainwater. Open reservoirs within the plant also act as sink for rainwater during rainy season the water of which is used in the plant. • Various initiatives and measures are being taken to reduce the GHG emissions and present level of GHG emission is 4.44 tCO₂e/tcs. Major focus are being given to maximise the waste heat utilisation, Reduction of Coal / Coke rate in BF & DRI Process, Maximum utilization of Char, resource conservation. To reduce the power consumption VFDs are being installed wherever possible. LED lights are installed to replace the sodium vapor lamps and many Kaizens are implemented to conserve power. By product BF gas is being used as fuel in Power Plant, Mills, Sinter Production Process.
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**Compliance status report for the conditions prescribed in the
Corporate Responsibility for Environmental Protection (CREP) of TSG**

	<ul style="list-style-type: none">• To Improve overall housekeeping.	<ul style="list-style-type: none">• A separate Environment cell is already available and need based training is being imparted to the monitoring personnels as and when required.• Mechanized housekeeping is introduced to done within the plant. Fixed and mobile sprinklers are deployed at required locations for suppression of fugitive dust.
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**OFFICE OF THE CHIEF CONSERVATOR OF FORESTS-CUM-CHIEF
WILD LIFE WARDEN, JHARKHAND, RANCHI**

Letter no.- 1221

Dated- 26/7/04

From,

Chief Conservator of Forests-cum-
Chief Wild Life Warden,
Jharkhand, Ranchi

To,

M/s Usha Martin Limited,
(Usha Alloys & Steels Divn.)
Gamharia, Jamshedpur

**Sub: Aerial Distance between Usha Martin Factory at Gamharia and
specified points of Dalma Wildlife Sanctuary boundary.**

Ref: Companies letter no. Nil dated-28.04.2004.

Sir,

In response to your letter under reference, a report was sought from the Divisional Forest Officer, Wild Life Division, Ranchi and Conservator of Forests, Wild Life Circle, Ranchi. On the basis of their reports it is stated that the distances between the three points on the boundary of the Dalma Wildlife Sanctuary and the location of the factory at Gamaharia are as under:


- | | | | | |
|----|------------|---|--|-----------------|
| 1) | Dalgaon | - | the north west corner of the sanctuary | - 15.75 Km. |
| 2) | Machabera | - | the south east corner of the sanctuary | - 33.75 Km. and |
| 3) | Dimna Jhor | - | the mid point of the sanctuary | - 15.50 Km. |

Since the content of the letter from the MOEF is not clear to us, no further comments are being made.

Yours sincerely,

[Signature]


Chief Conservator of Forests-cum-
Chief Wild Life Warden,
Jharkhand, Ranchi






Half Yearly EC Compliance Report of Straight Bar & Wire Mill Division-1 (Apr'24 to Sept'24)

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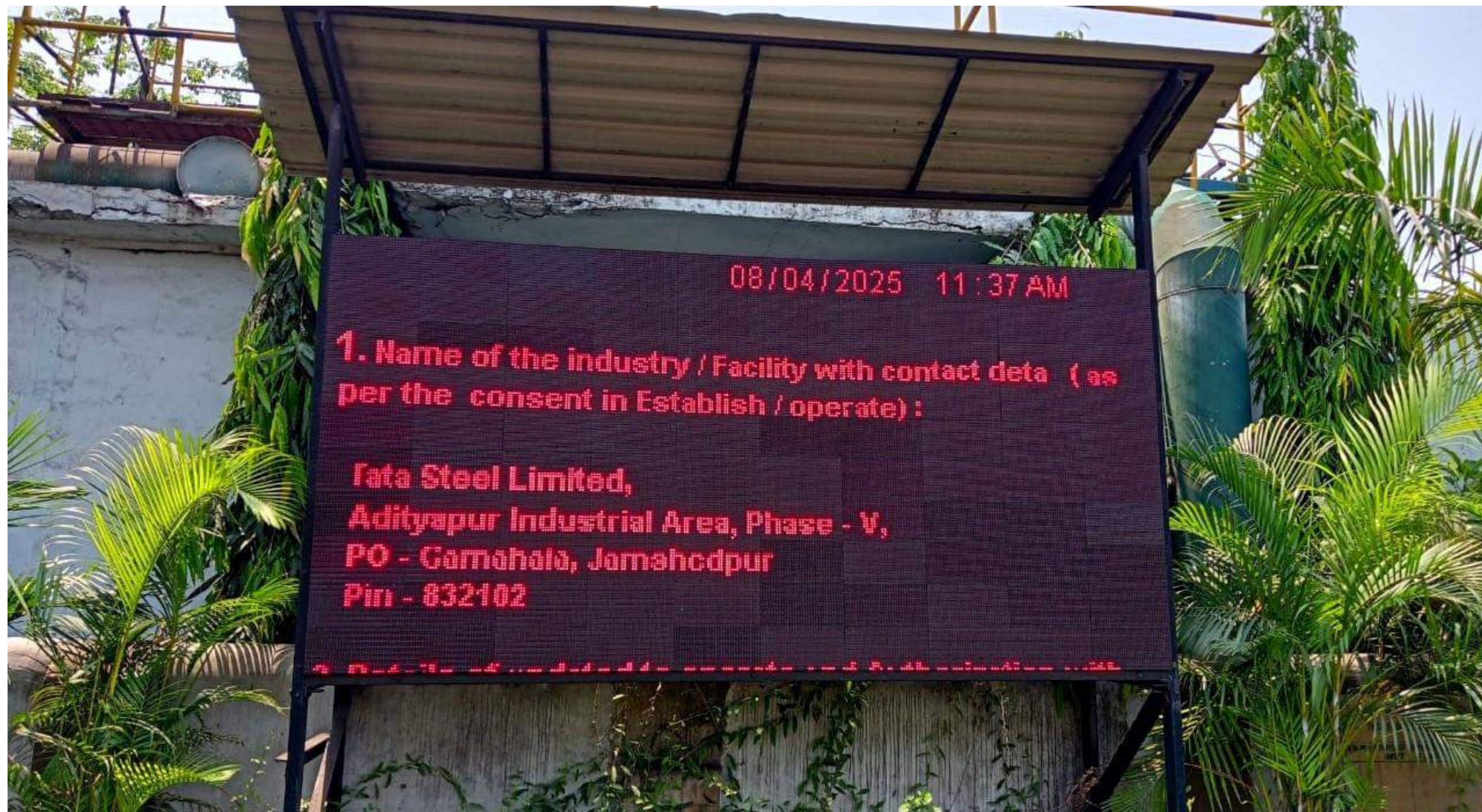
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Half Yearly EC Compliance Report of Tata Steel Limited, Gamharia (Apr'24 to Sept'24) Gamharia 04 December 2024	
Monthly Report on Ash Generation and Utilization - Nov'24 Gamharia 04 December 2024	
Monthly Report on Ash Generation and Utilization - Oct'24 Gamharia November 4, 2024	

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Your (Half Yearly Compliance Report) has been Submitted with following details	
Proposal No	IA/JH/IND/6114/2007
Compliance ID	111935428
Compliance Number(For Tracking)	EC/M/COMPLIANCE/111935428/2024
Reporting Year	2024
Reporting Period	01 Dec(01 Apr - 30 Sep)
Submission Date	28-11-2024
RO/SRO Name	ARTATRANA MISHRA
RO/SRO Email	jhk109@ifs.nic.in
State	JHARKHAND
RO/SRO Office Address	Integrated Regional Offices, Ranchi
Note:- SMS and E-Mail has been sent to ARTATRANA MISHRA, JHARKHAND with Notification to Project Proponent.	

Your (**Half Yearly Compliance Report**) has been **Submitted** with following details

Proposal No	IA/JH/IND/132216/2019
Compliance ID	112029591
Compliance Number(For Tracking)	EC/M/COMPLIANCE/112029591/2024
Reporting Year	2024
Reporting Period	01 Dec(01 Apr - 30 Sep)
Submission Date	28-11-2024
RO/SRO Name	ARTATRANA MISHRA
RO/SRO Email	jhk109@ifs.nic.in
State	JHARKHAND
RO/SRO Office Address	Integrated Regional Offices, Ranchi
Note:- SMS and E-Mail has been sent to ARTATRANA MISHRA, JHARKHAND with Notification to Project Proponent.	

Environment Audit Statement

FORM – V

(See rule 14 of The Environment Protection Act, 1986)

Environmental Audit Report for the financial year ending the 31st March 2024.

PART – A

General Information

1.	Name & Address of the owner/occupier of the industry, operation or process	TV Narendran CEO & MD Tata Steel Limited, Gamharia (Main Plant-1 & Main Plant-2) Adityapur Industrial Area, Dist: Saraikela-Kharsawan, Jharkhand- 831001
2.	Industry Category Primary (STC Code), Secondary (STC Code)	Red
3.	Production capacity-Units	Installed capacity- Integrated Steel Plant- 1.2 MTPA
4.	Year of establishment	1974 and 2004
5.	Date of last statement	18.09.2023

PART – B

Water & Raw material Consumption

B-1 : Total Water Consumption (m³/d)

Category	Total Water Consumption (m ³ /d) During the current financial year
Process (m ³ /d)	444
Cooling (m ³ /d)	14875
Domestic (m ³ /d)	296

B-2 : Water Consumption per unit of the product (m³/MT)

Name of the Products	Process Water Consumption per unit of product (m ³ /MT)	
	During the previous financial year	During the current financial year
1. Crude Steel	1.123	1.193
2. Hot Metal	0.741	0.697
3. Wire Rod & RCS	0.743	0.852
4. DRI	0.884	0.951
5. Power	4.90 KL/MWH	4.76 KL/MWH
6. Sinter	0.104	0.106
7. Pellet	Nil. (No fresh water. Only treated water from ETP is being used)	Majorly treated water from ETP and partially (0.75) fresh water is being used
8. Coke	Nil. (No fresh water. Only treated water from ETP is being used)	Nil. (No fresh water. Only treated water from ETP is being used)

B-3 : Raw Material Consumption

Name of Raw materials	Name of	Raw material Consumption per unit of
-----------------------	---------	--------------------------------------

	Products	product (MT/MT)	
		During the previous financial year	During the current financial year
1. MBF	Hot Metal		
Iron Ore (Lump)		0.607	0.521
Sinter		1.000	0.929
Coke (Net and Nut coke)		0.503	0.476
PCI Coal		0.114	0.116
2. SMS	Crude steel		
Hot metal /Pig Iron		0.827	0.786
Sponge Iron		0.323	0.356
3.WRM	Wire Rod		
Billet		1.018	1.027
4. Blooming Mill	Bloom		
Billet/Bloom		1.041	1.026
5. DRI	DRI		
Iron Ore		1.755	1.693
Coal		0.943	0.886
Pellet		Nil	Nil
6. Sinter	Sinter		
Iron Ore Fines		0.873	0.885
Coke Fines		0.068	0.048
Coal		0.022	0.006
7.Captive Power Plant	Electricity		
Coal		1.084	1.071
8. Pellet Plant	Pellet		
Iron Ore		1.150	1.121
Coal		0.070	0.050
9. Coke Oven Plant	Coke		
Coking Coal		1.502	1.454
PCI		Nil	0.002

PART – C				
Pollution discharged to Environment per unit of Output (Parameters as specified in the Consent issued)				
C-1 : Water Pollution				
Pollutant Parameter	Prescribed Standard	Quantity discharge (kg/d)	Concentration discharge (mg/l)	Percentage of variation from prescribed standards with reasons
-	-	Nil	Nil	-
It is to be noted that zero discharge of effluent is maintained and hence not applicable. We have achieved zero discharge by installing ETP for proper treatment of effluent and complete recycling back to process for reuse.				
C-2 : Air Pollution				
Pollutant Parameter	Stack No. / Name	Quantity discharge (kg/day)	Concentration discharge (mg/Nm ³)	Percentage of variation from prescribed standards with reasons
Stack emission	WHRB - 1 (DRI-1) & 40 TPH	107.5	34.16	None
	WHRB - 2 & 3 (DRI-2&3)	153.7	35.61	

(Particulate matter)	WHRB - 4 & 5 (DRI-4&5)	119.6	33.37
	25 MW CPP	337.9	63.62
	30 MW CPP	125.6	21.37
	Coke Oven WHRB - 1	65.3	17.00
	Coke Oven WHRB - 2	62.4	17.44
	MBF - 1 stove	10.8	8.74
	MBF - 1 Cast House	34.3	22.17
	MBF - 1 Stock House	12.9	18.58
	MBF - 1 Ground Hopper	12.4	18.09
	MBF - 2 stove	35.3	21.11
	MBF - 2 Cast House	102.9	22.44
	MBF - 2 Stock House	17.0	19.46
	MBF - 2 PCI	67.6	21.32
	MBF - 2 RMHS	14.7	19.36
	SMS - 1 & 2	197.6	21.03
	SMS - 3	261.4	23.67
	Pellet Plant	297.1	22.65
	Blooming Mill	33.8	26.55
	Wire Rod Mill	20.7	26.74
	Sinter Process	588.1	49.14
	Sinter De-dusting	197.2	29.38

PART – D		
Hazardous Wastes		
(As specified under The Hazardous Waste Management, Handling & Transboundary Movement Rules, 2016)		
D-1 : Generation from Process		
Name	Total Quantity (MT/KL)	
	During the previous financial year	During the current financial year
1. Used Oil / Spent Oil	75.63 KL	70.16 KL
2. Waste or Residue Containing Oil (cotton Waste)	14.24 MT	13.93 MT
3. Discarded Empty barrels/ containers/ liners contaminated with hazardous chemicals / wastes	1455 Nos	480 Nos
D-2 : Generation from Pollution Control Facilities		
Name	Total Quantity	
	During the previous financial year	During the current financial year
-	Nil	Nil

PART – E		
Solid Wastes		
E-1 : Generation from Process		
Name	Total Quantity (MT)	
	During the previous financial year	During the current financial year
1. Granulated Slag (Blast Furnace)	263880	257089
2. Mill Scale	7318	6885

3. Steel Slag (EAF Slag)	174128	207737
4. Char	93568	81797
5. DSC Dust	16338	14014

E-2 : Generation from Pollution Control Facilities

Name	Total Quantity (MT)	
	During the previous financial year	During the current financial year
1. Dust from gas cleaning plant of MBF	8320	6246
2. Dust from Fumes Extraction system of SMS	10807	12029
3. DE Dust from DRI plants	20050	23210
4. Fly Ash	331180	294739
5. PG Ash from Pellet Plant	1348	2899
6. ESP Dust of pellet Plant	26792	10387

E-3: Quantity Recycled / Reutilized /sold

Name	Total Quantity (MT)	
	During the previous financial year	During the current financial year
1. Mill Scale	7318	6885
2. Metallic from SMS slag	37605	34035

Reutilized and reuse, sold and disposal: Dust from the FES of SMS and GCP of MBF is partially utilized in sinter making at the sinter plant. Mill scale is also partially utilized in the sinter plant. Metallics from SMS slag are recycled within the SMS. Bag filter dust from the pellet plant and ESP dust from the pellet plant are utilized in the process. Coke breeze is used in sinter making. Fly ash is primarily used in brick making and cement manufacturing processes. Char is sold to an outside party and partly used in the power plant.

PART – F

Please specify the characterizations (in terms of composition in quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both this categories of wastes

F-1 : Hazardous Wastes

Description	Composition	Method of disposal
Used Oil / Waste Oil	Polycyclic aromatic hydrocarbon	Disposal to Authorized Recycler of JSPCB

F-2 : Solid Wastes

Description	Composition	Method of disposal
Granulated Slag of MBF	CaO, SiO ₂ , Al ₂ O ₃ , MgO	Sold to outside vendor
Mill Scale of Mills	Mostly Fe (t)	In-house utilization in sinter making
EAF slag of SMS	FeO, Fe, Cao, SiO ₂	Metallic portion charged in EAF, Portion of slag used in sinter
Char of DRI	Ash (SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ , CaO, MgO), Volatile Matter, Fixed Carbon	Sold outside, used in captive power plant
DSC Dust	Fixed Carbon, Fe	Sold to the outside vendor
Flue dust of MBF	FeO, Fe, Cao, SiO ₂	In-house utilization in sinter making
FES Dust of SMS	Fe, SiO ₂ , Al ₂ O ₃ , CaO, MgO	In-house utilization in sinter making
DE Dust of DRI	CaO, SiO ₂	Sold to the outside vendor
Fly Ash	SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ , CaO, MgO	Used in Brick making and cement manufacturing process
PG Ash of Pellet Plant	Fixed Carbon	Filling of lowland area
ESP dust of pellet plant	Fe, SiO ₂ , Al ₂ O ₃	Inhouse utilization in Pellet making

PART – G

Impact of pollution control measure taken on conservation of natural resources and cost of production

1. Pollution control equipment like Bag filters, gas cleaning plants at MBF have been installed to control emissions. Flue gas dusts are recycled at sinter plant for sinter making.
2. Separate Fume extraction system (FES) are provided at SMS 1,2 and 3. Collected FES dusts are recycled at sinter plant.
3. Water flow meters have been installed to monitor water consumption.
4. ESP is provided at waste heat recovery boiler of DRI for control of particulate emission.
5. ESP is provided at coal based CPP for control of particulate emission.
6. ESP and bag filters are provided at sinter plant and pellet plant to collect dusts which are recycled in the process.
7. Treatment of Industrial wastewater in the effluent treatment plant (ETP) and recycling the treated effluent back into process.
8. Installation of online CAAQMS, CEMS and EQMS for monitoring of ambient air, stack and treated effluent on real time basis.

PART – H

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

Several projects were undertaken in the last 3 years under the operating / capex budget of departments. The major activities include - Refurbishment of Air pollution control systems, new sheeting for fugitive dust containment, Construction of RCC roads, concreting of Raw material yards, strengthening of plant housekeeping through industrial vacuum cleaner etc. The major work undertaken for fugitive emission control include:

1. Installation of 6 mist beam in Raw material yard (RMH) of blast furnace
2. Construction of 4 Nos Coal Storage Shed at MBF, DRI, CPP and Coke Oven
3. Installation of 4 mist beam at MRP (Metal Recovery Plant)
4. 65 rain guns were installed in material handling area to control dust during its handling.
5. New drag chain conveyors installed at flux crusher, screening, and ESP hopper of Sinter Plant to handle fine dust through close circuit for eliminating fugitive emission.
6. Fixing of "Telescopic Chutes" (also referred as bulk unloading spout) in product separation building of Sponge Iron plant.
7. Dry Fog Dust Suppression (DFDS) system installed at all dust generation points in coal circuit of Power plants and ground hoppers of sinter plant.
8. Over 100,000 M2 of fresh sheeting across the plant of process buildings for dust control.
9. 6.30 Km of new RCC roads constructed to reduce dust caused by vehicular movement.
10. Concreting of material storage yards to the extent of over 12000 M2.
11. Introduction of mechanized housekeeping by deploying IVCs, automated road sweepers etc.
12. Massive tree plantation.

PART – I

Any other particulars undertaken for improving the quality of environment

Celebration of Tata Sustainable month and different campaign for creating awareness among employees.



V. Karthikeyan

Head - Environment & sustainability
For Tata Steel Limited, Gamharia

अमरोदपुर, रविवार
1 जुलाई, 2012

07

पहुंचे यूएसए प्रतिनिधि हुए अमेरिकी



धरोहर को भी देखा



अमेरिकी प्रतिनिधियों की वार्गीष्णों द्वारा धार से बनाये गये मुकुट को देखकर आश्चर्य खूबी रह गयी। इस दौरान प्रतिनिधियों ने संतानियों के जलस्थान (पूजा स्थल) समेत अन्य सांस्कृतिक धरोहरों को भी देखा।

अमेरिकी सरकार द्वारा जो-जो सुविधा प्राप्त हो सकती है, उसे अतिशीघ्र प्राप्त करने का प्रयास किया जायेगा।

याद किये गये सिद्धो-कान्हू

में हल दिवस कान्हू याद किये द्वारा आयोजित ई सोरेन उपस्थित सच्चे नायक थे। रामदास हैंब्रम, मोरुडीह चौक सरा के नेतृत्व में संतानी अकिस्टरा ए, जिन्हें सफल आदि की अहम



भूमिका रही। करनडीह आदिवासी भवन में केंद्रीय प्रधान महासचिव दिल बहादुर ने कहा कि भ्रष्टाचार खत्म करने के लिए आलस व जेपीपी 15 नवंबर से आंदोलन शुरू करेंगी। इसमें कुतिवास मंडल, सुनील, राजेश, राजेश घोषाल आदि उपस्थित थे। झाबिमा द्वारा परसुडीह मंडल अध्यक्ष रुद्र मुंडा के नेतृत्व में मोटरसाइकिल रैली निकाली गयी।

छोटा कादल वाटरशेड समिति गठित

गमहरिया ■ सामाजिक संस्था केजीवीके व आइडब्ल्यूएमपी गोविंदपुर प्रोजेक्ट द्वारा छोटा कादल व रुतडीह में वाटरशेड समिति गठित की गयी। इसमें गोवर्धन मंडल अध्यक्ष, लक्ष्मी धर महतो सचिव व लखन दुद्द कोषाध्यक्ष मनोनीत



किया गया। वहीं रुतडीह गांव में माझीयम सरदार अध्यक्ष, जगबंधु महतो सचिव व कालीचरण कोषाध्यक्ष बनाया गया। समिति चयन में आरके त्रिपाठी, राजीव कुमार, गेंदा दुद्द, रतन कुमार, मोनिका व विजय पाल आदि उपस्थित थे।

डॉक्टर्स डे चिकित्सक सम्मानित होंगे आज

आदित्यपुर ■ डॉक्टर्स डे पर रविवार को आइएमए जमशेदपुर की ओर से एमजीएम अस्पताल में रक्तदान शिविर लगाया जायेगा। शाम में डॉ फतेह बहादुर सिंह, डॉ केके अग्रर, डॉ उमेश लुकनुके को सम्मानित किया जायेगा। इस अवसर पर कोल्हान आयुक्त अविनाश कुमार होंगे। इसकी जानकारी सचिव डॉ मृत्युंजय सिंह ने दी।

उषा मार्टिन लिमिटेड

(उषा एलॉयज एव स्टील्स डिवीजन)

पाँचवा चरण, आदित्यपुर औद्योगिक क्षेत्र, गमहरिया, जिला: सरायकेला-खारसावाँ

आम सूचना

सर्वसाधारण को सूचित किया जाता है कि मैसर्स उषा मार्टिन लिमिटेड (उषा एलॉयज एवं स्टील्स डिवीजन) आदित्यपुर औद्योगिक क्षेत्र, पाँचवा चरण गाँव उषा एलॉयज गमहरिया, जिला: सरायकेला खारसावाँ के लौह एवं स्टील इकाई के विस्तार एवं कोक ओवेन प्लांट (0.5 MTPA), आयरन ओर वाशिंग प्लांट (2.7 MTPA) एवं गैलेटाइजेशन प्लांट (1.2 MTPA) को स्थापित करने हेतु, पर्यावरण एवं वन मंत्रालय भारत सरकार नई दिल्ली के पत्रांक संख्या-F.No.J-11011/611/2010-IA II(I), दिनांक 25.10.2011 द्वारा पर्यावरणीय स्वीकृति निर्गत किया गया है, जिन्हें भी पर्यावरणीय स्वीकृति संबंधित जानकारी प्राप्त करनी हो इसकी प्रतिलिपि झारखण्ड राज्य प्रदूषण नियंत्रण बोर्ड के क्षेत्रीय कार्यालय एवं पर्यावरण एवं वन मंत्रालय, भारत सरकार के वेबसाइट <http://envfor.mca.in> पर उपलब्ध है।

डॉ० विजय शर्मा
(संयुक्त कार्यकारी निदेशक)

एफ इण्डिया लिमिटेड

01 झारखण्ड, इण्डिया

526 दिनांक 30/06/2012

निवेदन आमंत्रित करता है।

कार्य का नाम

ऑफ मक/डेबरी/स्लैग/स्कल

ग्रीन एसएमएस - 2

ऑफ मक/डेबरी/स्लैग/स्कल/स्टील



युनाइटेड बैंक ऑफ इंडिया

11, हेमता नग्न सारणी, कोलकाता-700 001, टेलीफोन-233 1396 (सी), 233 1321 (ओ)
फैक्स 0651 233 1396, झारखंड क्षेत्र, सलूजा बिल्डिंग, पीपी कंपाउंड, रांची-834001

विक्री सूचना

जबकि युनाइटेड बैंक ऑफ इंडिया के प्राधिकृत अधिकारी ने निम्नलिखित इंटरेस्ट (इंक्वेस्टिग) नियम 2002 के साथ पंजीत निम्नलिखित इंटरेस्ट (इंक्वेस्टिग) नियम 2002 के अंतर्गत शक्तियों का प्रयोग करते हुए तथा नीचे उल्लेखित जानकारी/जमानतदारों के सुरक्षित आधिकारों के कम्पे के अनुसार अध्यावस्थापनी के द्वारा युनाइटेड बैंक ऑफ इंडिया के सुरक्षित बचत की कसौटी के लिए, नीचे दिये गये विवरण के अनुसार संपत्तियों की खरीद के लिए प्रस्ताव आमंत्रित किये जाते हैं -

संपत्तियों का विवरण

क्र.सं.	खाता का नाम / ऋणकर्ता	संपत्तियों का विवरण	सुरक्षित राशि (₹)	पेसगी राशि (₹)	अन्य विवरण
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JHARKHAND STATE POLLUTION CONTROL BOARD

T.A. DIVISION BUILDING (GROUND FLOOR), H.E.C., OHURWA, RANCHI-834004

Phone :- 0661-2400661 / 952 Fax :- 0661-240860 / 138 Website: www.jspcb.org

Memo No./Jsa Steel Ltd./ Gandharia, Jh... 943

Ranchi, Dated 27/03/2025

From: -

Rajeev Luchan Beksbi

Member Secretary

To,

Sri Sanjay Mohan Srivastava

Chief Resident Executive,

M/s TATA Steel limited,

At- Gandharia, Dist- Seraikela Kharsawan

Jamshedpur- 832 108

Subject: Issuance of Stabilization Certificate for Fly Ash Mound at Tata Steel Ltd., Gandharia

Reference:

1. Gazette notification for Fly Ash Management by MoEF&CC, New Delhi vide letter no S.O. 5481(E) dated 31.12.2021 and its subsequent amendment.
2. Your letter CRT/RAN/85/138 dated 19.09.2024 and Ref. TSG/EMD/Ash Mound/02/01 dated 21.02.2025
3. Inspection report submitted by the committee vide Ref. No. 66 dated 15.01.2025

Whereas, MoEF&CC, Govt. of India vide its gazette notification S.O. 5481(E) dated 31.12.2021 and its subsequent amendment, stipulated the option for stabilizing the "Legacy Ash" stock through plantation.

Whereas, in compliance to the said notification, Tata Steel Gandharia converted the unutilized stockpile of legacy ash by ecologically restoring and stabilizing the ash mound with biodegradable geotextile coir mats, good earth, and plantation.

Whereas, the site was inspected by the inspection committee constituted by the Board via Ref. B-134 dated 23.11.2024 and the committee submitted its report to the Board via Ref. No. 66 dated 15.01.2025.

Whereas, the Unit has submitted the necessary test reports for Ground Water, Surface Water, Ambient Air Quality, latest Leachability/ TCLP test, Compression, and Slope Stability tests, along with details of Environment Control and Mitigation Measures.

Based on the site inspection report and the test reports submitted by the unit, it is evident that the Fly Ash Mound has been stabilized in compliance with the MoEF&CC's notification dated 31.12.2021.

In light of the above, the **Fly Ash Mound Stabilization Certificate** is hereby issued to M/s Tata Steel Ltd., Gandharia, subject to the following conditions:

1. **Spillage Prevention:** The unit shall take all necessary precautions to avoid spillage of fly ash to nearby areas.
2. **Greenery Maintenance:** The unit shall maintain proper greenery on the Ash Mound in all seasons.
3. **Water Quality Monitoring:** Groundwater and surface water quality monitoring shall be carried out every six months in nearby areas/villages within a 5 km radius of the unit.
4. **Annual TCLP Test:** The unit shall conduct the TCLP test once every year.
5. **Garland Drain Maintenance:** The unit shall maintain a garland drain around the ash mound wherever feasible.
6. **De-silting Pond Maintenance:** The unit shall maintain a de-silting pond.
7. **Submission of Ambient Air Test Reports:** The unit shall submit ambient air test reports at minimum 05 location within 05 km radius of the plant boundary.

This certificate is issued based on the current compliance status and is subject to periodic review.

Any non-compliance with the above conditions may lead to the revocation of this certificate.


(Rejeev Pachan Bakshi)
Member Secretary

ENVIRONMENTAL POLICY

Tata Steel's environmental responsibilities are driven by our commitment to preserve the environment and are integral to the way we do business.

1. We are committed to deal proactively with Climate Change issue by efficient use of natural resources & energy; reducing and preventing pollution; promoting waste avoidance and recycling measures; and product stewardship.
 - We shall identify, assess and manage our environment impact.
 - We shall regularly monitor, review and report publicly our environmental performance.
 - We shall develop & rehabilitate abandoned sites through afforestation and landscaping and shall protect and preserve the biodiversity in the areas of our operations.
 - We shall enhance awareness, skill and competence of our employees and contractors so as to enable them to demonstrate their involvement, responsibility and accountability for sound environmental performance.
2. We are committed to continual improvement in our environmental performance.
 - We shall set objective-targets, develop, implement and maintain management standards and systems, and go beyond compliance of the relevant industry standards, legal and other requirements.
3. We will truly succeed when we sustain our environmental achievement and are valued by the communities in which we work.

Date : November 1, 2017



T V Narendran
CEO & Managing Director





JHARKHAND STATE POLLUTION CONTROL BOARD
T.A. DIVISION BUILDING (GROUND FLOOR), H.E.C., DHURWA, RANCHI -834004
Phone.:2400852, 2400851, Fax:0651- 2400850 www.jspcb.org

FORM 2

[See rule 6(2)]

**FORM FOR GRANT OR RENEWAL OF AUTHORIZATION BY STATE POLLUTION
CONTROL BOARD TO THE OCCUPIERS, RECYCLERS, REPROCESSORS, REUSERS, USER
AND OPERATORS OF DISPOSAL FACILITIES**

1. No. of authorization and date of issue: JSPCB/HO/RNC/HWM-18227614/2025/36 10/05/2025
2. Reference of application(No. and date): 18227614 07/01/2024
3. Tata Steel Limited, Gamharia, Main Plant-1 of T V Narendran is hereby granted an authorisation based on the enclosed signed inspection report for generation, collection, reception, storage, transport, reuse, recycling, recovery, pre-processing, co-processing, utilisation, treatment, disposal or any other use of hazardous or other wastes or both on the premises situated at Main Plant-1, Adityapur Industrial area (Phase-5), Gamharia, Dist - Saraikela-Kharsawan, Jharkhand

Details of Authorisation

Sl.No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorised mode of disposal or recycling or utilisation or co-processing, etc.	Quantity(ton/annum)
1	Schedule I (Wastes or residues containing oil(Cat 5.2))	Recovery and Reuse Authorized recyclers	35 KL/Annum
2	Schedule I (Discarded asbestos (Cat 15.2))	Recovery and Reuse Authorized recyclers	5 MT/Annum
3	Schedule I (Process wastes, residues and sludges (Discarded Paint) (Cat 21.1))	Recovery and Reuse Authorized recyclers	10 KI/annum
4	Schedule I (Spent solvents (Cat 21.2))	Recovery and Reuse Authorized recyclers	10 KI/annum
5	Schedule I ("Empty barrels/containers/liners contaminated with hazardous chemicals /wastes" (33.1))	Recovery and Reuse Authorized recyclers	25 MT/annum
6	Schedule I (Contaminated cotton rags or other cleaning materials(Cat 33.2))	Incineration-Captive	45 MT/Annum
7	Schedule I (Exhaust Air or Gas cleaning residue (Cat 35.1))	Recovery and Reuse Authorized recyclers	25000 MT/Annum
8	Schedule I (Chromium sludge from cooling water (Cat 35.5)	Common Landfill-TSDF	20 MT/ Annum
9	Schedule I (Spent ion exchange resin containing toxic metals (35.2))	Common Landfill-TSDF	2 MT/Annum
10	Schedule II (Used Glass Wool or insulation Material (Class C))	Common Landfill-TSDF	10 T/annum
11	Schedule II (Waste Chemicals(Class C)	Incineraton By authorized Agency	01 MT/annum
12	Schedule II (Insulated copper wire scrap or copper with pvc sheathing(S.NO. 7)	Incineraton By authorized Agency	10 MT/ Month
13	Schedule I (Used Spent oil (Cat 5.1))	Recovery and Reuse Authorized recyclers	70 KI /Annum

(1) The authorisation shall be valid for a period of Valid till 30.03.2025 years

(2) The authorisation is subject to the following general and specific conditions (Please specify any conditions that need to be imposed over and above general conditions, if any):

A General conditions of authorisation:

1. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.
3. The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.
4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.
5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.
6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on “Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty”
7. It is the duty of the authorised person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorisation.
11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
12. An application for the renewal of an authorisation shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

B Specific conditions:

- (1) That, the renewal of authorization shall be made as laid down in the rules.
- (2) That, the occupier shall submit annual return in form IV as per the time line mention in the HoWM Rules, 2016 with details of manifest.
- (3) That, the occupier shall ensure the disposal of Hazardous Waste within time line through authorized recycler/ actual users and shall ensure that the Hazardous Waste should be entered in the passbook of recycler/ actual users.
- (4) That, the occupier shall maintain record of Hazardous Waste generated, utilized and disposed as per form - 3 of the Hazardous and other waste (Management & Handling) Rules, 2016 and shall produce to concerned SPCB officers at the time of inspection.
- (5) That, the occupier shall complied all directions given by standard operating procedure.
- (6) That, the occupier shall install and maintain the display board as per the provisions of HoWM Rules, 2016 and shall submit the photographs to ensure the compliance of the order of Hon'ble Supreme Court passed in 2003.

Memo No:JSPCB/HO/RNC/HWM-
18227614/2025/36
Date: 10/05/2025

(Rajeev Lochan Bakshi)
Member Secretary

Copy To:

Chief Inspector of Factory, Ranchi / Director of Mines, Government of Jharkhand, Ranchi/ Director of Industry, Government of Jharkhand, Ranchi/ Secretary, Jharkhand State Electricity Board, Plant Plaza Road, P.O. Dhurwa, Dist- Ranchi /Dy Commissioner, SERAIKELA KHARSAWAN/ D.F.O., SERAIKELA KHARSAWAN/ District Mining Officer, SERAIKELA KHARSAWAN / The Regional Officer, Regional Office-Cum-Laboratory, JSPCB, Jamshedpur for information and necessary action. He is directed to submit the compliance status report of the same.

(Rajeev Lochan Bakshi)
Member Secretary



JHARKHAND STATE POLLUTION CONTROL BOARD
T.A. DIVISION BUILDING (GROUND FLOOR), H.E.C., DHURWA, RANCHI -834004
Phone.:2400852, 2400851, Fax:0651- 2400850 www.jspcb.org

FORM 2
[See rule 6(2)]

**FORM FOR GRANT OR RENEWAL OF AUTHORIZATION BY STATE POLLUTION
CONTROL BOARD TO THE OCCUPIERS, RECYCLERS, REPROCESSORS, REUSERS, USER
AND OPERATORS OF DISPOSAL FACILITIES**

1. No. of authorization and date of issue: JSPCB/HO/RNC/HWM-18229301/2025/35 10/05/2025
2. Reference of application(No. and date): 18229301 07/01/2024
3. Tata Steel Limited, Gamharia of T V Narendran is hereby granted an authorisation based on the enclosed signed inspection report for generation, collection, reception, storage, transport, reuse, recycling, recovery, pre-processing, co-processing, utilisation, treatment, disposal or any other use of hazardous or other wastes or both on the premises situated at Main Plant-2, Adityapur Industrial Area (Phase - 5), Gamharia, District: Seraikela- kharsawan, Jharkhand

Details of Authorisation

Sl.No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorised mode of disposal or recycling or utilisation or co-processing, etc.	Quantity(ton/annum)
1	Schedule I (Organic residues (Cat 1.4))	Recovery and Reuse Authorized recyclers	1000 KL/Annum
2	Schedule I (Used Spent oil (5.1))	Recovery and Reuse Authorized recyclers	50 KI/annum
3	Schedule I (Wastes or residues containing oil(Cat 5.2))	Recovery and Reuse Authorized recyclers	30 KI/annum
4	Schedule I (Tar storage tank residue (Cat 13.5))	Recovery and Reuse Authorized recyclers	50 KI/annum
5	Schedule I (Discarded asbestos (15.2))	Recovery and Reuse Authorized recyclers	10 MT/ Annum
6	Schedule I (Process wastes, residues and sludges (Discarded Paint) (Cat 21.1))	Recovery and Reuse Authorized recyclers	5 MT/Annum
7	Schedule I (Spent solvents (21.2))	Recovery and Reuse Authorized recyclers	05 T/annum
8	Schedule I ("Empty barrels/containers/liners contaminated with hazardous chemicals /wastes" (Cat 33.1))	Recovery and Reuse Authorized recyclers	20 MT/ Annum
9	Schedule I (Contaminated cotton rags or other cleaning materials (Cat 33.2))	Incineration-Captive	15 MT/Annum
10	Schedule I (Spent ion exchange resin containing toxic metals (Cat 35.2))	Common Landfill-TSDF	10 MT/ Annum
11	Schedule I (Chemical sludge from waste water treatment (Cat 35.3))	Recovery and Reuse Authorized recyclers	300 MT/Annum
12	Schedule I (Chromium sludge from cooling water(35.5))	Common Landfill-TSDF	20 MT/ Annum
13	Schedule II (Used Glass Wool or insulation Material (Class C))	Common Landfill-TSDF	50 MT/Annum
14	Schedule II (Waste Chemicals (Class C))	Incineraton By authorized Agency	50 MT/Annum
15	Schedule IV (Insulated copper wire scrap or copper with pvc sheathing(S No. 7))	Incineraton By authorized Agency	10 MT/Annum

(1) The authorisation shall be valid for a period of 5 years (till 31.07.2025) years

(2) The authorisation is subject to the following general and specific conditions (Please specify any conditions that need to be imposed over and above general conditions, if any):

A General conditions of authorisation:

1. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.
3. The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.
4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.
5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.
6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on “Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty”
7. It is the duty of the authorised person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorisation.
11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
12. An application for the renewal of an authorisation shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

B Specific conditions:

- (1) That, the occupier shall comply the provisions of the Environment Protection Act and Rules.
- (2) That, the authorization shall be produced at the time of inspection.
- (3) That, the occupier authorized shall not rent/sell or otherwise transport the H/W without obtaining prior permission of the Board.
- (4) That, any un-authorization change shall constitute a breach the authorization.
- (5) That, it is the duty of authorized person to take prior permission of the Board to close down the facility.
- (6) That, the renewal of authorization shall be made as laid down in the rules.
- (7) That, any other condition for compliance as per the guidelines issued by the MoEF for CPCB.
- (8) That, the occupier shall submit annual return for the financial year before 30th June, every year.
- (9) That, the occupier shall comply all the conditions.
- (10) That, the occupier shall submit quarterly and annual information on hazardous wastes consumed its source, products generated or resources conserved (specifying the details like type and quantity of resources conserved) to the concerned SPCB.
- (11) That, the occupier shall comply all directions given in standard operating procedure.
- (12) The previous auth. issued vide dated 30.3.2019 is revised up to this extent.

Memo No:JSPCB/HO/RNC/HWM-
18229301/2025/35
Date: 10/05/2025

(Rajeev Lochan Bakshi)
Member Secretary

Copy To:

Dy Commissioner, Jamshedpur / The Regional Officer, Regional Office-Cum-Laboratory, JSPCB, Jamshedpur for information and necessary action. He is directed to submit the compliance status report of the same.

(Rajeev Lochan Bakshi)
Member Secretary

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