

# BALMUKUND

## SPONGE & IRON PVT. LTD. ( M E G A D V N . )

18, R. N. Mukherjee Road, (1st Fl.), Kolkata - 700 001  
Ph.: 2248 6304 / 06, 4032 5000, Fax : 2213 7399  
E-mail : balmukundspunge@gmail.com  
Website : www.balmukund.com  
CIN : U27310WB1999PTC266185  
(An ISO 9001 : 2008 & ISO 14001 : 2004 Company)

28<sup>th</sup> November, 2025

The Member Secretary,  
State Level Environment Impact Assessment Authority, Jharkhand,  
Nursery Complex, Near Dhurwa Bus Stand,  
Dhurwa,  
Ranchi (Jharkhand)-834 004

Sub : Compliance Report to the EC vide Letter No. EC/SEIAA/2013-14/297/2014/1525  
dt.25.08.2015 & No. EC/SEIAA/2021-22/2167/2021/67 dated 15.07.2021 granted  
by SEIAA, Jharkhand, Ranchi.  
After installation/modernization Installed Capacity of the plant : CCM-274068  
TPA; Rolling Mill -246926 TPA and Induction Slag Grinders -47000 TPA segregating  
3760 TPA of crushed Iron Metal & Iron Ore Beneficiation -94000 TPA(Throughput)

Sir,

We have been granted Environmental Clearance by SEIAA, Jharkhand, Ranchi vide their Letter No. EC/SEIAA/2021-22/2167/2021/67 dated 15.07.2021 & Letter No. EC/SEIAA/2013-14/297/2014/1525 dt.25.08.2015. After installation/modernization, Installed Capacity of the plant is CCM-274068 TPA; Rolling Mill -246926 TPA and Induction Slag Grinders -47000 TPA segregating 3760 TPA of crushed Iron Metal and Iron Ore Beneficiation Plant of 94000 TPA (Throughput). We append below our compliance report for 01<sup>st</sup> six months of year 2025-26 (period from 01.04.2025 to 30.09.2025) :

### I. Specific Conditions :

Sl. No.	Conditions	Compliance
i.	<p>The Environmental Clearance is valid subject to the following condition, that this project has:</p> <ul style="list-style-type: none"><li>a. Obtained all legal rights to operate at concerned place.</li><li>b. Complied with all existing concerned laws of the land, and</li><li>c. Complied with the decision of SEIAA on the issue of Environmental Clearance till date.</li></ul>	<p>a. The required piece of land has been obtained with all legal rights to operate including NOC No. B-4109 dt.16.10.2015 &amp; CTE No. JSPCB/HO/RNC/CTE-10840052/2021/209 dt.28.09.2021 and C.T.O. No. JSPCB/HO/RNC/CTO-22315086/2025/2059 dt.25.07.2025 valid till 30.06.2029 from JSPC Board.</p> <p>b. Complied.</p> <p>c. Complied.</p>
ii.	No mining activity shall be undertaken in the forest land or deemed forest without obtaining requisite prior forestry clearance.	Land used for establishment of above referred manufacturing facilities does not include any mining activity. The said land also is not a forest land or deemed forest and need no forestry clearance.

NOC KOLKATA RMS (700001) Counter Date: 28/11/2025  
SF-P EW420115578IN IVR:6987420115578  
29-11-2025 15:47:41,432 (Actual) (pm),  
To: THE ZONAL OFFICER, CPCB  
Madurildhu SO, WEST BENGAL - 700107  
From: BALMUKUND SPONGE AND IRON-700001  
(Base:30.00)

UBAGH, PATNA-800 001, PH.: (0612) 2322388/488

UR, GIRIDIH-815 302, PHONE: (06532) 250597  
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Sl. No.	Conditions	Compliance
iii.	This Environmental Clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT, MoEF & CC and any other Court of Law, if any, as may be applicable to this project.	We will comply the said outcome accordingly, if applicable to us.
iv.	Environmental clearance is subject to obtaining prior clearance from forestry and Wildlife angle including clearance from standing committee of NBWL, as may be applicable to this project (in case any fauna occurs/is found in the Project area or if the area involves forest land or Wildlife habitat i.e. core zone of elephant/tiger reserve etc. and or located within 10 Km of protected area).	The Environmental Clearance (EC) has been granted on submission of proof that the land used for establishment of above referred manufacturing facilities is not a part of Reserve Forest/Protected Forest/Deemed Forest or wildlife habitat. Clearance from standing committee of NBWL is not required in our case.
v.	The project proponent may apply simultaneously for forest and NBWL clearance in order to complete the formalities without undue delay which will process on their respective merits, no rights will vest in or accrue to them unless all clearance are obtained	The land used for establishment of above referred projects is not a part of Reserve Forest/Protected Forest/Deemed Forest as stated in compliance of condition No. iv above. Therefore, we do not require NBWL clearance.

## II. Statutory Compliance

Sl. No.	Conditions	Compliance
i.	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.	The land used for establishment of above referred manufacturing facilities does not require diversification of forest land to non-forest purpose as the piece of land used is not a forest land.
ii.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	The land used for establishment of above referred manufacturing facilities is not a part of Reserve Forest/Protected Forest/Deemed Forest. We do not require NBWL clearance.
iii.	The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest	There is no presence of schedule-1 species in the study area. Site-Specific Conservation Plan & Wildlife Management Plan is not required in our case.

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Sl. No.	Conditions	Compliance
	Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area).	
iv.	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.	We have obtained required NOC/Consent to Establish (No.B-4109 dt.16.10.2015 & CTE No. JSPCB/HO/RNC/CTE-10840052/2021/209 dt. 28.09.2021) and CTO No. JSPCB/HO/RNC/ CTO-22315086/2025/2059 dt.25.07.2025 valid till 30.06.2029 from J.S.P.C.B., Ranchi under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974.
v.	The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.	We have obtained NOC from CGWA No. NOC/IND/JH/2024/656/R-4/4 dt.24.03.2025 valid till 03.03.2028, a copy of the said NOC has been submitted with our last EC Compliance for the period ending on 31 <sup>st</sup> March, 2025.
vi.	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.	We have obtained renewed authorization under the Hazardous and other Waste Management Rules, 2016 from SPCB bearing No JSPCB/HO/RNC/HWM-15424532/2024/29 dated 31.03.2024 valid till 08.09.2028. Copy of HW Authorization Certificate has been submitted along-with our 2 <sup>nd</sup> six months EC Compliance Report for the period ending on 31.03.2024.
vii.	It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority, concerned Regional Office of MoEF & CC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi/SEIAA/ CPCB.	We are submitting hard copy of the six (06) monthly compliance report in respect of the prior environmental clearance for stipulated terms and conditions including existing manufacturing units to the regulatory authority, concerned Regional Office of MoEF & CC at Ranchi and Jharkhand State Pollution Control Board, Ranchi/SEIAA/ CPCB within prescribed time limit.
viii.	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	We are submitting factual data only.

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Sl. No.	Conditions	Compliance
ix.	The SEIAA, Jharkhand or any other competent Authority may alter/modify the above conditions or stipulate any further condition in the interest of Environment Protection.	We agree and we will comply applicable modified conditions or further stipulated condition, if any, by the SEIAA, Jharkhand or any other competent authority.

### III. Air Quality Monitoring and Preservation:

Sl. No.	Conditions	Compliance
i.	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules, 1986 vide G.S.R. 277 (E) dated 31 <sup>st</sup> March, 2012 (applicable to IF/EAF) as amended from time to time, S.O.3305 (E) dated 7 <sup>th</sup> December, 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	We have already installed 24x7 days continuous emission monitoring system at process stacks of both existing and expanded/modernized units of our Mega Division to monitor stack emission and connected to SPCB and CPCB online servers for continuous monitoring of stacks' emissions. Calibration of stack emission monitoring equipment are done regularly and sent to concerned authority.
ii.	The project proponent shall monitor fugitive emission in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Quarterly monitoring of fugitive emission in the premises is being done by NABL laboratory. Quarterly fugitive emission monitoring report for compliance operational period is enclosed.
iii.	The project proponent shall install system carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM <sub>10</sub> and PM <sub>2.5</sub> in reference to PM emission, and SO <sub>2</sub> and NOx in reference to SO <sub>2</sub> and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each, covering upwind and downwind directions (case to case basis – Small plants : Manual; Large plants : Continuous).	We have installed Continuous online monitoring system at our Mega Division premises to monitor PM, PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> and NOx monitoring is also being done manually at four locations within the premises by NABL laboratory on quarterly basis as directed. Ambient Air Quality Monitoring Reports for compliance operational period are enclosed.

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Sl. No.	Conditions	Compliance
iv.	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality / fugitive emissions to Regional Office of MoEF & CC, Zonal Office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.	We are submitting quarterly results of manual stack monitoring and air quality/fugitive emissions monitoring to Regional Office of MoEF & CC, Zonal Office of CPCB and Regional Office of SPCB along with six- monthly compliance report. Our stacks and AAQ monitoring systems are connected online to JS PCB & CPCB servers for continuous monitoring of stacks emission and AAQ.
v.	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources.	We have provided dust catcher in our Mega Division plant premises. APC system comprising of bag filters, water sprinklers (fixed and manual), dry fog systems for all the dust generating points including fugitive dust from all vulnerable sources have already been provided.
vi.	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	We have provided leakage detection and mechanized bag cleaning facilities for better maintenance of bags filters.
vii.	Sufficient numbers of mobile or stationary vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.	We have provided sufficient numbers of mobile facilities to clean plant roads, shop floors, roofs, regularly.
viii.	Recycle and reuse iron ore fines, coal and coke fines, lime fines, and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/agglomeration.	We are reusing Iron ore fines and coke fines, lime fines collected in the pollution control devices in the manufacturing process.
ix.	The project proponent shall use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.	We are using leak proof trucks/dumpers covered tightly with tarpaulin sheets for carrying raw materials.
x.	The project proponent shall provide covered sheds for raw materials like scrap and sponge iron, lump ore, coke, coal, etc.	We have provided covered sheds for each raw material separately within premises.
xi.	The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.	We have provided fume extraction system with acoustic hoods at all induction furnaces.
xii.	Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.	Proper ventilation system for adequate air changes has been provided to the plant sheds. No tunnel, oil cellars exist within the plant premises.

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**IV. Water Quality Monitoring and Preservation :**

Sl. No.	Conditions	Compliance
i.	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules, 1986 vide G.S.R. 277 (E) dated 31 <sup>st</sup> March, 2012 (applicable to IF/EAF) as amended from time to time, S.O. 3305 (E) dated 7 <sup>th</sup> December, 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories (case to case basis small plants: Manual; Large plants: Continuous).	<p>There is no industrial effluent discharge from our Mega Division plant. Water is used only for cooling of hot products and domestic purposes. Cooling water is kept in closed circuit and is reused again and again. Domestic waste water is collected in settling tank followed by soak-pit and reused in greenbelt development and dust suppression within the premises. Water used for washing of low grade iron ore is stored in slime dam and reused again and again. During this compliance period low grade iron ore washing unit is not in operation.</p> <p>Also we have not any thermal power plant within premises.</p>
ii.	The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/ sampling wells in the plant and adjacent area through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.	Arrangements have been made to monitor ground water quality regularly twice a year (pre and post monsoon) at piezometers/sampling wells in the plant and adjacent area through M/s. Scientific Research Laboratory, Ranchi. Pre/Post-monsoon ground water quality reports dt.19.05.2025 & 25.10.2025 are enclosed.
iii.	The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF & CC, Zonal Office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.	There is no industrial effluent from our units under Mega Division. Copy of current ground water quality reports dt.19.05.2025 & dt. 25.10.2025 (Pre & Post monsoon) are enclosed herewith.
iv.	Adhere to 'Zero Liquid Discharge'.	We are strictly adhering to 'Zero Liquid Discharge'.
v.	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	We collect domestic wastewater in a collecting tank of adequate size followed by soak-pit. Waste water so obtained is reused for dust suppression and greenbelt development. Quarterly Monitoring Reports of domestic waste water for compliance operational period are enclosed.

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Sl. No.	Conditions	Compliance
vi.	The project proponent shall provide the ETP for effluents of rolling mills to the standards prescribed in G.S.R. 277 (E) dated 31 <sup>st</sup> March, 2012 (applicable to IF/EAF) as amended from time to time.	No effluent is generated in the rolling mill. Water is used only for cooling of hot TMT Bar/Rod, is kept in enclosed circuit and recycled/reused again and again. Only make-up water is added to this enclosed circuit when required.
vii.	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run-off.	Garland drains and collection pits of adequate size are provided and upgraded to arrest the run-off rain water in the event of heavy rains to prevent the water pollution due to surface run-off. Photograph of collection pond has been submitted earlier.
viii.	The project proponent shall practice rainwater harvesting to maximum possible extent.	We are practicing rainwater harvesting to maximum possible extent. Rain/Roof Top Rain Water Harvesting with ground water recharge pit(s) have also been provided. Photographs of the RTRWH structures have been submitted earlier.
ix.	The project proponent shall make efforts to minimize water consumption in the steel plant complex by segregation of used water, practicing cascade use by recycling treated water.	To minimize water consumption, we have integrated our CCM and Rolling Mill. Hot MS Billet is being directly injected to Rolling Mill. Arrangement for reuse of cooling water of hot TMT Bars has been made by keeping cooling water in closed circuit. Domestic waste water, treating it by collecting/settling tank followed by soak-pit, is reused in greenbelt development & dust suppression.

#### V. Noise Monitoring and Prevention:

Sl. No.	Conditions	Compliance
i.	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as part of six-monthly compliance report.	Quarterly NLM reports both for existing and expanded/modernized plant for compliance operational period are being submitted as part of this six-monthly compliance reports to the authorities concerned.
ii.	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB (A) during day time and 70 dB(A) during night time.	We have provided noise resisting arrangements in both the existing and expanded/modernized plant to control Ambient Noise Levels to conform the standards prescribed under E(P)A Rules, 1986.

#### VI. Energy Conservation measures :

Sl. No.	Conditions	Compliance
i.	The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.	There is no re-heating furnace in our Rolling Mill. It is completely integrated with our M.S. Billet plant.

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Sl. No.	Conditions	Compliance
ii.	Practice hot charging of slabs and billets/blooms as far as possible.	Only continuous hot charging of M.S. Billets with surplus heat to Rolling Mills as described in manufacturing process of TMT Bar/Rod has been adopted.
iii.	Ensure installation of regenerative type burners on all reheating furnaces.	No reheating furnace has been installed in rolling mill.
iv.	Provide solar power generation on rooftops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.	We are using LED lights at all common areas, street lights, parking area for minimal electric power consumption and to finish the provision of solar power generation and use.
v.	The project proponents shall provide LED lights in their offices and residential areas.	We have provided LED lights in our offices, canteens. There is no residential accommodation in our factory premises.

#### VII. Waste Management :

Sl. No.	Conditions	Compliance
i.	Used refractories shall be recycled as far as possible.	Refractories used in induction furnaces gets completely burnt. However, unburnt refractories, if any, is recycled as far as possible.
ii.	Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried and briquetted and reused in melting furnaces.	Oily scum and metallic sludge recovered from rolling mills cooling bed is dried, briquetted and reused in melting furnaces.
iii.	100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.	There is no fly ash generation in our units.
iv.	The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other Waste (Management & Transboundary Movement Rules, 2016).	Only burnt mobil oil is generated in course of running of Diesel Generator which is kept safely in metal drums and reused in mobilization of machineries for their smooth operation within the plant premises. No out of premises or trans-boundary disposal of the burnt mobil oil is done.
v.	Kitchen waste shall be composted or converted to biogas for further use ( <i>to be decided on case to case basis depending on type and size of plant.</i> )	Domestic waste of canteen is composted and reused in development of greenbelt.

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**VIII. Green Belt :**

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i.	Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter-alia cover the entire periphery of the plant.	We have developed greenbelt in an area of 33% of the plant area with native tree. We are enhancing density and biodiversity of the greenbelt regularly.
ii.	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.	We do not burn fossil fuels for electricity or heat. No GHG is generated. Transport vehicles with PUC only are permitted to enter into the premises.

**IX. Public Hearing and Human Health Issues :**

Sl. No.	Conditions	Compliance
i.	Emergency preparedness plan based on the Hazard Identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	We have implemented emergency plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan as per Factory Act.
ii.	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.	Personal Protection Equipment (PPEs) like heat resisting dress, goggles, gloves, nose masks as per the norms of Factory Act have been provided to the workmen working in high temperature work zone. During operation distance of at least 4 mtr from the molten metal and delivery spout is always maintained by the workers working near induction furnaces. Exhaust fans/ventilation in the working shed are provided to minimize and maintain heat stress in the working zone.
iii.	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Construction labours had been provided temporary housing with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile ST, safe drinking water, medical health care, creche etc. within the premises which were removed after the completion of installation work of the project. Only regular permanent workers are provided quarters/ house with all required facilities out of factory premises.

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18, R. N. Mukherjee Road, (1st Fl.), Kolkata - 700 001

Ph.: 2248 6304 / 06, 4032 5000, Fax : 2213 7399

E-mail : balmukundspunge@gmail.com

Website : www.balmukund.com

CIN : U27310WB1999PTC266185

(An ISO 9001 : 2008 & ISO 14001 : 2004 Company)

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**X. Corporate Environment Responsibility :**

Sl. No.	Conditions	Compliance
i.	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No.22-65/2017-IA.III dated 1 <sup>st</sup> May, 2018 as applicable, regarding Corporate Environment Responsibility.	We are complying with the provisions contained in this Ministry's OM vide F.No.22-65/2017-IA.III dated 1 <sup>st</sup> May, 2018 as applicable. We attach hereto detail of expenses incurred towards CSR and CER activities keeping in view of the issues of the Ministry's said OM.
ii.	The Company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and / or shareholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF & CC as a part of six-monthly report.	We are following Environment Management policy as stipulated in EIA submitted for grant of Environmental Clearances.
iii.	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel under the control of senior Executive, who directly report to the head of the organization as stated in the EMFs of final EIAs submitted for grant of Environmental Clearances. is already constituted.
iv.	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year-wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year-wise progress of implementation of action plan shall be reported to the Ministry/ Regional Office along with the Six Monthly Compliance Report.	We are implementing EMP and environmental conditions. The year-wise funds earmarked Rs.17.00 Lac towards recurring expenditure for environmental protection measures, has been kept in separate account and is not being diverted for any other purpose. Annexure-1 showing expenses incurred during 01 <sup>st</sup> six months of FY:2025-26 is enclosed herewith.

**PATNA OFFICE : 603, SHANTIKUNJ APARTMENT, CHHAJJUBAGH, PATNA-800 001, PH.: (0612) 2322388/488**

**WORKS : CHATRO, TUNDI ROAD, P.O.: GADISRIRAMPUR, GIRIDIH-815 302, PHONE.: (06532) 250597**

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Sl. No.	Conditions	Compliance
v.	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	We have submitted Self environmental audit for year 2024-25 with EC compliance report of 02 <sup>nd</sup> six month's of FY: 2024-25. Environment Audit Report for FY:2025-26 will be submitted with EC Compliance for compliance period ending on 31 <sup>st</sup> March, 2026.
vi.	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the plant shall be implemented.	We implemented the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for both the existing and newly established units (Annexure-2 enclosed).
vii.	Occupational health surveillance of the worker shall be done on a regular basis and records maintained as per Factories Act.	Occupational health surveillance of the workers on a regular basis as per Factory Act is being continued for workers working in Mega Div. and records kept in the factory office.

**X. Miscellaneous :**

Sl. No.	Conditions	Compliance
i.	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	We have already advertised the grant of Environmental Clearances in two local newspapers Hindustan Times dated 29.07.2021(English) and Dainik Bhasker dated 30.07.2021(Hindi) to make the public acknowledged in this regard. Copy of newspaper cuttings submitted earlier with 1 <sup>st</sup> compliance report. The EC granted has been uploaded on the Company's website. The existing unit has already complied this condition earlier.
ii.	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	We have submitted copy of granted Environmental Clearance to DC (Admn.), Giridih; Zila Parishad, Giridih; G.M., DIC, Giridih; Mukhiya, Gadisrirampur Panchyat; Giridih. Copies of receiving submitted earlier with 1 <sup>st</sup> compliance report. The existing unit has already complied this condition earlier.
iii.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	We are uploading compliance to the conditions of Environmental Clearances regularly on our website.

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Sl. No.	Conditions	Compliance
iv.	The project proponent shall monitor the criteria pollutants level namely PM <sub>10</sub> , SO <sub>2</sub> , NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	We monitor the criteria pollutants level namely PM <sub>10</sub> , SO <sub>2</sub> , NOx (ambient levels as well as stack emissions) and display the same at main gate of the premise for disclosure to the public. Monitoring reports conducted by NABL laboratory are put on the web site of the Company with six monthly compliance report regularly.
v.	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the Ministry of Environment, Forest and Climate Change at environment clearance portal.	We are submitting our six-monthly compliance report regularly. It is also put on website of the Company.
vi.	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	The environmental statement for financial year ending 31 <sup>st</sup> March, 2025 has been submitted to the State Pollution Control Board on 26.04.2025 by Speed Post and copy enclosed with EC Compliance Report for the 02 <sup>nd</sup> half six month of FY 2024-25. Copy of the same is once again enclosed herewith.
vii.	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	Already complied
viii.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	We strictly adhere to the stipulations made by the Jharkhand State Pollution Control Board and the State Government. We have obtained CTO valid till 30.06.2029. Copy of the same is being enclosed herewith for your ready reference.
ix.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	We abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during our presentation to the Expert Appraisal Committee. Compliance to the commitments made during Public Hearing has been submitted marked as Annexure-3 along-with EC Compliance Report for 1 <sup>st</sup> six month ending on 30.09.2024.

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Sl. No.	Conditions	Compliance
x.	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF & CC).	We will not expand or modify our plant further without prior approval of the competent authority.
xi.	Concealing factual data or submission of false / fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	We have submitted factual data only.
xii.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	We have complied all the conditions of existing and new environmental clearances to the best of satisfaction of concerned authorities.
xiii.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	We will implement properly the additional conditions, if any, found necessary and stipulated in future, in a time bound manner.
xiv.	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data / information / monitoring reports.	We will extend full cooperation to the officer(s) of the Regional Office by furnishing requisite data/information/monitoring reports.
xv.	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.	We are complying provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
xvi.	Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	We agree.

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MNC KOLKATA RMS (700001) Counter No. 1  
 India Post  
 SP-P EW420115547/IN IVR:698/420115547  
 29-11-2025 15:45:03, 428 (Actual) gms,  
 To: THE REGIONAL OFFICER, JSPCB  
 Hazaribagh II, JHARKHAND - 825301  
 From: BALMUKUND SPONGE AND TRON-700001  
 (Base: 60.00)

Track@ [www.indiapost.gov.in](http://www.indiapost.gov.in) Dial-18002002000

MNC KOLKATA RMS (700001) Counter No. 1  
 India Post  
 SP-P EW420115547/IN IVR:698/420115547  
 29-11-2025 15:45:57, 431 (Actual) gms,  
 To: THE MEMBER SECRETARY, JSPCB  
 Dhanwa BG, JHARKHAND - 834004  
 From: BALMUKUND SPONGE AND TRON-700001  
 (Base: 60.00)

## BALMUKUND

### SPONGE & IRON PVT. LTD. ( M E G A      D V N . )

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-14

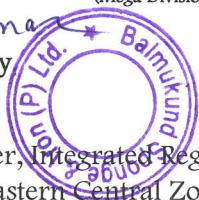
#### XI. Other Conditions :

Sl. No.	Conditions	Compliance
i.	The Authorities reserves the right to add any new condition or modify the above conditions or to revoke the clearance if conditions stipulated above are not implemented to the satisfaction of the Authority or for that matter for any other administrative reason.	We have implemented the directions given vide above conditions properly and agree to implement condition, if any, applicable to us is added/ modified by the concerned authorities. We are complying all the conditions of granted Environmental Clearances.
ii.	In view of MoEF & CC O.M.No.22-27/2015-IA-III dated 12.04.2016 the Environmental Clearance accorded shall be valid for a period of Seven (07) years. The PP shall not increase production rate and make modifications in process during the validity of Environmental Clearance.	We will not increase production rate and also will not make modifications in process further during validity of the Environmental Clearances without prior approval of the competent authority.
iii.	In case of any deviation or alteration in the project proposed from those submitted to SEIAA, Jharkhand for clearance, a fresh reference should be made to SEIAA to assess the adequacy of the conditions imposed and to incorporate any new conditions, if required.	We did not make any deviation or alteration in the project from those submitted to SEIAA, Jharkhand for environmental clearance. We will submit afresh proposal for deviation or alteration required in the existing plant, if any.

We have complied all the applicable conditions of the Environmental Clearances. We are also complying all the applicable EC Conditions which are to be complied periodically. Further, we assure that the direction in this regard, if any, is received, we will promptly take action to comply.

Thanking you,  
 Yours faithfully,  
 For Balmukund Sponge & Iron Pvt. Ltd.  
 (Mega Division)

*Santosh Kumar*  
 Authorized Signatory



MNC KOLKATA RMS (700001) Counter No. 1  
 India Post  
 SP-P EW420115547/IN IVR:698/420115547  
 29-11-2025 15:47:13, 425 (Actual) gms,  
 To: THE ZONAL OFFICER, INTEGRATED REGIONAL OFFICE  
 Dhanwa BG, JHARKHAND - 834002  
 From: BALMUKUND SPONGE AND TRON-700001  
 (Base: 60.00)

Encl: As above.

CC: The Zonal Officer, Integrated Regional Office of Ministry of Environment, Forest & Climate Change, Govt. of India, Eastern Central Zone, 2<sup>nd</sup> Floor, Jharkhand State Housing Board (HQ), Harmu Chowk, Ranchi (Jharkhand)-834 002

CC: The Zonal Officer, CPCB, Southern Conclave, Block 502, 5th and 6th Floors, 1582 Rajdanga Main Road, Kolkata - 700 107

CC: The Member Secretary, JSPCB, T.A. Division Bldg. (Ground Floor), HEC Complex, Ranchi (Jharkhand)-834004

CC: The Regional Officer, JSPCB, PTC Chowk, Hazaribagh (Jharkhand)-825301

-All for information and record.

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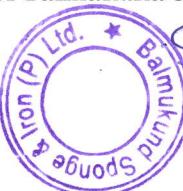
CIN : U27310WB1999PTC266185

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Annexure-1

Year	Recurring Expenditure for Environment Protection	Amount Rs. In Lakh
2025-26 (April, 2025 TO September, 2025)	Environmental Monitoring	1.552
	Running Cost of Pollution Control Equipments	5.15
	Greenbelt Development	2.178
Total during 01 <sup>st</sup> half of the year 2025-26 :		8.880

For Balmukund Sponge & Iron Pvt. Ltd.



Santosh Kumar

Authorized Signatory



R N Mukherjee Road SO (700001) 11-12-2025 11:15:34  
ChargedWeight(gms): 203 Phy.Wt(gms): 203 VolWt(gms): NA(L:  
NA B: NA H: NA)AmountPaid: Rs.75.00 (ONLINE) BkgRefId:  
3366031811122585583

In case of any grievance - DIAL-18002666868 : IVR NO : 6987302843767

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Annexure-2

Recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants are implemented and submit point-wise compliance as follow:

**CREP conditions & compliance :**

1. **Coke Oven Plant** : We do not have any coke oven plant in the premises.

**Steel Melting Shop:**

2. **Fugitive Emission** : To minimize fugitive emission we have concreted shop floor, floor of RM & Finished goods shed, installed fixed type water sprinklers and bag filters in sufficient wherever required. Besides, manual water sprinklers (water Tankers) are also sprinkling water on the floor of the work-shop and approach roads of transportation. Roads are kept clean and wet. Fugitive emission is kept within prescribed limit. Dry Fog Systems wherever required have been installed and are operated.
3. **Solid Waste/Hazardous Waste Management**: 100% Solid waste in form of induction slag is crushed, iron content is segregated from slag for reuse in the induction furnaces as raw material of M.S. Billet and remaining slag-dust is given to brick manufacturers and nearby villagers to fill their low land on demand at free of cost. Runner & Risers, End cutting and misroll, mill scale of TMT Bar are reused/melted again in induction furnaces as raw material of M.S. Billet. Refractories used in induction furnaces gets burnt and is not reusable and is used for leveling low land within premises. However, if any, refractories is received and is reusable, we are reusing the same as far as possible. Oily scum and metallic sludge recovered from rolling mills cooling bed tank is dried, briquetted and reused in melting furnaces. Iron fines recovered from Iron Ore is beneficiated by hot process of iron ore beneficiation. Solid waste (soil) received from slime dam of Iron Ore Beneficiation Plant (Wet Process) is given to brick manufacturers free of cost for their use. During this compliance operational period, our Iron Ore Beneficiation (Wet Process) is inoperative. Iron dust collected from Pollution Control Equipment is also reused as raw material in the manufacturing process of M.S. Billet. Domestic waste is composted and reused in development of greenbelt. Thus 100% solid waste is being disposed off by re-using in eco-friendly manner. Need not to study the possibility of slag transportation back to abandoned mines to fill the cavities. We do not generate tar sludge/ETP sludge. We generate, store, and dispose hazardous waste namely burnt mobil oil generated at DG Set Unit for which we have obtained 'Authorization Certificate' from Jharkhand State Pollution Control Board, Ranchi. Hazardous waste in form of burnt mobil oil received from DG Set is reused in mobilization of machineries for their smooth operation within the premises. Sufficient fixed type water sprinklers and manual water sprinklers

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C.I.N : U 2 7 3 1 0 W B 1 9 9 9 P T C 2 6 6 1 8 5

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are available which efficiently suppress the dust within the factory premises and on approach road. Fume Extraction System along-with acoustic hoods in our Induction Furnace Unit is provided for suction of PM, fume and dispersal into the atmosphere after filtration within prescribed limit.

**Water Conservation/ Water Pollution :** Rain water is being harvested into an adequate size water pond to meet out the water requirement in lean season. Roof Top rain water is being used for ground water recharge to maintain the ground water table. Only make-up water is abstracted from ground. Water consumption is in cooling of hot product (TMT Bar/Rod) during operational period only. Cooling water is recycled and kept in closed circuit. Domestic waste water is treated by septic tank followed by soak-pit and being reused for dust suppression and green belt development. Ground water consumption is less than the prescribed standard for the steel plant. No water pollution exists in our plant. We strictly maintain 'Zero Discharge'. Rain Water Harvesting system including Roof Top Rain Water Harvesting system and ground water recharge system have been implemented.

4. **Installation of Continuous Stack Monitoring System:** We have installed Fume Extraction System with continuous online stack monitoring system for regular monitoring of dust emission( $PM_{10}$  &  $PM_{2.5}$ ),  $SO_2$  analyzer and PM(AAQ) with remote calibration facility with 24 x 7 days connectivity to CPCB and JSPCB servers. Continuous data is transmitted to JSPCB and CPCB servers. Manual stack emission monitoring is also being done by NABL accredited laboratory. Test Reports for compliance period of the year 2025-26 (June & September) for stack emission monitoring are enclosed with the compliance report. Results are within the prescribed limit.
5. **Housekeeping:** Good Housekeeping is being maintained by placing things appropriately.
6. **To operate existing Pollution Control Equipment efficiently and to keep proper record of run hours, failure time and efficiently with immediate effect :** Fume Extraction System is installed, operate and maintain proper record. Manual monitoring reports of 01<sup>st</sup> and 02<sup>nd</sup> quarters of fy:2025-26 are being submitted to CPCB and SPCB along-with EC Compliance Report.

For Balmukund Sponge &amp; Iron Pvt. Ltd.

(Mega Division)



Authorized Signatory

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## **Corporate Social Responsibility**

**Balmukund Sponge & Iron Pvt. Ltd., Giridih**

(Mega Division)

**Detail of CSR Expenses incurred during 01.04.2025 to 30.09.2025**

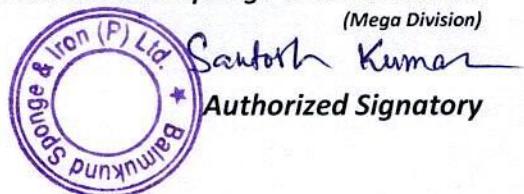
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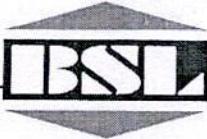
Date	CSR Work done	Amount incurred-Rs.
	<b><i>CSR Expenses incurred till 31.03.2025, detail submitted earlier(A)</i></b>	<b>3,81,64,893.72</b>
08.04.2025	Amount paid to Seth Dindayal Jalan Seva Trust vide Receipt No.701 of date for CSR expenses in nearby villagers being a social responsibility.	<b>10,00,000.00</b>
22.04.2025	Amount paid to M/s. Shri Godham Mahatirtha Pathmeda gaushala for better services to cattles including food, cleaning, arrangement of light at goshala being a social responsibility.	<b>1,01,000.00</b>
28.04.2025	Amount paid to Shubhkaran Triveni Foundation vide RTGS No.YESBR12025042800016792 of date for various CSR activities like distribution of free foods to homeless, sadhus, poor students and for education to poor children including girl child in surrounding villages.	<b>10,00,000.00</b>
28.04.2025	Amount paid to Sri Hanuman Prasad Poddar for maintenance of School of Blind Children vide Receipt of date being a social responsibility.	<b>75,000.00</b>
28.04.2025	Amount paid to Giridih Pachamba Shree Gopal Goshala vide Receipt No.20174 dt.28.04.2025 for better services to cattles including food, cleaning, arrangement of light at goshala being a social responsibility.	<b>1,25,000.00</b>
06.05.2025	Amount paid to Shubhkaran Triveni Foundation vide RTGS No.YESBR12025050600027603 of date for various CSR activities like distribution of free foods to homeless, sadhus, poor students and for education to poor children including girl child in surrounding villages.	<b>20,00,000.00</b>
06.05.2025	Amount paid to Shubhkaran Triveni Foundation for various CSR activities like distribution of free foods to homeless, sadhus, poor students and for education to poor children including girl child in surrounding villages.	<b>10,00,000.00</b>
14.05.2025	Amount paid to Seth Dindayal Jalan Seva Trust vide Receipt No.703 of date for CSR expenses in nearby villagers being a social responsibility.	<b>10,00,000.00</b>
26.05.2025	Amount paid to M/s. Shri Godham Mahatirtha Pathmeda gaushala for better services to cattles including food, cleaning, arrangement of light at goshala being a social responsibility.	<b>1,01,000.00</b>
27.05.2025	Amount paid to Giridih Pachamba Shree Gopal Goshala vide Receipt No.20194 dt.27.05.2025 for better services to cattles including food, cleaning, arrangement of light at goshala being a social responsibility.	<b>1,25,000.00</b>
27.05.2025	Amount paid to Sri Hanuman Prasad Poddar for maintenance of School of Blind Children vide Receipt of date being a social responsibility.	<b>75,000.00</b>
04.06.2025	Amount paid to Seth Dindayal Jalan Seva Trust vide Receipt No.703 of date for CSR expenses in nearby villagers being a social responsibility.	<b>10,00,000.00</b>
09.06.2025	Amount paid to Shubhkaran Triveni Foundation vide RTGS No.YESBR12025060900027834 of date for various CSR activities like distribution of free foods to homeless, sadhus, poor students and for education to poor children including girl child in surrounding villages.	<b>10,00,000.00</b>
25.06.2025	Amount paid to Sri Hanuman Prasad Poddar for maintenance of School of Blind Children vide Receipt of date being a social responsibility.	<b>75,000.00</b>
26.06.2025	Amount paid to Giridih Pachamba Shree Gopal Goshala vide Receipt No.20618 dt.26.06.2025 for better services to cattles including food, cleaning, arrangement of light at goshala being a social responsibility.	<b>1,25,000.00</b>

Date	CSR Work done	Amount incurred-Rs.
27.06.2025	Amount paid to M/s. Shri Godham Mahatirtha Pathmeda gaushala for better services to cattles including food, cleaning, arrangement of light at goshala being a social responsibility.	1,01,000.00
17.07.2025	Amount paid to M/s. Shri Godham Mahatirtha Pathmeda gaushala for better services to cattles including food, cleaning, arrangement of light at goshala being a social responsibility.	1,01,000.00
06.08.2025	Amount paid to Sri Hanuman Prasad Poddar for maintenance of School of Blind Children vide Receipt of date being a social responsibility.	1,50,000.00
11.08.2025	Amount paid to Giridih Pachamba Shree Gopal Goshala vide Receipt No.20641 dt.11.08.2025 for better services to cattles including food, cleaning, arrangement of light at goshala being a social responsibility.	2,50,000.00
11.08.2025	Amount paid to Giridih Pachamba Shree Gopal Goshala vide Receipt No.19770 dt.21.03.2025 for better services to cattles including food, cleaning, arrangement of light at goshala being a social responsibility.	5,00,000.00
20.08.2025	Amount paid to M/s. Shri Godham Mahatirtha Pathmeda gaushala for better services to cattles including food, cleaning, arrangement of light at goshala being a social responsibility.	1,01,000.00
16.09.2025	Amount paid to M/s. Shri Godham Mahatirtha Pathmeda gaushala for better services to cattles including food, cleaning, arrangement of light at goshala being a social responsibility.	1,01,000.00
16.09.2025	Amount paid to Sri Hanuman Prasad Poddar for maintenance of School of Blind Children vide Receipt of date being a social responsibility.	75,000.00
16.09.2025	Amount paid to Shri Keshav Kundu, Giridih, local resident, through RTGS No. YESBR12025091600028499 of date for his treatment at AIIMS, Delhi being a social responsibility.	2,50,000.00
16.09.2025	Amount paid to Shri Keshav Kundu, Giridih, local resident, through RTGS No. YESBR12025091600028992 of date for his treatment at AIIMS, Delhi being a social responsibility.	2,50,000.00
	Expenses incurred during 01 <sup>st</sup> half of FY- 2025-26 (B):	1,06,81,000.00
	Total expenditure on CSR till 30.09.2025(A+B):	4,88,45,893.72

For Balmukund Sponge & Iron Pvt. Ltd.

(Mega Division)





**BALMUKUND**

**SPONGE & IRON PVT. LTD.  
( M E G A D V N . )**

HEAD OFFICE : NEAR VISHWANATH NURSING HOME  
BAJRANG CHOWK, AT-BARMASIA, DIST/PO.: GIRIDIH-815301  
PHONE : 0 6 5 3 2 - 2 5 0 5 9 7  
E-mail : balmukundspunge@gmail.com  
Website : www.balmukund.com  
CIN : U 2 7 3 1 0 W B 1 9 9 9 P T C 2 6 6 1 8 5

EM2512533004IN IVR16907251253004  
SP MDC KOLKATA RMS (700001)  
Counter No:13,26/04/2025,15:34  
To THE MEMBER SECRETARY,DHURWA  
PIN:834004, Dhurwa 80  
Post:8341 P Ltd ,KOLKATA  
Wt:32gms  
Amt:41.30,Tax:6.30,Net,Paid:41.00(Cash)  
<Track on [www.indiapost.gov.in](http://www.indiapost.gov.in)>

26<sup>th</sup> April, 2025

The Member Secretary,  
Jharkhand State Pollution Control Board,  
T.A. Division Building,  
H.E.C. Complex, Dhurwa,  
**Ranchi (Jharkhand)-834004**

Sub: **Submission of Environmental Statement for the Financial Year : 2024-25**

Sir,

We are submitting hereto attached Environmental Statement (Form V) for the Financial Year 2024-25 for your needful.

Thanking you,  
Yours faithfully,  
For Balmukund Sponge & Iron Pvt. Ltd.

*Santosh Kumar*  
Manager



Encl: As above.

**Environment Statement for the Financial Year ending the 31<sup>st</sup> March, 2025**

**PART - A**

- 1) Name & Address of the owner/occupier of the industry operation or process : Pradeep Kumar Sahewal  
**Balmukund Sponge & Iron Pvt. Ltd. (Mega Divn.)**  
 Chatro,Tundi Road, Giridih.
- 2) Industry category-Primary,Secondary (STC Code): Primary
- 3) Production Capacity – Unit : TMT Rod - 746 MT per day  
 M.S. Billet - 828 MT per day  
 Indn.Furn.Slag Grinding- 47000 TPA  
 Pig Iron - 110 MT per day  
 Iron Ore (Beneficiated)- 94000 TPA
- 4) Year of Establishment : TMT Rod - 22.12.2021  
 M.S. Billet - 22.12.2021  
 Indn.Furn.Slag Grinding - 01.01.2022  
 Pig Iron - 14.11.2010  
 Iron Ore (Beneficiated)- 20.01.2016
- 5) Date of the last environmental statement submitted : 02.05.2024

**PART - B**

- 6) Water & Raw Material Consumption:

Water Consumption cub.m/day :

Process : 0.000 KL (Washing of Low Grade Iron Ore)

Cooling : 35.000 KL per day

Domestic : 12.000 KL per day

Name of Products	Process water consumption per unit of product out-put	
	During the previous Financial Year	During the current Financial Year
1. M.S. Billet	-	-
2. M.S./TMT Rod	-	-
3. Pig Iron	-	-
4. Iron Ore (Beneficiated)	-	-

- 7) Raw Material Consumption

Name of Raw Material	Name of Products	Raw material consumption per unit of product out-put	
		During the previous Financial Year(MT)	During the current Financial Year(MT)
1. Sponge Iron	M.S. Billet	0.889	0.869
2. Scrap of Iron & Steel		0.078	0.020
3. Pig Iron		0.191	0.233
4. Silico Manganese		0.014	0.014
5. Carbon Fines/CPC		0.000	0.000
1. M.S. Ingot/Billet	TMT Rod	1.005	1.024
1. Iron Ore	Pig Iron	1.696	1.449
2. Hard Coke		0.838	0.770
3. Dolomite/Quartz		0.230	0.190
4. Lime Stone		0.230	0.120
5. Iron Pellet		0.042	0.261
6. Iron Ore Fines		0.105	0.080

### Raw Material Consumption

Name of Raw Material	Name of Products	Raw material consumption per unit of product out-put	
		During the previous Financial Year(MT)	During the current Financial Year(MT)
1. Low Grade Iron Ore	Beneficiated Iron Ore	1.315	1.034
2. Induction Slag	Iron Metal	12.52	12.508

### PART – C

Pollution discharge to environment/out-put (Parameter as specified in the consent issued)

Pollutants	Quantity of Pollution Generated (Mass/day)	Conc. Of pollutants In discharge (Mass/Volume)	Percentage of form prescribed with reason
a) Water	: No water discharge out of premises. So no water pollution.		
b) Air	: Test reports submitted (found under limit of prescribed parameters).		

### PART – D

#### Hazardous Waste

(As specified Hazardous Waste (Management and Handling Rule, 1989)

Hazardous Waste	Total Quantity (Kg/Ltr)	
	During the previous Financial year(Liter)	During the Current Financial Year(Liter)
From Process	-	-
From pollution control facilities(sold)	-	-
Other (Burnt Mobil Oil)	410	445

### PART – E

#### Solid Waste

Solid Waste	Total Quantity (Kg)	
	During the previous Financial year	During the Current Financial Year
a) From Process		
i) From Induction unit – Slag	19751735*	22202460*
ii) From MBF unit – Slag	7743454**	9042940**
iii) Beneficiation of Iron Ore(Soil)	0	0
b) From Pollution Control facilities	9296	10870
c) Quantity recycled or re-utilized		
1) Sold -MBF unit(Pig) Slag	Sold-8489265**	Sold-7793400**
2) From Pollution Control facilities(Pig)	Reused in MBF-9296	Reused in MBF-10870
a) Disposal		
Induction slag	Crushing-12591790 Kg; Used in land filling within premises- 12772430 Kg, C/B- 9461240 Kg*. Crushed Waste/Dust O/B-7926810 Kg; Rect.-27160770 Kg; Given 3182.220 Kg Free of cost to brick manufacturers; Used in land filling within premises- 31214480 Kg.; C/B-690880 Kg.	*Indn.Slag O/B-9461240 Kg; Crushing-29520860 Kg; C/B- 2142840 Kg*. Crushed Waste/Dust O/B-7926810 Kg; Rect.-27160770 Kg; Given 3182.220 Kg Free of cost to brick manufacturers; Used in land filling within premises- 31214480 Kg.; C/B-690880 Kg.
Washing Salary- to brick manufacturer	0	0

## PART – F

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

We have installed 2 Induction Slag grinding units for iron metal segregation. Iron metal segregated is reused in induction furnaces as raw material and solid waste/dust obtained after segregation of iron metal is given to brick manufacturers free of cost. Solid Waste from MBF unit is being sold to cement manufacturers directly or through its suppliers and transported in eco-friendly safe manner in tightly covered trucks. During this whole year our low grade iron ore washing unit is non-operational. Mill skull generated during manufacturing of M.S/TMT Rod is reused in induction furnaces as raw material. Hazardous waste (Burnt Mobil Oil) is stored within the premises safely in appropriate drums and reused in smoothening the machinery within the premises for smooth running of the plant.

## PART – G

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

Impact of pollution control measures on conservation of natural resources is positive. Cost of production gets some hike causing reduction in profit ratio.

## PART – H

Additional investment proposal/implementation for environment protection including abatement of pollution:

Already implemented :

- 1) Gas Cleaning Plant (GCP) has been provided to MBF unit.
- 2) Fume Extractions Systems have been provided to Induction Fumace unit.
- 3) Online Stake Emission monitoring facility to stakes of appropriate heights with PM<sub>10</sub>, CO, SO<sub>2</sub>, NOx Analyzer and dust concentration monitoring with 24x7 days connectivity to JSPCB and CPCB servers have been provided for both the above units.
- 4) Sufficient Bag Filters at required places have been provided.
- 5) Dry Fog Systems at required places have been provided.
- 6) Settling tank for collection of used water in Iron Ore Beneficiation (washing unit) has been provided. (Not in operation).
- 7) Water used in cooling of hot products are kept in closed circuit for reuse again and again.
- 8) Water settling tank followed by soak-pits for collection of domestic waste water has been provided.
- 9) Online dust monitoring system for AAQ PM monitoring with 24x7 days connectivity to JSPCB and CPCB servers has been provided with a display board at factory premises main gate in public domain.
- 10) Water flow meter with camera are installed and is 24x7 days connected online to JSPCB & CPCB server to monitor.
- 11) Monitoring of AAQ within the premises, stack dust concentration, Fugitive Emission, Domestic Waste Water, Noise Level are also done quarterly by NABL laboratory also.
- 12) Rolling Mill unit has been integrated to M.S. Billet unit by installing covered metal conveyor for easy feeding of M.S. Billet to Rolling mill.
- 13) Emission Stack and Re-heating Furnaces of Rolling Mill have been removed after integration of Rolling Mill to M.S. Billet unit.

The additional measure will be adopted after study and on advice of the Jharkhand State Pollution Control Board/MoEF/CPCB.

## PART - I

Any other particulars in respect of environment protection of environment and abatement of pollution :

Besides operating facilities as above in Part-H, huge Plantation has been done around the factory premises. Concrete road constructed, Fixed water sprinklers have been provided by the side of concrete roads within premises. Manual water sprinklers have also been provided wherever fixed water sprinklers are found difficult to work. Manual water sprinklers are also made available for water sprinkling on approach roads to factory premise for dust suppression and to minimize the dust around boundary of factory premise. Arrangements has been made and facilities provided to MBF Unit for no increase in pollution load as per CTE granted for increased installed production capacity.

For Balmukund Sponge & Iron Pvt. Ltd.  
(Mega Division)



Ramkishan Kumar  
Manager



## JHARKHAND STATE POLLUTION CONTROL BOARD

TOWNSHIP ADMINISTRATION BUILDING, HEC COMPLEX, DHURWA, RANCHI 834004  
Telephone: 0651-2400850 (Fax)/ 2400851/2400852/2401847/2400979/2400139

Ref No. JSPCB/HO/RNC/CTO-22315086/2025/2059

Dated : 2025-07-25

### **Consent to operate (CTO) under section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981**

1. Application (s) dated 2025-06-12 of BALMUKUND SPONGE & IRON PVT. LTD.( Mega Division), Occupier Name :Pradip Kumar Sahewal for consent under section 25 (1)(b)/25 (1) (c)/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21(1) of the Air (Prevention & Control of Pollution) Act,1981..

#### **2. Documents Relied Upon:**

- (a) The content of Environmental Clearance (EC), vide ref. no.  
(i) F. No.J-1101/870/2008-IIA.II(I), dated 28.07.2010;  
(ii)EC/SEIAA/2013-14/297/2014/1525, Dated 25.08.2015;  
(iii) EC/SEIAA/2021-22/2167/2021/67, dated 15.07.2021.
- (b) (b) The content of Consent to Establish (CTE), vide Ref. No.  
(i) N-356, dated 13.06.2005;  
(ii) 3576, dated 18.07.2008;  
(iii) B-4109 dated 16.10.2015;  
(iv) JSPCB/HO/RNC/CTE-10840052/2021/209, dated 28.09.2021.  
(v) JSPCB/HO/RNC/CTE-17713231/2024/177 Dated : 2024-03-31.
- (c) The content of certificate released by the Board for "No Increase in Pollution Load" vide ref. no. B2437, dated 20.10.2023.
- (d) The content of previous Consent to Operate (CTO), vide ref. no. JSPCB/HO/RNC/CTO12633413/2022/845, dated 15.06.2022 valid till 30.06.2025 for the production of Pig Iron- 39000 TPA, MS Billet- 2,74,068 TPA, MS Coil/TMT Bar- 2,46,926 TPA, Beneficiated Iron Ore- 94000 TPA, Induction Slag Grinding47000 TPA (as per EC).
- (e) The content of Consent to Operate (CTO) granted vide Ref No. JSPCB/HO/RNC/CTO-21380740/2025/757 Dated : 2025-04-15 for production of Pig Iron- 67000 TPA (As per CTE).
- (f) The content of The content of CGWA certificate for ground water abstraction NOC No.- NOC/IND/JH/2024/656/R4/4 dt.24.03.2025 valid till 03.03.2028.
- (g) The content of Inspection report vide Ref no-1019 dated-27.05.2025 by RO office Hazaribagh.

3. The consent is granted under section 25 / 26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 to operate the project in Mauza -MANJHILADIH , P S -GIRIDIH , District -GIRIDIH , as follows:

Project	Site-Area	Investment (Rs)	Product & Capacity	Period of CTO
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	Plot Nos.	Area			Date of issue To
In Expansion	925, 927, 939, 940-958, 960, 965-968, 973, 982, 984, 985, 987, 988, Khata No.- 5, 20, 30, 33, 38, 39, 79, 161- 164	10.665 Ha	10050.47/- Lacs	Pig Iron- 67000TPA; MS Billet- 2,74,068 TPA; MS Coil/TMT Bar- 2,46,926 TPA; Beneficiated Iron Ore- 94000 TPA; Induction Slag Grinding- 47000 TPA (as per EC and NIPL)	30/06/2029

**(A) Specific Conditions:**

1. That, the occupier shall operate and maintain the fume extraction system with bag filters at the plant site.
2. That, the proponent shall do regular cleaning and wetting of the ground within the premises.
3. That, the occupier shall do transporting within the covered vehicles.
4. That, the occupier shall keep the waste water in close circuit and maintain zero liquid discharge.
5. That, the occupier shall install, operate and maintain fixed type water sprinklers regularly.
6. That, the occupier shall maintain proper housekeeping within the premises.
7. That, the occupier shall comply the recommendations made in charter for Corporate Responsibility for Environment Protection.
8. That, the occupier shall operate and maintain atleast four ambient air quality monitoring station in the downward direction as well as where maximum ground level concentration of PM 10, SO2 and NOx are anticipated in consultation with the Board.
9. That, the occupier shall maintain pucca road within the premises.
10. That, the proponent shall maintain the fugitive emission within the prescribed limit.
11. That, the proponent shall operate and maintain dry fog system at feeding and transfer points in iron ore beneficiation plant.
12. That, the occupier shall operate and maintain the ESP, dust catcher and bag filters to keep the emission levels within the prescribed limit.
13. That, the occupier shall ensure hot gases to be passed through Dust Settling chamber and thereafter after

burning chamber.

14. That, the occupier shall maintain on line stack emission monitoring system and shall ensure connectivity for transmission of data to CPCB & JSPCB server regularly.

15. That, the occupier shall keep the raw material in proper sheded area or cover with tarpaulin to minimize fugitive emission.

16. That, the occupier shall develop greenery in an area equal to 33 % of the plant area and shall maintain the same.

17. That, the occupier shall construct, operate and maintain the rain water harvesting system.

18. That, the occupier shall submit compliance report on Board's online Compliance Module before 120 days prior to expiry date of this CTO or every year as per Board's office order B-44, dated 11.07.2023.

19. That, the occupier shall submit applications for renewal of consent under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 again 120 days prior to the date of expiry of this consent with requisite fee and documents showing compliance of all of the above conditions.

**(B) General Conditions :**

(1) That, the occupier shall maintain the **National Ambient Air Quality Standard** given below:

S N	Pollutant	Time Weighted Average	Concentration in Ambient Air	
			Industrial, Residential, Rural and Other Area	Ecologically Sensitive Area (notified by Central Govt.)
(1)	(2)	(3)	(4)	(5)
1.	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Annual 24 hours	50 80	20 80
2.	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Annual 24 hours	40 80	30 80
3.	Particulate Matter (size less than 10 µm) or PM10, µg/m <sup>3</sup>	Annual 24 hours	60 100	60 100
4.	Particulate Matter (size less than 2.5 µm) or PM2.5, µg/m <sup>3</sup>	Annual 24 hours	40 60	40 60
5.	Ozone(O <sub>3</sub> ), µg/m <sup>3</sup>	8 hours 1 hour	100 180	100 180
6.	Lead (Pb) µg/m <sup>3</sup>	Annual 24 hours	0.50 1.0	0.50 1.0
7.	Carbon Monoxide (CO) mg/m <sup>3</sup>	8 hours 1 hour	02 04	02 04
8.	Ammonia (NH <sub>3</sub> ) µg/m <sup>3</sup>	Annual 24 hours	100 400	100 400
9.	Benzene (C <sub>6</sub> H <sub>6</sub> ) µg/m <sup>3</sup>	Annual	05	05
10.	Benzo(a) Pyrene(BaP) Particulate Phase only ng/m <sup>3</sup>	Annual	01	01
11.	Arsenic (As) ng/m <sup>3</sup>	Annual	06	06
12.	Nickel (Ni) ng/m <sup>3</sup>	Annual	20	20

**Note : Serial no. 1 to 4 – Mandatory**  
**Serial no. 5 to 12 As applicable for specific type of industry.**

- (2) That, the occupier shall maintain the emission quality within the standard and the quantity, as follows:

S N	Parameter	Standard
1	Particulate Matter	150 mg/Nm <sup>3</sup>

- (3) That, the occupier shall keep process effluent in close-circuit and the quality of effluent from other sources in conformity with the standard (s) and the discharge quantity as below:

S N	Parameter	Standard
1	Total Suspended Solids	100mg/L
2	BOD	30mg/L
3	COD	250mg/L
4	Oil & Grease	10mg/L

- (4) That, the occupier shall dispose of solid wastes as follows:

S N	Waste Type	Mode of Disposal
1	Non-Carbonaceous Non-Hazardous solid wastes/ Mine Over Burden	As a substitute of Soil or Mineral
2	Hazardous Carbonaceous Wastes	In co-processing in high temperature furnaces or kilns
3	Hazardous Non-Carbonaceous Wastes	In TSDF

- (5) That, the occupier shall keep D G Set(s) within acoustic enclosure and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board norm.
- (6) That, the occupier shall install and maintain Central Ground Water Board/ State Ground Water Directorate approved system of rain water harvesting-cum-ground water recharge and submit the photographic view of the structures within a month.
- (7) That, the occupier shall grow and maintain greenery of the project in the periphery and other available spaces and shall continue enhancing its plant density and biodiversity.
- (8) That, the occupier shall submit environmental statement with supporting stoichiometric calculations analyses reports, every year latest by 30th September of the next financial year.
- (9) That, the occupier shall submit report(s) duly monitored and issued by an NABL accredited / ISO 9001:2008 and OHSAS 18001:2007 certified laboratory in compliance sub-para (2), (3), (4) and (5) of paragraph 3 of this CTO yearly at required periodicity.

- (10) That, this CTO is valid subjected to the validity of mining Lease/Mining Plan/Ecofriendly/Environmental Clearance, if applicable. In case of no renewal of Mining Lease/Mining Plan, this consent shall be treated as revoked automatically.
- (11) That, this CTO is issued from the environmental angle only and does not absolve the occupier from other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with these conditions laid down in all other laws for the time-being in force, rests with the industry/ unit/ occupier.
- (12) That, this CTO shall not in any way, adversely affect or jeopardize the legal proceeding , if any, instituted in the past or that could be , instituted against you by the State Board for violation of the provisions of the Act or the Rules made there under.
- (13) That, the occupier shall comply with all applicable provisions of the Water (Prevention & Control of Pollution) Act, 1974; the Water (Prevention & Control of Pollution) Cess Act, 1977; the Air (Prevention & Control of Pollution) Act, 1981; and the Environment (Protection) Act, 1986 and Rules made there under.
4. **That, this CTO shall not absolve the occupier from making compliance of other statutory prescribed under any law or direction of courts or any other instrument for the time being in force.**
5. **That, this CTO is being issued on the basis of information/ documents/ certificate submitted by the unit. This CTO will be revoked if any of the information/documents/certificates/undertaking given by the occupier is found false/fictitious/forged in future.**
6. **The Order shall be valid subject to compliance of all other legal requirements applicable to the unit.**
7. **The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alteration in conditions of this consent.**

**This is issued with the approval of the Competent authority**

Rajeev  
Lochan  
Bakshi

Digitally signed  
by Rajeev  
Lochan Bakshi  
Date:  
2025.07.25  
11:46:13 +05'30'

[Rajeev Lochan Bakshi]  
Member Secretary

Memo No. : JSPCB/HO/RNC/CTO-  
22315086/2025/2059

Dated : 2025-07-25

**Copy to:** M/s Balmukund Sponge & Iron Pvt. Ltd. (Mega Division), At-Manjhiladih, Gadisrirampur, Giridih (Jharkhand)-815302/ Director of Industries, Government of Jharkhand, Ranchi/ Deputy Commissioner, Giridih/ Director of Mines, Government of Jharkhand, Ranchi/ Chief Inspector of Factories, Ranchi/ DFO, Giridih/ DMO, Giridih/ R O,JSPCB, Hazaribagh for information & ensuring compliance of the above.

Rajeev  
Lochan  
Bakshi

Digitally signed  
by Rajeev  
Lochan Bakshi  
Date:  
2025.07.25  
11:46:43 +05'30'

[Rajeev Lochan Bakshi]  
Member Secretary



सत्यमेव जयते



भूजल निकासी हेतु अनापत्ति प्रमाण पत्र

**NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION**

PROJECT NAME M/S BALMUKUND SPONGE AND IRON LTD.

PROJECT ADDRESS M/S BALMUKUND SPONGE AND IRON LTD. POST -  
GADDI-SHRIRAMPUR

PIN CODE 815302

STATE JHARKHAND

DISTRICT GIRIDIH

TOWN/BLOCK  
GIRIDIH

COMMUNICATION ADDRESS Village-Manjhiladih, P.O. Gadisrirampur

ADDRESS OF CGWB REGIONAL OFFICE 6th& 7th Floor, Lok Nayak Jai Prakash Bhawan, Frazer Road, Dak Banglow, Patna-800011, Bihar.

1. NOC NO. NOC/IND/JH/2024/656/R-4/4	2. DATE OF ISSUANCE 24/03/2025
3. APPLICATION NO. IND/JH/2024/656/R-4	4. APPLICATION TYPE Industry
5. PROJECT STATUS Existing Project	6. NOC TYPE Renew
7. VALID FROM 04/03/2025	8. VALID UP TO 03/03/2028
9. WATER QUALITY TYPE Fresh Water	10. AREA TYPE CATEGORY Semi Critical (GWRE - 2024)

**11. Ground Water Abstraction Permitted**

GW Abstraction		Dewatering		Total	
m <sup>3</sup> /day	m <sup>3</sup> /year	m <sup>3</sup> /day	m <sup>3</sup> /year	m <sup>3</sup> /day	m <sup>3</sup> /year
120.00	43800.00	0.00	0.00	120.00	43800.00

**12. Details of Ground Water Abstraction /Dewatering Structures**

EXISTING 2						PROPOSED 2						TOTAL 4					
DW	DCB	BW	TW	Pu	DW	DCB	BW	TW	Pu	DW	DCB	BW	TW	Pu			
0	0	2	0	0	0	0	2	0	0	0	0	4	0	0			

\*DW-Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; Pu Pumps;

**Validity of this NOC shall be subject to mandatory compliance of the following conditions:**

**Phase I (within 30 days)**

1. Installation of tamper proof digital water flow meter with telemetry on all the abstraction structure(s) is mandatory for all users seeking No Objection Certificate. Intimation regarding their installation shall be updated in Self-Compliance Module (Phase-I) of BhuNeer APP portal within 30 days of grant of No Objection Certificate.

**Phase II (after 11 months)**

1. Proponents shall mandatorily get water flow meter calibrated from an authorized agency once in a year.

2. Construction of purpose-built observation wells (piezometers) for ground water level monitoring is mandatory as per Section 14 of Guidelines. Water level data shall be made available to CGWA through web portal. Detailed guidelines for construction of piezometers are given in Annexure-II of the notified guidelines.

3. Proponents shall monitor quality of ground water from all the abstraction structure(s) once in a year. Water samples from bore wells/ tube wells / dug wells shall be collected during April/May every year and analyzed in NABL accredited or Govt. approved laboratories for basic parameters (cations and anions), heavy metals, pesticides/ organic compounds etc. Water quality data shall be made available to CGWA through the web portal.

**Phase III (Biennial)**

1. Industries shall undertake Biennial water audit through certified water auditors and submit audit reports within three months of completion of the same to CGWA. All such industries shall be required to reduce their ground water use by at least 20% over the next three years through appropriate means.

# All the above-mentioned mandatory compliance conditions are to be filed online in BHUNEER APP (<https://cgwa-bhuneer.mowr.gov.in>) timely.

**General Conditions:**

1. Application for renewal can be submitted online from 90 days before the expiry of NOC. Ground water withdrawal, if any, after expiry of NOC shall be illegal & liable for legal action as per provisions of Environment (Protection) Act, 1986 and amendment thereto, if any.
2. This NOC is subject to prevailing Central/State Government rules/laws/norms or Court orders related to construction of tube well/ground water abstraction structure / recharge or conservation structure/discharge of effluents or any such matter as applicable.
3. This NOC is being issued without any prejudice to the directions of the Hon'ble NGT/court orders in cases related to ground water or any other related matters.
4. No additional ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of the Central Ground Water Authority (CGWA).
5. The proponent shall seek prior permission from CGWA for any increase in quantum of groundwater abstraction as permitted in NOC.
6. Proponents shall install roof top rain water harvesting in the premise as per the existing building bye laws.
7. Proponents, who have installed/constructed rain water harvesting and artificial recharge structures shall continue to regularly maintain the water conservation structures.
8. The project proponent shall take all necessary measures to prevent contamination of ground water in the premises failing which the firm shall be responsible for any consequences arising thereupon.
9. Industries which are likely to cause ground water pollution, e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, pharmaceutical, other hazardous units etc. (as per CPCB list), no recharge measures shall be taken up by such firms inside the plant premises. The runoff generated from the rooftop shall be stored and put to beneficial use by the firm. The firm need to undertake necessary well head protection measures to ensure prevention of ground water pollution as per Annexure III of the notified guidelines
10. Wherever feasible, requirement of water for greenbelt (horticulture) shall be met from recycled / treated waste water.
11. Wherever the NOC is for abstraction of saline water and the existing wells (s) is /are yielding fresh water, the same shall be sealed and new tubewell(s) tapping saline water zone shall be constructed within 3 months of the issuance of NOC. The firm shall also ensure safe disposal of saline residue, if any.
12. Unexpected variations in inflow of ground water into the mine pit, if any, shall be reported to the concerned Regional Director, Central Ground Water Board.
13. This NOC does not absolve the proponents of their obligation / requirement to obtain other statutory and administrative clearances from appropriate authorities.
14. This NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and take decisions independently of the NOC.
15. In case of change of ownership, new owner of the industry will have to apply for incorporation of necessary changes in the No Objection Certificate with documentary proof within 6 months of taking over possession of the premises.
16. In case of new infrastructure projects having ground water abstraction of more than 20 m<sup>3</sup>/day, the firm/entity shall ensure implementation of dual water supply system in the projects.
17. In case of infrastructure projects, paved/parking area must be covered with interlocking/perforated tiles or other suitable measures to ensure groundwater infiltration/harvesting

18. In case of coal and other base metal mining projects, the project proponent shall use the advance dewatering technology (by construction of series of dewatering abstraction structures) to avoid contamination of surface water.

19. In the self-compliance report, the PP shall submit details of Drilling Agency/ Agencies, which has/ have constructed BW(s)/ TW(s) along with undertaking to the effect that all necessary measures have been taken as per directions of Hon'ble Supreme Court provided in Annexure-VII of guidelines dated 24.09.2020 in respect of abandoned/ failed BW(s)/ TW(s)/ Piezometer(s), if any. The PP is advised to engage registered drilling agency/agencies. In the event of any mishap/ unfortunate incident due to negligence in taking measures for prevention of accident due to falling in Bore Well, both PP and concerned drilling agency shall jointly be held responsible and penal action as per extant Government rules shall be taken.

**20. Non-compliance of the conditions mentioned above is likely to result in the cancellation of NOC and legal action against the proponent. In case of violation of any NOC conditions, the applicant shall be liable to pay the penalties as per Section 16 of Guidelines**

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**VASTHI INSTRUMENTS PRIVATE LIMITED**  
 IT'S ALL ABOUT SAFETY

Plot No. 21 & 22, 3<sup>rd</sup> and 4<sup>th</sup> Floor Phase IV, Mangalagiri Road, Auto Nagar, Guntur -  
 522002, [info@vasthi.com](mailto:info@vasthi.com) Tele No. 0863-2238 667, Fax No. 0863-2262 667

**CALIBRATION REPORT**

Date of Calibration: 28.05.2025

Calibration Due Date: 27.05.2026

<b>CUSTOMER:</b> Balmukund Sponge & Iron Pvt Ltd Chatro ,Tundi road,Post-Gadisirirampur, Giridih-8153001.	PO No : ..... PO Date : ..... Instrument type: Online SPM Analyser Model: VBDM-1500 Range: 0-1000 Mg/Nm3.
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Instrument Serial No.: VI 2019081

Test Items	Technical Requirements	Test Results
Appearance and Structure	Accessories Complete; Glass Clean; No Scratch on Surface	Passed
Zero Drift	$\pm 2\%$ F.S/24h	1.2%
Span Drift	$\pm 2\%$ F.S/24h	1.1%
Relativity	$R \geq 0.85$	1.5
Half width of the confidence interval	Half width of the confidence interval $\leq 10\%$	5%
Half width of the allowed interval	Half width of the allowed interval $\leq 25\%$	13%
Accuracy	When $> 200\text{mg/m}^3$ , relative error $\leq \pm 15\%$	12%

TESTED BY

L Supriya  
(L.Supriya)

CHECKED BY

P. Swaroopa  
(P.Swaroopa)



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522002, [info@vasthi.com](mailto:info@vasthi.com) Tele No. 0863-2238 667, Fax No. 0863-2262 667

**CALIBRATION REPORT**

Date of Calibration: 28.05.2025

Calibration Due Date: 27.05.2026

<b><u>CUSTOMER:</u></b> Balmukund Sponge & Iron Pvt Ltd Chatro ,Tundi road,Post-Gadisrirampur, Giridih-8153001.	PO No : ..... PO Date : ..... Instrument type: Online SPM Analyser Model: VBDM-1500 Range: 0-1000 Mg/Nm3.
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Instrument Serial No.: VI 2019079

Test Items	Technical Requirements	Test Results
Appearance and Structure	Accessories Complete; Glass Clean; No Scratch on Surface	Passed
Zero Drift	± 2%F.S/24h	1.5%
Span Drift	± 2%F.S/24h	1.4%
Relativity	R≥0.85	1.3
Half width of the confidence interval	Half width of the confidence interval ≤ 10%	7%
Half width of the allowed interval	Half width of the allowed interval ≤ 25%	15%
Accuracy	When > 200mg/m <sup>3</sup> , relative error ≤ ± 15%	10%

TESTED BY

L Supriya  
(L.Supriya)

CHECKED BY

P. Swaroopa  
(P.Swaroopa)



**VASTHI INSTRUMENTS PRIVATE LIMITED**  
IT'S ALL ABOUT SAFETY

Plot No. 21 & 22, 3<sup>rd</sup> and 4<sup>th</sup> Floor Phase IV, Mangalagiri Road, Auto Nagar, Guntur -  
522002, [info@vasthi.com](mailto:info@vasthi.com) Tele No. 0863-2238 667, Fax No. 0863-2262 667

**CALIBRATION REPORT**

Date of Calibration: 28.05.2025

Calibration Due Date: 27.05.2026

<b>CUSTOMER:</b> Balmukund Sponge & Iron Pvt Ltd Chatro ,Tundi road,Post-Gadisrirampur, Giridih-8153001.	PO No : ..... PO Date : ..... Instrument type: Online SPM Analyser Model: VBDM-1500 Range: 0-1000 mg/Nm3.
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Instrument Serial No.: VI2019080

Test Items	Technical Requirements	Test Results
Appearance and Structure	Accessories Complete; Glass Clean; No Scratch on Surface	Passed
Zero Drift	± 2%F.S/24h	1.3%
Span Drift	± 2%F.S/24h	1.8%
Relativity	R≥0.85	1.1
Half width of the confidence interval	Half width of the confidence interval ≤ 10%	6%
Half width of the allowed interval	Half width of the allowed interval ≤ 25%	18%
Accuracy	When > 200mg/m <sup>3</sup> , relative error ≤ ± 15%	11%

TESTED BY

L Supriya  
(L.Supriya)

CHECKED BY

P. Swaroopa  
(P.Swaroopa)



**VASTHI INSTRUMENTS PRIVATE LIMITED**  
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Plot No. 21 & 22, 3<sup>rd</sup> and 4<sup>th</sup> Floor Phase IV, Mangalagiri Road, Auto Nagar, Guntur -  
522002, [info@vasthi.com](mailto:info@vasthi.com) Tele No. 0863-2238 667, Fax No. 0863-2262 667

**TEST & CALIBRATION REPORT**

DATE OF CALIBRATION: 28.05.2025

CALIBRATION DUE: 27.05.2026

<b>CUSTOMER:</b> M/s Balmukund Sponge & Iron Pvt.Ltd, Chatro, Tundi Road, Post:Gadisrirampur,Giridih-815301.	PO No: ..... PO Date: ..... Instrument Model No: OMGA-3000 Instrument Type: Online Gas Analyzer Range: SOx: 0 - 1000 mg/Nm <sup>3</sup> , NOx: 0-1000 mg/Nm <sup>3</sup> , CO:0-1000 mg/Nm <sup>3</sup>
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Instruments Serial No: OMGA - VI2019089  
Voltage Rating: 230V AC, 50Hz

Calibration Gas and Range: SOx -950 mg/Nm<sup>3</sup>, NOx - 970 mg/Nm<sup>3</sup>,  
CO-953 mg/Nm<sup>3</sup>.

Functional Tests : O.K

Gas	Concentration (mg/Nm <sup>3</sup> )	Instant Reading (mg/Nm <sup>3</sup> )	Difference (mg/Nm <sup>3</sup> )
Fresh Air	-----	0000	0000
SOx	950	949	0001
NOx	970	967	0003
CO	953	951	0002

TESTED BY

L. Supriya  
(L.Supriya)



CHECKED BY

P. Swaroopa  
(P.Swaroop)

**CALIBRATION CERTIFICATE**

CERTIFICATE NO: - BA/DM/25-26/016

CERTIFICATE ISSUED DATE: - 25/08/25

Product Type : Online Dust Monitor

Make : Bhoomi

Model : BI 7000

Serial No. : 2307-G-0077

Customer : M/s. Balmukund Sponge &amp; Iron Pvt. Ltd.

Bhoomi Analyzers certifies that the above listed instrument was calibrated on date noted on site.

Our calibration system complies with the requirements of ISO 9001:2015 Certified standard and traceable to the International System of Units.

Sr. No.	Parameters	Values
1	Iso-Kinetic values (IKV)	84
2	Avg.Dust Value (E)	0.102
3	Dust Factor (DF)	88

The instrument Dust Monitor is calibrated according to the above Iso-Kinetic Value and corresponding average extinction value

Calibration Period: 25/08/26



By:

A handwritten signature in black ink that appears to read "madhuri".

Mrs. Madhuri Wakh

**Bhoomi Analyzers**

Correspondence Address :  
409, 4th Floor, Avior, Nirmal Galaxy,  
Mulund (W) Mumbai - 400080

## Works Address :

Unit No. 201, 207, 208, G Wing, Udyog Bhavan No.: 2,  
Plot No.: K-3, Add. Ambernath Ind. Area, Nr. Anand Nagar,  
MIDC, Ambernath (E), Thane-421506 Maharashtra

## Contact :

Call : +91-22-25916858 / 6916  
Email : [sales@bhoomiltd.com](mailto:sales@bhoomiltd.com)  
Website : [www.bhoomiltd.com](http://www.bhoomiltd.com)


**TEST REPORT**

ULR No.: TC1116325000000612F	Test Report No.	: SRL/R/GW/MAY/25/622
Issued to:	Report Issue Date	: 19/05/2025
M/s Balmukund Sponge & Iron (P) Limited, At.: Chatro – Tundi Road, District: Giridih, Jharkhand.	Sample Receipt Date	: 14/05/2025
	Analysis Date	: 14/05/2025 – 17/05/2025
	Sample Collected by	: Client
	Sample Quantity	: 1 Litre
	Sample Condition	: Sealed
	Weather Condition	: Clear
	Lab. Sample No.	: DW – 192

Type of Sample	: Ground Water	Sampling Method	: Grab
Location of Sample	: Bore Well No. 1 (Plant Campus)	Date of Sampling	: 14/05/2025

**TEST RESULTS**

Sl. No.	Parameters	Results	Regulatory Standards As per IS: 10500 (2012) (Drinking Water Specification)		Test Method (s)
			Desirable Limits	Permissible Limits	
1.	Colour, Hazen units, Max.	<5	5	15	APHA 23 <sup>rd</sup> Edn. 2120 B
2.	Odour	Unobjectionable	Agreeable	Agreeable	APHA 23 <sup>rd</sup> Edn. 2150 B
3.	Taste	Agreeable	Agreeable	Agreeable	APHA 23 <sup>rd</sup> Edn. 2160 B
4.	Turbidity, NTU, Max.	<5	1	5	APHA 23 <sup>rd</sup> Edn. 2130 B
5.	Conductivity, $\mu\text{mhos}/\text{cm}$	524	-	-	APHA 23 <sup>rd</sup> Edn. 2510 B
6.	pH Value	7.4	6.5 to 8.5	No relaxation	APHA 23 <sup>rd</sup> Edn. 4500H B
7.	Total Hardness (as $\text{CaCO}_3$ ), mg/l	168	200	600	APHA 23 <sup>rd</sup> Edn. 2340 C
8.	Iron (as Fe), mg/l	<0.10	0.3	No relaxation	APHA 23 <sup>rd</sup> Edn. 3500Fe B
9.	Chloride (as Cl), mg/l	34	250	1000	APHA 23 <sup>rd</sup> Edn. 4500 Cl B
10.	Residual Free Chlorine, mg/l	Nil	0.2	1.0	APHA 23 <sup>rd</sup> Edn. 4500 Cl B
11.	Fluoride (as F) mg/L	0.60	1.0	1.5	APHA 23 <sup>rd</sup> Edn. 4500 F D
12.	Dissolved Solids mg/l	351	500	2000	APHA 23 <sup>rd</sup> Edn. 4500 O C
13.	Calcium (as Ca), mg/l	36	75	200	APHA 23 <sup>rd</sup> Edn. 3500 Ca B
14.	Sodium (as Na), mg/l	16	-	-	APHA 23 <sup>rd</sup> Edn. 3500 Na B
15.	Potassium (as K), mg/l	8	-	-	APHA 23 <sup>rd</sup> Edn. 3500 K B
16.	Magnesium (as Mg), mg/l	19	30	100	APHA 23 <sup>rd</sup> Edn. 3500 Mg B
17.	Copper (Cu), mg/l	<0.05	0.05	1.5	APHA 23 <sup>rd</sup> Edn. 3500 Cu B
18.	Manganese (as Mn), mg/l	<0.05	0.1	0.3	APHA 23 <sup>rd</sup> Edn. 3500 Mn B
19.	Sulphate (as $\text{SO}_4^{2-}$ ), mg/l	68	200	400	APHA 23 <sup>rd</sup> Edn. 4500 $\text{SO}_4^{2-}$ E
20.	Nitrate (as $\text{NO}_3^-$ ), mg/l	2.6	45	No relaxation	APHA 23 <sup>rd</sup> Edn. 4500 $\text{NO}_3^-$ B
21.	Arsenic (as As), mg/l	<0.01	0.01	0.05	APHA 23 <sup>rd</sup> Edn. 3500 As B
22.	Lead (as Pb), mg/l	<0.005	0.01	No relaxation	APHA 23 <sup>rd</sup> Edn. 3500 Pb B
23.	Nickel (as Ni), mg/l	<0.01	0.02	No relaxation	APHA 23 <sup>rd</sup> Edn. 3500 Ni B
24.	Zinc (as Zn), mg/l	<0.01	5	15	APHA 23 <sup>rd</sup> Edn. 3500 Zn B
25.	Alkalinity (as $\text{CaCO}_3$ ) mg/l	194	200	600	APHA 23 <sup>rd</sup> Edn. 2320 B

Note:

(Water Level was observed as 6.55 Mbgl)

- The results relate only to the items received and tested.
- Test report shall not be reproduced except in full, without written approval of the laboratory.
- Sample shall be discarded after 15 days from the date of issue of the test reports.
- The results apply to the sample as received.

Dr. Niraj Kumar Singh  
(Authorized Signatory)

-- End of the Report --



TC 11163

TEST REPORT

ULR No.: TC1116325000000613F	Test Report No.	: SRL/R/GW/MAY/25/623
Issued to:	Report Issue Date	: 19/05/2025
M/s Balmukund Sponge & Iron (P) Limited, At.: Chatro – Tundi Road, District: Giridih, Jharkhand.	Sample Receipt Date	: 14/05/2025
	Analysis Date	: 14/05/2025 – 17/05/2025
	Sample Collected by	: Client
	Sample Quantity	: 1 Litre
	Sample Condition	: Sealed
	Weather Condition	: Clear
	Lab. Sample No.	: DW – 193

Type of Sample	: Ground Water	Sampling Method	: Grab
Location of Sample	: Bore Well No. 2 (Plant Campus)	Date of Sampling	: 14/05/2025

TEST RESULTS

Sl. No.	Parameters	Results	Regulatory Standards As per IS: 10500 (2012) (Drinking Water Specification)		Test Method (s)
			Desirable Limits	Permissible Limits	
1.	Colour, Hazen units, Max.	<5	5	15	APHA 23 <sup>rd</sup> Edn. 2120 B
2.	Odour	Unobjectionable	Agreeable	Agreeable	APHA 23 <sup>rd</sup> Edn. 2150 B
3.	Taste	Agreeable	Agreeable	Agreeable	APHA 23 <sup>rd</sup> Edn. 2160 B
4.	Turbidity, NTU, Max.	<5	1	5	APHA 23 <sup>rd</sup> Edn. 2130 B
5.	Conductivity, $\mu\text{mhos}/\text{cm}$	1142	-	-	APHA 23 <sup>rd</sup> Edn. 2510 B
6.	pH Value	7.1	6.5 to 8.5	No relaxation	APHA 23 <sup>rd</sup> Edn. 4500H B
7.	Total Hardness (as $\text{CaCO}_3$ ), mg/l	596	200	600	APHA 23 <sup>rd</sup> Edn. 2340 C
8.	Iron (as Fe), mg/l	<0.10	0.3	No relaxation	APHA 23 <sup>rd</sup> Edn. 3500Fe B
9.	Chloride (as Cl), mg/l	46	250	1000	APHA 23 <sup>rd</sup> Edn. 4500 Cl B
10.	Residual Free Chlorine, mg/l	Nil	0.2	1.0	APHA 23 <sup>rd</sup> Edn. 4500 Cl B
11.	Fluoride (as F) mg/L	0.56	1.0	1.5	APHA 23 <sup>rd</sup> Edn. 4500 F D
12.	Dissolved Solids mg/l	708	500	2000	APHA 23 <sup>rd</sup> Edn. 4500 O C
13.	Calcium (as Ca), mg/l	110	75	200	APHA 23 <sup>rd</sup> Edn. 3500 Ca B
14.	Sodium (as Na), mg/l	20	-	-	APHA 23 <sup>rd</sup> Edn. 3500 Na B
15.	Potassium (as K), mg/l	9	-	-	APHA 23 <sup>rd</sup> Edn. 3500 K B
16.	Magnesium (as Mg), mg/l	77	30	100	APHA 23 <sup>rd</sup> Edn. 3500 Mg B
17.	Copper (Cu), mg/l	<0.05	0.05	1.5	APHA 23 <sup>rd</sup> Edn. 3500 Cu B
18.	Manganese (as Mn), mg/l	<0.05	0.1	0.3	APHA 23 <sup>rd</sup> Edn. 3500 Mn B
19.	Sulphate (as $\text{SO}_4^{2-}$ ), mg/l	72	200	400	APHA 23 <sup>rd</sup> Edn. 4500 $\text{SO}_4^{2-}$ E
20.	Nitrate (as $\text{NO}_3^-$ ), mg/l	2.9	45	No relaxation	APHA 23 <sup>rd</sup> Edn. 4500 $\text{NO}_3^-$ B
21.	Arsenic (as As), mg/l	<0.01	0.01	0.05	APHA 23 <sup>rd</sup> Edn. 3500 As B
22.	Lead (as Pb), mg/l	<0.005	0.01	No relaxation	APHA 23 <sup>rd</sup> Edn. 3500 Pb B
23.	Nickel (as Ni), mg/l	<0.01	0.02	No relaxation	APHA 23 <sup>rd</sup> Edn. 3500 Ni B
24.	Zinc (as Zn), mg/l	<0.01	5	15	APHA 23 <sup>rd</sup> Edn. 3500 Zn B
25.	Alkalinity (as $\text{CaCO}_3$ ) mg/l	254	200	600	APHA 23 <sup>rd</sup> Edn. 2320 B

Note:

(Water Level was observed as 10.6 Mbgl)

1. The results relate only to the items received and tested.
2. Test report shall not be reproduced except in full, without written approval of the laboratory.
3. Sample shall be discarded after 15 days from the date of issue of the test reports.
4. The results apply to the sample as received.

Dr. Niraj Kumar Singh  
(Authorized Signatory)

-- End of the Report --



TC 11163

TEST REPORT

ULR No.: TC1116325000000615F	Test Report No.	: SRL/R/GW/MAY/25/625
Issued to:	Report Issue Date	: 19/05/2025
M/s Balmukund Sponge & Iron (P) Limited, At: Chatro - Tundi Road, District: Giridih, Jharkhand.	Sample Receipt Date	: 14/05/2025
	Analysis Date	: 14/05/2025 - 17/05/2025
	Sample Collected by	: Client
	Sample Quantity	: 1 Litre
	Sample Condition	: Sealed
	Weather Condition	: Clear
	Lab. Sample No.	: DW - 195

Type of Sample	: Ground Water	Sampling Method	: Grab
Location of Sample	: Dug Well, Gaganpur Village (Near Sri Lakhan Tudu House)	Date of Sampling	: 14/05/2025

TEST RESULTS

Sl. No.	Parameters	Results	Regulatory Standards As per IS: 10500 (2012) (Drinking Water Specification)		Test Method (s)
			Desirable Limits	Permissible Limits	
1.	Colour, Hazen units, Max.	<5	5	15	APHA 23 <sup>rd</sup> Edn. 2120 B
2.	Odour	Unobjectionable	Agreeable	Agreeable	APHA 23 <sup>rd</sup> Edn. 2150 B
3.	Taste	Agreeable	Agreeable	Agreeable	APHA 23 <sup>rd</sup> Edn. 2160 B
4.	Turbidity, NTU, Max.	<5	1	5	APHA 23 <sup>rd</sup> Edn. 2130 B
5.	Conductivity, $\mu\text{mhos}/\text{cm}$	526	-	-	APHA 23 <sup>rd</sup> Edn. 2510 B
6.	pH Value	7.2	6.5 to 8.5	No relaxation	APHA 23 <sup>rd</sup> Edn. 4500H B
7.	Total Hardness (as $\text{CaCO}_3$ ), mg/l	198	200	600	APHA 23 <sup>rd</sup> Edn. 2340 C
8.	Iron (as Fe), mg/l	<0.10	0.3	No relaxation	APHA 23 <sup>rd</sup> Edn. 3500Fe B
9.	Chloride (as Cl), mg/l	38	250	1000	APHA 23 <sup>rd</sup> Edn. 4500 Cl B
10.	Residual Free Chlorine, mg/l	Nil	0.2	1.0	APHA 23 <sup>rd</sup> Edn. 4500 Cl B
11.	Fluoride (as F) mg/L	0.48	1.0	1.5	APHA 23 <sup>rd</sup> Edn. 4500 F D
12.	Dissolved Solids mg/l	324	500	2000	APHA 23 <sup>rd</sup> Edn. 4500 O C
13.	Calcium (as Ca), mg/l	46	75	200	APHA 23 <sup>rd</sup> Edn. 3500 Ca B
14.	Sodium (as Na), mg/l	14	-	-	APHA 23 <sup>rd</sup> Edn. 3500 Na B
15.	Potassium (as K), mg/l	8	-	-	APHA 23 <sup>rd</sup> Edn. 3500 K B
16.	Magnesium (as Mg), mg/l	20	30	100	APHA 23 <sup>rd</sup> Edn. 3500 Mg B
17.	Copper (Cu), mg/l	<0.05	0.05	1.5	APHA 23 <sup>rd</sup> Edn. 3500 Cu B
18.	Manganese (as Mn), mg/l	<0.05	0.1	0.3	APHA 23 <sup>rd</sup> Edn. 3500 Mn B
19.	Sulphate (as $\text{SO}_4^{2-}$ ), mg/l	46	200	400	APHA 23 <sup>rd</sup> Edn. 4500 SO <sub>4</sub> <sup>2-</sup> E
20.	Nitrate (as $\text{NO}_3^-$ ), mg/l	2.8	45	No relaxation	APHA 23 <sup>rd</sup> Edn. 4500 NO <sub>3</sub> B
21.	Arsenic (as As), mg/l	<0.01	0.01	0.05	APHA 23 <sup>rd</sup> Edn. 3500 As B
22.	Lead (as Pb), mg/l	<0.005	0.01	No relaxation	APHA 23 <sup>rd</sup> Edn. 3500 Pb B
23.	Nickel (as Ni), mg/l	<0.01	0.02	No relaxation	APHA 23 <sup>rd</sup> Edn. 3500 Ni B
24.	Zinc (as Zn), mg/l	<0.01	5	15	APHA 23 <sup>rd</sup> Edn. 3500 Zn B
25.	Alkalinity (as $\text{CaCO}_3$ ) mg/l	224	200	600	APHA 23 <sup>rd</sup> Edn. 2320 B

Note:

(Water Level was observed as 4.8 Mbgl)

- The results relate only to the items received and tested.
- Test report shall not be reproduced except in full, without written approval of the laboratory.
- Sample shall be discarded after 15 days from the date of issue of the test reports.
- The results apply to the sample as received.

*Niraj*Dr. Niraj Kumar Singh  
(Authorized Signatory)

-- End of the Report --



TC.11163

**TEST REPORT**

ULR No.: TC1116324000000995F	Test Report No.	: SRL/R/GW/OCT/25/1017
Issued to:	Report Issue Date	: 25/10/2025
M/s Balmukund Sponge & Iron (P) Limited, At: Chatro – Tundi Road, District: Giridih, Jharkhand.	Sample Receipt Date	: 21/10/2025
	Analysis Date	: 21/10/2025 – 24/10/2025
	Sample Collected by	: Client
	Sample Quantity	: 2 Litre
	Sample Condition	: Sealed
	Weather Condition	: Partly Cloudy
	Lab. Sample No.	: GW – 264

Type of Sample	: Ground Water	Sampling Method	: Grab
Location of Sample	: Bore Well No. 1 (Plant Campus)	Date of Sampling	: 21/10/2025

**TEST RESULTS**

Sl. No.	Parameters	Results	Regulatory Standards As per IS: 10500 (2012) (Drinking Water Specification)		Test Method (s)
			Desirable Limits	Permissible Limits	
1.	Turbidity, NTU, Max.	<5	1	5	APHA 24 <sup>th</sup> Edn. 2130 B
2.	pH Value	7.0	6.5 to 8.5	No relaxation	APHA 24 <sup>th</sup> Edn. 4500H B
3.	Total Hardness (as CaCO <sub>3</sub> ), mg/l	156	200	600	APHA 24 <sup>th</sup> Edn. 2340 C
4.	Iron (as Fe), mg/l	<0.10	0.3	No relaxation	APHA 24 <sup>th</sup> Edn. 3500Fe B
5.	Chloride (as Cl), mg/l	38	250	1000	APHA 24 <sup>th</sup> Edn. 4500 Cl B
6.	Residual Free Chlorine, mg/l	Nil	0.2	1.0	APHA 24 <sup>th</sup> Edn. 4500 Cl B
7.	Fluoride (as F) mg/L	0.64	1.0	1.5	APHA 24 <sup>th</sup> Edn. 4500 F D
8.	Dissolved Solids mg/l	324	500	2000	APHA 24 <sup>th</sup> Edn. 2540 C
9.	Calcium (as Ca), mg/l	42	75	200	APHA 24 <sup>th</sup> Edn. 3500 Ca B
10.	Magnesium (as Mg), mg/l	14	30	100	APHA 24 <sup>th</sup> Edn. 3500 Mg B
11.	Sodium (as Na), mg/l	12	-	-	APHA 24 <sup>th</sup> Edn. 3500 Na B
12.	Potassium (as K), mg/l	8	-	-	APHA 24 <sup>th</sup> Edn. 3500 K B
13.	Copper (Cu), mg/l	<0.05	0.05	1.5	APHA 24 <sup>th</sup> Edn. 3500 Cu B
14.	Manganese (as Mn), mg/l	<0.05	0.1	0.3	APHA 24 <sup>th</sup> Edn. 3500 Mn B
15.	Sulphate (as SO <sub>4</sub> ), mg/l	56	200	400	APHA 24 <sup>th</sup> Edn. 4500 SO <sub>4</sub> <sup>2-</sup> E
16.	Nitrate (as NO <sub>3</sub> ), mg/l	3.8	45	No relaxation	APHA 24 <sup>th</sup> Edn. 4500 NO <sub>3</sub> B
17.	Zinc (as Zn), mg/l	<0.01	5	15	APHA 24 <sup>th</sup> Edn. 3500 Zn B
18.	Arsenic (as As), mg/l	<0.01	0.01	0.05	APHA 24 <sup>th</sup> Edn. 3114 As C
19.	Lead (as Pb), mg/l	<0.005	0.01	No relaxation	APHA 24 <sup>th</sup> Edn. 3111 B
20.	Nickel (as Ni), mg/l	<0.01	0.02	No relaxation	APHA 24 <sup>th</sup> Edn. 3111 B
21.	Mercury as Hg), mg/l	<0.001	0.001	No relaxation	APHA 24 <sup>th</sup> Edn. 3112 Hg B
22.	Alkalinity (as CaCO <sub>3</sub> ) mg/l	190	200	600	APHA 24 <sup>th</sup> Edn. 2320 B

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4. The results apply to the sample as received.

*Niraj*Reviewed & Issued by;  
Dr. Niraj Kumar Singh  
(Authorized Signatory)

-- End of the Report --



TC 11163

TEST REPORT

ULR No.: TC1116324000000996F	Test Report No.	SRL/R/GW/OCT/25/1018
Issued to:	Report Issue Date	: 25/10/2025
M/s Balmukund Sponge & Iron (P) Limited, At: Chatro – Tundi Road, District: Giridih, Jharkhand.	Sample Receipt Date	: 21/10/2025
	Analysis Date	: 21/10/2025 – 24/10/2025
	Sample Collected by	: Client
	Sample Quantity	: 2 Litre
	Sample Condition	: Sealed
	Weather Condition	: Partly Cloudy
	Lab. Sample No.	: GW – 265

Type of Sample	: Ground Water	Sampling Method	: Grab
Location of Sample	: Bore Well No. 2 (Plant Campus)	Date of Sampling	: 21/10/2025

TEST RESULTS

Sl. No.	Parameters	Results	Regulatory Standards As per IS: 10500 (2012) (Drinking Water Specification)		Test Method (s)
			Desirable Limits	Permissible Limits	
1.	Turbidity, NTU, Max.	<5	1	5	APHA 24 <sup>th</sup> Edn. 2130 B
2.	pH Value	6.8	6.5 to 8.5	No relaxation	APHA 24 <sup>th</sup> Edn. 4500H B
3.	Total Hardness (as CaCO <sub>3</sub> ), mg/l	528	200	600	APHA 24 <sup>th</sup> Edn. 2340 C
4.	Iron (as Fe), mg/l	<0.10	0.3	No relaxation	APHA 24 <sup>th</sup> Edn. 3500Fe B
5.	Chloride (as Cl), mg/l	38	250	1000	APHA 24 <sup>th</sup> Edn. 4500 Cl B
6.	Residual Free Chlorine, mg/l	Nil	0.2	1.0	APHA 24 <sup>th</sup> Edn. 4500 Cl B
7.	Fluoride (as F) mg/L	0.54	1.0	1.5	APHA 24 <sup>th</sup> Edn. 4500 F D
8.	Dissolved Solids mg/l	668	500	2000	APHA 24 <sup>th</sup> Edn. 2540 C
9.	Calcium (as Ca), mg/l	114	75	200	APHA 24 <sup>th</sup> Edn. 3500 Ca B
10.	Magnesium (as Mg), mg/l	56	30	100	APHA 24 <sup>th</sup> Edn. 3500 Mg B
11.	Sodium (as Na), mg/l	10	-	-	APHA 24 <sup>th</sup> Edn. 3500 Na B
12.	Potassium (as K), mg/l	9	-	-	APHA 24 <sup>th</sup> Edn. 3500 K B
13.	Copper (Cu), mg/l	<0.05	0.05	1.5	APHA 24 <sup>th</sup> Edn. 3500 Cu B
14.	Manganese (as Mn), mg/l	<0.05	0.1	0.3	APHA 24 <sup>th</sup> Edn. 3500 Mn B
15.	Sulphate (as SO <sub>4</sub> ), mg/l	52	200	400	APHA 24 <sup>th</sup> Edn. 4500 SO <sub>4</sub> E
16.	Nitrate (as NO <sub>3</sub> ), mg/l	3.4	45	No relaxation	APHA 24 <sup>th</sup> Edn. 4500 NO <sub>3</sub> B
17.	Zinc (as Zn), mg/l	<0.01	5	15	APHA 24 <sup>th</sup> Edn. 3500 Zn B
18.	Arsenic (as As), mg/l	<0.01	0.01	0.05	APHA 24 <sup>th</sup> Edn. 3114 As C
19.	Lead (as Pb), mg/l	<0.005	0.01	No relaxation	APHA 24 <sup>th</sup> Edn. 3111 B
20.	Nickel (as Ni), mg/l	<0.01	0.02	No relaxation	APHA 24 <sup>th</sup> Edn. 3111 B
21.	Mercury as Hg, mg/l	<0.001	0.001	No relaxation	APHA 24 <sup>th</sup> Edn. 3112 Hg B
22.	Alkalinity (as CaCO <sub>3</sub> ) mg/l	210	200	600	APHA 24 <sup>th</sup> Edn. 2320 B

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*Niraj*Reviewed & issued by:  
Dr. Niraj Kumar Singh  
(Authorized Signatory)

-- End of the Report --



TC 11163

**TEST REPORT**

ULR No.: TC1116324000000998F	Test Report No.	: SRL/R/GW/OCT/25/1020
Issued to:	Report Issue Date	: 25/10/2025
M/s Balmukund Sponge & Iron (P) Limited, At: Chatro – Tundi Road, District: Giridih, Jharkhand.	Sample Receipt Date	: 21/10/2025
	Analysis Date	: 21/10/2025 – 24/10/2025
	Sample Collected by	: Client
	Sample Quantity	: 2 Litre
	Sample Condition	: Sealed
	Weather Condition	: Partly Cloudy
	Lab. Sample No.	: GW – 267

Type of Sample	: Ground Water	Sampling Method	: Grab
Location of Sample	: Dug Well, Gaganpur Village (Near Sri Lakan Tudu House)	Date of Sampling	: 21/10/2025

**TEST RESULTS**

Sl. No.	Parameters	Results	Regulatory Standards As per IS: 10500 (2012) (Drinking Water Specification)		Test Method (s)
			Desirable Limits	Permissible Limits	
1.	Turbidity, NTU, Max.	<5	1	5	APHA 23 <sup>rd</sup> Edn. 2130 B
2.	pH Value	7.0	6.5 to 8.5	No relaxation	APHA 23 <sup>rd</sup> Edn. 4500H B
3.	Total Hardness (as CaCO <sub>3</sub> ), mg/l	192	200	600	APHA 23 <sup>rd</sup> Edn. 2340 C
4.	Iron (as Fe), mg/l	<0.10	0.3	No relaxation	APHA 23 <sup>rd</sup> Edn. 3500Fe B
5.	Chloride (as Cl), mg/l	34	250	1000	APHA 23 <sup>rd</sup> Edn. 4500 Cl B
6.	Residual Free Chlorine, mg/l	Nil	0.2	1.0	APHA 23 <sup>rd</sup> Edn. 4500 Cl B
7.	Fluoride (as F) mg/L	0.52	1.0	1.5	APHA 23 <sup>rd</sup> Edn. 4500 F D
8.	Dissolved Solids mg/l	328	500	2000	APHA 24 <sup>th</sup> Edn. 2540 C
9.	Calcium (as Ca), mg/l	46	75	200	APHA 23 <sup>rd</sup> Edn. 3500 Ca B
10.	Magnesium (as Mg), mg/l	18	30	100	APHA 23 <sup>rd</sup> Edn. 3500 Mg B
11.	Sodium (as Na), mg/l	12	-	-	APHA 23 <sup>rd</sup> Edn. 3500 Na B
12.	Potassium (as K), mg/l	8	-	-	APHA 23 <sup>rd</sup> Edn. 3500 K B
13.	Copper (Cu), mg/l	<0.05	0.05	1.5	APHA 23 <sup>rd</sup> Edn. 3500 Cu B
14.	Manganese (as Mn), mg/l	<0.05	0.1	0.3	APHA 23 <sup>rd</sup> Edn. 3500 Mn B
15.	Sulphate (as SO <sub>4</sub> ), mg/l	34	200	400	APHA 23 <sup>rd</sup> Edn. 4500 SO <sub>4</sub> <sup>2-</sup> E
16.	Nitrate (as NO <sub>3</sub> ), mg/l	3.2	45	No relaxation	APHA 23 <sup>rd</sup> Edn. 4500 NO <sub>3</sub> B
17.	Zinc (as Zn), mg/l	<0.01	5	15	APHA 23 <sup>rd</sup> Edn. 3500 Zn B
18.	Arsenic (as As), mg/l	<0.01	0.01	0.05	APHA 24 <sup>th</sup> Edn. 3114 As C
19.	Lead (as Pb), mg/l	<0.005	0.01	No relaxation	APHA 24 <sup>th</sup> Edn. 3111 B
20.	Nickel (as Ni), mg/l	<0.01	0.02	No relaxation	APHA 24 <sup>th</sup> Edn. 3111 B
21.	Mercury as Hg), mg/l	<0.001	0.001	No relaxation	APHA 24 <sup>th</sup> Edn. 3112 Hg B
22.	Alkalinity (as CaCO <sub>3</sub> ) mg/l	194	200	600	APHA 23 <sup>rd</sup> Edn. 2320 B

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*Niraj*Reviewed & Issued by:  
Dr. Niraj Kumar Singh  
(Authorized Signatory)

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Analytical & Environmental Engineering Laboratory

Address: C-144, Aman Green City, Pundag, Ranchi- 834 004, Jharkhand  
Tele No.: 0651-4057244, Mobile: 94701 30700, E-mail: srlranchilab@gmail.com



TC-11163

## TEST REPORT

ULR No.: TC1116325000000775F	Test Report No.	: SRL/R/AAQ/JULY/25/785
Customer's Name & Address	Report Issue Date	: 14.07.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Div.) At.: Manjhiladih, P.O.: Gadisrirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Type of Sample	: Ambient Air
	Sampling Location	: Near Labour Quarter
	Date of Sampling	: 23.06.2025 to 24.06.2025
	Sample Receipt Date	: 25.06.2025
	Analysis Date	: 25.06.2025 to 30.06.2025
	Sample Collected by	: SRL Team
	Sample Condition	: Sealed and refrigerated

Weather Condition: Partly Cloudy	Ambient Temperature (°C): 33	Relative Humidity (%): 82
Atmospheric Pressure (mmHg): 750	Wind Speed (km/hr.) : 12.0	Wind Direction : E

## TEST RESULTS

Sl. No.	Parameters	Unit	Results	Standards Value*	Test Method
1.	Sulphur Dioxide, (SO <sub>2</sub> )	µg/m <sup>3</sup>	18.50	80 (24 hrs.)	IS: 5182 (Part- 2)
2.	Nitrogen Dioxide, (NO <sub>2</sub> )	µg/m <sup>3</sup>	32.00	80 (24 hrs.)	IS: 5182 (Part- 6)
3.	Particulate Matter, PM <sub>10</sub>	µg/m <sup>3</sup>	72.00	100 (24 hrs.)	IS: 5182 (Part- 23)
4.	Particulate Matter, PM <sub>2.5</sub>	µg/m <sup>3</sup>	42.00	60 (24 hrs.)	IS: 5182 (Part- 24)
5.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	26.00	400 (24 hrs.)	IS: 5182 (Part- 25)
6.	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	30.00	180 (1 hr.)	CPCB, Vol. I (NAAQMS Monitoring & Analysis Guidelines)
7.	Arsenic (As)	ng/m <sup>3</sup>	<1.00	6 (Annual)	CPCB, Volume I (NAAQMS Monitoring & Analysis Guidelines)
8.	Lead (Pb)	µg/m <sup>3</sup>	<0.02	1 (24 hr.)	IS 5182 (Part-22)
9.	Nickel (Ni)	ng/m <sup>3</sup>	<5.00	20 (Annual)	IS 5182 (Part-26): 2020

\*NAAQS: National Ambient Air Quality Standards, 2009.

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Tele No.: 0651-4057244, Mobile: 94701 30700, E-mail: srlranchilab@gmail.com



TC-11163

## TEST REPORT

ULR No.: TC1116325000000776F	Test Report No.	: SRL/R/AAQ/JULY/25/786
Customer's Name & Address	Report Issue Date	: 14.07.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Div.) At.: Manjhiladih, P.O.: Gadirirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Type of Sample	: Ambient Air
	Sampling Location	: Near Labour Rest Room
	Date of Sampling	: 23.06.2025 to 24.06.2025
	Sample Receipt Date	: 25.06.2025
	Analysis Date	: 25.06.2025 to 30.06.2025
	Sample Collected by	: SRL Team
	Sample Condition	: Sealed and refrigerated

Weather Condition: Partly Cloudy	Ambient Temperature (°C): 33	Relative Humidity (%): 82
Atmospheric Pressure (mmHg): 750	Wind Speed (km/hr.) : 12.0	Wind Direction : E

## TEST RESULTS

Sl. No.	Parameters	Unit	Results	Standards Value*	Test Method
1.	Sulphur Dioxide, (SO <sub>2</sub> )	µg/m <sup>3</sup>	20.30	80 (24 hrs.)	IS: 5182 (Part- 2)
2.	Nitrogen Dioxide, (NO <sub>2</sub> )	µg/m <sup>3</sup>	33.70	80 (24 hrs.)	IS: 5182 (Part- 6)
3.	Particulate Matter, PM <sub>10</sub>	µg/m <sup>3</sup>	78.00	100 (24 hrs.)	IS: 5182 (Part- 23)
4.	Particulate Matter, PM <sub>2.5</sub>	µg/m <sup>3</sup>	47.00	60 (24 hrs.)	IS: 5182 (Part- 24)
5.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	28.00	400 (24 hrs.)	IS: 5182 (Part- 25)
6.	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	34.00	180 (1 hr.)	CPCB, Vol. I (NAAQMS Monitoring & Analysis Guidelines)
7.	Arsenic (As)	ng/m <sup>3</sup>	<1.00	6 (Annual)	CPCB, Volume I (NAAQMS Monitoring & Analysis Guidelines)
8.	Lead (Pb)	µg/m <sup>3</sup>	<0.02	1 (24 hr.)	IS 5182 (Part-22)
9.	Nickel (Ni)	ng/m <sup>3</sup>	<5.00	20 (Annual)	IS 5182 (Part-26): 2020

\*NAAQS: National Ambient Air Quality Standards, 2009.

Note:

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TC-11163

## TEST REPORT

ULR No.: TC1116325000000777F	Test Report No.	: SRL/R/AAQ/JULY/25/787
Customer's Name & Address	Report Issue Date	: 14.07.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Div.)	Type of Sample	: Ambient Air
At.: Manjhiladih, P.O.: Gadirirampur,	Sampling Location	: Near Northern Boundary
P.S.: Giridih (M), District: Giridih, Jharkhand.	Date of Sampling	: 23.06.2025 to 24.06.2025
	Sample Receipt Date	: 25.06.2025
	Analysis Date	: 25.06.2025 to 30.06.2025
	Sample Collected by	: SRL Team
	Sample Condition	: Sealed and refrigerated

Weather Condition: Partly Cloudy	Ambient Temperature (°C): 33	Relative Humidity (%): 82
Atmospheric Pressure (mmHg): 750	Wind Speed (km/hr.) : 12.0	Wind Direction : E

## TEST RESULTS

Sl. No.	Parameters	Unit	Results	Standards Value*	Test Method
1.	Sulphur Dioxide, (SO <sub>2</sub> )	µg/m <sup>3</sup>	21.40	80 (24 hrs.)	IS: 5182 (Part- 2)
2.	Nitrogen Dioxide, (NO <sub>2</sub> )	µg/m <sup>3</sup>	33.50	80 (24 hrs.)	IS: 5182 (Part- 6)
3.	Particulate Matter, PM <sub>10</sub>	µg/m <sup>3</sup>	77.00	100 (24 hrs.)	IS: 5182 (Part- 23)
4.	Particulate Matter, PM <sub>2.5</sub>	µg/m <sup>3</sup>	43.00	60 (24 hrs.)	IS: 5182 (Part- 24)
5.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	27.00	400 (24 hrs.)	IS: 5182 (Part- 25)
6.	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	32.00	180 (1 hr.)	CPCB, Vol. I (NAAQMS Monitoring & Analysis Guidelines)
7.	Arsenic (As)	ng/m <sup>3</sup>	<1.00	6 (Annual)	CPCB, Volume I (NAAQMS Monitoring & Analysis Guidelines)
8.	Lead (Pb)	µg/m <sup>3</sup>	<0.02	1 (24 hr.)	IS 5182 (Part-22)
9.	Nickel (Ni)	ng/m <sup>3</sup>	<5.00	20 (Annual)	IS 5182 (Part-26): 2020

\*NAAQS: National Ambient Air Quality Standards, 2009.

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TC-11163

## TEST REPORT

ULR No.: TC1116325000000778F	Test Report No.	: SRL/R/AAQ/JULY/25/788
Customer's Name & Address	Report Issue Date	: 14.07.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Div.) At.: Manjhiladih, P.O.: Gadirirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Type of Sample	: Ambient Air
	Sampling Location	: Near Southern Boundary
	Date of Sampling	: 23.06.2025 to 24.06.2025
	Sample Receipt Date	: 25.06.2025
	Analysis Date	: 25.06.2025 to 30.06.2025
	Sample Collected by	: SRL Team
	Sample Condition	: Sealed and refrigerated

Weather Condition: Partly Cloudy	Ambient Temperature (°C): 33	Relative Humidity (%): 82
Atmospheric Pressure (mmHg): 750	Wind Speed (km/hr.) : 12.0	Wind Direction : E

## TEST RESULTS

Sl. No.	Parameters	Unit	Results	Standards Value*	Test Method
1.	Sulphur Dioxide, (SO <sub>2</sub> )	µg/m <sup>3</sup>	22.80	80 (24 hrs.)	IS: 5182 (Part- 2)
2.	Nitrogen Dioxide, (NO <sub>2</sub> )	µg/m <sup>3</sup>	34.00	80 (24 hrs.)	IS: 5182 (Part- 6)
3.	Particulate Matter, PM <sub>10</sub>	µg/m <sup>3</sup>	84.00	100 (24 hrs.)	IS: 5182 (Part- 23)
4.	Particulate Matter, PM <sub>2.5</sub>	µg/m <sup>3</sup>	50.00	60 (24 hrs.)	IS: 5182 (Part- 24)
5.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	28.00	400 (24 hrs.)	IS: 5182 (Part- 25)
6.	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	34.00	180 (1 hr.)	CPCB, Vol. I (NAAQMS Monitoring & Analysis Guidelines)
7.	Arsenic (As)	ng/m <sup>3</sup>	<1.00	6 (Annual)	CPCB, Volume I (NAAQMS Monitoring & Analysis Guidelines)
8.	Lead (Pb)	µg/m <sup>3</sup>	<0.02	1 (24 hr.)	IS 5182 (Part-22)
9.	Nickel (Ni)	ng/m <sup>3</sup>	<5.00	20 (Annual)	IS 5182 (Part-26): 2020

\*NAAQS: National Ambient Air Quality Standards, 2009.

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TC-11163

## TEST REPORT

ULR No.: TC1116325000000779F	Test Report No.	: SRL/R/N/JULY/25/789
Issued to:	Report Issue Date	: 14.07.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Div.) At.: Manjhiladih, P.O.: Gadisrirampur, P.S.: Giridih (M), District: Giridih, Jharkhand	Type of Sample	: Ambient Noise
	Date of Sampling	: 23.06.2025 to 24.06.2025
	Sample Receipt Date	: 25.06.2025
	Analysis Date	: 26.06.2025
	Sample Collected by	: SRL Team
	Weather Condition	: Clear
	Atmospheric Temp.(°C)	: 36
	Test Method	: IS 9989

## AMBIENT NOISE MONITORING DATA

SI. No.	Monitoring Location	Date of Monitoring	Sound Pressure Level, dB(A)	
			Day Time (06.00-22.00 hr.)	Night Time (22.00-06.00 hr.)
1.	Near Labour Quarter	23.06.2025 to 24.06.2025	62.9	61.6
2.	Near Labour Rest Room	23.06.2025 to 24.06.2025	63.4	62.5
3.	Near Northern Boundary	23.06.2025 to 24.06.2025	65.0	64.7
4.	Near Southern Boundary	23.06.2025 to 24.06.2025	63.2	62.8

Norms: National Ambient Air Quality Standards (NAAQS) in respect of Noise as per CPCB, New Delhi,

- Industrial Area : Day Time 75 dB(A) Leq and Night Time 70 dB(A) Leq
- Commercial Area : Day Time 65 dB(A) Leq and Night Time 55 dB(A) Leq
- Residential Area : Day Time 55 dB(A) Leq and Night Time 45 dB(A) Leq
- Silence Zone : Day Time 50 dB(A) Leq and Night Time 40 dB(A) Leq

Reviewed & issued by;  
Dr. Niraj Kumar Singh  
(Authorized Signatory)

-- End of the Report --



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Tele No.: 0651-4057244, Mobile: 94701 30700, E-mail: srlranchilab@gmail.com



TC-11163

## TEST REPORT

ULR No.: TC1116325000000780F	Test Report No.	: SRL/R/ST/JULY/25/790
Issued to:	Report Issue Date	: 14.07.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Div.) (Iron Ore Ben. Plant) At.: Manjhiladih, P.O.: Gadisirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Type of Sample	: Stack Emission
	Date of Sampling	: 23.06.2025
	Sample Receipt Date	: 25.06.2025
	Analysis Date	: 25.06.2025 to 28.06.2025

### A. INFORMATION OF PHYSICAL CHARACTERISTICS OF STACK

Stack number if any	: Stack – 1 (Iron Ore Beneficiation Unit)
Emission due to	: Process
Material of construction of stack	: M.S.
Shape of stack	: Circular
Whether stack is provided with permanent platform/ ladder	: Yes
Height of the stack from ground level (in meter)	: 30
Height of the sampling point from ground level (in meter)	: 12
Diameter of the stack at sampling point (in meter)	: 0.60
Fuel used & Consumption	: Process Stack
Production Capacity	: 74,000 TPA (Iron Ore)
Stack connected to	: IOB Unit

### B. DETAIL OF STACK EMISSION SAMPLING AND TEST REPORT

Parameters (Units)	Results	Test Method
Ambient air temperature (°C)	36	IS 11255 (Part 3): 2008 RA 2013
Stack gas temperature, (°C)	72	IS 11255 (Part 3): 2008 RA 2013
Barometric Pressure, (mm of Hg)	752	-
Stack gas velocity, (m/sec)	6.78	IS 11255 (Part 3): 2008 RA 2013
Volumetric flow rate (in Nm <sup>3</sup> /hr),	5962	IS 11255 (Part 3): 2008 RA 2013
Emission rate (in kg/hr)	0.495	IS 11255 (Part 3): 2008 RA 2013
Conc. of Carbon dioxide, (% v/v by Orsat method)	NA	IS 13270; 1992 RA 2019
Conc. of Carbon monoxide, (% v/v by Orsat method)	NA	IS 13270; 1992 RA 2019
Conc. of Sulphur Dioxides, mg/Nm <sup>3</sup>	NA	IS: 11255 (Part 2) 1985 RA 2019
Conc. of Oxides of Nitrogen, mg/Nm <sup>3</sup>	NA	IS: 11255 (Part 7) 2005 RA 2017
Conc. of Particulate Matter, mg/Nm <sup>3</sup>	83	IS: 11255 (Part 1) 1985 RA 2019

Remarks: Dust concentration was found 83 mg/Nm<sup>3</sup> against prescribed limit of 150 mg/NM<sup>3</sup>.

Note:

1. The results relate only to the items sampled and tested.
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TC-11163

## TEST REPORT

ULR No.: TC1116325000000781F	Test Report No.	: SRL/R/WW/JULY/25/791
Customer's Name & Address:	Report Issue Date	: 14.07.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Div.) At.: Manjhiladih, P.O.: Gadisrirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Sample Receipt Date	: 25.06.2025
	Analysis Date	: 25.06.2025 to 28.06.2025
	Sample Collected by	: SRL Team
	Sample Quantity	: 2 Litre
	Sample Condition	: Preserved
	Weather Condition	: Clear
	Lab. Sample No.	: WW – 77

Type of Sample	: Effluent Water	Sampling Method	: APHA 1060 B
Location of Sample	: Office Outlet	Date of Sampling	: 25.06.2025

## TEST RESULTS

Sl. No.	Parameters	Results	Regulatory Standard*			Test Method
			Inland Surface Water Body	Public Sewer	On Land Irrigation	
1.	Temperature, °C	32	**	**	-	APHA 24 <sup>th</sup> Edn. 2550 B
2.	pH Value	7.2	5.5 – 9.0	5.5 – 9.0	5.5 – 9.0	APHA 24 <sup>th</sup> Edn. 4500H+ B
3.	Total Suspended Solids, mg/l	32	100	600	200	APHA 24 <sup>th</sup> Edn. 2540 D
4.	Total Dissolved Solids, mg/l	274	-	-	-	APHA 24 <sup>th</sup> Edn. 2540 C
5.	Total Solids, mg/l	310	-	-	-	APHA 24 <sup>th</sup> Edn. 2540 B
6.	COD (as O <sub>2</sub> ), mg/l	36	250	-	-	IS: 3025 (Part 58) 2006
7.	BOD (3 days at 27 °C), mg/l	12	30	350	100	IS: 3025 (Part 44) 2012
8.	Oil & Grease, mg/l	<5	10	20	10	APHA 24 <sup>th</sup> Edn. 5220 B
9.	Chloride (as Cl), mg/l, Max.	86	1000	1000	600	APHA 24 <sup>th</sup> Edn. 4500 Cl- B

\*General standards for discharge of environmental pollutants into inland surface water as per CPCB, MoEF&CC, July, 2000.

\*\*Shall not exceed 5°C above the receiving water temperature.

Note:

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2. Test report shall not be reproduced except in full, without written approval of the laboratory.
3. Sample shall be discarded after 15 days from the date of issue of the test reports.

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TC-11163

## TEST REPORT

ULR No.: TC1116325000000782F	Test Report No.	: SRL/R/WZ/JULY/25/792
Customer's Name & Address:	Report Issue Date	: 14.07.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Div.) (CCM & Iron Ore Ben. Plant) At.: Manjhiladih, P.O.: Gadirirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Sample Receipt Date	: 25.06.2025
	Analysis Date	: 25.06.2025 to 27.06.2025
	Weather Condition	: Clear
	Atmospheric Temp. (°C)	: 33
	Relative Humidity (%)	: 64
	Wind Speed (Km/hour)	: 12.0
	Wind Direction (From)	: ESE

Nature and Description of Sample	: Air Quality Monitoring (Work Place)
Type of Sample	: Work Zone Dust
Date of Sampling	: 24.06.2025
Sampling Method	: IS: 5182 (Part- 23)
Sample Collected by	: SRL Team
Any Other Information (if any)	: Nil

## TEST RESULTS

Sl. No.	Location	Unit	Regulatory Standards	Results
1.	Near Hopper (Iron Ore Beneficiation Unit)	µg/m³	3000	1890
2.	Near Raw Material Yard (Iron Ore Beneficiation Unit)	µg/m³	3000	1724
3.	Near Scrape Yard (M.S. Billet Section)	µg/m³	3000	1658
4.	Near Weigh Bridge (M.S. Billet Section)	µg/m³	3000	1876

\* Norms for Fugitive Emission: MoEF & CC Notification, 31<sup>st</sup> March, 2012.

Note:

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TC-11163

## TEST REPORT

ULR No.: TC1116325000000731F	Test Report No.	: SRL/R/N/JULY/25/741
Issued to:	Report Issue Date	: 02.07.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Division- Induction Furnace Unit) At.: Manjhiladih, Gadisrirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Type of Sample	: Ambient Noise
	Date of Sampling	: 21.06.2025 to 22.06.2025
	Sample Receipt Date	: 25.06.2025
	Analysis Date	: 26.06.2025
	Sample Collected by	: SRL Team
	Weather Condition	: Partly Cloudy
	Atmospheric Temp.(°C)	: 33
	Test Method	: IS 9989

## AMBIENT NOISE MONITORING DATA

Sl. No.	Monitoring Location	Date of Monitoring	Sound Pressure Level, dB(A)	
			Day Time (06.00-22.00 hr.)	Night Time (22.00-06.00 hr.)
1.	Near Metal Conveyer	21.06.2025 to 22.06.2025	70.2	68.5
2.	Near Raw Material Yard (Induction Furnace Division)	21.06.2025 to 22.06.2025	63.8	62.6
3.	Northern Side of Induction Furnace Shed	21.06.2025 to 22.06.2025	64.3	62.7
4.	Beside Control Room	21.06.2025 to 22.06.2025	66.0	65.2

Norms: National Ambient Air Quality Standards (NAAQS) in respect of Noise as per CPCB, New Delhi,

Industrial Area : Day Time 75 dB(A) Leq and Night Time 70 dB(A) Leq

Commercial Area : Day Time 65 dB(A) Leq and Night Time 55 dB(A) Leq

Residential Area : Day Time 55 dB(A) Leq and Night Time 45 dB(A) Leq

Silence Zone : Day Time 50 dB(A) Leq and Night Time 40 dB(A) Leq

Reviewed & issued by:

Dr. Niraj Kumar Singh

(Authorized Signatory)

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TC-11163

## TEST REPORT

ULR No.: TC1116325000000732F	Test Report No.	: SRL/R/N/JULY/25/742
Issued to:	Report Issue Date	: 02.07.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Division- Rolling Mill Unit) At.: Manjhiladih, Gadisrirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Type of Sample	: Ambient Noise
	Date of Sampling	: 21.06.2025 to 22.06.2025
	Sample Receipt Date	: 25.06.2025
	Analysis Date	: 26.06.2025
	Sample Collected by	: SRL Team
	Weather Condition	: Partly Cloudy
	Atmospheric Temp.(°C)	: 33
	Test Method	: IS 9989

## AMBIENT NOISE MONITORING DATA

SI. No.	Monitoring Location	Date of Monitoring	Sound Pressure Level, dB(A)	
			Day Time (06.00-22.00 hr.)	Night Time (22.00-06.00 hr.)
1.	Near Finished Product Yard	21.06.2025 to 22.06.2025	65.7	64.5
2.	Near Raw Material Yard (Rolling Division)	21.06.2025 to 22.06.2025	63.4	61.8
3.	Eastern Side of Rolling Mill Unit	21.06.2025 to 22.06.2025	66.5	64.6
4.	Southern Side of Labour Rest Room	21.06.2025 to 22.06.2025	63.1	62.3

Norms: National Ambient Air Quality Standards (NAAQS) in respect of Noise as per CPCB, New Delhi,

Industrial Area : Day Time 75 dB(A) Leq and Night Time 70 dB(A) Leq

Commercial Area : Day Time 65 dB(A) Leq and Night Time 55 dB(A) Leq

Residential Area : Day Time 55 dB(A) Leq and Night Time 45 dB(A) Leq

Silence Zone : Day Time 50 dB(A) Leq and Night Time 40 dB(A) Leq

Reviewed & issued by:

Dr. Niraj Kumar Singh  
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TC-11163

## TEST REPORT

ULR No.: TC1116325000000733F	Test Report No.	: SRL/R/ST/JULY/25/743
Issued to:	Report Issue Date	: 02.07.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Division) At.: Manjhiladih, Gadisrirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Type of Sample	: Stack Emission
	Date of Sampling	: 21.06.2025
	Sample Receipt Date	: 25.06.2025
	Analysis Date	: 25.06.2025 to 28.06.2025

### A. INFORMATION OF PHYSICAL CHARACTERISTICS OF STACK

Stack number if any	: Stack – 1 (Induction Furnace Stack)
Emission due to	: Burning of Raw Materials/ Scrap
Material of construction of stack	: M.S.
Shape of stack	: Circular
Whether stack is provided with permanent platform/ ladder	: Yes
Height of the stack from ground level (in meter)	: 30
Height of the sampling point from ground level (in meter)	: 09
Diameter of the stack at sampling point (in meter)	: 0.60
Fuel used & Consumption	: Electricity & Electric Furnace
Production Capacity	: 3 x 15 MT Furnace
Stack connected to	: Fume Extraction System

### B. DETAIL OF STACK EMISSION SAMPLING AND TEST REPORT

Parameters (Units)	Results	Test Method
Ambient air temperature (°C)	35	IS 11255 (Part 3): 2008 RA 2013
Stack gas temperature, (°C)	116	IS 11255 (Part 3): 2008 RA 2013
Barometric Pressure, (mm of Hg)	750	-
Stack gas velocity, (m/sec)	6.67	IS 11255 (Part 3): 2008 RA 2013
Volumetric flow rate (in Nm <sup>3</sup> /hr),	5202	IS 11255 (Part 3): 2008 RA 2013
Emission rate (in kg/hr)	0.437	IS 11255 (Part 3): 2008 RA 2013
Conc. of Carbon dioxide, (% v/v by Orsat method)	5.6	IS 13270; 1992 RA 2019
Conc. of Carbon monoxide, (% v/v by Orsat method)	<0.2	IS 13270; 1992 RA 2019
Conc. of Sulphur Dioxides, mg/Nm <sup>3</sup>	29	IS: 11255 (Part 2) 1985 RA 2019
Conc. of Oxides of Nitrogen, mg/Nm <sup>3</sup>	23	IS: 11255 (Part 7) 2005 RA 2017
Conc. of Particulate Matter, mg/Nm <sup>3</sup>	84	IS: 11255 (Part 1) 1985 RA 2019

Remarks: Dust concentration was found 84 mg/Nm<sup>3</sup> against prescribed limit of 150 mg/NM<sup>3</sup>.

Note:

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(Authorized Signatory)

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TC-11163

## TEST REPORT

ULR No.: TC1116325000000734F	Test Report No.	: SRL/R/ST/JULY/25/744
Issued to:	Report Issue Date	: 02.07.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Division) At.: Manjhiladih, Gadisrirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Type of Sample	: Stack Emission
	Date of Sampling	: 21.06.2025
	Sample Receipt Date	: 25.06.2025
	Analysis Date	: 25.06.2025 to 28.06.2025

### A. INFORMATION OF PHYSICAL CHARACTERISTICS OF STACK

Stack number if any	: Stack – 2 (Induction Furnace Stack)
Emission due to	: Burning of Raw Materials/ Scrap
Material of construction of stack	: M.S.
Shape of stack	: Circular
Whether stack is provided with permanent platform/ ladder	: Yes
Height of the stack from ground level (in meter)	: 30
Height of the sampling point from ground level (in meter)	: 09
Diameter of the stack at sampling point (in meter)	: 0.60
Fuel used & Consumption	: Electricity & Electric Furnace
Production Capacity	: 2 x 15 MT Furnace
Stack connected to	: Fume Extraction System

### B. DETAIL OF STACK EMISSION SAMPLING AND TEST REPORT

Parameters (Units)	Results	Test Method
Ambient air temperature (°C)	36	IS 11255 (Part 3): 2008 RA 2013
Stack gas temperature, (°C)	112	IS 11255 (Part 3): 2008 RA 2013
Barometric Pressure, (mm of Hg)	750	-
Stack gas velocity, (m/sec)	6.63	IS 11255 (Part 3): 2008 RA 2013
Volumetric flow rate (in Nm³/hr),	5225	IS 11255 (Part 3): 2008 RA 2013
Emission rate (in kg/hr)	0.408	IS 11255 (Part 3): 2008 RA 2013
Conc. of Carbon dioxide, (% v/v by Orsat method)	5.5	IS 13270; 1992 RA 2019
Conc. of Carbon monoxide, (% v/v by Orsat method)	<0.2	IS 13270; 1992 RA 2019
Conc. of Sulphur Dioxides, mg/Nm³	27	IS: 11255 (Part 2) 1985 RA 2019
Conc. of Oxides of Nitrogen, mg/Nm³	19	IS: 11255 (Part 7) 2005 RA 2017
Conc. of Particulate Matter, mg/Nm³	78	IS: 11255 (Part 1) 1985 RA 2019

Remarks: Dust concentration was found 78 mg/Nm³ against prescribed limit of 150 mg/NM³.

Note:

1. The results relate only to the items sampled and tested.
2. Test report shall not be reproduced except in full without written approval of the laboratory.

Reviewed & issued by:  
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(Authorized Signatory)

-- End of Report --



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TC-11163

## TEST REPORT

ULR No.: TC1116325000000738F	Test Report No.	: SRL/R/WZ/JULY/25/748
Customer's Name & Address:	Report Issue Date	: 02.07.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Division- Rolling Unit) At.: Manjhiladih, Gadirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Sample Receipt Date	: 25.06.2025
	Analysis Date	: 25.06.2025 to 27.06.2025
	Weather Condition	: Clear
	Atmospheric Temp. (°C)	: 33
	Relative Humidity (%)	: 68
	Wind Speed (Km/hour)	: 6.0
	Wind Direction (From)	: SE

Nature and Description of Sample	: Air Quality Monitoring (Work Place)
Type of Sample	: Work Zone Dust
Date of Sampling	: 22.06.2025
Sampling Method	: IS: 5182 (Part- 23)
Sample Collected by	: SRL Team
Any Other Information (if any)	: Nil

## TEST RESULTS

Sl. No.	Location	Unit	Regulatory Standards	Results
1.	Finished Product Yard	µg/m³	3000	1626
2.	Raw Material Yard	µg/m³	3000	1840
3.	Eastern Side of Rolling Unit	µg/m³	3000	1672
4.	Southern Side of Labour Rest Room	µg/m³	3000	1554

\* Norms for Fugitive Emission: MoEF & CC Notification, 31<sup>st</sup> March, 2012.

Note:

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(Authorized Signatory)

-- End of the Report --



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Website : www.srlkolkata.com

## TEST REPORT

[ REF - 250000001515 ]

AMBIENT AIR QUALITY MONITORING

[ FORMAT NO. SRL / FRM / 18 ]

Name & Address of the Factory	: M/s. Balmukund Sponge & Iron (P) Ltd. (Mega Div.) ( Mega Division, CCM & Iron Ore Beneficiation Plant ) Manjhiladih, P.O.: Gadirampur, P.S.: Giridih District: Giridih, Jharkhand		
Sampling Location	: Near Labour Quarter		
Sample Identification No.	: S - 203/06/ 2025		
Sampling starting date	: 23.06.2025	Sampling ending date	: 24.06.2025
Sample Receiving/Analysis Starting On	: 25.06.2025	Analysis Completed on	: 12.07.2025

## TEST REPORT OF AMBIENT AIR QUALITY MONITORING

[ SRL/ BS&IPL / AMB / S - 203/06/ 2025 Dated: 12.07.2025 ]

SL.NO	PARAMETERS	UNIT	RESULTS	TEST SPECIFICATION	STANDARD/LIMITS
01.	Carbon Monoxide (CO) [01 Hr.]	mg/m <sup>3</sup>	0.692	IS 5182(Part-10):1999 ( Non-Dispersive Infrared Method )	4.0 [1 Hour]
02.	Benzene ( C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	< 0.2	IS 5182 (Part 11) : 2006	5.0 [Annual]
03.	Benzo (a) Pyrene (BaP)	ng/m <sup>3</sup>	< 0.2	IS 5182 (Part 12) : 2009	1.0 [Annual]

Note 01 : Carbon Monoxide (CO) for hourly basis.

Note 02 : Details of Instruments used for Analysis: GC-MN System (VARIAN 210-MS VARIAN 431-GC Gas Chromatograph with FID & ECD

/Agilent 7820A), CO Analyser Ecotech Model-Syrinx 30.

Note 03 : Detection Limit of Benzene ( C<sub>6</sub>H<sub>6</sub> ) is 0.2 µg/m<sup>3</sup> & Benzo (a) Pyrene ( BaP ) is 0.2 ng/m<sup>3</sup>

For Scientific Research Laboratory  
Reviewed and Authorized By

*Shirsendu Das*

Shirsendu Das

Dy. Technical Manager (Authorized Signatory)

-----End of Test Report-----

1 of 1

- The test report shall not be reproduced, except in full, without written approval of the company.
- Results relate only to the parameters tested.
- No Repeat Analysis will be entertained after 15 days from the date of reporting.
- All relevant information of customers regarding testing are treated as "Confidential".



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 Website : www.srlkolkata.com

## TEST REPORT

[ REF - 250000001516 ]

AMBIENT AIR QUALITY MONITORING

[ FORMAT NO. SRL / FRM / 18 ]

Name & Address of the Factory	: M/s. Balmukund Sponge & Iron (P) Ltd. (Mega Div.) ( Mega Division, CCM & Iron Ore Beneficiation Plant ) Manjhilladih, P.O.: Gadisirampur, P.S.: Giridih District: Giridih, Jharkhand		
Sampling Location	: Near Labour Rest Room		
Sample Identification No.	: S - 204/06/ 2025		
Sampling starting date	: 23.06.2025	Sampling ending date	: 24.06.2025
Sample Receiving/Analysis Starting On	: 25.06.2025	Analysis Completed on	: 12.07.2025

## TEST REPORT OF AMBIENT AIR QUALITY MONITORING

[ SRL / BS&PL / AMB / S - 204/06/ 2025 Dated: 12.07.2025 ]

SL.NO	PARAMETERS	UNIT	RESULTS	TEST SPECIFICATION	STANDARD/LIMITS
01.	Carbon Monoxide (CO) [01 Hr.]	mg/m <sup>3</sup>	0.720	IS 5182(Part-10):1999 ( Non-Dispersive Infrared Method )	4.0 [1 Hour]
02.	Benzene ( C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	< 0.2	IS 5182 (Part 11) - 2006	5.0 [Annual]
03.	Benzo (a) Pyrene (BaP)	ng/m <sup>3</sup>	< 0.2	IS 5182 (Part 12) - 2009	1.0 [Annual]

Note 01 : Carbon Monoxide (CO) for hourly basis.

Note 02 : Details of Instruments used for Analysis: GC-MS System / VARIAN 210-MS VARIAN 431-GC Gas Chromatograph with FID & ECD / Agilent 7820 A, CO Analyzer Ecotech Model- Scrivius 3B.

Note 03 : Detection Limit of Benzene ( C<sub>6</sub>H<sub>6</sub> ) is 0.2 µg/m<sup>3</sup> & Benzo (a) Pyrene (BaP) is 0.2 ng/m<sup>3</sup>.

For Scientific Research Laboratory  
 Reviewed and Authorized By

*Shirsendu Das*

Shirsendu Das

Dy. Technical Manager (Authorized Signatory)

----End of Test Report----

1 of 1

- The test report shall not be reproduced, except in full, without written approval of the company.
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Website : www.srlkolkata.com

## TEST REPORT

[ REF - 250000001517 ]

AMBIENT AIR QUALITY MONITORING

[ FORMAT NO. SRL / FRM / 18 ]

Name & Address of the Factory	: M/s. Balmukund Sponge & Iron (P) Ltd. (Mega Div.) ( Mega Division, CCM & Iron Ore Beneficiation Plant ) Manjhiladih, P.O.: Gadisirampur, P.S.: Giridih District: Giridih, Jharkhand		
Sampling Location	: Near Northern Boundary		
Sample Identification No.	: S - 205/06/ 2025		
Sampling starting date	: 23.06.2025	Sampling ending date	: 24.06.2025
Sample Receiving/Analysis Starting On	: 25.06.2025	Analysis Completed on	: 12.07.2025

## TEST REPORT OF AMBIENT AIR QUALITY MONITORING

[ SRL / BS&IPL / AMB / S - 205/06/ 2025 Dated: 12.07.2025 ]

SL.NO	PARAMETERS	UNIT	RESULTS	TEST SPECIFICATION	STANDARD/ LIMITS
01.	Carbon Monoxide (CO) [01 Hr.]	mg/m <sup>3</sup>	0.710	IS 5182(Part-10):1999 ( Non-Dispersive Infrared Method )	4.0 [1 Hour]
02.	Benzene ( C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	< 0.2	IS 5182 (Part 11) : 2006	5.0 [Annual]
03.	Benzo (a) Pyrene (BaP)	ng/m <sup>3</sup>	< 0.2	IS 5182 (Part 12) : 2009	1.0 [Annual]

Note 01 : Carbon Monoxide (CO) for hourly basis.

Note 02 : Details of instruments used for Analysis: GC-MS System / VARIAN 210-MS VARIAN 431-GC, Gas Chromatograph with FID & FCD

/ Agilent 7829A, CO Analyser Ecotech Model- Scrivis 3B.

Note 03 : Detection Limit of Benzene ( C<sub>6</sub>H<sub>6</sub> ) is 0.2 µg/m<sup>3</sup> & Benzo (a) Pyrene (BaP) is 0.2 ng/m<sup>3</sup>

For Scientific Research Laboratory

Reviewed and Authorized By

*Shresendu Das*

Shresendu Das

Dy. Technical Manager (Authorized Signatory)

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Website : www.srlkolkata.com

## TEST REPORT

[ REF - 250000001518 ]

AMBIENT AIR QUALITY MONITORING

[ FORMAT NO. SRL / FRM / 18 ]

Name & Address of the Factory	: M/s. Balmukund Sponge & Iron (P) Ltd. (Mega Div.) ( Mega Division, CCM & Iron Ore Beneficiation Plant ) Manjhiladih, P.O.: Gadirirampur, P.S.: Giridih District: Giridih, Jharkhand		
Sampling Location	: Near Southern Boundary		
Sample Identification No.	: S - 206/06/ 2025		
Sampling starting date	: 23.06.2025	Sampling ending date	: 24.06.2025
Sample Receiving/Analysis Starting On	: 25.06.2025	Analysis Completed on	: 12.07.2025

## TEST REPORT OF AMBIENT AIR QUALITY MONITORING

[ SRL / BS&PL / AMB / S - 206/06/ 2025 Dated: 12.07.2025 ]

SL.NO	PARAMETERS	UNIT	RESULTS	TEST SPECIFICATION	STANDARD/ LIMITS
01.	Carbon Monoxide (CO) [01 Hr.]	mg/m <sup>3</sup>	0.660	IS 5182(Part-10):1999 ( Non-Dispersive Infrared Method )	4.0 [1 Hour]
02.	Benzene ( C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	< 0.2	IS 5182 (Part 11) : 2006	5.0 [Annual]
03.	Benzo (a) Pyrene (BaP)	ng/m <sup>3</sup>	< 0.2	IS 5182 (Part 12) : 2009	1.0 [Annual]

Note 01 : Carbon Monoxide (CO) for hourly basis.

Note 02 : Details of instruments used for Analysis: GC-MS System / VARIAN 210-MS VARIAN 430-GC, Gas Chromatograph with FID & ECD (Agilent 7820A), CO Analyser Ecotech Model: Series 30.

Note 03 : Detection Limit of Benzene ( C<sub>6</sub>H<sub>6</sub> ) is 0.2 µg/m<sup>3</sup> & Benzo (a) Pyrene (BaP) is 0.2 ng/m<sup>3</sup>

For Scientific Research Laboratory  
Reviewed and Authorized By

*Shirsendu Das*

Shirsendu Das

Dy. Technical Manager (Authorized Signatory)

-----End of Test Report-----

1 of 1

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TC-11163

## TEST REPORT

ULR No.: TC1116325000000899F	Test Report No.	: SRL/R/N/SEPT/25/912
Issued to:	Report Issue Date	: 20.09.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Division- Induction Furnace Unit) At.: Manjhiladih, Gadisrirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Type of Sample	: Ambient Noise
	Date of Sampling	: 08.09.2025 to 09.09.2025
	Sample Receipt Date	: 12.09.2025
	Analysis Date	: 13.09.2025
	Sample Collected by	: SRL Team
	Weather Condition	: Partly Cloudy
	Atmospheric Temp.(°C)	: 32
	Test Method	: IS 9989

## AMBIENT NOISE MONITORING DATA

Sl. No.	Monitoring Location	Date of Monitoring	Sound Pressure Level, dB(A)	
			Day Time (06.00-22.00 hr.)	Night Time (22.00-06.00 hr.)
1.	Near Metal Conveyer	08.09.2025 to 09.09.2025	71.4	69.2
2.	Near Raw Material Yard (Induction Furnace Division)	08.09.2025 to 09.09.2025	65.7	64.0
3.	Northern Side of Induction Furnace Shed	08.09.2025 to 09.09.2025	64.9	63.5
4.	Beside Control Room	08.09.2025 to 09.09.2025	67.3	66.7

Norms: National Ambient Air Quality Standards (NAAQS) in respect of Noise as per CPCB, New Delhi,

Industrial Area : Day Time 75 dB(A) Leq and Night Time 70 dB(A) Leq

Commercial Area : Day Time 65 dB(A) Leq and Night Time 55 dB(A) Leq

Residential Area : Day Time 55 dB(A) Leq and Night Time 45 dB(A) Leq

Silence Zone : Day Time 50 dB(A) Leq and Night Time 40 dB(A) Leq

Reviewed & issued by:

Dr. Niraj Kumar Singh

(Authorized Signatory)

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TC-11163

## TEST REPORT

ULR No.: TC1116325000000900F	Test Report No.	: SRL/R/N/SEPT/25/913
Issued to:	Report Issue Date	: 20.09.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Division- Rolling Mill Unit) At.: Manjhiladih, Gadisrirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Type of Sample	: Ambient Noise
	Date of Sampling	: 08.09.2025 to 09.09.2025
	Sample Receipt Date	: 12.09.2025
	Analysis Date	: 13.09.2025
	Sample Collected by	: SRL Team
	Weather Condition	: Partly Cloudy
	Atmospheric Temp.(°C)	: 32
	Test Method	: IS 9989

## AMBIENT NOISE MONITORING DATA

Sl. No.	Monitoring Location	Date of Monitoring	Sound Pressure Level, dB(A)	
			Day Time (06.00-22.00 hr.)	Night Time (22.00-06.00 hr.)
1.	Near Finished Product Yard	08.09.2025 to 09.09.2025	65.1	64.8
2.	Near Raw Material Yard (Rolling Division)	08.09.2025 to 09.09.2025	64.3	62.6
3.	Eastern Side of Rolling Mill Unit	08.09.2025 to 09.09.2025	65.8	64.5
4.	Southern Side of Labour Rest Room	08.09.2025 to 09.09.2025	63.6	62.7

Norms: National Ambient Air Quality Standards (NAAQS) in respect of Noise as per CPCB, New Delhi,

Industrial Area : Day Time 75 dB(A) Leq and Night Time 70 dB(A) Leq

Commercial Area : Day Time 65 dB(A) Leq and Night Time 55 dB(A) Leq

Residential Area : Day Time 55 dB(A) Leq and Night Time 45 dB(A) Leq

Silence Zone : Day Time 50 dB(A) Leq and Night Time 40 dB(A) Leq

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(Authorized Signatory)

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TC-11163

## TEST REPORT

ULR No.: TC111632500000901F	Test Report No.	: SRL/R/ST/SEPT/25/914
Issued to:	Report Issue Date	: 20.09.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Division) At.: Manjhiladih, Gadisrirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Type of Sample	: Stack Emission
	Date of Sampling	: 08.09.2025
	Sample Receipt Date	: 12.09.2025
	Analysis Date	: 12.09.2025 to 15.09.2025

### A. INFORMATION OF PHYSICAL CHARACTERISTICS OF STACK

Stack number if any	: Stack – 1 (Induction Furnace Stack)
Emission due to	: Burning of Raw Materials/ Scrap
Material of construction of stack	: M.S.
Shape of stack	: Circular
Whether stack is provided with permanent platform/ ladder	: Yes
Height of the stack from ground level (in meter)	: 30
Height of the sampling point from ground level (in meter)	: 09
Diameter of the stack at sampling point (in meter)	: 0.60
Fuel used & Consumption	: Electricity & Electric Furnace
Production Capacity	: 3 x 15 MT Furnace
Stack connected to	: Fume Extraction System

### B. DETAIL OF STACK EMISSION SAMPLING AND TEST REPORT

Parameters (Units)	Results	Test Method
Ambient air temperature (°C)	33	IS 11255 (Part 3): 2008 RA 2013
Stack gas temperature, (°C)	110	IS 11255 (Part 3): 2008 RA 2013
Barometric Pressure, (mm of Hg)	752	-
Stack gas velocity, (m/sec)	6.61	IS 11255 (Part 3): 2008 RA 2013
Volumetric flow rate (in Nm <sup>3</sup> /hr),	5238	IS 11255 (Part 3): 2008 RA 2013
Emission rate (in kg/hr)	0.46	IS 11255 (Part 3): 2008 RA 2013
Conc. of Carbon dioxide, (% v/v by Orsat method)	5.4	IS 13270; 1992 RA 2019
Conc. of Carbon monoxide, (% v/v by Orsat method)	<0.2	IS 13270; 1992 RA 2019
Conc. of Sulphur Dioxides, mg/Nm <sup>3</sup>	26	IS: 11255 (Part 2) 1985 RA 2019
Conc. of Oxides of Nitrogen, mg/Nm <sup>3</sup>	22	IS: 11255 (Part 7) 2005 RA 2017
Conc. of Particulate Matter, mg/Nm <sup>3</sup>	88	IS: 11255 (Part 1) 1985 RA 2019

Remarks: Dust concentration was found 88 mg/Nm<sup>3</sup> against prescribed limit of 150 mg/NM<sup>3</sup>.

#### Note:

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TC-11163

## TEST REPORT

ULR No.: TC1116325000000902F	Test Report No.	: SRL/R/ST/SEPT/25/915
Issued to:	Report Issue Date	: 20.09.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Division) At.: Manjhiladih, Gadirirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Type of Sample	: Stack Emission
	Date of Sampling	: 08.09.2025
	Sample Receipt Date	: 12.09.2025
	Analysis Date	: 12.09.2025 to 15.09.2025

### A. INFORMATION OF PHYSICAL CHARACTERISTICS OF STACK

Stack number if any	: Stack – 2 (Induction Furnace Stack)
Emission due to	: Burning of Raw Materials/ Scrap
Material of construction of stack	: M.S.
Shape of stack	: Circular
Whether stack is provided with permanent platform/ ladder	: Yes
Height of the stack from ground level (in meter)	: 30
Height of the sampling point from ground level (in meter)	: 09
Diameter of the stack at sampling point (in meter)	: 0.60
Fuel used & Consumption	: Electricity & Electric Furnace
Production Capacity	: 2 x 15 MT Furnace
Stack connected to	: Fume Extraction System

### B. DETAIL OF STACK EMISSION SAMPLING AND TEST REPORT

Parameters (Units)	Results	Test Method
Ambient air temperature (°C)	33	IS 11255 (Part 3): 2008 RA 2013
Stack gas temperature, (°C)	106	IS 11255 (Part 3): 2008 RA 2013
Barometric Pressure, (mm of Hg)	752	-
Stack gas velocity, (m/sec)	6.58	IS 11255 (Part 3): 2008 RA 2013
Volumetric flow rate (in Nm <sup>3</sup> /hr),	5269	IS 11255 (Part 3): 2008 RA 2013
Emission rate (in kg/hr)	0.437	IS 11255 (Part 3): 2008 RA 2013
Conc. of Carbon dioxide, (% v/v by Orsat method)	5.4	IS 13270; 1992 RA 2019
Conc. of Carbon monoxide, (% v/v by Orsat method)	<0.2	IS 13270; 1992 RA 2019
Conc. of Sulphur Dioxides, mg/Nm <sup>3</sup>	24	IS: 11255 (Part 2) 1985 RA 2019
Conc. of Oxides of Nitrogen, mg/Nm <sup>3</sup>	20	IS: 11255 (Part 7) 2005 RA 2017
Conc. of Particulate Matter, mg/Nm <sup>3</sup>	83	IS: 11255 (Part 1) 1985 RA 2019

Remarks: Dust concentration was found 83 mg/Nm<sup>3</sup> against prescribed limit of 150 mg/NM<sup>3</sup>.

#### Note:

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Dr. Niraj Kumar Singh  
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Tele No.: 0651-4057244, Mobile: 94701 30700, E-mail: srlranchilab@gmail.com

## TEST REPORT

Customer's Name & Address;	Test Report No.	: SRL/R/WZ/SEPT/25/919
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Division- Rolling Unit) At.: Manjhiladih, Gadirirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Report Issue Date	: 20.09.2025
	Sample Receipt Date	: 12.09.2025
	Analysis Date	: 12.09.2025 to 15.09.2025
	Weather Condition	: Partly Cloudy
	Atmospheric Temp. (°C)	: 32
	Relative Humidity (%)	: 76
	Wind Speed (Km/hour)	: 6.0
	Wind Direction (From)	: NNE

Nature and Description of Sample	: Air Quality Monitoring (Work Place)
Type of Sample	: Work Zone Dust
Date of Sampling	: 09.09.2025
Sampling Method	: IS: 5182 (Part- 23)
Sample Collected by	: SRL Team
Any Other Information (if any)	: Nil

## TEST RESULTS

Sl. No.	Location	Unit	Regulatory Standards	Results
1.	Finished Product Yard	µg/m³	3000	1584
2.	Raw Material Yard	µg/m³	3000	1876
3.	Eastern Side of Rolling Unit	µg/m³	3000	1634
4.	Southern Side of Labour Rest Room	µg/m³	3000	1496

\* Norms for Fugitive Emission: MoEF & CC Notification, 31<sup>st</sup> March, 2012.

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TC-11163

## TEST REPORT

ULR No.: TC1116325000000905F	Test Report No.	: SRL/R/AAQ/SEPT/25/920
Customer's Name & Address	Report Issue Date	: 20.09.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Div.) At.: Manjhiladih, P.O.: Gadisirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Type of Sample	: Ambient Air
	Sampling Location	: Near Labour Quarter
	Date of Sampling	: 10.09.2025 to 11.09.2025
	Sample Receipt Date	: 12.09.2025
	Analysis Date	: 12.09.2025 to 19.09.2025
	Sample Collected by	: SRL Team
	Sample Condition	: Sealed and refrigerated

Weather Condition: Partly Cloudy	Ambient Temperature (°C): 34	Relative Humidity (%): 74
Atmospheric Pressure (mmHg): 753	Wind Speed (km/hr.) : 12	Wind Direction : WNW

## TEST RESULTS

Sl. No.	Parameters	Unit	Results	Standards Value*	Test Method
1.	Sulphur Dioxide, (SO <sub>2</sub> )	µg/m <sup>3</sup>	17.60	80 (24 hrs.)	IS: 5182 (Part- 2)
2.	Nitrogen Dioxide, (NO <sub>2</sub> )	µg/m <sup>3</sup>	33.00	80 (24 hrs.)	IS: 5182 (Part- 6)
3.	Particulate Matter, PM <sub>10</sub>	µg/m <sup>3</sup>	71.00	100 (24 hrs.)	IS: 5182 (Part- 23)
4.	Particulate Matter, PM <sub>2.5</sub>	µg/m <sup>3</sup>	43.00	60 (24 hrs.)	IS: 5182 (Part- 24)
5.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	22.00	400 (24 hrs.)	IS: 5182 (Part- 25)
6.	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	24.00	180 (1 hr.)	CPCB, Vol. I (NAAQMS Monitoring & Analysis Guidelines)
7.	Arsenic (As)	ng/m <sup>3</sup>	<1.00	6 (Annual)	CPCB, Volume I (NAAQMS Monitoring & Analysis Guidelines)
8.	Lead (Pb)	µg/m <sup>3</sup>	<0.02	1 (24 hr.)	IS 5182 (Part-22)
9.	Nickel (Ni)	ng/m <sup>3</sup>	<5.00	20 (Annual)	IS 5182 (Part-26): 2020

\*NAAQS: National Ambient Air Quality Standards, 2009.

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TC-11163

## TEST REPORT

ULR No.: TC1116325000000906F	Test Report No.	: SRL/R/AAQ/SEPT/25/921
Customer's Name & Address	Report Issue Date	: 20.09.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Div.) At.: Manjhiladih, P.O.: Gadirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Type of Sample	: Ambient Air
	Sampling Location	: Near Labour Rest Room
	Date of Sampling	: 10.09.2025 to 11.09.2025
	Sample Receipt Date	: 12.09.2025
	Analysis Date	: 12.09.2025 to 19.09.2025
	Sample Collected by	: SRL Team
	Sample Condition	: Sealed and refrigerated

Weather Condition: Partly Cloudy	Ambient Temperature (°C): 34	Relative Humidity (%): 74
Atmospheric Pressure (mmHg): 753	Wind Speed (km/hr.) : 12	Wind Direction : WNW

## TEST RESULTS

Sl. No.	Parameters	Unit	Results	Standards Value*	Test Method
1.	Sulphur Dioxide, (SO <sub>2</sub> )	µg/m <sup>3</sup>	18.50	80 (24 hrs.)	IS: 5182 (Part- 2)
2.	Nitrogen Dioxide, (NO <sub>2</sub> )	µg/m <sup>3</sup>	34.00	80 (24 hrs.)	IS: 5182 (Part- 6)
3.	Particulate Matter, PM <sub>10</sub>	µg/m <sup>3</sup>	76.00	100 (24 hrs.)	IS: 5182 (Part- 23)
4.	Particulate Matter, PM <sub>2.5</sub>	µg/m <sup>3</sup>	45.00	60 (24 hrs.)	IS: 5182 (Part- 24)
5.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	25.00	400 (24 hrs.)	IS: 5182 (Part- 25)
6.	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	27.00	180 (1 hr.)	CPCB, Vol. I (NAAQMS Monitoring & Analysis Guidelines)
7.	Arsenic (As)	ng/m <sup>3</sup>	<1.00	6 (Annual)	CPCB, Volume I (NAAQMS Monitoring & Analysis Guidelines)
8.	Lead (Pb)	µg/m <sup>3</sup>	<0.02	1 (24 hr.)	IS 5182 (Part-22)
9.	Nickel (Ni)	ng/m <sup>3</sup>	<5.00	20 (Annual)	IS 5182 (Part-26): 2020

\*NAAQS: National Ambient Air Quality Standards, 2009.

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Dr. Niraj Kumar Singh  
(Authorized Signatory)

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Analytical & Environmental Engineering Laboratory

Address: C-144, Aman Green City, Pundag, Ranchi- 834 004, Jharkhand

Tele No.: 0651-4057244, Mobile: 94701 30700, E-mail: srlranchilab@gmail.com



TC-11163

## TEST REPORT

ULR No.: TC1116325000000907F	Test Report No.	: SRL/R/AAQ/SEPT/25/922
Customer's Name & Address	Report Issue Date	: 20.09.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Div.) At.: Manjhiladih, P.O.: Gadisrirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Type of Sample	: Ambient Air
	Sampling Location	: Near Northern Boundary
	Date of Sampling	: 10.09.2025 to 11.09.2025
	Sample Receipt Date	: 12.09.2025
	Analysis Date	: 12.09.2025 to 19.09.2025
	Sample Collected by	: SRL Team
	Sample Condition	: Sealed and refrigerated

Weather Condition: Partly Cloudy	Ambient Temperature (°C): 34	Relative Humidity (%): 74
Atmospheric Pressure (mmHg): 753	Wind Speed (km/hr.) : 12	Wind Direction : WNW

## TEST RESULTS

Sl. No.	Parameters	Unit	Results	Standards Value*	Test Method
1.	Sulphur Dioxide, (SO <sub>2</sub> )	µg/m <sup>3</sup>	18.70	80 (24 hrs.)	IS: 5182 (Part- 2)
2.	Nitrogen Dioxide, (NO <sub>2</sub> )	µg/m <sup>3</sup>	33.50	80 (24 hrs.)	IS: 5182 (Part- 6)
3.	Particulate Matter, PM <sub>10</sub>	µg/m <sup>3</sup>	75.00	100 (24 hrs.)	IS: 5182 (Part- 23)
4.	Particulate Matter, PM <sub>2.5</sub>	µg/m <sup>3</sup>	44.00	60 (24 hrs.)	IS: 5182 (Part- 24)
5.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	24.00	400 (24 hrs.)	IS: 5182 (Part- 25)
6.	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	27.00	180 (1 hr.)	CPCB, Vol. I (NAAQMS Monitoring & Analysis Guidelines)
7.	Arsenic (As)	ng/m <sup>3</sup>	<1.00	6 (Annual)	CPCB, Volume I (NAAQMS Monitoring & Analysis Guidelines)
8.	Lead (Pb)	µg/m <sup>3</sup>	<0.02	1 (24 hr.)	IS 5182 (Part-22)
9.	Nickel (Ni)	ng/m <sup>3</sup>	<5.00	20 (Annual)	IS 5182 (Part-26): 2020

\*NAAQS: National Ambient Air Quality Standards, 2009.

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Tele No.: 0651-4057244, Mobile: 94701 30700, E-mail: srlranchilab@gmail.com



TC-11163

## TEST REPORT

ULR No.: TC1116325000000908F	Test Report No.	: SRL/R/AAQ/SEPT/25/923
Customer's Name & Address	Report Issue Date	: 20.09.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Div.) At.: Manjhiladih, P.O.: Gadirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Type of Sample	: Ambient Air
	Sampling Location	: Near Southern Boundary
	Date of Sampling	: 10.09.2025 to 11.09.2025
	Sample Receipt Date	: 12.09.2025
	Analysis Date	: 12.09.2025 to 19.09.2025
	Sample Collected by	: SRL Team
	Sample Condition	: Sealed and refrigerated

Weather Condition: Partly Cloudy	Ambient Temperature (°C): 34	Relative Humidity (%): 74
Atmospheric Pressure (mmHg): 753	Wind Speed (km/hr.) : 12	Wind Direction : WNW

## TEST RESULTS

Sl. No.	Parameters	Unit	Results	Standards Value*	Test Method
1.	Sulphur Dioxide, (SO <sub>2</sub> )	µg/m <sup>3</sup>	18.00	80 (24 hrs.)	IS: 5182 (Part- 2)
2.	Nitrogen Dioxide, (NO <sub>2</sub> )	µg/m <sup>3</sup>	34.60	80 (24 hrs.)	IS: 5182 (Part- 6)
3.	Particulate Matter, PM <sub>10</sub>	µg/m <sup>3</sup>	81.00	100 (24 hrs.)	IS: 5182 (Part- 23)
4.	Particulate Matter, PM <sub>2.5</sub>	µg/m <sup>3</sup>	49.00	60 (24 hrs.)	IS: 5182 (Part- 24)
5.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	24.00	400 (24 hrs.)	IS: 5182 (Part- 25)
6.	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	28.00	180 (1 hr.)	CPCB, Vol. I (NAAQMS Monitoring & Analysis Guidelines)
7.	Arsenic (As)	ng/m <sup>3</sup>	<1.00	6 (Annual)	CPCB, Volume I (NAAQMS Monitoring & Analysis Guidelines)
8.	Lead (Pb)	µg/m <sup>3</sup>	<0.02	1 (24 hr.)	IS 5182 (Part-22)
9.	Nickel (Ni)	ng/m <sup>3</sup>	<5.00	20 (Annual)	IS 5182 (Part-26): 2020

\*NAAQS: National Ambient Air Quality Standards, 2009.

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TC-11163

## TEST REPORT

ULR No.: TC1116325000000909F	Test Report No.	: SRL/R/N/SEPT/25/924
Issued to:	Report Issue Date	: 20.09.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Div.) At.: Manjhiladih, P.O.: Gadisrirampur, P.S.: Giridih (M), District: Giridih, Jharkhand	Type of Sample	: Ambient Noise
	Date of Sampling	: 10.09.2025 to 11.09.2025
	Sample Receipt Date	: 12.09.2025
	Analysis Date	: 13.09.2025
	Sample Collected by	: SRL Team
	Weather Condition	: Partly Cloudy4
	Atmospheric Temp.(°C)	: 32
	Test Method	: IS 9989

## AMBIENT NOISE MONITORING DATA

SI. No.	Monitoring Location	Date of Monitoring	Sound Pressure Level, dB(A)	
			Day Time (06.00-22.00 hr.)	Night Time (22.00-06.00 hr.)
1.	Near Labour Quarter	10.09.2025 to 11.09.2025	63.7	60.2
2.	Near Labour Rest Room	10.09.2025 to 11.09.2025	65.4	62.8
3.	Near Northern Boundary	10.09.2025 to 11.09.2025	63.5	61.7
4.	Near Southern Boundary	10.09.2025 to 11.09.2025	64.4	62.1

Norms: National Ambient Air Quality Standards (NAAQS) in respect of Noise as per CPCB, New Delhi,

Industrial Area : Day Time 75 dB(A) Leq and Night Time 70 dB(A) Leq

Commercial Area : Day Time 65 dB(A) Leq and Night Time 55 dB(A) Leq

Residential Area : Day Time 55 dB(A) Leq and Night Time 45 dB(A) Leq

Silence Zone : Day Time 50 dB(A) Leq and Night Time 40 dB(A) Leq

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TC-11163

## TEST REPORT

ULR No.: TC1116325000000910F	Test Report No.	: SRL/R/ST/SEPT/25/925
Issued to:	Report Issue Date	: 20.09.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Div.) (Iron Ore Ben. Plant) At.: Manjhiladih, P.O.: Gadisirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Type of Sample	: Stack Emission
	Date of Sampling	: 10.09.2025
	Sample Receipt Date	: 12.09.2025
	Analysis Date	: 12.09.2025 to 15.09.2025

### A. INFORMATION OF PHYSICAL CHARACTERISTICS OF STACK

Stack number if any	: Stack – 1 (Iron Ore Beneficiation Unit)
Emission due to	: Process
Material of construction of stack	: M.S.
Shape of stack	: Circular
Whether stack is provided with permanent platform/ ladder	: Yes
Height of the stack from ground level (in meter)	: 30
Height of the sampling point from ground level (in meter)	: 12
Diameter of the stack at sampling point (in meter)	: 0.60
Fuel used & Consumption	: Process Stack
Production Capacity	: 74,000 TPA (Iron Ore)
Stack connected to	: IOB Unit

### B. DETAIL OF STACK EMISSION SAMPLING AND TEST REPORT

Parameters (Units)	Results	Test Method
Ambient air temperature (°C)	34	IS 11255 (Part 3): 2008 RA 2013
Stack gas temperature, (°C)	68	IS 11255 (Part 3): 2008 RA 2013
Barometric Pressure, (mm of Hg)	752	-
Stack gas velocity, (m/sec)	6.74	IS 11255 (Part 3): 2008 RA 2013
Volumetric flow rate (in Nm <sup>3</sup> /hr),	5997	IS 11255 (Part 3): 2008 RA 2013
Emission rate (in kg/hr)	0.52	IS 11255 (Part 3): 2008 RA 2013
Conc. of Carbon dioxide, (% v/v by Orsat method)	NA	IS 13270; 1992 RA 2019
Conc. of Carbon monoxide, (% v/v by Orsat method)	NA	IS 13270; 1992 RA 2019
Conc. of Sulphur Dioxides, mg/Nm <sup>3</sup>	NA	IS: 11255 (Part 2) 1985 RA 2019
Conc. of Oxides of Nitrogen, mg/Nm <sup>3</sup>	NA	IS: 11255 (Part 7) 2005 RA 2017
Conc. of Particulate Matter, mg/Nm <sup>3</sup>	86	IS: 11255 (Part 1) 1985 RA 2019

Remarks: Dust concentration was found 86 mg/Nm<sup>3</sup> against prescribed limit of 150 mg/NM<sup>3</sup>.

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TC-11163

## TEST REPORT

ULR No.: TC111632500000911F	Test Report No.	: SRL/R/WW/SEPT/25/926
Customer's Name & Address:	Report Issue Date	: 20.09.2025
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Div.) At.: Manjhiladih, P.O.: Gadisirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Sample Receipt Date	: 12.09.2025
	Analysis Date	: 12.09.2025 to 15.09.2025
	Sample Collected by	: SRL Team
	Sample Quantity	: 2 Litre
	Sample Condition	: Preserved
	Weather Condition	: Clear
	Lab. Sample No.	: WW – 93

Type of Sample	: Effluent Water	Sampling Method	: APHA 1060 B
Location of Sample	: Office Outlet	Date of Sampling	: 12.09.2025

## TEST RESULTS

Sl. No.	Parameters	Results	Regulatory Standard*			Test Method
			Inland Surface Water Body	Public Sewer	On Land Irrigation	
1.	Temperature, °C	29	**	**	-	APHA 24 <sup>th</sup> Edn. 2550 B
2.	pH Value	7.4	5.5 – 9.0	5.5 – 9.0	5.5 – 9.0	APHA 24 <sup>th</sup> Edn. 4500H+ B
3.	Total Suspended Solids, mg/l	36	100	600	200	APHA 24 <sup>th</sup> Edn. 2540 D
4.	Total Dissolved Solids, mg/l	284	-	-	-	APHA 24 <sup>th</sup> Edn. 2540 C
5.	Total Solids, mg/l	326	-	-	-	APHA 24 <sup>th</sup> Edn. 2540 B
6.	COD (as O <sub>2</sub> ), mg/l	42	250	-	-	IS: 3025 (Part 58) 2006
7.	BOD (3 days at 27 °C), mg/l	12	30	350	100	IS: 3025 (Part 44) 2012
8.	Oil & Grease, mg/l	<5	10	20	10	APHA 24 <sup>th</sup> Edn. 5220 B
9.	Chloride (as Cl), mg/l, Max.	92	1000	1000	600	APHA 24 <sup>th</sup> Edn. 4500 Cl- B

\*General standards for discharge of environmental pollutants into inland surface water as per CPCB, MoEF&CC, July, 2000.

\*\*Shall not exceed 5°C above the receiving water temperature.

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3. Sample shall be discarded after 15 days from the date of issue of the test reports.

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## TEST REPORT

Customer's Name & Address:	Test Report No.	: SRL/R/WZ/SEPT/25/927
M/s Balmukund Sponge & Iron (P) Ltd. (Mega Div.) (CCM & Iron Ore Ben. Plant) At.: Manjhiladih, P.O.: Gadirirampur, P.S.: Giridih (M), District: Giridih, Jharkhand.	Report Issue Date	: 20.09.2025
	Sample Receipt Date	: 12.09.2025
	Analysis Date	: 12.09.2025 to 15.09.2025
	Weather Condition	: Partly Cloudy
	Atmospheric Temp. (°C)	: 32
	Relative Humidity (%)	: 67
	Wind Speed (Km/hour)	: 10
	Wind Direction (From)	: WNW

Nature and Description of Sample	: Air Quality Monitoring (Work Place)
Type of Sample	: Work Zone Dust
Date of Sampling	: 11.09.2025
Sampling Method	: IS: 5182 (Part- 23)
Sample Collected by	: SRL Team
Any Other Information (if any)	: Nil

## TEST RESULTS

Sl. No.	Location	Unit	Regulatory Standards	Results
1.	Near Hopper (Iron Ore Beneficiation Unit)	µg/m³	3000	1794
2.	Near Raw Material Yard (Iron Ore Beneficiation Unit)	µg/m³	3000	1578
3.	Near Scrape Yard (M.S. Billet Section)	µg/m³	3000	1626
4.	Near Weigh Bridge (M.S. Billet Section)	µg/m³	3000	1840

\* Norms for Fugitive Emission: MoEF & CC Notification, 31<sup>st</sup> March, 2012.

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Website : www.srlkolkata.com

## TEST REPORT

[ REF - 250000002416 ]

AMBIENT AIR QUALITY MONITORING

[ FORMAT NO. SRL / FRM / 18 ]

Name & Address of the Factory	: M/s. Balmukund Sponge & Iron (P) Ltd. (Mega Div.) ( Mega Division, CCM & Iron Ore Beneficiation Plant ) Manjhiladih, P.O.: Gadisirampur, P.S.: Giridih District: Giridih, Jharkhand		
Sampling Location	: Near Labour Quarter		
Sample Identification No.	: S - 218/09/ 2025		
Sampling starting date	: 10.09.2025	Sampling ending date	: 11.09.2025
Sample Receiving/Analysis Starting On	: 16.09.2025	Analysis Completed on	: 22.09.2025

## TEST REPORT OF AMBIENT AIR QUALITY MONITORING

[ SRL / BS&IPL / AMB / S - 218/09/ 2025 Dated: 22.09.2025 ]

SL.NO	PARAMETERS	UNIT	RESULTS	TEST SPECIFICATION	STANDARD LIMITS
01.	Carbon Monoxide (CO) [01 Hr.]	mg/m <sup>3</sup>	0.652	IS 5182(Part-10):1999 ( Non-Dispersive Infrared Method )	4.0 [1 Hour]
02.	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	< 0.2	IS 5182 (Part 11) : 2006	5.0 [Annual]
03.	Benzo (a) Pyrene (BaP)	ng/m <sup>3</sup>	< 0.2	IS 5182 (Part 12) : 2009	1.0 [Annual]

Note 01 : Carbon Monoxide (CO) for hourly basis.

Note 02 : Details of instruments used for Analysis: GC-MS System / VARIAN 210-MS VARIAN 431-GC, Gas Chromatograph with FID & ECD / Agilent 7820A, CO Analyser Ecotech Model- Serinus 30.

Note 03 : Detection Limit of Benzene (C<sub>6</sub>H<sub>6</sub>) is 0.2 µg/m<sup>3</sup> & Benzo (a) Pyrene (BaP) is 0.2 ng/m<sup>3</sup>

For Scientific Research Laboratory  
Reviewed and Authorized By

Shirsendu Das

Shirsendu Das

Dy. Technical Manager (Authorized Signatory)

-----End of Test Report-----

1 of 1

- The test report shall not be reproduced, except in full, without written approval of the company.
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 Website : www.srlkolkata.com

## TEST REPORT

[ REF - 250000002417 ]

AMBIENT AIR QUALITY MONITORING

[ FORMAT NO. SRL / FRM / 18 ]

Name & Address of the Factory	: M/s. Balmukund Sponge & Iron (P) Ltd. (Mega Div.) ( Mega Division, CCM & Iron Ore Beneficiation Plant ) Manjhiladih, P.O.: Gadisirampur, P.S.: Giridih District: Giridih, Jharkhand		
Sampling Location	: Near Labour Rest Room		
Sample Identification No.	: S - 219/09/ 2025		
Sampling starting date	: 10.09.2025	Sampling ending date	: 11.09.2025
Sample Receiving/Analysis Starting On	: 16.09.2025	Analysis Completed on	: 22.09.2025

## TEST REPORT OF AMBIENT AIR QUALITY MONITORING

[ SRL / BS&IPL / AMB / S - 219/09/ 2025 Dated: 22.09.2025 ]

SL.NO	PARAMETERS	UNIT	RESULTS	TEST SPECIFICATION	STANDARD/LIMITS
01.	Carbon Monoxide (CO) [01 Hr.]	mg/m <sup>3</sup>	0.686	IS 5182(Part-10):1999 . ( Non-Dispersive Infrared Method )	4.0 [1 Hour]
02.	Benzene ( C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	< 0.2	IS 5182 (Part 11) : 2006	5.0 [Annual]
03.	Benzo (a) Pyrene (BaP)	ng/m <sup>3</sup>	< 0.2	IS 5182 (Part 12) : 2009	1.0 [Annual]

Note 01 : Carbon Monoxide (CO) for hourly basis.

Note 02 : Details of instruments used for Analysis: GC-MS System [VARIAN 210-MS VARIAN 431-GC, Gas Chromatograph with FID & ECD

/Agilent 7820A], CO Analyser Ecotech Model- Serinus 30.

Note 03 : Detection Limit of Benzene ( C<sub>6</sub>H<sub>6</sub> ) is 0.2 µg/m<sup>3</sup> & Benzo (a) Pyrene (BaP) is 0.2 ng/m<sup>3</sup>

For Scientific Research Laboratory  
 Reviewed and Authorized By

*Shirsendu Das*

Shirsendu Das

Dy. Technical Manager (Authorized Signatory)

-----End of Test Report-----

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 Website : www.srlkolkata.com

## TEST REPORT

[ REF - 250000002418 ]

AMBIENT AIR QUALITY MONITORING

[ FORMAT NO. SRL / FRM / 18 ]

Name & Address of the Factory	: Ms. Balmukund Sponge & Iron (P) Ltd. (Mega Div.) ( Mega Division, CCM & Iron Ore Beneficiation Plant ) Manjhiladih, P.O.: Gadisrirampur, P.S.: Giridih District: Giridih, Jharkhand		
Sampling Location	: Near Northern Boundary		
Sample Identification No.	: S - 220/09/ 2025		
Sampling starting date	: 10.09.2025	Sampling ending date	: 11.09.2025
Sample Receiving/Analysis Starting On	: 16.09.2025	Analysis Completed on	: 22.09.2025

## TEST REPORT OF AMBIENT AIR QUALITY MONITORING

[ SRL / BS&IPL / AMB / S - 220/09/ 2025 Dated: 22.09.2025 ]

SL.NO	PARAMETERS	UNIT	RESULTS	TEST SPECIFICATION	STANDARD/ LIMITS
01.	Carbon Monoxide (CO) [01 Hr.]	mg/m <sup>3</sup>	0.732	IS 5182(Part-10):1999 ( Non-Dispersive Infrared Method )	4.0 [1 Hour]
02.	Benzene ( C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	< 0.2	IS 5182 (Part 11) : 2006	5.0 [Annual]
03.	Benzo (a) Pyrene (BaP)	ng/m <sup>3</sup>	< 0.2	IS 5182 (Part 12) : 2009	1.0 [Annual]

Note 01 : Carbon Monoxide (CO) for hourly basis.

Note 02 : Details of instruments used for Analysis: GC-MS System / VARIAN 210-MS VARIAN 431-GC, Gas Chromatograph with FID & ECD / Agilent 7820A/, CO Analyser Ecotech Model- Serinus 30,

Note 03 : Detection Limit of Benzene (C<sub>6</sub>H<sub>6</sub>) is 0.2 µg/m<sup>3</sup> & Benzo (a) Pyrene (BaP) is 0.2 ng/m<sup>3</sup>

For Scientific Research Laboratory  
 Reviewed and Authorized By

*Shirsendu Das*

Shirsendu Das

Dy. Technical Manager (Authorized Signatory)

-----End of Test Report-----

1 of 1

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# SCIENTIFIC RESEARCH LABORATORY

(Analytical & Environmental Engineering Laboratory)

Laboratory Recognised By Central Pollution Control Board, Govt. Of India

Laboratory Recognised By West Bengal Pollution Control Board, West Bengal

An ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 (OHSAS) Certified

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## TEST REPORT

[ REF - 25000002419 ]

AMBIENT AIR QUALITY MONITORING

| FORMAT NO. SRL / FRM / 18 ]

Name & Address of the Factory	: M/s. Balmukund Sponge & Iron (P) Ltd. (Mega Div.) ( Mega Division, CCM & Iron Ore Beneficiation Plant ) Manjhiladih, P.O.: Gadisirampur, P.S.: Giridih District: Giridih, Jharkhand		
Sampling Location	: Near Southern Boundary		
Sample Identification No.	: S - 221/09/ 2025		
Sampling starting date	: 10.09.2025	Sampling ending date	: 11.09.2025
Sample Receiving/Analysis Starting On	: 16.09.2025	Analysis Completed on	: 22.09.2025

## TEST REPORT OF AMBIENT AIR QUALITY MONITORING

[ SRL / BS&IPL / AMB / S - 221/09/ 2025 Dated: 22.09.2025 ]

SL.NO	PARAMETERS	UNIT	RESULTS	TEST SPECIFICATION	STANDARD/ LIMITS
01.	Carbon Monoxide (CO) [01 Hr.]	mg/m <sup>3</sup>	0.680	IS 5182(Part-10);1999 ( Non-Dispersive Infrared Method )	4.0 [1 Hour]
02.	Benzene ( C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	< 0.2	IS 5182 (Part 11) : 2006	5.0 [Annual]
03.	Benzo (a) Pyrene (BaP)	ng/m <sup>3</sup>	< 0.2	IS 5182 (Part 12) : 2009	1.0 [Annual]

Note 01 : Carbon Monoxide (CO) for hourly basis.

Note 02 : Details of instruments used for Analysis: GC-MS System /VARIAN 210-MS VARIAN 431-GC, Gas Chromatograph with FID & ECD /Agilent 7820A, CO Analyser Ecotech Model-Serinas 30.

Note 03 : Detection Limit of Benzene ( C<sub>6</sub>H<sub>6</sub> ) is 0.2 µg/m<sup>3</sup> & Benzo (a) Pyrene (BaP) is 0.2 ng/m<sup>3</sup>

For Scientific Research Laboratory  
Reviewed and Authorized By

Shirsendu Das

Shirsendu Das

Dy. Technical Manager (Authorized Signatory)

-----End of Test Report-----

1 of 1

- The test report shall not be reproduced, except in full, without written approval of the company.
- Results relate only to the parameters tested.
- No Repeat Analysis will be entertained after 15 days from the date of reporting.
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