

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

HEAD OFFICE: NEAR VISHWANATH NURSING HOMÉ
BAJRANG CHOWK, AT-BARMASIA, DIST/PO.: GIRIDIH-815301
PHONE: 06532-250597
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Website: www.balmukund.com
CIN: U27310WB1999PTC266185

25th May, 2024

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/2021-22/2167/2021/67 dated 15.07.2021. & No.EC/SEIAA/2013-14/297/2014/1525 dt.25.08.2015 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 for installation/modernization of existing Induction Furnaces from existing 4x7 MT/Heat to 4x15 MT/Heat, Installation of 2 (Two) Rolling Mill of capacity 371 TPD and 375 TPD and 2 (Two) Nos. of Induction Slag Grinders having crushing capacity of 47000 TPA segregating 3760 TPA of crushed Iron Metal & Letter No.EC/SEIAA/2013-14/297/2014/1525 dt.25.08.2015 which includes 1x15 MT/Heat Induction Furnace and Iron Ore Beneficiation Plant of 94000 TPA (Throughput). 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 2nd six months of year 2023-24 (period from 01.10.2023 to 31.03.2024):

I. Specific Conditions:

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|------------|---|---|
| Sl.<br>No. | Conditions  | Compliance  |
| i.         | The Environmental Clearance is valid subject to the following condition, that this project has:  a. Obtained all legal rights to operate at concerned place.                      | a. The required piece of land has been obtained with all legal rights to operate including NOC No.B-4109 dt.16.10.2015 & CTE No. JSPCB/HO/RNC/CTE-10840052/2021/209 dt.28.09.2021 and C.T.O.No.JSPCB/HO/RNC/CTO-12633413/2022/845 dated 15.06.2022 valid till 30.06.2025 from JSPC Board. |
|            | <ul><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> | b. Complied. c. Complied.   |



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| Sl.<br>No. | Conditions  | Compliance   |
| 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.  |
| 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 habitate. 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

| S1. |  |  |
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| 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. | manufacturing facilities does not require diversification of forest land to non-forest purpose   |
| 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. |



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| Sl.<br>No. | Conditions   | Compliance   |
| 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 Department. The implementation report shall be furnished along with the sixmonthly compliance report. (in case of the presence of schedule-I species in the study area). | 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.  |
| 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 and CTO from Jharkhand State Pollution Control Board, Ranchi under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974. Copy of the said NOC/CTE & CTO have been submitted earlier alongwith our compliance report for 2 <sup>nd</sup> six month period ending on 31.03.2022. |
| 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. CGWA/NOC/IND/REN/3/2022/7357 valid till 03.03.2025, a copy of the said NOC has been submitted along-with our 2 <sup>nd</sup> six months EC Compliance Report for the year 2022-23.  |
| 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 is enclosed for your reference, record and needful.   |
| 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 complying accordingly as directed including existing manufacturing units within prescribed time limit.  |



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| S1.  |   |  |
| No.  | Conditions                                  | Compliance   |
| viii | Concealing factual data or submission of    | We are submitting factual data only.                 |
|      | false/fabricated data and failure to comply | , ACC , ACC  |
|      | 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.                                       |  |
| ix.  | The SEIAA, Jharkhand or any other           | We agree and we will comply applicable modified      |
|      | competent Authority may alter modify the    | conditions and further stipulated condition, if any. |
|      | above conditions or stipulate any further   | ·  |
|      | condition in the interest of Environment    |  |
|      | Protection.                                 |  |

### III. Air Quality Monitoring and Preservation:

| -   | Quanty wientering and reservation.  |   |
|-----|---|---|
| S1. | D   |   |
| 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 31st March, 2012 (applicable to IF/EAF) as amended from time to time, S.O.3305 (E) dated 7th 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. | both existing and expanded/modernized units of<br>our Mega Division to monitor stack emission and<br>connected to SPCB and CPCB online servers. Copy<br>of valid calibration certificates of stack emission |
| ii. | The project proponent shall monitor fugitive emission in the plant premises at least once in every quarter through laboratories recognized under Environment (Frotection) 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.                    |



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| Sl.<br>No. | Conditions   | Compliance  |
| 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 Ambient Air Quality monitoring system at our Mega Division premises to monitor PM. PM, SO <sub>2</sub> and NOx emissions monitoring is also being done 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.             |
| 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 sixmonthly 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 JSPCB & CPCB servers for regular 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.   |



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| S1.  |   |  |
|------|---|--|
| No.  | Conditions                                  | Compliance   |
| ix.  | The project proponent shall use leak proof  | We are using leak proof trucks/dumpers for         |
|      | trucks/dumpers carrying coal and other      | carrying raw materials and cover them tightly      |
|      | raw materials and cover them with           | with tarpaulin sheets.                             |
|      | tarpaulin.                                  |  |
| X.   | The project proponent shall provide         | We have provided covered sheds for each raw        |
|      | covered sheds for raw materials like scrap  | material separately within premises.               |
|      | and sponge iron, lump ore, coke, coal, etc. |  |
| xi.  | The project proponent shall provide         | We have provided fume extraction system with       |
|      | primary and secondary fume extraction       | acoustic hoods for all induction furnaces.         |
|      | system at all melting furnaces.             |  |
| xii. | Design the ventilation system for adequate  | Proper ventilation system for adequate air changes |
|      | air changes as per ACGIH document for all   | have been provided in plant sheds. No tunnel, oil  |
| 4    | tunnels, motor houses, Oil Cellars.         | cellars exists in the plant.                       |

### IV. Water Quality Monitoring and Preservation:

| Sl. |  |  |
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| 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 31st March, 2012 (applicable to IF/EAF) as amended from time to time, S.O. 3305 (E) dated 7th December, 2015 (Thermal Power Plants) as amended from time to time and conneced 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). | 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.  Also we have not any thermal power plant within premises. |
| 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   | 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 for May & October, 2023 are enclosed.  |



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|------------|---|--|
| Sl.<br>No. | Conditions  | Compliance   |
|            | Environment (Protection) Act, 1986 and  |  |
| ļ          | NABL accredited laboratories.   |  |
| 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 sixmonthly monitoring report. | There is no industrial effluent in our units under Mega Division. Copy of current ground water quality reports dt.03.06.2023 & 20.10.2023 (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.   |
| vi.        | The project proponent shall provide the ETP for effluents of rolling mills to the standards prescribed in G.S.R. 277 (E) dated 31st 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 are upgraded to arrest the run-off rain water in the event of heavy rains to prevent the water pollution due to surface run-off.  |
| 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 RWH/RTRWH 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. |



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V. Noise Monitoring and Prevention:

| S1. |  |   |
|-----|--|---|
| No. | Conditions   | Compliance  |
| i.  | Noise level survey shall be carried as per<br>the prescribed guidelines and report in this<br>regard shall be submitted to Regional<br>Officer of the Ministry as part of six-<br>monthly compliance report. | expanded/modernized plant for compliance  |
| 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:

| V 1. LI | nergy Conservation measures:  |  |
|---------|---|--|
| S1.     | 590 01  |  |
| 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.  |
| ii.     | Practice hot charging of slabs and billets/blooms as far as possible.   | We have adopted continuous system of hot charging of M.S. Billets with surplus heat to Rolling Mills as described in manufacturing process of TMT Bar/Rod.                     |
| 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:

| S1. |  |   |
|-----|--|---|
| No. | Conditions   | Compliance  |
| i.  | Used refractories shall be recycled as far as possible.  | We are recycling used refractories as far as possible.  |
| ii. | Oily scum and metallic sludge recovered<br>from rolling mills ETP shall be mixed, dried<br>and briquetted and reused in melting<br>furnaces. | Oily scum and metallic sludge recovered from rolling mills cooling bed is dried, briquetted and reused in melting furnaces. |

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| S1.        |  |  |
|------------|--|--|
| No.        | Conditions   | Compliance   |
| 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. No out of premises or transboundary disposal of the burnt mobil oil is done. |
| V.         | Kitchen waste shall be composted or converted to biogas for further use (to be decided on case to case basis depending on type and size of plant.)   | Domestic waste of canteen is composted and reused in development of greenbelt.   |
|            | Green Belt :   |  |
| S1.<br>No. | Conditions   | Compliance   |
| 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 interalia cover the entire periphery of the plant.                                  | We have developed greenbelt in an area equal to 33% of the existing plant. No additional land has been taken into use for setting-up/modernization. We are enhancing density and biodiversity of the greenbelt.                        |
| 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:

| S1. |  |  |
|-----|--|--|
| No. | Conditions   | Compliance   |
| i.  | Emergency preparedness plan based on the   | We have implemented emergency plan based on  |
|     | Hazard identification and Risk Assessment  | the Hazard identification and Risk Assessment  |
|     | (HIRA) and Disaster Management Plan  | (HIRA) and Disaster Management Plan as per   |
|     | shall be implemented.  | 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 Equipments (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 installed to minimize and maintain heat stress in the working zone. |



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|------|---|---|
| S1.  |   |   |
| No.  | Conditions  | Compliance  |
| 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. |
|      |   | factory premises.   |

X. Corporate Environment Responsibility:

|      | porate Environment Responsibility:   |  |
|------|--|--|
| S1.  |  |  |
| 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 1st 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 1st May, 2018 as applicable. We attach hereto detail of expenses incurred in CSR and CER activities keeping in view of the issues raised in public hearing and in compliance to 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 EMPs of final EIAs submitted for grant of Environmental Clearances. is already constituted. |



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

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|------------|---|---|
| Sl.<br>No. | Conditions  | Compliance  |
| 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 2 <sup>nd</sup> six months of FY:2023-24 is enclosed herewith. |
| V.         | Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.   | We have conducted Self environmental audit for year 2023-24, copy of the same has been submitted with EC compliance report of 01st six month's of FY: 2023-24. Third party environmental audit shall be carried out in every three years.   |
| 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<br>the Charter on Corporate Responsibility for<br>Environment Protection (CREP) for both the<br>existing and newly established units (Annexure-<br>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<br>on a regular basis as per Factory Act is being<br>continued for workers working in Mega Div. and<br>records kept in the factory office.  |
|            | <u>liscellaneous</u> :  |   |
| S1.<br>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   | We have already advertised the grant of Environmental Clearances in two local newspapers Hindustan Times dated 29.07.2021(English) and Dainik Bhasker dated   |

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 1st compliance report. The EC granted has been uploaded on the Company's website. The existing unit has already complied this condition earlier.



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|------------|---|---|
| S1.<br>No. | Conditions  | Compliance  |
| 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 1st 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.   |
| 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) or critical sectoral parameters, and display the same at main gate of the premise for disclosure to the public and put it 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 will also be 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 31st March, 2024 has been submitted to the State Pollution Control Board. It is also being uploaded on the website of the Company. Copy of the same is also being submitted along-with this EC Compliance Report for the 02nd half six month of FY 2023-24.                           |
| 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.  | Complied as reported to your goodself.  |



### SPONGE & IRON PVT. LTD. (MEGA DVN.)

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|------------|---|---|
| Sl.<br>No. | Conditions  | Compliance  |
| 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 30.06.2025. Copy of the same has been submitted and complying its conditions.  |
| 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 had been submitted marked as Annexure-2 alongwith previous compliance report. |
| 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 put up 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 implemented 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.   |
|            | 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 | 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.  |



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| Sl.<br>No. | Conditions  | Compliance |
|------------|---|------------|
|            | 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. |            |
| 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.  |

#### XI. Other Conditions:

|   |     | Conditions.  |  |
|---|-----|--|--|
| 1 | S1. | 946 ABICAN   |  |
|   | 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 is added/modified by the concerned authorities, if any, applicable to us. 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.  |
| j | ii. | 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 clearance. We will submit afresh proposal for deviation or alteration, if any.   |



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CIN: U27310WB1999PTC266185

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We have complied all the applicable conditions of the Environmental Clearances. Further, we assure that the direction in this regard, if any, is received, we will promptly take action to comply the directives.

Thanking you, Yours faithfully,

For Balmukund Sponge & Iron Pvt. Ltd.

Santoh Kuma
Authorized Signatory

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 Office, 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

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-All for information and record.

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REGD. OFFICE: 18, R. N. MUKHERJEE ROAD, (1ST FLOOR), KOLKATA-700 001, PH.: 4032 5000

WORKS: AT- CHATRO. TUNDI ROAD, P.O.: GADISRIRAMPUR, GIRIDIH - 815 302, PH.: (06532) 244162, 244163, FAX: 244062

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

All Disputes are Subject to Patna (Bihar) jurisdiction only



# SPONGE & IRON PVT. LTD. (MEGA DVN.)

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#### Annexure-1

| Year                            | Recurring Expenditure for                    | Amount Rs. In Lakh |
|---------------------------------|--|--------------------|
| 2023-24                         | Environment Protection                       |                    |
| (October, 2023-<br>March, 2024) | Environmental Monitoring                     | 2.27               |
|                                 | Running Cost of Pollution Control Equipments | 9.24               |
|                                 | Greenbelt Development                        | 1.98               |
|                                 | Total during the year:                       | 13.49              |

For Balmukund Sponge & Iron Pvt. Ltd.

Santorh Kuman

Authorized Signatory



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

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Annexure-2

Recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants is 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. <u>Fugitive Emission</u>: To minimize fugitive emission we have concreted shop floor, 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.
- 3. Solid Waste/Hazardous Waste Management: Solid waste in form of induction slag is 100% 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. End cutting and misroll of TMT Bar, Runner & Risers are reused/melted again in induction furnaces as raw material of M.S. Billet. We are recycling used refractories as far as possible. Oily scum and metallic sludge recovered from rolling mills cooling bed is dried, briquetted and reused in melting furnaces. Iron fines generated or recovered from Iron Ore Beneficiation Plant during beneficiation of low grade iron ore, is again beneficiated. Domestic waste is composted and reused in development of greenbelt. Thus 100% solid waste is being disposed off. 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 bumt mobil oil safely 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 within the premises.
- 4. <u>Water Conservation/ Water Pollution</u>: Rain water is being harvested 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. 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

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Website: www.balmukund.com CIN: U27310WB1999PTC266185

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' outside the factory premises. Rain Water Harvesting system including Roof Top Rain Water Harvesting system and ground water recharge system have been implemented.

- 5. Installation of Continuous Stack Monitoring System: We have installed Fume Extraction System with continuous online stack monitoring system for dust emission (PM) monitoring, SO<sub>2</sub> analyzer and PM (AAQ) with remote calibration facility with 24 x 7 days connectivity. Continuous data is transmitted to JSPCB and CPCB server. Manual stack emission monitoring is also being done by NABL laboratory namely M/s. Kalyani Laboratories Pvt. Ltd., Bhubaneswar. Test Reports for compliance period of the year 2023-24 (October-March) for stack emission monitoring are enclosed with the compliance report. Results are within the prescribed limit. Good Housekeeping has been is being maintained.
- 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, operated and maintained proper record. Manual monitoring reports of 03<sup>rd</sup> and 04<sup>th</sup> quarters of fy:2023-24 are also being submitted to CPCB and SPCB along-with EC Compliance Report.

For Balmukund Sponge & Iron Pvt. Ltd.

santorh

(Mega Division)

Authorized Signatory

### **Corporate Social Responsibility**

# Balmukund Sponge & Iron Pvt. Ltd., Giridih (Mega Division)

### Detail of CSR Expenses incurred during 01.04.2023 to 31.03.2024

### Ledger:

| Date       | CSR Work done  | Amount incurred |
|------------|--|-----------------|
|            | CSR Expenses incurred till 31.03.2023, detail submitted earlier(A)   | 2,40,37,546.36  |
| 07.04.2023 | Amount paid to M.P. Verma Cricket Foundation for distribution of free bats and balls to students in surrounding villages to improve their interest in game for better health.  |                 |
| 17.04.2023 | Amount paid to M/s. Sharma Emgineering Works Shop towards cost of one almirah, given to Mudrika Kumari D/o Kailash Turi and one Palang given to Khushbu Kumari D/o Munna Turi both resident of Chatro, Tundi Road, Giridih on their marriage ceremony as help being a social responsibility. | 15,000.00       |
| 19.04.2023 | Amount paid to M/s. Shri Godham Mahatirtha Pathmeda for better services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility.   | 1,01,000.00     |
| 29.04.2023 | Amount paid to Smt. Devanti Devi as assistance in the marriage ceremony of her daughter Saraswati Kumari being a social responsibility.  | 11,000.00       |
| 29.04.2023 | Amount paid to Sri Hanuman Prasad Poddar for maintenance of School of Blind Children at Giridih being a social responsibility.   | 75,000.00       |
| 02.05.2023 | Amount paid to Giridih Pachamba Shree Gopal Goshala vide Receipt No.15206 dt.02.05.2023 for better services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility.                   | 1,25,000.00     |
| 02.05.2023 | Amount paid to M/s. Sharma Emgineering Works Shop towards cost of one almirah, given to Ita Kumari D/o Dilip Ray resident of Kalhamanjho, PO-Gadisrirampur, Giridih on her marriage ceremony as help being a social responsibility.  | 7,500.00        |
| 09.05.2023 | Amount paid to Sri Hanuman Prasad Poddar for maintenance of School of Blind Children being a social responsibility.  | 3,41,000.00     |
| 11.05.2023 | Amount paid to M/s. Computer Care being payment of their Invoice No.CC/23-24/0246 dt.11.05.2023 towards cost including installation of CCTV camera sets at SDO Office and SDO Court, Giridih as an assistance being a social responsibility.   | 1,09,212.48     |
| 12.05.2023 | Amount paid to Shri Bageshwar Jan Seva for social activities in nearby village.  | 1,25,000.00     |
| 17.05.2023 | Amount paid to M/s. Shri Godham Mahatirtha Pathmeda for better services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility.   | 1,01,000.00     |
| 19.05.2023 | Amount paid to M/s. Sharma Emgineering Works Shop towards cost of one almirah, vide Inv.No.263 dt.19.05.2023 given to Pratima Kumari D/o Shyam Prasad resident of Village-Mohanpur, PO-Gadisrirampur, Giridih on her marriage ceremony as help being a social responsibility.                | 7,500.00        |

| Date       | CSR Work done  | Amount incurred            |
|------------|--|----------------------------|
| 23.05.2023 | Amount paid to Sri Hanuman Prasad Poddar for maintenance of School of Blind Children being a social responsibility.  | 75,000.00                  |
| 25.05.2023 | Amount paid to Giridih Pachamba Shree Gopal Goshala vide Receipt No.15216 dt.25.05.2023 for better services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility.   | 1,25,000.00                |
| 29.05.2023 | Amount paid to Shri Shikshayatan towards school exam fee of needy child being a social responsibility.   | 518.88                     |
| 14.06.2023 | Amount paid to M/s. Sharma Emgineering Works Shop towards cost of one almirah, given to Uma Kumari D/o Late Ramchander Rai, Village-Gadisrirampur, Giridih on her marriage ceremony as help being a social responsibility.   | 7,500.00                   |
| 23.06.2023 | Amount paid to M/s. Shri Godham Mahatirtha Pathmeda for better services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility.   | 1,01,000.00                |
| 26.06.2023 | Amount paid to Giridih Pachamba Shree Gopal Goshala vide Receipt No.15226 dt.26.06.2023 for better services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility.   | 1,25,000.00                |
| 26.06.2023 | Amount paid to Sri Hanuman Prasad Poddar for maintenance of School of Blind Children being a social responsibility.  | 75,000.00                  |
| 20.07.2023 | Amount paid to M/s. Shri Godham Mahatirtha Pathmeda for better services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility.   | 1,01,000.00                |
| 01.09.2022 | Amount paid to Sri Hanuman Prasad Poddar for maintenance of School   | 4.50.000.00                |
| 01.08.2023 | of Blind Children being a social responsibility.  Amount paid to Giridih Pachamba Shree Gopal Goshala vide Receipt No.15239 dt.02.08.2023 for better services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility. | 1,50,000.00<br>2,50,000.00 |
| 16.08.2023 | Amount paid to M/s. Shri Godham Mahatirtha Pathmeda for better services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility.   | 1,01,000.00                |
| 20.09.2023 | Amount paid to M/s. Shri Godham Mahatirtha Pathmeda for better services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility.   | 1,01,000.00                |
| 28.09.2023 | Amount paid to Sri Hanuman Prasad Poddar for maintenance of School of Blind Children being a social responsibility.  | 75,000.00                  |
| 10.10.2023 | Amount paid to Giridih Pachamba Shree Gopal Goshala vide Receipt No.16063 dt.10.10.2023 for better services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility.   | 1,25,000.00                |

| Date       | CSR Work done  | Amount incurred |
|------------|--|-----------------|
| 20.10.2023 | Amount paid to M/s. Shri Godham Mahatirtha Pathmeda for better services to cattles including food, cleaning, arrangement of light at   | 1,01,000.00     |
|            | goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility.  |                 |
| 15.11.2023 | Amount paid to Giridih Pachamba Shree Gopal Goshala vide Receipt No.16083 dt.15.11.2023 for better services to cattles including food,   | 3 50 000 00     |
| 13.11.2023 | cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility.  | 2,50,000.00     |
| 15.11.2023 | Amount paid to Sri Hanuman Prasad Poddar for maintenance of School of Blind Children being a social responsibility.  | 1,50,000.00     |
|            | Amount paid to M/s. Shri Godham Mahatirtha Pathmeda for better   |                 |
| 17.11.2023 | services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility.  | 1,01,000.00     |
| 16.12.2023 | Amount paid to M/s. Shri Godham Mahatirtha Pathmeda for better services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility.                                     | 1,01,000.00     |
| 20.12.2023 | Amount paid to Sri Hanuman Prasad Poddar for maintenance of School of Blind Children vide R.No.2187 dt.20.12.2023 being a social responsibility.   | 75,000.00       |
| 21.12.2023 | Amount paid to Giridih Pachamba Shree Gopal Goshala vide Receipt No.16090 dt.21.12.2023 for better services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility. | 1,25,000.00     |
| 23.12.2023 | Amount paid to M/s. Maa Ganga Borewell against their Inv. No.01 dt.23.12.2023 towards charges of 4 (four) boring at village Gadisrirampur & Chatro Dist. Giridih for drinking water.   | 1,22,650.00     |
| 13.01.2024 | Amount paid to Giridih Pachamba Shree Gopal Goshala vide Receipt No.16094 dt.13.01.2024 for better services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility. | 5,00,000.00     |
| 18.01.2024 | Amount paid to Sri Hanuman Prasad Poddar for maintenance of School of Blind Children vide Receipt dt.18.01.2024 being a social responsibility.   | 75,000.00       |
| 19.01.2024 | Amount paid to M/s. Ajay Furniture, Giridih against their Inv. No.1418 dt.19.01.2024 towards cost of 5 (five) pcs of office rake for SDO Office, Giridih.  | 13,250.00       |
| 12.02.2024 | Amount paid to Giridih Pachamba Shree Gopal Goshala vide Receipt No.16100 dt.12.02.2024 for better services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility. | 1,25,000.00     |
| 14.02.2024 | Amount paid to Giridih Pachamba Shree Gopal Goshala vide Receipt No.17205 dt.14.02.2024 for better services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility. | 1,25,000.00     |
| 14.02.2024 | 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       |

| Date       | CSR Work done   | Amount incurred |
|------------|---|-----------------|
| 16.02.2024 | Amount paid to M/s. Shri Godham Mahatirtha Pathmeda for better services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers   | 1,01,000.00     |
|            | being a social responsibility.  Amount paid to Giridih Pachamba Shree Gopal Goshala vide Receipt  |                 |
| 14.02.2024 | No.17205 dt.14.02.2024 for better services to cattles including food, cleaning, arrangement of light at goshala and fulfillment of milk requirement of the nearby dwellers being a social responsibility. | 1,25,000.00     |
| 27.03.2024 | 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       |
|            | Total expenditure on CSR during FY:2023-24(B):  | 46,80,131.36    |
|            | Total expenditure on CSR till 31.03.2024(A+B):  | 2,87,17,677.72  |

For Balmukund Sponge & Iron Pvt. Ltd.

(Mega Division)

Santon Kuman

**Authorized Signatory** 

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 Tele No. 0863-2238 667,Fax No.0863-2262 667

### **CALIBRATION REPORT**

Date of Calibration: 30.10.2023 Calibration Due Date: 29.10.2024

CUSTOMER:
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.

Instrument Serial No.: VI 202000140

| Test Items                            | Technical Requirements                                      | Test Results |
|---------------------------------------|---|--------------|
| Appearance and Structure              | Accessories Complete; Glass<br>Clean; No Scratch on Surface | Passed       |
| Zero Drift                            | ± 2%F.S/24h   | 1.2%         |
| Span Drift                            | ± 2%F.S/24h   | 1.1%         |
| Relativity                            | R≥0.85  | 1.3          |
| 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 > $200 \text{mg/m}^3$ , relative error ≤ $\pm 15\%$    | 10%          |

**TESTED BY** 

P. Suchlook-(P. Swaroopa) STRUME SZZ 002 \* 'QL'

CHECKED BY

L. Supriya (L. Supriya)

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 Tele No. 0863-2238 667,Fax No.0863-2262 667

## **CALIBRATION REPORT**

Date of Calibration: 30.10.2023

Calibration Due Date: 29.10.2024

CUSTOMER:

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.

Instrument Serial No.: VI 2019081

| Test Items                            | Technical Requirements                                      | Test Results |  |
|---------------------------------------|---|--------------|--|
| Appearance and Structure              | Accessories Complete; Glass<br>Clean; No Scratch on Surface | Passed       |  |
| Zero Drift                            | ± 2%F.S/24h   | 1.2%         |  |
| Span Drift                            | ± 2%F.S/24h   | 1.1%         |  |
| Relativity                            | R≥0.85  | 1.3          |  |
| 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/m³, relative error ≤ ± 15%                     | 10%          |  |

**TESTED BY** 

P. Sunlopo (P. Swaroopa) GUNTUR STORY OF THE SERVICE OF THE S

**CHECKED BY** 

L. Supriya (L. Supriya)

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 Tele No. 0863-2238 667,Fax No.0863-2262 667

### **CALIBRATION REPORT**

Date of Calibration: 30.10.2023 Calibration Due Date: 29.10.2024

CUSTOMER:

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

Instrument Serial No.: VI 2019080

| Test Items                            | Technical Requirements                                      | Test Results |
|---------------------------------------|---|--------------|
| Appearance and Structure              | Accessories Complete; Glass<br>Clean; No Scratch on Surface | Passed       |
| Zero Drift                            | ± 2%F.S/24h   | 1.2%         |
| Span Drift                            | ± 2%F.S/24h   | 1.1%         |
| Relativity                            | R≥0.85  | 1.3          |
| 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/m³, relative error ≤ ± 15%                     | 10%          |

**TESTED BY** 

P. Swaroops)

GUNTUR SZZ 002 PH

**CHECKED BY** 

L. Supriya (L. Supriya)

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 Tele No. 0863-2238 667,Fax No.0863-2262 667

### TEST & CALIBRATION REPORT

Date of Calibration: 30.10.2023

Calibration Due Date: 29.10.2024

CUSTOMER:

Balmukund Sponge & Iron Pvt Ltd Chatro ,Tundi road,Post-Gadisrirampur,

Instrument Type: PM 10 Monitor Range: 0-10 mg/m3

Giridih-8153001.

Type Model No

: PM 10 Monitor : V-Air-9009-PM10

Range Equipment Sl.No

: 0-10 mg/m3 : VE19040120

1. FUNCTIONAL TESTS:

Kept system on running condition for 76 Hours.

 Repeatability Test: Test on blank film on 10 times and Standard film 10 times. Record counts.

| S/N       | Count value Of Blank Film | Count Value Of Standard Film |
|-----------|---------------------------|------------------------------|
|           |                           |                              |
| 1         | 1315732                   | 3334531                      |
| 2         | 1314421                   | 3335842                      |
| 3         | 1314452                   | 3345351                      |
| 4         | 1313541                   | 3334631                      |
| 5         | 1315416                   | 3334431                      |
| 6         | 1313371                   | 3335532                      |
| 7         | 1315628                   | 3337631                      |
| 8         | 1316831                   | 3339683                      |
| 9         | 1314137                   | 3333264                      |
| 10        | 1313542                   | 3334633                      |
| Max Error | 0.28%                     | 0.33%                        |

b. Tested Flow Error : Found ok c. Tested Paper Broken : Found ok d. Tested Detector Error : Found ok e. Tested Process Test : Found ok

CHECKED BY L.Supriya GUNTUR BY

APPROVED BY



An ISO 9001:2015 (QMS) & OHSMS 45001:2018 Certified Organization Accredited by NABL & Jharkhand State Pollution Control Board

Analytical & Environmental Engineering Laboratory

C- 144, Aman Green City, Pundag, Ranchi- 834 004, Jharkhand Tele No.: 0651-4057244, Mobile: 94701 30700, E-mail: nirajksingh2003@yahoo.co.in

### TEST REPORT

| Customer's Name & Address:                              | Test Report No.     | : SRL/BSIPL/JUNE/GW-01/23/76 |
|---|---------------------|------------------------------|
| M/s Balmukund Sponge & Iron (P) Limited,                | Report Issue Date   | : 03/06/2023                 |
| At.: Chatro - Tundi Road, District: Giridih, Jharkhand. | Sample Receipt Date | : 25/05/2023                 |
|   | Analysis Date       | : 26/05/2023 - 31/05/2023    |
|   | Lab Sample No       | BSIPL/GW - 01                |

| Type of Sample     | : Ground Water                 | Sample Quantity     | : 1 Litre         |
|--------------------|--------------------------------|---------------------|-------------------|
| Location of Sample | Bore Well No. 1 (Plant Campus) | Sample Condition    | : Properly Sealed |
| Date of Sampling   | ; 25/05/2023                   | Sampling Method     | Grab              |
| Weather Condition  | Clear                          | Sample Collected by | Client            |

#### TEST RESULTS

| SI.<br>No. | Parameters                                   | Results         | Regulatory Standards<br>As per IS: 10500 (2012)<br>(Drinking Water<br>Specification) |                       | Test Method (s)                                   |
|------------|--|-----------------|--|-----------------------|---|
|            |  |                 | Desirable<br>Limits  | Permissible<br>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 TEdn. 2160 B                              |
| 4.         | Turbidity, NTU, Max.                         | <1              | 1  | 5                     | APHA 23 <sup>N</sup> -Edn 2130 B                  |
| 5.         | Conductivity, µmhos/cm                       | 464             | *  |                       | APHA 23 <sup>rd</sup> Edn 2510 B                  |
| 6.         | pH Value                                     | 6.8             | 6.5 to 8.5   | No relaxation         | APHA 23 <sup>rd</sup> Edn. 4500H B                |
| 7.         | Total Hardness (as CaCO <sub>3</sub> ), mg/l | 162             | 200  | 600                   | APHA 23 <sup>rd</sup> Edn. 2340 C                 |
| 8.         | Iron (as Fe), mg/l                           | <0.1            | 0.3  | No relaxation         | APHA 23 <sup>rd</sup> Edn 3500Fe B                |
| 9.         | Chloride (as CI), mg/l                       | 26              | 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 CI B               |
| 11.        | Fluoride (as F) mg/L                         | 0.58            | 1.0  | 1.5                   | APHA 23" Edn 4500 F D                             |
| 12.        | Dissolved Solids mg/l                        | 290             | 500  | 2000                  | APHA 23 <sup>rd</sup> Edn. 2540 C                 |
| 13.        | Calcium (as Ca), mg/l                        | 40              | 75   | 200                   | APHA 23 <sup>rd</sup> Edn. 3500 Ca 8              |
| 14:        | Magnesium (as Mg), mg/l                      | 22              | 30   | 100                   | APHA 23 <sup>3</sup> Edn. 3500 Mg B               |
| 15.        | Copper (Cu), mg/l                            | <0.05           | 0.05   | 1.5                   | APHA 23 <sup>rd</sup> Edn. 3500 Cu B              |
| 16.        | Manganese (as Mn), mg/l                      | <0.05           | 0.1  | 0.3                   | APHA 23 <sup>rd</sup> Edn. 3500 Mn (3             |
| 17.        | Sulphate (as SO <sub>4</sub> ), mg/l         | 62              | 200  | 400                   | APHA 23 <sup>rd</sup> Edn. 4500 SOLFE             |
| 18.        | Nitrate (as NO <sub>3</sub> ), mg/l          | 4.4             | 45   | No relaxation         | APHA 23 <sup>rd</sup> Edn. 4500 NO <sub>3</sub> B |
| 19.        | Sodium (as Na), mg/l                         | 24              | *  | *                     | APHA 23 <sup>rd</sup> Edn. 3500 Na B              |
| 20.        | Potassium (as K), mg/l                       | 8               | *  |                       | APHA 23 <sup>rd</sup> Edn. 3500 K B               |
| 21         | Zinc (as Zn), mg/l                           | <0.01           | 5  | 15                    | APHA 23 <sup>11</sup> Edn. 3500 Zn.B              |
| 22.        | Alkalinity (as CaCO <sub>3</sub> ) mg/l      | 185             | 200  | 600                   | APHA 23 <sup>-9</sup> Edn. 2320 B                 |

#### Note:

(Water Level was observed as 5.6 Mbgl)

- The results relate only to the items received and tested 1.
- 2. 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.

(Dr. Niraj Kumar Singh) Authorized Signatory



An ISO 9001:2015 (QMS) & OHSMS 45001:2018 Certified Organization Accredited by NABL & Jharkhand State Pollution Control Board

Analytical & Environmental Engineering Laboratory

C- 144, Aman Green City, Pundag, Ranchi- 834 004, Jharkhand Tele No.: 0651-4057244, Mobile: 94701 30700, E-mail: nirajksingh2003@yahoo.co.in

### TEST REPORT

| Customer's Name & Address:                   | Test Report No.     | SRL/BSIPL/JUNE/GW-01/23/77 |
|--|---------------------|----------------------------|
| M/s Balmukund Sponge & Iron (P) Limited,     | Report Issue Date   | : 03/06/2023               |
| At.: Chatro - Tundi Road, District: Giridih, | Sample Receipt Date | 25/05/2023                 |
| Jharkhand,                                   | Analysis Date       | 26/05/2023 - 31/05/2023    |
|  | Lab. Sample No.     | a BSIPL/GW - 02            |

| Type of Sample     | : Ground Water                  | Sample Quantity     | 1 Litre         |
|--------------------|---------------------------------|---------------------|-----------------|
| Location of Sample | : Bore Well No 2 (Plant Campus) | Sample Condition    | Properly Sealed |
| Date of Sampling   | : 25/05/2023                    | Sampling Method     | Grab            |
| Weather Condition  | : Clear                         | Sample Collected by | Client          |

#### TEST RESULTS

| SI.<br>No. | Parameters                                   | Results         | Regulatory Standards As per IS: 10500 (2012) (Drinking Water Specification) |                       | Test Method (s)                                    |
|------------|--|-----------------|---|-----------------------|--|
|            |  |                 | Desirable<br>Limits   | Permissible<br>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>rt</sup> Edn. 2130 B                  |
| 5.         | Conductivity, µmhos/cm                       | 998             | 125   | -                     | APHA 23 <sup>rd</sup> Edn. 2510 B                  |
| 6.         | pH Value                                     | 6.4             | 6.5 to 8.5  | No relaxation         | APHA 23 <sup>rd</sup> Edn. 4500H B                 |
| 7.         | Total Hardness (as CaCO <sub>3</sub> ), mg/l | 566             | 200   | 600                   | APHA 23 <sup>rt</sup> Edn. 2340 C                  |
| 8.         | Iron (as Fe), mg/l                           | <0.1            | 0.3   | No relaxation         | APHA 23 <sup>rd</sup> Edn. 3500Fe B                |
| 9.         | Chloride (as CI), mg/l                       | 32              | 250   | 1000                  | APHA 23 <sup>rd</sup> Edn. 4500 Ct. E.             |
| 10.        | Residual Free Chlorine, mg/l                 | Nil             | 0.2   | 1.0                   | APHA 23 <sup>H</sup> Edn. 4500 CI 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                        | 624             | 500   | 2000                  | APHA 23 <sup>rd</sup> Edn 2540 C                   |
| 13.        | Calcium (as Ca), mg/l                        | 108             | 75  | 200                   | APHA 23 <sup>rd</sup> Edn. 3500 Ca B.              |
| 14.        | Magnesium (as Mg), mg/l                      | 84 .            | 30  | 100                   | APHA 2313 Edn. 3500 Mg B                           |
| 15.        | Copper (Cu), mg/l                            | < 0.05          | 0.05  | 1.5                   | APHA 23 <sup>rd</sup> Edn 3500 Gu B                |
| 16.        | Manganese (as Mn), mg/l                      | < 0.05          | 0.1   | 0.3                   | APHA 23 <sup>rd</sup> Edn. 3500 Mn B               |
| .17.       | Sulphate (as SO <sub>4</sub> ), mg/l         | 70              | 200   | 400                   | APHA 23 <sup>re</sup> Edn. 4500 SO₄ <sup>7</sup> E |
| 18.        | Nitrate (as NO <sub>3</sub> ), mg/l          | 3.4             | 45  | No relaxation         | APHA 2810 Edn. 4500 NO <sub>3</sub> B              |
| 19.        | Sodium (as Na), mg/l                         | 32              |   | *                     | APHA 23 <sup>rd</sup> Edn. 3500 Na B               |
| 20.        | Potassium (as K), mg/l                       | 9               |   | -                     | APHA 23 <sup>st</sup> Edn. 3500 K B                |
| 21;        | Zinc (as Zn), mg/l                           | <0.01           | 5   | 15                    | APHA 23 <sup>rd</sup> Edn, 3500 Zn B               |
| 22.        | Alkalinity (as CaCO <sub>3</sub> ) mg/l      | 245             | 200   | 600                   | APHA 23 <sup>rt</sup> Edn. 2320 B                  |

#### Note:

- (Water Level was observed as 5.5 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.

(Dr. Niraj Kumar Singh) Authorized Signatory



An ISO 9001:2015 (QMS) & OHSMS 45001:2018 Certified Organization Accredited by NABL & Jharkhand State Pollution Control Board

Analytical & Environmental Engineering Laboratory

C- 144, Aman Green City, Pundag, Ranchi- 834 004, Jharkhand Tele No.: 0651-4057244, Mobile: 94701 30700, E-mail: nirajksingh2003@yahoo.co.in

### TEST REPORT

| Customer's Name & Address:                   | Test Report No.     | : SRL/BSIPL/JUNE/GW-01/23/78 |
|--|---------------------|------------------------------|
| M/s Balmukund Sponge & Iron (P) Limited,     | Report Issue Date   | 1 03/06/2023                 |
| At.: Chatro - Tundi Road, District: Giridih, | Sample Receipt Date | : 25/05/2023                 |
| Jharkhand.                                   | Analysis Date       | : 26/05/2023 - 31/05/2023    |
|  | Lab. Sample No.     | : BSIPL/GW 03                |

| Type of Sample     | : Ground Water (Dug Well)                                   | Sample Quantity     | 1 Litre         |
|--------------------|---|---------------------|-----------------|
| Location of Sample | : Dug Well, Gaganpur Vill.,<br>(Near Sri Lakhan Tudu House) | Sample Condition    | Properly Sealed |
| Date of Sampling   | : 25/05/2023  | Sampling Method     | Grab            |
| Weather Condition  | ; Clear   | Sample Collected by | Client          |

#### TEST RESULTS

| SI.<br>No. | Parameters<br>*                              | Results         | Regulatory Standards As per IS: 10500 (2012) (Drinking Water Specification) |                       | Test Method (s)                                   |
|------------|--|-----------------|---|-----------------------|---|
|            |  |                 | Desirable<br>Limits   | Permissible<br>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.                         | <b>&lt;</b> 1   | 1   | 5                     | APHA 23 <sup>rd</sup> Edn. 2130 B                 |
| 5.         | Conductivity, µmhos/cm                       | 458             |   |                       | APHA 23 <sup>rd</sup> Edn 2510 B                  |
| 6.         | pH Value                                     | 6.6             | 6,5 to 8.5  | No relaxation         | APHA 23 <sup>rd</sup> Etin 4500H B                |
| 7.         | Total Hardness (as CaCO <sub>3</sub> ), mg/l | 182             | 200   | 600                   | APHA 23 <sup>rd</sup> Edn. 2340 C                 |
| 8.         | Iron (as Fe), mg/l                           | <0.1            | 0.3   | No relaxation         | APHA 23" Edn 3500Fe B                             |
| 9.         | Chloride (as CI), mg/l                       | 30              | 250   | 1000                  | APHA 23 <sup>rd</sup> Edn. 4500 CT B              |
| 10.        | Residual Free Chlorine, mg/l                 | Nil             | 0.2   | 1.0                   | APHA 23 <sup>rd</sup> Edn. 4500 CI B              |
| 11.        | Fluoride (as F) mg/L                         | 0.56            | 10  | 1.5                   | APHA 23 <sup>rt</sup> Edn. 4500 F.D               |
| 12.        | Dissolved Solids mg/l                        | 286             | 500   | 2000                  | APHA 23 <sup>rd</sup> Edn. 2540 C                 |
| 13.        | Calcium (as Ca), mg/l                        | 46              | 75  | 200                   | APHA 23" Edn. 3500 Ca B                           |
| 14.        | Magnesium (as Mg), mg/l                      | 15-             | 30  | 100                   | APHA 2310 Edn. 3500 Mg B                          |
| 15.        | Copper (Cu), mg/l                            | < 0.05          | 0.05  | 1.5                   | APHA 2318 Edn. 3500 Cu B                          |
| 16.        | Manganese (as Mn), mg/l                      | <0.05           | 0.1   | 0.3                   | APHA 23 <sup>rd</sup> Edn. 3500 Mn B              |
| 17.        | Sulphate (as SO <sub>4</sub> ), mg/l         | 41              | 200   | 400                   | APHA 23" Edn. 4500 SO. E                          |
| 18:        | Nitrate (as NO <sub>3</sub> ), mg/l          | 2.6             | 45  | No relaxation         | APHA 23 <sup>rd</sup> Edn. 4500 NO <sub>3</sub> B |
| 19.        | Sodium (as Na), mg/l                         | -38             | -   | -                     | APHA 23 <sup>rt</sup> Edn. 3500 No B              |
| 20         | Potassium (as K), mg/l                       | 12              | 50 00 0 <del>2</del> 00 00 0  | *                     | APHA 23 <sup>-d</sup> Edn. 3500 K B               |
| 21.        | Zinc (as Zn), mg/l                           | < 0.01          | 5   | 15                    | APHA 23° Edn. 3500 Zn B                           |
| 22.        | Alkalinity (as CaCO <sub>3</sub> ) mg/l      | 190             | 200   | 600                   | APHA 23 <sup>rd</sup> Edn. 2320 B                 |

Note:

(Water Level was observed as 4.5 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.

(Dr. Niraj Kumar Singh) Authorized Signatory



An ISO 9001:2015 (QMS) & OHSMS 45001:2018 Certified Organization Accredited by NABL & Jharkhand State Pollution Control Board

Analytical & Environmental Engineering Laboratory C- 144, Aman Green City, Pundag, Ranchi- 834 004, Jharkhand

Tele No.: 0651-4057244, Mobile: 94701 30700, E-mail: nirajksingh2003@yahoo.co.in

### **TEST REPORT**

| Customer's Name & Address:                   | Test Report No.     | : SRL/R/OCT/GW-01/23/184  |
|--|---------------------|---------------------------|
| M/s Balmukund Sponge & Iron (P) Limited,     | Report Issue Date   | : 20/10/2023              |
| At.: Chatro - Tundi Road, District: Giridih, | Sample Receipt Date | : 12/10/2023              |
| Jharkhand.                                   | Analysis Date       | : 13/10/2023 – 18/10/2023 |
|  | Lab. Sample No.     | : GW – 81                 |

| Type of Sample     | : Ground Water                   | Sample Quantity     | : 1 Litre         |
|--------------------|----------------------------------|---------------------|-------------------|
| Location of Sample | : Bore Well No. 1 (Plant Campus) | Sample Condition    | : Properly Sealed |
| Date of Sampling   | : 12/10/2023                     | Sampling Method     | : Grab            |
| Weather Condition  | : Clear                          | Sample Collected by | : Client          |

#### **TEST RESULTS**

| SI.<br>No. | Parameters                                   | Results         | Regulatory Standards<br>As per IS: 10500 (2012)<br>(Drinking Water<br>Specification) |                       | Test Method (s)                                     |
|------------|--|-----------------|--|-----------------------|---|
|            |  |                 | Desirable<br>Limits  | Permissible<br>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.                         | <1              | 1  | 5                     | APHA 23 <sup>rd</sup> Edn. 2130 B                   |
| 5.         | Conductivity, µmhos/cm                       | 448             |  |                       | APHA 23 <sup>rd</sup> Edn. 2510 B                   |
| 6.         | pH Value                                     | 6.9             | 6.5 to 8.5   | No relaxation         | APHA 23 <sup>rd</sup> Edn. 4500H B                  |
| 7.         | Total Hardness (as CaCO <sub>3</sub> ), mg/l | 156             | 200  | 600                   | APHA 23 <sup>rd</sup> Edn. 2340 C                   |
| 8.         | Iron (as Fe), mg/l                           | <0.1            | 0.3  | No relaxation         | APHA 23 <sup>rd</sup> Edn. 3500Fe B                 |
| 9.         | Chloride (as CI), mg/l                       | 28              | 250  | 1000                  | APHA 23 <sup>rd</sup> Edn. 4500 Cl <sup>-</sup> B   |
| 10.        | Residual Free Chlorine, mg/l                 | Nil             | 0.2  | 1.0                   | APHA 23 <sup>rd</sup> Edn. 4500 CI B                |
| 11.        | Fluoride (as F) mg/L                         | 0.52            | 1.0  | 1.5                   | APHA 23 <sup>rd</sup> Edn. 4500 F D                 |
| 12.        | Dissolved Solids mg/l                        | 274             | 500  | 2000                  | APHA 23 <sup>rd</sup> Edn. 2540 C                   |
| 13.        | Calcium (as Ca), mg/l                        | 36              | 75   | 200                   | APHA 23 <sup>rd</sup> Edn. 3500 Ca B                |
| 14.        | Magnesium (as Mg), mg/l                      | 21              | 30   | 100                   | APHA 23 <sup>rd</sup> Edn. 3500 Mg B                |
| 15.        | Copper (Cu), mg/l                            | < 0.05          | 0.05   | 1.5                   | APHA 23 <sup>rd</sup> Edn. 3500 Cu B                |
| 16.        | Manganese (as Mn), mg/l                      | < 0.05          | 0.1  | 0.3                   | APHA 23rd Edn. 3500 Mn B                            |
| 17.        | Sulphate (as SO <sub>4</sub> ), mg/l         | 56              | 200  | 400                   | APHA 23 <sup>rd</sup> Edn. 4500 SO <sub>4</sub> -2E |
| 18.        | Nitrate (as NO <sub>3</sub> ), mg/l          | 2.8             | 45   | No relaxation         | APHA 23 <sup>rd</sup> Edn. 4500 NO <sub>3</sub> B   |
| 19.        | Sodium (as Na), mg/l                         | 16              | -  | 7                     | APHA 23 <sup>rd</sup> Edn. 3500 Na B                |
| 20.        | Patassium (as K), mg/l                       | 9               | -  | ( <del>-</del> )      | APHA 23 <sup>rd</sup> Edn. 3500 K B                 |
| 21.        | Zinc (as Zn), mg/l                           | <0.01           | 5  | 15                    | APHA 23 <sup>rd</sup> Edn. 3500 Zn B                |
| 22.        | Alkalinity (as CaCO <sub>3</sub> ) mg/l      | 182             | 200  | 600                   | APHA 23 <sup>rd</sup> Edn. 2320 B                   |

Note:

(Water Level was observed as 5.2 Mbgl)

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

(Dr. Niraj Kumar Singh) Authorized Signatory

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An ISO 9001:2015 (QMS) & OHSMS 45001:2018 Certified Organization Accredited by NABL & Jharkhand State Pollution Control Board

Analytical & Environmental Engineering Laboratory

C- 144, Aman Green City, Pundag, Ranchi- 834 004, Jharkhand Tele No.: 0651-4057244, Mobile: 94701 30700, E-mail: nirajksingh2003@yahoo.co.in

#### **TEST REPORT**

| Customer's Name & Address:                   | Test Report No.     | : SRL/R/OCT/GW-01/23/185  |
|--|---------------------|---------------------------|
| M/s Balmukund Sponge & Iron (P) Limited,     | Report Issue Date   | : 20/10/2023              |
| At.: Chatro - Tundi Road, District: Giridih, | Sample Receipt Date | : 12/10/2023              |
| Jharkhand.                                   | Analysis Date       | : 13/10/2023 – 18/10/2023 |
|  | Lab. Sample No.     | : GW – 82                 |

| Type of Sample     | : Ground Water                   | Sample Quantity     | : 1 Litre         |
|--------------------|----------------------------------|---------------------|-------------------|
| Location of Sample | : Bore Well No. 2 (Plant Campus) | Sample Condition    | : Properly Sealed |
| Date of Sampling   | : 12/10/2023                     | Sampling Method     | : Grab            |
| Weather Condition  | : Clear                          | Sample Collected by | : Client          |

#### **TEST RESULTS**

| SI.<br>No. | Parameters                                   | Results         | As per IS:<br>(Drink<br>Speci | ry Standards<br>10500 (2012)<br>ing Water<br>ification) | Test Method (s)                                     |
|------------|--|-----------------|-------------------------------|---|---|
|            |  |                 | Desirable<br>Limits           | Permissible<br>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, µmhos/cm                       | 946             | -                             |   | APHA 23 <sup>rd</sup> Edn. 2510 B                   |
| 6.         | pH Value                                     | 6.8             | 6.5 to 8.5                    | No relaxation   | APHA 23 <sup>rd</sup> Edn. 4500H B                  |
| 7.         | Total Hardness (as CaCO <sub>3</sub> ), mg/l | 530             | 200                           | 600   | APHA 23 <sup>rd</sup> Edn. 2340 C                   |
| 8.         | Iron (as Fe), mg/l                           | <0.1            | 0.3                           | No relaxation   | APHA 23 <sup>rd</sup> Edn. 3500Fe B                 |
| 9.         | Chloride (as Cl), mg/l                       | 36              | 250                           | 1000  | APHA 23 <sup>rd</sup> Edn. 4500 Cl <sup>-</sup> B   |
| 10.        | Residual Free Chlorine, mg/l                 | Nil             | 0.2                           | 1.0   | APHA 23 <sup>rd</sup> Edn. 4500 CI 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                        | 574             | 500                           | 2000  | APHA 23 <sup>rd</sup> Edn. 2540 C                   |
| 13.        | Calcium (as Ca), mg/l                        | 102             | 75                            | 200   | APHA 23 <sup>rd</sup> Edn. 3500 Ca B                |
| 14.        | Magnesium (as Mg), mg/l                      | 86              | 30                            | 100   | APHA 23 <sup>rd</sup> Edn. 3500 Mg B                |
| 15.        | Copper (Cu), mg/l                            | <0.05           | 0.05                          | 1.5   | APHA 23 <sup>rd</sup> Edn. 3500 Cu B                |
| 16.        | Manganese (as Mn), mg/l                      | < 0.05          | 0.1                           | 0.3   | APHA 23 <sup>rd</sup> Edn. 3500 Mn B                |
| 17.        | Sulphate (as SO <sub>4</sub> ), mg/l         | 64              | 200                           | 400   | APHA 23 <sup>rd</sup> Edn. 4500 SO <sub>4</sub> -2E |
| 18.        | Nitrate (as NO <sub>3</sub> ), mg/l          | 2.2             | 45                            | No relaxation   | APHA 23 <sup>rd</sup> Edn. 4500 NO <sub>3</sub> B   |
| 19.        | Sodium (as Na), mg/l                         | 21              |                               |   | APHA 23 <sup>rd</sup> Edn. 3500 Na B                |
| 20.        | Patassium (as K), mg/l                       | 9               |                               |   | APHA 23 <sup>rd</sup> Edn. 3500 K B                 |
| 21.        | Zinc (as Zn), mg/l                           | <0.01           | 5                             | 15  | APHA 23 <sup>rd</sup> Edn. 3500 Zn B                |
| 22.        | Alkalinity (as CaCO <sub>3</sub> ) mg/l      | 238             | 200                           | 600   | APHA 23 <sup>rd</sup> Edn. 2320 B                   |

Note:

(Water Level was observed as 4.4 Mbgl)

- 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.

(Dr. Niraj Kumar Singh) Authorized Signatory

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Analytical & Environmental Engineering Laboratory

C- 144, Aman Green City, Pundag, Ranchi- 834 004, Jharkhand Tele No.: 0651-4057244, Mobile: 94701 30700, E-mail: nirajksingh2003@yahoo.co.in

#### **TEST REPORT**

| Customer's Name & Address:                   | Test Report No.     | : SRL/R/OCT/GW-01/23/186  |
|--|---------------------|---------------------------|
| M/s Balmukund Sponge & Iron (P) Limited,     | Report Issue Date   | : 20/10/2023              |
| At.: Chatro - Tundi Road, District: Giridih, | Sample Receipt Date | : 12/10/2023              |
| Jharkhand.                                   | Analysis Date       | : 13/10/2023 – 18/10/2023 |
|  | Lab. Sample No.     | : GW – 83                 |

| Type of Sample     | : Ground Water (Dug Well)                                   | Sample Quantity     | : 1 Litre         |
|--------------------|---|---------------------|-------------------|
| Location of Sample | : Dug Well, Gaganpur Vill.,<br>(Near Sri Lakhan Tudu House) | Sample Condition    | : Properly Sealed |
| Date of Sampling   | : 12/10/2023  | Sampling Method     | : Grab            |
| Weather Condition  | : Clear   | Sample Collected by | : Client          |

#### **TEST RESULTS**

| SI.<br>No. | Parameters                                   | Results         | As per IS:<br>(Drink<br>Speci | ry Standards<br>10500 (2012)<br>ing Water<br>ification) | Test Method (s)                                     |  |
|------------|--|-----------------|-------------------------------|---|---|--|
|            |  |                 | Desirable<br>Limits           | Permissible<br>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.                         | <1              | 1                             | 5   | APHA 23 <sup>rd</sup> Edn. 2130 B                   |  |
| 5.         | Conductivity, µmhos/cm                       | 466             |                               |   | APHA 23 <sup>rd</sup> Edn. 2510 B                   |  |
| 6.         | pH Value                                     | 6.6             | 6.5 to 8.5                    | No relaxation   | APHA 23 <sup>rd</sup> Edn. 4500H B                  |  |
| 7.         | Total Hardness (as CaCO <sub>3</sub> ), mg/l | 178             | 200                           | 600   | APHA 23 <sup>rd</sup> Edn. 2340 C                   |  |
| 8.         | Iron (as Fe), mg/l                           | <0.1            | 0.3                           | No relaxation   | APHA 23 <sup>rd</sup> Edn. 3500Fe B                 |  |
| 9.         | Chloride (as CI), mg/l                       | 26              | 250                           | 1000  | APHA 23 <sup>rd</sup> Edn. 4500 Cl <sup>-</sup> B   |  |
| 10.        | Residual Free Chlorine, mg/l                 | Nil             | 0.2                           | 1.0   | APHA 23 <sup>rd</sup> Edn. 4500 CI B                |  |
| 11.        | Fluoride (as F) mg/L                         | 0.40            | 1.0                           | 1.5   | APHA 23 <sup>rd</sup> Edn. 4500 F D                 |  |
| 12.        | Dissolved Solids mg/l                        | 280             | 500                           | 2000  | APHA 23 <sup>rd</sup> Edn. 2540 C                   |  |
| 13.        | Calcium (as Ca), mg/l                        | 42              | 75                            | 200   | APHA 23 <sup>rd</sup> Edn. 3500 Ca B                |  |
| 14.        | Magnesium (as Mg), mg/l                      | 12              | 30                            | 100   | APHA 23 <sup>rd</sup> Edn. 3500 Mg B                |  |
| 15.        | Copper (Cu), mg/l                            | < 0.05          | 0.05                          | 1.5   | APHA 23 <sup>rd</sup> Edn. 3500 Cu B                |  |
| 16.        | Manganese (as Mn), mg/l                      | <0.05           | 0.1                           | 0.3   | APHA 23 <sup>rd</sup> Edn. 3500 Mn B                |  |
| 17.        | Sulphate (as SO <sub>4</sub> ), mg/l         | 38              | 200                           | 400   | APHA 23 <sup>rd</sup> Edn. 4500 SO <sub>4</sub> -2E |  |
| 18.        | Nitrate (as NO <sub>3</sub> ), mg/l          | 2.0             | 45                            | No relaxation   | APHA 23 <sup>rd</sup> Edn. 4500 NO <sub>3</sub> B   |  |
| 19.        | Sodium (as Na), mg/l                         | 32              | C 1 + 12                      |   | APHA 23 <sup>rd</sup> Edn. 3500 Na B                |  |
| 20.        | Patassium (as K), mg/l                       | 11              |                               |   | APHA 23 <sup>rd</sup> Edn. 3500 K B                 |  |
| 21.        | Zinc (as Zn), mg/l                           | <0.01           | 5                             | 15  | APHA 23 <sup>rd</sup> Edn. 3500 Zn B                |  |
| 22.        | Alkalinity (as CaCO <sub>3</sub> ) mg/l      | 195             | 200                           | 600   | APHA 23 <sup>rd</sup> Edn. 2320 B                   |  |

Note:

(Water Level was observed as 4.3 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.

(Dr. Niraj Kumar Singh) Authorized Signatory

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## KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

#### **TEST REPORT**

TC1206324000018775 NABL ULR NO

Test Report No KLPL/12/23/ENVN/02629H Reference

Customer Name

BALMUKUND SPONGE & IRON (P) LIMITED (MEGA DIV.)

(MEGA DIV, CCM & IRON ORE BENEFICIATION PLANT), AT- CHATRO-TUNDI ROAD, GIRIDIH, JHARKHAND. Address Completion On: 21-Dec-2023

Commenced On: 11-Dec-2023 : 11-Dec-2023 Date of receipt

: AMBIENT AIR QUALITY MONITORING Sample Name ; GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED/FILTER PAPER SEALED IN ZIP LOCK POLYTHENE BAG Sample Condition

: By KLPL(MR. SUDHIR KUMAR BARIK) Sample Collected By

Bof To Sampling Procedure: KI DI /OSP-07

| Ref. To Sampling Procedure: KLP | L/QSP-07          |              |                   |                                   |  |  |
|---------------------------------|-------------------|--------------|-------------------|-----------------------------------|--|--|
| Parameters                      | Unit              | Standard Va  |                   | Test Method                       |  |  |
| Location & Date : NE            | AR LABOUR Q       | UARTER DT- 0 | 08.12.2023 TO 09. | .12.2023                          |  |  |
| Sulphur Dioxide                 | µg/m³             | 80           | 16.40             | IS 5182(PART-2): 2001             |  |  |
| Nitrogen Dioxide                | µg/m³             | 80           | 33.00             | IS 5182 (PART 6 ):2006            |  |  |
| Particulate Matter (PM10)       | µg/m³             | 100          | 79.00             | IS 5182(PART-23) :2006            |  |  |
| Particulate Matter (PM2.5)      | µg/m³             | 60           | 44.00             | KLPL/SOP/AIR-02 , ISSUE NO.1:2017 |  |  |
| Carbon Monoxide (CO) (01 Hrs.)  | mg/m³             | 04           | 0.60              | KLPL/SOP/AIR-19:2019              |  |  |
| Ozone (O3) (01 Hrs.)            | μg/m³             | 180          | 26.00             | KLPL/SOP/AIR-13 , ISSUE NO.1:2019 |  |  |
| Lead (Pb)                       | µg/m³             | 1.0          | <0.02             | KLPL/SOP/AIR-10 , ISSUE NO.1:2017 |  |  |
| Ammonia (NH3)                   | µg/m³             | 400          | 18.00             | KLPL/SOP/AIR-05 , ISSUE NO.1:2017 |  |  |
|                                 |                   |              |                   |                                   |  |  |
| Benza (a) Pyrene (BaP)          | ng/m³             | 01           | <0.1              | KLPL/SOP/AIR-07 , ISSUE NO.1:2019 |  |  |
| Arsenic (As)                    | ng/m³             | 06           | <1.0              | KLPL/SOP/AIR-10 , ISSUE NO.1:2017 |  |  |
| Nickel (Ni)                     | ng/m³             | 20           | <4.0              | KLPL/SOP/AIR-10 , ISSUE NO.1:2017 |  |  |
| Location & Date : NE            | AR LABOUR R       | EST ROOM BU  | ILDING DT- 08.12  | 2.2023 TO 09.12.2023              |  |  |
| Sulphur Dioxide                 | µg/m³             | 80           | 17.60             | 1S 5182(PART-2) : 2001            |  |  |
| Nitrogen Dioxide                | µg/m³             | 80           | 35.00             | IS 5182 (PART 6 ) :2006           |  |  |
| Particulate Matter (PM10)       | µg/m³             | 100          | 83.00             | IS 5182(PART-23) :2006            |  |  |
| Particulate Matter (PM2.5)      | µg/m³             | 60           | 47.00             | KLPL/SOP/AJR-02 , ISSUE NO.1:2017 |  |  |
| Carbon Monoxide (CO) (01 Hrs.)  | mg/m³             | 04           | 0.64              | KLPL/SOP/AIR-19:2019              |  |  |
| Ozone (O3) (01 Hrs.)            | µg/m³             | 180          | 30.00             | KLPL/SOP/AIR-13 , ISSUE NO.1:2019 |  |  |
| Lead (Pb)                       | μg/m³             | 1.0          | <0.02             | KLPL/SOP/AIR-10 , ISSUE NO.1:2017 |  |  |
| Ammonia (NH3)                   | μg/m³             | 400          | 21.00             | KLPL/SOP/AIR-05 , ISSUE NO.1:2017 |  |  |
|                                 |                   |              |                   |                                   |  |  |
| Benza (a) Pyrene (BaP)          | µg/m³             | 01           | <0.1              | KLPL/SOP/AIR-07 , ISSUE NO.1:2019 |  |  |
| Arsenic (As)                    | hg/w <sub>3</sub> | 06           | <1.0              | KLPL/SOP/AIR-10 , ISSUE NO.1:2017 |  |  |
| Nickel (Ni)                     | µg/m³             | 20           | <4.0              | KLPL/SOP/AIR-10 , ISSUE NO.1:2017 |  |  |
| Location & Date : NEA           | AR NORTHER        | N BOUNDARY   | DT- 08.12.2023 T  | 0 09.12.2023 Ografor              |  |  |
| Sulphur Dioxide                 | µg/m³             | 80           | 18.80             | 15 5182(PART-2) : 2001            |  |  |
| Nitrogen Dioxide                | µg/m³             | 80           | 37.00             | 15 5182 (PART 6 ) :2006 (S BBSR ) |  |  |
| Particulate Matter (PM10)       | µg/m³             | 100          | 81.00             | IS 5182(PART-23) :2006            |  |  |
| Particulate Matter (PM2.5)      | µg/m³             | 60           | 45.00             | KLPL/SOP/AIR-02 , ISSUE NO.1:2017 |  |  |

28-Dec-2023



Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

#### **TEST REPORT**

TC1206324000018775 NABL ULR NO

Test Report No KLPL/12/23/ENVN/02629H

28-Dec-2023

Reference

Issue Date

BALMUKUND SPONGE & IRON (P) LIMITED (MEGA DIV)

Customer Name

(MEGA DIV, CCM & IRON ORE BENEFICIATION PLANT )AT-CHATRO, TUNDI ROAD, GIRIDIH, JHARKHAND

Address

11-Dec-2023

11-Dec-2023

21-Dec-2023

Date of receipt

Commenced On:

Completion On:

Sample Name

: AMBIENT AIR QUALITY MONITORING

Sample Condition

GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED/FILTER PAPER SEALED IN ZIP LOCK POLYTHENE BAG

Sample Collected By

By KLPL(MR. SUDHIR KUMAR BARIK)

Ref.To Sampling Procedure : KLPL/QSP-07

| Parameters                     | Unit              | Standard Value | Results      | Test Method                       |
|--------------------------------|-------------------|----------------|--------------|-----------------------------------|
| Carbon Monoxide (CO) (01 Hrs.) | mg/m³             | 04             | 0.72         | KLPL/SOP/AIR-19:2019              |
| Ozone (O3) (01 Hrs.)           | µg/m³             | 180            | 31.00        | KLPL/SOP/AIR-13 , ISSUE NO.1:2019 |
| Lead (Pb)                      | μg/m³             | 1.0            | <0.02        | KLPL/SOP/AIR-10 , ISSUE NO.1:2017 |
| Ammonia (NH3)                  | µg/m³             | 400            | 24.00        | KLPL/SOP/AIR-05 , ISSUE NO.1:2017 |
|                                |                   |                |              |                                   |
| Benza (a) Pyrene (BaP)         | µg/m³             | 01             | <0.1         | KLPL/SOP/AIR-07 , ISSUE NO.1:2019 |
| Arsenic (As)                   | µg/m³             | 06             | <1.0         | KLPL/SOP/AIR-10 , ISSUE NO.1:2017 |
| Nickel (Ni)                    | µg/m³             | 20             | <4.0         | KLPL/SOP/AIR-10 , ISSUE NO.1:2017 |
| Location & Date : NEA          | R SOUTHERN        | BOUNDARY DT- 0 | 8.12.2023 TO | 09.12.2023                        |
| Sulphur Dioxide                | µg/m³             | 80             | 17.00        | IS 5182(PART-2): 2001             |
| Nitrogen Dioxide               | µg/m³             | 80             | 35.00        | IS 5182 (PART 6 ) :2006           |
| Particulate Matter (PM10)      | µg/m³             | 100            | 77.00        | IS 5182(PART-23) :2006            |
| Particulate Matter (PM2.5)     | µg/m³             | 60             | 42.00        | KLPL/SOP/AIR-02 , ISSUE NO.1:2017 |
| Carbon Monoxide (CO) (01 Hrs.) | mg/m³             | 04             | 0.70         | KLPL/SOP/AIR-19:2019              |
| Ozone (O3) (01 Hrs.)           | µg/m³             | 180            | 30.00        | KLPL/SOP/AIR-13 , ISSUE NO.1:2019 |
| Lead (Pb)                      | hg/w <sub>3</sub> | 1.0            | <0.02        | KLPL/SOP/AIR-10 , ISSUE NO.1:2017 |
| Ammonia (NH3)                  | µg/m³             | 400            | 26.60        | KLPL/SOP/AIR-05 , ISSUE NO.1:2017 |
|                                |                   |                |              | ·                                 |
| Benza (a) Pyrene (BaP)         | µg/m³             | 01             | <0.1         | KLPL/SOP/AIR-07 , ISSUE NO.1:2019 |
| Arsenic (As)                   | µg/m³             | 06             | <1.0         | KLPL/SOP/AIR-10 , ISSUE NO.1:2017 |
| Nickel (Ni)                    | μg/m³             | 20             | <4.0         | KLPL/SOP/AIR-10 , ISSUE NO.1:2017 |

Remarks

: NIL

Any unusual feature observed during determination Requirement is as per standard specification NAAQS:2009 :NIL

Analysed By

BOURLO

Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd.

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Authorised Signatory

1202 Garrey

Dr. Debasis Biswal For Kalyani Laboratories Pvt. Ltd.

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# KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

#### TEST REPORT

| Test Report No   | : | KLPL/12/23/ENVN/02629                            | I                   | Issue Date : 28-Dec-2023                          |  |  |  |  |
|--|---|--|---------------------|---|--|--|--|--|
| Amendment No   | : |  |                     | Amendment Date :-                                 |  |  |  |  |
| Reference  | ; |  |                     |   |  |  |  |  |
| ustomer Name : BALMUKUND SPONGE & IRON (P) LIMITED (MEGA DIV.) |   |  |                     |   |  |  |  |  |
| Address  | : | (MEGA DIV, CCM & IRON ORE                        | BENEFICIATION PLAN  | IT), AT- CHATRO-TUNDI ROAD, GIRIDIH, JHARKHAND.   |  |  |  |  |
| Date of receipt  | ; | 11-Dec-2023 Commend                              | red On: 11-Dec-20   | 23 Completion On: 12-Dec-2023                     |  |  |  |  |
| Sample Name  | : | AMBIENT AIR QUALITY MO                           |                     |   |  |  |  |  |
| Sample Condition   | ; | GASEOUS SAMPLE ABSORBING                         | SOLUTIONS REFRIGERA | TED/FILTER PAPER SEALED IN ZIP LOCK POLYTHENE BAG |  |  |  |  |
| Sample Collected By  | : | By KLPL(MR. SUDHIR KUMAR                         | BARIK)              |   |  |  |  |  |
| Ref.To Sampling Procedure                                      | ; | KLPL/QSP-07                                      |                     |   |  |  |  |  |
| Parameters   |   | Unit Standa                                      | ard Value Resu      | ılts Test Method                                  |  |  |  |  |
| Location & Date  | : | NEAR LABOUR QUARTER DT- 08.12.2023 TO 09.12.2023 |                     |   |  |  |  |  |
| Benzene (C6 H6)  |   | μg/m³ <b>05</b>                                  | <1.0                | KLPL/SOP/AIR-07,Issue No.01: 2019                 |  |  |  |  |
| Location & Date  | : | NEAR LABOUR REST ROOM                            | BUILDING DT- 08.1   | 2.2023 TO 09.12.2023                              |  |  |  |  |
| Benzene (C6 H6)  |   | μg/m³ <b>05</b>                                  | <1.0                | KLPL/SOP/AIR-07,Issue No.01: 2019                 |  |  |  |  |
| Location & Date  | : | NEAR NORTHERN BOUNDAR                            | RY DT- 08.12.2023   | TO 09.12.2023                                     |  |  |  |  |
| Benzene (C6 H6)  |   | µg/m³ <b>05</b>                                  | <1.0                | KLPL/SOP/AIR-07,Issue No.01: 2019                 |  |  |  |  |
| Location & Date  | : | NEAR SOUTHERN BOUNDAR                            | RY DT- 08.12.2023 1 | TO 09.12.2023                                     |  |  |  |  |

<1.0

Remarks

Benzene (C6 H6)

Requirement is as per standard specification NAAQS:2009

Any unusual feature observed during determination

: NIL

05

μg/m³

Analysed By

Mr. Digambar Arukha

For Kalyani Laboratories Pvt. Ltd.



Authorised Signatory

Dogsova

Dr. Debasis Biswal For Kalyani Laboratories Pvt. Ltd.

KLPL/SOP/AIR-07,Issue No.01: 2019

Recognized by MoEF & CC,QCI-NABET

## KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

Rerefrence

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

#### **TEST REPORT**

Issue Date

KLPL/12/23/ENVN/02629J Test Report No

Customer Name BALMUKUND SPONGE & IRON (P) LIMITED (MEGA DIV.)

(MEGA DIVISION,CCM & IRON ORE BENEFICIATION PLANT,CHATRO,TUNDI ROAD,GIRIDIH,JHARKHAND Address

Commenced On: 11-Dec-2023 Completion On: 12-Dec-2023 Date of receipt 11-Dec-2023

: AIR QUALITY MONITORING (FUGITIVE DUST) Sample Name : FILTER PAPER SEALED IN ZIP LOCK POLYTHENE BAG Sample Condition

: By KLPL(MR. SUDHIR KUMAR BARIK) Sample Collected By

Ref. To Sampling Procedure : KLPL/QSP-07

| Parameters                       |   | Unit                 | Standard       | Value Resul     | ts Test Method                        |  |  |  |
|----------------------------------|---|----------------------|----------------|-----------------|---------------------------------------|--|--|--|
| Location & Date                  | : NEAR HOPPER (IRON ORE BENEFICIATION UNIT) DT-09.12.2023 |                      |                |                 |                                       |  |  |  |
| Fugitive Dust                    |   | µG/M³                |                | 1784            | KLPL/SOP/AIR-11:2012                  |  |  |  |
| Location & Date                  | : NE  | AR RAW MATE          | ERIAL STORA    | GE YARD (IRON   | ORE BENEFICIATION UNIT) DT-09.12.2023 |  |  |  |
| Fugitive Dust                    |   | h@\W <sub>3</sub>    | 1              | 1676            | KLPL/SOP/AIR-11:2012                  |  |  |  |
| Location & Date                  | : NE  | AR SCRAP YA          | RD (M.S.BILL   | ET SECTION) DT- | -09.12.2023                           |  |  |  |
| Fugitive Dust µG/M³ 1567 KLPL/SO |   | KLPL/SOP/AIR-11:2012 |                |                 |                                       |  |  |  |
| Location & Date                  | : NE  | AR WEIGH BR          | RIDGE (M. S. I | BILLET SECTION) | DT- 09.12.2023                        |  |  |  |
| Fugitive Dust                    |   | µG/M³                |                | 1778            | KLPL/SOP/AIR-11:2012                  |  |  |  |

Remarks

Any unusual feature observed during determination Requirement Is As Per Standard Specification NAAQS:2009

: -

Analysed By

Mr. Digambar Arukha

For Kalyani Laboratories Pvt. Ltd.

Authorised Signatory

Diegnon

Dr. Debasis Biswal For Kalyani Laboratories Pvt. Ltd.

Recognized by MoEF & CC,QCI-NABET

### KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

Test Report No

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

### **TEST REPORT**

TC1206324000018776 NABL ULR NO

KLPL/12/23/ENVN/02629K

Reference

: BALMUKUND SPONGE & IRON PVT LTD (MEGA DIVISION) Customer Name

Address Date of receipt

: 11-Dec-2023

Commenced On:

11-Dec-2023

: (SMS & IOB PLANT), AT- CHATRO - TUNDI ROAD, DISTRICT- GIRIDIH, JHARKHAND Completion On:

12-Dec-2023

28-Dec-2023

Sample Name

: NOISE (DAY TIME)

Sample Condition

Sample Collected By Ref. To Sampling Procedure :

By KLPL (MR. SUDHIR KUMAR BARIK) :

KLPL/NOISE/SOP-23

Parameters

: NEAR HOPPER (IRON ORE BENEFICIATION UNIT), DT- 08.12.2023

Unit Standard Value Results

Test Method

Location & Date

dB(A)

75

75

67.2

Location & Date

63.6

: NEAR RAW MATERIAL YARD (IRON ORE BENEFICIATION UNIT), DT- 08.12.2023

Noise Level Indl. Area (Day)

Noise Level Indl. Area (Day)

dB(A)

IS 9989:1981 (RA 2014)

Location & Date

: NEAR SCRAP YARD (M.S. BILLET SECTION), DT- 08.12.2023

67.8

IS 9989;1981 (RA 2014)

Noise Level Indl. Area (Day)

dB(A)

Location & Date

: NEAR WEIGH BRIDGE (M.S. BILLET SECTION), DT- 08.12.2023

Noise Level Indl. Area (Day)

dB(A)

IS 9989-1981 (RA 2014)

Remarks

: NIL

Any unusual feature observed during determination Requirement Is As Per Standard Specification Noise Rule 2000

Analysed By

D Arycla

Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd.



Authorised Signatory

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Dr. Debasis Biswal

For Kalyani Laboratories Pvt. Ltd.

KLPL- 364697A

### KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

NABL ULR NO

PLOT NO-78/944, MILLENIUM CITY PAHAL, BEIUBANESWAR-751032, ODISHA

TEST REPORT

: TC1206324000018777

Test Report No : KLPL/12/23/ENVN/02629L

Reference : -

Customer Name : BALMUKUND SPONGE & IRON PVT LTD (MEGA DIVISION)

Address : (SMS & IOB PLANT), AT- CHATRO - TUNDI ROAD, DISTRICT- GIRIDIH, JHARKHAND

Date of receipt : 11-Dec-2023 Commenced On: 11-Dec-2023 Completion On: 12-Dec-2023

Sample Name : NOISE (NIGHT TIME)

Sample Condition : --

Sample Collected By : By KLPL (MR. SUDHIR KUMAR BARIK)

Ref. To Sampling Procedure: KLPL/NOISE/SOP-23

| Location & Date :              | NEAR HOPPER ( | IRON ORE BE    | NEFICIATION UI | Test Method<br>NIT), DT- 08-09.12.2023 |
|--------------------------------|---------------|----------------|----------------|--|
| Noise Level Indl. Area (Night) | dB(A)         | 70             | 63.0           | IS 9989:1981 (RA 2014)                 |
| Location & Date :              | NEAR RAW MATE | ERIAL YARD (   | IRON ORE BENE  | FICIATION UNIT), DT- 08-09.12.2023     |
| Noise Level Indl. Area (Night) | dB(A)         | 70             | 61.3           | IS 9989:1981 (RA 2014)                 |
| Location & Date :              | NEAR SCRAP YA | RD (M.S. BILL  | ET SECTION), D | T- 08-09.12.2023                       |
| Noise Level Indl. Area (Night) | dB(A)         | 70             | 59.6           | IS 9989:1981 (RA 2014)                 |
| Location & Date ;              | NEAR WEIGH BR | PIDGE (M.S. B. | ILLET SECTION) | , DT- 08-09.12.2023                    |
| Noise Level Indl. Area (Night) | dB(A)         | 70             | 63.4           | IS 9989:1981 (RA 2014)                 |

Remarks

: NIL

Any unusual feature observed during determination :NII Requirement Is As Per Standard Specification Noise Rule 2000

Analysed By

D ASULLa

Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd.



Authorised Signatory

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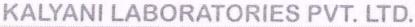
Dr. Debasis Biswal

For Kalyani Laboratories Pvt. Ltd.

KLPL- 364696A

28-Dec-2023

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Kalyani taboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

### **TEST REPORT**

NABL ULR NO TC1206324000018778 Test Report No

KLPL/12/23/ENVN/02629M : 28-Dec- 2023

Completion On:

14-Dec- 2023

Amendment No Amendment Date Reference

Customer Name BALMUKUND SPONGE & IRON (P) LIMITED (MEGA DIVISION- MBF)

Address AT-CHATRO, TUNDI ROAD, GIRIDIH, JHARKHAND Date of receipt 11-Dec- 2023 Commenced On: 11-Dec- 2023

Sample Name FLUE GAS | STACK MONITORING

Sample Condition : GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED Sample Collected By : By KLPL(MR. SUDHIR KUMAR BARIK)

Ref.To Sampling Procedure : KLPL/SOP/AIR-20

| Parameters                             | Unit       | Standard \  | /alue Results       | Test Method                   |
|--|------------|-------------|---------------------|-------------------------------|
| Location & Date : STA                  | CK-01(IRON | ORE BENEFIC | TATION UNIT),DATE:  |                               |
| Particulate Matter                     | mg/Nm³     | 150         | 68                  | IS 11255(Part-1):1985,RA:2019 |
| Oxides of Nitrogen                     | mg/Nm³     |             | -                   | KLPL/SOP/AIR-20:2019          |
| Stack Temperature                      | Deg C      |             | 92                  | IS 11255(Part-1):1985,RA:2019 |
| Velocity                               | m/sec      | 1           | 6.46                | IS 11255(Part-1):1985,RA:2019 |
| Sulphur Dioxide as SO2                 | mg/Nm³     | -           |                     | IS 11255(part-2):1985,RA:2019 |
| *Weather condition                     |            | 1-          | CLEAR               | -                             |
| *Height of stack from ground level     | In Meter   | <u> </u>    | 30                  |                               |
| *Inner dimension of stack              | In Meter   |             | 0.6                 |                               |
| *Height of port hole                   | In Meter   |             | 12                  | ]                             |
| Atmospheric temperature                | Deg C      | <del></del> | 23                  | IS 11255(Part-1):1985,RA:2019 |
| /olumetric flow rate                   | Nm3 / hr   |             | 5,373               | IS 11255(Part-1):1985,RA:2019 |
| mission rate                           | kg/hr      |             | 0.365               | IS 11255(Part-1):1985,RA:2019 |
| Name of fuel & quantity used per shift |            |             | PROCESS STACK       | -                             |
| Production capacity                    | T          | -           | 74000 TPA (IRON ORE | ) -                           |
| Stack attached to                      |            |             | IOB UNIT            |                               |

### Remarks

Any unusual feature observed during determination Requirement Is As Per Standard Specification CTO

:NIL

\* Additional information incorporated in the test report as per the requirement and data provided by the customer.

Analysed By

Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd.

ator BBSF

Authorised Signatory

Donolard

Dr. Debasis Biswal

For Kalyani Laboratories Pvt. Ltd.



Kalyani Laboratories

KALYANI LABORATORIES PVT. LTD.

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

### **TEST REPORT**

NABL ULR NO TC1206324000018784

Test Report No KLPL/12/23/WATER/09888

Reference

Customer Name Address

At.: CHATRO - TUNDI ROAD, GIRIDIH, JHARKHAND Date of receipt

: 11-Dec-2023

Test Commenced On: 11-Dec-2023

BALMUKUND SPONGE & IRON (P) LIMITED (MEGA DIV.)

Test Completion On: 15-Dec-2023

Issue Date : 28-Dec-2023

WASTE WATER Sample Description

Sample Condition

SEALED IN 1LTR PET BOTTLE

Sample Identification Batch No , Lot No

Sample Collected By

DOMESTIC EFFLUENT WATER

MFG Date: NA

Sampling Date: 09-Dec-2023 EXP Date: NA

Received Quantity

Place of Collection: OUTLET OF ADMINISTRATIVE BUILDING

: By KLPL(MR. SUDHIR KUMAR BARIK)

DT-09.12.2023

Ref. To Sampling Procedure:

KLPL/QSP-07

| CHEMICAL PARAMETER  Oil & Grease  Total Dissolved Soli  Chemical Oxygen D | J                   | mg/l |     | <1.0<br>236 |           | Edition (5520B),2023       |
|---|---------------------|------|-----|-------------|-----------|----------------------------|
| ii Total Dissolved Soli   | j                   |      |     |             |           |                            |
|   | J                   | mg/l | **  | 236         | APHA 24th | Edition (2540 C) 2023      |
| ii Chemical Oxygen D  |                     |      |     |             |           | Edidon (2040 C), 2023      |
| , ,   | emand -             | mg/l | - * | 40          | APHA 24th | Edition (5220 B), 2023     |
| iv Biochemical Oxyge<br>27deg C)  | n Demand(For 3 days | mg/l | -x- | 14          | APHA 24th | Edition 2012(5210 B), 2023 |
| v Total Suspended So  | lids                | mg/l | **  | 30          | APHA 24th | Edition (2540 D),2023      |

| i  | Colour   | True col. Unit | <br><1.0 | APHA 24th Edition (2120 B), 2023    |
|----|----------|----------------|----------|-------------------------------------|
| ii | pH Value | 14 to 20       | <br>7.45 | APHA 24th Edition (4500-H+-B), 2023 |

Remarks

Any unusual feature observed during determination

:NIL

Analysed By

Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd



Authorized Signatory

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Dr. Debasis Biswal For Kalyani Laboratories Pvt. Ltd

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KLPL-364691A



NABL ULR NO



Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-75 (932, ODISHA

**TEST REPORT** 

TC1206324000018780 KLPL/12/23/ENVN/02629Q

Test Report No

Reference

BALMUKUND SPONGE & IRON PVT LTD (MEGA DIVISION) Customer Name

(INDUCTION FURNACE UNIT), AT- CHATRO - TUNDI ROAD, DISTRICT- GIRIDIH, JHARKHAND Address

Date of receipt 11-Dec-2023

Commenced On: 11-Dec-2023 Completion On: 12-Dec-2023

28-Dec-2023

Sample Name

: NOISE (DAY TIME)

Sample Condition

Sample collected by

By KLPL (MR. SUDHIR KUMAR BARIK)

Ref.To Sampling Procedure : KLPL/NOISE/SOP-23

| Location & Date :            | NEAR METAL CO | NVEYER, DT-  | 06.12.2023    |                             |
|------------------------------|---------------|--------------|---------------|-----------------------------|
| Noise Level Indl. Area (Day) | dB(A)         | 75           | 62.7          | IS 9989:1981 (RA 2014)      |
| Location & Date :            | NEAR RAW MAT  | ERIAL YARD ( | INDUCTION FUR | RNACE DIV.), DT- 06.12.2023 |
| Noise Level Indl. Area (Day) | dB(A)         | 75           | 60.2          | IS 9989:1981 (RA 2014)      |
| Location & Date :            | NORTHERN SIDE | E OF INDUCTI | ON FURNACE SH | IED, DT- 06.12.2023         |
| Noise Level Indl. Area (Day) | dB(A)         | 75           | 61.5          | IS 9989:1981 (RA 2014)      |
| Location & Date :            | BESIDE CONTRO | DL ROOM, DT- | 06.12.2023    |                             |
| Noise Level Indl. Area (Day) | dB(A)         | 75           | 62.9          | IS 9989:1981 (RA 2014)      |

Remarks

:NIL Any unusual feature observed during determination Requirement Is As Per Standard Specification Noise Rule 2000

Analysed By

) Arricha Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd. **Authorised Signatory** 

Dassweg

Dr. Debasis Biswal

For Kalyani Laboratories Pvt. Ltd.



Kalyani taboratories

## KALYANI LABORATORIES PVT. LTD.

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

TEST REPORT

TC1206324000018781 NABL ULR NO

Test Report No KLPL/12/23/ENVN/02629R

Reference

BALMUKUND SPONGE & IRON PVT LTD (MEGA DIVISION) Customer Name

(INDUCTION FURNACE UNIT), AT- CHATRO - TUNDI ROAD, DISTRICT- GIRIDIH, JHARKHAND Address

11-Dec-2023 Completion On: KLPL/NOISE/SOP-23 Commenced On: Date of receipt 11-Dec-2023

; NOISE (NIGHT TIME) Sample Name

Sample Condition

By KLPL (MR. SUDHIR KUMAR BARIK) Sample collected by

Ref. To Sampling Procedure : KLPL/NOISE/SOP-23

| Location & Date :              | NEAR METAL CONVEYER, DT- 06.12.2023 |   |               |                             |  |  |  |
|--------------------------------|-------------------------------------|---|---------------|-----------------------------|--|--|--|
| Noise Level Indl. Area (Night) | dB(A)                               | 70  | 60.4          | IS 9989:1981 (RA 2014)      |  |  |  |
| Location & Date :              | NEAR RAW MAT                        | ERIAL YARD (  | INDUCTION FUR | RNACE DIV.), DT- 06.12.2023 |  |  |  |
| Noise Level Indl. Area (Night) | dB(A)                               | 70  | 58.7          | IS 9989:1981 (RA 2014)      |  |  |  |
| Location & Date :              | NORTHERN SID                        | NORTHERN SIDE OF INDUCTION FURNACE SHED, DT- 06.12.2023 |               |                             |  |  |  |
| Noise Level Indl. Area (Night) | dB(A)                               | 70  | 59.4          | IS 9989:1981 (RA 2014)      |  |  |  |
| Location & Date :              | BESIDE CONTRO                       | OL ROOM, DT-  | 06.12.2023    |                             |  |  |  |
| Noise Level Indl. Area (Night) | dB(A)                               | 70  | 60.1          | IS 9989:1981 (RA 2014)      |  |  |  |

Remarks

Any unusual feature observed during determination Requirement Is As Per Standard Specification Noise Rule 2000

Analysed By

Anyleha

Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd.



Authorised Signatory

Dasswell

Dr. Debasis Biswal For Kalyani Laboratories Pvt. Ltd.

28-Dec-2023

KALYANI LABORATORIES PVT. LTD.

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

**TEST REPORT** 

: TC1206324000018784

Test Report No KLPL/12/23/ENVN/02629U

Reference

: BALMUKUND SPONGE & IRON PVT LTD (MEGA DIVISION) Customer Name

: (ROLLING MILL UNIT), AT- CHATRO - TUNDI ROAD, DISTRICT- GIRIDIH, JHARKHAND Address

11-Dec-2023

Date of receipt

Commenced On: 11-Dec-2023

Completion On:

12-Dec-2023

28-Dec-2023

Sample Name

: NOISE(DAY TIME)

Sample Condition

Kalyani Laboratories

NABL ULR NO

Sample collected by

: By KLPL (MR. SUDHIR KUMAR BARIK)

Ref. To Sampling Procedure : KLPL/NOISE/SOP-23

Parameters

Unit Standard Value

Results

Test Method

Location & Date

: NEAR FINISHED PRODUCT YARD, DT- 06.12.2023

75

63.7

IS 9989:1981 (RA 2014)

Location & Date

: NEAR RAW MATERIAL YARD (ROLLING DIV.), DT- 06.12.2023

Noise Level Indl. Area (Day)

dB(A)

dB(A)

65.4

IS 9989:1981 (RA 2014)

Location & Date

: EASTERN SIDE OF ROLLING MILL UNIT, DT- 06.12.2023

IS 9989:1981 (RA 2014)

Location & Date

dB(A)

dB(A)

: SOUTHERN SIDE OF LABOUR REST ROOM, DT- 06.12.2023

75

IS 9989:1981 (RA 2014)

Remarks

Any unusual feature observed during determination

Requirement Is As Per Standard Specification Noise Rule 2000

Analysed By

Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd.

Authorised Signatory

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Dr. Debasis Biswal

For Kalyani Laboratories Pvt. Ltd.

## KALYANI LABORATORIES PVT. LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

### TEST REPORT

: TC1206324000018785 NABL ULR NO

KLPL/12/23/ENVN/02629V Test Report No

Reference

BALMUKUND SPONGE & IRON PVT LTD (MEGA DIVISION) Customer Name

(ROLLING MILL UNIT), AT- CHATRO - TUNDI ROAD, DISTRICT- GIRIDIH, JHARKHAND Address

Commenced On: Completion On: 12-Dec-2023 11-Dec-2023 11-Dec-2023 Date of receipt

: NOISE(NIGHT TIME) Sample Name

Sample Condition

: By KLPL (MR. SUDHIR KUMAR BARIK) Sample collected by

Ref. To Sampling Procedure : KLPL/NOISE/SOP-23

| Location & Date :              | NEAR FINISHED PRODUCT YARD, DT- 06-07.12.2023        |              |                |                        |  |  |
|--------------------------------|--|--------------|----------------|------------------------|--|--|
| Noise Level Indl. Area (Night) | dB(A)  | 70           | 61.5           | IS 9989:1981 (RA 2014) |  |  |
| Location & Date :              | NEAR RAW MAT   | ERIAL YARD ( | ROLLING DIV.), | DT- 06-07.12.2023      |  |  |
| Noise Level Indl. Area (Night) | dB(A)  | 70           | 60.7           | IS 9989:1981 (RA 2014) |  |  |
| Location & Date :              | EASTERN SIDE OF ROLLING MILL UNIT, DT- 06-07.12.2023 |              |                |                        |  |  |
| Noise Level Indl. Area (Night) | dB(A)  | 70           | 62.1           | IS 9989:1981 (RA 2014) |  |  |
| Location & Date :              | SOUTHERN SIDE OF LABOUR REST ROOM, DT- 06-07.12.2023 |              |                |                        |  |  |
| Noise Level Indl. Area (Night) | dB(A)  | 70           | 58.1           | IS 9989:1981 (RA 2014) |  |  |

Remarks

Any unusual feature observed during determination :NIL Requirement Is As Per Standard Specification Noise Rule 2000

Analysed By

Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd.



Authorised Signatory

Donas may

Dr. Debasis Biswal For Kalyani Laboratories Pvt. Ltd.

28-Dec-2023

TC1206324000018786

KLPL/12/23/ENVN/02629W

KALYANI LABORATORIES PVT. LTD.

Kalyani taboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

### **TEST REPORT**

BALMUKUND SPONGE & IRON (P) LIMITED (MEGA DIVISION)

: 28-Dec- 2023

Amendment Date

Reference

NABL ULR NO

Test Report No

Amendment No

Customer Name

Address Date of receipt

AT-CHATRO, TUNDI ROAD, GIRIDIH, JHARKHAND : 11-Dec- 2023

Commenced On: 11-Dec- 2023

Completion On:

14-Dec- 2023

Sample Name

: FLUE GAS | STACK MONITORING

: GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED

Sample Condition Sample Collected By

: By KLPL(MR. SUDHIR KUMAR BARIK)

Ref.To Sampling Procedure : KLPL/SOP/AIR-20

| Parameters                         | Unit        | Standard     | Value Results                     | Test Method                   |
|------------------------------------|-------------|--------------|-----------------------------------|-------------------------------|
| Location & Date : IND              | UCTION FURI | VACE STACK-  | 01,DATE:06.12.2023                |                               |
| Particulate Matter                 | mg/Nm³      | 150          | 54                                | IS 11255(Part-1):1985,RA:2019 |
| Oxides of Nitrogen                 | mg/Nm³      |              | 23                                | KLPL/SOP/AJR-20:2019          |
| Stack Temperature                  | Deg C       | <b>-</b>     | 110                               | IS 11255(Part-1):1985,RA:2019 |
| Velocity                           | m/sec       | 1-           | 6.61                              | IS 11255(Part-1):1985,RA:2019 |
| Sulphur Dioxide as SO2             | mg/Nm³      |              | 11                                | IS 11255(part-2):1985,RA:2019 |
| *Weather condition                 |             | -            | CLEAR                             |                               |
| *Height of stack from ground level | In Meter    |              | 30                                |                               |
| *Inner dimension of stack          | In Meter    | 1            | 0.6                               |                               |
| *Height of port hole               | In Meter    | 1-           | 09                                |                               |
| Atmospheric temperature            | Deg C       | 1-           | 21                                | IS 11255(Part-1):1985,RA:2019 |
| Volumetric flow rate               | Nm3 / hr    | <del>-</del> | 5,236                             | 1S 11255(Part-1):1985,RA:2019 |
| Emission rate                      | kg/hr       | -            | 0.283                             | IS 11255(Part-1):1985,RA:2019 |
| *Name of fuel & quantity used per  |             | 1-           | ELECTRICITY(ELECT<br>RIC FURNACE) | -                             |
| *Production capacity               |             | 1            | 3 X 15MT FURNACE                  |                               |
| *Stack attached to                 | <u> </u>    |              | FUME EXTRACTION SYSTEM            | <u> </u>                      |

Remarks

Any unusual feature observed during determination

Requirement Is As Per Standard Specification CTO

\* Additional information incorporated in the test report as per the requirement and data provided by the customer.

Analysed By

Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd. ato

:NIL

Authorised Signatory

morred

Dr. Debasis Biswal For Kalyani Laboratories Pvt. Ltd.



NABL ULR NO Test Report No

Amendment No Reference

Customer Name

Kalyani Laboratories

## KALYANI LABORATORIES PVT. LTD.

**TEST REPORT** 

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-751032, ODISHA

Amendment Date

: BALMUKUND SPONGE & IRON (P) LIMITED (MEGA DIVISION)

KLPL/12/23/ENVN/02629X

: AT-CHATRO, TUNDI ROAD, GIRIDIH, JHARKHAND Address Date of receipt

: -

11-Dec- 2023

Commenced On:

Completion On:

14-Dec-2023

Sample Name Sample Condition

FLUE GAS | STACK MONITORING

GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED

Sample Collected By

By KLPL(MR. SUDHIR KUMAR BARIK)

: TC1206324000018787

Ref.To Sampling Procedure : KLPL/SOP/AIR-20 Test Method Results Parameters Unit Standard Value Location & Date INDUCTION FURNACE STACK-02, DATE: 06.12.2023 IS 11255(Part-1):1985,RA:2019 mg/Nm<sup>3</sup> 150 46 Particulate Matter KLPL/SOP/AIR-20:2019 mg/Nm³ 21 Oxides of Nitrogen IS 11255(Part-1):1985,RA:2019 106 Stack Temperature Deg C IS 11255(Part-1):1985,RA:2019 6.58 Velocity IS 11255(part-2):1985,RA:2019 mg/Nm³ 10 Sulphur Dioxide as SO2 --CLEAR \*Weather condition 30 In Meter \*Height of stack from ground level In Meter 0.6 \*Inner dimension of stack 09 \*Height of port hole In Meter IS 11255(Part-1):1985,RA:2019 22 Deg C Atmospheric temperature IS 11255(Part-1):1985,RA:2019 Nm3 / hr 5,267 Volumetric flow rate 0.242 IS 11255(Part-1):1985,RA:2019 Emission rate kg/hr ELECTRICITY(ELECT RIC FURNACE) \*Name of fuel & quantity used per shift 1 X 15 MT FURNACE \*Production capacity FUME EXTRACTION \*Stack attached to

Any unusual feature observed during determination

:NIL

Requirement Is As Per Standard Specification CTO

\* Additional information incorporated in the test report as per the requirement and data provided by the customer.

Analysed By

Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd.

Brynha

BBSR

Authorised Signatory

top gover

Dr. Debasis Biswal

For Kalyani Laboratories Pvt. Ltd.



Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-752101, ODISHA

(a) +91 9861463904 M: kalyanilab@yahoo.co.in

### TEST REPORT

NABL ULR NO : TC1206324000002623

Test Report No : KLPL/03/20/ENVN/00137 Issue Date : 06-April, 2024

Reference :

Customer Name : BALMUKUND SPONGE & IRON (P) LIMITED (MEGA DIV.)

Address : (MEGA DIV, CCM & IRON ORE BENEFICIATION PLANT), AT- CHATRO-TUNDI ROAD, GIRIDIH, JHARKHAND.

Date of receipt : 25-March, 2024 Commenced On: 25-March, 2024 Completion On: 30-March, 2024

Sample Name : AMBIENT AIR QUALITY MONITORING
Sample Condition : GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED/FILTER PAPER SEALED IN ZIP LOCK POLYTHENE BAG

Sample Collected By : MR, SUDHIR KUMAR BARIK

Ref. To Sampling Procedure: KLPL/QSP-07

| Parameters                     | Unit        | Standard     | Value Results   | Test Method   |
|--------------------------------|-------------|--------------|-----------------|---|
| Location & Date : NE           | AR LABOUR Q | UARTER DT- 2 | 20.03.2024 TO 2 |   |
| Sulphur Dioxide                | µg/m³       | 80           | 17.00           | IS 5182(PART-2) \ 2001                                  |
| Nitrogen Dioxide               | µg/m³       | 80           | 31.00           | IS 5182 (PART 6 ) :2006                                 |
| Particulate Matter (PM10)      | µg/m³       | 100          | 81.00           | IS 5182(PART-23) :2006                                  |
| Particulate Matter (PM2.5)     | μg/m³       | 60           | 45.00           | KLPL/SOP/AIR-02 , ISSUE NO.1:2017                       |
| Carbon Monoxide (CO) (01 Hrs.) | mg/m³       | 04           | 0.52            | KLPL/SOP/AIR-19:2019                                    |
| Ozone (03) (01 Hrs.)           | µg/m³       | 180          | 32.00           | KLPL/SOP/AIR-13 , ISSUE NO.1:2019                       |
| Lead (Pb)                      | µg/m³       | 1.0          | <0.02           | KLPL/SOP/AIR-10 , ISSUE NO.1:2017                       |
| Ammonia (NH3)                  | μg/m³       | 400          | 20.00           | KLPL/SOP/AIR-05 , ISSUE NO.1:2017                       |
| Nickel (Ni)                    | ng/m³       | 20           | <4.0            | KLPL/SOP/AIR-10 , ISSUE NO.1:2017                       |
| Benzo (a) Pyrene (BaP)         | ng/m³       | 01           | <0.1            | CPCB Guidelines of Ambient Air Pollutants Volume-1 & II |
| Arsenic (As)                   | ng/m³       | 06           | <1.0            | KLPL/SOP/AIR-10 , ISSUE NO.1:2017                       |

| Location & Date : NEX          | AR LABOUR R | EST ROOM BU | 1LD1NG D1- 20.0 | 03.2024 TO 21.03.2024                                   |
|--------------------------------|-------------|-------------|-----------------|---|
| Sulphur Dioxide                | μg/m³       | 80          | 18.50           | IS 5182(PART-2) : 2001                                  |
| Nitrogen Dioxide               | µg/m³       | 80          | 33.00           | IS 5182 (PART 6 ):2006                                  |
| Particulate Matter (PM10)      | µg/m³       | 100         | 85.00           | IS 5182(PART-23) :2006                                  |
| Particulate Matter (PM2.5)     | µg/m³       | 60          | 49.00           | KLPL/SOP/AIR-02 , ISSUE NO.1:2017                       |
| Carbon Monoxide (CO) (01 Hrs.) | mg/m³       | 04          | 0.58            | KLPL/SOP/AIR-19 :2019                                   |
| Ozone (O3) (01 Hrs.)           | µg/m³       | 180         | 34.00           | KLPL/SOP/AIR-13 , ISSUE NO.1:2019                       |
| Lead (Pb)                      | µg/m³       | 1.0         | <0.02           | KLPL/SOP/AIR-10 , ISSUE NO.1:2017                       |
| Ammonia (NH3)                  | µg/m³       | 400         | 22.00           | KLPL/SOP/AIR-OS , ISSUE NG.1:2017                       |
| Nickel (Ni)                    | ng/m³       | 20          | <4.0            | KLPL/SOP/AIR-10 , ISSUE NO.1:2017                       |
| Benzo (a) Pyrene (BaP)         | ng/m³       | 01          | <0.1            | CPCB Guidelines of Ambient Air Pollutants Volume I & II |
| Arsenic (As)                   | ng/m³       | 06          | <1.0            | KLPL/SOP/AIR-10 , ISSUE NO.1:2017                       |

| Location & Date : /        | 10/ 10 |     |       |                             |           |
|----------------------------|--------|-----|-------|-----------------------------|-----------|
| Sulphur Dioxide            | µg/m³  | 80  | 17.80 | 15 5182(PART-2) : 2001      | ( 885R )A |
| Nitrogen Dioxide           | μg/m³  | 80  | 34.00 | IS 5182 (PART 6 ) :2006     | 12/ /2/   |
| Particulate Matter (PM10)  | hã/m³  | 100 | 80.00 | 15 5182(PART-23) :2006      | XED &     |
| Particulate Matter (PM2.5) | µg/m³  | 60  | 45.00 | KLPL/SOP/AIR-02 , ISSUE NO. | 1:2017    |

KLPL- 1009335B

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KALYANI LABORATORIES PVT.LTD.

Kalvani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-752101, ODISHA 🔯 🚱 +91 9861463904 M: kalyanilab@yahoo.co.in

TEST REPORT

TC1206324000002623

KLPL/03/20/ENVN/00137

Issue Date

06-April, 2024

Test Report No

Reference

Customer Name Address

NABL ULR NO

: BALMUKUND SPONGE & IRON (P) LIMITED (MEGA DIV.) : (MEGA DIV, CCM & IRON ORE BENEFICIATION PLANT), AT- CHATRO-TUNDI ROAD, GIRIDIH, JHARKHAND.

Date of receipt

: 25-March, 2024

Commenced On: 25-March, 2024

Completion On: 30-March, 2024

Sample Name

AMBIENT AIR QUALITY MONITORING : GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED/FILTER PAPER SEALED IN ZIP LOCK POLYTHENE BAG

Sample Condition

: MR. SUDHIR KUMAR BARIK

Sample Collected By Ref. To Sampling Procedure: KLPL/QSP-07

| Parameters                     | Unit  | Standard Valu | e Results | Test Method                       |
|--------------------------------|-------|---------------|-----------|-----------------------------------|
| Carbon Monoxide (CO) (01 Hrs.) | mg/m³ | 04            | 0.56      | KLPL/SOP/AIR-19:2019              |
| Ozone (O3) (01 Hrs.)           | µg/m³ | 180           | 32.00     | KLPL/SOP/AIR-13 , ISSUE NO.1:2019 |
| Lead (Pb)                      | µg/m³ | 1.0           | <0.02     | KLPL/SOP/AIR-10 , ISSUE NO.1:2017 |
| Ammonia (NH3)                  | μg/m³ | 400           | 26.00     | KLPL/SOP/AIR-05 , ISSUE NO.1:2017 |
| Nickel (Ni)                    | ng/m³ | 20            | <4.0      | KLPL/SOP/AIR-10 , 15SUE NO.1:2017 |
| Benzo (a) Pyrene (BaP)         | ng/m³ | 01            | <0.1      | KLPL/SQP/AIR-07 , ISSUE NO.1:2019 |
|                                | ng/m³ | 06            | <1.0      | KLPL/SOP/AIR-10 , ISSUE NO.1:2017 |
| Arsenic (As)                   | ng/m² | Vo            | 7.0       |                                   |

|                                |       |     | 1     | IS 5182(PART-2) : 2001            |
|--------------------------------|-------|-----|-------|-----------------------------------|
| Sulphur Dioxide                | µg/m³ | 80  | 16.60 | 15 5182(PART-2) 1 2001            |
| Nitrogen Dioxide               | µg/m³ | 80  | 33.00 | IS 5182 (PART 6 ) :2006           |
| Particulate Matter (PM10)      | µg/m³ | 100 | 79.00 | IS 5182(PART-23) :2006            |
| Particulate Matter (PM2.5)     | µg/m³ | 60  | 44.00 | KLPL/SOP/AIR-02 , ISSUE NO.1:2017 |
| Carbon Monoxide (CO) (01 Hrs.) | mg/m³ | 04  | 0.60  | KLPL/SOP/AIR-19 ;2019             |
| Ozone (O3) (01 Hrs.)           | µg/m³ | 180 | 32.00 | KLPL/SOP/AIR-13 , ISSUE NO.1:2019 |
| Lead (Pb)                      | µg/m³ | 1.0 | <0.02 | KLPL/SOP/AIR-10 , ISSUE NO.1:2017 |
| Ammonia (NH3)                  | µg/m³ | 400 | 24.00 | KLPL/SOP/AIR-05 , ISSUE NO.1:2017 |
| Nickel (Ni)                    | ng/m³ | 20  | <4.0  | KLPL/SOP/AIR-10 , ISSUE NO.1:2017 |
| Benzo (a) Pyrene (BaP)         | ng/m³ | 01  | <0.1  | KLPL/SOP/AIR-07 , ISSUE NO.1:2019 |
| Arsenic (As)                   | ng/m³ | 06  | <1.0  | KLPL/50P/AIR-10 , ISSUE NO.1:2017 |

Remarks

: NIL

Any unusual feature observed during determination Requirement is as per standard specification NAAQS:2009 : NIL

Analysed By

D Arypha Mr Digambar Arukha

For Kalyani Laboratories Pvt. Ltd.

CONCREMENTAL STATE OF THE PROPERTY OF THE PROP

Authorised Signatory

Dusgena

Dr. Debasis Biswal For Kalyani Laboratories Pvt. Ltd.

KLPL- 1009336B



Kalyani Laboratories

Reference

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-752101. ODISHA

### **TEST REPORT**

 NABL ULR NO
 : TC1206324000002626

 Test Report No
 : KLPL/03/24/ENVN/0140

Amendment No : - Amendment Date : -

Customer Name : M/s Balmukund Sponge & Iron (Pvt.) Ltd. (MEGA DIV.)

Address : AT-CHATRO, TUNDI ROAD, GIRIDIH, JHARKHAND

Date of receipt : 25-March, 2024 Commenced On: 25-March, 2024 Completion On: 30-March, 2024

Sample Name : FLUE GAS | STACK MONITORING

Sample Condition : GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED

Sample Collected By : MR. SUDHIR KUMAR BARIK

Ref. To Sampling Procedure : KLPL/SOP/AIR-20

| Parameters                                 | Unit               | Standard      | Value Results           | Test Method                   |
|--|--------------------|---------------|-------------------------|-------------------------------|
| Location & Date : Stac                     | k- 01 (Iron (      | Ore Beneficia | ation Unit), Date:20.   | .03.2024                      |
| Particulate Matter                         | mg/Nm³             | 150           | 76                      | IS 11255(Part-1):1985,RA:2019 |
| Oxides of Nitrogen                         | mg/Nm <sup>3</sup> |               |                         | KLPL/SOP/AIR-20:2019          |
| Stack Temperature                          | Deg C              |               | 86                      | IS 11255(Part-1):1985,RA:2019 |
| Velocity                                   | m/sec              | 1-            | 6.40                    | IS 11255(Part-1):1985,RA:2019 |
| Sulphur Dioxide as SO2                     | mg/Nm³             |               | ***                     | IS 11255(part-2):1985,RA:2019 |
| *Weather condition                         |                    | 1-            | CLEAR                   |                               |
| *Height of stack from ground level         | In Meter           |               | 30                      | A                             |
| *Inner dimension of stack                  | In Meter           |               | 0.6                     |                               |
| *Height of port hole                       | In Meter           | •••           | 12                      | V-                            |
| Atmospheric temperature                    | Deg C              |               | 36                      | IS 11255(Part-1):1985,RA:2019 |
| /olumetric flow rate                       | Nm3 / hr           |               | 5408                    | IS 11255(Part-1):1985,RA:2019 |
| Emission rate                              | kg/hr              |               | 0.41                    | 15 11255(Part-1):1985,RA:2019 |
| *Name of fuel & quantity used per<br>shift |                    | -             | Process Stack           |                               |
| *Production capacity                       |                    |               | 74000 TPA<br>(IRON ORE) | V-                            |
| *Stack attached to                         |                    | T             | IOB UNIT                |                               |

Remarks

Any unusual feature observed during determination

Requirement Is As Per Standard Specification CTO

Additional information incorporated in the test report as per the requirement

and data provided by the customer.

Analysed By

Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd.



:NIL

**Authorised Signatory** 

Dr. Debasis Biswal

For Kalyani Laboratories Pvt. Ltd.

KLPL- 1009341B

## KALYANI LABORATORIES PVT.LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-752101, ODISHA

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### **TEST REPORT**

| Test Report No | : KLPL/03/20/ENVN/00138 | Issue Date     | : 06-April, 2024 |
|----------------|-------------------------|----------------|------------------|
| Amendment No   |                         | Amendment Date | 1 -              |

Reference Customer Name : BALMUKUND SPONGE & IRON (P) LIMITED (MEGA DIV.)

: (MEGA DIVISION, CCM & IRON ORE BENEFICIATION PLANT, CHATRO, TUNDI ROAD, GIRIDIH, JHARKHAND Address

Date of receipt : 25-March, 2024 Commenced On: 25-March, 2024 Completion On: 27-March, 2024 Sample Name AIR QUALITY MONITORING (FUSITIVE DUST)

: FILTER PAPER SEALED IN ZIP LOCK POLYTHENE BAG Sample Condition : MR. SUDHIR KUMAR BARIK Sample Collected By

µG/M³

Ref. To Sampling Procedure: KLPL/QSP-07

Parameters Standard Value Results Test Method Location & Date : NEAR HOPPER (IRON ORE BENEFICIATION UNIT) DT- 21.03.2024

2000 Location & Date : NEAR RAW MATERIAL STORAGE YARD (IRON ORE BENEFICIATION UNIT) DT- 21.03.2024

Fugitive Dust µG/M³ 2000 1752 KLPL/SOP/AIR-11:2012

Location & Date : NEAR SCRAP YARD (M.S.BILLET SECTION) DT- 21.03.2024

KLPL/SQP/AIR-11:2012 2000 1588 **Fugitive Dust** uG/M3

Location & Date : NEAR WEIGH BRIDGE (M. S. BILLET SECTION) DT- 21.03.2024

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KLPL/SOP/AIR-11:2012 **Fugitive Dust** µG/М<sup>3</sup> 2000 1834

Remarks

**Fugitive Dust** 

Any unusual feature observed during determination : NIL Requirement Is As Per Standard Specification NAAQS:2009

: NIL

Analysed By

1) Asylata Mr. Digambar Arukha

For Kalyani Laboratories Pvt. Ltd.

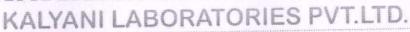
Authorised Signatory

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Dr. Debasis Biswal For Kalyani Laboratories Pvt. Ltd.

KLPL/SOP/AIR-11:2012



Kalyani Laboratories

Amendment No Reference

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-752161, ODISHA

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### TEST REPORT

: TC1206324000002625 NABL ULR NO

KLPL/03/20/ENVN/00139 Test Report No

: 06-April, 2024

. .

Issue Date

Amendment Date

: BALMUKUND SPONGE & IRON PVT LTD (MEGA DIVISION)

Customer Name

: (SMS & IOB PLANT), AT- CHATRO - TUNDI ROAD, DISTRICT- GIRIDIH, JHARKHAND

Address Completion On: 27-March, 2024 Commenced On: 25-March, 2024 : 25-March, 2024 Date of receipt

NOISE (DAY TIME) Sample Name

Sample Condition

MR. SUDHIR KUMAR BARIK

Sample collected by Ref. To Sampling Procedure: KLPL/NOISE/SOP-23

Standard Value Results Test Method Unit Parameters : NEAR HOPPER (IRON ORE BENEFICIATION UNIT), DT- 20.03.2024 Location & Date

IS 9989:1981 (RA 2014) dB Noise Level Indl. Area (Day)

: NEAR RAW MATERIAL YARD (IRON ORE BENEFICIATION UNIT), DT- 20.03.2024 Location & Date

IS 9989:1981 (RA 2014) 64.3 75 Noise Level Indl. Area (Day)

: NEAR SCRAP YARD (M.S. BILLET SECTION), DT- 20.03.2024 Location & Date

15 9989:1981 (RA 2014) Noise Level Indl. Area (Day)

: NEAR WEIGH BRIDGE (M.S. BILLET SECTION), DT- 20.03.2024 Location & Date

IS 9989:1981 (RA 2014) 67.5 Noise Level Indl. Area (Day)

Remarks

: NIL

Any unusual feature observed during determination Requirement Is As Per Standard Specification Noise Rule 2000

NIL

Analysed By

1) Anyeta Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd. atori

**Authorised Signatory** 

Dr.Debasis Biswal For Kalyani Laboratories Pvt. Ltd.

KLPL- 1009339B

## KALYANI LABORATORIES PVT.LTD.



PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-752101, ODISHA

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### TEST REPORT

NABL ULR NO TC1206324000002625 Test Report No

Issue Date : 06-April, 2024 KLPL/03/20/ENVN/00139A

Amendment Date Amendment No : -

Reference BALMUKUND SPONGE & IRON PVT LTD (MEGA DIVISION) Customer Name

: (SMS & IOB PLANT), AT- CHATRO - TUNDI ROAD, DISTRICT- GIRIDIH, JHARKHAND Address

Commenced On: 25-March, 2024 Completion On: 27-March, 2024 : 25-March, 2024 Date of receipt

NOISE (NIGHT TIME) Sample Name

Sample Condition

MR. SUDHIR KUMAR BARIK Sample collected by

Ref. To Sampling Procedure: KLPL/NOISE/SOP-23

Unit Standard Value Results Parameters Location & Date : NEAR HOPPER (IRON ORE BENEFICIATION UNIT), DT- 20.03.2024 To 21.03.2024 15 9989-1981 (RA 2014) Noise Level Indl. Area (Day)

: NEAR RAW MATERIAL YARD (IRON ORE BENEFICIATION UNIT), DT- 20.03.2024 To 21.03.2024 Location & Date

IS 9989:1981 (RA 2014) Noise Level Indl. Area (Day) 61.2

: NEAR SCRAP YARD (M.S. BILLET SECTION), DT- 20.03.2024 To 21.03.2024 Location & Date

IS 9989:1981 (RA 2014) dB 70 Noise Level Indl. Area (Day)

Location & Date : NEAR WEIGH BRIDGE (M.S. BILLET SECTION), DT- 20.03.2024 To 21.03.2024

IS 9989:1981 (RA 2014) dB 70 65 7 Noise Level Indl. Area (Day)

Remarks

: NIL

Any unusual feature observed during determination NIL Requirement Is As Per Standard Specification Noise Rule 2000

Analysed By

Asubha Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd.

rator BBSR

Authorised Signatory

Dr. Debasis Biswal For Kalyani Laboratories Pvt. Ltd.

KLPL-1009340B



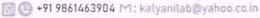
Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-752101, ODISHA

Issue Date

: 06-April, 2024

Sampling Date: 24-March, 2024



### TEST REPORT

NABL ULR NO : TC1206324000003817
Test Report No : KLPL/03/20/WATER/00634

Reference : -

Customer Name : BALMUKUND SPONGE & IRON (P) LIMITED (MEGA DIV.)

Address : At.: CHATRO - TUNDI ROAD, GIRIDIH, JHARKHAND

Date of receipt : 25-March, 2024 Test Commenced On: 25-March, 2024 Test Completion On: 30-March, 2024

Sample Description : WASTE WATER

Sample Condition : SEALED IN 1LTR PET BOTTLE

Sample Identification \*: DOMESTIC EFFLUENT WATER

Batch No , Lot No : NA MFG Date : NA EXP Date : NA

Received Quantity : 1LTR X 1 Place of Collection :OUTLET OF ADMINISTRATIVE BUILDING Sample Collected By : MR. SUDHIR KUMAR BARIK DT-24.03.2024

Ref. To Sampling Procedure: KLPL/QSP-07

| Para | ameters                                       | Unit R         | equirement | Resu | lt Test Method                                  |
|------|---|----------------|------------|------|---|
| CHE  | MICAL PARAMETER                               |                |            |      |   |
| ł    | Oil & Grease                                  | mg/l           |            | <1.0 | APHA 24th Edition (2550B), 2023                 |
| ř.   | Total Dissolved Solid                         | mg/l           | -          | 224  | APHA 24th Edition (2540 C), 2023                |
| i ii | Chemical Oxygen Demand                        | mg/l           | =          | 40   | APHA 24th Edition (5220 B), 2023                |
| lч   | Biochemical Oxygen Demand(For 3 days 27deg C) | mg/l           | •          | 14   | APHA 24th Edition (5210 B), 2023                |
| y    | Total Suspended Solids                        | mg/l           | *          | 28   | APHA 24th Edition (2540 D),2023                 |
|      |   |                | *          |      |   |
| PHY  | SICAL PARAMETER                               |                |            |      |   |
| -    | Color   | True col. Unit | (m)        | <1.0 | APHA 23'd Edition (2120 B), 2017                |
| ii   | pH Value                                      | week           |            | 7.3  | APHA 23 <sup>rd</sup> Edition (4500-H+-B), 2017 |

Remarks

: NIL

Any unusual feature observed during determination

: NIL

Analysed By

Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd



**Authorized Signatory** 

Tourstood

Dr Debasis Biswal

For Kalyani Laboratories Pvt. Ltd

End of Test Report

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Page 1 of 1

KLPL- 1009345B

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-752101, ODISHA

6 +91 9861463904 M: kalyanilab@yahoo.co.in

### TEST REPORT

| Test Report No              | : KLPL/03/20/ENVN     | /001424   |                   | Issue Date : 06-April, 2024   |  |  |  |
|-----------------------------|-----------------------|---|-------------------|-------------------------------|--|--|--|
| Amendment No                | : -                   | /00142A   |                   | Amendment Date : -            |  |  |  |
| Reference                   |                       |   |                   |                               |  |  |  |
| Customer Name               | BALMUKUND SPON        | GE & IRON (P)   | LIMITED (MEGA I   | DIV.)                         |  |  |  |
| Address                     | : (ROLLING UNIT) At.: | CHATRO-TUNDI F  | ROAD, GIRIDIH, JE | HARKHAND                      |  |  |  |
| Date of receipt             | : 25-March, 2024 C    | ommenced On:  | 25-March, 2024    | Completion On: 27-March, 2024 |  |  |  |
| Sample Name :               | AIR QUALITY MONI      | TORING (FUSIT   | TIVE DUST)        |                               |  |  |  |
| Sample Condition            | ; FILTER PAPER SEALED | IN ZIP LOCK POLY                                      | THENE BAG         |                               |  |  |  |
| Sample Collected By         | : MR. SUDHIR KUMAR E  | BARIK   |                   |                               |  |  |  |
| Ref. To Sampling Procedure: | KLPL/QSP-07           |   |                   |                               |  |  |  |
| Parameters                  | Unit                  | Standard V  | alue Results      | Test Method                   |  |  |  |
| Location & Date             | NEAR FINISHED PR      | NEAR FINISHED PRODUCT YARD, DT- 23.03.2024            |                   |                               |  |  |  |
| Fugitive Dust               | µG/M³                 | 2000  | 1728              | KLPL/SGP/AIR-11:2012          |  |  |  |
| Location & Date :           | NEAR RAW MATERIA      | NEAR RAW MATERIAL YARD (ROLLING DIV.), DT- 23.03.2024 |                   |                               |  |  |  |
| Fugitive Dust               | μG/M <sup>3</sup>     | 2000  | 1844              | KLPL/SOP/AIR-11:2012          |  |  |  |
| Location & Date             | EASTERN SIDE OF R     | OLLING MILL U   | INIT, DT- 23.03.2 | 2024                          |  |  |  |
| Fugitive Dust               | µG/M³                 | 2000  | 1650              | KLPL/SOP/AIR-11:2012          |  |  |  |
| Location & Date :           | SOUTHERN SIDE OF      | LABOUR REST   | ROOM, DT- 23.0:   | 3.2024                        |  |  |  |
| Fugitive Dust               | he/w <sub>3</sub>     | 2000  | 1594              | KLPL/SOP/AIR-11:2012          |  |  |  |

Remarks

: NIL

Any unusual feature observed during determination : NIL Requirement is As Per Standard Specification NAAQS: 2009

Analysed By

Mr. Digambar Arukha
For Kalyani Laboratories Pvt. Ltd.

Authorised Signatory

postment

Dr. Debasis Biswal For Kalyani Laboratories Pvt. Ltd.

\* End of Test Report \*\*

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BBSR

## KALYANI LABORATORIES PVT.LTD.

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-752101, ODISHA

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### **TEST REPORT**

NABL ULR NO TC1206324000002629

: 06-April, 2024 Issue Date KLPL/03/20/ENVN/00143D Test Report No Amendment Date

Amendment No Reference

Kalyani taboratories

: BALMUKUND SPONGE & IRON PVT LTD (MEGA DIVISION) Customer Name

: (ROLLING MILL UNIT), AT- CHATRO - TUNDI ROAD, DISTRICT- GIRIDIH, JHARKHAND Address

Completion On: Commenced On: 25-March, 2024 27-March, 2024 25-March, 2024 Date of receipt

Sample Name NOISE (DAY TIME)

Sample Condition

MR. SUDHIR KUMAR BARIK Sample collected by

KLPL/NOISE/SOP-23 Ref. To Sampling Procedure:

Standard Value Results Unit Parameters | Location & Date

: NEAR FINISHED PRODUCT YARD, DT- 22.03.2024

15 9989:1981 (RA 2014) 75 Noise Level Indl. Area (Day)

Location & Date : NEAR RAW MATERIAL YARD (ROLLING DIV.), DT- 22.03.2024

IS 9989:1981 (RA 2014) 65.7 Noise Level Indl. Area (Dav)

: EASTERN SIDE OF ROLLING MILL UNIT, DT- 22.03.2024 Location & Date

IS 9989:1981 (RA 2014) 63.5 75 Noise Level Indl. Area (Day)

: SOUTHERN SIDE OF LABOUR REST ROOM, DT- 22.03.2024 Location & Date

I5 9989:1981 (RA 2014) 75 Noise Level Indl. Area (Day) dB

atoria

Remarks

: NIL

Any unusual feature observed during determination Requirement Is As Per Standard Specification Noise Rule 2000

Analysed By

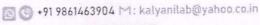
Annh

Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd. Authorised Signatory

Dr. Debasis Biswal For Kalyani Laboratories Pvt. Ltd.

KLPL- 1009349B

KALYANI LABORATORIES PVT.LTD. PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-752101, ODISHA



**TEST REPORT** 

NABL ULR NO : TC1206324000002629 KLPL/03/20/ENVN/00143

Test Report No Amendment No

Issue Date

: 06-April, 2024

Amendment Date

1 -

: BALMUKUND SPONGE & IRON PVT LTD (MEGA DIVISION)

Customer Name Address

: (INDUCTION FURNACE UNIT), AT- CHATRO - TUNDI ROAD, DISTRICT- GIRIDIH, JHARKHAND Completion On: 27-March, 2024

Commenced On: 25-March, 2024 : 25-March, 2024 Date of receipt

NOISE (DAY TIME) Sample Name

Sample Condition

Kalvani Laboratories

Reference

MR. SUDHIR KUMAR BARIK Sample collected by

Ref. To Sampling Procedure: KLPL/NOISE/SOP-23

Standard Value Results Test Method Unit Parameters : NEAR METAL CONVEYER, DT- 22.03.2024 Location & Date

15 9989:1981 (RA 2014) 63.6 75 dB Noise Level Indl. Area (Day)

: NEAR RAW MATERIAL YARD (INDUCTION FURNACE DIV.), DT- 22.03.2024 Location & Date

15 9989:1981 (RA 2014) 62.5 75 Noise Level Indl. Area (Day)

: NORTHERN SIDE OF INDUCTION FURNACE SHED, DT- 22.03.2024 Location & Date

IS 9989:1981 (RA 2014) 61.2 Noise Level Indl. Area (Day)

: BESIDE CONTROL ROOM, DT- 22.03.2024 Location & Date

1S 9989:1981 (RA 2014) 62.8 75 Noise Level Indl. Area (Day)

Remarks

NII

Any unusual feature observed during determination Requirement Is As Per Standard Specification Noise Rule 2000

NII

Analysed By

1) Asylete

Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd. **Authorised Signatory** 

Possonce

Dr. Debasis Biswal For Kalyani Laboratories Pvt. Ltd.

KLPL- 1009350B

## KALYANI LABORATORIES PVT.LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-752101, ODISHA

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### **TEST REPORT**

TC1206324000002629 NABL ULR NO Test Report No

Issue Date : 06-April, 2024 KLPL/03/20/ENVN/00143E

Amendment Date

: -

Amendment No

Reference

BALMUKUND SPONGE & IRON PVT LTD (MEGA DIVISION) Customer Name

: (ROLLING MILL UNIT), AT- CHATRO - TUNDI ROAD, DISTRICT- GIRIDIH, JHARKHAND Address

Commenced On: 25-March, 2024 Completion On: 27-March, 2024 Date of receipt 25-March, 2024

NOISE (NIGHT TIME) Sample Name

Sample Condition

Sample collected by : MR. SUDHIR KUMAR BARIK

Ref. To Sampling Procedure: KLPL/NOISE/SOP-23

 Test Method Standard Value Results Parameters Unit

: NEAR FINISHED PRODUCT YARD, DT- 22.03.2024 & 23.03.2024 Location & Date

IS 9989:1981 (RA 2014) 62.7 Noise Level Indl. Area (Day) 70

Location & Date : NEAR RAW MATERIAL YARD (ROLLING DIV.), DT- 22.03.2024 & 23.03.2024

IS 9989:1981 (RA 2014) Noise Level Indl. Area (Day)

Location & Date : EASTERN SIDE OF ROLLING MILL UNIT, DT- 22.03.2024 & 23.03.2024

15 9989:1981 (RA 2014) Noise Level Indl. Area (Day) dB 70 62.6

Location & Date : SOUTHERN SIDE OF LABOUR REST ROOM, DT- 22.03.2024 & 23.03.2024

59.5 IS 9989:1981 (RA 2014) 70 dB Noise Level Indl. Area (Day)

Remarks

: NII

Any unusual feature observed during determination Requirement Is As Per Standard Specification Noise Rule 2000

Analysed By

> Arubha Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd.

Authorised Signatory

bostonea

Dr. Debasis Biswal

For Kalyani Laboratories Pvt. Ltd.



End of Test Report

KLPL- 1009352B

## KALYANI LABORATORIES PVT.LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENRIM CITY PAHAL, BHUBANESWAR-752101, ODISHA

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### **TEST REPORT**

NABL ULR NO : TC1206324000002629
Test Report No : KLPL/03/20/ENVN/00143A

Amendment No : - Amendment Date :-

Reference : Customer Name : BALMUKUND SPONGE & IRON PVT LTD (MEGA DIVISION)

Address : (INDUCTION FURNACE UNIT), AT- CHATRO – TUNDI ROAD, DISTRICT- GIRIDIH, JHARKHAND

Date of receipt : 25-March, 2024 Commenced On: 25-March, 2024 Completion On: 27-March, 2024

Sample Name : NOISE (NIGHT TIME)

Sample Condition : -

Sample collected by : MR. SUDHIR KUMAR BARIK

Ref. To Sampling Procedure: KLPL/NOISE/SOP-23

Parameters Unit Standard Value Results Test Method

Location & Date : NEAR METAL CONVEYER, DT- 22.03.2024 & 23.03.2024

Noise Level Indl. Area (Day) dB 70 62.6 | 15 9989:1981 (RA 2014)

Location & Date : NEAR RAW MATERIAL YARD (INDUCTION FURNACE DIV.), DT- 22.03.2024 & 23.03.2024

Noise Level Indl. Area (Day) dB 70 59.4 IS 9989:1981 (RA 2014)

Location & Date : NORTHERN SIDE OF INDUCTION FURNACE SHED, DT- 22.03.2024 & 23.03.2024

Noise Level Indl. Area (Day) dB 70 60.2 IS 9989:1981 (RA 2014)

Location & Date : BESIDE CONTROL ROOM, DT- 22.03.2024 & 23.03.2024

Noise Level Indl. Area (Day) dB 70 62.5 IS 9989:1981 (RA 2014)

Remarks ; NIL

Any unusual feature observed during determination : NIL Requirement Is As Per Standard Specification Noise Rule 2000

Analysed By

Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd.

BBSR XX

Authorised Signatory

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Dr. Debasis Biswal For Kalyani Laboratories Pvt. Ltd.

KLPL- 1009353B

### KALYANI LABORATORIES PVT.LTD.

Kalyani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-752101, ODISHA

Issue Date

Amendment Date

: 06-April, 2024

### TEST REPORT

NABL ULR NO : TC1206324000002630

Test Report No : KLPL/03/24/ENVN/0144

Amendment No : -

Reference : -

Customer Name : M/s Balmukund Sponge & Iron (Pvt.) Ltd. (MEGA DIV.)

Address : AT-CHATRO, TUNDI ROAD, GIRIDIH, JHARKHAND

Date of receipt : 25-March, 2024 Commenced On: 25-March, 2024 Completion On: 28-March, 2024

Sample Name ; FLUE GAS | STACK MONITORING

Sample Condition : GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED

Sample Collected By : MR. SUDHIR KUMAR BARIK

Ref. To Sampling Procedure : KLPL/SOP/AIR-20

| Parameters                                 | Unit         | Standard      | Value Results                     | Test Method                   |
|--|--------------|---------------|-----------------------------------|-------------------------------|
| Location & Date : Indu                     | uction Furna | ace Stack- (  | 01,Date:22.03.2024                |                               |
| Particulate Matter                         | mg/Nm³       | 150           | 62                                | IS 11255(Part-1):1985,RA:2019 |
| Oxides of Nitrogen                         | mg/Nm³       |               | 28                                | KLPL/SOP/AIR-20:2019          |
| Stack Temperature                          | Deg C        | 1-            | 104                               | IS 11255(Part-1):1985,RA:2019 |
| Velocity                                   | m/sec        |               | 6.56                              | IS 11255(Part-1):1985,RA:2019 |
| Sulphur Dioxide as SO2                     | mg/Nm³       |               | 12                                | IS 11255(part-2):1985,RA:2019 |
| *Weather condition                         |              |               | CLEAR                             | -                             |
| *Height of stack from ground level         | In Meter     |               | 30                                |                               |
| *Inner dimension of stack                  | In Meter     |               | 0.6                               | *                             |
| *Height of port hole                       | In Meter     | ļ             | 09                                |                               |
| Atmospheric temperature                    | Deg C        |               | 34                                | IS 11255(Part-1):1985,RA:2019 |
| Volumetric flow rate                       | Nm3 / hr     |               | 5279                              | IS 11255(Part-1):1985,RA:2019 |
| Emission rate                              | kg/hr        |               | 0.327                             | IS 11255(Part-1):1985,RA:2019 |
| *Name of fuel & quantity used per<br>shift |              | ] <del></del> | Electricity<br>(Electric Furnace) | de-                           |
| *Production capacity                       | 7.4          |               | 3 x 15 MT Furnace                 |                               |
| *Stack attached to                         | T            |               | Fume Extraction<br>System         |                               |

Remarks

Any unusual feature observed during determination Requirement Is As Per Standard Specification CTO :NIL

\* Additional information incorporated in the test report as per the requirement and data provided by the customer.

Analysed By

1) Howe

Mr. Digambar Arukha For Kalyani Laboratories Pvt. Ltd.



Authorised Signatory

1200 such

Dr. Debasis Biswal For Kalyani Laboratories Pvt. Ltd.

KLPL-1009354B

## KALYANI LABORATORIES PVT.LTD.

Kalvani Laboratories

PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-752101, ODISHA

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### **TEST REPORT**

NABL ULR NO TC1206324000002630 Test Report No

Issue Date

Amendment No

KLPL/03/24/ENVN/0144A

: 06-April, 2024

1 -

Amendment Date

Reference

M/s Balmukund Sponge & Iron (Pvt.) Ltd. (MEGA DIV.)

Customer Name

Address

: AT-CHATRO, TUNDI ROAD, GIRIDIH, JHARKHAND

28-March, 2024

Date of receipt

: 25-March, 2024

Commenced On: 25-March, 2024

Completion On:

Sample Name

Sample Condition

: FLUE GAS | STACK MONITORING

: GASEOUS SAMPLE ABSORBING SOLUTIONS REFRIGERATED : MR. SUDHIR KUMAR BARIK

Sample Collected By

Ref. To Sampling Procedure : KLPL/SOP/AIR-20

| 1 | 1 |  | · | - | 4.2 | 1.1 |
|---|---|--|---|---|-----|-----|
|   |   |  |   |   |     |     |
|   |   |  |   |   |     |     |

| Parameters                                 | Unit        | Standard   | Value Results                     | Test Method                   |
|--|-------------|------------|-----------------------------------|-------------------------------|
| Location & Date : Indu                     | uction Furn | ace Stack- | 02,Date:22.03.2024                |                               |
| Particulate Matter                         | mg/Nm³      | 150        | 56                                | IS 11255(Part-1):1985,RA:2019 |
| Oxides of Nitrogen                         | mg/Nm³      | -          | 26                                | KLPL/SOP/AIR-20:2019          |
| Stack Temperature                          | Deg C       |            | 98                                | IS 11255(Part-1):1985,RA:2019 |
| Velocity                                   | m/sec       | 1          | 6.51                              | IS 11255(Part-1):1985,RA:2019 |
| Sulphur Dioxide as SO2                     | mg/Nm³      | 1          | 11                                | IS 11255(pert-Z):1985,RA:2019 |
| *Weather condition                         | 1           |            | CLEAR                             | 1                             |
| *Height of stack from ground level         | In Meter    |            | 30                                |                               |
| *Inner dimension of stack                  | In Meter    | 1          | 0.6                               |                               |
| *Height of port hole                       | In Meter    | w w        | 09                                | **                            |
| Atmospheric temperature                    | Deg C       | **         | 35                                | IS 11255(Part-1):1985,RA:2019 |
| Volumetric flow rate                       | Nm3 / hr    |            | 5324                              | IS 11255(Part-1):1985,RA:2019 |
| Emission rate                              | kg/hr       |            | 0.298                             | IS 11255(Part-1):1985,RA:2019 |
| *Name of fuel & quantity used per<br>shift |             |            | Electricity<br>(Electric Furnace) | 1                             |
| *Production capacity                       | **          |            | 1 x 15 MT Furnace                 | 4.5                           |
| *Stack attached to                         |             |            | Fume Extraction                   |                               |

Any unusual feature observed during determination Requirement Is As Per Standard Specification CTO

Additional information incorporated in the test report as per the requirement and data provided by the customer.

Analysed By

Mr. Digambar Arukha

For Kalyani Laboratories Pvt. Ltd.

**Authorised Signatory** 

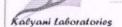
System

Dr. Debasis Biswal For Kalyani Laboratories Pvt. Ltd.

End of Test Report

KLPL- 1009355B

## KALYANI LABORATORIES PVT.LTD.



PLOT NO-78/944, MILLENIUM CITY PAHAL, BHUBANESWAR-752101, ODISHA

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### **TEST REPORT**

| Test Report No             | :                                       | KLPL/03/24/ENV                                   | /N/0137     |                  | Issue Date : 06-April, 2024                        |  |
|----------------------------|---|--|-------------|------------------|--|--|
| Amendment No               | :                                       | -  |             |                  | Amendment Date : -                                 |  |
| Reference                  | :                                       |  |             |                  |  |  |
| Customer Name              | ,                                       | BALMUKUND SPO                                    | NGE & IRON  | (P) LIMITED (M   | EGA DIV.)  |  |
| Address                    | :                                       | (MEGA DIV, CCM &                                 | IRON ORE BE | ENEFICIATION PLA | NT), AT- CHATRO-TUNDI ROAD, GIRIDIH, JHARKHAND.    |  |
| Date of receipt            | ÷                                       | 25-March, 2024                                   | Commenced   | On: 25-March,    | 2024 Completion On: 30-March, 2024                 |  |
| Sample Name                | :                                       | AMBIENT AIR QUA                                  | ALITY MONI  | TORING           |  |  |
| Sample Condition           | 1                                       | GASEOUS SAMPLE AF                                | BSORBING SO | LUTIONS REFRIGER | ATED/FILTER PAPER SEALED IN ZIP LOCK POLYTHENE BAG |  |
| Sample Collected By        | :                                       | MR. SUDHIR KUMAF                                 | R BARIK     |                  |  |  |
| Ref. To Sampling Procedure | ;                                       | KLPL/QSP-07                                      |             |                  |  |  |
| Parameters                 |   | Unit   | Standard    | Value Results    | Test Method  |  |
| Location & Date            | ;                                       | NEAR LABOUR QUARTER DT- 20.03.2024 TO 21.03.2024 |             |                  |  |  |
| Benzene (C6 H6)            | ***********                             | µg/m³  | 05          | <1.0             | KLPL/SOP/AIR-07,Issue No.01: 2019                  |  |
| Location & Date            | :                                       | NEAR LABOUR RE                                   | ST ROOM BU  | VILDING DT- 20.0 | 03.2024 TO 21.03.2024                              |  |
| Benzene (C6 H6)            |   | µg/m³  | 05          | <1.0             | KLPL/SOP/AIR-07,Issue No.01: 2019                  |  |
| Location & Date            | :                                       | NEAR NORTHERN                                    | BOUNDARY    | DT- 20.03.2024   | TO 21.03.2024                                      |  |
| Benzene (C6 H6)            | *************************************** | μg/m³  | 05          | <1.0             | KLPL/SOP/AIR-07,Issue No.01: 2019                  |  |
| Location & Date            | :                                       | NEAR SOUTHERN                                    | BOUNDARY    | DT- 20.03.2024   | TO 21.03.2024                                      |  |
|                            | *****                                   | µg/m³  | 05          | <1.0             | KLPL/SOP/AIR-07, Issue No.01: 2019                 |  |

Requirement is as per standard specification NAAQS:2009

Any unusual feature observed during determination

: NIL

Analysed By

Mr. Digambar Arukha

For Kalyani Laboratories Pvt. Ltd.

Authorised Signatory pofore

Dr. Debasis Biswal

For Kalyani Laboratories Pvt. Ltd.

|     | Cat  | orio | 1   |
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KLPL- 1009337B