

Date: 24.12.2024

To,  
The Regional Officer,  
Ministry of Environment, Forests & Climate Change.  
Govt. of India.; Eastern Regional Office.  
A/3, Chandrasekharpur, Bhubaneswar-751023, Odisha.  
Email: roez.bsr-mef@nic.in

**Sub: Submission of Six-Monthly Report on the status of the compliance of the stipulated environmental conditions for the period from Apr' 2024 to Sep' 2024.**

**Ref: Environmental Clearance F.J. 11011/116/2011-1A-II (I) dt.10.10.2012.**

Dear Sir,

In reference to the above subject matter, we are submitting herewith the status of compliance to the environmental conditions of EC dtd.10.10.2012 both in hardcopies and through Parivesh 2.0 portal for the period from Apr' 2024 to Sep' 2024 along with all annexures in support of the compliances made to different conditions in the unit of MSP Sponge Iron Ltd., Haldiajuna, Keonjhar, Odisha .

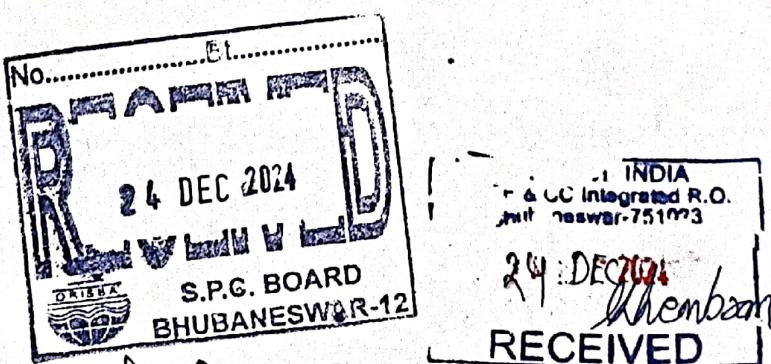
This is for your kind information and perusal please.

Thanking you,

Yours faithfully,  
For MSP Sponge Iron Ltd.



P. K. Dey,  
Director



Encl: As stated above

Copy to : The Member Secretary, State Pollution Control Board, Odisha,  
E-Mail: paribesh1@ospcboard.org

..... for kind information please.

Works: Vill Manuwapali, P.O.: Jamgaon, District: Ralgarh, Chhattisgarh-496 001, Phone: +91 91091 34188  
Vill.: Haldiajuna, P.O.: Gobardhan, District: Keonjhar, Odisha-758 013  
CIN Number: U27102WB1999PLC114830



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**CIN Number:** U27102WB1999PLC114830



## **MSP SPONGE IRON LTD.**

**Haldiaguna, Keonjhar, Odisha**

List of Annexure attached to this Half-yearly report to the  
Environmental Clearance granted vide

letter NO.11011/ 116/2011-IA-II (I) DT.10.10.2012.

<b>Sl. No.</b>	<b>Annexure No.</b>	<b>Subject Matter</b>
1.	Annexure -1	Compliance report to the conditions specified in EC Dt.10.10.2012.
2.	Annexure -2	Status of project for which EC dated 10.10.2012 was issued.
3.	Annexure -3	Bi-monthly Analysis Report for Apr' 24, Jun' 24 and Aug' 24 on Environment Monitoring.
4.	Annexure -4	Year Wise Plantation Report as on Sep' 24.
5.	Annexure -5	Status of Action taken as on 30 <sup>th</sup> Sep' 2024 on commitments made during public hearing held done Dt. 23.03.2012.
6.	Annexure -6	Periphery Development Expenses as on 30 <sup>th</sup> Sep' 2024.
7.	Annexure-7	CREP Compliance
8.	Annexure-8	Environment Policy & Env. Mgt Cell.
9.	Annexure-9	Paper Publication of EC Dt.10.10.2012
10.	Annexure-10	Financial Closure (MoM of Consortium) of Lending Banks Dt.17.05.2012

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**MSP SPONGE IRON LTD.**  
**Haldiaguna, Keonjhar, Odisha**

Compliance to Specific and General Condition of Environmental Clearance granted vide File NO.11011/ 116/2011-IA-II (I) DT.10.10.2012.

**A. SPECIFIC CONDITIONS:**

Sl. No.	Specific Conditions	Compliance Status as on Sep'2024
i.	<p>Measures shall be undertaken to mitigate particulate levels in the ambient air. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), gas cleaning plant, venturi scrubber, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm<sup>3</sup> by installing energy efficient technology.</p>	<p>Air Pollution Control Measures with online Stack monitoring facilities operating are as hereunder :</p> <p><b><u>Electrostatic Precipitator (ESPs):</u></b></p> <p><b>DRI :</b> Common Stack 1 attached to ESP connected to Kiln I &amp; II.  Common Stack 2 attached to ESP connected to Kiln III &amp; IV.</p> <p><b>Pellet:</b> Stack 3 attached to ESP connected to TG of Pellet</p> <p><b><u>Bag Filters</u></b> / Gas Cleaning Plant (GCP) installed – 15 nos to capture dust laden fume as under:.</p> <p><b>DRI: GCP / Bag Filters : 6 nos.</b></p> <ul style="list-style-type: none"> <li>(1) Cooler Discharge 1 &amp; 2</li> <li>(2) Cooler Discharge 3 &amp; 4</li> <li>(3) Injection Coal Circuit for Kiln no. 1 &amp; 2</li> <li>(4) Injection Coal Circuit for Kiln 3 &amp; 4</li> <li>(5) Production House - 2 Nos.</li> </ul> <p><b>Pellet: GCP / Bag filter : 8 nos.</b></p> <ul style="list-style-type: none"> <li>(1) Flux Grinding: 1 No. (2) MTM: 1 No.</li> <li>(3) PCI Grinding mill: 2 No. (4) PGP (Coal Crusher): 1 No.</li> </ul>

	<p>(5)Bento Storage Bin ( Burdening building) : 1 No (6)Lime storage Bin ( Burdening building) : 1 No (7) TG coal bin : 1 No</p> <p><b>SMS: GCP / Bag filter: 1 nos.</b></p> <p>(1) Induction Furnace No. 1 &amp; 2 common (2) Induction Furnace No. 3.</p> <p><b>Pneumatic Dust Handling:</b> Pneumatic Dust handling system (5 Nos) with closed circuits are arranged to transfer the dust from the hoppers of the ESPs and Bag Filters to dedicated collecting bin as detailed hereunder:</p> <p><b>DRI:</b> Connected to ESP I &amp; II. – 1 No. Connected to ESP III &amp; IV- 1 No.</p> <p><b>Pellet:</b> Connected to ESP &amp; Multi-cyclone: 1 No. Connected to Flux Grinder &amp; Bag Filters: 1 No.</p> <p><b>Water Sprinkling Arrangement:</b> Fixed Water sprinklers: 156 nos. Mobile Water Sprinklers: 3 Nos. (5 KL, 6 KL and 12 KL) Dry Foggers: 17 Nos.</p> <ul style="list-style-type: none"><li>• Online Stack monitoring devices for PM, CO and SO<sub>2</sub> have been installed in all ESP stacks of DRI &amp; Pellet plant since Sept'2014 and transmission of DATA to SPCB as well as CPCB Server is being</li></ul>
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		<p>carried out with Remote calibration facility.</p> <ul style="list-style-type: none"> <li>Two nos. online and real time CO monitoring stations have been installed at ESP Stacks of DRI I&amp;II and III &amp; IV.</li> <li>In-house “Environment Management Cell” functions in routine manner to maintain &amp; upkeep of all PCEs with weekly measurement through Environment Score Card System and best environment caring unit is being awarded in the review meeting conducted every month.</li> </ul>
ii.	As proposed, Electrostatic Precipitator (ESP) shall be provided to Sinter plant, WHRB, CFBC, DRI plants and dust catcher followed by venture scrubbers to blast furnace to control PM levels within 50 mg/Nm <sup>3</sup> . Fume extraction system shall be provided to induction furnaces to control the emissions within the prescribed standards.	<ul style="list-style-type: none"> <li>Detail status of plant facilities in Operation, dropped is furnished herewith as <b>Annexure-2</b>.</li> <li>However, as stated above in point no. i, the existing plant facilities are running effectively under prescribed emission standard.</li> <li>The Third Party Inspection report is enclosed as <b>Annexure-‘3’</b> herewith for your kind reference please.</li> </ul>
iii.	The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No.826 (E) dated 16 <sup>th</sup> November, 2009 shall be followed.	<ul style="list-style-type: none"> <li>Ambient Air Quality monitoring is being carried out by NABL certified third party to ensure about the quality of ambient air. It is evident from the report enclosed as <b>Annexure 3</b>, the ambient air quality is within the prescribed standard of SPCB, Odisha.</li> </ul>
iv.	Gaseous emission levels including secondary fugitive emission from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/Code of practice issued by the CPCB shall be followed. New standards for the sponge iron plant issued by the Ministry vide G.S.R. 414(E) dated 30 <sup>th</sup>	<ul style="list-style-type: none"> <li>The Flue Gas Emission and Fugitive emission from potential dust/gas generation points are under control with effective PCEs. Periodical health check up of equipment and third party monitoring of effectiveness is being carried out to ensure and keep the fugitive emission well below the stipulated standard.</li> </ul>

	May, 2008 should be followed.													
v.	Hot gases from DRI kiln shall be passed through Dust Settling Chamber (DSC) to remove coarse solids and After Burning Chamber (ABC) to burn CO completely and used in waste heat recovery boiler (WHRB). The gas then shall be cleaned in ESP before leaving out into the atmosphere through ID fan and stack.	<ul style="list-style-type: none"> <li>• Low ash coal (16-22%) is used in DRI kilns</li> <li>• All 4 nos. DRI Kilns are equipped with ABC for complete combustion of CO &amp; DSC is well.</li> <li>• Since DSC is connected to ESP ultimate discharge satisfy permissible norms.</li> </ul>												
vi.	Total water requirement shall not exceed 7,920 m <sup>3</sup> /d. Efforts shall further be made to use maximum water from the rain water harvesting sources. Use of air cooled condensers shall be explored the closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly. All the effluent should be treated and used for ash handling, dust suppression and green belt development. No effluent shall be discharged and 'Zero' discharge shall be adopted. Sanitary sewage should be treated in septic tank followed by soak pit.	<ul style="list-style-type: none"> <li>• Around 300 m<sup>3</sup>/day make up water is in use for operation of existing plant facilities.</li> <li>• Instead of GCP, we are using recuperator to reduce the use of water.</li> <li>• The water is recycled and reused in cooling tower and Zero discharge principle is followed.</li> <li>• The Domestic Waste water is being treated through STP and the safe water is used for plantation and road sprinkling.</li> <li>• Water consumption measures have been adopted to minimize and conserve water after valuable recommendation/suggestion of CII-Triveni Water Institute, New Delhi in Feb' 2021 and National Productive Council, BBSR during Water Audit in October 2023.</li> </ul>												
vii.	Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.	<ul style="list-style-type: none"> <li>• Six nos. of Rain Water harvesting structure is established as detailed hereunder.</li> </ul> <table> <tbody> <tr> <td>RWH Pond 1</td> <td>=</td> <td>43 m x 20 m x 5 m.</td> </tr> <tr> <td>RWH Pond 2</td> <td>=</td> <td>50m x 20m x 5m.</td> </tr> <tr> <td>RWH Pond 3</td> <td>=</td> <td>21m x 20m x 4.2 m</td> </tr> <tr> <td>RWH Pond 4</td> <td>=</td> <td>48m x 20m x 4m</td> </tr> </tbody> </table>	RWH Pond 1	=	43 m x 20 m x 5 m.	RWH Pond 2	=	50m x 20m x 5m.	RWH Pond 3	=	21m x 20m x 4.2 m	RWH Pond 4	=	48m x 20m x 4m
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		<p>RWH Pond 5(A) = 72 m x 20m x 5m  RWH Pond 5 = 72m x 20 m x 5m  RWH Pond 6 = 60m x 40 m x 4m</p> <ul style="list-style-type: none"> <li>Clarifier of 15 KLD capacity is installed to treat contaminated Run-off water has been installed at a 3-chambered impervious storage tanks inside the premises.</li> <li>Natural percolation / ground water recharging is being carried out through RWH Ponds.</li> <li>The water so harvested is used in cooling, cleaning and sprinkling on the road as well as for watering the plants.</li> </ul>
viii.	Regular monitoring of influent and effluent surface, sub-surface and ground water (including chromite) should be ensured and treated wastewater should meet the norms prescribed by the State Pollution Control Board or described under the E (P) Act whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB.	<ul style="list-style-type: none"> <li>Monitoring of ground water and domestic waste water is being conducted in every alternate month (6 times in a year) by certified expert agency.</li> <li>Copies of such monitoring reports April '24, June '24 and August 24 are enclosed herewith as <b>Annexure-3</b>.</li> <li>No adverse impact on ground water is noticed so far.</li> </ul>
ix.	This water consumption shall not exceed as per the standard prescribed for the steel plants.	<ul style="list-style-type: none"> <li>Water consumed in our steel unit is within the prescribed standard.</li> <li>Quantum of consumption is also as per the Environmental Clearance.</li> <li>All the Bore Wells have been fitted with digital flow meters with telemetry system to record the consumption.</li> </ul>
x.	All the coal fines, char from DRI plant shall be utilized in CFBC boiler	<ul style="list-style-type: none"> <li>Char of 25% FC from DRI plant is being stored separately in the</li> </ul>

	<p>of power plant and no char shall be used for briquette making or disposed off anywhere else. CFBC boiler shall be installed simultaneously along with the DRI plant to ensure full utilization of char from the beginning. All the blast furnace (BF) slag shall be provided to the cement manufacturers. Scrap shall be used in steel melting shop (SMS) and SMS slag and kiln accretions shall be properly utilized. All the other solid waste including broken refractory mass shall be properly disposed off in environment-friendly manner.</p>
xi.	<p>Tailings from beneficiation plant and sponge iron kiln accretion can be mixed and made into bricks etc.</p>
xii.	<p>Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003 and 2009.</p>

xiii.	Vehicular pollution due to transportation of raw material and finished products shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.	<ul style="list-style-type: none"><li>• 156 nos. high speed water sprinklers installed all along the internal roads in the plant premises and are functioning effectively.</li><li>• Two types of Water sprinklers Rotary &amp; Static have been provided at the loading and unloading points to suppress air borne dust.</li><li>• Loaded trucks are properly covered during movement and are being checked by the security department sincerely.</li><li>• Three nos. water tankers are engaged to sprinkle water on the approach road and inside the premises.</li><li>• Mechanical Road Sweeping machine is engaged to clean the internal road in regular intervals.</li></ul>
xiv.	Transportation of raw coal during the initial phase shall be by 40-T mechanically covered or tarpaulin covered trucks from the coalmines to the washery. The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site(s) within sheds/stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored minerals do not catch fire.	<ul style="list-style-type: none"><li>• Coal loaded trucks move with proper tarpoline cover.</li><li>• Coal unloading / handling is done mechanically at designated stack yard and it is being stored under covered shed with side walls of adequate height.</li><li>• Water spray arrangement is there at stock yard to suppress ground dust.</li><li>• Care &amp; caution is taken to avert fire hazards in coal stock yard.</li><li>• Well equipped Fire tender is available in plant premises to deal with unforceable situation.</li></ul>

xv.	<p>Hoppers of the coal crushing unit at the crushing shed and washery unit shall be fitted with high efficiency bag filters/Dust extractors and mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of belt conveyor systems which shall be closed and from transportation roads.</p>	<ul style="list-style-type: none"> <li>• Coal washery Project has been dropped.</li> <li>• Ground hopper for Coal crushing unit is equipped with dry Fog system to suppress the dust generated during Coal feeding.</li> <li>• Bag-filters are provided for coal crushing units.</li> <li>• All the belt conveyors are covered with Canopy to arrest emission during movement of Coal by belt.</li> </ul>
xvi.	<p>All internal roads shall be black topped. The roads shall be regularly cleaned with mechanical sweepers. A 3-tier avenue plantation using native species shall be developed along the roads. Facilities for parking of trucks carrying raw coal from the linked coalmines shall be created within the Unit.</p>	<ul style="list-style-type: none"> <li>• All Internal roads connecting different production units within the plant premises are concreted and are being cleaned as and when required.</li> <li>• Avenue plantations as directed are undertaken along the side of internal road and the vacant space is completed.</li> <li>• 3-tier plantation norms at some part of plant area all along the boundary wall strictly could not be maintained because of narrow size of land width to match with the plant layout. However, we are in the process in increasing plantation in nos which would be capable of taking care of Carbon Footprint target. The Plantation details is provided herewith in <b>Annexure-4</b> for your reference.</li> <li>• Parking space within factory premises is earmarked to facilitate/ regulate movement.</li> <li>• The wheel washing system has been installed &amp; in operation after Weigh Bridge before the main gate to clean the trucks/tippers</li> </ul>

		moving out of the premises.
xvii.	The washery unit shall be a zero-discharge facility and no wastewater shall be discharged from the washery into the drains/natural watercourses. Recycled water shall be used for development and maintenance of green belt and in dust suppression from plant operations.	<ul style="list-style-type: none"> <li>There is no Coal washery in the Project as yet.</li> <li>Presently higher grade coal/mailings are used.</li> </ul>
xviii.	The tailing pond/slime pond shall be lined with impervious lining.	<ul style="list-style-type: none"> <li>No tailing pond/ slim pond is envisaged in the project.</li> </ul>
xix.	The ground water quality around the tailing pond/slime pond shall be monitored regularly and records maintained.	<ul style="list-style-type: none"> <li>No tailing pond/ slim pond is envisaged in the project.</li> <li>Required parameters of ground water from different locations in the plant premise are being tested by certified agency twice a year.</li> <li>No adverse impact has been noticed so far due to our plant activity.</li> <li>Copies of Monitoring reports are enclosed in <b>Annexure-3</b> for your kind perusal and record.</li> </ul>
xx.	The garland drain shall be constructed around the tailing/slime pond.	<ul style="list-style-type: none"> <li>No tailing / slime pond is envisaged in the project.</li> </ul>
xxi.	The decanted water from the tailing/slime pond shall be re-circulated and there should be zero discharge from the slime/tailing pond.	<ul style="list-style-type: none"> <li>Not required since there is no tailing/slime pond.</li> </ul>
xxii.	The ground water quality around the tailing/slime pond shall be monitored regularly. The monitoring network shall be designed in consultation with State Ground Water Board/Central Ground Water Authority. There shall be at least one monitoring station between the tailing/slime pond and the river.	<ul style="list-style-type: none"> <li>As there is no tailing / slime pond, so there is no need of regular monitoring of ground water for the purpose mentioned in the condition. Besides, ore beneficiation is not in operation for viability reason.</li> </ul>

xxiii	<p>Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste should be submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB.</p>	<ul style="list-style-type: none"><li>• Solid wastes are segregated depending upon their characteristic and are managed in environment friendly manner.</li><li>• These are handled mechanically as per the requirement</li><li>• The fine dusts collected from ESP, Bag Filter etc are transported to dedicated stock bins through pneumatic conveying systems</li><li>• The solid wastes generated from various sources are being disposed off as per the conditions stipulated in the Consent Order of SPCB and annual environmental statement in Form-V is being submitted every year.</li><li>• The NABL approved Agency (Third Party) namely M/s Visiontek Consultancy Services Pvt. Ltd. Bhubaneswar is engaged by the company who undertakes the leachability test year on yearly basis which is duly submitted to your esteemed office and enclosed as <b>Annexure-3</b>.</li></ul>
xxiv	<p>Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB within 3 months of issue of environmental clearances letter.</p>	<ul style="list-style-type: none"><li>• Already submitted along with our earlier six-monthly return dtd. 29.11.2013.</li></ul>
xxv.	<p>As proposed, green belt shall be developed in 33% of plant area as per the CPCB guidelines in consultation with the DFO.</p>	<ul style="list-style-type: none"><li>• Green belt development is completed covering about 34% of plant area.</li><li>• Plantations are also made in nearby villages in the area available/ suitable for the purpose.</li><li>• Around 29271 trees are planted over 26.02 Acres inside the plant</li></ul>

		<p>premises with overall survival rate of 78%.</p> <ul style="list-style-type: none"> <li>• The details of Green belt development is attached herewith as <b>Annexure-‘4’</b>.</li> </ul>
xxvi	All the recommendations made in the charter on Corporate Responsibility for Environmental Protection (CREP) for the Steel Plants should be implemented.	<ul style="list-style-type: none"> <li>• The CREP report was submitted earlier and is enclosed and marked as <b>Annexure-‘7’</b>, for your information and record please.</li> </ul>
xxvii	All the commitments made to the Public Hearing / Public Consultation meeting held on 23 <sup>rd</sup> March, 2012 should be satisfactory implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Bhubaneswar.	<ul style="list-style-type: none"> <li>• The status of action taken up to Sept'2024 towards the commitments made during Public Hearing / Public Consultation meeting held on 23<sup>rd</sup> March'2012 is enclosed as <b>Annexure-‘5’</b>.</li> </ul>
xxviii.	At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment (ESC) based on Public Hearing issues and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhubaneswar. Implementation of such program should be ensured accordingly in a time bound manner.	<ul style="list-style-type: none"> <li>• Community developmental works are taken up in consultation with the District Administration, Keonjhar/Local Body.</li> <li>• Information regarding works under taken along with total expenses incurred as on Sept'2024 is furnished herewith as <b>Annexure ‘6’</b>.</li> </ul>
xxix.	Rehabilitation and Resettlement Plan for the project affected population including tribal's, if any shall be implemented as per the policy of the State Govt. in consultation with the State Govt. of Odisha. Compensation paid in any case should not be less than the norms prescribed under the National Resettlement and Rehabilitation Policy, 2007.	<ul style="list-style-type: none"> <li>• There was no displacement of any family or homestead land made for the project.</li> <li>• Land has been acquired through State Govt. Agency i.e., IDCO.</li> <li>• Land Oustees are provided with job or ancillary services as per their choice &amp; competency.</li> </ul>

xxx.	<p>The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.</p>	<ul style="list-style-type: none"> <li>• The temporary house provided during construction of the project stage are removed.</li> <li>• The existing project / plant are equipped with sufficient nos. of toilets, restroom etc. as per plant lay out approved by the Deptt. of Factories &amp; Boilers. Hence, no such mobile / temporary infrastructure is required.</li> <li>• All most all construction labourers were from surrounding villages. Therefore, provision of infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP etc. were not required.</li> <li>• The unit has no female worker hence crèche is not required at this stage.</li> </ul>
xxxi.	<p>The company shall submit within three months their policy towards Corporate Environment Responsibility which should inter-alia address (i) Standard operating process/procedure to being into focus any infringement/ deviation/ violation of environment or forest norms/ conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.</p>	<ul style="list-style-type: none"> <li>• The Environment Policy and Env. Management Cell is enclosed and as <b>Annexure-‘8’</b> for your reference.</li> <li>• Environmental issues are taken care of for ensuring compliances of necessary EC conditions.</li> </ul>

**B. GENERAL CONDITIONS:**

<b>Sl. No.</b>	<b>General Conditions</b>	<b>Compliance Status</b>
i.	The project authorities must strictly adhere to the stipulations made by the Orissa State Pollution Control Board and the State Government.	<ul style="list-style-type: none"><li>• All the conditions stipulated in Consent to Operate are being followed and we are committed to comply the conditions raised by OSPCB and state government time to time.</li><li>• All units are operating with CTO from SPCB valid up to 31.03.2025.</li></ul>
ii.	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	<ul style="list-style-type: none"><li>• Standard ToR was granted by MoEF &amp; CC on 03.08.2021 and subsequently ToR amended on 16.11.2021 &amp; 23.10.2023 for grant of EC for expansion projects vide initial proposal no. IA/OR/IND/220161/2021.</li><li>• Relying on Ministry's OM Dt.07.07.2021 containing SOP, regularization of permissible project work prior to EC, Civil foundation (about 25%) of DRI 350 TPD and connected CPP were undertaken on the preapproved area of earlier EC Dt.10.10.2012.</li><li>• Public supported the expansion project in PH on 05.04.2023.</li><li>• Based on suo-moto intimation of PP about prior activity to MoEF &amp; CC, legal action was initiated by the Collector, Keonjhar before CJM Court vide 2(c) C.C. Case No. 33/2024 on 07.03.2024, who passed final order with penalty of Rs.1,00,000/- (One Lac) only and PP has already complied the Order dt.21.10.2024 (Annexure-11).</li></ul>

		<ul style="list-style-type: none"> <li>Final EIA and EMP Report containing Remediation Plan and Community Augmentation Plan is ready for uploading but kept on hold due to notification dt.08.01.2024 of MoEF &amp; CC intimating the Stay Order on operation of MoEF Notification Dt.07.07.2021 and 28.01.2022 by Hon'ble Supreme Court of India on 02.01.2024.</li> </ul>
iii.	The gaseous emissions from various process units shall confirm to the load/mass based standards notified by the Ministry on 19 <sup>th</sup> May, 1993 and standards prescribed from time to time. The State Pollution Control Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.	<ul style="list-style-type: none"> <li>Conditions noted and shall be complied as per requirement.</li> </ul>
iv.	At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of PM10, SO <sub>2</sub> and NO <sub>x</sub> are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and the SPCB/CPCB once in six months.	<ul style="list-style-type: none"> <li>Periodical monitoring is being conducted by SPCB.</li> <li>As suggested bi-monthly monitoring is being carried out by the third party agency engaged by the company. The monitoring reports for the month of April '24, June '24 and August '24 are enclosed herewith as <b>Annexure-3</b>.</li> </ul>
v.	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall confirm to the standards prescribed under EPA Rules, 1989 viz.75 dBA	<ul style="list-style-type: none"> <li>Necessary steps have been taken to maintain the noise level within limit in and around the plant.</li> <li>Massive wall side plantation has been done to restrict the noise if any within the plant premise.</li> <li>Acoustic enclosures are provided to the DG Sets.</li> </ul>

	(daytime) and 70 dBA (night time).	<ul style="list-style-type: none"> <li>Wherever applicable, lubrication of noise generating parts is being done regularly.</li> <li>The reports of Noise level monitoring conducted on Apr'24, Jun'24 and Aug'24 are enclosed herewith as <b>Annexure -'3'</b> for your reference &amp; record.</li> </ul>
vi.	Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.	<ul style="list-style-type: none"> <li>To ensure occupational health status, periodical Health Check up of all employees and workers in Form -31A prescribed under Factories Act is being carried out every year.</li> <li>The new entrants are also undergoing pre-employment health check up to ensure the health condition before employment and records are maintained regularly.</li> </ul>
vii.	The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water level.	<ul style="list-style-type: none"> <li>Rain water harvesting infrastructure has been developed and maintained to support water requirement in lean season.</li> <li>One reservoir is provided with HDPE Liner to accommodate the contaminated runoff water for subsequent treatment and reuse.</li> <li>The contaminated surface run-off water is being stored in an impervious pit and HDPE Liner pond and subsequently treated through clarifier in three-staged-operation to get clear water for further use.</li> <li>6 nos. of RWH ponds are there to store the runoff water through separate drains for further use in the plant.</li> </ul>
viii.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP	The PP has complied with all environment protection measures as per the commitments made during the public hearing on 23.03.2012 for

	<p>report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.</p>	<p>the EC granted on 10.10.2012 along with the socio-economic developmental activities as specified in Annexure- 5 &amp; 6. The Hon'ble Ministry is also duly informed of by way of periodical returns.</p>
ix.	<p>Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bhubaneswar. The funds so provided shall not be diverted for any other purpose.</p>	<ul style="list-style-type: none"><li>• Pollution control measures as per the conditions of EC and the Consent to Operate Order of the State Govt. (SPCB) has been implemented in plant.</li><li>• The Regional Office of MOEF in Bhubaneswar has also been made apprised of the action taken by us so far regularly.</li><li>• The online emission monitoring systems have been installed in the chimneys since Aug'2014 and there is the system of auto transmission of all such data to SPCB &amp; CPCB server regularly.</li><li>• Estimated amount is kept reserve to meet the recurring expenditure for maintenance of Pollution control device and for the upkeep of proper environmental condition.</li></ul>
x.	<p>A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad /Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.</p>	<ul style="list-style-type: none"><li>• EC copies are provided to the jurisdictional local bodies namely, Sarpanch, Kaunrikala GP, Zilla Parishad &amp; DIC, Keonjhar in the year 2012.</li><li>• Website of the Company has been made functional w.e.f 20<sup>th</sup> May 2023 and the copy of the EC Dt.10.10.2012 is available in the company website.</li></ul>
xi.	<p>The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of</p>	<ul style="list-style-type: none"><li>• The status of the conditions is being complied in every Six-monthly report to MoEF and SPCB Bhubaneswar and is uploaded</li></ul>

	<p>monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF at Bhubaneswar. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM10, S0<sub>2</sub>, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.</p>	<p>in the Website.</p> <ul style="list-style-type: none"> <li>• Data transmission systems are installed for transferring the on-line emission data to the system of SPCB &amp; CPCB since 2014.</li> <li>• Digital display board has already been installed at the main gate which is reflecting the real-time data of all CEMS &amp; EQMS.</li> <li>• As per the circular of SPCB, Odisha, the Chimneys are installed with HD-IP Camera to monitor the emission level and the data is available online.</li> </ul>
xii.	<p>The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bhubaneswar/CPCB/SPCB shall monitor the stipulated conditions.</p>	<ul style="list-style-type: none"> <li>• Noted and it is being complied regularly.</li> </ul>
xiii.	<p>The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEF at Bhubaneswar by e-mail.</p>	<ul style="list-style-type: none"> <li>• It is submitted vide our letter dt. 27.09.2024 to all concerned and the same is available in your record.</li> <li>• This compliance status will be uploaded in Website, as advised.</li> </ul>
xiv.	<p>The project proponent shall inform the public that the project has</p>	<ul style="list-style-type: none"> <li>• Paper publication of the first EC dated 10/10/2012 was made in</li> </ul>

	<p>been accorded environmental clearances by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspaper that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Bhubaneswar.</p>	<p>Odiya daily news paper "The Pragatibadi" and in English Daily "The Pioneer" and the same was duly intimated to your good office vide our letter dtd.07.01.2013 and is enclosed as <b>Annexure- '9'</b>.</p>
xv.	<p>Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.</p>	<p>The documentary proof of Financial Closure of the project in the form of MoM of Consortium of lending banks dtd. 17.05.2012 was furnished earlier. However, the copy of said MoM supporting Financial Closure of the unit is re-submitted herewith as <b>Annexure -'10'</b>.</p>

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**MSP SPONGE IRON LTD.**  
Haldiajuna, Keonjhar, Odisha

**Project Profile (Existing & Dropped)**

**EC Ref. File No. 11011/ 116/2011-IA-II (I)**

**DT.10.10.2012**

SL. NO	UNIT	CONFIGURATIONS & CAPACITY AS APPROVED IN EXISTING EC	PLANT CONFIGURATION AS PER CTO 31.03.2023	ULTIMATE PRODUCITON CAPACITY AS PER CTO DT.31.03.2023	REMARKS
1	Iron Ore Beneficiation	10,00,000 TPA	1 x 10,00,000 TPA	10,00,000 TPA	Operating with Valid CTO no. 5119 Dt.31.03.2023 Commissioned
2	Coal Gasification	23,664 m <sup>3</sup> /hr	6 x 2850 M <sup>3</sup> / Hr.	17,1000 M <sup>3</sup> / Hr.	
5.	Iron Ore Pellet (Pellet)	2 x 6,00,000 TPA (12,00,000 TPA)	1 x 6,00,000 TPA	7,50,000 TPA	Production Enhancement under 7(ii) vide notification
6.	DRI Kilns (Sponge Iron)	2 x 50 TPD, 2 x 40 TPD & 1 x 350 TPD (1,59,000 TPA)	2 x 50 TPD & 2 x 40 TPD (54,000 TPA)	67,500 TPA	Dt.16.01.2020 has been granted vide CTO Order no. 14828 Dt.17.08.2022 of SPCB, Odisha with due Acknowledgement of MoEF & CC and subsequently main CTO is amended vide no.5119 Dt. 31.03.2023.
7.	Induction Furnaces & CCM (MS-Billet)	3 x 5T & 4 x 15T (2,64,000 TPA)	3 x 5T (50,400 TPA)	63,000 TPA	
6.	Rolling Mill (Hot Rolled Product)	42,000 TPA	2 Stand (42,000 TPA)	52,000 TPA	
7.	CPP (Power)	20 MW (CFBC-12MW) + (WHRB 8 MW)	---	---	
8.	Sinter Plant	4,16,000 TPA	---	---	Project Dropped due to want of Land & Fund
9.	MBF	2,00,000 TPA	---	---	
10.	Coal Beneficiation	6,00,000 TPA	---	---	

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# MONTHLY ANALYSIS REPORT (APRIL-2024)

ON  
ENVIRONMENTAL MONITORING  
AT



**M/s MSP SPONGE IRON LIMITED**  
**Vill : Haldiaguna, P.O. Gobardhan**  
**Dist : Keonjhar, Orissa-758013**

*Prepared by:-*

**VISIONTEK CONSULTANCY SERVICES PVT. LTD.**  
*(An Environ Engineering Consulting Cell)*

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## **METHODOLOGY OF ENVIRONMENTAL MONITORING STUDY**

### **1.0 INTRODUCTION :**

**M/s Visiontek Consultancy Services Pvt. Ltd.** to carry out the environmental monitoring for the **M/s MSP Sponge Iron Limited, Keonjhar**

Environmental monitoring was carried out at various locations in and around the plant premises. The Monitoring was carried out with respect to the qualities of Ambient Air, Stack Monitoring, and Ground Water & Domestic Waste Water & Noise Level Monitoring.

### **2.0 STUDY PERIOD:**

The monitoring was carried out to study the present environmental condition at the locations from **APRIL-2024**.

### **3.0 METHODOLOGY:**

The environmental monitoring was carried out as per the standard methodology of Bureau of Indian Standard (IS: 5182), American Public Health Association (APHA).

### **4.0 SELECTION OF MONITORING LOCATIONS:**

The location for Ambient Air Quality, Stack, Water (Ground Water & Domestic Water), and Noise Level has been selected by Clients representative.

#### **4.1 AMBIENT AIR QUALITY:**

The ambient air quality of the study region was monitored at four locations selected within the plant premises. The parameters monitored were Particulate Matter (size less than 10  $\mu\text{m}$  or  $\text{PM}_{10}$ ), Particulate matter (size less than 2.5  $\mu\text{m}$  or  $\text{PM}_{2.5}$ ), Sulphur di-oxide ( $\text{SO}_2$ ), Oxides of Nitrogen ( $\text{NO}_x$ ). Respirable Dust Sampler (APM 460BL) of ENVIROTECH make, FPS (APM ) of ENVIROTECH make used for monitoring of ambient air quality at all the identified



locations. The sampling method was carried out as per the guidelines for planning IS: 5182 (part 14): 2000. And the analysis methods are outlined in the table as shown below:

### **AMBIENT AIR QUALITY ANALYSIS METHOD**

<b>SL. NO.</b>	<b>PARAMETER</b>	<b>ANALYSIS METHOD</b>
1.	Particulate Matter (size less than 10 $\mu\text{m}$ or $\text{PM}_{10}$ ), $\mu\text{g}/\text{m}^3$	Gravimetric method
2.	Particulate matter (size less than 2.5 $\mu\text{m}$ or $\text{PM}_{2.5}$ ), $\mu\text{g}/\text{m}^3$	Gravimetric method
3.	Sulphur di-oxide ( $\text{SO}_2$ ), $\mu\text{g}/\text{m}^3$	Improved west & Geake method
4.	Oxides of Nitrogen ( $\text{NO}_x$ ) $\mu\text{g}/\text{m}^3$	Jacob and Hochheiser Modified method
5.	Carbon Monoxide as CO $\text{mg}/\text{m}^3$	NDIR Spectroscopy

#### **4.1.1 AMBIENT AIR QUALITY SAMPLING STATIONS:**

Details of the sampling locations are given below.

<b>Field ID</b>	<b>Location</b>
<b>AAQMS-1</b>	Oxygen Plant
<b>AAQMS-2</b>	Near plant Boundary at New weigh Bridge (E)
<b>AAQMS-3</b>	Near New Colony (W)
<b>AAQMS-4</b>	Near Universal contractor Office (E)

The Detailed Air Quality is given in the **Annexure-1**.

#### **4.2 WATER QUALITY :**

Water quality monitoring was carried out at two locations of STP Water. Samples were collected manually during study period. Considering several possibilities of interference the polytetrafluoroethylene (PTFE) samples bottles were used. These bottles were sterilized properly before being used for water collection.

The methodology for sample collection, preservation and analysis was as per Standard methods for the Examination of Water and Wastewater, 23<sup>RD</sup> Edition, APHA 2017.



**4.2.1 EFFLUENT WATER SAMPLING LOCATIONS:**

Details of the sampling locations are given below:

Field ID	Location
EW-1	ETP Near PGP –Inlet
EW-2	ETP Near PGP –Outlet

The Detailed Effluent Water Analysis report is mentioned in **Annexure-2**

**4.2.2 DOMESTIC SEWAGE WATER SAMPLING LOCATIONS:**

Details of the sampling locations are given below:

Field ID	Location
STP-1	STP Near Main Gate –Inlet
STP-2	STP Near Main Gate –Outlet

The Detailed STP Water Analysis report is mentioned in **Annexure-3**

**4.2.3 GROUND WATER SAMPLING LOCATIONS:**

Details of the sampling locations are given below:

Field ID	Location
GW-1	Water Collected from Near to Canteen
GW-2	Water Collected From Old Filter Press

The Detailed Ground Water Analysis report is mentioned in **Annexure-4**.

**4.3 EMISSIONS FROM STATIONARY SOURCES:**

The stationary source emission of the study region was monitored at eight locations selected within the plant premises. The parameters monitored were Particulate Matter using sampler of Vayubodhan Stack Sampler VSS1, Temperature, Velocity, Flow rate, Particulate Matter (PM), Carbon Monoxide ( CO) of stationary source emission of the identified location. Sampling was done as per guidelines of Bureau of Indian Standard. And the analysis methods are outlined in the table as shown below:

**STATIONARY EMISSION ANALYSIS METHOD**

SL. NO.	PARAMETER	ANALYSIS METHOD
1.	Stack Temperature	Stack Sampler (IS:11255 Part 3:2008)
2.	Velocity	Stack Sampler (IS:11255 Part 3:2008)
3.	Particulate Matter as PM	Gravimetric (IS: 11255 Part 1:1985)



4.	Sulphur dioxide as SO <sub>2</sub>	Improved West & Geake Method ( IS 5182 (Part-2) RA2006)
5.	Oxides of Nitrogen as NO <sub>X</sub>	Modified Jacob & Hochheiser Method IS 5182 (Part-6) RA2006

#### **4.3.1 STATIONARY SOURCE EMISSION SAMPLING STATIONS**

Detail of the sampling location is given below.

<b>Field ID</b>	<b>Station</b>
<b>ST-1</b>	<b>Stack attached MTM, Pellet Division</b>
<b>ST-2</b>	<b>Stack attached to Cooler Discharge DRI,I &amp; II</b>
<b>ST-3</b>	<b>Stack attached to Induction Furnace (SMS Area)</b>

The Detailed Stationary Source Emission Report is given in the **Annexure-5**.

#### **4.4. NOISE LEVEL MONITORING:**

Noise Levels were recorded by Digital Sound Level Meter of LUTRON make at Four locations within the plant premises. Monitoring was carried out once at each location during the study period for day time and night time. According to CPCB (Noise Pollution (Regulation & Control) rules, 2000 day time is considered from 6.00 am to 10.00 pm and night time is considered from 10.00 pm to 6.00 am

Locations of Noise level monitoring stations are as follows:

#### **4.3.1 NOISE LEVEL SAMPLING STATIONS:**

<b>Field ID</b>	<b>Location ID</b>
<b>N-1</b>	<b>Near Rotary Kiln 1&amp;2</b>
<b>N-2</b>	<b>Near TG Building</b>
<b>N-3</b>	<b>Near Rolling Mill Area</b>
<b>N-4</b>	<b>Near Induction Furnace</b>

The Detailed Noise Measurement Data is given in **Annexure-6**.

#### **4.5. FUGITIVE EMISSION SAMPLING STATIONS:**

<b>Field ID</b>	<b>Location ID</b>
<b>F-1</b>	<b>Near DRI Office</b>
<b>F-2</b>	<b>Near Thickner Area, Beneficiation</b>
<b>F-3</b>	<b>Rolling Mill Area</b>

The Detailed Noise Measurement Data is given in **Annexure-7**.



**Annexure-1****AMBIENT AIR QUALITY MONITORING REPORT**



# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Certified for : ISO 9001:2015, ISO 14001:2015, ISO 45001:2018

Accredited by : NABET-A Grade, MOEF & CC/CPCB & SPCB-A Grade

- Infrastructure Engineering
- Water Resource Management
- Environmental & Social Study

- Surface & Sub-Surface Investigation
- Quality Control & Project Management
- Renewable Energy

- Agricultural Development
- Information Technology
- Public Health Engineering

- Mine Planning & Design
- Mineral/Sub-Soil Exploration
- Waste Management Services

<b>Laboratory Services</b>
Environment Lab
Food Lab
Material Lab
Soil Lab
Mineral Lab
&
Microbiology Lab

Ref: Envlab/24-25/TR-01723

Date:06.05.2024

## AMBIENT AIR QUALITY MONITORING REPORT APRIL-2024

1. Name of Client :M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : AAQ1: Oxygen Plant
3. Date of Sampling : 27.04.2024
4. Date of Analysis : 29.04.2024 TO 02.05.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Analysis Result	Testing Methods	NAAQ Standard
		AAQ1		
Particulate matter (size less than 10 $\mu\text{m}$ ) or PM <sub>10</sub>	$\mu\text{g}/\text{m}^3$	61.9	Gravimetric method	100
Particulate matter (size less than 10 $\mu\text{m}$ ) or PM <sub>2.5</sub>	$\mu\text{g}/\text{m}^3$	33.4	Gravimetric method	60
Sulphur dioxide as SO <sub>2</sub>	$\mu\text{g}/\text{m}^3$	24.2	Improved West and Geake method	80
Oxides of Nitrogen as NO <sub>x</sub>	$\mu\text{g}/\text{m}^3$	28.9	Modified Jacob & Hochheiser (Na-Arsenite)	80
Carbon Monoxide as CO	$\text{mg}/\text{m}^3$	0.83	NDIR Spectroscopy	4
Ammonia as NH <sub>3</sub>	$\mu\text{g}/\text{m}^3$	37.5	Indo Phenol Blue Method	400





Ref :Envlab/24-25/TR-01724

Date :06.05.2024

## AMBIENT AIR QUALITY MONITORING REPORT APRIL-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : AAQ-2: Near plant Boundary at New weigh Bridge (E)
3. Date of Sampling : 27.04.2024
4. Date of Analysis : 29.04.2024 TO 02.05.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Analysis Result	Testing Methods	NAAQ Standard
		AAQ-2		
Particulate matter (size less than 10 $\mu\text{m}$ ) or PM <sub>10</sub>	$\mu\text{g}/\text{m}^3$	68.8	Gravimetric method	100
Particulate matter (size less than 2.5 $\mu\text{m}$ ) or PM <sub>2.5</sub>	$\mu\text{g}/\text{m}^3$	34.1	Gravimetric method	60
Sulphur dioxide as SO <sub>2</sub>	$\mu\text{g}/\text{m}^3$	26.1	Improved West and Geake method	80
Oxides of Nitrogen as NO <sub>x</sub>	$\mu\text{g}/\text{m}^3$	30.9	Modified Jacob & Hochheiser (Na-Arsenite)	80
Carbon Monoxide as CO	$\text{mg}/\text{m}^3$	0.75	NDIR Spectroscopy	4
Ammonia as NH <sub>3</sub>	$\mu\text{g}/\text{m}^3$	38.2	Indo Phenol Blue Method	400

Reviewed By:



Approved By:



Ref: Envlab/24-25/TR-01725

Date: 06.05.2024

## AMBIENT AIR QUALITY MONITORING REPORT APRIL-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : AAQ-3: Near New Colony (W)
3. Date of Sampling : 27.04.2024
4. Date of Analysis : 29.04.2024 TO 02.05.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Analysis Result	Testing Methods	NAAQ Standard
		AAQ-3		
Particulate matter(size less than 10 $\mu\text{m}$ ) or PM <sub>10</sub>	$\mu\text{g}/\text{m}^3$	65.3	Gravimetric method	100
Particulate matter(size less than 10 $\mu\text{m}$ ) or PM <sub>2.5</sub>	$\mu\text{g}/\text{m}^3$	33.8	Gravimetric method	60
Sulphur dioxide as SO <sub>2</sub>	$\mu\text{g}/\text{m}^3$	23.6	Improved West and Geake method	80
Oxides of Nitrogen as NO <sub>x</sub>	$\mu\text{g}/\text{m}^3$	32.5	Modified Jacob & Hochheiser (Na-Arsenite)	80
Carbon Monoxide as CO	$\text{mg}/\text{m}^3$	0.81	NDIR Spectroscopy	4
Ammonia as NH <sub>3</sub>	$\mu\text{g}/\text{m}^3$	37.6	Indo Phenol Blue Method	400





# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Certified for : ISO 9001:2015, ISO 14001:2015, ISO 45001:2018

Accredited by : NABET-A Grade, MOEF & CC/CPCB & SPCB-A Grade

- Infrastructure Engineering
- Water Resource Management
- Environmental & Social Study

- Surface & Sub-Surface Investigation
- Quality Control & Project Management
- Renewable Energy

- Agricultural Development
- Information Technology
- Public Health Engineering

- Mine Planning & Design
- Mineral/Sub-Soil Exploration
- Waste Management Services

Laboratory Services
Environment Lab
Food Lab
Material Lab
Soil Lab
Mineral Lab
&
Microbiology Lab

Ref: Envlab/24-25/TR-01726

Date:06.05.2024

## AMBIENT AIR QUALITY MONITORING REPORT APRIL-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : AAQ-4:Near Universal contractor Office (E)
3. Date of Sampling : 27.04.2024
4. Date of Analysis : 29.04.2024 TO 02.05.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Analysis Result	Testing Methods	NAAQ Standard
		AAQ-4		
Particulate matter(size less than 10 $\mu\text{m}$ ) or PM <sub>10</sub>	$\mu\text{g}/\text{m}^3$	61.2	Gravimetric method	100
Particulate matter(size less than 10 $\mu\text{m}$ ) or PM <sub>2.5</sub>	$\mu\text{g}/\text{m}^3$	32.8	Gravimetric method	60
Sulphur dioxide as SO <sub>2</sub>	$\mu\text{g}/\text{m}^3$	22.6	Improved West and Geake method	80
Oxides of Nitrogen as NO <sub>x</sub>	$\mu\text{g}/\text{m}^3$	32.4	Modified Jacob & Hochheiser (Na-Arsenite)	80
Carbon Monoxide as CO	$\text{mg}/\text{m}^3$	0.44	NDIR Spectroscopy	4
Ammonia as NH <sub>3</sub>	$\mu\text{g}/\text{m}^3$	35.6	Indo Phenol Blue Method	400



Reviewed By



Approved By

**Annexure-2****WASTE WATER QUALITY MONITORING**  
**REPORT**



Ref: Envlab/24-25/TR-01733

Date:06.05.2024

## DOMESTIC SEWAGEWATER QUALITY ANALYSIS REPORT APRIL-2024

1. Name of Client :M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location :STP-1:STP near Main Gate –Inlet  
STP-2: STP near Main Gate –Outlet
3. Date of Sampling : 27.04.2024
4. Date of Analysis : 29.04.2024 TO 04.05.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

Sl No	Parameters	Unit	Standard for discharge of Effluent in (Inland Surface Water)	Testing Methods	Analysis Result	
					STP1	STP2
1.	pH Value at 250C	--	5.5-9.0	pH Meter APHA 23RD Ed,2017: 4500H+ B	6.93	7.24
2.	Total suspended solids as TSS	mg/l	100	Gravimetric Method APHA 23RD Ed,2017: 2540 D	188	56
3.	Biological Oxygen Demand as BOD	mg/l	30	Oxygen Depletion Method IS 3025(P-44): 1993, RA 2003	60	12
4.	Chemical Oxygen Demand as COD	mg/l	250	Open Reflux Method APHA 23RD Ed,2017: 5220 C	228	54
5.	Total Dissolved Solids as TDS	mg/l	---	Gravimetric Method APHA 23RD Ed,2017:2540 C	325	101



Reviewed By:



Approved By:



Ref: Envlab/24-25/TR-01734

Date: 06.05.2024

## EFFLUENT WATER QUALITY ANALYSIS REPORT APRIL-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : ETP1: ETP Near PGP –Inlet  
ETP2: ETP near PGP –Outlet
3. Date of Sampling : 27.04.2024
4. Date of Analysis : 29.04.2024 TO 04.05.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

Sl No.	Parameters	Unit	Standard for discharge of Effluent in (Inland Surface Water)	Testing Methods	Analysis Result	
					ETP1	ETP2
1	pH Value at 25°C	--	5.5-9.0	pH Meter APHA 23RD Ed,2017: 4500H+ B	6.85	7.31
2	Total suspended solids as TSS	mg/l	100	Gravimetric Method APHA 23 <sup>RD</sup> Ed,2017: 2540 D	184	48
3	Biological Oxygen Demand as BOD	mg/l	30	Oxygen Depletion Method IS 3025(P-44): 1993, RA 2003	80	26
4	Chemical Oxygen Demand as COD	mg/l	250	Open Reflux Method APHA 23 <sup>RD</sup> Ed,2017: 5220 C	258	64
5	Oil & Grease	mg/l	10.0	Gravimetric Method (Solvent Extraction) APHA 23 <sup>RD</sup> Ed,2017:5520-B	4.2	ND



**Annexure-3****GROUND WATER QUALITY MONITORING**  
**REPORT**



Ref :Envlab/24-25/TR-01731

Date :06.05.2024

## GROUND WATER QUALITY ANALYSIS REPORT APRIL-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : GW1: Near to Canteen
3. Date of Sampling :27.04.2024
4. Date of Analysis :29.04.2024 TO 04.05.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

L.No	Parameters	Unit	Testing Method	Standard as per	Analysis Result
				IS:10500,2012	
1	pH Value at 25°C	--	pH Meter APHA 23RD Ed,2017: 4500H+ B	6.5-8.5	7.27
2	Total Dissolved Solids	mg/l	Gravimetric Method APHA 23RD Ed,2017 2540 C	500	321
3	Total Hardness as CaCO <sub>3</sub>	mg/l	EDTA Titrimetric Method APHA 23RD Ed,2017: 2340 C	200	94
4	Fluoride as F	mg/l	Distillation followed by Spectrophotometric Method APHA 23RD Ed,2017: 4500F- C	1.0	0.036
5	Turbidity	NTU	Nephelometric Method APHA 23RD Ed,2017 :2130 B	5	1.6
6	Iron as Fe	mg/l	By AAS Method APHA 23RD Ed,2017: 3111, B	1.0	0.35
7	Nitrate as NO <sub>3</sub>	mg/l	By UV-Screen Method APHA 23RD Ed,2017: 4500 NO3- E	45	3.1
8	Sulphate as SO <sub>4</sub>	mg/l	Turbid metric Method APHA 23RD Ed,2017: 4500 SO42- E	200	8.8
9	Chromium as Cr <sup>+6</sup>	mg/l	Diphenyl Carbazide Method APHA 23RD Ed,2017: 3500Cr B	0.05	<0.05
10	Chloride as Cl	mg/l	Argentometric Method APHA 23RD Ed,2017: 4500Cl- B	250	31.9
11	Manganese as Mn	mg/l	Persulfate Method APHA 23RD Ed,2017: 3500Mn B	0.1	<0.005
12	Copper as Cu	mg/l	By AAS Method APHA 23RD Ed,2017: 3111 B	0.05	<0.05
13	Aluminum as Al	mg/l	AAS Method APHA 23RD Ed,2017: 3111 D	0.03	<0.001
14	Alkalinity as CaCO <sub>3</sub>	mg/l	Titration Method APHA 23RD Ed,2017:2320 B	200	50.3



Reviewed By:



Approved By:



Ref: Envlab/24-25/TR-01732

Date:06.05.2024

## GROUND WATER QUALITY ANALYSIS REPORT APRIL-2024

1. Name of Client :M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location :GW2: Old Filter Press
3. Date of Sampling :27.04.2024
4. Date of Analysis :29.04.2024 TO 04.05.2024
5. Sample Collected by :VCSPL Representative in presence of MSP Representative

L.No	Parameters	Unit	Testing Method	Standard as per	Analysis Result
				IS:10500,2012	
1	pH Value at 25°C	--	pH Meter APHA 23RD Ed,2017: 4500H+ B	6.5-8.5	7.3
2	Total Dissolved Solids	mg/l	Gravimetric Method APHA 23RD Ed,2017: 2540 C	500	296
3	Total Hardness as CaCO <sub>3</sub>	mg/l	EDTA Titrimetric Method APHA 23RD Ed,2017: 2340 C	200	82
4	Fluoride as F	mg/l	Distillation followed by Spectrophotometric Method APHA 23RD Ed,2017: 4500F- C	1.0	0.049
5	Turbidity	NTU	Nephelometric Method APHA 23RD Ed,2017: 2130 B	5	1.4
6	Iron as Fe	mg/l	By AAS Method APHA 23RD Ed,2017: 3111, B	1.0	0.37
7	Nitrate as NO <sub>3</sub>	mg/l	By UV-Screen Method APHA 23RD Ed,2017: 4500 NO3- E	45	2.4
8	Sulphate as SO <sub>4</sub>	mg/l	Turbid metric Method APHA 23RD Ed,2017: 4500 SO42- E	200	6.1
9	Chromium as Cr <sup>+6</sup>	mg/l	Diphenyl Carbazide Method APHA 23RD Ed,2017: 3500Cr B	0.05	< 0.05
10	Chloride as Cl	mg/l	Argentometric Method APHA 23RD Ed,2017: 4500Cl- B	250	30.5
11	Manganese as Mn	mg/l	Persulfate Method APHA 23RD Ed,2017: 3500Mn B	0.1	< 0.005
12	Copper as Cu	mg/l	By AAS Method APHA 23RD Ed,2017: 3111 B	0.05	< 0.05
13	Aluminum as Al	mg/l	AAS Method APHA 23RD Ed,2017: 3111 D	0.03	< 0.001
14	Alkalinity as CaCO <sub>3</sub>	mg/l	Titration Method APHA 23RD Ed,2017:2320 B	200	48.7



Reviewed By:



Approved By:

**Annexure-4****STACK MONITORING REPORT**



Ref: Envlab/24-25/TR-01727

Date:06.05.2024

## STATIONARY EMISSION MONITORING REPORT APRIL-2024

1. Name of Client : **M/s MSP SPONGE IRON LTD; KEONJHAR**
2. Sampling Location : **ST-1:Stack attached to MTM, Pellet Division**
3. Date of Sampling : **27.04.2024**
4. Date of Analysis : **29.04.2024 TO 02.05.2024**
5. Sample Collected by : **VCSPL Representative in presence of MSP Representative**

Parameters Analyzed	Unit	Standard as per CTO	Analysis Result
			ST-1
Stack Temperature	°C	--	80
Velocity of Flue Gas	m/sec	--	3.84
Concentration of Particulate Matter(PM)	mg/Nm <sup>3</sup>	100	43.2
Sulphur dioxide as SO <sub>2</sub>	mg/Nm <sup>3</sup>	--	46.5
Oxides of Nitrogen as NO <sub>X</sub>	mg/Nm <sup>3</sup>	--	60.8

Reviewed By:



Approved By:





Ref: Envlab/24-25/TR-01728

Date:06.05.2024

## STATIONARY EMISSION MONITORING REPORT APRIL-2024

1. Name of Client :M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location :ST2:Stack attached to Cooler Discharge DRI I & II
3. Date of Sampling :27.04.2024
4. Date of Analysis :29.04.2024 TO 02.05.2024
5. Sample Collected by: VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Standard as per CTO	Analysis Result
			ST-2
Stack Temperature	°C	--	72
Velocity of Flue Gas	m/sec	--	4.18
Concentration of Particulate Matter as PM	mg/Nm <sup>3</sup>	100	40.9
Sulphur dioxide as SO <sub>2</sub>	mg/Nm <sup>3</sup>	--	55.2
Oxides of Nitrogen as NO <sub>x</sub>	mg/Nm <sup>3</sup>	--	62.4

Reviewed By:



Approved By:





Ref: Envlab/24-25/TR-01729

Date:06.05.2024

## STATIONARY EMISSION MONITORING REPORT APRIL-2024

- |                        |   |
|------------------------|---|
| 1. Name of Client      | :M/s MSP SPONGE IRON LTD;KEONJHAR                       |
| 2. Sampling Location   | :ST3: Stack attached to Induction furnace (SMS Area)    |
| 3. Date of Sampling    | :27.04.2024   |
| 4. Date of Analysis    | :29.04.2024 TO 02.05.2024                               |
| 5. Sample Collected by | :VCSPL Representative in presence of MSP Representative |

Parameters Analyzed	Unit	Standard as per CTO	Analysis Result
			ST-2
Stack Temperature	°C	--	78
Velocity of Flue Gas	m/sec	--	4.21
Concentration of Particulate Matter as PM	mg/Nm <sup>3</sup>	100	38.6
Sulphur dioxide as SO <sub>2</sub>	mg/Nm <sup>3</sup>	--	54.2
Oxides of Nitrogen as NO <sub>X</sub>	mg/Nm <sup>3</sup>	--	64.1

Reviewed By:



Approved By:



**Annexure-5****NOISE MONITORING REPORT**



# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Certified for : ISO 9001:2015, ISO 14001:2015, ISO 45001:2018

Accredited by : NABET-A Grade, MOEF & CC/CPCB & SPCB-A Grade

- Infrastructure Engineering
- Water Resource Management
- Environmental & Social Study

- Surface & Sub-Surface Investigation
- Quality Control & Project Management
- Renewable Energy

- Agricultural Development
- Information Technology
- Public Health Engineering

- Mine Planning & Design
- Mineral/Sub-Soil Exploration
- Waste Management Services

Laboratory Services  
Environment Lab  
Food Lab  
Material Lab  
Soil Lab  
Mineral Lab  
&  
Microbiology Lab

Ref: Envlab/24-25/TR-01735

Date:06.05.2024

## NOISE MONITORING REPORT APRIL-2024

1. Name of Client :M/s MSP SPONGE IRON LTD; KEONJHAR
2. Date of Recording :27.04.2024
3. Monitored By : VCSPL Representative in presence of MSP Representative

Location ID	Location	Day time Equivalent	Night time Equivalent
		Noise Level in dB(A) Leq	
N-1	Near Rotary Kiln 1&2 , DRI	71.9	64.5
N-2	Near TG Building	70.8	61.0
N-3	Near Rolling Mill Area	68.6	59.7
N-4	Near Induction Furnace	71.3	64.2
Standard as per CPCB		75	70

Reviewed By:



Approved By:

**Annexure-6****FUGITIVE EMISSION MONITORING REPORT**



Ref: Envlab/24-25/TR-01730

Date:06.05.2024

## FUGITIVE EMISSION MONITORING REPORT APRIL-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sample Type : Fugitive Emission Monitoring
3. Date of Analysis : 29.04.2024
4. Sample Collected by : VCSPL Representative in presence of MSP Representative

SL. No.	Sampling Location	Date of sampling	Parameter	Unit	MoEF & CC Notification GSR 809(E) DT 04.10.2010	Analysis Result
1.	F1- Near DRI Office	20.02.2024	Suspended Particulate Matter	µg/m <sup>3</sup>	1200 µg/m <sup>3</sup>	572
2.	F2-Near Thickner Area, Beneficiation	20.02.2024	Suspended Particulate Matter	µg/m <sup>3</sup>	1200 µg/m <sup>3</sup>	581
3.	F3-Rolling Mill Area	20.02.2024	Suspended Particulate Matter	µg/m <sup>3</sup>	1200 µg/m <sup>3</sup>	586

Reviewed By:



Approved By:





# Visiontek Consultancy Services Pvt. Ltd

*(Committed For Better Environment)*

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ISO 9001: 2015  
ISO 14001: 2015  
ISO 45001:2018 (OH&S)  
ISO/IEC 17025:2017

# MONTHLY ANALYSIS REPORT

## (JUNE-2024)

ON  
ENVIRONMENTAL MONITORING  
AT



**M/s MSP SPONGE IRON LIMITED**  
**Vill : Haldiaguna, P.O. Gobardhan**  
**Dist : Keonjhar, Orissa-758013**

*Prepared by:-*

**VISIONTEK CONSULTANCY SERVICES PVT. LTD.**  
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## ANNEXURE

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## **METHODOLOGY OF ENVIRONMENTAL MONITORING STUDY**

### **1.0 INTRODUCTION :**

**M/s Visiontek Consultancy Services Pvt. Ltd.** to carry out the environmental monitoring for the **M/s MSP Sponge Iron Limited, Keonjhar**

Environmental monitoring was carried out at various locations in and around the plant premises. The Monitoring was carried out with respect to the qualities of Ambient Air, Stack Monitoring, and Ground Water & Domestic Waste Water & Noise Level Monitoring.

### **2.0 STUDY PERIOD:**

The monitoring was carried out to study the present environmental condition at the locations from **JUNE-2024**.

### **3.0 METHODOLOGY:**

The environmental monitoring was carried out as per the standard methodology of Bureau of Indian Standard (IS: 5182), American Public Health Association (APHA).

### **4.0 SELECTION OF MONITORING LOCATIONS:**

The location for Ambient Air Quality, Stack, Water (Ground Water & Domestic Water), and Noise Level has been selected by Clients representative.

#### **4.1 AMBIENT AIR QUALITY:**

The ambient air quality of the study region was monitored at four locations selected within the plant premises. The parameters monitored were Particulate Matter (size less than 10  $\mu\text{m}$  or  $\text{PM}_{10}$ ), Particulate matter (size less than 2.5  $\mu\text{m}$  or  $\text{PM}_{2.5}$ ), Sulphur di-oxide ( $\text{SO}_2$ ), Oxides of Nitrogen ( $\text{NO}_x$ ). Respirable Dust Sampler (APM 460BL) of ENVIROTECH make, FPS (APM ) of ENVIROTECH make used for monitoring of ambient air quality at all the identified



locations. The sampling method was carried out as per the guidelines for planning IS: 5182 (part 14): 2000. And the analysis methods are outlined in the table as shown below:

### **AMBIENT AIR QUALITY ANALYSIS METHOD**

<b>SL. NO.</b>	<b>PARAMETER</b>	<b>ANALYSIS METHOD</b>
1.	Particulate Matter (size less than 10 $\mu\text{m}$ or $\text{PM}_{10}$ ), $\mu\text{g}/\text{m}^3$	Gravimetric method
2.	Particulate matter (size less than 2.5 $\mu\text{m}$ or $\text{PM}_{2.5}$ ), $\mu\text{g}/\text{m}^3$	Gravimetric method
3.	Sulphur di-oxide ( $\text{SO}_2$ ), $\mu\text{g}/\text{m}^3$	Improved west & Geake method
4.	Oxides of Nitrogen ( $\text{NO}_x$ ) $\mu\text{g}/\text{m}^3$	Jacob and Hochheiser Modified method
5.	Carbon Monoxide as CO $\text{mg}/\text{m}^3$	NDIR Spectroscopy

#### **4.1.1 AMBIENT AIR QUALITY SAMPLING STATIONS:**

Details of the sampling locations are given below.

<b>Field ID</b>	<b>Location</b>
<b>AAQMS-1</b>	Oxygen Plant
<b>AAQMS-2</b>	Near plant Boundary at New weigh Bridge (E)
<b>AAQMS-3</b>	Near New Colony (W)
<b>AAQMS-4</b>	Near Universal contractor Office (E)

The Detailed Air Quality is given in the **Annexure-1**.

#### **4.2 WATER QUALITY :**

Water quality monitoring was carried out at two locations of STP Water. Samples were collected manually during study period. Considering several possibilities of interference the polytetrafluoroethylene (PTFE) samples bottles were used. These bottles were sterilized properly before being used for water collection.

The methodology for sample collection, preservation and analysis was as per Standard methods for the Examination of Water and Wastewater, 23<sup>RD</sup> Edition, APHA 2017.



**4.2.1 EFFLUENT WATER SAMPLING LOCATIONS:**

Details of the sampling locations are given below:

Field ID	Location
EW-1	ETP Near PGP –Inlet
EW-2	ETP Near PGP –Outlet

The Detailed Effluent Water Analysis report is mentioned in **Annexure-2**

**4.2.2 DOMESTIC SEWAGE WATER SAMPLING LOCATIONS:**

Details of the sampling locations are given below:

Field ID	Location
STP-1	STP Near Main Gate –Inlet
STP-2	STP Near Main Gate –Outlet

The Detailed STP Water Analysis report is mentioned in **Annexure-3**

**4.2.3 GROUND WATER SAMPLING LOCATIONS:**

Details of the sampling locations are given below:

Field ID	Location
GW-1	Water Collected from Near Pellet Stackyard Area
GW-2	Water Collected from Near Material Gate

The Detailed Ground Water Analysis report is mentioned in **Annexure-4**.

**4.3 EMISSIONS FROM STATIONARY SOURCES:**

The stationary source emission of the study region was monitored at eight locations selected within the plant premises. The parameters monitored were Particulate Matter using sampler of Vayubodhan Stack Sampler VSS1, Temperature, Velocity, Flow rate, Particulate Matter (PM), Carbon Monoxide ( CO) of stationary source emission of the identified location. Sampling was done as per guidelines of Bureau of Indian Standard. And the analysis methods are outlined in the table as shown below:

**STATIONARY EMISSION ANALYSIS METHOD**

SL. NO.	PARAMETER	ANALYSIS METHOD
1.	Stack Temperature	Stack Sampler (IS:11255 Part 3:2008)
2.	Velocity	Stack Sampler (IS:11255 Part 3:2008)
3.	Particulate Matter as PM	Gravimetric (IS: 11255 Part 1:1985)



4.	Sulphur dioxide as SO <sub>2</sub>	Improved West & Geake Method ( IS 5182 (Part-2) RA2006)
5.	Oxides of Nitrogen as NO <sub>X</sub>	Modified Jacob & Hochheiser Method IS 5182 (Part-6) RA2006

#### **4.3.1 STATIONARY SOURCE EMISSION SAMPLING STATIONS**

Detail of the sampling location is given below.

<b>Field ID</b>	<b>Station</b>
<b>ST-1</b>	<b>Stack attached PGP Bag Filter</b>
<b>ST-2</b>	<b>Stack attached to Cooler Discharge DRI III &amp; IV</b>
<b>ST-3</b>	<b>Stack attached to Induction Furnace (SMS Area)</b>

The Detailed Stationary Source Emission Report is given in the **Annexure-5**.

#### **4.4. NOISE LEVEL MONITORING:**

Noise Levels were recorded by Digital Sound Level Meter of LUTRON make at Four locations within the plant premises. Monitoring was carried out once at each location during the study period for day time and night time. According to CPCB (Noise Pollution (Regulation & Control) rules, 2000 day time is considered from 6.00 am to 10.00 pm and night time is considered from 10.00 pm to 6.00 am

Locations of Noise level monitoring stations are as follows:

#### **4.3.1 NOISE LEVEL SAMPLING STATIONS:**

<b>Field ID</b>	<b>Location ID</b>
<b>N-1</b>	<b>Near DRI Iron Crusher</b>
<b>N-2</b>	<b>Inside PGP Control Room</b>
<b>N-3</b>	<b>Near to Induction Furnace</b>
<b>N-4</b>	<b>Near Rolling Mill Area</b>

The Detailed Noise Measurement Data is given in **Annexure-6**.

#### **4.5. FUGITIVE EMISSION SAMPLING STATIONS:**

<b>Field ID</b>	<b>Location ID</b>
<b>F-1</b>	<b>Near DRI Control room</b>
<b>F-2</b>	<b>Near TG Building of Pellet Plant</b>
<b>F-3</b>	<b>Near Induction Furnace</b>

The Detailed Noise Measurement Data is given in **Annexure-7**.



**Annexure-1****AMBIENT AIR QUALITY MONITORING REPORT**



Ref: Envlab/24-25/TR-04835

Date: 01.07.2024

## AMBIENT AIR QUALITY MONITORING REPORT JUNE-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : AAQ1: Oxygen Plant
3. Date of Sampling : 22.06.2024
4. Date of Analysis : 24.06.2024 TO 29.06.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Testing Methods	NAAQ Standard	Analysis Result	
				AAQ1	
Particulate matter (size less than 10µm) or PM <sub>10</sub>	µg/m <sup>3</sup>	Gravimetric method	100	61.2	
Particulate matter (size less than 10µm) or PM <sub>2.5</sub>	µg/m <sup>3</sup>	Gravimetric method	60	62.8	
Sulphur dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	Improved West and Geake method	80	23.4	
Oxides of Nitrogen as NO <sub>x</sub>	µg/m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	28.1	
Carbon Monoxide as CO	mg/m <sup>3</sup>	NDIR Spectroscopy	4	0.79	
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	Indo Phenol Blue Method	400	36.8	

Reviewed By:



Approved By:





Ref: Envlab/24-25/TR-04836

Date:01.07.2024

## AMBIENT AIR QUALITY MONITORING REPORT JUNE-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : AAQ-2: Near plant Boundary at New weigh Bridge (E)
3. Date of Sampling : 22.06.2024
4. Date of Analysis : 24.06.2024 TO 29.06.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Testing Methods	NAAQ Standard	Analysis Result
				AAQ-2
Particulate matter (size less than 10µm) or PM <sub>10</sub>	µg/m <sup>3</sup>	Gravimetric method	100	62.5
Particulate matter (size less than 10µm) or PM <sub>2.5</sub>	µg/m <sup>3</sup>	Gravimetric method	60	33.1
Sulphur dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	Improved West and Geake method	80	23.5
Oxides of Nitrogen as NO <sub>x</sub>	µg/m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	30.4
Carbon Monoxide as CO	mg/m <sup>3</sup>	NDIR Spectroscopy	4	0.73
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	Indo Phenol Blue Method	400	37.6

  
Reviewed By:



  
Approved By:





Ref: Envlab/24-25/TR-04837

Date: 01.07.2024

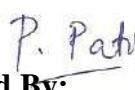
## AMBIENT AIR QUALITY MONITORING REPORT JUNE-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : AAQ-3: Near New Colony (W)
3. Date of Sampling : 22.06.2024
4. Date of Analysis : 24.06.2024 TO 29.06.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Testing Methods	NAAQ Standard	Analysis Result
				AAQ-3
Particulate matter (size less than 10 $\mu\text{m}$ ) or PM <sub>10</sub>	$\mu\text{g}/\text{m}^3$	Gravimetric method	100	64.1
Particulate matter (size less than 10 $\mu\text{m}$ ) or PM <sub>2.5</sub>	$\mu\text{g}/\text{m}^3$	Gravimetric method	60	32.9
Sulphur dioxide as SO <sub>2</sub>	$\mu\text{g}/\text{m}^3$	Improved West and Geake method	80	23.5
Oxides of Nitrogen as NO <sub>x</sub>	$\mu\text{g}/\text{m}^3$	Modified Jacob & Hochheiser (Na-Arsenite)	80	30.2
Carbon Monoxide as CO	$\text{mg}/\text{m}^3$	NDIR Spectroscopy	4	0.78
Ammonia as NH <sub>3</sub>	$\mu\text{g}/\text{m}^3$	Indo Phenol Blue Method	400	37.3

  
Reviewed By:



  
Approved By:



Ref: Envlab/24-25/TR-04838

Date:01.07.2024

## AMBIENT AIR QUALITY MONITORING REPORT JUNE-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : AAQ-4: Near Universal contractor Office (E)
3. Date of Sampling : 22.06.2024
4. Date of Analysis : 24.06.2024 TO 29.06.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Testing Methods	NAAQ Standard	Analysis Result
				AAQ-4
Particulate matter (size less than 10µm) or PM <sub>10</sub>	µg/m <sup>3</sup>	Gravimetric method	100	58.6
Particulate matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg/m <sup>3</sup>	Gravimetric method	60	30.2
Sulphur dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	Improved West and Geake method	80	22.4
Oxides of Nitrogen as NO <sub>x</sub>	µg/m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	31.7
Carbon Monoxide as CO	mg/m <sup>3</sup>	NDIR Spectroscopy	4	0.42
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	Indo Phenol Blue Method	400	34.6

Reviewed By  




Approved By  




**Annexure-2****WASTE WATER QUALITY MONITORING**  
**REPORT**



Ref: Envlab/24-25/TR-04846

Date: 01.07.2024

## EFFLUENT WATER QUALITY ANALYSIS REPORT JUNE-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : ETP1: ETP Near PGP –Inlet  
ETP2: ETP near PGP –Outlet
3. Date of Sampling : 22.06.2024
4. Date of Analysis : 24.06.2024 to 29.06.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

Sl No.	Parameters	Unit	Standard for discharge of Effluent in (Inland Surface Water)	Testing Methods	Analysis Result	
					ETP1	ETP2
1	pH Value at 25°C	--	5.5-9.0	pH Meter APHA 23RD Ed,2017: 4500H+ B	6.91	7.28
2	Total suspended solids as TSS	mg/l	100	Gravimetric Method APHA 23 <sup>RD</sup> Ed,2017: 2540 D	182	46
3	Biological Oxygen Demand as BOD	mg/l	30	Oxygen Depletion Method IS 3025(P-44): 1993, RA 2003	76	28
4	Chemical Oxygen Demand as COD	mg/l	250	Open Reflux Method APHA 23 <sup>RD</sup> Ed,2017: 5220 C	246	84
5	Oil & Grease	mg/l	10.0	Gravimetric Method (Solvent Extraction) APHA 23 <sup>RD</sup> Ed,2017:5520-B	4.0	ND

Reviewed By:



Approved By:





Ref: Envlab/24-25/TR-04845

Date:01.07.2024

**DOMESTIC SEWAGEWATER QUALITY ANALYSIS REPORT JUNE-2024**



Sl No	Parameters	Unit	Standard for discharge of Effluent in (Inland Surface Water)	Testing Methods	Analysis Result	
					STP1	STP2
1.	pH Value at 250C	--	5.5-9.0	pH Meter APHA 23RD Ed,2017: 4500H+ B	7.01	7.18
2.	Total suspended solids as TSS	mg/l	100	Gravimetric Method APHA 23RD Ed,2017: 2540 D	182	60
3.	Biological Oxygen Demand as BOD	mg/l	30	Oxygen Depletion Method IS 3025(P-44): 1993, RA 2003	54	11
4.	Chemical Oxygen Demand as COD	mg/l	250	Open Reflux Method APHA 23RD Ed,2017: 5220 C	214	48
5.	Total Dissolved Solids as TDS	mg/l	---	Gravimetric Method APHA 23RD Ed,2017:2540 C	322	163

### Reviewed By:



Approved By:

**Annexure-3****GROUND WATER QUALITY MONITORING**  
**REPORT**



Ref : Envlab/24-25/TR-04843

Date :01.07.2024

## GROUND WATER QUALITY ANALYSIS REPORT JUNE-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : GW1: Water Collected from Bore well Near Pellet Stockyard area
3. Date of Sampling :22.06.2024
4. Date of Analysis :24.06.2024 to 29.06.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

SL.N o	Parameters	Unit	Testing Method	Standard as per IS:10500,2012	Analysis Result
				Amended on 2015 & 2018	
1	pH Value at 25°C	--	pH Meter APHA 23RD Ed,2017: 4500H+ B	6.5-8.5	7.24
2	Total Dissolved Solids	mg/l	Gravimetric Method APHA 23RD Ed,2017 2540 C	500	316
3	Total Hardness as CaCO <sub>3</sub>	mg/l	EDTA Titrimetric Method APHA 23RD Ed,2017: 2340 C	200	92
4	Fluoride as F	mg/l	Distillation followed by Spectrophotometric Method APHA 23RD Ed,2017: 4500F- C	1.0	0.034
5	Turbidity	NTU	Nephelometric Method APHA 23RD Ed,2017 :2130 B	5	1.5
6	Iron as Fe	mg/l	By AAS Method APHA 23RD Ed,2017: 3111, B	1.0	0.33
7	Nitrate as NO <sub>3</sub>	mg/l	By UV-Screen Method APHA 23RD Ed,2017: 4500 NO3- E	45	3.0
8	Sulphate as SO <sub>4</sub>	mg/l	Turbid metric Method APHA 23RD Ed,2017: 4500 SO42- E	200	8.5
9	Chromium as Cr <sup>+6</sup>	mg/l	Diphenyl Carbazide Method APHA 23RD Ed,2017: 3500Cr B	0.05	<0.05
10	Chloride as Cl	mg/l	Argentometric Method APHA 23RD Ed,2017: 4500Cl- B	250	32.1
11	Manganese as Mn	mg/l	Persulfate Method APHA 23RD Ed,2017: 3500Mn B	0.1	<0.005
12	Copper as Cu	mg/l	By AAS Method APHA 23RD Ed,2017: 3111 B	0.05	<0.05
13	Aluminum as Al	mg/l	AAS Method APHA 23RD Ed,2017: 3111 D	0.03	<0.001
14	Alkalinity as CaCO <sub>3</sub>	mg/l	Titration Method APHA 23RD Ed,2017:2320 B	200	48.6

Reviewed By:



Approved By:





Ref: Envlab/24-25/TR-04844

Date:01.07.2024

## GROUND WATER QUALITY ANALYSIS REPORT JUNE-2024

1. Name of Client :M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location :GW2: Water Collected from Bore well Near Material Gate
3. Date of Sampling :22.06.2024
4. Date of Analysis :24.06.2024 to 29.06.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

L.No	Parameters	Unit	Testing Method	Standard as per	Analysis Result
				IS:10500,2012	
1	pH Value at 25°C	--	pH Meter APHA 23RD Ed,2017: 4500H+ B	6.5-8.5	7.31
2	Total Dissolved Solids	mg/l	Gravimetric Method APHA 23RD Ed,2017: 2540 C	500	284
3	Total Hardness as CaCO <sub>3</sub>	mg/l	EDTA Titrimetric Method APHA 23RD Ed,2017: 2340 C	200	80
4	Fluoride as F	mg/l	Distillation followed by Spectrophotometric Method APHA 23RD Ed,2017: 4500F- C	1.0	0.045
5	Turbidity	NTU	Nephelometric Method APHA 23RD Ed,2017: 2130 B	5	1.3
6	Iron as Fe	mg/l	By AAS Method APHA 23RD Ed,2017: 3111, B	1.0	0.35
7	Nitrate as NO <sub>3</sub>	mg/l	By UV-Screen Method APHA 23RD Ed,2017: 4500 NO3- E	45	2.2
8	Sulphate as SO <sub>4</sub>	mg/l	Turbid metric Method APHA 23RD Ed,2017: 4500 SO42- E	200	6.0
9	Chromium as Cr <sup>+6</sup>	mg/l	Diphenyl Carbazide Method APHA 23RD Ed,2017: 3500Cr B	0.05	< 0.05
10	Chloride as Cl	mg/l	Argentometric Method APHA 23RD Ed,2017: 4500Cl- B	250	31.5
11	Manganese as Mn	mg/l	Persulfate Method APHA 23RD Ed,2017: 3500Mn B	0.1	< 0.005
12	Copper as Cu	mg/l	By AAS Method APHA 23RD Ed,2017: 3111 B	0.05	< 0.05
13	Aluminum as Al	mg/l	AAS Method APHA 23RD Ed,2017: 3111 D	0.03	< 0.001
14	Alkalinity as CaCO <sub>3</sub>	mg/l	Titration Method APHA 23RD Ed,2017: 2320 B	200	50.1

Reviewed By:



Approved By:



**Annexure-4****STACK MONITORING REPORT**



Ref: Envlab/24-25/TR-04839

Date:01.07.2024

## STATIONARY EMISSION MONITORING REPORT JUNE-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : ST-1:Stack attached to PGP Bag Filter
3. Date of Sampling : 21.06.2024
4. Date of Analysis : 22.06.2024 TO 25.06.2024
5. Sample Collected by: VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Standard as per CTO	Analysis Result
			ST-1
Stack Temperature	°C	--	78
Velocity of Flue Gas	m/sec	--	3.78
Concentration of Particulate Matter (PM)	mg/Nm <sup>3</sup>	100	40.5
Sulphur dioxide as SO <sub>2</sub>	mg/Nm <sup>3</sup>	--	44.3
Oxides of Nitrogen as NO <sub>x</sub>	mg/Nm <sup>3</sup>	--	58.2

Reviewed By:  
B. Pati



Approved By:  
P. Pati





Ref: Envlab/24-25/TR-04840

Date:01.07.2024

## STATIONARY EMISSION MONITORING REPORT JUNE-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : ST-2: Stack attached to Cooler Discharge DRI III & IV
3. Date of Sampling : 21.06.2024
4. Date of Analysis : 22.06.2024 TO 25.06.2024
5. Sample Collected by: VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Standard as per CTO	Analysis Result
			ST-2
Stack Temperature	°C	--	70
Velocity of Flue Gas	m/sec	--	4.12
Concentration of Particulate Matter as PM	mg/Nm <sup>3</sup>	100	38.6
Sulphur dioxide as SO <sub>2</sub>	mg/Nm <sup>3</sup>	--	52.4
Oxides of Nitrogen as NO <sub>x</sub>	mg/Nm <sup>3</sup>	--	60.8

Reviewed By:



Approved By:





Ref: Envlab/24-25/TR-04841

Date:01.07.2024

## STATIONARY EMISSION MONITORING REPORT JUNE-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : ST-3: Stack attached to Induction furnace (SMS Area)
3. Date of Sampling : 21.06.2024
4. Date of Analysis : 22.06.2024 TO 25.06.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Standard as per CTO	Analysis Result
			ST-2
Stack Temperature	°C	--	81
Velocity of Flue Gas	m/sec	--	4.09
Concentration of Particulate Matter as PM	mg/Nm <sup>3</sup>	100	38.1
Sulphur dioxide as SO <sub>2</sub>	mg/Nm <sup>3</sup>	--	50.6
Oxides of Nitrogen as NO <sub>x</sub>	mg/Nm <sup>3</sup>	--	59.7

Reviewed By:



Approved By:



**Annexure-5****NOISE MONITORING REPORT**



Ref: Envlab/24-25/TR-04847

Date:01.07.2024

## NOISE MONITORING REPORT JUNE-2024

1. Name of Client :M/s MSP SPONGE IRON LTD; KEONJHAR
2. Date of Recording : 22.06.2024
3. Monitored By : VCSPL Representative in presence of MSP Representative

Location ID	Location	Day time Equivalent	Night time Equivalent
		Noise Level in dB(A) Leq	
N-1	Near to DRI Iron crusher	70.8	63.5
N-2	Inside PGP Control room	69.5	60.4
N-3	Near to Induction Furnace	66.3	52.1
N-4	Near Rolling Mill Area	71.6	60.8
Standard as per CPCB		75	70

Reviewed By:



Approved By:



**Annexure-6****FUGITIVE EMISSION MONITORING REPORT**



Ref: Envlab/24-25/TR-04842

Date:01.07.2024

## FUGITIVE EMISSION MONITORING REPORT JUNE-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sample Type : Fugitive Emission Monitoring
3. Date of Analysis : 22.06.2024
4. Sample Collected by : VCSPL Representative in presence of MSP Representative

SL. No.	Sampling Location	Date of sampling	Parameter	Unit	MoEF & CC Notification GSR 809(E) DT 04.10.2010	Analysis Result
1.	F1- Near DRI Control Room	20.02.2024	Suspended Particulate Matter	µg/m³	1200 µg/m³	543
2.	F2-Near TG Building of Pellet Plant	20.02.2024	Suspended Particulate Matter	µg/m³	1200 µg/m³	559
3.	F3-Near Induction Furnace	20.02.2024	Suspended Particulate Matter	µg/m³	1200 µg/m³	571

*B. Pati*  
Reviewed By:



*P. Pati*  
Approved By:



**Annexure-7****SLAG & COAL CHAR MONITORING REPORT**



Ref: Envlab/24-25/TR-04849

Date:01.07.2024

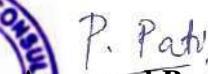
## COAL CHAR ANALYSIS REPORT JUNE-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Date of Recording : 22.06.2024
3. Date of Analysis : 24.06.2024 TO 26.06.2024
4. Type of Sample : S1-Coal char
5. Monitored By : VCSPL Representative in presence of MSP Representative

SL.NO	Parameters	Unit	Analysis Result
1	Moisture	%	3.11
2	Volatile Solids	%	16.4
3	Ash Content	%	4.5
4	Fixed Carbon	%	81.9

  
Reviewed By:



  
Approved By:



Ref: Envlab/24-25/TR-04848

Date:01.07.2024

## LEACHEABILITY ANALYSIS REPORT JUNE-2024

1. Name of the Industry : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : S1:Slag Sample
3. Date of Sampling : 22.06.2024
4. Date of Analysis : 24.06.2024 TO 29.06.20
5. Sample Collected by : VCSPL Representative in presence of Client's Representative

Sl.No.	Name of the Parameters	Unit	Testing Method	Govt. Of India, MoEF & CC Schedule-II based on leachable concentration limits (TCLP) or Soluble Threshold limit Concentration (STLC), Class A2016	Analysis Result
				S1	
1	Arsenic as As	mg/l	TCLP With Zero Head Extraction Followed by Analysis in AAS	5 mg/l	<0.001
2	Barium as Ba	mg/l		100 mg/l	0.33
3	Cadmium as Cd	mg/l		1 mg/l	<0.001
4	Chromium as Cr	mg/l		5 mg/l	<0.05
5	Lead as Pb	mg/l		5 mg/l	<0.01
6	Mercury as Hg	mg/l		0.2 mg/l	<0.001
7	Selenium as Se	mg/l		1 mg/l	<0.001
8	Iron as Fe	mg/l		---	2.0
9	Nickel as Ni	mg/l		20 mg/l	<0.01
10	Zinc as Zn	mg/l		250 mg/l	3.8
11	Manganese as Mn	mg/l		10 mg/l	<0.005
12	Cobalt as Co	mg/l		80 mg/l	<0.001
13	Copper as Cu	mg/l		25 mg/l	0.42
14	Vanadium as V	mg/l		24 mg/l	<0.001
15	Aluminium as Al	mg/l		--	<1.0
16	Fluoride as F	mg/l		180 mg/l	4.5

Reviewed By:



Approved By:





# Visiontek Consultancy Services Pvt. Ltd

*(Committed For Better Environment)*

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*Committed For Better Environment*



ISO 9001: 2015  
ISO 14001: 2015  
ISO 45001:2018 (OH&S)  
ISO/IEC 17025:2017

# MONTHLY ANALYSIS REPORT

## (AUGUST-2024)

ON  
ENVIRONMENTAL MONITORING  
AT



**M/s MSP SPONGE IRON LIMITED**  
**Vill : Haldiaguna, P.O. Gobardhan**  
**Dist : Keonjhar, Orissa-758013**

*Prepared by:-*

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## **METHODOLOGY OF ENVIRONMENTAL MONITORING STUDY**

### **1.0 INTRODUCTION :**

**M/s Visiontek Consultancy Services Pvt. Ltd.** to carry out the environmental monitoring for the **M/s MSP Sponge Iron Limited, Keonjhar**

Environmental monitoring was carried out at various locations in and around the plant premises. The Monitoring was carried out with respect to the qualities of Ambient Air, Stack Monitoring, and Ground Water & Domestic Waste Water & Noise Level Monitoring.

### **2.0 STUDY PERIOD:**

The monitoring was carried out to study the present environmental condition at the locations from **AUGUST-2024**.

### **3.0 METHODOLOGY:**

The environmental monitoring was carried out as per the standard methodology of Bureau of Indian Standard (IS: 5182), American Public Health Association (APHA).

### **4.0 SELECTION OF MONITORING LOCATIONS:**

The location for Ambient Air Quality, Stack, Water (Ground Water & Domestic Water), and Noise Level has been selected by Clients representative.

#### **4.1 AMBIENT AIR QUALITY:**

The ambient air quality of the study region was monitored at four locations selected within the plant premises. The parameters monitored were Particulate Matter (size less than 10  $\mu\text{m}$  or  $\text{PM}_{10}$ ), Particulate matter (size less than 2.5  $\mu\text{m}$  or  $\text{PM}_{2.5}$ ), Sulphur di-oxide ( $\text{SO}_2$ ), Oxides of Nitrogen ( $\text{NO}_x$ ). Respirable Dust Sampler (APM 460BL) of ENVIROTECH make, FPS (APM ) of ENVIROTECH make used for monitoring of ambient air quality at all the identified



locations. The sampling method was carried out as per the guidelines for planning IS: 5182 (part 14): 2000. And the analysis methods are outlined in the table as shown below:

### **AMBIENT AIR QUALITY ANALYSIS METHOD**

<b>SL. NO.</b>	<b>PARAMETER</b>	<b>ANALYSIS METHOD</b>
1.	Particulate Matter (size less than 10 $\mu\text{m}$ or $\text{PM}_{10}$ ), $\mu\text{g}/\text{m}^3$	Gravimetric method
2.	Particulate matter (size less than 2.5 $\mu\text{m}$ or $\text{PM}_{2.5}$ ), $\mu\text{g}/\text{m}^3$	Gravimetric method
3.	Sulphur di-oxide ( $\text{SO}_2$ ), $\mu\text{g}/\text{m}^3$	Improved west & Geake method
4.	Oxides of Nitrogen ( $\text{NO}_x$ ) $\mu\text{g}/\text{m}^3$	Jacob and Hochheiser Modified method
5.	Carbon Monoxide as CO $\text{mg}/\text{m}^3$	NDIR Spectroscopy

#### **4.1.1 AMBIENT AIR QUALITY SAMPLING STATIONS:**

Details of the sampling locations are given below.

<b>Field ID</b>	<b>Location</b>
<b>AAQMS-1</b>	<b>Near Main Gate (S)</b>
<b>AAQMS-2</b>	<b>Near New weigh Bridge Office</b>
<b>AAQMS-3</b>	<b>Near New Colony (W)</b>
<b>AAQMS-4</b>	<b>Near Universal contractor Office (E)</b>

The Detailed Air Quality is given in the **Annexure-1**.

#### **4.2 WATER QUALITY :**

Water quality monitoring was carried out at two locations of STP Water. Samples were collected manually during study period. Considering several possibilities of interference the polytetrafluoroethylene (PTFE) samples bottles were used. These bottles were sterilized properly before being used for water collection.

The methodology for sample collection, preservation and analysis was as per Standard methods for the Examination of Water and Wastewater, 23<sup>RD</sup> Edition, APHA 2017.



**4.2.1 EFFLUENT WATER SAMPLING LOCATIONS:**

Details of the sampling locations are given below:

Field ID	Location
EW-1	ETP Near PGP –Inlet
EW-2	ETP Near PGP –Outlet

The Detailed Effluent Water Analysis report is mentioned in **Annexure-2**

**4.2.2 DOMESTIC SEWAGE WATER SAMPLING LOCATIONS:**

Details of the sampling locations are given below:

Field ID	Location
STP-1	STP Near Main Gate –Inlet
STP-2	STP Near Main Gate –Outlet

The Detailed STP Water Analysis report is mentioned in **Annexure-3**

**4.2.3 GROUND WATER SAMPLING LOCATIONS:**

Details of the sampling locations are given below:

Field ID	Location
GW-1	Water Collected from Bore Well Near Canteen
GW-2	Water Collected From Bore well Near Filter Press

The Detailed Ground Water Analysis report is mentioned in **Annexure-4**.

**4.3 EMISSIONS FROM STATIONARY SOURCES:**

The stationary source emission of the study region was monitored at eight locations selected within the plant premises. The parameters monitored were Particulate Matter using sampler of Vayubodhan Stack Sampler VSS1, Temperature, Velocity, Flow rate, Particulate Matter (PM), Carbon Monoxide ( CO) of stationary source emission of the identified location. Sampling was done as per guidelines of Bureau of Indian Standard. And the analysis methods are outlined in the table as shown below:

**STATIONARY EMISSION ANALYSIS METHOD**

SL. NO.	PARAMETER	ANALYSIS METHOD
1.	Stack Temperature	Stack Sampler (IS:11255 Part 3:2008)
2.	Velocity	Stack Sampler (IS:11255 Part 3:2008)
3.	Particulate Matter as PM	Gravimetric (IS: 11255 Part 1:1985)



4.	Sulphur dioxide as SO <sub>2</sub>	Improved West & Geake Method ( IS 5182 (Part-2) RA2006)
5.	Oxides of Nitrogen as NO <sub>X</sub>	Modified Jacob & Hochheiser Method IS 5182 (Part-6) RA2006

#### **4.3.1 STATIONARY SOURCE EMISSION SAMPLING STATIONS**

Detail of the sampling location is given below.

<b>Field ID</b>	<b>Station</b>
<b>ST-1</b>	<b>Stack attached to New Product house (DRI)</b>
<b>ST-2</b>	<b>Stack attached to Stack attached to MTM (Pellet)</b>
<b>ST-3</b>	<b>Stack attached to Induction furnace (SMS Area)</b>

The Detailed Stationary Source Emission Report is given in the **Annexure-5**.

#### **4.4. NOISE LEVEL MONITORING:**

Noise Levels were recorded by Digital Sound Level Meter of LUTRON make at Four locations within the plant premises. Monitoring was carried out once at each location during the study period for day time and night time. According to CPCB (Noise Pollution (Regulation & Control) rules, 2000 day time is considered from 6.00 am to 10.00 pm and night time is considered from 10.00 pm to 6.00 am

Locations of Noise level monitoring stations are as follows:

#### **4.3.1 NOISE LEVEL SAMPLING STATIONS:**

<b>Field ID</b>	<b>Location ID</b>
<b>N-1</b>	<b>Near to DRI Iron crusher</b>
<b>N-2</b>	<b>Inside PGP Control room</b>
<b>N-3</b>	<b>Near to Induction Furnace</b>
<b>N-4</b>	<b>Near Rolling Mill Area</b>

The Detailed Noise Measurement Data is given in **Annexure-6**.

#### **4.5. FUGITIVE EMISSION SAMPLING STATIONS:**

<b>Field ID</b>	<b>Location ID</b>
<b>F-1</b>	<b>Near DRI Kiln 1 &amp; 2</b>
<b>F-2</b>	<b>Near Pellet TG Area</b>
<b>F-3</b>	<b>Rolling Mill Area</b>

The Detailed Noise Measurement Data is given in **Annexure-7**.



**Annexure-1****AMBIENT AIR QUALITY MONITORING REPORT**



- Infrastructure Engineering
- Water Resource Management
- Environmental & Social Study

- Surface & Sub-Surface Investigation
- Quality Control & Project Management
- Renewable Energy

- Agricultural Development
- Information Technology
- Public Health Engineering

- Mine Planning & Design
- Mineral/Sub-Soil Exploration
- Waste Management Services

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Ref: Envlab/24-25/TR-08593

Date: 14.08.2024

## AMBIENT AIR QUALITY MONITORING REPORT AUGUST-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : AAQ1: Near Rolling Mill (ESP-1 area)
3. Date of Sampling : 07.08.2024
4. Date of Analysis : 08.08.2024 TO 13.08.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Testing Methods	NAAQ Standard	Analysis Result	
				AAQ1	
Particulate matter (size less than 10µm) or PM <sub>10</sub>	µg/m <sup>3</sup>	Gravimetric method	100	57.6	
Particulate matter (size less than 10µm) or PM <sub>2.5</sub>	µg/m <sup>3</sup>	Gravimetric method	60	29.1	
Sulphur dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	Improved West and Geake method	80	21.5	
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	26.8	
Carbon Monoxide as CO	mg/m <sup>3</sup>	NDIR Spectroscopy	4	0.67	
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	Indo Phenol Blue Method	400	34.6	

Reviewed By:



Approved By:





# Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Certified for : ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 (OH&S), ISO/IEC 17025:2017

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Date: 14.08.2024

## AMBIENT AIR QUALITY MONITORING REPORT AUGUST-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : AAQ-2: Near New Weigh Bridge Office
3. Date of Sampling : 07.08.2024
4. Date of Analysis : 08.08.2024 TO 13.08.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Testing Methods	NAAQ Standard	Analysis Result
				AAQ-2
Particulate matter (size less than 10 $\mu\text{m}$ ) or PM <sub>10</sub>	$\mu\text{g}/\text{m}^3$	Gravimetric method	100	60.3
Particulate matter (size less than 2.5 $\mu\text{m}$ ) or PM <sub>2.5</sub>	$\mu\text{g}/\text{m}^3$	Gravimetric method	60	31.4
Sulphur dioxide as SO <sub>2</sub>	$\mu\text{g}/\text{m}^3$	Improved West and Geake method	80	22.2
Oxides of Nitrogen as NO <sub>2</sub>	$\mu\text{g}/\text{m}^3$	Modified Jacob & Hochheiser (Na-Arsenite)	80	28.3
Carbon Monoxide as CO	$\text{mg}/\text{m}^3$	NDIR Spectroscopy	4	0.70
Ammonia as NH <sub>3</sub>	$\mu\text{g}/\text{m}^3$	Indo Phenol Blue Method	400	35.1

*B. Pati*  
Reviewed By:



*P. Pati*  
Approved By:





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Date: 14.08.2024

## AMBIENT AIR QUALITY MONITORING REPORT AUGUST-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : AAQ-3: Near New Colony (W)
3. Date of Sampling : 07.08.2024
4. Date of Analysis : 08.08.2024 TO 13.08.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Testing Methods	NAAQ Standard	Analysis Result
				AAQ-3
Particulate matter (size less than 10 $\mu\text{m}$ ) or PM <sub>10</sub>	$\mu\text{g}/\text{m}^3$	Gravimetric method	100	56.2
Particulate matter (size less than 10 $\mu\text{m}$ ) or PM <sub>2.5</sub>	$\mu\text{g}/\text{m}^3$	Gravimetric method	60	28.4
Sulphur dioxide as SO <sub>2</sub>	$\mu\text{g}/\text{m}^3$	Improved West and Geake method	80	20.6
Oxides of Nitrogen as NO <sub>2</sub>	$\mu\text{g}/\text{m}^3$	Modified Jacob & Hochheiser (Na-Arsenite)	80	27.5
Carbon Monoxide as CO	$\text{mg}/\text{m}^3$	NDIR Spectroscopy	4	0.66
Ammonia as NH <sub>3</sub>	$\mu\text{g}/\text{m}^3$	Indo Phenol Blue Method	400	34.6

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Date: 14.08.2024

## AMBIENT AIR QUALITY MONITORING REPORT AUGUST-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : AAQ-4: Near Pellet Yard
3. Date of Sampling : 07.08.2024
4. Date of Analysis : 08.08.2024 TO 13.08.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Testing Methods	NAAQ Standard	Analysis Result
				AAQ-4
Particulate matter (size less than 10 $\mu\text{m}$ ) or PM <sub>10</sub>	$\mu\text{g}/\text{m}^3$	Gravimetric method	100	54.1
Particulate matter (size less than 2.5 $\mu\text{m}$ ) or PM <sub>2.5</sub>	$\mu\text{g}/\text{m}^3$	Gravimetric method	60	26.8
Sulphur dioxide as SO <sub>2</sub>	$\mu\text{g}/\text{m}^3$	Improved West and Geake method	80	19.8
Oxides of Nitrogen as NO <sub>2</sub>	$\mu\text{g}/\text{m}^3$	Modified Jacob & Hochheiser (Na-Arsenite)	80	30.1
Carbon Monoxide as CO	$\text{mg}/\text{m}^3$	NDIR Spectroscopy	4	0.38
Ammonia as NH <sub>3</sub>	$\mu\text{g}/\text{m}^3$	Indo Phenol Blue Method	400	32.4

Reviewed By



Approved By



**Annexure-2****WASTE WATER QUALITY MONITORING**  
**REPORT**



Ref: Envlab/24-25/TR-08603

Date: 14.08.2024

## **DOMESTIC SEWAGEWATER QUALITY ANALYSIS REPORT AUGUST-2024**



Sl No	Parameters	Unit	Standard for discharge of Effluent in (Inland Surface Water)	Testing Methods	Analysis Result	
					STP1	STP2
1.	pH Value at 250C	--	5.5-9.0	pH Meter APHA 23RD Ed,2017: 4500H+ B	7.15	7.22
2.	Total suspended solids as TSS	mg/l	100	Gravimetric Method APHA 23RD Ed,2017: 2540 D	196	58
3.	Biological Oxygen Demand as BOD	mg/l	30	Oxygen Depletion Method IS 3025(P-44): 1993, RA 2003	58	14
4.	Chemical Oxygen Demand as COD	mg/l	250	Open Reflux Method APHA 23RD Ed,2017: 5220 C	228	52
5.	Total Dissolved Solids as TDS	mg/l	---	Gravimetric Method APHA 23RD Ed,2017:2540 C	335	156

Reviewed By:



### Approved By





- Infrastructure Engineering
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- Renewable Energy

- Agricultural Development
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Ref: Envlab/24-25/TR-08604

Date: 14.08.2024

## EFFLUENT WATER QUALITY ANALYSIS REPORT AUGUST-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : ETP1: ETP Near PGP –Inlet  
ETP2: ETP near PGP –Outlet
3. Date of Sampling : 07.08.2024
4. Date of Analysis : 08.08.2024 TO 14.08.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

Sl No.	Parameters	Unit	Standard for discharge of Effluent in (Inland Surface Water)	Testing Methods	Analysis Result	
					ETP1	ETP2
1	pH Value at 25°C	--	5.5-9.0	pH Meter APHA 23RD Ed,2017: 4500H+ B	6.88	7.22
2	Total suspended solids as TSS	mg/l	100	Gravimetric Method APHA 23 <sup>RD</sup> Ed,2017: 2540 D	196	44
3	Biological Oxygen Demand as BOD	mg/l	30	Oxygen Depletion Method IS 3025(P-44): 1993, RA 2003	72	24
4	Chemical Oxygen Demand as COD	mg/l	250	Open Reflux Method APHA 23 <sup>RD</sup> Ed,2017: 5220 C	262	86
5	Oil & Grease	mg/l	10.0	Gravimetric Method (Solvent Extraction) APHA 23 <sup>RD</sup> Ed,2017:5520-B	3.4	ND

*B. Pati*  
Reviewed By:



*P. Pati*  
Approved By:



**Annexure-3****GROUND WATER QUALITY MONITORING**  
**REPORT**



- Infrastructure Engineering
- Water Resource Management
- Environmental & Social Study

- Surface & Sub-Surface Investigation
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Ref : Envlab/24-25/TR-08601

Date : 14.08.2024

## GROUND WATER QUALITY ANALYSIS REPORT AUGUST-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : GW1: Water Collected from Bore well Near Pellet Stockyard area
3. Date of Sampling : 07.08.2024
4. Date of Analysis : 08.08.2024 TO 14.08.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

SL.N o	Parameters	Unit	Testing Method	Standard as per IS:10500,2012	Analysis Result
				Amended on 2015 & 2018	
1	pH Value at 25°C	--	pH Meter APHA 23RD Ed,2017: 4500H+ B	6.5-8.5	7.31
2	Total Dissolved Solids	mg/l	Gravimetric Method APHA 23RD Ed,2017 2540 C	500	330
3	Total Hardness as CaCO <sub>3</sub>	mg/l	EDTA Titrimetric Method APHA 23RD Ed,2017: 2340 C	200	98
4	Fluoride as F	mg/l	Distillation followed by Spectrophotometric Method APHA 23RD Ed,2017: 4500F- C	1.0	0.029
5	Turbidity	NTU	Nephelometric Method APHA 23RD Ed,2017 :2130 B	5	1.4
6	Iron as Fe	mg/l	By AAS Method APHA 23RD Ed,2017: 3111, B	1.0	0.35
7	Nitrate as NO <sub>3</sub>	mg/l	By UV-Screen Method APHA 23RD Ed,2017: 4500 NO3- E	45	3.2
8	Sulphate as SO <sub>4</sub>	mg/l	Turbid metric Method APHA 23RD Ed,2017: 4500 SO42- E	200	8.8
9	Chromium as Cr <sup>+6</sup>	mg/l	Diphenyl Carbazide Method APHA 23RD Ed,2017: 3500Cr B	0.05	<0.05
10	Chloride as Cl	mg/l	Argentometric Method APHA 23RD Ed,2017: 4500Cl- B	250	33.2
11	Manganese as Mn	mg/l	Persulfate Method APHA 23RD Ed,2017: 3500Mn B	0.1	<0.005
12	Copper as Cu	mg/l	By AAS Method APHA 23RD Ed,2017: 3111 B	0.05	<0.05
13	Aluminum as Al	mg/l	AAS Method APHA 23RD Ed,2017: 3111 D	0.03	<0.001
14	Alkalinity as CaCO <sub>3</sub>	mg/l	Titration Method APHA 23RD Ed,2017:2320 B	200	46.2

Reviewed By:



P. Pati  
Approved By





- Infrastructure Engineering
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Ref: Envlab/24-25/TR-08602

Date: 14.08.2024

## GROUND WATER QUALITY ANALYSIS REPORT AUGUST-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : GW2: Water Collected from Bore well Near Material Gate
3. Date of Sampling : 07.08.2024
4. Date of Analysis : 08.08.2024 TO 14.08.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

SL. No	Parameters	Unit	Testing Method	Standard as per IS:10500,2012	Analysis Result
				Amended on 2015 & 2018	
1	pH Value at 25°C	--	pH Meter APHA 23RD Ed,2017: 4500H+ B	6.5-8.5	7.35
2	Total Dissolved Solids	mg/l	Gravimetric Method APHA 23RD Ed,2017: 2540 C	500	294
3	Total Hardness as CaCO <sub>3</sub>	mg/l	EDTA Titrimetric Method APHA 23RD Ed,2017: 2340 C	200	84
4	Fluoride as F	mg/l	Distillation followed by Spectrophotometric Method APHA 23RD Ed,2017: 4500F- C	1.0	0.038
5	Turbidity	NTU	Nephelometric Method APHA 23RD Ed,2017: 2130 B	5	1.2
6	Iron as Fe	mg/l	By AAS Method APHA 23RD Ed,2017: 3111, B	1.0	0.39
7	Nitrate as NO <sub>3</sub>	mg/l	By UV-Screen Method APHA 23RD Ed,2017: 4500 NO3- E	45	2.6
8	Sulphate as SO <sub>4</sub>	mg/l	Turbid metric Method APHA 23RD Ed,2017: 4500 SO42- E	200	6.3
9	Chromium as Cr <sup>+6</sup>	mg/l	Diphenyl Carbazide Method APHA 23RD Ed,2017: 3500Cr B	0.05	< 0.05
10	Chloride as Cl	mg/l	Argentometric Method APHA 23RD Ed,2017: 4500Cl- B	250	34.5
11	Manganese as Mn	mg/l	Persulfate Method APHA 23RD Ed,2017: 3500Mn B	0.1	< 0.005
12	Copper as Cu	mg/l	By AAS Method APHA 23RD Ed,2017: 3111 B	0.05	< 0.05
13	Aluminum as Al	mg/l	AAS Method APHA 23RD Ed,2017: 3111 D	0.03	< 0.001
14	Alkalinity as CaCO <sub>3</sub>	mg/l	Titration Method APHA 23RD Ed,2017: 2320 B	200	52.5

Reviewed By:



Approved By:



**Annexure-4****STACK MONITORING REPORT**



- Infrastructure Engineering
- Water Resource Management
- Environmental & Social Study

- Surface & Sub-Surface Investigation
- Quality Control & Project Management
- Renewable Energy

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Ref: Envlab/24-25/TR-08597

Date: 14.08.2024

## STATIONARY EMISSION MONITORING REPORT AUGUST-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : ST-1:Stack attached to New Product house (DRI)
3. Date of Sampling : 08.08.2024
4. Date of Analysis : 09.08.2024 TO 12.08.2024
5. Sample Collected by: VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Standard as per CTO	Analysis Result
			ST-1
Stack Temperature	°C	--	75
Velocity of Flue Gas	m/sec	--	4.21
Concentration of Particulate Matter (PM)	mg/Nm <sup>3</sup>	100	32.5
Sulphur dioxide as SO <sub>2</sub>	mg/Nm <sup>3</sup>	--	29.8
Oxides of Nitrogen as NO <sub>x</sub>	mg/Nm <sup>3</sup>	--	31.6

Reviewed By:



Approved By:





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Ref: Envlab/24-25/TR-08598

Date: 14.08.2024

## STATIONARY EMISSION MONITORING REPORT AUGUST-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : ST-2: Stack attached to MTM (Pellet)
3. Date of Sampling : 08.08.2024
4. Date of Analysis : 09.08.2024 TO 12.08.2024
5. Sample Collected by: VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Standard as per CTO	Analysis Result
			ST-2
Stack Temperature	°C	--	70
Velocity of Flue Gas	m/sec	--	4.38
Concentration of Particulate Matter as PM	mg/Nm <sup>3</sup>	100	33.4
Sulphur dioxide as SO <sub>2</sub>	mg/Nm <sup>3</sup>	--	30.9
Oxides of Nitrogen as NO <sub>x</sub>	mg/Nm <sup>3</sup>	--	33.2

*B. Pati*

Reviewed By:



*P. Pati*

Approved By:





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Ref: Envlab/24-25/TR-08599

Date: 14.08.2024

## STATIONARY EMISSION MONITORING REPORT AUGUST-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sampling Location : ST-3: Stack attached to Induction furnace (SMS Area)
3. Date of Sampling : 08.08.2024
4. Date of Analysis : 09.08.2024 TO 12.08.2024
5. Sample Collected by : VCSPL Representative in presence of MSP Representative

Parameters Analyzed	Unit	Standard as per CTO	Analysis Result
			ST-2
Stack Temperature	°C	--	79
Velocity of Flue Gas	m/sec	--	4.13
Concentration of Particulate Matter as PM	mg/Nm <sup>3</sup>	100	38.1
Sulphur dioxide as SO <sub>2</sub>	mg/Nm <sup>3</sup>	--	33.8
Oxides of Nitrogen as NO <sub>x</sub>	mg/Nm <sup>3</sup>	--	36.2

*Babu*  
Reviewed By:



*P. Pati*  
Approved By:



**Annexure-5****NOISE MONITORING REPORT**



- Infrastructure Engineering
- Water Resource Management
- Environmental & Social Study

- Surface & Sub-Surface Investigation
- Quality Control & Project Management
- Renewable Energy

- Agricultural Development
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Date: 14.08.2024

## NOISE MONITORING REPORT AUGUST-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Date of Recording : 08.08.2024
3. Monitored By : VCSPL Representative in presence of MSP Representative

Location ID	Location	Day time Equivalent	Night time Equivalent
		Noise Level in dB(A) Leq	
N-1	Near to DRI Iron crusher	71.2	61.5
N-2	Inside PGP Control room	67.8	59.2
N-3	Near to Induction Furnace	69.5	55.1
N-4	Near Rolling Mill Area	70.6	61.0
Standard as per CPCB		75	70

Reviewed By:



Approved By:



**Annexure-6****FUGITIVE EMISSION MONITORING REPORT**



- Infrastructure Engineering
- Water Resource Management
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- Surface & Sub-Surface Investigation
- Quality Control & Project Management
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Ref: Envlab/24-25/TR-08600

Date: 14.08.2024

## FUGITIVE EMISSION MONITORING REPORT AUGUST-2024

1. Name of Client : M/s MSP SPONGE IRON LTD; KEONJHAR
2. Sample Type : Fugitive Emission Monitoring
3. Date of Analysis : 08.08.2024
4. Sample Collected by : VCSPL Representative in presence of MSP Representative

SL. No.	Sampling Location	Date of sampling	Parameter	Unit	MoEF & CC Notification GSR 809(E) DT 04.10.2010	Analysis Result
1.	F1-Near DRI Kiln 1 & 2	08.08.2024	Suspended Particulate Matter	µg/m³	1200 µg/m³	480
2.	F2-Near Pellet TG Area	08.08.2024	Suspended Particulate Matter	µg/m³	1200 µg/m³	467
3.	F3-Rolling Mill Area	08.08.2024	Suspended Particulate Matter	µg/m³	1200 µg/m³	492

Reviewed By:



Approved By:





# Visiontek Consultancy Services Pvt. Ltd

*(Committed For Better Environment)*

Plot No.-M22&M23, Chandaka Industrial Estate, Patia, Chandrasekharpur, Bhubaneswar-24, Tel.: 0674-3511721  
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*Committed For Better Environment*



ISO 9001: 2015  
ISO 14001: 2015  
ISO 45001:2018 (OH&S)  
ISO/IEC 17025:2017

**Annexure - 4**



**MSP SPONGE IRON LTD.**  
HALDIAGUNA, KEONJHAR, ODISHA

**YEAR WISE PLANTATION (INSIDE PREMISES) REPORT UP TO Sep'24**

Year of Plantation	Species planted	Total area covered	Plantation (Nos.)	Survival (Nos.)	Survival Rate (%)
Up to 2011-12	Fruit Bearing Species: Mango, Guava, Anla etc. Others Species: Chakunda, Gambhari, Teak, Neem, Krushna Chuda, Sisu, Kadamba, Siris, Deb Daru, Sala & Piasal etc.	17.50 acres	10850	7595	70%
2012-13		21.30 acres	5300	3816	72%
2013-14		23.00 acres	3863	2781	72%
2014-15		25.00 acres	3600	2592	72%
2015-16		25.00 acres	591	420	71%
2016-17		25.00 acres	832	750	90%
2017-18		25.00 acres	350	325	92%
2018-19		25.00 acres	582	495	85%
2019-20		25.00 acres	342	313	91%
2020-21		25.00 acres	375	231	62%
2021-22		25.00 acres	327	241	83%
2022-23		25.40 acres	410	320	78%
2023-24		25.85 acres	1737	1472	84%
2024-25		26.02 acres	112	98	87.5%
			<b>29271</b>	<b>21449</b>	<b>79.25 %</b>

**Annexure - 4**



**MSP SPONGE IRON LTD.**  
HALDIAGUNA, KEONJHAR, ODISHA

**YEAR WISE PLANTATION (OUTSIDE PREMISES) REPORT UP TO Sep'24**

Year of Plantation	Species Planted	No. of Saplings Planted	Total Area Covered in acre	Survival Rate	Standing Trees	Remarks
2011-12	Fruit Bearing Trees Like Mango, Guava and Jackfruit etc.  Others Timber Species: Gambhari, Teak, Neem, Sisu, Siris, etc.	3000	3.2	75%	2250	Haladiaguna, Banua Village & Employees
2012-13		2000	2.0	75%	1500	Banua Village & Bankamaruni Vilage & Employees
2013-14		2500	2.0	75%	1875	Haladiaguana, Jadichatar and Employees
2014-15		2000	2.0	75%	1500	Kaunrikala village and employees
2017-18		1000	1.5	75%	750	Employees & villagers
2018-19		3000	3.0	75%	2250	Banua, Haldiaguna & Bankamaruni Vilage & Employees
2019-20		3000	3.0	75%	2250	Haladiaguna, Banua, Bankamaruni, Rangamatia Village and Employees
2020-21		5000	4.0	67%	3346	Fruit bearing saplings distributed among Villagers and Employees, Plantation at Keri Village, Maidankel, Gobardhan, Rangamatia, Haladiaguna & Banua.
2021-22		2800	3.0	62%	1736	Plantation at Gualdihi Rly Siding, Bankamaruni chowk , Adjacent to Santhebhanj Hill
2022-23		1400	2.5	74%	1054	Mega plantation at Banua Village, Bankamaruni chowk , Adjacent to Santhebhanj Hill
2023-24		1855	2.3	88%	1646	Mega plantation at Banua Village, Bankamaruni chowk , Adjacent to Santhebhanj Hill, Padmapur shiva temple premises.
2024-25		85	0.4	80%	68	Avenue plantation at Bankamaruni chowk to wards Haladiaguna village.
		<b>27640</b>	<b>28.9</b>	<b>74.6%</b>	<b>20225</b>	

**MSP SPONGE IRON LTD.**  
**HALDIAGUNA, KEONJHAR, ODISHA**

**STATUS OF ACTION TAKEN AS 30<sup>th</sup> SEPTEMBER 2024 ON COMMITMENTS MADE DURING PUBLIC HEARING HELD ON 23.03.2012**

Sl. No.	Activities Committed	Work undertaken before the PH (i.e., from 2001-02 to 2011-12)	Major Activities Undertaken after the PH (i.e., from 2012-13 to Sep'24)	Remarks
01	Drinking Water Supply	<p>a) • Supply of Drinking water to the nearby villages by digging bore well and water tanker.</p> <p>• Beneficiaries around 950 villagers of 3 surrounding villages namely Haldiaguna, Balisuan, Rangamatia.</p> <p>b) • Bore well – 1 no. provided in Balisuan village.</p> <p>c) • 6 nos. Bore wells are constructed at nearby villages.</p> <p>• Villages are namely Balisuan, Banua, Haldiaguna, &amp; Rangamatia</p> <p>d) • Drinking water supply by mobile Tankers made available to villagers on their social &amp; cultural events.</p>	<p>• Additional population covered around 600.</p> <p>• Regular maintenance is being carried out.</p> <p>• 2 nos. new Bore wells constructed</p> <p>• All 8 nos. of Bore Wells are regularly maintained.</p> <p>• Villages benefited namely Bankamaruni &amp; Hundula.</p> <p>• Drinking water supplied by Tankers to the surrounding villages are being maintained regularly</p> <p>• Supply of drinking water is made to meet social / individual functions and gatherings and in social</p>	<p>• Commitment complied, No pendency.</p>

				congregations.	
02	Medical facility	a)	<ul style="list-style-type: none"> <li>Round the clock Ambulance service is made available to the villagers.</li> </ul>	<ul style="list-style-type: none"> <li>Round the clock Ambulance service is made available to the local people considering the urgency of cases.</li> <li>One dedicated full-time doctor is engaged at Outpatient Clinic and Health Awareness Center of MSPSIL with supply of free medicine.</li> <li>Medical expenses of Rs.15,000/ per Month to critically ill patient of nearby village.</li> </ul>	<ul style="list-style-type: none"> <li>Continued....</li> </ul>

			<ul style="list-style-type: none"> <li>Considering the Covid Pandemic, the company has sanitized the local areas, GPs including Padmapur Market area and some nearby industries to contain the spread of COVID-19.</li> </ul>	
03	Road	a) <ul style="list-style-type: none"> <li>Repair and maintenance of internal village roads.</li> </ul> b) <ul style="list-style-type: none"> <li>Development of approach road from NH-215 to Banua village.</li> </ul> d) <ul style="list-style-type: none"> <li>24 nos. Street lights provided in the village road.</li> </ul>	<ul style="list-style-type: none"> <li>Repair and maintenance of village road were carried out wherever so needed.</li> <li>Repair and maintenance of village road plying from Kusmula to Gobardhan village made.</li> <li>Renovation of existing road of Ratanpur Village was made.</li> </ul> <ul style="list-style-type: none"> <li>Widening with one-side packing wall was constructed.</li> <li>Three nos. bus stops with approach bay were constructed in the main road of Keonjhar Town.</li> <li>Concretization of Approach Road to Banua Village.</li> <li>Village Approach Road Lighting.</li> </ul> <ul style="list-style-type: none"> <li>Provided total 136 Street light in Haldiaguna, Banua, Balisuan, Rangamatia, Senkhknap, Kusumula, Jadichatar, Ratanpur and Approach Road</li> </ul>	<ul style="list-style-type: none"> <li>Maintenance of village Road and providing street light is going on in consultation to the village committee.</li> <li>In continuation with the existing road lead to village another patch of 85 Mtr x 6 Mtr road is under construction with paver block for better maintenance and ground percolation of water during rain.</li> </ul>
04	Plantation	a) <ul style="list-style-type: none"> <li>Massive plantation in villages.</li> </ul>	<ul style="list-style-type: none"> <li>Plantation made in nearby village is about 27,640 sapling with a survival of approx. 20,225 nos.</li> </ul>	<ul style="list-style-type: none"> <li>Major plantation at Banua and Haldiaguna and</li> </ul>

				Padmapur village.	
	b)	<ul style="list-style-type: none"> <li>• Around 12500 saplings had been planted in various surrounding villages.</li> </ul>	<ul style="list-style-type: none"> <li>• As most of the employees are belongs to local villages, we have distributed good quality fruit bearing trees to the local employees.</li> </ul>	<ul style="list-style-type: none"> <li>• Fruit bearing trees of Mangoes and Jackfruits are distributed among the villagers.</li> </ul>	
	c)	<ul style="list-style-type: none"> <li>• Plantation in factory premises were made at boundary wall.</li> </ul>	<ul style="list-style-type: none"> <li>• The company has already achieved the target area of plantation inside the factory premises.</li> <li>• To meet the above requirements, the company had developed a Nursery inside the factory premises as per the directive of SPCB, Odisha and supplied saplings for inside &amp; outside plantation and achieved the target plantation during the year 2014-15.</li> </ul>	<ul style="list-style-type: none"> <li>• Plantation for greenbelt development as per the norms of EC is completed.</li> <li>• The land acquisition for the expansion project has not yet started. Once, after completion of land acquisition, plantation will be made to fulfil the norms of 33% green belt coverage.</li> </ul>	
05	Employment	a)	<ul style="list-style-type: none"> <li>• Employment provided to 140 nos. land losers.</li> <li>• Employment provided to other eligible local villagers.</li> </ul>	<ul style="list-style-type: none"> <li>• 192 land losers are directly employed in regular roll.</li> <li>• Besides, 116 villagers from periphery villages are employed in regular roll.</li> </ul>	<ul style="list-style-type: none"> <li>• Commitment complied.</li> <li>• However, in case of future expansion of the project, scope of new employment will be there for the villagers.</li> </ul>

		b)	<p>Employment in 2011- 2012 is around 676.</p> <table border="1"> <thead> <tr> <th colspan="2">Employment Details</th></tr> </thead> <tbody> <tr> <td>2012-13</td><td>865</td></tr> <tr> <td>2013-14</td><td>997</td></tr> <tr> <td>2014-15</td><td>1062</td></tr> <tr> <td>2015-16</td><td>1167</td></tr> <tr> <td>2016-17</td><td>568</td></tr> <tr> <td>2017-18</td><td>894</td></tr> <tr> <td>2018-19</td><td>1398</td></tr> <tr> <td>2019-20</td><td>1441</td></tr> <tr> <td>2020-21</td><td>1486</td></tr> <tr> <td>2021-22</td><td>1487</td></tr> <tr> <td>2022-23</td><td>1491</td></tr> <tr> <td>2023-24</td><td>1431</td></tr> <tr> <td>2024-25</td><td>1387</td></tr> </tbody> </table>	Employment Details		2012-13	865	2013-14	997	2014-15	1062	2015-16	1167	2016-17	568	2017-18	894	2018-19	1398	2019-20	1441	2020-21	1486	2021-22	1487	2022-23	1491	2023-24	1431	2024-25	1387	<ul style="list-style-type: none"> <li>Total employment as on Sep'24 is 1387. Out of total employment 84 % of employees belongs to the State of Odisha and 62 % belong to the local dist.</li> </ul>
Employment Details																																
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06	Education	a)	<ul style="list-style-type: none"> <li>Financial assistance to 10 nos of teachers in nearby school.</li> <li>Schools namely Jogeswar ME School, Jogeswar BHB High School &amp; Gobardhan UP School.</li> </ul>	<ul style="list-style-type: none"> <li>Additional 9 nos. Teachers at nearby schools in villages at Sendkap, Kusumula and Baulamal villages.</li> </ul>	<ul style="list-style-type: none"> <li>Remuneration of the teachers are being paid in every month.</li> </ul>																											
		b)	<ul style="list-style-type: none"> <li>Infrastructure development in school.</li> <li>School in villages at Banua, Kaunrikala, Putulia, Kainsi &amp; Sendkap.</li> </ul>	<ul style="list-style-type: none"> <li>Construction of School Building (New Class room) for students.</li> <li>Water supply at 3 nos. schools at Kainsi Keonjhar &amp; Banua.</li> <li>Contributed for Block Level Science Exhibition to Pragati High School, Maidankel, Keonjhar.</li> <li>Funded for Study Tour and Other events for School</li> </ul>	<ul style="list-style-type: none"> <li>Company provides funds for infrastructure development on demand and facilitate different education oriented activities in the schools at local villages.</li> </ul>																											

			students of Jogeswar BHB School and Nodal UP School Banua.	
	c)	<ul style="list-style-type: none"> <li>• Financial assistance for Sports, Annual functions, Science Exhibition &amp; study Tour / Picnic etc. for 6 nos. schools at Gobardhan, Keonjhar, Padmapur, Banua, &amp; Kaunrikala.</li> <li>• Organizing Sports, Annual functions, Science Exhibition &amp; study Tour /Picnic etc. for 6 nos. schools at Gobardhan, Keonjhar, Padmapur, Banua, &amp; Kaunrikala.</li> </ul>		
	d)	<ul style="list-style-type: none"> <li>• Rs,2,50,000/- has been spent for towards poor students for their higher study.</li> <li>• Financial assistance to 6 nos. poor students of Haldiaguna, Rangamatia, Balisuan &amp; Banua village.</li> </ul>		

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**MSP**  
**MSP SPONGE IRON LTD.**  
**HALDIAGUNA, KEONJHAR, ODISHA**

**PERIPHERY DEVELOPMENT EXPENSES AS ON 30<sup>th</sup> SEP' 2024**

Sl.No	PROJECT DETAILS	BENFICIARIES VILLAGES	TOTAL AMOUNT SPENT IN LACS.
1	DRINKING WATER SUPPLY (Digging of Bore wells, Contribution under Swajala Dhara Scheme, maintenance of all tubewells, supply of drinking water at social functions in the village etc.)	Haldiaguna, Banua, Balisuan, Bankamaruni, Rangamatia, Hundula	47.77 Lac
2	EDUCATION (Teachers monthly salary, infrastructure development school, supply of furnitures, contribution for Sports, Picnic, Annual Day Functions, Independence & Republic Functions, For digging of Wells & For Higher studies for meritorious students)	Haldiaguna, Banua, Balisuan, Bankamaruni, Rangamatia, Hundula, Kaunrikala, Gobardhan, Putulia, Padmapur	44.58 Lac
3	HEALTH & SANITATION (Mega Health Camps in village with free check up and medicines, cattle vaccinations for F&M diseases, Chlorination of the Pond in villages, providing Ambulance service for shifting of patients to DHQH or CTC)	Haldiaguna, Banua, Balisuan, Bankamaruni, Rangamatia, Hundula, Kaunrikala, Gobardhan, Sendhkap, Kusumula	30.56 Lac
4	IRRIGATION & AGRICULTURE & PLANTATION (Financial assistance for Fertilizers & Electrical charges under Panipachayat Scheme & Plantation)	Haldiaguna, Banua, Balisuan, Bankamaruni, Rangamatia	35.10 Lac
5	ELECTRIFICATION (provision of Streetlight on village Road, Supply of electrical items for School at Banua village, Electrical line provided in village & transformer rearing etc.)	Haldiaguna, Banua, Balisuan, Bankamaruni, Rangamatia, Ratanpur	30.73 Lac
6	ROADS REPAIRING & MAINTENANCE	Haldiaguna, Banua, Balisuan, Rangamatia, Ratanpur, Gualdihi	315.97 Lac
7	SOCIAL, CULTURAL & RELIGIOUS FUNCTIONS & CONSTRUCTION	All periphery villages in the vicinity of 5KM aerial distance.	59.30 Lac
8	OTHER CONTRIBUTIONS TOWARDS DEVELOPMENTAL WORKS AT KEONJHAR AND OTHER AREAS	Keonjhar Town	60.68 Lac
9	PAYMENT MADE TO PERIPHERY DEVELOPMENT SOCIETY, KEONJHAR.	Keonjhar Dist.	58.40 Lac
	GRAND TOTAL		683.09 Lac

**MSP SPONGE IRON LTD.**  
**Haldiaguna, Keonjhar, Odisha**

**CREP COMPLIANCE**

#	ENVIRONMENT PROTECTION MEASURES	STATUS OF COMPLIANCE
1.	Pollution Control Measures	<ul style="list-style-type: none"> <li>- Online Stack Monitoring systems (CEMS) are installed with three nos. Stacks connected to ESPs of Pellet and DRI Kilns.</li> <li>- Transmission of CEMS Data through RTDAS Server to SPCB and CPCB server.</li> <li>- Bi-monthly monitoring of AAQ, Stack, Water, Effluent, noise by NABL Accredited Lab.</li> <li>- 10 KLD STP for domestic water used in DRI cooling process and Green Belt development.</li> <li>- 6 KLD ETP used to treat PGP condensed water to reuse in LTC line Cooling.</li> <li>- Road Sweeping Machine for cleaning of internal roads on regular basis.</li> <li>- 148 Nos. of Fixed and Rotary sprinklers are installed all along the internal Roads.</li> <li>- Wheel Washing System installed before exit material gate to remove dust from the wheels of the outgoing trucks.</li> <li>- Three nos. water spray mobile tankers used for dust suppression on raw material yard and approach road.</li> <li>- Apart from the above additional Pollution Control Measures major pollution control equipment installed in various units supplied in <b>Annexure 7-I</b>.</li> </ul>
2.	Energy Conservation:	<ul style="list-style-type: none"> <li>- VFDs installed in ID Fan of ESPs connected to Pellet &amp; DRI Kiln</li> <li>- IE1 motors are replaced with IE3 motors. (30% completed.)</li> <li>- HPSB Lamps are replaced with LED Lamps.</li> <li>- General Switch Gears are replaced with Energy efficient Switch Gears. (30% already replaced)</li> </ul>
3.	Water Conservation:	<p><b>Technology Adopted in process:</b></p> <ul style="list-style-type: none"> <li>- Recuperators are installed in place of Ventury Scrubber.</li> <li>- STP treated water is used in DRI Cooling process.</li> <li>- Treated water from ETP is used in cooling of LTC Line.</li> </ul> <p><b>General Conservation Methods.</b></p> <ul style="list-style-type: none"> <li>- Developed 6 nos. of RWH ponds for collection of run-off water.</li> </ul>

		<ul style="list-style-type: none"> <li>- Clarifiers of 15 KLD capacity is installed to treat runoff water.</li> <li>- Water sprinkling systems are installed all along the internal road instead of manual water sprinkling through tankers.</li> <li>- Conducted Water Audit by CII-Triveni Water Institute in Mar'21 and by NPC in Oct'23 wherein suggested water conservation measures are under implementation.</li> </ul>
4	Plantation	<ul style="list-style-type: none"> <li>- Developed 33% green belt inside the premises over 25.85 Acres land out of total existing land of 74.19 Acres.</li> <li>- Outside plantation is carried out every year exclusively for local species of fruit bearing trees.</li> <li>- Details of Plantation is reflected as <b>Annexure-4</b>.</li> </ul>
5.	Hazardous Waste Management	<p>Used Oil : 0.84 T/Annum</p> <ul style="list-style-type: none"> <li>- Stored in a Barrel on impervious floor under covered shed.</li> <li>- Used in lubricating the rotary equipment.</li> </ul> <p>Tarry Waste: 1500 T/Annum</p> <ul style="list-style-type: none"> <li>- Stored in a container/Barrel on impervious floor under covered shed.</li> <li>- Disposed to Authorized recycler.</li> </ul> <p>Empty Barrel: 1 T/Annum</p> <ul style="list-style-type: none"> <li>- Kept under shed for further disposal to Authorized recycler.</li> </ul> <p>The unit is operating under valid HW Authorization no. 19997 Dt.19.12.2023 which is valid to 31.03.2025.</p>

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**MSP SPONGE IRON LTD.**  
HALDIAGUNA, KEONJHAR, ODISHA

Annexure-7-I

**DETAILS OF THE POLLUTION CONTROL EQUIPMENTS INSTALLED**

DIVISION / UNIT	TYPE	LOCATION	SUCTION POINT DETAILS	NO OF BAGS	SIZE OF BAGS	MOTOR CAPACITY	RPM	AIR HANDING CAPACITY IN AM3/Hr	
DRI, SMS & ROLLING MILL	Bag Filter	CD No 1 & 2 (Cooler Discharge)	Kiln 1,2, and 3 product (sponge Iron with half burnt Coal) discharge point from cooler 1 and 2	90	150 X 3000	20	1440	14000	
	Bag Filter	CD No 3 & 4 (Cooler Discharge)	Cooler -3& 4 discharge point	90	150 X 3000	22	1440	13500	
	Bag Filter	Injection Coal 1 & 2	Hopper connecting to storage bin & Rotary lock feeding point of kiln 1 & 2	72	150 X 3000	22	1440	9000	
	Bag Filter	Injection Coal 3 & 4	Hopper connecting to storage bin & Rotary lock feeding point of kiln 3 & 4	72	150 X 3000	15	1440	9000	
	Bag Filter	Product House and Transfer House	Sponge Iron screen, Magnetic Seperator, Product House	110	160 X 3600	30	1440	16200	
	Bag Filter	New Product House and Transfer House	Sponge Iron screen, Magnetic Seperator, Product House	90	160 X 3600	25	1440	11500	
	Bag Filter	Coal Crusher	Crusher of Coal, Coal Screen, Crusher Discharge, Screen Discharge	72	150 X 3000	22	1440	7200	
	Bag Filter	Iron Crusher & Stock House	Iron Screen, Iron screen Discharge. Stock House	90	150 X 3000	22	1440	15000	
	Bag Filter	Induction Furnace 1 & 2	Crucible Hood	120	150 X 3000	30	1440	10000	
	Bag Filter	Induction Furnace 3	Crucible Hood	72	150 X 3000	20	1440	7000	
	Pneumatic Dust handling System(Silo system)	Connected to ESP I & II and Heat Exchanger	Connected to discharge point of ESP I and II and heat exchanger of all kilns.	Capacity- 140 Cubic Meter - Connected to a screw -compressor of capacity 75KW, volume 550 c.f.m.& pressure of 7 K.g./Sq.c.m					
		Connected to all bagfilters of DRI units	Coller discharger 1,2 & 3,4, Injection coal 1,2 & 3,4 and Product House (Old & New)	Capacity- 80 Cubic Meter - Connected to a screw -compressor of capacity 75KW, volume 550 c.f.m.& pressure of 7 K.g./Sq.c.m					
Water spray Nozzles in ABC	After Burning Chamber	Location of Outlet	12 No each						
Air Pollution Control System by using Reccuparator, ESP & Chimney	For flue gas exhaust system at Kiln-I,II,III & IV stack (ABC)	Suction point from ABC top (stock) (750 mm X750 mm)	Comman ESP for Kiln I & II						
			Comman ESP for Kiln III & IV						

PELLET	ESP	CONNECTED TO TRAVELLING GRATE		NIL	NIL	525X2	1440	2, 60, 000X2
	BAG FILTER	FLUX GRINDING	FLUX GRINDER	80	260X1900	132	1440	25,000
	BAG FILTER	DRYER	DRYER HOOD	150	160X3620	45	1440	18,000
	BAG FILTER	PCI	PCI GRINDING MILL	768	120ø X 2400	180	1440	33, 000
	PNEUMATIC DUST HANDLING SYSTEM	CONNECTED TO ESP & MULTICYCLONE	MULTI CYCLONE,ESP	NIL	HIL	NIL	NIL	NIL
		CONNECTED TO FLUX DAYBIN	FLUX GRINDER&CYCLONE,BAG FILTER	NIL	NIL	NIL	NIL	NIL
PGP	Bag Filter	Coal Crushing Unit connected to PGP	Crusher of Coal,Coal Screen,Crusher Discharge,Screen Discharge	150	160 X 3620	45	1440	20000
COMMON APC FACILITIES	+	Coal yard,Iron Crusher, Doal Char stock yard , Internal Road etc.	Coal crushing Zone, Iron Ore crushing Zone, Coal Yard, Doalchar stock yard and internal roads.	156 Nos.				
	Dry Fog System	Coal and Iron Ore Crusher	Ground Hopper, Crusher, Screen and all Transfer Points.	16 Nos.				
	Water Spray System	All the internal roads and surroundings of all 4 kilns, Coal yard etc.	-	3 Nos. of Water Tanker (5 KL, 6KL & 12 KL)				



# MSP SPONGE IRON LIMITED

(An ISO 9001 : 2008, 14001 : 2004 OHSAS 18001 : 2007 Certified Company)

Corporate Office : 16/5, Block - A, New Alipore, Kolkata - 700 053, Ph. : +91-33-4005 7777, 4014 5678

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CIN No. : U27102WB1999PLC114830

## ENVIRONMENT POLICY

As has been resolved by the Board of Directors of MSP Sponge Iron Ltd (MSPSIL), the objective of the company is to operate its integrated unit with utmost regard for Safety and care for the Environment, in its meeting held on 19<sup>th</sup> April, 2021 at the Corporate Office, Kolkata.

MSPSIL is, therefore, committed to:

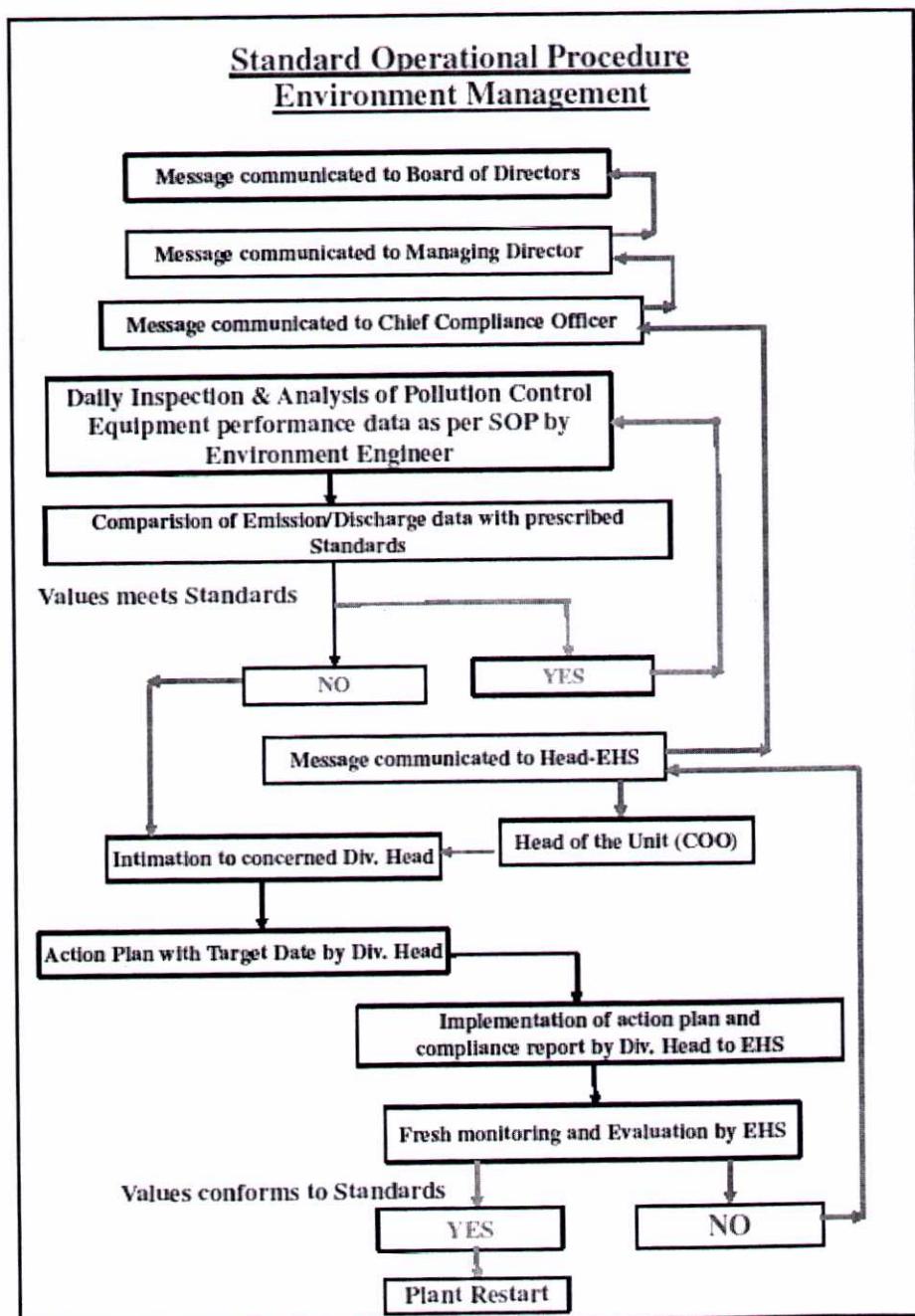
1. Adhere to National laws and regulations related to Environment Protection and Prevention & Control of Pollution for ensuring healthy & safe workplace.
2. Design, construct and operate the plant by adopting technology and process that are sustainable and environmentally acceptable in the country.
3. Initiate measures to prevent, minimize and control discharges to air, water and land of substances, which could adversely affect health and the environment.
4. Operate facilities and conduct activities taking into consideration of efficient usage and conservation of natural resources.
5. Establish Standard Operating Procedure (SOP) for effective Environment management through awareness and participation of employees, Contractors & Suppliers for prompt corrective measures and their compliances.
6. Employ qualified and competent personnel to oversee and maintain healthy and safe workplace environment for all employees.
7. Adopt measures to ensure that, all its contractors and business associates also comply with National laws and regulations related to Environment Protection and Prevention & Control of Pollution.
8. Adopt environmental conservation initiatives for preservation of bio-diversity around areas of operation.
9. Focus on continual improvement of environmental performance and ensure involvement of employees at all levels by providing training & awareness.

Date : 14.04.2021

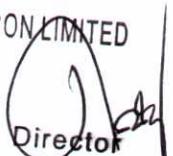
For MSP SPONGE IRON LIMITED

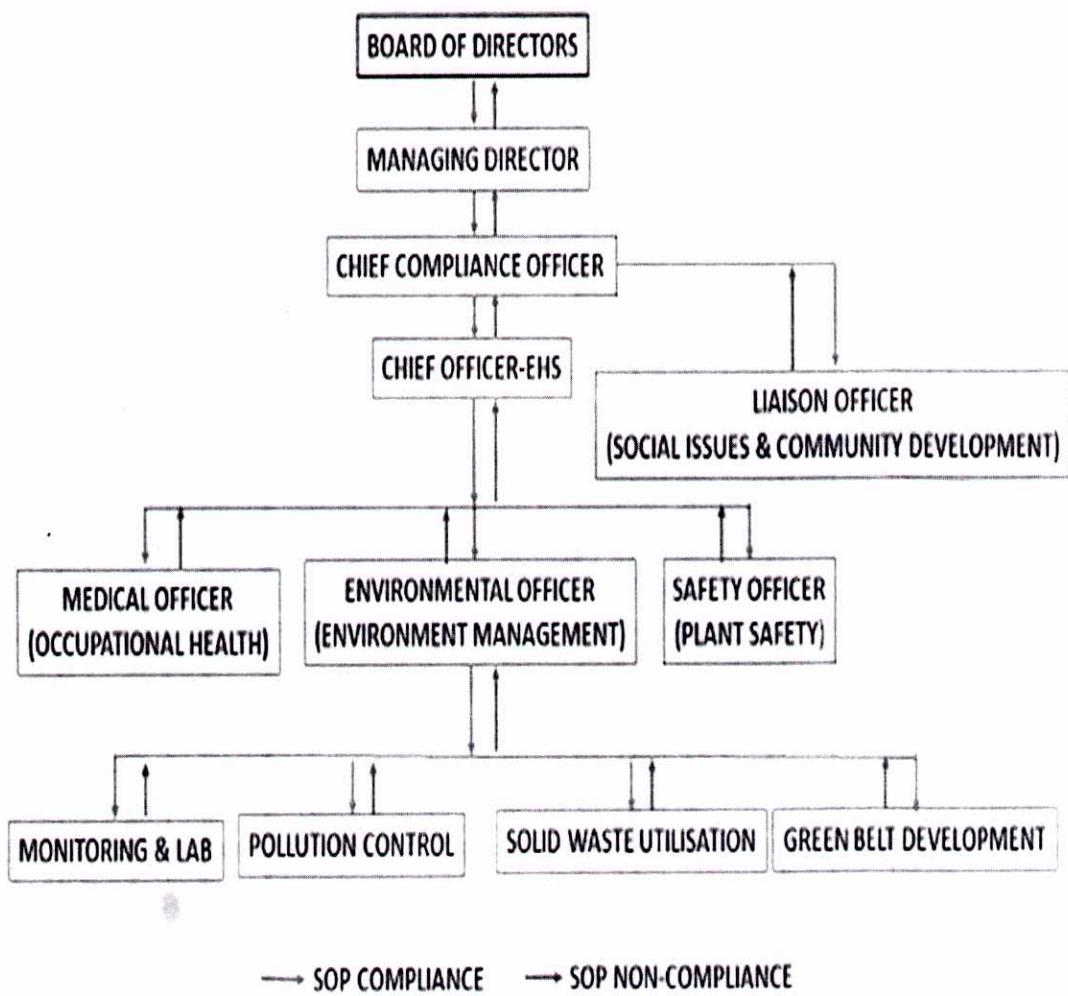
(P.K. DEY)  
Director

The Standard Operational Procedure (SOP) Flow Chart is described below :



For MSP SPONGE IRON LIMITED

  
Director

**Institutional Set-Up for Environmental Management**

For MSP SPONGE IRON LIMITED

Director



# MSP SPONGE IRON LIMITED

SPONGE IRON DIVISION

Corporate Office: 16/S, Block - A, New Alipore, Kolkata - 700 053  
Ph.: 91-033-4005 7777, 4014 5678, Fax : 91-033-4005 7799, 2398 2239  
Email: contactus@mspsteel.com, Web: www.mspsteel.com

OLC

Dt.07.01.2013

To

**The Chief Conservator of Forest (Eastern),  
Regional Office (Eastern Zone),  
Ministry of Environment & Forest, Govt.of India,  
A/3, Chandrasekharpur,  
Bhubaneswar-751023, Odisha**

**Sub: Intimation regarding publication of Environmental Clearance notification  
in respect of expansion proposal of M/s MSP sponge Iron Ltd., Haldia guna,  
Keonjhar in daily News papers.**

**Ref.: Environmental Clearance accorded vide F.No.J-11011/116/2011-IA-II (I)  
dt.10.10.2012**

Respected Sir,

In reference to above, as per the general condition stipulated at Sl. no. XIV of the Environmental Clearance granted in favour of our company, we had informed the Public through publication in two local news papers, i.e., **in Odiya daily "The Pragatibadi" on dt.19.12.2012 and the English daily "The Pioneer" dt.22.12.12.**

The details of publication in both the news papers are enclosed herewith for your kind reference.

Thanking You.

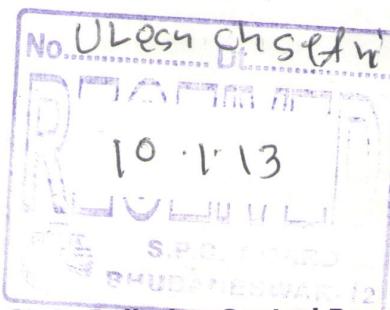
Yours faithfully,

For **MSP Sponge Iron Ltd.**

  
**A.R. Mishra**  
**Dy.G.M. (HR&Admn.)**

Encl.: As Above

**C.c. to The Member Secretary, State Pollution Control Board, Odisha,  
----- for kind information please.**



*Received*  
PS to APCCF (Central)  
GOI, M/o Envt. & Forests 11/13  
Eastern Regional Office  
Bhubaneswar-751023  
(Central)  
& Forests  
Regional Office  
Bhubaneswar-751023

Regd. Office :

1,Crooked Lane, Kolkata - 700 069, Phone : 91 033 3022 2795 / 4795, Fax : 91 033 2248 1720

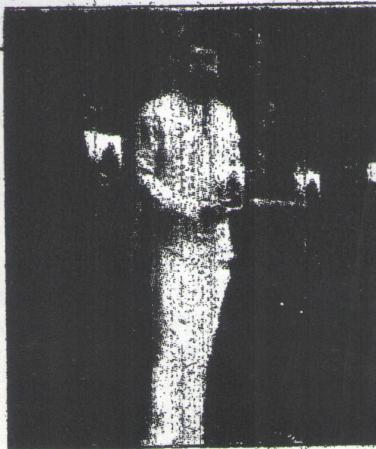
Works :

Vill. : Haldia guna, P.O. : Gabardhan, Dist. : Keonjhar, Orissa, Pin - 758013, Ph. : (06766) 235534, 256513

**BUILDING THE NATION**

ମହା କହିଥିଲେ ଯେ, ପ୍ରତିବିନି ଜାଣ୍ୟର ଶକ୍ତି ତାଇଥିବା ସାରତ ନିର୍ଣ୍ଣତ ହେଉଛି । ଏଥିମଧ୍ୟ ବି

## କିଟ୍ଟରେ କୁମାଳ ୧୫



ଭୁବନେଶ୍ୱର, ଟାଙ୍କ ୧୭ (ପିଣ୍ଡନାମ୍ବେ) : ବିଶ୍ଵାସ କିର୍ଦ୍ଦଶକ ଓ ସଂକାପକାର କୁନ୍ତାଳ କୋହଲି ତିପା ସେତଳଭାତ କିଟ୍ ପରିସରରେ ତେଷେଲୁ ବକ୍ତ୍ତା ସାରେ ଯୋଗ ଦେଇ ନିଜ ବିକ୍ରମ୍ ପ୍ରଦା କିଟ୍ କିଟ୍ ଓ ଓଡ଼ିଶା ଆଧ୍ୟତ୍ମିକ କୁନ୍ତାଳ ଓଡ଼ିଶାର ବିମୋହିତ ହୋଇପଢ଼ିଥିବା ବେଳେ ଓଡ଼ିଶାରେ ଶିକ୍ଷା ଉନ୍ନତ ମନକର ପ୍ରମାଣିତ କରୁଛି ବେଳି କି ‘ଦି ପାଇୟିର ଅଟ୍ଟ ଲଜ୍ଜିରେସନ’ ଉପରେ ବର୍ଣ୍ଣିତ ପରେ ଯିବିଧି ସୁବକମାନେ ଦେଖି ପାଇଁ କିଛି କରୁଥିଲେ ମଧ୍ୟ ହିତ୍ରାହିମାନେ ଦେଶ ପାଇଁ ଅନ୍ତର୍ଭାବେ ସେ ପ୍ରକାଶ କରିଥିଲେ । ଶିଶୁମାନେ ଯେ

# ବୁଲାଗୋରୁଙ୍କ ଲି

## କର୍ଣ୍ଣକୁ

କଳେ, ତାଣାଟିଏ (ପିଲାନ୍ଧେସ୍):  
ରାଜ୍ୟରେ ପଲିଥିନ ଆବର୍ଜନା  
ବାସା ଖାଦ୍ୟ ତଥା ଅନ୍ୟାନ୍ୟ  
ଅଖାଦ୍ୟ ଖାଇ ମୃତ୍ୟୁ ବରଣ  
କରୁଥିବା ଗୋଟିଏ ଗାନ୍ଧିଜୀ ସମ୍ମାନ ବୃଦ୍ଧି  
ପାଇବାରେ ଲାଗିଛି । ଯତି ଓ  
ବର୍ଷମାନ ଏହା ଚିତ୍ରାଜନକ  
ହୋଇନି ତଥାପି ଆଗାମୀ ଦିନରେ  
ଏହା ରାଜ୍ୟର ସହରାଞ୍ଜଳିର  
ଗୋପାଳକ ମାନ୍ୟ ଲାଗି ଚିତ୍ରାର  
ବିଷୟ ହୋଇଛି । ସ୍ଵତନ୍ତ୍ରା ଅନୁଯାୟୀ  
ରାଜ୍ୟର ବିଭିନ୍ନ ସହରରେ ଗୋଟିଏ  
ଗାଇ ଏତିକି ପ୍ରତିଷ୍ଠିତରେ ପଡ଼ି ମୃତ୍ୟୁ  
ବରଣ କରୁଥିବାଟି ଜଣାଯାଇଛି ।  
ପଲିଥିନକୁ ଗତ ୨୦୦୪ ମସିହାରୁ  
ନିର୍ମିତ କରାଯାଇଥିଲେ ମଧ୍ୟ ଏହାର  
ବନ୍ଦଳ ବ୍ୟକ୍ତହାର ହୋଇଗଲାଇଛି ।  
ସାଧାରଣତଃ ସ୍ଵଭବରେ ଏହି ଟାଙ୍କ  
ବୁଲାଥାବା ଗୋଟିଏ ଏହାକୁ ଉପିଲି  
ଦେଉଥିବାରୁ ଏହା ସେମାନଙ୍କ  
ପାଇସୁଲାଗେ ଏହିଷ୍ଟ କ୍ଷତି  
ଗଟିଥାଏ ବୋଲି କିମ୍ବକମାନେ

କେହାକିମ୍ବାକ ମୁରକ୍କାଥର ଚନ୍ଦ୍ରକାନ୍ତ ରାତ୍ରାମେ

ମେସର୍ସ୍ ଏମ୍ ଏସପି ସ୍କାନ୍ ଆଇରନ୍ ଲିମିଟେଡ୍

ଗ୍ରା: ହଳଦିଆଗୁଣା, ପୋ: ଗୋବର୍ଦ୍ଧନ, ଜିଲ୍ଲା: କେନ୍ଦ୍ରରେ, ଓଡ଼ିଶା  
ସାଧାରଣ ବିଜୟ

## ନିର୍ଦ୍ଦେଶକ

ମେସର୍ସ ଏମ. ଏସ. ପି. ଦାଙ୍କ ଆଇରନ୍ ଲିମିଟେଡ୍

**ଭାରତୀୟ ପ୍ରତିହାତି ଓ ବିତ୍ତମୟବୋର୍ଡ**  
**SECURITIES AND EXCHANGE BOARD OF INDIA**

ପୁର୍ବାଞ୍ଚଳ ଆନ୍ଦଳିକ କାର୍ଯ୍ୟାଳୟ  
ପ୍ରଦୀପ କାନ୍ଦିଲ ପ୍ରାଚୀ ପ୍ରକାଶନ ଲିମଟେଡ୍ ଲୋକାଶା- ୭୦୦୦୧୯

କଣ୍ଠରେ କାହାର କାହାର ପାଇଁ କାହାର କାହାର କାହାର କାହାର କାହାର

କାନ୍ତିକାରୀ ପର୍ଯ୍ୟନ୍ତ ମନ୍ଦିର ମଧ୍ୟରେ ମନ୍ଦିର ଆସବାବପତ୍ର, ବୈଦ୍ୟତିକ କାର୍ଯ୍ୟ, ଏଥାରୁ

## ବିଜ୍ଞାପନ

ଓଡ଼ିଶା ରାଜ୍ୟ ଗୃହ ନିର୍ମାଣ ସଂସ୍ଥା  
(ପ୍ରକଳ୍ପ ପଥେ)

ମୁଦ୍ରଣ ତାରିଖ: ୨୦୧୯୦୯-୦୫୦୦୯, ପେଜ୍: (୦୭୭୪) ୨୩୯୩୯୪

ପ୍ରକାଶକ ନାମ, ଦୂର୍ଦ୍ଵାରାର୍ଥ-୨୦୧୦୦୧, ପ୍ରକାଶନ ନମ୍ବର-  
ପ୍ରକାଶକ ନମ୍ବର: (୦୩୭୪) ୨୯୮୯୪୯୨, ୨୯୯୦୦୪୯

ପରିବହନ : (୦୬୭୪) ୨୫୮୦୬୨୨୨୨, ଓବିଦାର୍ (www.oshb.org) ପରିବହନ, ବ୍ୟାପକ ଦ୍ୱାରା ଆବଶ୍ୟକ ପାଇଁ ମୁଖ୍ୟ ପରିବହନ କରିବାରେ ନିର୍ଦ୍ଦେଶ ଦିଆଯାଇଛି ତାହାର ଉପରେ ବ୍ୟାପକ ଦ୍ୱାରା ଆବଶ୍ୟକ ପରିବହନ କରିବାରେ ନିର୍ଦ୍ଦେଶ ଦିଆଯାଇଛି । ଧ୍ୟାନ ଦିଲ୍ଲି ଏବଂ ବ୍ୟାପକ ଦ୍ୱାରା ଆବଶ୍ୟକ ପରିବହନ କରିବାରେ ନିର୍ଦ୍ଦେଶ ଦିଆଯାଇଛି ।

ନାମ	ବ୍ୟକ୍ତିଗତ	ରାଜାଧିକାରାବ ବାନୀ
ନାମ	ଟିକ୍କୁ-୪୧, ଟିକ୍କୁ-୫୧, କର, ଟିକ୍କୁ-୫୨, କୁଳକୁଳ	୧- କିରୁପାଳ କାଶ୍ତେ (ସା) ୨- ଦ୍ୱାରାରକାଣ କାଶ୍ତେ (ସୁଅ) ୩- କିରୁପାଳ କାଶ୍ତେ (ସୁଅ)
ନାମ	ଟିକ୍କୁ-୫୩, କୁଳକୁଳ ଟିକ୍କୁ-୫୪, କୁଳକୁଳ ଟିକ୍କୁ-୫୫, କୁଳକୁଳ	୧- କୁଳକୁଳ ମହାପାତ୍ର (ସୁଅ) ୨- ବସନ୍ତ କୁମାର ମହାପାତ୍ର (ସୁଅ) ୩- ମୁଖେଶ ଦିନ ମହାପାତ୍ର (ସୁଅ) ୪- କିଳାଳିତା କେବା (ବେହୁ)
ନାମ	ଟିକ୍କୁ-୫୬, କୁଳକୁଳ ଟିକ୍କୁ-୫୭, କୁଳକୁଳ ଟିକ୍କୁ-୫୮, କୁଳକୁଳ	୧- ରତ୍ନିକ୍ରିୟ କୁମାର ମହାପାତ୍ର (ସୁଅ) ୨- ନାରାୟଣ ବରଣ ମହାପାତ୍ର (ସୁଅ) ୩- ଶ୍ରୀରାମ ମୁଖେ ମହାପାତ୍ର (ସୁଅ)
ନାମ	ଟିକ୍କୁ-୫୯, କୁଳକୁଳ ଟିକ୍କୁ-୬୦, କୁଳକୁଳ ଟିକ୍କୁ-୬୧, କୁଳକୁଳ	୧- ପ୍ରିଲିଲ ପ୍ରଥାମ (ସା) ୨- ମନୀତା କୁମ୍ବୀ (ବିବାହିତା ଦିଅ) ୩- ସୁଲିତା ପ୍ରଥାମ (ଦିଅ) ୪- ଗାତ୍ର ପ୍ରଥାମ (ଦିଅ) ୫- ଗାତ୍ର ପ୍ରଥାମ (ଦିଅ) ୬- ବସନ୍ତ କୁମାର ପ୍ରଥାମ (ସୁଅ)
ନାମ	ଟିକ୍କୁ-୬୨, କୁଳକୁଳ ଟିକ୍କୁ-୬୩, କୁଳକୁଳ ଟିକ୍କୁ-୬୪, କୁଳକୁଳ	୧- ମୁଖେଶ କି (ସାରୀ) ୨- କିରାତକାଣ କି (ସାରୀ) ୩- ରତ୍ନିକ୍ରିୟ କି (ସାରୀ)



# 209 new Revenue Circles to be opened in 8 dists

PNS ■ BHUBANESWAR

In order to strengthen revenue administration at the rural level to ensure right to public services in time, the State Government has decided to open as many as 209 new Revenue Inspector Circles covering eight districts.

According to Revenue and Disaster Management Minister Surjya Kumarayani Patro, the proposed RI circles would be opened in seven backward districts, Kalahandi, Jharsuguda, Mayurbhanj, Subarnapur, Balasore, Nuapada and Sundargarh and Khurda. He said steps have already been taken to appoint 209 RIs and

209 Assistant RIs in the proposed RI Circles. Besides, 209 employees engaged on contract under the department would be appointed as peons in the new RI Circle. All the staff would be posted as per the 1983 Revenue Service Rules.

Patro said while 32 RIs and Assistant RIs each would be appointed under six tehsils of Kalahandi, 22 RIs and Assistant RIs in two tehsils of Jharsuguda, 7 RIs and Assistant RIs in eight tehsils of Mayurbhanj, seven each in two tehsils of Subarnapur, 52 in six tehsils of Balasore, 11 in two tehsils of Nuapada, four each in tehsils of Khurda and 10 each in three tehsils in Sundargarh.

they have arrested the culprits so they have cracked the case. So what about our safety? This incident has once again proved that Delhi is unsafe for women and the police administration has failed to prevent such activities," said Sonia, a physiotherapist. Amid slogans of 'A Girl is Not a Private Property of Anyone', students demanded that the rape culprits should face stringent punishment.

State, 1. Chhota Bihari, 19 spots of seven districts with details of their cultural and historic importance.

The 128-page book is printed entirely in glossy art paper with self-descriptive photographs. The beauties of Konark and Chandrabhaga along the marine drive are explained in the first chapter.

The typical Odia cuisine at Satapada on the blue sea mouth has given importance in the second part. The history of the Parikud palace, attack of British soldiers and the story and mythology behind Kalijai are

thing different while travel Phulbari, Dhimamaska Belghar and Bondagha is as a most beaut Odisha. The lifestyle, ornan dancing style out of experier Talsari, Panchalingesw

ory of the m first-ever Pri Independent with in the la

## MSP Sponge Iron Ltd.

Vill.: Haldiaguna, P.O.: Gobardhan, Dist.: Keonjhar

### NOTICE

This is for information of all concerned that M/s MSP Sponge Iron Ltd., Keonjhar have been accorded Environmental Clearance from the Ministry of Environment & Forest, New Delhi vide Letter No. J-11011/116/2011-IA-II (I) Dtd. 10.10.2012 for the expansion of its Mini Steel Plant to integrated Steel Plant for production of 1.59 LTPA Sponge Iron 12.00 LTPA Iron re Pellet, 10.00 LTPA Iron Ore Beneficiation, 20 MW captive power, 2.00 LTPA Pig Iron, 4.16 LTPA Sinter, 2,65,000 TPA Steel 0.42 LTPA Rolled products, 6.00 LTPA Coal Beneficiation, 23,664 nM3/hr coal based Producer Gas Plant (PGP) at village Haldiaguna, P.O.: Gobardhan, Dist.: Keonjhar, Odisha.

A copy of the said Environmental Clearance is available with the State Pollution Control Board, Odisha, Bhubaneswar and also the website of the Ministry of Environment & Forest, New Delhi at <http://envfor.nic.in>.

Director  
M/s MSP Sponge Iron Ltd.

### Uproar over...

From Page 1

their statement in the House, but the department after examining the notice had said that since the issue was pending in the Odisha High Court, it could not be discussed as per the rules and procedure of the House. However, aggrieved Singh alleged that attempts were being made to gag the Opposition against raising the burning issues taking the plea of sub judice. Stating that there was no point in coming to the Assembly if serious issues were not allowed for discussion under one plea or the other by the Government and the Speaker, he asked the Speaker to provide a list of issues which were not sub judice so that they could move and debate the left out issues through adjournment.

Government's to disrupt the repeated appeara of the Congress met ate in running Speaker first 11.36 am till and adjourned day at 3.56 pm sittings as change. As th in the afterno Opposition's Chief W Harichandran to the rela adjournmen issue, sought Speaker disc for discus Governmen information issues still in

Dubbing the Speaker in the S



702-B

## e-procurement Notice BID IDENTIFICATION No: EE/R&B/SBP/19/ 2012-13

No. 6840 /Dated. 15.12.2012

The Executive Engineer, Sambalpur (E&B) Division on behalf of Government of Odisha invites percentage rates bids for the construction of works as detailed below

বাংলা বেঙ্ক



UCO BANK

FLAGSHIP CORPORATE BRANCH.

2, India Exchange Place, Kolkata-700001  
Ph. No. (033) 2231-0205 Fax. (033) 2230-9613 Email:  
[bo.mcciep@ucobank.co.in](mailto:bo.mcciep@ucobank.co.in)

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Dated -17.05.2012

State bank of India Commercial Branch 24 Park Street. kolkata-700016	State Bank of Patiala Mid Corporate Branch Camac Street Branch Kolkata - 700017
United Bank of India Corporate Finance Branch 11, Hemanta Basu Sarani. Kolkata -700001	Federal Bank Bhowanipore Branch. 4/1, Lala Lajpat rai Sarani. Kolkata - 700020
State Bank of Hyderabad Park Street Branch Kolkata 700016	Central Bank of India. Corporate Finance Branch. 33 N.S. Road kolkata-700001

Dear Sir

**Sub:-** Minutes of the consortium meeting of the term lenders of pelletisation project of the company held on 15.05.2012 at the Golden Park Hotel – A/C MSP Sponge Ltd.

This has reference to the captioned subject, we forward herewith the minutes of the consortium meeting of the term lenders of pelletisation project of the company held on 15.05.2012 at the Golden Park Hotel, 13, Ho chi Minh Sarani Kolkata-700071 for your perusal and record.

Yours faithfully

Assistant General Manager.



**MINUTES OF THE CONSORTIUM MEETING OF MSP SPONGE IRON LIMITED AT THE GOLDEN PARK HOTEL AT 13, HO CHI MINH SARANI, KOLKATA- 700071 ON 15.05.2012 AT 7.00 P.M.**

**Members Present**

List of members is enclosed.

Mr. Saket Agarwal, Director of the company, welcomed all the members present at the meeting and acknowledged the support and guidance received from the bankers for the company's continuous growth. He then requested the bankers present to introduce themselves. With the introduction over, Mr. Saket Agarwal requested Mr. T.R. Gulati, AGM, UCO Bank to preside over the proceedings of the meeting. Mr. Gulati informed the members that the last consortium meeting was held on 5<sup>th</sup> January 2012 at the corporate office of the company and a copy of the minutes has already been circulated to all member banks for their consent for approving the same. The minutes were approved by all the consortium members. MR. T.R. Gulati then proceeded to the next agenda which was declaration of financial closure. He thereafter invited Mr. Saket Agarwal, Director of the company to appraise consortium about their new project.

**Declaration of Financial Closure**

Mr. Saket Agarwal, Director of the company, informed the members present that the company is setting up some additional infrastructure and balancing equipments at its Keonjhar Orissa factory site with a view for betterment of the existing infrastructure and to reduce costs of producing pellets and increase the productivity. The proposed project includes the following:

- (i) Installation of coal gasifier at the under implementation pellet plant to reduce fuel costs
- (ii) Construction of Water Pipe Line and Reservoir for utilization of water from nearby Ardei river to reduce the use of ground water as per the new policies of the state govt.
- (iii) Installation of a fire hydrant system in the plant to increase safety levels
- (iv) Installation of state of the art raw material handling systems to reduce transportation costs and time which shall help in improving margins

He further informed the members present that the COD for the proposed project has been finalized at Oct 2013. He further stated that the new project was discussed in the last consortium meeting held on 5<sup>th</sup> January 2012 wherein it was decided that the company can either approach the existing banks or new banks. Based on this the company had approached both existing banks and Central bank of India for grant of credit facilities.



Mr. Agarwal further stated that the total project cost for the proposed project was Rs 66.12 crs which is funded at an effective Debt/Equity ratio of 2:1. Out of the total equity component of Rs 22.12 crs, the company has already infused Rs 10.00 crs till date. He further informed the members present that the total term loan requirement of Rs 44.00 crs has been sanctioned by the following two banks:

Sl. No.	Name of Bank	Rs in Crs Amount
1.	State Bank of Hyderabad	22.00
2.	Central Bank of India	22.00

Mr. Agarwal further stated that the total requirement for the project was Rs 44.00 crs and the company has received sanctions for the same. With the required debt amount already tied up the company declared financial closure.

Mr. Agarwal then requested other member banks to formally induct Central bank of India in the consortium. The other members of the Consortium of Bankers noted the same and welcomed Central Bank of India into the consortium. He further stated that taking into consideration the new entrant, the consortium now have seven member banks.

#### **Discussion on Documentation, Disbursement and Security Creation**

##### **i) Documentation**

Mr. Saket Agarwal, Director of the company, informed the members present that since the company is planning to commission the pellet plant about 6-9 months ahead of the scheduled COD the company is planning to take the disbursement immediately for the proposed project on the basis of individual documentation. Both State Bank of Hyderabad and Central Bank of India agreed to it.

##### **ii) Disbursement**

The mode of taking disbursement was discussed among the member banks and it was finally agreed to between State bank of Hyderabad and Central bank of India that a common disbursement request will be given to both the banks wherein it will be clearly mentioned about the amount disbursed from each of the bank.

##### **iii) NOC**

Mr Agarwal stated that it was decided in the last consortium meeting on 5<sup>th</sup> January 2012 that incase a new bank takes an exposure in the proposed project the other member banks will give their NOC for ceding of pari passu charge on fixed assets of the pellet project and second pari passu charge on the current assets of the pellet project. In reply to this, Mr. Mr. T.R. Gulati, AGM, UCO Bank, informed the members present that they have already forwarded the proposal for issue of NOC and it is expected to be placed in the next Board Meeting. He then requested all the other member banks present to expedite their process for issue of NOC so that the formalities pertaining to execution of Joint Documents and creation of security for the proposed project can be completed within 120 days from the date of first disbursement.



**iv) LIE**

Mr. T.R. Gulati, AGM, UCO Bank, stated that the LIE Mr. Satyadeb Chakraborti appointed for the pellet project should continue for the proposed project as well for operational convenience. This was agreed to by the company as well as all the consortium members.

#### **Financial & Physical Status of the Pellet Project**

Mr. Saket Agarwal, Director then updated the consortium regarding the current status of the pellet project and the proposed project and informed that the project implementation is ahead of the schedule. The status of the project is as under:

##### **I. Pellet Project**

- a. The company has already deployed Rs 202.04 crs for implementation of the project till 30.04.2012. The source of funds is as follows:

Sl. No.	Source	Amount (Rs in crs)
1.	Promoters Contribution	77.57
2.	Term Loan from Banks	119.35
3.	Sundry Creditors	5.22
	<b>Total</b>	<b>202.04</b>

- b. The Land development work has already started and is expected to be completed by July 2012.
- c. The civil work has already started and is expected to be completed by Sep 2012. The details of construction activity completed till date is briefed as under:

Sl. No.	Description	Work Completed
1.	Proportionate Building (45 mts x 9 mts)	The work is complete to the extent of 85%
2.	Ore Grinding Unit (56 mts x 40 mts)	The work is complete to the extent of 75%
3.	Balling Disc (41 mts x 18 mts)	The work is complete to the extent of 90%
4.	TG (75 mts x 23 mts)	The work is complete to the extent of 90%
5.	ESP (22 mts x 17 mts)	The work is complete to the extent of 95%
6.	Staff Shed (68 mts x 12 mts)	The work is complete to the extent of 96%. Exterior wall plastering being done.
7.	Project office & store (45 mts x 18 mts)	Complete
8.	Tailing Thickener (Dia 38 mts)	The work is complete to the extent of 70%
9.	Weigh Bridge Building	The work is complete to the extent of 95%



10.	Chimney	The work is complete to the extent of 90%
11.	Concentrate Foundation	The work is complete to the extent of 70%
12.	Flux PCI Shed	The work is complete to the extent of 40%
13.	Dryer Foundation	Complete
14.	Flux Room	The work is complete to the extent of 90%
15.	PCI Foundation Work	Complete.

d. The company have placed import orders on various concerns of China for supplying of items like disc feeder, Kiln, Cooler, disc pelletizer, O/s & U/s screen, CVDF, Bucket Elevator, etc. Further the indigenous plant & machinery have been ordered to various vendors.

e. Most of the imported equipments have arrived at the Site. Erection work of the same has also started.

f. Most of the Fabricated structures have been received at site. Erection work of the same has also started.

## II. ADDITIONAL INFRASTRUCTURES PROJECT

a. The company has already invested Rs 10 crs (approx) for implementation of the project till 15.05.2012.

b. Civil Construction work  
Foundation Work for Reservoir, Coal & Iron Ore Shed, Coal Gassifiers etc have started.  
Excavation Work for laying Pipes for Fire Hydrant System started.

c. Plant & Machinery  
Orders for Coal Gassifiers have been placed.  
Order for MS Pipes placed for Fire Hydrant System.

### Any other Miscellaneous Matters, if any

Mr. A.K. Verma, CM, United Bank of India requested Mr. P.K. Das, Chief Manager, SBI to inform the members present about the status of creation of security for the remaining 2.35 acres of the pellet project. Mr. Das stated that the approval from the competent authorities has come. He assured the members present that the MOE will change in favour of the consortium by the end of this month.

Their being no further business to transact, the meeting ended with a vote of thanks to the chair.



# M/s. MSP Sponge Iron Limited

Bankers Meet on 15.05.2012 [7:00 PM] at  
"The Golden Park, 13 Ho Chi Minh Sarani, Kolkata"

## -: ATTENDANCE SHEET:-

Sl.	Name of the Participant	Bank	Designation	Signature
1	T. R. GUJALI	UCO Bank	ADM	TRG
2	S. Chakraborty	R	2nd Sr. Mng.	Chakraborty
3	P. Unnatheshwar	SBH, Park Street	CM	Unnatheshwar
4	B. K. Dash	SBH, Park Street	ADM	B. K. Dash
5	D. K. Sardarshan	Central Bank of India	ers.	Sardarshan
6	A. K. Singh	Central Bank of India	SM	A. K. Singh
7	S. K. Das	SBI	CM	S. K. Das
8	Ram Jogn	Federal Bank	CM	Ram Jogn
9	Alexander Ch.	Federal Bank	CM	Alexander Ch.
10	A. K. Verma	United Bank of India	CM	A. K. Verma
11	H. H. Pandey	State Bank of India	ADM	H. H. Pandey
12	S. K. Verma	State Bank of India	Dir. Manager	S. K. Verma
13	S. K. Agarwal	MSP Spon.	Director	S. K. Agarwal
14	SURESH AGARWAL	MSP SPONGE	C.E.O.	S. Agarwal
15	C. M. Bandy	MPA Financial	Director	C. M. Bandy
16	SUBHASH AGARWAL	MSP SPONGE	CFO	S. Agarwal
17				
18				
19				
20				



- 1) Date of application for copy - 22/10/24  
 2) Date fixed for notifying the accused - 22/10/24  
 3) Date of service of the copy - 22/10/24  
 4) Date when the copy was ready for service - 22/10/24  
 5) Date of making over the copy - 22/10/24

**ORDER-SHEET FOR MAGISTRATE'S RECORDS**  
**DISTRICT: KEONJHAR**

**Cost of Rs. 11/-** IN THE COURT OF CHIEF JUDICIAL MAGISTRATE OF  
**KEONJHAR.**

**2 (C) C.C. CASE NO. 33 OF 2024**

The State of Odisha

.....Complainant

-Versus-

M/S. MSP Sponge Iron Limited  
 Vill.- Haladiaguna, P.O.- Gobardhan,  
 Dist.-Keonjhar.

.....Accused Person

Order dated 21.10.2024

Ld. Counsel for the accused as well as the authorized person representing the accused company are present. Authorized person Sri Pradip Kumar Dey, Director of the Company filed a plead guilty memo. Statement of the authorized person of the accused company is recorded u/s 313 CrPC. Put up later for order.



Dictated.

Sd/-

C.J.M., Keonjhar.

Later 21.10.2024

Authorized Agent Sri Pradip Kumar Dey, Director of company M.S.P. Sponge Iron Ltd., Village- Haladiaguna, P.O.- Gobardhan, Dist.- Keonjhar is present and filed a plead guilty memo. On being asked he pleaded that M.S.P. Sponge Iron Ltd., Village- Haladiaguna, P.O.- Gobardhan,

Dist.- Keonjhar started construction activities i.e. 20 to 25 percent of Civil foundation work (boiler, STG and cooling tower) along with construction of raw material storage, finished the product bin, coal shed DRI & MCC room prior to grant of environment clearance during the period 15.03.2022 to 05.04.2023 and he admitted the guilty on behalf of the company. Thus the company has not complied E.I.A. Notification 2006 Clause I (ii) and (III)(b) and is liable u/s-15(I) of the Act. Hence, the company is held guilty u/s 241 of CrPC and is sentenced to pay fine of Rs. 1, 00,000/ (Rupees one Lakh) for offence u/s 15 (I) of EP Act. 1986.

Dictated.

Sd/-

C.J.M., Keonjhar.

Later 21.10.2024

Fine amount of Rs. 1, 00,000/- (Rupees one lakh) only is paid on behalf of the the accused and the fine cheque duly received by Nazir is tagged with the case record.

The case is closed.

Dictated.

Sd/-

C.J.M., Keonjhar

Typed By:- *Ishak*

Comp. By:- *D. Moh*

Certified the copy & found that the amount of court fees stamps & No. of folios required have been realise.

*Nanayon Moh*  
22/10/24  
Head comparing clerk



Verified to be true Copy  
*D. Moh*  
Head Clerk 22/10/24  
Authorised U/S 76 Act. 71

Comp. & found correct:- *22/10/24*



Schedule XLIII- High Court (M)3[Old(M)85]

2(c) C.C. No. 33 of 2024

FORM OF RECORDING EXAMINATION OF ACCUSED

The examination Pradip Kumar Dey, Director, M.S.P. Sponge, Iron Ltd, aged about 62 years,

taken before me Sri Himansu Sekhar Biswal, C.J.M.-cum-A.S.J., Keonjhar on the 21<sup>st</sup> day of October, 2024 in the English language interpreted by me into Oriya.

My name is Pradip Kumar Dey, my father's name is  
Lt. S.C. Dey

My home is at mouza AKASH ENCLAVE, 22/B, Police Station Behela, District Keonjhar.

I reside at Haladiaguna, Sadar, Keonjhar.

Q. No.1 M.S.P. Sponge Iron Ltd., Village- Haladiaguna, P.O.-Gobardhan, District- Keonjhar started construction activities i.e. 20 to 25 percent of civil foundation work (boiler, STG and cooling tower) along with construction of raw material storage, finished the product bin, coal shed DRI & MCC room prior to grant of environment clearance during the period 15.03.2022 to 05.04.2023. What have you got to say ?

Ans : প্রাদীপ দে

Q. No.2 What else have you got to say ?

Ans : কুন্তল কাপ কুন্তল কুন্তল,

Pradip Kumar Dey

(Signature or mark of the accused)

SD/-

21/10/24  
Chief Judicial Magistrate,  
Keonjhar.

Due to pressure of work and due to pain in my hand, I exercise my discretion of getting examination of accused typed on computer. The statement of him u/s.313 Cr. P.C. was recorded under my direction and superintendence by my Stenographer appointed in this behalf as per GL No.2 of 1976. The above examination was taken in my presence and hearing and contains a full and true account of the statement made by the accused. It was read over to the accused or interpreted to him in the language which he understands and was admitted by him to be correct.

SD/- 21/10/24  
Chief Judicial Magistrate,  
Keonjhar.

Certified the copy & found  
that the amount of court fees  
stamps & No. of folios  
required have been realise.

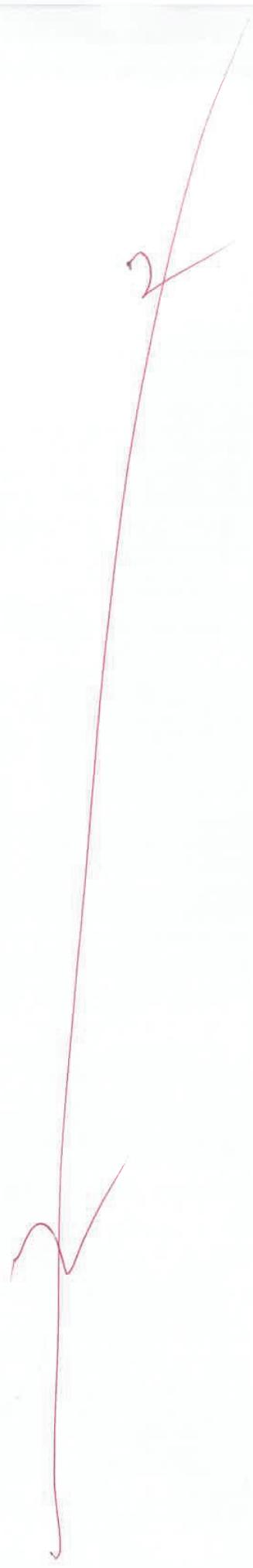
Narayan 22/10/24  
Head comparing clerk

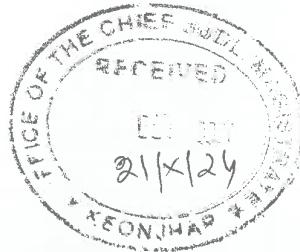


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22/10/24

SD/- 22/10/24  
Certified to be true copy  
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Head Clerk  
Authorised u/s 76 Act. 71.





To the Court of the C.M. for.

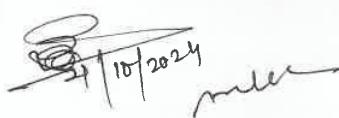
21 to 32/10/24.

State - S.D.R. -- correct  
Rs.

Msp. -- 40/-

Memo.

On behalf of Mr. And, Company  
Its representative of Mr. And  
pleads guilty of the offence.

Pradip Kumar Dey   
21/10/24  
Date

Representative  
of Mr. And company.

Certified the copy & found  
that the amount of court fees  
stamps & No. of follic  
required have been realise.

22/10/24  
Head comparing clerk

Comp. & found correct:-

22/10/24



verified to be true Copy  
Dilawer Dabri  
Head Clerk 21/10/24  
Authorised U/S 76 Act.

CA 2292124 (contd) dt. 22.10.24

Application for copy	Rs 1	P. 50
Searching	Rs 0	P. 50
Extra foil	Rs 4	P. 00
Delivery cost	Rs 1	P. 00
Other items	Rs 1	P. 00
Total	Rs 11	P. 00

(Rupees Eleven) only

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(Receipt Book)

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ତା 21/10/2024

Received from... M.S.R. Sponge Iron Ltd. କୋଣିହାର  
Crt. Fine is 2000000 33/2024 of the court of G.M. Keonjhar  
.owards  
Rs. (Paise) ପରସା ମାତ୍ର  
Rs. Taka Taka Taka



ରେ ଜମା ହେଲା ।

Prakash & Son  
21/10/2024

Deputy Administra  
Keonjhar

ଅଧିକାରୀଙ୍କର ସ୍ଥାନ ଓ ପଦନାମ

Signature of the Officer and Designation

-(FORMS) CTP-259--80,000Bks.--10-12-2015