पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय
Ministry of Environment, Forest and Climate Change

List of proposals for compliance report(Environment Clearance)

Category : All Category **State** : All States **Type of project** : All Project Type **Enter text for Search** : Please Enter Proposal No.,Name of Project or Area

Search

Add Project

Sr.No.	Proposal Details	Proponent Name	Project Sector	Location	Date of EC Granted	Uploaded EC Letter	Upload Compliance Report
No Record Found							

List of Added Projects

Sr.No.	Proposal Details	Proponent Name	Project Sector	Location	Date of EC Granted	Uploaded EC Letter	Upload Compliance Report
1	**Proposal No** : IA/JH/IND/236898/2020 **File No** : J-11011/41/2013-IA-II(I) **Name of Project** : JHARKHAND ISPAT PVT LTD	PUNYA NAND JHA	Industrial Projects - 1	**State** : JHARKHAND **District** : RAMGARH	2022-09-07		

Gmail Jharkhand <jam.env2018@gmail.com>

Regarding compliance for the period October, 2023 to March, 2024 to the conditions of Environment Clearance for Sponge Iron Plant (4x100 TPD), Induction furnace (2x12T+1x12T), Rolling Mill (90,000 TPA) and 18 MW power plant [6 MW WHRB, 2 MW Coal char based and 10 MW Coal based]

1 message

Jharkhand <jam.env2018@gmail.com> Thu, Jun 6, 2024 at 10:39 AM
To: ro.ranchi-mef@gov.in
Cc: rdkolkata.cpcb@gov.in, ranchijspcb@gmail.com, jspcb_hazaribagh@rediffmail.com
Bcc: Jharkhand <jam.env2018@gmail.com>

JIPL/2024-25 06/06/2024

To,
The Additional Principal Chief Conservator of Forests (C),
Government of India,
Ministry of Environment, Forest & Climate Change,
Integrated Regional Office (Eastern Central Zone),
2nd Floor, Headquarter-Jharkhand State Housing Board,
Harmu Chowk, Ranchi, Jharkhand- 834002

Sub:-Regarding compliance for the period October, 2023 to March, 2024 to the conditions of Environment Clearance for Sponge Iron Plant (4x100 TPD), Induction furnace (2x12T+1x12T), Rolling Mill (90,000 TPA) and 18 MW power plant [6 MW WHRB, 2 MW Coal char based and 10 MW Coal based].

Ref: - Environment Clearance Letter No. F. No. J-11011/41/2013-IA-II (I) Dated- 07/09/2022.

Dear Sir,
In reference to the above subject matter & reference letter, the point wise Half Yearly compliance status for the period of October, 2023 to March, 2024 is being submitted for your kind perusal please.

Hope you will find this in order and oblige.

Thanking you.
Yours faithfully
For Jharkhand Ispat Pvt Ltd

JIPL - EC Compliance - Oct 23 to March -2023.pdf
17569K

JHARKHAND ISPAT PRIVATE LIMITED

ADMN. OFFICE : Near P.N. Bank, Main Road, Ramgarh Cantt.
Dist. - Ramgarh (Jharkhand) - 829 122
CIN : U34102UP1991PTC012872
Telephone : 06553-226846, 224601, Fax : 226845
E-mail : jiplramgarh@gmail.com

IS : 2830
CM/L - 5406356

WORKS :
Vill, & P.O.- Hesla, Argada
Dist.- Ramgarh (Jharkhand)
PIN. - 829 101

Ref. No JIPL/2024-25

Date..... 06/06/2024

To,
The Additional Principal Chief Conservator of Forests (C),
Government of India,
Ministry of Environment, Forest & Climate Change,
Integrated Regional Office (Eastern Central Zone),
2nd Floor, Headquarter-Jharkhand State Housing Board,
Harmu Chowk, Ranchi, Jharkhand- 834002

Sub:-Regarding compliance for the period October, 2023 to March, 2024 to the conditions of Environment Clearance for Sponge Iron Plant (4x100 TPD), Induction furnace (2x12T+1x12T), Rolling Mill (90,000 TPA) and 18 MW power plant [6 MW WHRB, 2 MW Coal char based and 10 MW Coal based].

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Dear Sir,
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Hope you will find this in order and oblige.

Thanking you.
Yours faithfully
For Jharkhand Ispat Pvt Ltd

Authorized Signatory

Enclosures: Compliance status Report.

Cc to:-

1) The Zonal office Incharge, Central Pollution Control Board, Southernd Conclave, Block 502, 5th & 6th Floors, 1582 Rajdanga Main Road, Kolkata - 700 107 (W. B.).
2) The Member Secretary, Jharkhand State Pollution Control Board, T.A. Division Building (Ground Floor), HEC Campus, P.O. Dhurwa, Ranchi - 834004, Jharkhand.
3) Regional Officer, Regional Office, State Pollution Control Board, Hazaribagh, Jharkhand.

Jharkhand State Pollution Control Board

Online Consent Management & Monitoring System

Ministry of Environment, Forest and Climate Change
Government of India

Welcome JHARKHAND ISPAT PRIVATE LIMITED

Date : 6-6-2024

Your Compliance details has been Submitted. Your Acknowledgement Number is 19501193. Thank You!.

General

General Details

Industry Name:	**JHARKHAND ISPAT PRIVATE LIMITED**
Industry Address:	**VILL: HESLA, PO: ARGADA, RAMGARH, JHARKHAND**
Industry Pin:	**829103**
Industry S.T.D. Code(Phone):	**06553**
Industry Phone No:	**226846**
Industry E-Mail Address:	**jipllegal@gmail.com**
Occupier Name:	**RAM CHANDRA RUNGTA**
Occupier Designation:	**DIRECTOR**
Occupier Address:	**NEAR PNB, MAIN ROAD**
Occupier Pin:	**829122**
Occupier Mobile No:	
Occupier Email Address:	**jipllegal@gmail.com**
Industry Category:	**RED**
Industry Type:	**Iron and Steel (Involving processing from ore/scrap/integrated steel plants).**
Last Consent Granted App. No:	16016339
Last Consent Granted Uploaded Certificate:	View Uploaded Certificate
Last Consent Granted App. Type:	**CTO**
Authorization to file Compliance:	View File

Proposal No.	State	Proposal Name	Category	User Agency Name	Proposal Recieved on	File No	Date of grant

General Condition:	View
Specific Condition:	View

Environment Clearance Compliance Status
Period from October-2023 to March -2024

Name of Project:	Jharkhand Ispat Pvt. Ltd.
Capacity:	Sponge Iron Plant (4x100 TPD), Induction furnace (2x12T+1x12T), Rolling Mill (90,000 TPA) and 18 MW power plant [6 MW WHRB, 2 MW Coal char based and 10 MW Coal based].
Location:	Village & P.O – Hesla, Via – Argada, Dist.- Ramgarh, Jharkhand.
EC letter No.	F. No. J-11011/41/2013-IA-II(I) Dated- 07/09/2022.

A. SPECIFIC CONDITION:

<table>
<tr><th>Sl. No.</th><th>CONDITION</th><th>COMPLIANCE</th></tr>
<tr><td>i.</td><td>Damage remediation measures @ cost of Rs. 660.22 lakhs shall be implemented as per the action plan submitted in the EIA report.</td><td rowspan="2">EC obtained vide F. No. J-11011/41/2013-IA-II(I) Dated- 07/09/2022. The first year of damage remediation plan has been considered as financial year 2023-24 i.e 1st April 2023 onwards.
Following activities has been completed:-
<table>
<tr><th>Sl. No</th><th>Activity</th><th>Budget</th><th>Remark</th></tr>
<tr><td>01</td><td>Green Belt development in barren & stony forest land area of about 5 acres located between the village Argada and Jharkhand Ispat Pvt Ltd in consultation with DFO, Ramgarh.</td><td>4,77,238/-</td><td>Supporting documents are enclosed as Annexure – 1.</td></tr>
<tr><td>02</td><td>Distribution of seedling (Paddy) & Manure (DAP) to the villagers of Hesla & Maraar</td><td>46,350/-</td><td>Supporting documents are enclosed as Annexure – 2.</td></tr>
<tr><td>03</td><td>Distribution of agricultural tools for agriculture purpose to villagers of Hesla and Maraar.</td><td>1,65,191/-</td><td>Supporting documents are enclosed as Annexure – 3.</td></tr>
<tr><td>04</td><td>Distribution of tractor (Make Mahindra) with hydraulic trolley and</td><td>23,70,044/-</td><td>Supporting documents are enclosed as Annexure</td></tr>
</table></td></tr>
<tr><td>ii.</td><td>Jharkhand State Pollution Control Board vide letter Memo no. B-1767 dated 01.09.2022,has confirmed that M/s Jharkhand Ispat Private Limited has submitted Bank Guarantee amounting Rs. 6,60,22,500/- towards remediation plan and natural and community resources augmentation plan to Jharkhand State Pollution Control Board, Head Office, Ranchi vide BG No. 0962022BG0000159 dated 12.08.2022. Project proponent shall implement the plan and it shall be completed in three years whereas the bank guarantee shall be for five years. The bank guarantee shall be released by the SPCB after successful implementation of Remediation plan, Natural Resource Augmentation Plan and Community Resource Augmentation plan.</td></tr>
</table>

				Rotavator to each Nagar panchayat of village Hesla and Maraar		**– 4.**
			05	Distribution of eight (8) numbers of E-Rickshaw (4-seater, Make: Mac Auto) with charger for public transport in village Argada, Phulsarai, Maraar & Barkakana	9,30,248/-	Supporting documents are enclosed as **Annexure – 5.**
			06	Fund submitted to the DFO, Ramgarh for conservation of fauna in Phulsarai Protected Forest.	6,10,000/-	Supporting documents are enclosed as **Annexure-6.**
			07	Fund submitted to the Executive Engineer, water ways division, Hazaribag (Jharkhand) for conservation of aquatic life in Damodar River.	6,30,000/-	Supporting documents are enclosed as **Annexure – 7.**
				Total	**52,29,071/-**	
iii.	PP shall meet the 2906 KLD water requirement from Damodar River after obtaining requisite permission from the concerned competent authority. Ground water abstraction for industrial purpose is not permitted.	Complying with.				
iv.	Railway siding for the material transportation shall be provided by December, 2022 as committed.	Railway authority introduced new policy Gati Shakti Multi Modal Cargo Terminal; new installation under GCT scheme is awarded to JIPL by Railway on 22/04/2024. It is delay due to change of policy of Railway. Hence only WHRB is installed and other facilities are delay.				

<table>
<tr><td>v.</td><td>Green Belt shall be developed in 40 % of total land with tree density of 2500 trees per ha. (or 1000 trees per acre) all along the periphery of the project site. This shall include development of green belt with a width of 10-20 m within the project site towards Argarda village and Mahuwa Tand village.</td><td>Complying with.
Unit has expended Rs 15,27,085/- (under Environment clearance expenditure Rs 4,77,238/- & Rs 10,49,847/- under CSR) for green belt development in barren & stony forest land area of about 5 acres located between the village Argada and Jharkhand Ispat Pvt Ltd in consultation with DFO, Ramgarh. Letter of DFO regarding development of land for plantation and expenses bills are enclosed as Annexure – 1. We have planned for plantation in coming monsoon.
Detail expenditure are given below:-
<table>
<tr><td>Sl. No.</td><td>Particulates</td><td>Amount</td></tr>
<tr><td>01</td><td>Paid for deployed heavy vehicle machinery – Hyva, Dozer & Poklen</td><td>4,22,440.00</td></tr>
<tr><td>02</td><td>Diesel & lubricant used in deployed heavy vehicle machinery.</td><td>10,68,645.00</td></tr>
<tr><td>03</td><td>Payment for soil dumping</td><td>36,000.00</td></tr>
<tr><td colspan="2">TOTAL</td><td>15,27,085.00/-</td></tr>
</table>
</td></tr>
<tr><td>vi.</td><td>Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC.</td><td>Compiling with.
Performance test monitoring report of all pollution control systems is enclosed as Annexure – 8.</td></tr>
<tr><td>vii.</td><td>Effluent treatment plant shall be provided for 225 KLD effluent and treated water shall be reutilized in plant process.</td><td>Noted.</td></tr>
<tr><td>viii.</td><td>Particulate matter emission from stacks shall be less than 30 mg/Nm3.</td><td>Complying with.
Stack monitoring report is enclosed as Annexure – 9.</td></tr>
<tr><td>ix.</td><td>100 % solid waste shall be utilized. Dumping is not permitted.</td><td>Noted.</td></tr>
<tr><td>x.</td><td>Project proponent shall operate the violating unit “2x100 TPD DRI Kiln and 2x12 T Induction Furnace” only after obtaining Environmental Clearance and valid consent from state pollution control board as committed in the undertaking submitted to the Ministry.</td><td>Agree with and complied.</td></tr>
<tr><td>xi.</td><td>80-85 % hot charging for billets shall be done. Balance rolling shall be carried out through reheat furnace operating on LDO/LSHS.</td><td>Noted.</td></tr>
<tr><td>xii.</td><td>All plant roads shall be paved and</td><td>Noted, a dedicated housekeeping team is engaged to</td></tr>
</table>

	industrial vacuum cleaners shall be used to clean the roads regularly.	clean the factory premises.
xiii.	All stock piles shall be constructed over impervious soil and garland drains with catch pits to trap run off material shall be constructed.	Noted.

B. GENERAL CONDITION:

Sl.No	CONDITION	COMPLIANCE
I	**Statutory compliance :**	
i	The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.	Noted.
II.	**Air Quality monitoring and preservation:**	
i	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Being complied. Online monitoring systems – CEMS & CAAQMS are installed for monitoring of PM & SO2 emission of stack and ambient air quality. It is connected online with Central Pollution Control Board and Jharkhand State Pollution Control Board URL server.
ii	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Being complied. Fugitive monitoring report is enclosed as **Annexure – 10.**
iii	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	Agree with.
iv	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	Being complied on regular basis. 8 nos of bag filters are installed at different transfer point.
v	Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.	Noted.
vi	The project proponent shall ensure covered	Being complied with.

	transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.	
vii	The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.	Being complied with.
viii	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.	Noted.
ix	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.	Being complied with.
III	**Water quality monitoring and preservation**	
i.	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008; G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF); S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Noted. Unit has installed one number of Web Camera & Flow Meter near pump house. As per CPCB guideline, data is uploaded on CPCB & JSPCB URL sever.
ii.	The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.	Being Complied on regular basis. Ground water quality test monitoring & Piezometer reading is enclosed as **Annexure – 11.**
iii.	Adhere to 'Zero Liquid Discharge'.	Agree with.
iv.	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	For domestic waste, Unit has provided septic tank with soak pit.
v.	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.	Noted.
IV.	**Noise monitoring and prevention:**	
i.	Noise quality shall be monitored as per the prescribed Noise Pollution (Regulation And Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	Being complied on regular basis. Noise monitoring report is enclosed as **Annexure – 12.**
V.	**Energy Conservation measures**	

i.	Energy conservation measures may be adopted such as adoption of solar energy and provision of LED lights etc., to minimize the energy consumption.	Noted. For minimization of energy consumption, Unit has used LED lights.
VI.	**Waste management:**	
i.	Used refractories shall be recycled as far as possible	Noted.
ii.	100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.	Noted. Till date unit has installed only WHRB power plant.
iii	Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused in melting Furnaces.	Noted.
iv.	Kitchen waste shall be composted or converted to biogas for further use.	Noted.
VII.	**Green Belt :**	
i.	Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant	Being complied in regular basis.
ii.	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.	GHG emissions inventory report is enclosed as **Annexure – 13.**
VIII	**Public hearing and Human health issues :**	
i.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Being complied with.
ii.	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.	Being complied with.
iii.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.	Periodical health check-up are being carried and record are maintained on regular basis.
IX.	**Corporate Environment Responsibility**	
i.	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020.	Noted.

ii.	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/ violation of the environmental /forest / wildlife norms /conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and/or shareholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.	Environmental policy duly approve by the Board of Director is enclosed as **Annexure – 14.**
iii.	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	Being complied.

X. MISCELLANEOUS:

i	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	Advertised in two local newspapers of the District, Prabhat Khabar and Danik Bhaskar published on 13/09/2022 and 14/09/2022 respectively. Environmental conditions and safeguards will be complied in due course. EC letter has been put on our web site www.jharkhandispat.in

ii	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Copy of environment clearance letter has been sent to the following authorities:- 1) The Member Secretary, Jharkhand State Pollution Control Board, Ranchi, Jharkhand dated 12/09/2022. 2) The Regional officer, Jharkhand State Pollution Control Board, Hazaribagh, Jharkhand dated 12/09/2022. 3) The District Industries Centre, District -Ramgarh, Jharkhand dated 12/09/2022. 4) The Deputy Commissioner, District- Ramgarh, Jharkhand dated 12/09/2022. 5) President, Ramgarh Nagar Parishad, District- Ramgarh, Jharkhand dated 12/09/2022.
iii	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	Being complied on regular basis.
iv	The project proponent shall monitor the criteria pollutants level namely; PM_{10}, SO_2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	Being complied. Ambient Air Quality monitoring Report is enclosed as **Annexure-15.** Display board has been displayed on main gate. Photograph is enclosed as **Annexure – 16.**
v	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Noted, being complied on regular basis.
vi	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Being complied for existing plant, noted for compliance in expansion project. Environment Statement Report has been uploaded on the company web site www.jharkhandispat.in

vii	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	Noted.
viii	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Noted.
ix	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Agree with.
x	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted.
xi	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Agree with.
xii	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Agree with.
xiii	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.	Agree with.
xiv	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted.

O/C

Annexure - 1

JHARKHAND ISPAT PRIVATE LIMITED

ADMN. OFFICE : Near P.N. Bank, Main Road, Ramgarh Cantt.
Dist. - Ramgarh (Jharkhand) - 829 122
CIN : U34102UP1991PTC012872
Telephone : 06553-226846, 224601, Fax : 226845
E-mail : jiplramgarh@gmail.com

IS : 2830
CM/L - 5405356

WORKS :
Vill, & P.O.- Hesla, Argada
Dist.- Ramgarh (Jharkhand)
PIN. - 829 101

Ref. No JIPL/114/2023-24

Date 19/12/2023

To,
The Divisional Forest Officer,
Forest Division- Ramgarh
Dist. – Ramgarh (Jharkhand)

15-12-23

Sub: Proposal for Green belt development in compliance to the direction of MoEF&CC issued under the Environment Clearance.

Ref.: Environment Clearance letter No. J-11011/41/2013-IA-II(I) Dated 07/09/2022.

Dear Sir,

With reference to the above, MoEF&CC, New Delhi has been issued Environment Clearance to the Unit vide letter No J-11011/41/2013-IA-II(I) Dated 07/09/2022 (Copy enclosed as Annexure - I). As per EC condition detailed at page no 10 in para 1 (ii) "Greenbelt of 15m width, covering an area of 0.45 ha will be developed along the periphery of the village Argada, District Ramgarh, Jharkhand". To comply this EC condition, Jharkhand Ispat Pvt Ltd is planning for development green belt in barren & stony forest land area of about 5.00 acre located between the village Argada and Jharkhand Ispat Pvt Ltd plant with an investment of Rs 4,50,000/-.

Kindly give us the direction for green belt development in the above said area. Detail Proposal for Green belt development is enclosed as Annexure - II for your kind reference please.

Your early action on the matter is solicited.

Thanking you,

Yours faithfully,
For **JHARKHAND ISPAT PVT LTD**

Punya Nand Jha

Authorized Signatory

कार्यालयः– वन प्रमंडल पदाधिकारी, रामगढ़ वन प्रमंडल, रामगढ़।

(रांची रोड नियर बी.आर.एल. गेट, पो0–मरार, जिला–रामगढ़ पिन–829117)
Email id – dfo-ramgarh@gov.in, Landline- 06553-296061, Mobile No-8987790306

पत्रांकः– 22 दिनांकः– 5/01/24

सेवा में,

वन क्षेत्र पदाधिकारी,
कुजू प्रक्षेत्र।

विषय :– **मेसर्स झारखण्ड इस्पात प्रा0 लि0, हेसला द्वारा Green Belt development हेतु स्थल निरीक्षण के संबंध में।**

प्रसंगः– **निदेशक, मेसर्स झारखण्ड इस्पात प्रा0 लि0, हेसला, रामगढ़ का पत्रांक–114 दिनांक 19.12.2023**

महाशय,

उपर्युक्त विषय के संबंध में सूचित करना है कि मेसर्स झारखण्ड इस्पात प्रा0 लि0 द्वारा भारत सरकार, पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, नई दिल्ली द्वारा प्रदत पर्यावरणीय स्वीकृति के अनुपालन के क्रम में मौजा–अरगडा में 05 हे0 क्षेत्र में Greenbelt Develop करना है।

प्रयोक्ता अभिकरण द्वारा औधोगिक ईकाई के आस पास वनरोपण हेतु वन भूमि का चयन किया गया है। चयनित स्थल का नक्शा इस पत्र के साथ संलग्न कर भेजते हुए निदेशित किया जाता है कि प्रस्तावित स्थल का स्थलीय निरीक्षण कर प्रतिवेदित करें कि उक्त स्थल पर Top Soil डालते हुए समतलीकरण के उपरांत Greenbelt Develop किया जा सकता है ? क्या वन वृद्धि में इससे लाभ होगा ? पौधो की सुरक्षा के क्या उपाय किए जाएगें ? प्रतिवेदन एक सप्ताह में जमा करना सुनिश्चित करें।

अनुलग्नकः– यथोक्त।

आपका विश्वासी,

Nitish 05/1/24

वन प्रमंडल पदाधिकारी,
रामगढ़।

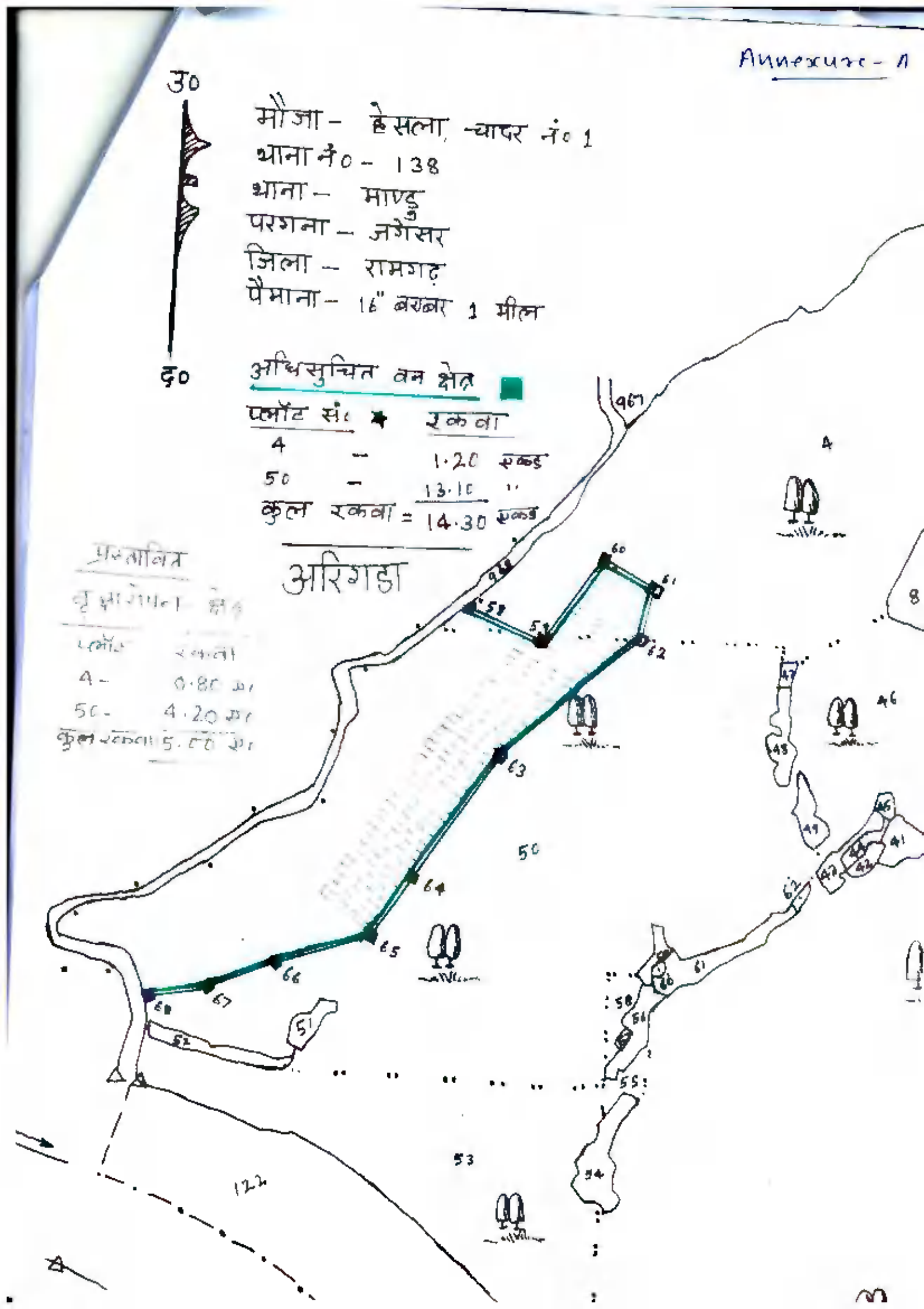
ज्ञापांकः–22 दिनांकः–5/01/24

प्रतिलिपि :– निदेशक, झारखण्ड इस्पात प्रा0 लि0, हेसला, रामगढ़ को सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित्। निदेशित किया जाता है कि स्थल निरीक्षण में वन क्षेत्र पदाधिकारी, कुजू को अपेक्षित सहयोग करें एवं अपने योजना से उनको अवगत करा, संयुक्त जाँच करना सुनिश्चित करें।

Nitish 05/1/24

वन प्रमंडल पदाधिकारी,
रामगढ़।

Annexure - A


उ०
द०
मौजा - हेसला, चादर नं० 1
थाना नं० - 138
थाना - माण्डु
परगना - जगेसर
जिला - रामगढ़
पैमाना - 16" बराबर 1 मील
अधिसुचित वन क्षेत्र
प्लॉट सं० * रकबा
4 - 1·20 एकड़
50 - 13·10 "
कुल रकबा = 14·30 एकड़
अरिगडा
प्रस्तावित
वृक्षारोपण क्षेत्र
प्लॉट रकबा
4 - 0·80 हे०
50 - 4·20 हे०
कुल रकबा 5·00 हे०
4
8
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122
967

कार्यालयः–वन प्रमंडल पदाधिकारी, रामगढ़ वन प्रमंडल, रामगढ़।

(रांची रोड नियर बी.आर.एल. गेट, पो0–मरार, जिला–रामगढ़ पिन–829117)

Email id –dfo-ramgarh@gov.in, Mobile No.8987790306, Landline No.06553-296061

पत्रांक 90 /रामगढ़, दिनांक 18/01/24

सेवा में,

निदेशक,
झारखण्ड इस्पात प्रा0लि0
हेसला, रामगढ़।

विषय :– **मेसर्स झारखण्ड इस्पात प्रा0 लि0 हेसला द्वारा Green Belt Development हेतु स्थल निरीक्षण के संबंध में।**

प्रसंग :– **आपका पत्रांक–114 दिनांक 19.12.23**

महाशय,

उपर्युक्त विषयक प्रसंगाधीन पत्र के संबंध में सूचित करना है कि मेसर्स झारखण्ड इस्पात प्रा0लि0 को भारत सरकार पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय नई दिल्ली द्वारा प्रदत पर्यावरणीय स्वीकृति के बिन्दु संख्या–7 के अनुपालन के क्रम में औधोगिक इकाई के आस–पास Greenbelt develop किया जाना है, जिसके क्रम में प्रसंगाधीन पत्र द्वारा मौजा–अरगड़ा में समर्पित रेखांकित मानचित्र के अनुसार 5 हे0 क्षेत्र का चयन किया गया है, जिसका स्थल निरीक्षण वन क्षेत्र पदाधिकारी, कुजू द्वारा किया गया है।

अतः Greenbelt development को बानिकी कार्य मानते हुए, निम्नलिखित शर्तो के साथ अनुमति प्रदान की जा रही है :–

1) प्रस्तावित स्थल अधिसूचित वन भूमि है, जिसका उपयोग सिर्फ Greenbelt development हेतु किया जाना है एवं उक्त भूमि का स्वामित्व वन भूमि ही रहेगा। इस पर प्रयोक्ता अभिकरण का कोई भी स्वामित्व अधिकार नहीं होगा।
2) प्रस्तावित स्थल पर अतिक्रमण एवं अवैध खनन के रोकथाम हेतु पूर्व से फेकें मलबे का समतलीकरण कर कम–से–कम 3 से 4 फीट उपजाउ मिट्टी भरते हुए वनरोपण कार्य किया जाय।
3) पौधों की सुरक्षा हेतु Chain Link Fencing/ Wire Fencing कार्य किया जाय।
4) प्रस्तावित स्थल पर ग्रामीणों के हित में वनोपज/फलदार वृक्षों का वृक्षारोपण किया जाय।
5) पौधों का रख–रखाव कार्य कम–से–कम पांच वर्षो का सुनिश्चित किया जाय।

6) पौधारोपण हेतु अग्रिम कार्य एवं समापन कार्य वन क्षेत्र पदाधिकारी, कुजू के देखरेख में एवं उनके निर्देशानुसार कराना सुनिश्चित करेंगे।

7) रोपित किये जाने वाले पौधा का प्रत्येक छमाही वन क्षेत्र पदाधिकारी, कुजू के साथ संयुक्त स्थल निरीक्षण के साथ उत्तरजीविता प्रतिवेदन समर्पित करना सुनिश्चित करेंगे।

आपका विश्वासी,

18/1/24

वन प्रमंडल पदाधिकारी,
रामगढ

ज्ञापांक ....90.... दिनांक ....18/01/24....

प्रतिलिपि :– वन क्षेत्र पदाधिकारी, कुजू प्रक्षेत्र को सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित।

18/1/24

वन प्रमंडल पदाधिकारी,
रामगढ

JHARKHAND ISPAT PRIVATE LIMITED

ADMN. OFFICE : Near P.N. Bank, Main Road, Ramgarh Cantt.
Dist. - Ramgarh (Jharkhand) - 829 122
CIN : U34102UP1991PTC012872
Telephone : 06553-226846, 224601, Fax : 226845
E-mail : jiplramgarh@gmail.com

IS : 2830

WORKS :
Vill. & P.O.- Hesla, Argada
Dist.- Ramgarh (Jharkhand)
PIN. - 829 101

Ref. No JIPL/2023-24 O/C

Date 13/03/2024

To,
The Ranger Forest Officer,
Kuju, Dist. – Ramgarh
(Jharkhand)

Sub: Green belt development regarding.

Ref.: Letter no 90 dated 18/01/2024 issued by DFO, Ramgarh.

Dear Sir,

With reference to the above, this is to inform you that M/s Jharkhand Ispat Pvt Ltd is developing green belt as per direction issued vide letter no 90 dated 18/01/2024.

13/3/24

In this regards we have completed following work:-

1) Scattered heavy & small stone pitching besides the low land to create retention of soil by deploying the Dozer & JCB.
2) Levelling of the surface of the area.
3) Top soil filling for green belt development. (Few photographs are enclosed for your kind reference).

This is for your kind information and needful please. Selection of plant for plantation and other technical suggestions on the matter is solicited.

Thanking you,

Yours faithfully,
For **JHARKHAND ISPAT PVT LTD**

Authorized Signatory

Enc.:- As above.

Cc.:- The Divisional Forest Officer, Ramgarh Forest Division, Jharkhand for information.

13/03/24

JHARKHAND ISPAT PVT. LTD

GREEN BELT DEVELOPEMENT

JHARKHAND ISPAT PRIVATE LIMITED

ADMN. OFFICE : Near P.N. Bank, Main Road, Ramgarh Cantt.
Dist. - Ramgarh (Jharkhand) - 829 122
CIN : U34102UP1991PTC012872
Telephone : 06553-226846, 224601, Fax : 226845
E-mail : jiplramgarh@gmail.com

IS : 2830
CM/L - 6406360

WORKS :
Vill, & P.O.- Hesla, Argada
Dist.- Ramgarh (Jharkhand)
PIN. - 829 101

Ref. No JIPL/2024-25 O/C Date 22/05/2024

To,
The Forest Range Officer,
Kuju, Dist. – Ramgarh
(Jharkhand)

Sub: Green belt development regarding.

Ref.: 1) Letter no 90 dated 18/01/2024 issued by DFO, Ramgarh.
2) Our letter no. JIPL/2023-24 dated 13/03/2024.

Dear Sir,

With reference to the above, this is to inform you that M/s Jharkhand Ispat Pvt. Ltd is developing green belt as per direction issued by DFO, Ramgarh vide letter no 90 dated 18/01/2024 on Khata no. – 64, Plot no – 4 & 50 of village – Hesla, Distt- Ramgarh, Jharkhand (falling between the village Argada and Jharkhand Ispat Pvt. Ltd plant).

In this regards we have completed following work:-

1) Scattered heavy & small stone pitching besides the low land to create retention of soil by deploying the Dozer & JCB.
2) Leveling of the surface of the area.
3) Top soil filling for green belt development.

For the above work, we have already incurred total Rs 15,27,085/- (under Environment clearance expenditure Rs 4,77,238/- & Rs 10,49,847/- under CSR). We also request you to provide the plants from your forest Nursery. We bave planned for plantation in coming monsoon.

Selection of plant for plantation and other technical suggestions on the matter from your end is solicited.

Thanking you,

Yours faithfully,
For **JHARKHAND ISPAT PVT LTD**

Authorized Signatory

CC: - The Divisional Forest Officer, Ramgarh Forest Division, Jharkband for information.

21AABAV0191P2ZC
VFPL ASIPL JV COMPANY

1.e-Invoice Details

IRN : acae9c9a09d28621cd7df235987e146cb **Ack No. :** 182416110697361 **Ack Date :** 02-05-2024 16:44:00
b421e0bb8e5e6526125d82d8ffe38ce

2.Transaction Details

Supply type Code : B2B **Document No. :** VFPLASIPL/2024A **IGST applicable despite Supplier and Recipient located in same State :** No

Place of Supply : JHARKHAND

Document Type : Tax Invoice **Document Date :** 30-04-2024

3.Party Details

Supplier :
GSTIN : 21AABAV0191P2ZC
VFPL ASIPL JV COMPANY
B/12, 132 KV CSC, JORABAGHA, JSG,
ODHISHA 768211 ODISHA
7488797812 vfpl.lakhanpur@gmail.com

Recipient :
GSTIN : 20AABCR2993R1ZX
JHARKHAND ISPAT PVT. LTD.
HESLA RAMGARH
ARGADA Place of Supply: JHARKHAND
829101 JHARKHAND

Ship To :
GSTIN : 20AABCR2993R1ZX
JHARKHAND ISPAT PVT. LTD.
HESLA RAMGARH
ARGADA
829101 JHARKHAND

4.Details of Goods / Services

SlNo	Item Description	HSN Code	Quantity	Unit	Unit Price(Rs)	Discount(Rs)	Taxable Amount(Rs)	Tax Rate(GST + Cess | State Cess + Cess Non.Advol	Other charges	Total
1	RENTAL CHARGES	996601	0	OTH	0	0	32000.00	18.00 + 0.00 | 0.00 + 0	0	37760.00

Tax'ble Amt	CGST Amt	SGST Amt	IGST Amt	CESS Amt	State CESS	Discount	Other Charges	Round off Amt	Tot Inv. Amt
32000.00	0.00	0.00	5760.00	0.00	0.00	0.00	0.00	0.00	37760.00

Generated By : 21AABAV0191P2ZC
Print Date : 02-05-2024 16:44:05

182416110697361

Digitally Signed by NIC-IRP
on :2024-05-02 16:44:00

21AABAV0191P2ZC
VFPL ASIPL JV COMPANY

1.e-Invoice Details

IRN : bc52d4cf0aa9d4a86abe246480809ffc24 **Ack No. :** 182416094709784 **Ack Date :** 30-04-2024 19:09:00
0a37ec4f7e8729fd271ddfbf4b5a63

2.Transaction Details

Supply type Code : B2B **Document No. :** VFPLASIPL/2024 **IGST applicable despite Supplier and Recipient located in same State : No**

Place of Supply : JHARKHAND

Document Type : Tax Invoice **Document Date :** 30-04-2024

3.Party Details

Supplier :
GSTIN : 21AABAV0191P2ZC
VFPL ASIPL JV COMPANY
B/12, 132 KV CSC, JORABAGHA, JSG,
ODHISHA 768211 ODISHA
7488797812 vfpl.lakhanpur@gmail.com

Recipient :
GSTIN : 20AABCR2993R1ZX
JIPL
HESLA RAMGARH
ARGADA Place of Supply: JHARKHAND
829101 JHARKHAND

Ship To :
GSTIN : 20AABCR2993R1ZX
JIPL
HESLA RAMGARH
ARGADA
829101 JHARKHAND

4.Details of Goods / Services

SlNo	Item Description	HSN Code	Quantity	Unit	Unit Price(Rs)	Discount(Rs)	Taxable Amount(Rs)	Tax Rate(GST + Cess | State Cess + Cess Non.Advol	Other charges	Total
1	RENTAL CHARGES	996601	0	OTH	0	0	326000.00	18.00 + 0.00 | 0.00 + 0	0	384680.00

Tax'ble Amt	CGST Amt	SGST Amt	IGST Amt	CESS Amt	State CESS	Discount	Other Charges	Round off Amt	Tot Inv. Amt
326000.00	0.00	0.00	58680.00	0.00	0.00	0.00	0.00	0.00	384680.00

Generated By : 21AABAV0191P2ZC
Print Date : 30-04-2024 19:09:09

182416094709784

Digitally Signed by NIC-IRP
on :2024-04-30 19:09:00

@ Rs. 95.50/- }
Total Ltrs: 11190 }

DIESEL CONSUPTION FOR GREEN BELT DEVELOPMENT PROJECT AT JIPL

	DATE	LTRS
DOZER	22.01.2024	190
	24.01.2024	270
	28.01.2024	245
	30.01.2024	185
	01.02.2024	210
	03.02.2024	220
	05.02.2024	205
	09.02.2024	180
	12.02.2024	190
	15.02.2024	160
	29.02.2024	200
	LTRS	2255

	DATE	LTRS
POKLEN	23.01.2024	320
	25.01.2024	275
	27.01.2024	170
	28.01.2024	335
	31.01.2024	310
	01.02.2024	460
	02.02.2024	270
	03.02.2024	340
	4.02.2024	289
	05.02.2024	335
	07.02.2024	240
	08.02.2024	390
	12.02.2024	330
	13.02.2024	328
	15.02.2024	330
	18.02.2024	495
	19.02.2024	402
	20.02.2024	437
	21.02.2024	320
	23.02.2024	350
	25.02.2024	228
	26.02.2024	200
	29.02.2024	380
	01.03.2024	480
	5.03.2024	250
	LTRS	8264

	DATE	LTRS
HYVA: 1960	08.02.2024	30
	09.02.2024	40
	10.02.2024	80
	11.02.2024	88
	27.02.2024	30
	29.02.2024	67
	12.03.2024	15
	LTRS	350

	DATE	LTRS
HYWA: 6081	08.02.2024	13
	09.02.2024	38
	10.02.2024	75
	11.02.2024	73
	LTRS	199

	DATE	LTRS
HYWA: 0494	27.02.2024	102
	LTRS	102

	DATE	LTRS
HYWA: 4650	12.03.2024	20
	LTRS	20

Jindal Ind. Pvt. Ltd. Angul
Store Received
Sign.
Date. 15/3/24

PAYMENT VOUCHER

JHARKHAND ISPAT (P) LTD.

Date 18/03/24

Branch Ramgarh

Voucher No.

A/c Head	
Yogesh Bediya for Soil Laying 20 Trip Rate Per Trip 1000/-	2000.00
12/03/24 20 trip	
Rupees Two Thousand only	
TOTAL	2000.00

Accountant/ Cashier

Manager

Passed by

योगेश बेदिया

Receiver's Signature

PAYMENT VOUCHER

JHARKHAND ISPAT (P) LTD.

Date 14/02/24

Branch Ramgarh

Voucher No.

A/c Head Jagdish Kediya For Soil Lagging Rate Per trip 1800 Rs	19'400.00
09/02/24 — 69 trip 10/02/24 — 60 trip 11/02/24 — 65 trip Total - 194 trip	
Rupees Nineteen thousand four hundred only.	
TOTAL	19'400.00

Accountant/ Cashier

Manager

Passed by

Receiver's Signature

PAYMENT VOUCHER

JHARKHAND ISPAT (P) LTD.

Date 02/03/24

Branch Ramgarh

Voucher No.

A/c Head Jagdish bediya for Soil Laying	
Rate Per trip 10045	14'600.00
27/02/24 — 38 trip	
28/02/24 — 41 trip	
29/02/24 — 67 trip	
Total 146 trip	
Rupees fourteen thousand six hundred only.	
TOTAL	14'600.00

Accountant/ Cashier

Manager

Passed by

Receiver's Signature

Jharkhand Ispat Pvt Ltd

Distribution of seedling (Paddy) & Manure (DAP) to the villagers of Hesla & Maraar

Village – Hesla

Village- Maraar

Bill of Supply

TRIPURARI STORES -(2021-22-23)
Gola Road Ramgarh Cantt
Jharkhand
Tripurari.Stores@yahoo.Com
MOBILE NO :-9431331805, 9709121294
9202565066
GSTIN/UIN 20AAIFT5761H1Z7
State Name : Jharkhand, Code : 20
E-Mail : tripurari.stores@yahoo.com

Invoice No.	Dated
583	23-Jun-23
Delivery Note	Mode/Terms of Payment
Reference No. & Date.	Other References
583 dt. 23-Jun-23	
Buyer's Order No.	Dated
Dispatch Doc No.	Delivery Note Date
Dispatched through	Destination
Terms of Delivery	

Consignee (Ship to)
JHARKHAND ISPAT PVT LTD
ARGADA
State Name : Jharkhand, Code : 20

Buyer (Bill to)
JHARKHAND ISPAT PVT LTD
ARGADA
State Name : Jharkhand, Code : 20
Place of Supply : Jharkhand

Sl No.	Description of Goods	HSN/SAC	Quantity	Rate	per	Disc. %	Amount
1	PADDY 650 1KG 30PC (SHIRIRAM)	10061010	96 NO'S	300.00	NO'S		28,800.00
	Total		96 NO'S				₹ 28,800.00

Amount Chargeable (in words) E & O.E
Indian Rupees Twenty Eight Thousand Eight Hundred Only

HSN/SAC	Taxable Value
10061010	28,800.00
	Total : 28,800.00

Tax Amount (in words) : **NIL**

Company's PAN : **AAIFT5761H**

Declaration
We declare that this invoice shows the actual price of the goods described and that all particulars are true and correct.

for TRIPURARI STORES -(2021-22-23)

Authorised Signatory

This is a Computer Generated Invoice

DUPLICATE

CASH / CREDIT RECEIPT

(SALE TO FARMER)

Retailer Name & Address Tripurari St oreRamgarh

Retailer ID 219589

Certificate Registration No 69/14-17

GSTIN No : 20AAIFT5761H1Z7

Invoice No 219589173102709

Date/Time : 23/06/2023 10:27

Buyer Name Rajesh Singh

Buyer Address : Vill- Bujurg Jamira Ne ar Shiv Mandir Ps - Patratu Barkakana Ramgarh Jharkhand

AadharNo/VirtualId : ********1489

Product-Plant	Qty(Unit)	Unit/Price (Rs.)	Amt (Rs.)
Imported DAP IPL	2.0(50 Kg Bag)	1350.0	2700.00

Total Amount (Rs) 2700

(Inclusive of GST)

GST Summary

CGST(@2.5%)	Rs. 64.29
SGST(@2.5%)	Rs. 64.29

Total Tax Amount(Rs) : 128.58

Payment Mode: Cash

Subsidy to be borne by the government on behalf of the farmer (Rs) : 3264.1

To know the stock position at retailer, se nd SMS RS<space><Retailer ID> to 77382898 99 or visit Farmer s corner at https://ur varak.nic.in

Thank You

23/06/23

Customer Copy

CASH / CREDIT RECEIPT

(Sale to Farmer)

Retailer Name & Address Tripurari St oreRamgarh

Retailer ID : 219589

Certificate Registration No 69/14-17

GSTIN No : 20AAIFT5761H1Z7

Invoice No 219589173102438

Date/Time : 23/06/2023 10:25

Buyer Name Manoj Kumar

Buyer Address : Milan Niwas, Aashria C olony, Street No. 3 Oyna Ranchi Jharkh and

AadharNo/VirtualId : ********1930

Product-Plant	Qty(Unit)	Unit/Price (Rs.)	Amt (Rs.)
Imported DAP IPL	11.00(50 Kg Bag)	1350	14850.00

Total Amount (Rs) : 14850.00

(Inclusive of GST)

GST Summary

CGST(@2.5%)	Rs. 353.57
SGST(@2.5%)	Rs. 353.57

Total Tax Amount(Rs) : 707.14

Payment Type: CASH

Subsidy to be borne by the government on behalf of the farmer (Rs) : 17952 55

To know the stock position at retailer, se nd SMS RS<space><Retailer ID> to 77382898 99 or visit Farmer's corner at https://ur varak.nic.in

Thank You

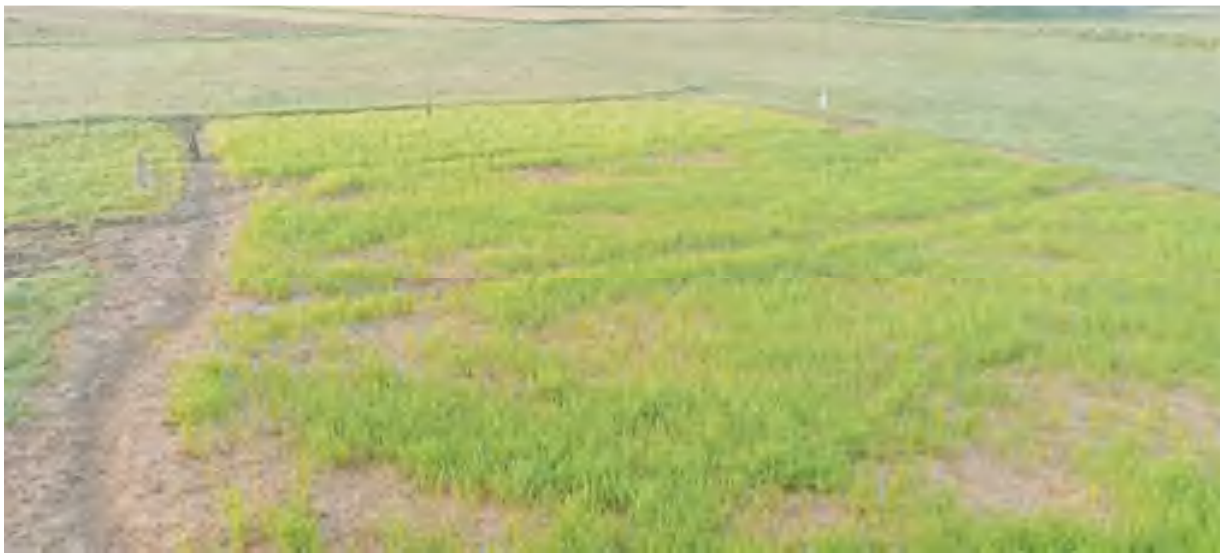
दैनिक भास्कर

रामगढ़ 25-06-2023

किसानों के बीच बीज और खाद का वितरण

रामगढ़ | रामगढ़ में मानसून के प्रवेश के साथ ही झारखंड इस्पात प्राइवेट लिमिटेड रामगढ़ के द्वारा किसानों के बीच उन्नत बीज और खाद देकर सहयोग किया है। शनिवार को मरार और हेसला के किसानों के बीच उन्नत बीज और खाद (डीएपी) बांटा गया। उत्तम बीज 650 एवं खाद पा कर गांव के किसानों में खुशी का माहौल है।

Cultivation of Paddy at Village Hesla & Maraar



Harvesting of Paddy crop at village Hesla & Maraar

Annexure - 3

JHARKHAND ISPAT PRIVATE LIMITED

ADMN. OFFICE : Near P.N. Bank, Main Road, Ramgarh Cantt.
Dist. – Ramgarh (Jharkhand) - 829 122
CIN : U34102UP1991PTC012872
Telephone : 06553-226846, 224601, Fax : 226845
E-mail : jiplramgarh@gmail.com

IS : 2830

WORKS :
Vill. & P.O.- Hesla, Argada
Dist.- Ramgarh (Jharkhand)
PIN. - 829 101

Ref. No ..... O/C Date.....

JIPL/2023-24 दिनांक:– 08.01.2024

सेवा में,

अध्यक्ष
नगर परिषद, रामगढ़,
जिला–रामगढ़, झारखण्ड।

विषयः– **गाँव हेसला और मरार के कृषकों के लिए कृषि उपकरणों के वितरण के संबंध में।**

संदर्भः– पर्यावरणीय सहमति पत्र सं0– F.No.-J11011/41/2013-IA-(I) दिनांक–07.09.2022

महाशय,

उपर्युक्त के संबंध में सूचित करना है कि झारखंड इस्पात प्रा0 लि0 द्वारा गाँव हेसला और मरार मे किसानों के लिए कृषि कार्य के लिए उपकरणों के वितरण की योजना है, जिसके लिए गाँव हेसला और मरार के किसानों की सूची तथा उनके जमीन की लगान रसीद की छायाप्रति एवं आधार कार्ड की छायाप्रति की आवश्यकता है।

अतः आपसे अनुरोध है कि गाँव हेसला एवं मरार के किसानो की सूची के साथ उनके जमीन के लगान रसीद एवं आधार कार्ड की छायाप्रति यथाशिघ्र उपलब्ध कराने की कृपा करें। जिससे कृषि कार्य के लिए उपयोगी उपकरणो का वितरण सुनिश्चित किया जा सके।

सधन्यवाद,

कृते झारखंड इस्पात प्रा0लि0

(मनोज कुमार)
अधिकृत हस्ताक्षरकर्ता

प्रतिलिपिः–

01. वार्ड पार्षद गाँव हेसला।
02. वार्ड पार्षद गाँव मरार।
आवश्यक कार्यवाही हेतु प्रेषित।

08/1/2024
शिव शंकर विश्वा
वार्ड पार्षद सं0-09, मरार
रामगढ़ नगर परिषद (झारखण्ड)


सौजन्य से,
JHARKHAND ISPAT PVT LTD
Shot on Y11
Vivo AI camera


सौजन्य से
JHAR ISPAT LTD
Vill & Pos
Via- Arga
Dist- Ran
Shot on Y11
Vivo AI camera


IHARKHAND ISPAT PVT LTD
झारखण्ड इस्पात प्रा० लि०
& Post- Hesla
Argada


सौजन्य से,
GPS Map Camera
Marar, Jharkhand, India
MGF5+HGH, Marar, Jharkhand 829117, India
Lat 23.673978°
Long 85.508926°
06/03/24 12:18 PM GMT +05:30
Google

गोपाल मुण्डा
वार्ड पार्षद
हेसला, वार्ड सं०-12
नगर परिषद, रामगढ़
जिला – रामगढ़

स्वच्छ भारत
एक कदम स्वच्छता की ओर

आवास:
ग्राम – हेसला (जामुनटाँड़)
पो० – हेसला
थाना + जिला – रामगढ़
झारखण्ड पिन – 829101
मो० : 9470320320, 7004804212

पत्रांक GM:P-12/33/024 दिनांक 2/03/2024

सेवा में,
झारखण्ड इस्पात प्रा० लि०
हेसला (महुवा टाँड़) जिला-रामगढ़

विषय : दिनाँक- 02/03/2024 के संबंध में।

संदर्भ : पत्रांक सं० J.I.P.L/2023-24 दिनाँक 08/01/2024 के आलोक में।

महाशय,

उपर्युक्त विषय के संदर्भ में कहना है की दिनाँक 02/03/2024 को झारखण्ड इस्पात प्रा० लि० C.S.R के प्रभारी सह- फैक्ट्री अधिकारी, वार्ड पार्षद एवं गण्यमान्य लोगों की गरिमामयी उपस्थिति में फैक्ट्री के आस पास कृषि किसानों को किसान सामग्री उपकरन किट का वितरण किया गया।

जो झारखण्ड इस्पात प्रा० लि० के प्रबंधक बधाई के पात्र हैं।

धन्यवाद

Gopal Munda
2/03/024
गोपाल मुण्डा
वार्ड पार्षद
वार्ड सं०-12
नगर परिषद, रामगढ़

शिव शंकर मिश्रा
वार्ड पार्षद वार्ड सं0 09
रामगढ़ नगर परिषद
(झारखण्ड)

झारखण्ड सरकार

आवास : ग्राम + पो0 : मरार,
थाना : रामगढ़,
जिला : रामगढ़, (झारखण्ड)

Mob.:- 97981 78956
96612 50484

पत्रांक सं0 ---18/3034---

दिनांक 06/3/2024

सेवा में,

झारखण्ड इस्पात प्रा0 लि0

मरार, जिला रामगढ़, झारखण्ड।

विषयः– मरार गाँव में दिनांक 06.03.2024 को कृषि उपकरण वितरण के संबंध में

संदर्भः– पत्रांक सं0– JIPL/2023-24 दिनांक 08.01.2024 के आलोक में।

महाशय,

उपयुक्त विषय के संदर्भ में कहना है कि दिनांक 06.03.2024 को मरार गाँव के पंचायत भवन में किसानो को कृषि उपकरण का वितरण झारखण्ड इस्पात प्रा0 लि0 के प्रबंधन द्वारा किया गया।

इस कार्य के लिए झारखण्ड इस्पात प्रा0 लि0 के प्रबंधन बधाई के पात्र हैं।

धन्यवाद,

06/3/2024

(ORGINAL FOR RECIPIENT)

Tax Invoice

SWADESHI ENTERPRISES PROPRIETOR : SUBHAM CHOWHURY RANCHI ROAD, MARAR, RAMGARH (JHARKHAND) 829117 GSTIN : 20AVGPC9551P1ZD CONTACT NO. : 7979740256 PAN NO. AVGPC95551P (SUBHAM CHOWDHURY)	Invoice No. **SE/2023-24/209**	Dated **29-FEB-2024**
	Delivery Note	Mode/Terms of Payment
	Supplier's Ref.	Other Reference(s)
Consignee **JHARKHAND ISPAT PRIVATE LIMITED** VILL. HESLA, ARGADA DIST: RAMGARH JHARKHAND 829101 GSTIN/UIN: 20AABCR2993R1ZX State Name : Jharkhand, Code : 20	Buyer's Order No.	Dated
	Despatch Document No.	Delivery Note Date
	Despatched through	Destination **HESLA, ARGADA ,RAMGARH,JHARKHAND**
	Bill Of Lading/ LR-RR No.	Motor Vehicle No.
Buyer (if other than consignee)		

Sl No.	Description of Goods	HSN/SAC	Quantity	Rate	Per	Amount
1	SHOVEL ATTOT GOLD	8201	130	280.00	NOS	36400
2	SPADE TATA SET	8201	130	290	NOS	37700
3	SPADE SMALL SET	8201	130	185.00	NOS	24050
4	AXE SET	8201	130	260.00	NOS	33800
5	SMALL SHOVEL(KHURPA)	8201	130	65.00	NOS	8450
6	SIKLE (HASIYA)	8201	130	55	NOS	7150
					TOTAL	**147,550.00**
					0% CGST	
					0% SGST	
					FARE	-
					ROUNDUP	**147,550.00**
					GROSS TOTAL	**147,550.00**

IN WORDS
INR ONE LAKH FORTY SEVEN THOUSAND FIVE HUNDRED FIFTY ONLY.

BANK DETAILS :
SWADESHI ENTERPRISES
A/C NO . 2515201001158 (CANARA BANK)
IFSC : CNRB0002515
BRANCH : RAMGARH CANTT

Swadeshi Enterprises Ramgarh, Jharkhand

FOR SWADESHI ENTERPRISES

DECLARATION

Authorised Signatory

This is a Computer Generated Invoice

(ORGINAL FOR RECIPIENT)

Tax Invoice

SWADESHI ENTERPRISES PROPRIETOR : SUBHAM CHOWHURY RANCHI ROAD, MARAR, RAMGARH (JHARKHAND) 829117 GSTIN : 20AVGPC9551P1ZD CONTACT NO. : 7979740256 PAN NO. AVGPC9551P (SUBHAM CHOWDHURY)	Invoice No. **SE/2023-24/208**	Dated **29-FEB-2024**
	Delivery Note	Mode/Terms of Payment
	Supplier's Ref.	Other Reference(s)
Consignee **JHARKHAND ISPAT PRIVATE LIMITED** VILL. HESALA, ARGADA DIST: RAMGARH JHARKHAND 829101 GSTIN/UIN: 20AABCR2993R1ZX State Name : Jharkhand, Code : 20	Buyer's Order No.	Dated
	Despatch Document No.	Delivery Note Date
	Despatched through	Destination **HESLA, ARGADA ,RAMGARH,JHARKHAND**
	Bill Of Lading/ LR-RR No.	Motor Vehicle No.
Buyer (if other than consignee)		

Sl No.	Description of Goods	HSN/SAC	Quantity	Rate	Per	Amount
1	GHAMELLA G.I	7323	130	115.00	BOX	14950

TOTAL	14,950.00
9% CGST	1,345.50
9% SGST	1,345.50
FARE	-
ROUNDUP	17,641.00
GROSS TOTAL	17,641.00

IN WORDS
INR SEVENTEEN THOUSAND SIX HUNDRED FORTY ONE ONLY.

BANK DETAILS :
SWADESHI ENTERPRISES
A/C NO . 2515201001158 (CANARA BANK)
IFSC : CNRB0002515
BRANCH : RAMGARH CANTT

FOR SWADESHI ENTERPRISES

Authorised Signatory

DECLARATION

This is a Computer Generated Invoice

दैनिक भास्कर
रामगढ़ 03-03-2024

किसानों के बीच उपकरण किट का किया वितरण

रामगढ़ |आरसी रूंगटा समूह की कंपनी झारखंड इस्पात प्राइवेट लिमिटेड द्वारा शनिवार को हेसला के दो वार्डों में कृषि उपकरण किट का वितरण किया गया। इस अवसर पर वार्ड संख्या 11 का प्रतिनिधित्व गोपाल मुंडा और वार्ड 12 का अंबरीन मंजर ने किया। इस अवसर पर प्लांट हेड मानवेंद्र चौबे कमर्शियल हेड कृष्णा सिंह , सीएसआर हेड आरपी शर्मा, पर्यावरण हेड मनोज कुमार मौजूद थे ।

दैनिक भास्कर रामगढ़ 07-03-2024

किसानों में कृषि उपकरण का वितरण किया गया

रामगढ़। रूंगटा समूह झारखंड इस्पात की ओर से को-ऑरपोरेट इनवायरमेंट रिस्पांसिबिलिटी के तहत बुधवार को एक समारोह का आयोजन कर मरार नगर परिषद क्षेत्र वार्ड नंबर नौ के किसानों के बीच कृषि उपकरण का वितरण किया। जिसमें मुख्य रूप से वार्ड नंबर नौ के पार्षद शंकर मिश्रा ने किसानों को कृषि उपकरण दिए। किसानों के बीच कृषि उपकरण कीट वितरण करते हुए रूंगटा समूह झारखंड इस्पात के सीएसआर हेड आरपी शर्मा और पर्यावरण हेड मनोज कुमार ने कंपनी की ओर से किसानों के लिए कार्य योजना के बारे में विस्तार से बताया ।

Annexure - 4

TAX INVOICE

THE REPUBLIC PRIVATE LIMITED Authorised Dealers :MAHINDRA & MAHINDRA LTD. * (FES) HAZARIBAGH ROAD (NH 33) BOOTY,RANCHI * Reg. Office: Atmaram Bhawan, Radhey Shyam Lane, Main Road, Ranchi 83400 GSTN 20AACCT0051D2Z9 CIN NO. U22212JH1958PTC000615	Invoice No. RPL/INV/250089	Dated : 16/05/2024
	Challan No. CH/250102	Mode/Terms of Payment
	Supplier's Ref.	Other Reference

Buyer

To,

M/S JHARKHAND ISPAT PRIVATE LIMITED.

I/C

At. :HESLA ARGADA Post :HESLA

PS. :RAMGARH Dist :RAMGARH

GSTN - 20AABCR2993R1ZX

PAN - AABCR2993R AADHAR -

Under H.P.A.: CASH/ N O T H E L D

Sr. No.	Particular / Description	HSN/SAC	Taxable Value	Qty.	CGST		SGST		Amount
					Rate	Amt	Rate	Amt	
1	AGRICULTURE TROLLY SELF UNLODING HYDRAULIC 4 TON CAPACITY TWO WHEELER 10* 6* 1.5 SIZE FITTED WITH RIMS. Chassis No. RPLH879	871610	112300.00	1	6%	6738.00	6%	6738.00	125776.00
2	NEW TYRE V0159590624	401192	12300.00	1	14%	1722.00	14%	1722.00	15744.00
3	NEW TYRE . V0001930624	401192	12300.00	1	14%	1722.00	14%	1722.00	15744.00
4	Mahindra Rotavator Supervator1.80 Sl. No. :- S180GMVP1L00210	843280	119200.00	1	6%	7152.00	6%	7152.00	133504.00
TOTAL			256100.00			17334.00		17334.00	290768.00

Rupees Two Lakh Ninety Thousand Seven Hundred Sixty Eight Only

TCS @1%	0.00
Grand Total	290768.00

Rupees Two Lakh Ninety Thousand Seven Hundred Sixty Eight Only

HSN/SAC	Taxable Value	Central Tax		State Tax	
		Rate %	Amount	Rate %	Amount
871610	112300.00	6	6738.00	6	6738.00
401192	24600.00	14	3444.00	14	3444.00
843280	119200.00	6	7152.00	6	7152.00
Total	256100.00		17334.00		17334.00

Rupees Thirty Four Thousand Six Hundred Sixty Eight Only

COMPANY PAN : AACCT0051D, BANK A/C: 106010300001410, IFSC: UTIB0000106

E & O.E.

Declaration

We declare that this invoice show the actual price of the goods described and the all particulers are tru and correct

FOR THE REPUBLIC PRIVATE LIMITED

Authorised Signatory

TAX INVOICE

THE REPUBLIC PRIVATE LIMITED Authorised Dealers :MAHINDRA & MAHINDRA LTD. * (FES) HAZARIBAGH ROAD (NH 33) BOOTY,RANCHI * Reg. Office: Atmaram Bhawan, Radhey Shyam Lane, Main Road, Ranchi 83400 GSTN 20AACCT0051D2Z9 CIN NO. U22212JH1958PTC000615	Invoice No. RPL/INV/250090 Challan No. CH/250103 Supplier's Ref.	Dated : 16/05/2024 Mode/Terms of Payment Other Reference

Buyer

To,

M/S JHARKHAND ISPAT PRIVATE LIMITED..

I/C

At. :HESLA ARGADA Post :HESLA

PS. :RAMGARH Dist :RAMGARH

GSTN - 20AABCR2993R1ZX

PAN - AABCR2993R AADHAR -

Under H.P.A.: CASH/ N O T H E L D

Sr. No.	Particular / Description	HSN/SAC	Taxable Value	Qty.	CGST		SGST		Amount
					Rate	Amt	Rate	Amt	
1	MAHINDRA 475 DI NBP LT (TR475NBPLCOWLT3A) HP CATEGORY:42 CYLINDER:4 Engine No. RRA2KBA0519 Chassis No. MBNABAJAKRRA11373	870192	737100.00	1	6%	44226.00	6%	44226.00	825552.00
2	HOOD	870810	3000.00	1	9%	270.00	9%	270.00	3540.00
3	HITCH	870810	3000.00	1	9%	270.00	9%	270.00	3540.00
4	BUMPER	870810	3700.00	1	9%	333.00	9%	333.00	4366.00
5	D.PATTA	870810	1200.00	1	9%	108.00	9%	108.00	1416.00
TOTAL			748000.00			45207.00		45207.00	838414.00

Rupees Eight Lakh Thirty Eight Thousand Four Hundred Forteen Only

TCS @1%	0.00
Grand Total	838414.00

Rupees Eight Lakh Thirty Eight Thousand Four Hundred Forteen Only

HSN/SAC	Taxable Value	Central Tax		State Tax	
		Rate %	Amount	Rate %	Amount
870192	737100.00	6	44226.00	6	44226.00
870810	10900.00	9	981.00	9	981.00
Total	748000.00		45207.00		45207.00

Rupees Ninety Thousand Four Hundred Forteen Only

COMPANY PAN : AACCT0051D, BANK A/C: 106010300001410, IFSC: UTIB0000106

E & O.E.

Declaration

We declare that this invoice show the actual price of the goods described and the all particulers are tru and correct

FOR THE REPUBLIC PRIVATE LIMITED

Authorised Signatory

TAX INVOICE

THE REPUBLIC PRIVATE LIMITED Authorised Dealers :MAHINDRA & MAHINDRA LTD. * (FES) HAZARIBAGH ROAD (NH 33) BOOTY,RANCHI * Reg. Office: Atmaram Bhawan, Radhey Shyam Lane, Main Road, Ranchi 83400 GSTN 20AACCT0051D2Z9 CIN NO. U22212JH1958PTC000615	Invoice No. RPL/INV/250091 Challan No. CH/250104 Supplier's Ref.	Dated : 16/05/2024 Mode/Terms of Payment Other Reference

Buyer

To,

M/S JHARKHAND ISPAT PRIVATE LIMITED...

I/C

At. :HESLA ARGADA Post :HESLA

PS. :RAMGARH Dist :RAMGARH

GSTN - 20AABCR2993R1ZX

PAN - AABCR2993R AADHAR -

Under H.P.A.: CASH/ N O T H E L D

Sr. No.	Particular / Description	HSN/SAC	Taxable Value	Qty.	CGST		SGST		Amount
					Rate	Amt	Rate	Amt	
1	AGRICULTURE TROLLY SELF UNLODING HYDRAULIC 4 TON CAPACITY TWO WHEELER 10* 6* 1.5 SIZE FITTED WITH RIMS. Chassis No. RPLH880	871610	112300.00	1	6%	6738.00	6%	6738.00	125776.00
2	NEW TYRE V0075935223	401192	12300.00	1	14%	1722.00	14%	1722.00	15744.00
3	NEW TYRE V0040530624	401192	12300.00	1	14%	1722.00	14%	1722.00	15744.00
4	Mahindra Rotavator Supervator1.80 Sl. No. :- S180GMVP1H00042	843280	119200.00	1	6%	7152.00	6%	7152.00	133504.00
TOTAL			256100.00			17334.00		17334.00	290768.00

Rupees Two Lakh Ninety Thousand Seven Hundred Sixty Eight Only

TCS @1%	0.00
Grand Total	290768.00

Rupees Two Lakh Ninety Thousand Seven Hundred Sixty Eight Only

HSN/SAC	Taxable Value	Central Tax		State Tax	
		Rate %	Amount	Rate %	Amount
871610	112300.00	6	6738.00	6	6738.00
401192	24600.00	14	3444.00	14	3444.00
843280	119200.00	6	7152.00	6	7152.00
Total	256100.00		17334.00		17334.00

Rupees Thirty Four Thousand Six Hundred Sixty Eight Only

COMPANY PAN : AACCT0051D, BANK A/C: 106010300001410, IFSC: UTIB0000106

E & O.E

Declaration

We declare that this invoice show the actual price of the goods described and the all particulers are tru and correct

FOR THE REPUBLIC PRIVATE LIMITED

Authorised Signatory

The Republic Pvt.Ltd.
NH33, Hazaribagh Road,Booty , RANCHI-834001.(JHARKHAND)
GSTIN/UIN: 20AACCT0051D2Z9 , CIN: U22212JH1958PTC000615
E-Mail : RANCHI@mahindrafes.com

Debit Note / Invoice

Ref. No.: **RPL/DN/250088** Dated: **16/May/2024**

Party's Name: **M/S JHARKHAND ISPAT PRIVATE LIMITED**
I/C
At. :HESLA ARGADA Post :HESLA
PS. :RAMGARH Dist :RAMGARH
GSTN - 20AABCR2993R1ZX
State Name : **Jharkhand, Code : 20**
Place of Supply : **Jharkhand**

Particulars	Debit
Regisration of Tractor - MBNABAJAKRRL11222 & MBNABAJAKRRA11373	*84,904.00*
Insurance of Tractor - MBNABAJAKRRL11222 & MBNABAJAKRRA11373	*26,776.00*
Total >>	**111,680.00**

On Account of : REG. & INS. as per proposal
Amount (in words) :
INR One Lakh Eleven Thousand Six Hundred Eighty only

Company's PAN : **AACCT0051D**

for The Republic Pvt. Ltd.

Authorised Signatory

TAX INVOICE

THE REPUBLIC PRIVATE LIMITED Authorised Dealers :MAHINDRA & MAHINDRA LTD. * (FES) HAZARIBAGH ROAD (NH 33) BOOTY,RANCHI * Reg. Office: Atmaram Bhawan, Radhey Shyam Lane, Main Road, Ranchi 83400 GSTN 20AACCT0051D2Z9 CIN NO. U22212JH1958PTC000615	Invoice No. RPL/INV/250088	Dated : 16/05/2024
	Challan No. CH/250101	Mode/Terms of Payment
	Supplier's Ref.	Other Reference

Buyer

To,

M/S JHARKHAND ISPAT PRIVATE LIMITED

I/C

At. :HESLA ARGADA Post :HESLA

PS. :RAMGARH Dist :RAMGARH

GSTN - 20AABCR2993R1ZX

PAN - AABCR2993R AADHAR -

Under H.P.A.: CASH/ N O T H E L D

Sr. No.	Particular / Description	HSN/SAC	Taxable Value	Qty.	CGST		SGST		Amount
					Rate	Amt	Rate	Amt	
1	MAHINDRA 475 DI NBP LT (TR475NBPLCOWLT3A) HP CATEGORY:42 CYLINDER:4 Engine No. RRL2KBA0308 Chassis No. MBNABAJAKRRL11222	870192	737100.00	1	6%	44226.00	6%	44226.00	825552.00
2	HOOD	870810	3000.00	1	9%	270.00	9%	270.00	3540.00
3	HITCH	870810	3000.00	1	9%	270.00	9%	270.00	3540.00
4	BUMPER	870810	3700.00	1	9%	333.00	9%	333.00	4366.00
5	D.PATTA	870810	1200.00	1	9%	108.00	9%	108.00	1416.00
TOTAL			748000.00			45207.00		45207.00	838414.00

Rupees Eight Lakh Thirty Eight Thousand Four Hundred Forteen Only

TCS @1%	0.00
Grand Total	838414.00

Rupees Eight Lakh Thirty Eight Thousand Four Hundred Forteen Only

HSN/SAC	Taxable Value	Central Tax		State Tax	
		Rate %	Amount	Rate %	Amount
870192	737100.00	6	44226.00	6	44226.00
870810	10900.00	9	981.00	9	981.00
Total	748000.00		45207.00		45207.00

Rupees Ninety Thousand Four Hundred Forteen Only

COMPANY PAN : AACCT0051D, BANK A/C: 106010300001410, IFSC: UTIB0000106

E & O.E.

Declaration

We declare that this invoice show the actual price of the goods described and the all particulers are tru and correct

FOR THE REPUBLIC PRIVATE LIMITED

Authorised Signatory


Mahindra 475DI
Mahindra 475DI

Annexure - 5

JHARKHAND ISPAT PRIVATE LIMITED

ADMN. OFFICE : Near P.N. Bank, Main Road, Ramgarh Cantt.
Dist. - Ramgarh (Jharkhand) - 829 122
CIN : U34102UP1991PTC012872
Telephone : 06553-226846, 224601, Fax : 226845
E-mail : jiplramgarh@gmail.com

IS : 2830
CML - 5406356

WORKS :
Vill, & P.O.- Hesla, Argada
Dist.- Ramgarh (Jharkhand)
PIN. - 829 101

Ref. No ..... O/C

Date.....

JIPL/2023-24

दिनांकः— 12.03.2024

सेवा में,

वार्ड पार्षद वो-12,13,14
ग्राम अरगडा
जिला—रामगढ़, झारखण्ड।

विषयः— गाँव अरगडा के गरीबी रेखा से नीचे आने वाले लोंगों के लिए दो ई—रिक्सा (चार सीटर एवं चारजर के साथ) के वितरण करने के संबंध में।

संदर्भः— पर्यावरणीय सहमति पत्र सं0— F.No.-J11011/41/2013-IA-(I) दिनांक—07.09.2022

महाशय,

उपर्युक्त के संबंध में सूचित करना है कि झारखंड इस्पात प्रा0 लि0 द्वारा गाँव अरगडा के गरीबी रेखा से नीचे आने वाले दो लोंगों के लिए ई—रिक्सा (चार सीटर एवं चारजर के साथ) के वितरण करने की योजना है, जिसके लिए आपसे अनुरोध है कि अपने क्षेत्र के गरीबी रेखा से नीचे के लभार्थियों की सूचि उपलब्ध कराये। जिसका आधार कार्ड एवं ड्रविंग लाईसेंस एवं बी0पी0एल0 कार्ड की छायाप्रति उपलब्ध कराए। जिससे प्रबंधन उचित निर्णय लेते हुए ई—रिक्सा की खरीदी की व्यवस्था सुनिश्चित कर सके और बी0पी0एल0 परिवारों का हित लाभ हो सके।

सधन्यवाद,

कृते झारखंड इस्पात प्रा0 लि0

(मनोज कुमार)
अधिकृत हस्ताक्षरकर्ता

प्रतिलिपिः—

01.अध्यक्ष नगर परिषद रामगढ़ (झा0)।
आवश्यक कार्यवाही हेतु प्रेशित।

संगीता देवी
वार्ड पार्षद

Gopal Mahto
Ward Parshad-12

13/03/24

JHARKHAND ISPAT PRIVATE LIMITED

ADMN. OFFICE : Near P.N. Bank, Main Road, Ramgarh Cantt.
Dist. - Ramgarh (Jharkhand) - 829 122
CIN : U34102UP1991PTC012872
Telephone : 06553-226846, 224601, Fax : 226845
E-mail : jiplramgarh@gmail.com

IS : 2830
CM/L - 5406386

WORKS :
Vill, & P.O.- Hesla, Argada
Dist.- Ramgarh (Jharkhand)
PIN. - 829 101

Ref. No ..... Date.....

JIPL/2023-24 O/c दिनांकः– 12.01.2024

सेवा में,

वार्ड पार्षद
ग्राम मरार
जिला–रामगढ़, झारखण्ड।

विषयः– गाँव मरार के गरीबी रेखा से नीचे आने वाले लोंगों के लिए चार ई–रिक्सा (चार सीटर एवं चारजर के साथ) के वितरण करने के संबंध में।

संदर्भः– पर्यावरणीय सहमति पत्र सं0– F.No.-]11011/41/2013-IA-(I) दिनांक–07.09.2022

महाशय,

उपर्युक्त के संबंध में सूचित करना है कि झारखंड इस्पात प्रा0 लि0 द्वारा गाँव मरार के गरीबी रेखा से नीचे आने वाले चार लोंगों के लिए ई–रिक्सा (चार सीटर एवं चारजर के साथ) के वितरण करने की योजना है, जिसके लिए आपसे अनुरोध है कि अपने क्षेत्र के गरिबी रेखा से नीचे के लभार्थियों की सूचि उपलब्ध कराये। जिसका आधार कार्ड एवं ड्रविंग लाईसेंस एवं बी0पी0एल0 कार्ड की छायाप्रति उपलब्ध कराए। जिससे प्रबंधन उचित निर्णय लेते हुए ई–रिक्सा की खरीदी की व्यवस्था सुनिश्चित कर सके और बी0पी0एल परिवारों का हित लाभ हो सके।

सधन्यवाद,

कृते झारखंड इस्पात प्रा0लि0

(मनोज कुमार)
अधिकृत हस्ताक्षरकर्ता

प्रतिलिपिः–

01. अध्यक्ष नगर परिषद् रामगढ़ (झा0)।
आवश्यक कार्यवाही हेतु प्रेषित।

12/1/2024

नगर परिषद्, रामगढ़

JHARKHAND ISPAT PRIVATE LIMITED

ADMN. OFFICE : Near P.N. Bank, Main Road, Ramgarh Cantt.
Dist. - Ramgarh (Jharkhand) - 829 122
CIN : U34102UP1991PTC012872
Telephone : 06553-226846, 224601, Fax : 226845
E-mail : jiplramgarh@gmail.com

IS : 2830
CM/L - 5406366

WORKS :
Vill, & P.O.- Hesla, Argada
Dist.- Ramgarh (Jharkhand)
PIN. - 829 101

Ref. No ..... O/C Date.....

JIPL/2023-24 दिनांकः— 12.03.2024

सेवा में,

वार्ड पार्षद
ग्राम फुलसराय
जिला—रामगढ़, झारखण्ड।

विषयः— गाँव फुलसराय के गरीबी रेखा से नीचे आने वाले लोंगों के लिए दो ई—रिक्सा (चार सीटर एवं चारजर के साथ) के वितरण करने के संबंध में।

संदर्भः— पर्यावरणीय सहमति पत्र सं0— F.No.-J11011/41/2013-IA-(I) दिनांक—07.09.2022

महाशय,

उपर्युक्त के संबंध में सूचित करना है कि झारखंड इस्पात प्रा0 लि0 द्वारा गाँव फुलसराय के गरीबी रेखा से नीचे आने वाले दो लोंगों के लिए ई—रिक्सा (चार सीटर एवं चारजर के साथ) के वितरण करने की योजना है, जिसके लिए आपसे अनुरोध है कि अपने क्षेत्र के गरीबी रेखा से नीचे के लमार्थियों की सूचि उपलब्ध कराये। जिसका आधार कार्ड एवं ड्रविंग लाईसेंस एवं बी0पी0एल0 कार्ड की छायाप्रति उपलब्ध कराए। जिससे प्रबंधन उचित निर्णय लेते हुए ई—रिक्सा की खरीदी की व्यवस्था सुनिश्चित कर सके और बी0पी0एल0 परिवारों का हित लाभ हो सके।

सधन्यवाद,

कृते झारखंड इस्पात प्रा0 लि0

(मनोज कुमार)
अधिकृत हस्ताक्षरकर्ता

प्रतिलिपिः—

01.अध्यक्ष नगर परिशद् रामगढ़ (झा0)।
आवश्यक कार्यवाही हेतु प्रेशित।

Sridhar 12/03
पार्षद
वार्ड सं0—10. फुलसराय
नगर परिषद रामगढ़, जिला—रामगढ़

Tax Invoice
MAC/24-25/0013

Invoice From
MAC AUTO INDIA PVT LTD
121 A 121 B GURUKUL INDUSTRIAL AREA
FARIDABAD HARYANA,
Faridabad (Haryana- 6)
India - 121010
Contact Person: nitesh saini
Email: accounts.receivable@macauto.in
Contact No: 9559158384
GSTIN: 06AANCM5780F1Z6

Invoice To
M/S JHARKHAND ISPAT PVT. LTD.
HESLA, ARGADA, ARGADA, Ramgarh
Hazaribag (Jharkhand)
India - 829101
Email: kaushik.dwari@outlook.com
Contact No: 8339045661
GSTIN: 20AABCR2993R1ZX
Place of Supply: Hazaribag, Jharkhand (20)

Shipped To
M/S JHARKHAND ISPAT PVT. LTD.
HESLA, ARGADA, ARGADA, Ramgarh
Hazaribag (Jharkhand)
India - 829101
GSTIN : 20AABCR2993R1ZX

Invoice Details

Invoice Number	MAC/24-25/0013	**Invoice Date**	18/04/2024
PO Date	18/03/2024		
OC Number	23-24/OC0404	**OC Date**	18/03/2024
Payment Date	20/03/2024		

#	Description	HSN/SAC Code	Quantity	Rate	Taxable Amount	IGST Rate	IGST Amount	Total
1	MAC 900 **Item ID:** RM1093 Mac Bolt MS BODY(POWDER COATING) Motor Make:- Autolek Motor Power:- 1000 Watt Battery Type:- Lead Acid Battery Make:- Exide Battery Power:- 130 A.H E Cart Voltage:- 48 Volt Front Type:- Windshield With Wiper Motor With Luggage Carrier With Fogg Light With Stepony & Jack With Charger 2 Year Warranty & With Battery 1 Year Warranty COLOR:-BLUE CHASSIS NUMBER M71MAMND24D000219 M71MAMND24D000215 M71MAMND24D000221 M71MAMND24D000222 M71MAMND24D000217 M71MAMND24D000216 M71MAMND24D000218 M71MAMND24D000220	870390	8.00 Nos	₹95,238.10	₹7,61,904.80	5%	₹38,095.24	₹8,00,000.04
2	Transport Charges				₹80,000.00	0%	₹0.00	₹80,000.00

Invoice Amount Eight Lakh, Eighty Thousand Rupees and Zero Paise Only
IGST Thirty-Eight Thousand, Ninety-Five Rupees and Twenty-Four Paise Only

Total (before Tax) : ₹8,41,904.80

CGST	SGST	IGST	Cess
₹0.00	₹0.00	₹38,095.24	₹0.00

Total Tax : ₹38,095.24
Grand Total : **₹8,80,000.00**
Advance Paid : ₹8,80,000.00
Amount Payable : ₹0.00

For MAC AUTO INDIA PVT LTD

Authorised Signatory

Tax Invoice
MAC/24-25/0013

Comments:

MOTOR NO:- I027,I025,I026,I028,I175,I174,I173,I176
CONTROLLER NO:- I070,I064,I067,I062,I387,I065,I384,I382
CHARGER NO:-
BATTERY NO:-

1. 43867,38657,21169,43672
2. 38660,38856,34520,32322
3. 38670,43665,38663,38664
4. 38668,43525,65554,43667
5. 34841,78841,38950,79952
6. 28933,90776,89985,85841
7. 58841,38659,90553,92433
8. 38957,38661,38841,37967

Terms And Conditions:

Judicial to Faridabad, Haryana

For MAC AUTO INDIA PVT LTD

Authorised Signatory


मेरा
ENGINEERING

Annexure - 6

JHARKHAND ISPAT PRIVATE LIMITED

ADMN. OFFICE : Near P.N.Bank, Main Road, Ramgarh Cantt.
Dist. - Ramgarh (Jharkhand) - 829 122
CIN : U34102UP1991PTC012872
Telephone : 06553-226846, Fax : 226845
E-mail : jiplramgarh@gmail.com

IS:2830
CM/L-5406356

WORKS :
Vill, & P.O.-Hesla, Argada
Dist.-Ramgarh (Jharkhand)
PIN.- 829 101

Ref. No.....**JIPL/164/2022-23**

O/C

Date.....
21.03.2023

To,
The Divisional Forest Officer,
Ramgarh Division,
Dist. Ramgarh.
Jharkhand

Sub: Regarding submission of Rs 6,10,000/- for conservation of fauna in Phulsarai Protected Forest to the District Forest Office under Corporate Environment Responsibility (CER).

Ref.:- Environment Clearance letter No. J-11011/41/2013-IA-II(I) Dated 07/09/2022.

Dear Sir,

With reference to the above, MoEF&CC, New Delhi has been issued Environment Clearance to the Unit vide letter No J-11011/41/2013-IA-II(I) Dated 07/09/2022 (Copy enclosed). As per EC condition under CER for implementation of Remediation Plan in the first year, we have to submit Rs 6,.10,000/- for conservation of fauna in Phulsarai Protected Forest to the District Forest Office.

Kindly give us proper direction for payment of Rs 6, 10,000/- in compliance of the direction.

Your early action on the matter is solicited.

Thanking you,

Yours faithfully,
For **JHARKHAND ISPAT PVT LTD**

Authorized Signatory

Encl.:- As above.

कार्यालयः–वन प्रमंडल पदाधिकारी, रामगढ़ वन प्रमंडल, रामगढ़।

(रांची रोड नियर बी.आर.एल. गेट, पो0–मरार, जिला–रामगढ़ पिन–829117)
Email id – dfo-ramgarh@gov.in

पत्रांक 602 /रामगढ़, दिनांक 29/03/23

सेवा में,

Jharkhand Ispat Private Limited
Vill+Po-Hesla, Argada,
Dist-Ramgarh (Jharkhand)
Pin-829101

विषय :– **Regarding submission of Rs.6,10,000/- for conservation of fauna in phulsarai protected forest to the district forest office under corporate environment responsibility (CER).**

प्रसंग :– आपका पत्रांक–**JIPL/164/2022-23 dt.21.03.23** एवं **Environment clearance letter No. J-11011/41/2013-IA-II(I) dt.07.09.22**

महाशय,

उपर्युक्त विषयक प्रसंगाधीन पत्र के आलोक में सूचित करना है कि झारखण्ड इस्पात प्रा0 लि0 इकाई को भारत सरकार, वन, पर्यावरण एवं जलवायु परिवर्तन मंत्रालय के पत्रांक–F.No.J-11011/41/2023-IA-II(I) dt.07.09.2022 द्वारा पर्यावरणी स्वीकृति में लगाये गये शर्ते के आलोक में औद्योगिक इकाई के आस–पास फुलसराय एवं अन्य क्षेत्रों में Biological Environment अन्तर्गत वन्यप्राणी संरक्षण हेतु राशि–6,10,000/– रूपये वन, पर्यावरण एवं जलवायु परिवर्तन विभाग को हस्तान्तरण किया जाना है।

अतः अनुरोध है कि कुल राशि रू. 6,10,000/– का चालान के माध्यम से कोषागार के वन प्रेषण लोक लेखा (प्राप्तियां) शीर्ष 8782 में जमा कराना सुनिश्चित करें।

आपका विश्वासी,

Nitish 29/3/23

वन प्रमंडल पदाधिकारी,
रामगढ़

C:\RD\Account Section\Dinesh Sir, Navin Sir, Shashi Sir\Plantation work under User Agency\Misc ltr.docx

JHARKHAND ISPAT PRIVATE LIMITED

ADMN. OFFICE : Near P.N. Bank, Main Road, Ramgarh Cantt.
Dist. - Ramgarh (Jharkhand) - 829 122
CIN : U34102UP1991PTC012872
Telephone : 06553-226846, 224601, Fax : 226845
E-mail : jiplramgarh@gmail.com

IS : 2830
CM/L - 5406356

WORKS :
Vill, & P.O.- Hesla, Argada
Dist.- Ramgarh (Jharkhand)
PIN. - 829 101

Ref. No..... O/C

Date.....

JIPL/169/2022-23

31.03.2023

To,
The Divisional Forest Officer,
Ramgarh Division,
Dist. Ramgarh.
Jharkhand

Sub: Regarding submission of e- Challan copy duly received by SBI, Ramgarh Branch of Rs 6,10,000/- for conservation of fauna in Phulsarai Protected Forest to the District Forest Office under Corporate Environment Responsibility (CER).

31/3/23

Ref.:- 1) Our letter no JIPL/164/2022-23 dated 21/03/2023.
2) DFO, Ramgarh letter no 602 dated 29/03/2023.

Dear Sir,

With reference to the above, please find enclosed herewith e- Challan copy duly received by SBI, Ramgarh Branch of Rs 6, 10,000/- bearing no J-175799624 dated 31/03/2023.

Please find above in order and oblige.

Thanking you,

Yours faithfully,
For **JHARKHAND ISPAT PVT LTD**

Authorized Signatory

Encl.:- As above.

e-Challan

Finance Department, Goverment of Jharkhand

Receiving Dept: Forest, Environment and Climate Change Department

Valid UpTo :-09/04/2023 — Remitter's Copy of Dept

GRN:-2316468419 — Date:- 31/03/2023 11:51:34

Receiving Office:- HZBFOR001-DIV. FOREST OFFICER-RAMGARH FOREST DIVISION, RAMGARH

District:- Ramgarh — **Deposit Treasury:- Ramgarh**

Year:- 31/03/2023 — to :- 31/03/2023

Head(8782)	**Amount** ₹
Head Details **878200103010101** FOREST REMITTANCES	610000.00

Net Payable Amount:- ₹ **610000.00**

Six Lakh Ten Thousand Rupees And Zero Paisa Only

For Treasury Use Only(Ramgarh)

Challan No and Date: 168 31/03/2023

Identity Proof(GSTIN No.) - 20AABCR2993R1ZX

PAN No:- NA

Remitter Name:- JHARKHAND ISPAT PRIVATE LIMITED

Address :- VILL HESLA PO HESLA ARGADA RAMGARH RAMGARH 829101

Remarks :- Deposit Work

Treasury Officer Signature is not required.

FOR USE IN TREASURY LINK BANK

CHEQUE/DD :- 366933/31.03.23

Scroll No and (Date) :-

Bank Name :-SBI,RAMGHAR,STATE BANK OF INDIA, RAMGARH CANTT

Note:- Bank Official are requested to update the receipt Online before Stamping.

Signature & Seal of Bank

Cut from here

Use seprate page

e-Challan

Finance Department, Goverment of Jharkhand

Receiving Dept: Forest, Environment and Climate Change Department

Valid UpTo :-09/04/2023 — Remitter's Copy

GRN:-2316468419 — Date:- 31/03/2023 11:51:34

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Identity Proof(GSTIN No.) - 20AABCR2993R1ZX

PAN No:- NA

Remitter Name:- JHARKHAND ISPAT PRIVATE LIMITED

Address :- VILL HESLA PO HESLA ARGADA RAMGARH RAMGARH 829101

Remarks :- Deposit Work

Treasury Officer Signature is not required.

FOR USE IN TREASURY LINK BANK

CHEQUE/DD :- 366933/31.03.23

Scroll No and (Date) :-

Bank Name :-SBI,RAMGHAR,STATE BANK OF INDIA, RAMGARH CANTT

Note:- Bank Official are requested to update the receipt Online before Stamping.

Signature & Seal of Bank

भारतीय स्टेट बैंक
State Bank Of India

(09620)-SME BRANCH RANCHI
MACON CAMPUS
DORANDA RANCHI,DIST:RANCHI, 834002
Tel : 651 2482676 Fax : IFS Code : SBIN0009620 SWIFT :

केवल 3 महीने के लिए वैध / VALID FOR 3 MONTHS ONLY

3	1	0	3	2	0	2	3
D	D	M	M	Y	Y	Y	Y

C1Ljcd

1536801 / 100 / BLUE ORDER /1 / 18/Aug/2022
SESHAASAI (K) / CTS-2010

PAY D F O, Ramgarh ——— ∝ ——— को या उनके आदेश पर OR ORDER

रुपये RUPEES Six lakh ten thousand only

अदा करें ₹ 610000/2

खा. सं. A/c No. 10324842800

VALID UPTO ₹ 50 LACS AT NON-HOME BRANCH FOR NON-CASH TRANSACTION ONLY

00824842301

CASH CREDIT A/C

PREFIX :
1516200003

Jharkhand Ispat Pvt. Ltd.

JHARKHAND ISPAT PRIVATE LIMITED

Director

MULTI-CITY CHEQUE Payable at Par at All Branches of SBI

Please sign above

⑈366933⑈ 834002006⑆ 000152⑈ 30

Annexure - 7

JHARKHAND ISPAT PRIVATE LIMITED

ADMN. OFFICE : Near P.N. Bank, Main Road, Ramgarh Cantt.
Dist. - Ramgarh (Jharkhand) - 829 122
CIN : U34102UP1991PTC012872
Telephone : 06553-226846, 224601, Fax : 226845
E-mail : jiplramgarh@gmail.com

IS : 2830
CML - 5405358

WORKS :
Vill, & P.O.- Hesla, Argada
Dist.- Ramgarh (Jharkhand)
PIN. - 829 101

Ref. No **JIPL/026/2023-24** 2/C Date **15/06/2023**

To,
The Dy. Commissioner,
Dist. Ramgarh.
Jharkhand.

Sub: Request for direction of payment of Rs 6, 30,000/- for conservation of aquatic life in Damodar River, to the District Collector/Water Resource Department.

Ref.:- Environment Clearance letter No. J-11011/41/2013-IA-II(I) Dated 07/09/2022.

Dear Sir,

With reference to the above, this is to inform you that Ministry of Environment Forest & Climate Change (MoEF&CC), New Delhi has been issued Environment Clearance to the Unit vide letter No J-11011/41/2013-IA-II(I) Dated 07/09/2022 (Copy enclosed). Please refer to Page no. – 12, Point no. – 5 of the EC, as per the condition for implementation of Remediation Plan in the 2nd year, we have to submit Rs 6,30,000/- for conservation of aquatic life in Damodar River to the District Collector / Water Resource Department.

Kindly give us proper direction for payment of Rs 6, 30,000/- in compliance of the direction of MoEF&CC.

Your early action on the matter is solicited.

Thanking you,

Yours faithfully,
For **JHARKHAND ISPAT PVT LTD**

Authorized Signatory

Encl.:- As above.

JHARKHAND ISPAT PRIVATE LIMITED

ADMN. OFFICE : Near P.N. Bank, Main Road, Ramgarh Cantt.
Dist. - Ramgarh (Jharkhand) - 829 122
CIN : U34102UP1991PTC012872
Telephone : 06553-226846, 224601, Fax : 226845
E-mail : jiplramgarh@gmail.com

S : 2830
CML - 5406386

WORKS :
Vill, & P.O.- Hesla, Argada
Dist.- Ramgarh (Jharkhand)
PIN. - 829 101

Ref. No ..... Date.....

JIPL/039/2023-24

04.07.2023

To,
The Executive Engineer,
Waterways Division.
Jhillpath, Dist. Hazaribagh,
Jharkhand

Sub: Request for direction of payment of Rs. 6,30,000/- for conservation of aquatic life in Damodar River.
Ref: Environment Clearance letter no. J-11011/41/2013-IA-II(I) dated 07.09.2022.

Sir,

With reference to the above, this is to inform you that the Ministry of Environment Forest & Climate Change (MoEF&CC), New Delhi has been issued Environment Clearance to the unit vide letter no. J-11011/41/2013-IA-II(I) dated 07.09.2022 (Copy enclosed). Please refer to Page no. – 12, Point no. – 5 of the EC, as per the condition for implementation of Remediation Plan in the 2nd year, we have to submit Rs. 6,30,000/- for conservation of aquatic life in Damodar River to the District Collector / Water Resource Department.

Kindly give us proper direction for payment of Rs. 6,30,000/- in compliance of the direction of MoEF&CC.

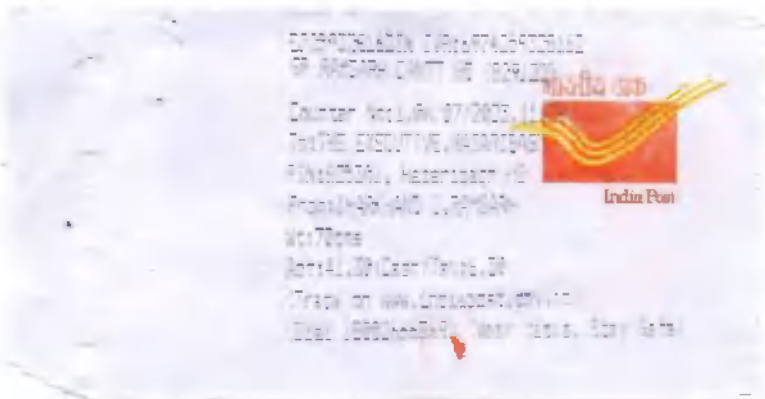
Your early action on the matter is solicited.

Thanking you,

Yours faithfully,
For JHARKHAND ISPAT PVT. LTD.

Authorized Signatory

Encl: As above.



Executive engineer of office

Water ways division,hazaribag

Lattar no:- 840 **hazaribag,date:-** 16.08.2023

Form:-

Executive Engineer
Water ways division
Hazaribag.

To,

Jharkhand ispat Private Ltd.Near
P.N.B.Bank,main Road,Ramgarh Cantt.
Dist. Ramgarh,(Jharkhand)

Subject:- Regarding direction of payment of Rs.6,30,000/-

Sir,

With reference to the Subject mention you are directed to deposit the amount of Rs 6,30,000=00(Six Lacs thirty thousand only) in the name of "Executive engineer,water ways Division,hazaribag". The Payment should be in the shape of Cheque/D.D Which Should be in favour of the undersigned as mentioned above,with a proper forwarding mentioning all details about payment.The payment amount so Obtained will be taken in revenue head 4701 this is for your intimation & needful Action. thanking you.

Your's sincerally

16/08/2023

Executive Engineer

Water Ways division, Hazaribag.

16.08.2023

JHARKHAND ISPAT PRIVATE LIMITED

ADMN. OFFICE : Near P.N. Bank, Main Road, Ramgarh Cantt.
Dist. - Ramgarh (Jharkhand) - 829 122
CIN : U34102UP1991PTC012872
Telephone : 06553-226846, 224601, Fax : 226845
E-mail : jiplramgarh@gmail.com

IS : 2830
CML - 8406358

WORKS :
Vill, & P.O.- Hesla, Argada
Dist.- Ramgarh (Jharkhand)
PIN. - 829 101

Ref. No JIPL/055/2023-24 O/C Date 23.08.2023

To,
The Executive Engineer,
Water ways division,
Hazaribag, Jharkhand.

Sub: Regarding payment of Rs 6, 30,000/- for conservation of aquatic life in Damodar River in compliance to the EC condition.

Ref.:
1) Environment Clearance (EC) issued vide letter no. J-11011/41/2013-IA-II(I) dated 07/09/2022 by MoEF&CC, New Delhi.
2) Our letter no. JIPL/026/2023-24 dated 15/06/2023 to the Dy. Commissioner, Ramgarh, Jharkhand regarding compliance of page no–12, point no. – 5 of EC.
3) Our letter no JIPL/039/2023-24 dated 04/07/2023 to the Executive Engineer, Water way division, Hazaribag, Jharkhand regarding compliance of page no – 12, point no. – 5 of EC.
4) Your letter no. – 840 dated 16/08/2023.

Dear Sir,

With reference to the above, please find enclosed herewith Cheque No. 549736 Dated 22/08/2023 of Rs 6, 30,000/- drawn on SBI, SME Branch Ranchi in compliance to the condition detailed at page no – 12, point no. – 5 of EC i.e. "Fund for conservation of aquatic life in Damodar River to the District collector / Water resource Department".

Please find above in order and oblige.

Thanking you,

Yours faithfully,
For **JHARKHAND ISPAT PVT LTD**

Authorized Signatory

Encl.:- Cheque No. 549736 Dated 22/08/2023 of SBI SME Branch Ranchi.

Cc – The Dy. Commissioner, Ramgarh (Jharkhand).

भारतीय स्टेट बैंक
State Bank Of India

(09620)-SME BRANCH RANCHI
MACON CAMPUS
DORANDA RANCHI,DIST:RANCHI, 834002
Tel : 651 2482676 Fax : IFS Code : SBIN0009620 SWIFT :

कवल 3 महीने के लिए वैध VALID FOR 3 MONTHS ONLY
2 2 0 8 2 0 2 3
D D M M Y Y Y Y
EO2jO6

PAY Executive Engineer (Water Ways Division, Hazaribagh, को या उनके आदेश पर OR ORDER

रुपये RUPEES Six lakh thirty thousand only

अदा करें ₹ 630000/-

A/C No. 10324842800

VALID UPTO ₹ 50 LACS AT NON-HOME BRANCH FOR NON-CASH TRANSACTION ONLY

00824842301

CASH CREDIT A/C
PREFIX :
1516200003

JHARKHAND ISPAT PRIVATE LIMITED

MULTI-CITY CHEQUE Payable at Par at All Branches of SBI

Please sign above

"549736" 834002006": 000152" 30

A
Performance Test Monitoring Report
of
Air Pollution Control Device (APCD)

Jharkhand Ispat Pvt. Ltd.

At vill. &P.O.- Hesla, Argada, Ramgarh, Dist. Ramgarh, Jharkhand

Index

1. Introduction of Plant: -

The unit of Jharkhand Ispat Pvt. Ltd. is situated at vill. & P.O.Hesla, Argada, Ramgarh, Dist. Ramgarh, Jharkhand has GPS Co-Ordinate 23^0 38' 57.24", 85^0 27' 53.78". The unit has installed 4 Rotary kilns of 100 TPD capacity each producing sponge iron (400 TPD). Annual production from four Rotary Kilns is 120000 Ton Sponge Iron. They Have installed a Captive Power Plant to utilize sensible waste heat energy from the DRI flue gases and dolochar produced in these Kilns, supplemented by coal. The proposed power plant is producing power at a cheaper cost. The Total Capacity of Electricity production is 6 MW and a billet plant with a capacity of 108000 TPA. The Unit Has installed Induction Furnace in Steel Melting Shop. The unit has installed Air Pollution Control System in various Locations viz. Coal Crusher, Stock House, Cooler Discharge, Product House, Intermediate bin, Induction Furnace, and Rotary Kiln with Waste Heat Recovery System attached.

2. **Objective: -** Performance Test Monitoring Report of Air Pollution Control Device (APCD)

Technical Team: -

Mr. Umesh Das – Laboratory Head
Mr. Brij Nandan Kumar- Technical Head
Mr. Amit Kumar – Section Head
Mr. Pandab Mahto – Field Monitoring Head

3. Technical Specifications of Air Pollution Controls Devices

I. Specification of Coal Crusher Bag Filter

Air Volume Supply	10000	m^3/hr
Bag Size		
Diameter of bag	0.15	m
Length of bag	3.66	m
Each bag filtering area	1.724	m
Existing no. of bags	100	nos.
Total filter area	172.4	m^2
Air to cloth ratio	58.00	$m^3/hr/ m^2$

II. Specification of Stock House Bag Filter

Air Volume Supply	10000	m^3/hr
Bag Size		
Diameter of bag	0.15	m
Length of bag	3.66	m
Each bag filtering area	1.724	m
Existing no. of bags	80.0	nos.
Total filter area	172.4	m^2
Air to cloth ratio	58.00	$m^3/hr/ m^2$

III. Specification of Intermediate Bin Bag Filter No.1

	I/Bin 1	
Air Volume Supply	10000	m^3/hr
Bag Size		
Diameter of bag	0.15	m
Length of bag	3.66	m
Each bag filtering area	1.724	m^2
Existing no. of bags	90	nos.
Total filter area	155.16	m^2
Air to cloth ratio	64.45	$m^3/hr/ m^2$

IV. Specification of Intermediate Bin Bag Filter No. 2

	I/Bin 2	
Air Volume Supply	10000	m^3/hr
Bag Size		
Diameter of bag	0.15	m
Length of bag	3.66	m
Each bag filtering area	1.724	m^2
Existing no. of bags	100	nos.
Total filter area	172.4	m^2
Air to cloth ratio	58.00	$m^3/hr/ m^2$

EPIC LAB TECH PRIVATE LIMITED RANCHI

V. Specification of Cooler Discharge (1&2) Bag Filter

	CD 1&2	
Air Volume Supply	25000	m^3/hr
Bag Size		
Diameter of bag	0.15	m
Length of bag	3.66	m
Each bag filtering area	1.724	m
Existing no. of bags	180.0	nos.
Total filter area	310.3	m^2
Air to cloth ratio	80.56	$m^3/hr/ m^2$

VI. Specification of Cooler Discharge (3 & 4) Bag Filter

	CD 3&4	
Air Volume Supply	27500	m^3/hr
Bag Size		
Diameter of bag	0.15	m
Length of bag	3.66	m
Each bag filtering area	1.724	m
Existing no. of bags	168.0	nos.
Total filter area	310.3	m^2
Air to cloth ratio	88.62	$m^3/hr/ m^2$

VII. Specification of Product House No. 1 Bag filter

	Product House-1	
Air Volume Supply	40000	**m^3/hr**
Bag Size		
Diameter of bag	0.15	m
Length of bag	3.66	m
Each bag filtering area	1.724	m
Existing no. of bags	264.0	nos.
Total filter area	456.8	m^2
Air to cloth ratio	87.57	$m^3/hr/ m^2$

VIII. Specification of Product House No. 2 Bag filter

	Product House-2	
Air Volume Supply	40000	**m^3/hr**
Bag Size		
Diameter of bag	0.15	m
Length of bag	3.66	m
Each bag filtering area	1.724	m
Existing no. of bags	264.0	nos.
Total filter area	456.8	m^2
Air to cloth ratio	87.57	$m^3/hr/ m^2$

EPIC LABTECH PRIVATE LIMITED RANCHI

IX. Specification of ESP for Each Kiln

	ESP 1 & 2	
Air volume Supply	80000	m^3/hr
No. of Field	2	
Collecting Electrode Size	8840 x 2246	mm
*Voltage Distance 175 X 175		
Collecting electrode Spacing	400	mm
Discharge electrode length	9000	mm
Transformer capacity	43.99	KVA

*Distance between collecting and discharge electrode

X. Specification of ESP for Each Kiln

	ESP 3 & 4	
Air volume Supply	80000	m^3/hr
No. of Field	2	
Collecting Electrode Size	7000 x 500	mm
*Voltage Distance 175 X 175		
Collecting electrode Spacing	400	mm
Discharge electrode length	9000	mm
Transformer capacity	43.99	KVA

*Distance between collecting and discharge electrode

XI. Specification of Induction Furnace Venturi Scrubber

In this Unit, Two Induction furnaces are Running 12 x 3

Air Volume Supply (for two no. of induction furnace)	45000	m3/hr
Venturi throat diameter	300	mm WG
Water Consumption	20000 – 2500	L/hr
Fan motor rating	45	KW
Crucible diameter for the furnace		
For 12 MT capacity	1560	mm

4. Performance of Air Pollution Control Device: -

I. Coal Crusher Bag Filter Performance

Date of Sampling	: - 21-01-2024
Stack attached to	: - Bag Filter
Stack height from G.L.	: - 30m
Stack Diameter at port hole	: - 0.7 m
Stack Port Hole Height	: - 09 m

Description: -Pollution Control Equipment Bag filter attached to Coal Crusher Unit, the height of the stack is 30 meters and the diameter of stack is 0.7 meter

Monitoring of flue gas before Bag Filter:

Flue Gas Temperature	: -	321 ^{0}K
Flue Gas Velocity	: -	7.99 m/s
Volumetric Flow Rate	: -	9862.55 Nm^3/hr
Dust Concentration	: -	5175.90 mg/Nm^3

Monitoring of flue gas after Bag filter:

Ambient Air Temperature	: -	293 ^{0}K
Flue Gas Temperature	: -	316 ^{0}K
Flue Gas Velocity	: -	7.48 m/s
Volumetric Flow Rate	: -	9385.91 Nm^3/hr
Dust Concentration	: -	27.75 mg/Nm^3

Efficiency of the Bag Filter :- **99.30 %**

II. Stock House Bag Filter performance

Date of Sampling	: -	21-01-2024
Stack attached to	: -	Bag Filter
Stack height from G.L.	: -	30 m
Stack Diameter at port hole	: -	0.7 m

Description: -Pollution Control Equipment Bag filter attached to Stock House Unit, the height of the stack is 30 meter and the diameter of stack is 0.7 meter

Monitoring of flue gas before Bag Filter:

Ambient Air Temperature	: -	29^0K
Flue Gas Temperature	: -	$320\ ^0K$
Flue Gas Velocity	: -	7.89 m/s
Volumetric Flow Rate	: -	9770.48 Nm^3/hr
Dust Concentration	: -	3980.91 mg/Nm^3

Monitoring of flue gas after Bag filter:

Ambient Air Temperature	: -	$290\ ^0K$
Flue Gas Temperature	: -	$318\ ^0K$
Flue Gas Velocity	: -	7.51 m/s
Volumetric Flow Rate	: -	9356.35 Nm^3/hr
Dust Concentration	: -	27.58 mg/Nm^3

Efficiency of the Bag Filter: - **99.28 %**

EPIC LABTECH PRIVATE LIMITED ★ RANCHI ★

III. Cooler Discharge (1& 2) Bag Filter Performance

Date of Sampling	: -	21-01-2024
Stack attached to	: -	Bag Filter
Stack height from G.L.	: -	30 m
Stack Diameter at port hole	: -	0.7 m

Description: -Pollution Control Equipment Bag filter attached to Cooler Discharge (1&2), the height of the stack is 30 meter and the diameter of stack is 0.7 meter

Monitoring of flue gas before Bag Filter:

Ambient Air Temperature	: -	292 ^{0}K
Flue Gas Temperature	: -	445 ^{0}K
Flue Gas Velocity	: -	21.90 m/s
Volumetric Flow Rate	: -	19633.48 Nm^3/hr
Dust Concentration	: -	3310.79 mg/Nm^3

Monitoring of flue gas after Bag filter:

Ambient Air Temperature	: -	292 ^{0}K
Flue Gas Temperature	: -	440 ^{0}K
Flue Gas Velocity	: -	19.96 m/s
Volumetric Flow Rate	: -	17980.82 Nm^3/hr
Dust Concentration	: -	21.89 mg/Nm^3

Efficiency of the Bag Filter : - **99.34 %**

IV. Cooler Discharge (3&4) Bag Filter Performance

Date of Sampling	: -	22-01-2024
Stack attached to	: -	Bag Filter
Stack height from G.L.	: -	30 m
Stack Diameter at Port hole	: -	0.7 m

Description: -Pollution Control Equipment Bag filter attached to Cooler Discharge (3&4), the height of the stack is 30 meter and the diameter of stack is 0.7 meter

Monitoring of flue gas before Bag Filter:

Ambient Air Temperature	: -	293 ^{0}K
Flue Gas Temperature	: -	443 ^{0}K
Flue Gas Velocity	: -	23.24 m/s
Volumetric Flow Rate	: -	20794.66 Nm^3/hr
Dust Concentration	: -	3155.01 mg/Nm^3

Monitoring of flue gas after Bag filter:

Ambient Air Temperature	: -	293 ^{0}K
Flue Gas Temperature	: -	439 ^{0}K
Flue Gas Velocity	: -	20.97 m/s
Volumetric Flow Rate	: -	18930.24 Nm^3/hr
Dust Concentration	: -	18.05 mg/Nm^3

Efficiency of the Bag Filter : - **99.42 %**

EPIC LABTECH PRIVATE LIMITED RANCHI

V. Intermediate Bin Bag Filter-1 Performance

Date of Sampling	: -	22-01-2024
Stack attached to	: -	Bag Filter
Stack height from G.L.	: -	30 m
Stack Diameter at port hole	: -	0.7 m

Description: -Pollution Control Equipment Bag filter attached to Intermediate Bin-1, the height of the stack is 30 meter and the diameter of stack is 0.7 meter

Monitoring of flue before Bag Filter:

Ambient Air Temperature	: -	289 ^{0}K
Flue Gas Temperature	: -	428 ^{0}K
Flue Gas Velocity	: -	8.71 m/s
Volumetric Flow Rate	: -	8061.64 Nm^3/hr
Dust Concentration	: -	2078.88 mg/Nm^3

Monitoring of flue after Bag filter:

Ambient Air Temperature	: -	288 ^{0}K
Flue Gas Temperature	: -	420 ^{0}K
Flue Gas Velocity	: -	8.30 m/s
Volumetric Flow Rate	: -	7836.64 Nm^3/hr
Dust Concentration	: -	23.09 mg/Nm^3
Efficiency of the Bag Filter	: -	**98.88 %**

EPIC LABTECH PRIVATE LIMITED RANCHI

VI. Intermediate Bin Bag Filter 2 Performance

Date of Sampling	: -	23-01-2024
Stack attached to	: -	Bag Filter
Stack height from G.L.	: -	30 m
Stack Diameter at port hole	: -	0.7 m

Description: -Pollution Control Equipment Bag filter attached to Stock House Unit, the height of the stack is 30 meter and the diameter of stack is 0.7 meter

Monitoring of flue before Bag Filter:

Ambient Air Temperature	: -	294 ^{0}K
Flue Gas Temperature	: -	426 ^{0}K
Flue Gas Velocity	: -	9.67 m/s
Volumetric Flow Rate	: -	8996.44 Nm^3/hr
Dust Concentration	: -	2359.77 mg/Nm^3

Monitoring of flue after Bag filter:

Ambient Air Temperature	: -	292 ^{0}K
Flue Gas Temperature	: -	419 ^{0}K
Flue Gas Velocity	: -	8.81 m/s
Volumetric Flow Rate	: -	8331.56 Nm^3/hr
Dust Concentration	: -	21.50 mg/Nm^3

Efficiency of the Bag Filter : - **99.08 %**

EPIC LABTECH PRIVATE LIMITED RANCHI

VII. Product House -1 Bag filter Performance

Date of Sampling	: -	23-01-2024
Stack attached to	: -	Bag Filter
Stack height from G.L.	: -	30 m
Stack Diameter at port hole	: -	0.7 m

Description: -Pollution Control Equipment Bag filter attached to Product House-1, the height of the stack is 30 meter and the diameter of stack is 0.7 meter

Monitoring of flue before Bag Filter:

Ambient Air Temperature	: -	295 ^{0}K
Flue Gas Temperature	: -	399 ^{0}K
Flue Gas Velocity	: -	29.05 m/s
Volumetric Flow Rate	: -	28857.32 Nm^3/hr
Dust Concentration	: -	3977.62 mg/Nm^3

Monitoring of flue after Bag filter:

Ambient Air Temperature	: -	294 ^{0}K
Flue Gas Temperature	: -	390 ^{0}K
Flue Gas Velocity	: -	22.69 m/s
Volumetric Flow Rate	: -	22850.26 Nm^3/hr
Dust Concentration	: -	22.69 mg/Nm^3

Efficiency of the Bag Filter : - **99.42 %**

VIII. Product House -2 Bag filter Performance

Date of Sampling	: -	23-01-2024
Stack attached to	: -	Bag Filter
Stack height from G.L.	: -	30 m
Stack Diameter at port hole	: -	0.7 m

Description: -Pollution Control Equipment Bag filter attached to Product House-2, the height of the stack is 30 meter and the diameter of stack is 0.7 meter

Monitoring of flue gas before Bag Filter:

Ambient Air Temperature	: -	294 ^{0}K
Flue Gas Temperature	: -	397 ^{0}K
Flue Gas Velocity	: -	28.68 m/s
Volumetric Flow Rate	: -	28633.19 Nm^3/hr
Dust Concentration	: -	3954.62 mg/Nm3

Monitoring of flue gas after Bag filter:

Ambient Air Temperature	: -	295 ^{0}K
Flue Gas Temperature	: -	388 ^{0}K
Flue Gas Velocity	: -	22.04 m/s
Volumetric Flow Rate	: -	22510.44 Nm^3/hr
Dust Concentration	: -	23.32 mg/Nm3

Efficiency of the Bag Filter : - **99.38 %**

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IX. ESP-1 Performance

Date of Sampling	: -	24-01-2024
Stack attached to	: -	ESP-1
Stack height from G.L.	: -	55 m
Stack Diameter at port hole	: -	1.8 m

Description: -Pollution Control Equipment ESP-1attached to Kiln-1, the height of the stack is 55 meter and the diameter of stack is 1.8 meter.

Monitoring of flue gas before ESP:

Ambient Air Temperature	: -	293 ^{0}K
Flue Gas Temperature	: -	428 ^{0}K
Flue Gas Velocity	: -	3.44 m/s
Volumetric Flow Rate	: -	79829.86 Nm^3/hr
Dust Concentration	: -	15268.62 mg/Nm^3

Monitoring of flue gas after ESP:

Ambient Air Temperature	: -	293 ^{0}K
Flue Gas Temperature	: -	365 ^{0}K
Flue Gas Velocity	: -	11.09 m/s
Volumetric Flow Rate	: -	79596.54 Nm^3/hr
Dust Concentration	: -	29.75 mg/Nm^3

Efficiency of the ESP : - **99.80 %**

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X. ESP-2 Performance

Date of Sampling	: -	24-01-2024
Stack attached to	: -	ESP-2
Stack height from G.L.	: -	55 m
Stack Diameter at port hole	: -	1.8 m

Description: -Pollution Control Equipment ESP-2 attached to Kiln-2, the height of the stack is 55 meter and the diameter of stack is 1.8 meter.

Monitoring of flue gas before ESP:

Ambient Air Temperature	: -	294 ^{0}K
Flue Gas Temperature	: -	429 ^{0}K
Flue Gas Velocity	: -	12.98 m/s
Volumetric Flow Rate	: -	79310.2 Nm^3/hr
Dust Concentration	: -	14849.69 mg/Nm^3

Monitoring of flue gas after ESP:

Ambient Air Temperature	: -	292 ^{0}K
Flue Gas Temperature	: -	364 ^{0}K
Flue Gas Velocity	: -	11.0 m/s
Volumetric Flow Rate	: -	79201.18 Nm^3/hr
Dust Concentration	: -	2.17 mg/Nm^3

Efficiency of the ESP : - **99.81 %**

XI. ESP-3 Performance

Date of Sampling	: -	24-01-2024
Stack attached to	: -	ESP-3
Stack height from G.L.	: -	55 m
Stack Diameter at port hole	: -	1.8 m

Description: -Pollution Control Equipment ESP-3 attached to Kiln-3, the height of the stack is 55 meter and the diameter of stack is 1.8 meter.

Outlet Monitoring of flue gas after Bag Filter:

Ambient Air Temperature	: -	290 ^{0}K
Flue Gas Temperature	: -	427.0 ^{0}K
Flue Gas Velocity	: -	12.81 m/s
Volumetric Flow Rate	: -	78617.29 Nm^3/hr
Dust Concentration	: -	15255.02 mg/Nm^3

Monitoring of flue gas after ESP:

Ambient Air Temperature	: -	291 ^{0}K
Flue Gas Temperature	: -	361 ^{0}K
Flue Gas Velocity	: -	12.08 m/s
Volumetric Flow Rate	: -	77424.67 Nm^3/hr
Dust Concentration	: -	27.23 mg/Nm^3

Efficiency of the ESP : - **99.82 %**

XII. ESP-4 Performance

Date of Sampling	: -	24-01-2024
Stack attached to	: -	ESP-4
Stack height from G.L.	: -	55 m
Stack Diameter at port hole	: -	1.8 m

Description: -Pollution Control Equipment ESP-4 attached to Kiln-4, the height of the stack is 55 meters and the diameter of stack is 1.8 meters.

Monitoring of flue gas before ESP:

Ambient Air Temperature	: -	293 ^{0}K
Flue Gas Temperature	: -	425 ^{0}K
Flue Gas Velocity	: -	12.85 m/s
Volumetric Flow Rate	: -	79255.48 Nm^3/hr
Dust Concentration	: -	15381.40 mg/Nm^3

Monitoring of flue gas after ESP:

Ambient Air Temperature	: -	293 ^{0}K
Flue Gas Temperature	: -	359 ^{0}K
Flue Gas Velocity	: -	10.78 m/s
Volumetric Flow Rate	: -	78724.11Nm^3/hr
Dust Concentration	: -	28.04 mg/Nm^3

Efficiency of the ESP : - **99.81 %**

XIII. Induction Furnace Venturi Scrubber Performance

Date of Sampling	: -	22-01-2024
Stack attached to	: -	Venturi Scrubber
Stack height from G.L.	: -	30 m
Stack Diameter at port hole	: -	0.7 m

Description: -Pollution Control Equipment Venturi Scrubber attached to Induction Furnace, the height of the stack is 30 meter and the diameter of stack is 0.7 meter.

Monitoring of flue gas before Venturi Scrubber:

Ambient Air Temperature	: -	289 ^{0}K
Flue Gas Temperature	: -	453 ^{0}K
Flue Gas Velocity	: -	18.78 m/s
Volumetric Flow Rate	: -	16427.80 Nm^3/hr
Dust Concentration	: -	1385.51 mg/Nm^3

Monitoring of flue gas after Venturi Scrubber:

Ambient Air Temperature	: -	290 ^{0}K
Flue Gas Temperature	: -	330 ^{0}K
Flue Gas Velocity	: -	11.82 m/s
Volumetric Flow Rate	: -	14194.16 Nm^3/hr
Dust Concentration	: -	28.67 mg/Nm^3

Efficiency of the Venturi Scrubber :- **97.93 %**

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5. **Conclusion:** - The Unit has installed Various types of Air Pollution Control Devices like Bag Filter, Electrostatic precipitator, and vesture Scrubber in Various locations like Coal Crusher areas, stock houses, Cooler Discharge, Intermediate Bin, Product House, and Rotary Kilns. The Performance of all Pollution Control Devices is Satisfactory. The Inlet and Outlet Comparison with Efficiency of Pollution Control Devices Performance Given in Table No. 1

The Summary of adequacy of each Air Pollution Control System

Stack Attached to	Air Volume	Inlet dust concentration	Outlet duct concentration	Efficiency of APC
	m^3/hr	mg/Nm^3	mg/Nm^3	%
Coal Crusher Bag Filter	10000	5175.90	24.44	**99.52**
Stock House Bag Filter	10000	3980.91	27.75	**99.30**
Cooler Discharge 1 & 2 Bag Filter	25000	3310.79	21.89	**99.34**
Cooler Discharge 3&4 Bag Filter	27500	3155.01	18.05	**99.42**
Intermediate Bin Bag Filter- 1	10000	2078.88	23.09	**98.88**
Intermediate Bin Bag Filter- 2	10000	2359.77	21.50	**99.08**
Product House 1 Bag Filter	40000	3977.62	22.69	**99.42**
Product House 2 Bag Filter	40000	3954.62	23.32	**99.41**
ESP 1	80000	15268.62	29.75	**99.80**
ESP 2	80000	14849.69	22.17	**99.81**
ESP 3	80000	15255.02	27.23	**99.82**
ESP 4	80000	15381.40	28.04	**99.81**
Induction Furnace Venturi Scrubber	45000	1385.51	28.67	**97.93**

Fig.1 DRI Section

Fig. 2 WHRB Area

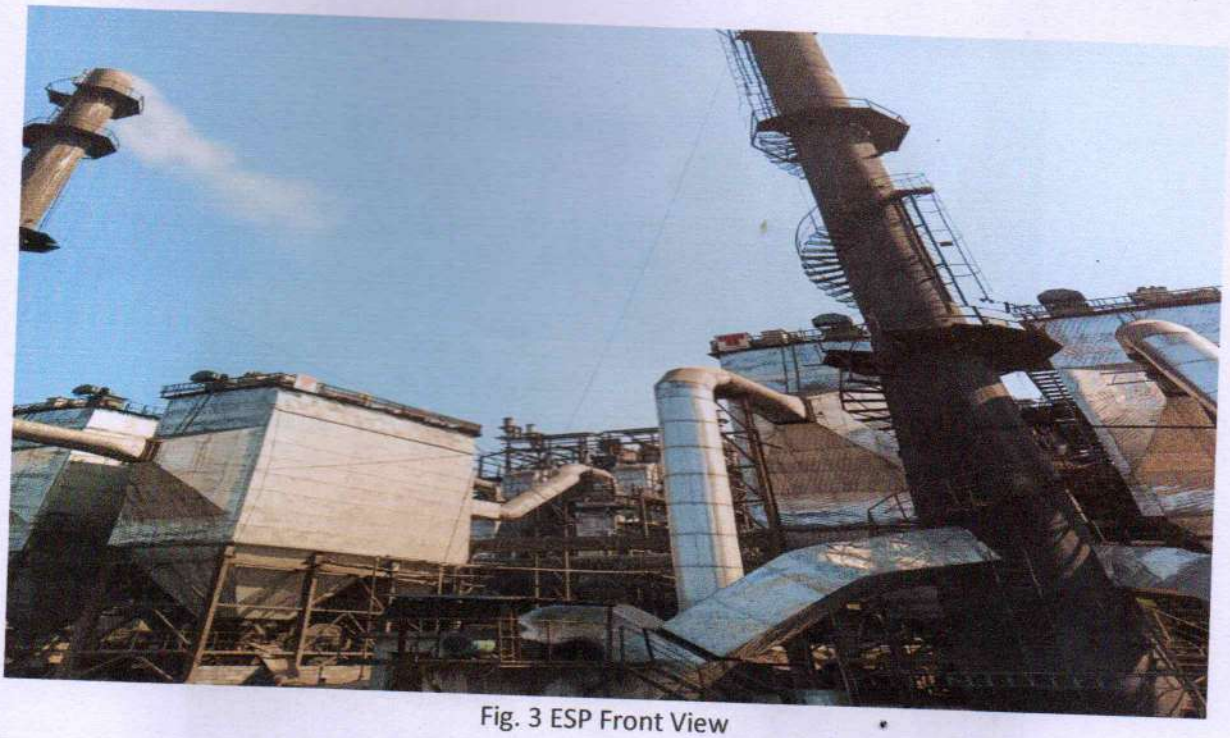

Fig. 3 ESP Front View

Fig. 4 ESP Another Side View

Fig. 5 Sample of Stack

Analytical Test Report

Unique Lab Report No.	**TC1288724000000286**				
Report Unique ID	**RP0391241512**			**Issue date/time**	**13.04.2024/ 16:55**
Discipline	Chemical	**Group**	Atmospheric Pollution	**Sub Group**	Stack Emission

Report Issue to

M/s – **JHARKHAND ISPAT PRIVATE LIMITED** VILL: HESLA, PO: ARGADA, RAMGARH, JHARKHAND		Contact Person	Mr. Ram Chandra Rungta
		Contact Number	9337292105
		Email Id	jipllegal@gmail.com
Order Number	**18984256**	Order Date	**06.04.2024/ 07:57**

References of Quality Management System *(Steps of Traceability Chain)*

Customer Registration No.	EPIC/PCB/0391	Sample Booking Number	EPIC-241512
Sample(s) Code	241512	Sample Receipt (D/T)	09.04.2024/ 13:51

Sampling References

Type of Industry	Sponge Iron	Ref. of Sampling Plan	EPIC/LAB/R/036
Sampling method used	IS: 11255 & CPCB Guideline (Lats/80/2013-14)		
Sampling Start (D/T)	07.04.2024/ 16:00	Sampling End (D/T)	07.04.2024/ 16:53
Mode of Sampling	Conducted by laboratory	Sample collected by	Mr. Janardan Kumar & team
Description/condition of sample	Receipt sample(s) were fit for analysis.		

Environmental Condition during sampling

Weather condition	Clear	Temperature (^{0}C)	31	Humidity %	42	Wind direction	360^0-180^0

Sampling Location(s) with GPS coordinate(s)

S. Location	Port hole (Stack-1 Attached With WHRB-1 & 2)	GPS coordinate	23^0 38' 51.34"/ 85^0 27' 50.43"

Field Observations

Field observation by laboratory's personnel		Data provided by customer	
Platform	Permanent	*Type of fuel Used*	Coal
Stack Description (Shape & Material)	Circular/ Metal	*Quantity of Fuel Used*	300TPD
Sampling port hole	Available	*Total production Capacity*	200TPD
Pollution Controlling Device (if any)	ESP	*Height of Stack from ground level*	55.0m
Emission Source	Rotary Kiln	*Inner Diameter of Stack*	1.8m
Total Number of Oven (if any)	N/A	*Height of port hole from Ground level*	25.0m
Running Oven during sampling (if any)	N/A	*ID fan capacity of PCD*	N/A
Test start date/time	09.04.2024/ 14:05	Test completion date/time	12.04.2024/ 16:36

Sl	Parameters	Test Method	Units	Results	Limits	MU %
1.	Stack gas Velocity	IS 11255 (Part 3)2018	m/s	15.21	-	-
2.	Volumetric Flow Rate	IS 11255 (Part 3)2018	Nm^3/hr	89812.71	-	-
3.	Particulate Matter (PM)	IS 11255 (Part 1)2019	mg/Nm^3	26.52	30.0	-
4.	Sulphur Dioxide (SO_2)	IS 11255 (Part 2)2019	mg/Nm^3	83.02	-	-
5.	Oxides of Nitrogen (NO_x)	IS 11255 (Part 7)2022	mg/Nm^3	49.47	-	-

****Test result End ****

Prescribed Limit	As per EC Condition.
Remarks	Unit was operational during sampling.

Contractual Notes

1. *The laboratory accepts responsibility for content of this report.*
2. *Test performed at laboratory's permanent facility and results relate only to the sample tested in prescribed Date & time*
3. *Laboratory is maintaining, Temperature 25 ± 2^{0}C and Relative Humidity 45 ± 5 % in all testing area as per IS 196:1966*
4. *The Test report shall not be reproduced full or in part & can't be used as proof in the court of law.*
5. *Any complaint about this report should be communicated in writing within 7 days of its issue (epiclabtech@gmail.com)*
6. *Total liability of EPIC LabTech Pvt. Ltd. will be limited to invoiced amount only.*
7. *All disputes are subjected to Ranchi Jurisdiction and maximum liability of the laboratory does not exceed the testing and sampling charges*
8. *Opinion does not imply endorsement of the tested product by laboratory. Under no circumstances, laboratory accepts any caused by use or misuse of this report.*
9. *When the results are from external provider are marked as * mark.*

Analysed by – A.K. Sinha

Laboratory's Seal

Checked by
(B.N. Kumar)
Technical Head

13/4/24
Verified & Issue by
(Umesh Das)
Laboratory Head

Authorized Signatory
EPIC LabTech Pvt. Ltd.
Ranchi, Jharkhand

EPIC LabTech Private Limited
CIN:-U74999JH2022PTC019685
Accredited by :- NABL vide certificate Number TC- 12887
Jharkhand State Pollution Control Board
Certified by :- ISO 9001:2015 and ISO 45001:2018
TC-12887

Analytical Test Report

Unique Lab Report No.	**TC1288724000000287**				
Report Unique ID	**RP0391241513**			**Issue date/time**	**13.04.2024/ 16:59**
Discipline	Chemical	**Group**	Atmospheric Pollution	**Sub Group**	Stack Emission

Report Issue to

M/s – JHARKHAND ISPAT PRIVATE LIMITED VILL: HESLA, PO: ARGADA, RAMGARH, JHARKHAND		Contact Person	Mr. Ram Chandra Rungta
		Contact Number	9337292105
		Email Id	jipllegal@gmail.com
Order Number	**18984256**	Order Date	**06.04.2024/ 07:57**

References of Quality Management System *(Steps of Traceability Chain)*

Customer Registration No.	EPIC/PCB/0391	Sample Booking Number	EPIC-241513
Sample(s) Code	241513	Sample Receipt (D/T)	09.04.2024/ 13:53

Sampling References

Type of Industry	Sponge Iron	Ref. of Sampling Plan	EPIC/LAB/R/036
Sampling method used	IS: 11255 & CPCB Guideline (Lats/80/2013-14)		
Sampling Start (D/T)	07.04.2024/ 17:20	Sampling End (D/T)	07.04.2024/ 18:20
Mode of Sampling	Conducted by laboratory	Sample collected by	Mr. Janardan Kumar & team
Description/condition of sample	Receipt sample(s) were fit for analysis.		

Environmental Condition during sampling

Weather condition	Clear	Temperature (^{0}C)	31	Humidity %	42	Wind direction	360^0-180^0

Sampling Location(s) with GPS coordinate(s)

S. Location	Port hole (Stack-2 Attached With WHRB-3 & 4)	GPS coordinate	23^0 38' 49.86"/ 85^0 27' 50.62"

Field Observations

Field observation by laboratory's personnel		Data provided by customer	
Platform	Permanent	*Type of fuel Used*	Coal
Stack Description (Shape & Material)	Circular/ Metal	*Quantity of Fuel Used*	300TPD
Sampling port hole	Available	*Total production Capacity*	200TPD
Pollution Controlling Device (if any)	ESP	*Height of Stack from ground level*	55.0m
Emission Source	Rotary Kiln	*Inner Diameter of Stack*	1.8m
Total Number of Oven (if any)	N/A	*Height of port hole from Ground level*	25.0m
Running Oven during sampling (if any)	N/A	*ID fan capacity of PCD*	N/A
Test start date/time	09.04.2024/ 14:15	Test completion date/time	12.04.2024/ 16:41

Sl	Parameters	Test Method	Units	Results	Limits	MU %
1.	Stack gas Velocity	IS 11255 (Part 3)2018	m/s	16.26	-	-
2.	Volumetric Flow Rate	IS 11255 (Part 3)2018	Nm^3/hr	92848.72	-	-
3.	Particulate Matter (PM)	IS 11255 (Part 1)2019	mg/Nm^3	28.00	30.0	-
4.	Sulphur Dioxide (SO_2)	IS 11255 (Part 2)2019	mg/Nm^3	99.63	-	-
5.	Oxides of Nitrogen (NO_x)	IS 11255 (Part 7)2022	mg/Nm^3	55.66	-	-

****Test result End ****

Prescribed Limit	As per EC Condition.
Remarks	Unit was operational during sampling,

Contractual Notes

1. *The laboratory accepts responsibility for content of this report.*
2. *Test performed at laboratory's permanent facility and results relate only to the sample tested in prescribed Date & time*
3. *Laboratory is maintaining, Temperature 25 ± 2^{0}C and Relative Humidity 45 ± 5 % in all testing area as per IS 196:1966*
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7. *All disputes are subjected to Ranchi Jurisdiction and maximum liability of the laboratory does not exceed the testing and sampling charges*
8. *Opinion does not imply endorsement of the tested product by laboratory. Under no circumstances, laboratory accepts any caused by use or misuse of this report.*
9. *When the results are from external provider are marked as * mark.*

Analysed by – A.K. Sinha

Laboratory's Seal

Checked by
(B.N. Kumar)
Technical Head

13/4/24

Verified & Issue by
(Umesh Das)
Laboratory Head

Authorized Signatory
EPIC LabTech Pvt. Ltd.
Ranchi, Jharkhand

Annexure - 10

Analytical Test Report

Unique Lab Report No.	**TC1288724000000047F**				
Report Unique ID	RL002724050201			**Issue date/time**	05.02.2024/ 15:21
Discipline	Chemical	**Group**	Atmospheric Pollution	**Sub Group**	Fugitive Emission

Report Issue to

M/s – **JHARKHAND ISPAT PRIVATE LIMITED** VILL. & PO – HESLA, ARGADA, DIST.- RAMGARH, JHARKHAND - 829101		Contact Person	Mr. Manoj Kumar
		Contact Number	9337292105
		Email Id	jam.env2018@gmail.com
Order Number	**JIPL/2023-24**	Order Date	**11.01.2024/ 12:30**

References of Quality Management System *(Steps of Traceability Chain)*

Customer Registration No.	EPIC/OTH/0027	Sample Booking Number	EPIC-C-AP-FE-2405/02
Sample(s) Code	FE-2405/02	Sample Receipt (D/T)	30.01.2024/ 10:30

Sampling References

Type of Industry	Sponge Iron	Ref. of Sampling Plan	EPIC/LAB/R/036
Sampling method used	IS 5182 and CPCB Air Manual Volume – 1 (NAAQM/36/2012-13)		
Sampling Start (D/T)	29.01.2024/ 10:00	Sampling End (D/T)	29.01.2024/ 18:05
Mode of Sampling	Conducted by laboratory	Sample collected by	Mr. Janardan Kumar & team
Description/condition of sample	Receipt sample(s) were fit for analysis		

Environmental Condition during sampling

Weather condition	Clear	Temperature (^{0}C)	20	Humidity %	50	Wind direction	180^0-0^0

Sampling Location(s) with GPS coordinate(s)

S. Location A	10.0m from Raw Material Handling Area	GPS coordinate	23^0 38' 57.02"/ 85^0 27' 48.09"
S. Location B	10.0m from Product Handling Area	GPS coordinate	23^0 38' 56.13"/ 85^0 27' 53.04"

Date(s) of performance of the laboratory activities

Test start date/time	30.01.2024/ 12:15	Test completion date/time	03.02.2024/ 10:59

Sl	Tested Parameters	Method used	Unit	Results		Limits	MU%
				A	B		
1.	Suspended Particulate Matter (SPM)	IS:5182 (P-04) 2019	µg/m^3	1401.31	1765.68	2000	± 0.44

--Test result End --

Prescribed Limit	Environmental (Protection) Rules, 1986 Schedule I, Serial No.99
Remarks	Unit was operational during sampling.

Contractual Notes

1. *The laboratory accepts responsibility for content of this report.*
2. *Test performed at laboratory's permanent facility and results relate only to the sample tested in prescribed Date & time*
3. *Laboratory is maintaining, Temperature 25 ± 2^{0}C and Relative Humidity 45 ± 5 % in all testing area as per IS 196:1966*
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6. *Total liability of EPIC LabTech Pvt/ Ltd. will be limited to invoiced amount only.*
7. *All disputes are subjected to Ranchi Jurisdiction and maximum liability of the laboratory does not exceed the testing and sampling charges*
8. *Opinions does not imply endorsement of the tested product by laboratory. Under no circumstances, laboratory accepts any caused by use or misuse of this report.*
9. *When the results are from external provider are marked as * mark.*

Analysed by - A.K. Sinha

Laboratory's Seal

Checked by
(B.N. Kumar)
Technical Head

05/2/24

Verified & Issue by
(Umesh. Das)
Laboratory Head

Authorized Signatory
EPIC LabTech Pvt. Ltd.
Ranchi, Jharkhand

C/o - R.K. Tripathi, Indrapuri, Road No. - 5, Ranchi, Jharkhand - 834005, India
0651 4666392 9304973994 9304973994 epiclabtech@gmail.com

Analytical Test Report

Unique Lab Report No.	**TC1288724000000283**				
Report Unique ID	**RL0044241509**			**Issue date/time**	**13.04.2024/ 16:46**
Discipline	Chemical	**Group**	Atmospheric Pollution	**Sub Group**	Fugitive Emission

Report Issue to

M/s – JHARKHAND ISPAT PRIVATE LIMITED Vill. & PO – HESLA, ARGADA DIST.-RAMGARH, JHARKHAND-829101		Contact Person	Mr. Manoj Kumar
		Contact Number	+91 9337292105
		Email Id	jam.env2018@gmail.com
Order Number	**JIPL/2023-24**	Order Date	**05.04.2024/ 12:30**

References of Quality Management System *(Steps of Traceability Chain)*

Customer Registration No.	EPIC/OTH/0044	Sample Booking Number	EPIC-241509
Sample(s) Code	241509-(A), (B)	Sample Receipt (D/T)	09.04.2024/ 11:30

Sampling References

Type of Industry	Sponge Iron	Ref. of Sampling Plan	EPIC/LAB/R/036
Sampling method used	IS 5182 and CPCB Air Manual Volume – 1 (NAAQM/36/2012-13)		
Sampling Start (D/T)	08.04.2024/ 08:00	Sampling End (D/T)	08.04.2024/ 17:00
Mode of Sampling	Conducted by laboratory	Sample collected by	Mr. Ajay Kumar & team
Description/condition of sample	Receipt sample(s) were fit for analysis		

Environmental Condition during sampling

Weather condition	Cloudy	Temperature (^{0}C)	30	Humidity %	55	Wind direction	270^0-90^0

Sampling Location(s) with GPS coordinate(s)

S. Location A	10m away from Raw material handling area	GPS coordinate	23^0 38' 57.02"/ 85^0 27' 48.09"
S. Location B	10m away from product handling area	GPS coordinate	23^0 38' 56.13"/ 85^0 27' 53.04"

Date(s) of performance of the laboratory activities

Test start date/time	09.04.2024/ 11:45	Test completion date/time	12.04.2024/ 14:25

Sl	**Tested Parameters**	**Method used**	**Unit**	**Results**		**Limits**	**MU%**
				A	**B**		
1.	Suspended Particulate Matter (SPM)	IS:5182 (P-04) 2019	µg/m^3	1892.04	1645.42	2000.0	±0.44

--Test result End --

Prescribed Limit	Environmental (Protection) Rules, 1986 Schedule I, Serial No.-99
Remarks	Unit was operational during sampling.

Contractual Notes

1. *The laboratory accepts responsibility for content of this report.*
2. *Test performed at laboratory's permanent facility and results relate only to the sample tested in prescribed Date & time*
3. *Laboratory is maintaining, Temperature 25 ± 2^{0}C and Relative Humidity 45 ± 5 % in all testing area as per IS 196:1966*
4. *The Test report shall not be reproduced full or in part & can't be used as proof in the court of law.*
5. *Any complaint about this report should be communicated in writing within 10 days of its issue (epiclabtech@gmail.com)*
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7. *All disputes are subjected to Ranchi Jurisdiction and maximum liability of the laboratory does not exceed the testing and sampling charges*
8. *Opinion does not imply endorsement of the tested product by laboratory. Under no circumstances, laboratory accepts any caused by use or misuse of this report.*
9. *When the results are from external provider are marked as * mark.*

Analysed by – Nargish Perween, Supervise by - A.K. Sinha

Laboratory's Seal

Checked by
(B.N. Kumar)
Technical Head

13/4/24

Verified & Issue by
(Umesh Das)
Laboratory Head

Authorized Signatory
EPIC LabTech Pvt. Ltd.
Ranchi, Jharkhand

C/o – R.K. Tripathi, Indrapuri, Road No. – 5, Ranchi, Jharkhand – 834005, India
0651 4666392 9304973994 9304973994 epiclabtech@gmail.com

Analytical Test Report

Unique Lab Report No.	**TC1288724000000302**				
Report Unique ID	**RL0041241507**			**Issue date/time**	22.04.2024/ 12:28
Discipline	Chemical	**Group**	Water	**Sub Group**	Groundwater

Report Issue to

M/s- **JHARKHAND ISPAT PRIVATE LIMITED** Vill. & PO – HESLA, ARGADA, DIST.-RAMGARH, JHARKHAND-829101		Contact Person	Mr. Manoj Kumar
		Contact Number	+91 9337292105
		Email Id	jam.env2018@gmail.com
Order Number	**JIPL/2024-25**	Order Date	**05.04.2024/ 11:15**

References of Quality Management System *(Steps of Traceability Chain)*

Customer Registration No.	EPIC/OTH/0041	Sample Booking Number	EPIC-241507
Sample(s) Code	241507	Sample Receipt (D/T)	09.04.2024/ 11:20

Sampling References

Type of Industry	Sponge Iron	Ref. of Sampling Plan	EPIC/LAB/R/036
Sampling method used	IS : 3025 (Part-1) 1987, R-2003		
Sampling Start (D/T)	08.04.2024/ 09:20	Sampling End (D/T)	08.04.2024/ 09:25
Mode of Sampling	Conducted by Laboratory	Sample collected by	Mr. Janardan Kumar & team
Description/condition of sample	Receipt sample(s) were fit for analysis.		

Environmental Condition during sampling

Weather condition	Cloudy	Temperature (^{0}C)	27	Humidity %	65	Wind direction	270^0-90^0

Sampling Location(s) with GPS coordinate(s)

S. Location A	Borewell	GPS coordinate	23^0 38' 53.92"/ 85^0 27' 46.23"
Test start date	09.04.2024/ 11:28	Test completion date	11.04.2024/ 14:10

Sl	Test Parameters	Method used	Unit	Results	Limits	MU%
1.	Conductivity	IS 3025 (P-14) 2019	µs/cm	1440.00	-	±0.15
2.	Turbidity	IS 3025 (P-10) 1984	NTU	2.04	5	±11.92
3.	pH value at 25^{0}C	IS 3025 (P-11) 2022	-	07.20	6.5-8.5	±0.24
4.	Colour	IS 3025 (P-04) 2021	Hazen	10	15	±22.22
5.	Odour	IS 3025 (P-05) 2018	-	Agreeable	Agreeable	-
6.	Taste	IS 3025 (P-07) 2017	-	Agreeable	Agreeable	-
7.	Total Dissolved Solids (TDS)	IS 3025 (P-16) 2023	mg/l	774.00	2000	±0.48
8.	Calcium (as Ca)	IS 3025 (P-40) 1991	mg/l	132.26	200	±2.28
9.	Total Alkalinity(as $CaCO_3$)	IS 3025 (P-23) 2019	mg/l	148.00	600	±15.80
10.	Total Hardness (as $CaCO_3$)	IS 3025 (P-21`) 2009	mg/l	366.00	600	±0.82
11.	Chloride (as Cl)	IS 3025 (P-32) 2019	mg/l	138.95	1000	±2.58
12.	Free Residual Chlorine	IS 3025 (P-26) 1986	mg/l	BDL(MDL-0.4)	1.0	±3.22
13.	Sulphate (as SO_4)	IS 3025 (P-24/Sec-1)2022	mg/l	90.00	400	±0.38
14.	Magnesium (as Mg)	APHA 3500 Mg E 2023	mg/l	36.00	100	±1.61
15.	Nitrate (as NO_3)	APHA 4500 B 2023	mg/l	2.38	45	±0.56
	Residues and Contaminants in Water- Trace Metals Elements-Analysis on 09.04.2024/ 11:15 to 18.04.2024/ 15:48					
16.	Copper(as Cu)	APHA 3111 B 2023	mg/l	BDL(MDL-0.2)	1.5	±2.52
17.	Iron (as Fe)	APHA 3111 B 2023	mg/l	0.33	1.0	±5.17
18.	Lead (as Pb)	APHA 3111 B 2023	mg/l	BDL(MDL-0.3)	-	±2.23
19.	Cadmium (as Cd)	APHA 3111 B 2023	mg/l	BDL(MDL-0.05)	-	±6.15
20.	Chromium (as Cr)	APHA 3111 B 2023	mg/l	BDL(MDL-0.3)	-	±2.15
21.	Nickel (as Ni)	APHA 3111 B 2023	mg/l	BDL(MDL-0.5)	-	±4.11

C/o - R.K. Tripathi, Indrapuri, Road No. - 5, Ranchi, Jharkhand – 834005, India
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Analytical Test Report

Unique Lab Report No.	**TC1288724000000302**				
Report Unique ID	**RL0041241507**			**Issue date/time**	22.04.2024/ 12:28
Discipline	Chemical	**Group**	Water	**Sub Group**	Groundwater

Report Issue to

M/s- **JHARKHAND ISPAT PRIVATE LIMITED** Vill. & PO – HESLA, ARGADA, DIST.-RAMGARH, JHARKHAND-829101		Contact Person	Mr. Manoj Kumar
		Contact Number	+91 9337292105
		Email Id	jam.env2018@gmail.com
Order Number	**JIPL/2024-25**	Order Date	**05.04.2024/ 11:15**

22.	Arsenic (as As)	APHA 3114 B 2023	mg/l	BDL(MDL-0.005)	0.01	±7.52
23.	Zinc(as Zn)	APHA 3111 B 2023	mg/l	0.2	15	±5.72

–Test result End –

Prescribed Limit	IS 10500:2021
Remarks	Unit was operational during sampling.

Contractual Notes

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9. *When the results are from external provider are marked as * mark.*

Analysed by – Pratima Kumari/ Nisha Kumari

Laboratory's Seal

Checked by
(B.N. Kumar)
Technical Head

22/4/24

Verified & Issue by
(Umesh Das)
Laboratory Head

Authorized Signatory
EPIC LabTech Pvt. Ltd.
Ranchi, Jharkhand

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EPIC LabTech Private Limited
CIN:-U74999JH2022PTC019685
Certified by :- ISO 9001:2015 (Quality Management System), ISO 45001:2018 (Occupational Health & Safety Management System)
Accredited by :- Jharkhand State Pollution Control Board

Analytical Test Report

Report Unique ID	RL0041241507			Issue date/time	22.04.2024/ 12:43
Discipline	Chemical	Group	Water	Sub Group	Groundwater

Report Issue to

M/s- **JHARKHAND ISPAT PRIVATE LIMITED** Vill. & PO – HESLA, ARGADA, DIST.-RAMGARH, JHARKHAND-829101	Contact Person	Mr. Manoj Kumar
	Contact Number	+91 9337292105
	Email Id	jam.env2018@gmail.com
Order Number **JIPL/2024-25**	Order Date	**05.04.2024/ 11:15**

References of Quality Management System *(Steps of Traceability Chain)*

Customer Registration No.	EPIC/OTH/0041	Sample Booking Number	EPIC-241507
Sample(s) Code	241507	Sample Receipt (D/T)	09.04.2024/ 11:20

Sampling References

Type of Industry	Sponge Iron	Ref. of Sampling Plan	EPIC/LAB/R/036
Sampling method used	IS : 3025 (Part-1) 1987, R-2003		
Sampling Start (D/T)	08.04.2024/ 09:20	Sampling End (D/T)	08.04.2024/ 09:25
Mode of Sampling	Conducted by Laboratory	Sample collected by	Mr. Janardan Kumar & team
Description/condition of sample	Receipt sample(s) were fit for analysis.		

Environmental Condition during sampling

Weather condition	Cloudy	Temperature (^0C)	27	Humidity %	65	Wind direction	270^0-90^0

Sampling Location(s) with GPS coordinate(s)

S. Location A	Borewell	GPS coordinate	23^0 38' 53.92"/ 85^0 27' 46.23"
Test start date	09.04.2024/ 11:28	Test completion date	11.04.2024/ 14:10

Sl	Test Parameters	Method used	Unit	Results	Limits	MU%
1.	Phosphate (as PO_4)	IS 3025 (P-24/Sec-1) 2022	mg/l	0.65	-	-
2.	Fluoride (as F)	APHA 4500 F-C 2023	mg/l	BDL(MDL-0.01)	1.5	-
3.	Cyanide (as CN)	APHA 4500 CN – D 2023	mg/l	BDL(MDL-1)	-	-
Residues and Contaminants in Water- Trace Metals Elements-Analysis on 09.04.2024/ 11:15 to 18.04.2024/ 15:48						
4.	Mercury (as Hg)	APHA 3112 B 2023	mg/l	BDL(MDL-0.005)	-	-
5.	Aluminium(as Al)	IS 3025 (P-55) 2003	mg/l	BDL(MDL-0.1)	0.2	-

--Test result End--

Prescribed Limit	IS 10500:2021
Remarks	Unit was operational during sampling.

Contractual Notes

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9. *When the results are from external provider are marked as * mark.*

Analysed by – Pratima Kumari/ Nisha Kumari

Laboratory's Seal

Checked by
(B.N. Kumar)
Technical Head

22/4/24
Verified & Issue by
(Umesh Das)
Laboratory Head

Authorized Signatory
EPIC LabTech Pvt. Ltd.
Ranchi, Jharkhand

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EPIC LabTech Private Limited
CIN:-U74999JH2022PTC019685

Certified by :- ISO 9001:2015 (Quality Management System), ISO 45001:2018 (Occupational Health & Safety Management System)
Accredited by :- Jharkhand State Pollution Control Board

Analytical Test Report

Report Unique ID	**RL0041241508**			**Issue date/time**	**22.04.2024/ 12:48**
Discipline	Biological	**Group**	Water	**Sub Group**	Groundwater

Report Issue to

M/s- **JHARKHAND ISPAT PRIVATE LIMITED** Vill. & PO – HESLA, ARGADA, DIST.-RAMGARH, JHARKHAND-829101	Contact Person	Mr. Manoj Kumar
	Contact Number	+91 9337292105
	Email Id	jam.env2018@gmail.com
Order Number: **JIPL/2024-25**	Order Date	**05.04.2024/ 11:15**

References of Quality Management System *(Steps of Traceability Chain)*

Customer Registration No.	EPIC/OTH/0041	Sample Booking Number	EPIC-241508
Sample(s) Code	241508	Sample Receipt (D/T)	09.04.2024/ 11:25

Sampling References

Type of Industry	Sponge Iron	Ref. of Sampling Plan	EPIC/LAB/R/036
Sampling method used	IS : 3025 (Part-1) 1987, R-2003		
Sampling Start (D/T)	08.04.2024/ 09:20	Sampling End (D/T)	08.04.2024/ 09:25
Mode of Sampling	Conducted by Laboratory	Sample collected by	Mr. Janardan Kumar & team
Description/condition of sample	Receipt sample(s) were fit for analysis.		

Environmental Condition during sampling

Weather condition	Cloudy	Temperature (^{0}C)	27	Humidity %	65	Wind direction	270^0-90^0

Sampling Location(s) with GPS coordinate(s)

S. Location A	Borewell	GPS coordinate	23^0 38' 53.92"/ 85^0 27' 46.23"
Test start date	09.04.2024/ 11:28	Test completion date	16.04.2024/ 14:10

Sl	Test Parameters	Method used	Unit	Results	Limits	MU%
1.	Total Coliform	IS 1622-2000	MPN/100	BDL(MDL-1.8)	Shall not be detectable in any 100ml sample.	-
2.	Fecal Coliform	IS 1622-2000	MPN/100	BDL(MDL-1.8)	-	-

--Test result End --

Prescribed Limit	IS 10500:2021
Remarks	Unit was operational during sampling.

Contractual Notes

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9. *When the results are from external provider are marked as * mark.*

Analysed by – Pratima Kumari/ Nisha Kumari

Laboratory's Seal

Checked by
(B.N. Kumar)
Technical Head

22/4/24

Verified & Issue by
(Umesh Das)
Laboratory Head

Authorized Signatory
EPIC LabTech Pvt. Ltd.
Ranchi, Jharkhand

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Analytical Test Report

Report Unique ID	**RL0041241507**			**Issue date/time**	**22.04.2024/ 12:46**
Discipline	Chemical	**Group**	Water	**Sub Group**	

Report Issue to

M/s- **JHARKHAND ISPAT PRIVATE LIMITED** Vill. & PO – HESLA, ARGADA, DIST.-RAMGARH, JHARKHAND-829101		Contact Person	Mr. Manoj Kumar
		Contact Number	+91 9337292105
		Email Id	jam.env2018@gmail.com
Order Number	**JIPL/2024-25**	Order Date	**05.04.2024/ 11:15**

References of Quality Management System *(Steps of Traceability Chain)*

Customer Registration No.	EPIC/OTH/0041	Sample Booking Number	EPIC-241507
Sample(s) Code	241507	Sample Receipt (D/T)	09.04.2024/ 11:20

Sampling References

Type of Industry	Sponge Iron	Ref. of Sampling Plan	EPIC/LAB/R/036
Sampling method used	IS : 3025 (Part-1) 1987, R-2003		
Sampling Start (D/T)	08.04.2024/ 09:20	Sampling End (D/T)	08.04.2024/ 09:25
Mode of Sampling	Conducted by Laboratory	Sample collected by	Mr. Janardan Kumar & team
Description/condition of sample	Receipt sample(s) were fit for analysis.		

Environmental Condition during sampling

Weather condition	Cloudy	Temperature (^{0}C)	27	Humidity %	65	Wind direction	270^0-90^0

Sampling Location(s) with GPS coordinate(s)

S. Location A	Borewell (Near Main Gate)	GPS coordinate	23^0 38' 53.92"/ 85^0 27' 46.23"
Test start date	09.04.2024/ 11:28	Test completion date	11.04.2024/ 14:10

Sl	Test Parameters	Method used	Unit	Results	Limits	MU%
1.	Ground Water Level	EPIC/LAB/SOP/WA/01/00	mbgl	7.8	-	-

–Test result End –

Prescribed Limit	N/A
Remarks	Unit was operational during sampling.

Contractual Notes

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9. *When the results are from external provider are marked as * mark.*

Laboratory's Seal

Checked by
(B.N. Kumar)
Technical Head

22/4/24

Verified & Issue by
(Umesh Das)
Laboratory Head
Authorized Signatory
EPIC LabTech Pvt. Ltd.
Ranchi, Jharkhand

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Annexure - 12

Analytical Test Report

Unique Lab Report No.	**TC1288724000000285**				
Report Unique ID	**RP0391241511**			**Issue date/time**	**13.04.2024/ 16:53**
Discipline	Chemical	**Group**	Atmospheric Pollution	**Sub Group**	Ambient Noise

Report Issue to

M/s – **JHARKHAND ISPAT PRIVATE LIMITED** VILL: HESLA, PO: ARGADA, RAMGARH, JHARKHAND		Contact Person	Mr. Ram Chandra Rungta
		Contact Number	9337292105
		Email Id	jipllegal@gmail.com
Order Number	**18984256**	Order Date	06.04.2024/ 07:57

References of Quality Management System *(Steps of Traceability Chain)*

Customer Registration No.	EPIC/PCB/0391	Sample Booking Number	EPIC-241511
Sample(s) Code	241511-(A), (B), (C)	Sample Receipt (D/T)	09.04.2024/ 13:50

Sampling References

Type of Industry	Sponge Iron	Ref. of Sampling Plan	EPIC/LAB/R/036
Sampling method used	IS 9989:1981 (RA 2020) & CPCB Method S.O.50 (E) dated 11/01/2010		
Sampling Start (D/T)	07.04.2024/ 14:00	Sampling End (D/T)	08.04.2024/ 14:10
Mode of Sampling	Conducted by laboratory	Sample collected by	Mr. Janardan Kumar & team
Description/condition of sample	Receipt sample(s) were fit for analysis.		

Environmental Condition during sampling

Weather condition	Clear	Temperature (^{0}C)	34	Humidity %	50	Wind direction	360^0-180^0

Sampling Location(s) with GPS coordinate(s)

S. Location A	Near Main gate of unit	GPS coordinate	23^0 38' 57.88"/ 85^0 27' 53.21"
S. Location B	West corner side of unit	GPS coordinate	23^0 38' 55.38"/ 85^0 27' 45.98"
S. Location C	Near Online PM 10 Analyzer	GPS coordinate	23^0 38' 56.57"/ 85^0 27' 51.71"

Date(s) of performance of the laboratory activities

Test start date/time	09.04.2024/ 14:00	Test completion date/time	12.04.2024/ 16:34

Sl	Test Parameters	Method used	Unit	Results			Limits	MU%
				A	B	C		
1.	Leq (Day time)	IS: 9989:1981	dB (A)	70.5	67.4	71.7	75	± 2.39
2.	Leq (Night time)	IS: 9989:1981	dB (A)	52.8	59.7	63.2	70	± 2.39
Prescribed Limit		The Noise Pollution (Regulation and Control) Rules, 2000.						
Remarks		Unit was operational during sampling.						

Contractual Notes

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Analysed by - A.K. Sinha

Laboratory's Seal

Checked by
(B.N. Kumar)
Technical Head

13/4/24

Verified & Issue by
(Umesh Das)
Laboratory Head

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Ranchi, Jharkhand

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Annexure - 13

Report
on
GHG Emissions inventory & Its Reduction Including Carbon Sequestration through Plantation for Sponge Iron Plant

Jharkhand Ispat PVT. LTD.

Vill: Hesla, P.O.: Argada, Dist.: Ramgarh, Jharkhand

Prepared By

REDUCE • REUSE
RECYCLE • RESPECT

Institute for Environmental Management
Ranchi, Jharkhand, 834002

December– 2022

Preface

A report on GHG emission Inventory and its reduction including Carbon Sequestration through plantation for steel plant has been prepared of Jharkhand Ispat Pvt. Ltd. (JIPL) operating a Sponge Iron Plant having two (2) Nos .of coal based Rotary Kilns, each of 100 TPD capacity at village: Hesla, District: Argada in the state of Jharkhand since 2003. The report is prepared based on the secondary data provided by JIPL

Name and address of manufacturing facility:

Jharkhand Ispat Pvt. Ltd.

At- Hesla, Post- Argada - 829122,

Dist. - Ramgarh (Jharkhand)

E-mail: jipllegal@gmail.com

Within the ambit of this study, the following units were considered:

GHG emissions have been estimated considering a system boundary from gate-to-gate which is from raw materials entering a sponge iron plant producing sponge iron or DRI used for manufacturing of steel. The system boundary in this study include the

- Sponge Iron process

The purpose of this study is to highlight the potential areas of GHG emission of sponge iron production for reducing GHG emissions. The main sources of GHG emissions during sponge iron manufacturing are considered and the key groups of measures that can reduce the GHG emissions are identified.

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Chapter – 1

Introduction

The production of iron through direct reduction (Direct-Reduced Iron; DRI) involves the use of natural gas or coal to reduce iron ore to iron through carbothermic reactions at a temperature below its melting point, negating the need for a blast furnace as otherwise required. In India, around 25% of iron is produced through direct reduction. However, there is a high reliance on coal (79% of DRI production capacity) causing significant energy use and emissions from production. Also, a large portion of raw materials (especially coal) is imported due to low quality of domestic resources. Weighted average specific energy use and emissions is calculated for seven such clusters (using total cluster capacity), based on regional raw material qualities and transport distances from various mines, ports and beneficiation plants. The results suggest an overall specific (per tonne DRI) energy consumption of 27.24 GJ with an emission of 2.8 tCO_2eq, 2.6 kg NOx, 1.8 kg SOx and 1.4kg $PM_{2.5}$. The specific energy and emission values are used to calculate the total annual emissions by multiplying with the 2019 DRI production amount of 27.8 million tonnes. The annual midpoint and endpoint impacts as per ReCiPe 2016 (country-wise factors where applicable) are then calculated. The DRI industry causes 77.31 million tCO_2eq/year in global warming potential, 59.02 thousand tSO_2eq/year in acidification potential and 287.2 thousand $tPM_{2.5}eq$/year in fine dust formation potential. It is estimated to cause approximately 270,000 years of reduction in overall human life and 230 species years of species loss (mainly in terrestrial ecosystems). Different sensitivities are carried out to understand the impact of some key influencing parameters (effect of ore quality and coal quality, effect of imports of ore and coal). Some development scenarios, such as increasing coal washery capacity, shifting land transport from road to rail, increasing waste-heat recovery penetration, effect of stricter regulations, etc. are discussed, along with pathways for fuel-switching from coal to natural gas, and then from natural gas to hydrogen.

Jharkhand Ispat Pvt. Ltd. (JIPL) is a registered company under the Company's Act. It is operating a steel plant having two (2) Nos of Sponge Iron Plant.of coal based Rotary Kilns, each of 100 TPD capacity at village: Hesla, District: Argada in the state of Jharkhand since 2003. Sponge Iron is presently sold to other steel producers for making finished steel products.

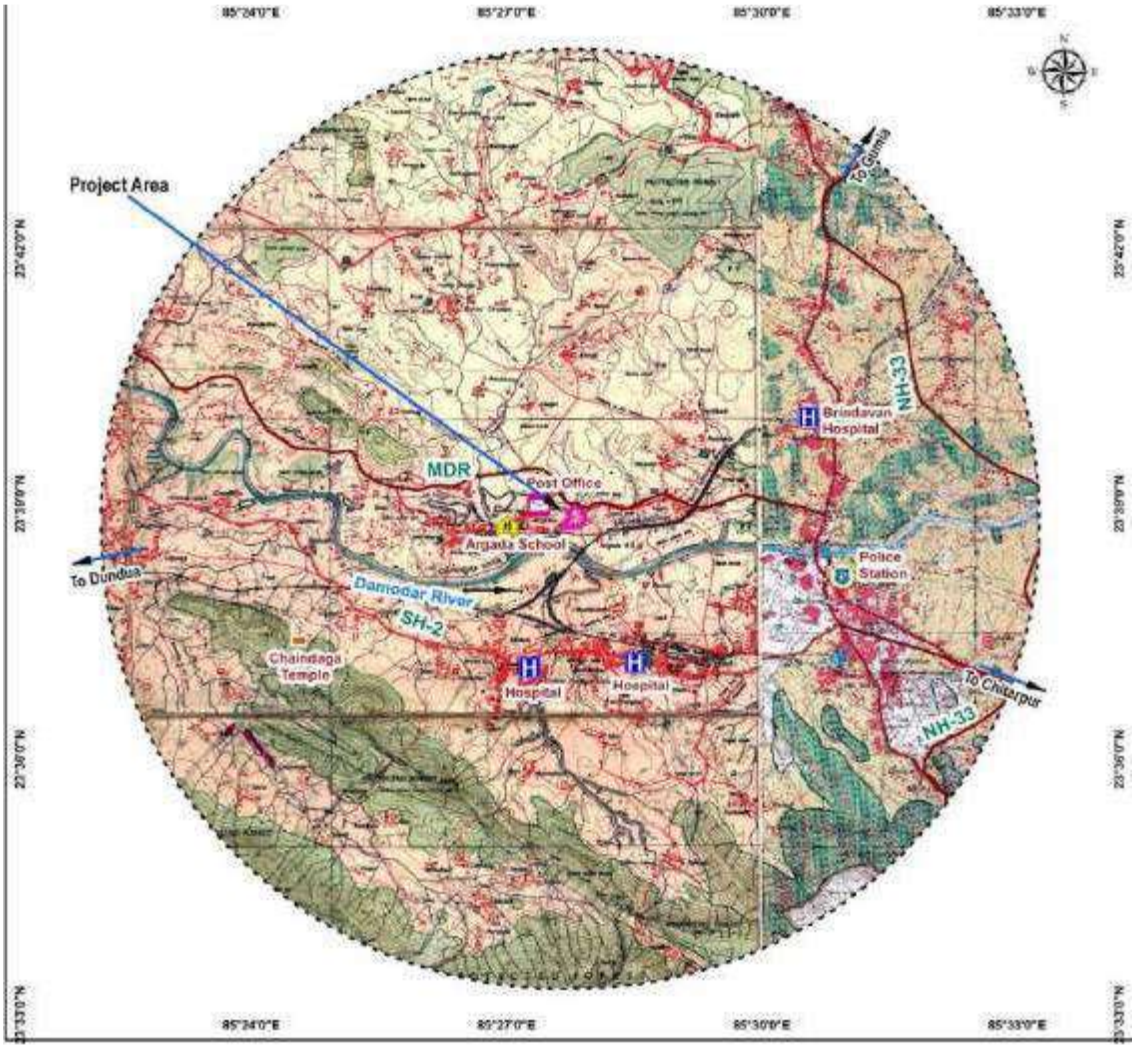
GHG emission inventory is comprised of carbon footprint analysis where it is historically been defined as "the inventory of greenhouse gas (GHG) emissions caused by an organization, event, product or person". In this report the estimation of carbon emission for sponge iron production, carbon budgeting/balancing, carbon sequestration activities and carbon offsetting strategies are discussed. GHG emission calculation has been carried out using IPCC guidelines as overall principal and following standard methodology of GHG protocol for GHG estimation. Estimations for this green field project are majorly for scope 1 where direct use of materials and energy for the plant is considered.

JIPL has installed 2x100TPD (Sponge Iron plants) DRI Units at village: Hesla, District: Argada in the state of Jharkhand since 2003 after getting NOC from Jharkhand Pollution Control Board (JSPCB) and subsequently Consent to Operate from JSPCB.

Now JIPL intends to use the waste heat energy from the DRI units in Waste Heat Recovery Boilers and dolochar produced in plant in AFBC Boiler, supplemented by coal, for production of 18 MW power. 2x100 TPD DRI Kilns for production of 60,000 TPA sponge Iron

And 2x12T Induction furnaces along with Continuous Casting Mill for 72,000 TPA Billet Production were installed after getting NOC from Jharkhand Pollution Control Board (JSPCB) on 6th November, 2006. JIPL submitted application on 11.01.2013 for grant of TOR for obtaining EC for 2x100 TPD Sponge Iron Plant and 240 TPD MS Billet Plant which are under violation and installation of 1x12 Ton Induction Furnace, 90,000 TPA Rolling Mill & 12 MW Power Plant under expansion.

Fig.:1 Digitized Key plan of project site



Chapter - 2

Project Description

Overview of direct reduction process

The basic mechanism behind iron production involves two main pathways,

i. Using a blast furnace (heated using coal or natural gas) for reduction of iron ore (iron oxides) into pig iron by reaction with coke and fluxes (usually limestone) (SAIL, 2012). The molten pig iron is then converted to steel (through the steelmaking process, usually with a basic oxygen furnace) or processed and sold as such. In 2019, 46.7% of India's steel industry utilized the blast furnace-basic oxygen furnace (BF-BOF) method (World Steel Association, 2019b).

ii. Using coal (solid or gas) or reformed natural gas to perform a direct reduction of the iron ore into Direct-Reduced Iron (DRI) or Sponge iron at high heat (but below melting point) (Sarangi and Sarangi, 2011). The sponge iron is then converted to steel (with an electric arc or electric induction furnace) or processed and sold. The share of electric induction/arc furnace processes in India constituted 53.3% in 2019 (World Steel Association, 2019b).

The SL/RN process (developed by **S**teel Company of Canada, **L**urgi Chemie, **R**epublic Steel Company and **N**ational Lead Corporation in 1964) forms the basis of rotary kiln technologies used in India (Sarangi and Sarangi, 2011); the process uses a rotary kiln into which iron ore pellets, non-coking coal (for reduction) and limestone/dolomite (flux) is supplied. From the other end, air and coal (for combustion) are supplied. The resulting high temperatures (900 to 1020 °C) form a reducing atmosphere of CO which reduces the iron ores to sponge iron. The sponge iron is subsequently separated out of the remaining reaction products through magnetic separation. The kiln is inclined at an angle of ~2.5° to facilitate movement of the charge

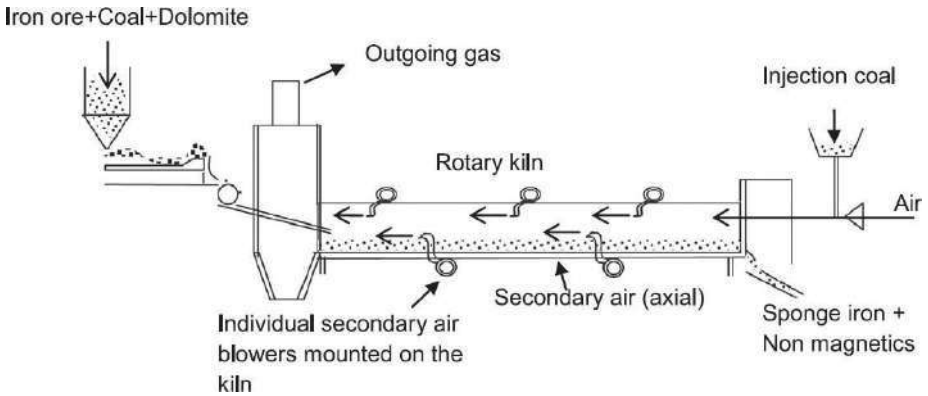


Figure 2: Rotary kiln *(SL/RN process) (Source: Dey et al, 2015)*

From the feed end to the exit. The rotary motion encourages even reaction of the charge through mixing with the reducing gases (Dey et al, 2015). The basic process is shown in Figure 2.

Around a third of the kiln length is typically required for preheating the charge consisting of iron ore, coal and dolomite. The dolomite flux is added to control sulphurisation. The coal supplied along with the ore is mainly meant to produce reducing gas by reacting with atmospheric oxygen at high temperature. In this stage, the iron ore (predominantly hematite - Fe2O3) is partially reduced to ferrous oxide. After reaching the ideal reaction temperature of 900-1100 °C, the ore is reduced to metal in the latter portion of the kiln through further reduction. The following are the main reactions taking place within the kiln, at a temperature of 1067 °C (Sarangi and Sarangi, 2011).

$$3Fe2O3 + CO \rightarrow 2Fe3O4 + CO2 - 44.46\ kJ/mol \quad (1)$$

$$Fe3O4 + CO \rightarrow 3FeO + CO2 + 3.07\ kJ/mol \quad (2)$$

$$FeO + CO \rightarrow Fe + CO_2 - 11.12\ kJ/mol \quad (3)$$

The CO required for the above reduction reactions is produced when fixed carbon of the feed-end coal reacts with CO2 produced by the reductions, in a perpetual, reversible reaction called Boudouard reaction.

$$C + CO_2 \leftrightharpoons 2CO + 167.52\ kJ/mol \quad (4)$$

This reaction is crucial to maintaining the reducing atmosphere and kiln temperature. The ratio of CO/ (CO+CO2) depends on the temperature inside the kiln; ideally a CO concentration of ~50-60% is maintained (Dey, Prasad and Singh, 2015) to ensure optimum reduction of ore. Since the forward reaction (4) is highly endothermic, it serves to maintain kiln temperature for a regulated combustion of injectioncoal. By combining the above reactions, we get

$$2Fe2O3 + 3C \rightarrow 4Fe + 3CO2 + 432.52\ kJ/mol \quad (5)$$

Note that only one part of CO produced in (4) is used for the reduction, whereas the other part is combusted into CO2 resulting in a net output of CO2 from the kiln. Various other reactions take place dueto the combustion of injection coal fixed carbon and volatiles, causing the formation of additional CO and CO2 along with H2O and CH4. The sulphur present in coal is removed by dolomite, as the CaCO3 and MgCO3 decompose into CaO and MgO to act as desulphurising agents. The addition of dolomite is crucial to control the sulphur content in the DRI (to prevent embrittlement in steel production), and also to control SOx emissions (Sarangi and Sarangi, 2011).

After the reduction process, the metal (now known as sponge iron or DRI) is separated from the remaining slag (consisting of coal char, unreacted coal, sulphurated dolomite) through magnetic separation. The product CO2 reacts further with incoming/excess coal to produce more CO. Thus, for a low ash coal with high reactivity, the reduction efficiency will be higher as the quantity of coal input would be reduced. Also, the retaining time of the ore within the kiln can be lower, thus improving output (Dey et al, 2015).

Table 2.1: Salient Features of the Project

S. No	Particulars	Details
1.	Latitude	$23^0$38' 48.47"N
2.	Longitude	$85^0$27'37.77"E
3.	Altitude	335 m above MSL
4.	Toposheet	73 E/6 & 73 E/10
9.	Nearest village/Habitation	City Ramgarh at 6 kms
10.	Nearest Town	Ramgarh
11.	Nearest Police Station	Ramgarh Police Station, 5.0 Km in SE
12.	Nearest Post office Ghutu Post office	Argada Post office – 600 meter in NE direction
13.	Nearest River	River Damodar at 300 meter in south direction.
15	Nearest Temple	Bajrangwali Temple at 1 km in North East
16.	Nearest School	Argada Primary school by 1.0 km
17.	Nearest Bus Stop	Digwar High School 2.6 km in NW direction
18.	Nearest Medical	CCL Hospital at a distance of 3 km
19.	Nearest airport	Birsa Munda Airport Ranchi is at 45 kms in SW
20.	Sanctuaries /National Parks/ Biospheres, etc	Not within 10 km radius of the project site
24.	Reserve Forest/ Protected Forest	No Reserve forest present in 10 Km radius of plant area. Few protected forests present in 10 km radius
26	Total Water Requirement	Existing (Non-violating): 170 KLD Existing (Violating): 406 KLD, Proposed: 2330 KLD Total after Expansion: 2906 KLD Source: Damodar Valley Corporation
27.	Total Power Requirement	Existing – 10.5 MW (Non-Violating – 0.8 MW & 9.7 MW for violating Units) Proposed – 7.5 MW (Expansion) Total after expansion: 18.00 MW DG Set Existing: 2x500KVA, 1 x320KVA & 1x750KVA Proposed: 1x500KVA Fuel: HSD: 1000 litres/day (For Emergency and Start up only)
28.	Total Manpower	Non-Violating: 120, Violating: 100 Proposed: 174, Total: 394

29.	Total capital cost	Existing (Non-violating): Rs. 22.41 Crs. Existing (Units under Violation): Rs. 31.71 Crs. Proposed Units: Rs.186.63 Crs. Total: 240.75 Crs.

Power Plant Waste Heat BoilersAFBC Boiler	Total 18 MW	18 MW	18MW (Captive use)
Iron Ore Crushing & Beneficiation Plant	80 – 100 TPH single stream(throughput)	920 T	276,000 T
Slag Crushing Plant for SMS Slag	Single stream 8 TPH	55 T	162,00 T

Table 2.2: Summary of the Project (Existing & Proposed)

PRODUCTION FACILITY	PLANT SIZE	PRODUCTION(TPD)	PRODUCTION(TPA)
EXISTING			
Sponge Iron Plant	4x 100 T /day of DRI	400 TPD	120,000T
PROPOSED			
Steel Making Shop, Induction Furnaces and Billet Caster	3 x 12 T	360 T	108,000 T
Rolling Mill – TMT Rebar Mill	15 Stand Mill with Direct Hot Charging	300 T	90,000 T

SPONGE IRON PLANT (Existing)

Sponge Iron Plant is having two (2) Nos. Coal Based Rotary Kilns each of 100 TPD Capacity, with an annual capacity of 60,000 Metric Tons. Sponge Iron Plant has its own material storage and handling facilities and other auxiliary plant units.

Process Description:

To produced sponge iron, sized lump ore is fed along with coal, and flux in to the Rotary Kiln wherein iron ore gets converted to metallic iron. Flux helps in scavenging Sulphur content from coal. Brief features of the process are as follows:

- Kiln process of DRI production involves tumbling of iron ore with select grade of non- coking coal and dolomite in a rotary kiln.
- The kiln is supported on roller stations and rotated by means of a variable speed AC motor and girth gear mechanism. Refractory lined rotary kiln of suitable size is placed on two or four support stations and is kept inclined at 2.5 % slope.
- The transport rate of materials through the kiln can be controlled by varying its slope and speed of rotation. There are inlet and outlet cones at opposite ends of the kiln that are cooled by individual fans.
- The kiln shell is provided with small sampling ports, large ports for rapid removal of the contents in emergency or for lining repairs. Longitudinal positioning of the kiln on its riding rings is controlled hydraulically.
- The coal and iron ore are metered into the high end of the inclined kiln. A portion of the coal in pulverized form is also injected pneumatically from the discharge end. The burden first passes through a pre-heating zone where coal de-volatilization takes place and iron ore is heated to pre-

heating temperature for reduction.

- Temperature and process control in the kiln are carried out by installing suitable no. of air injection tubes made of heat-resistant steel. These are spaced evenly along the kiln length and countercurrent to the flow of iron ore. Tips of the air tubes are equipped with special internal swirls to improve uniformity of combustion.
- A central burner located at the kiln discharge end is used with LDO for heating the cold kiln. After initial heating, the fuel supply is turned off and the burner is used to inject air for coal combustion.
- The kiln temperatures are measured with fixed thermocouples and Quick Response Thermocouples (QRT). Fixed thermocouples are located along the length of the kiln to monitor temperature profile of kiln. Fixed thermocouples, at times, may give erratic readings due to coating with ash, ore or accretion. In such a case QRT are used to monitor the kiln temperatures.
- The product (DRI) is discharged from the kiln at about 1000°C. An enclosed chute at the kiln discharge end is used to transfer the hot DRI to a rotary cooler. The cooler is a horizontal revolving cylinder of appropriate size, wherein DRI is cooled indirectly by water spray on the cooler upper surface. The cooling water collected in troughs below is pumped to the cooling tower for recycling along with make-up water.
- DRI is cooled to about 100°C without exposure to atmospheric air. A grizzly in the chute removes accretions that are large enough to plug up or damage the cooler discharge mechanisms.
- The product is screened to remove the plus 30 mm DRI. The undersize – a mix of DRI, dolochar and coal ash are screened into +/- 3mm fractions. Each fraction passes through a magnetic separator. The non-magnetic portion of the plus 3 mm fraction is mostly char and can be used in AFBC Boiler for power generation.
- The nonmagnetic portion of -3mm fraction, mostly spent lime, ash and fine char is discarded.
- Magnetic portion of each fraction is DRI. Of this the +3mm fraction can be used directly for steel making and the finer fraction is either briquetted or collected in bags.
- The kiln waste gases leave at about 850-900°C. These are passed through dust settling chamber where heavier particles settle down due to sudden decrease in velocity of gases. The flue gases are then passed through an After Burning Chamber (ABC) where un-burnt combustibles are burnt by blowing excess air. The temperature of the

after burner chamber, at times, is controlled by water sprays.

- Burnt gases are passed through a down duct into an evaporation cooler where its temperature is brought down and balance dust particles are separated through a pollution control equipment namely ESP / Bag filter/ scrubber. The gas is let off into the atmosphere through stack via ID fan.
- The thermal energy in outgoing flue gases is recovered through Waste Heat Recovery Boiler (WHRB) where sensible heat of the gases is extracted and then let off into the atmosphere after passing through pollution control equipment like ESP, ID fan and stack.

Table2.3: Raw Material Requirement for Existing Sponge Iron Plant

Unit	**Installed Capacity**	**Working Days**	**Annual Production**
Sponge Iron Plant	4x100 TPD	300	65,598 MT of Sponge Iron
Water Requirement	Make Up Water	300	170.84 m³/day
Power Requirement		300	950 KVA
Raw Material Requirement	**Raw Material**	**Size (mm)**	**Quantity (MT/Annum)**
	Coal	20 & below	98397
	Iron ore Pellets	5-18	126669.7
	Dolomite	2-4	2427
	MS Scrap		1491.24
	Pig Iron		343.42
	Sponge Iron		39640.48

Process flow diagram of sponge iron plant is given below in **Figure 2.4**. **Raw Material Handling System**

Main Raw materials Iron Ore, Coal & Dolomite are fed to the ground hoppers with the help of Pay Loaders and Tippers and carried by belt conveyors to the Crusher House having Crusher for crushing and Vibrating Screen. Screened and Crushed Material carried out by belt Conveyers to the stock house having 2 days bins for Iron Ore, Feed coal, Dolomite, and Injection coal (Lumps and Fines). Injection Coal is screened in –5 mm. and –18mm sizes and stored in separate bins. The main raw material handling consists of iron ore crusher, vibrating screen and conveyor belts for preparation of raw material as mentioned above.

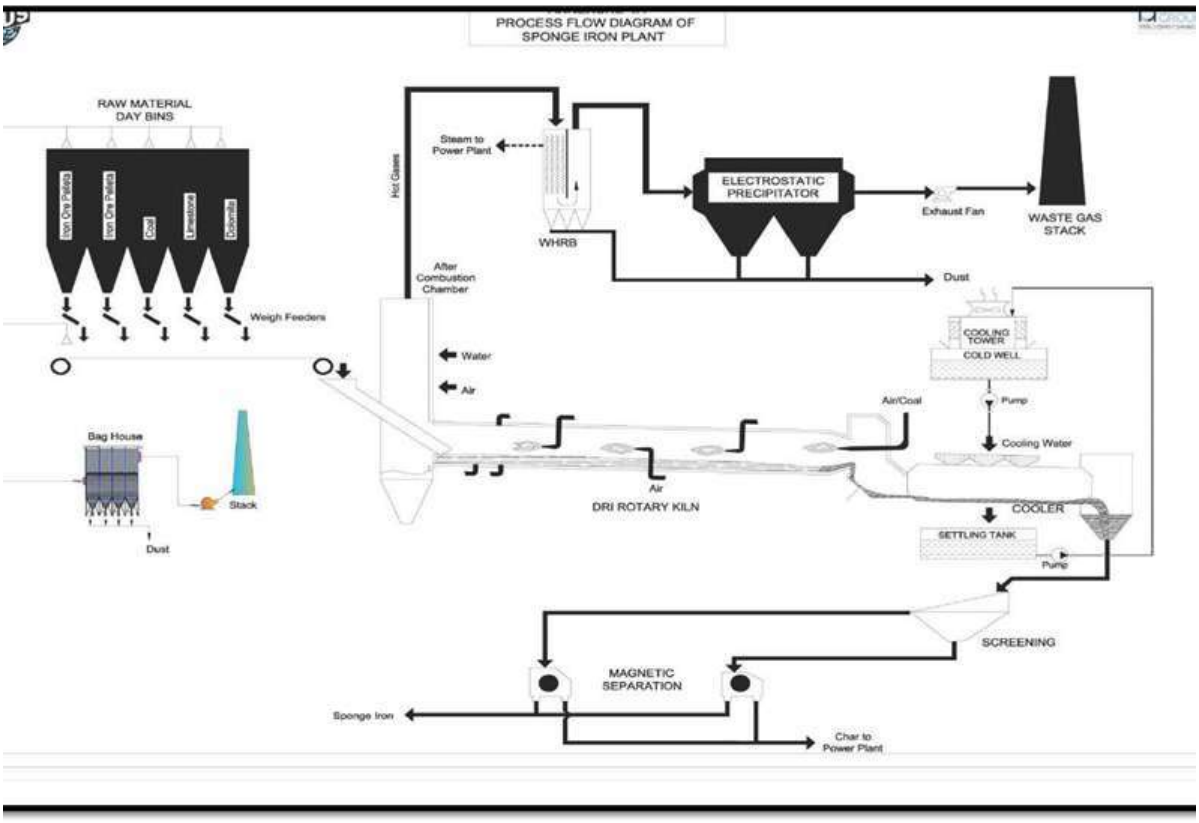


Figure3: Process flow diagram of Sponge Iron Plant

Brief outline for resource utilization

Resource utilization by optimization has been envisaged from design stage itself for plant related activities. The various resources likely to be used are detailed below.

i) Iron ore
ii) Coal
iii) Dolomite
iv) Water &
v) Power

These resources are effectively used in the plant. Rainwater harvesting is being envisaged on large scale to utilize the rain water and reduce the water requirement from external sources. The effluent generated from various units will be treated and recycled back into system to ensure zero discharge.

3.0. Greenhouse Gas Emission

In this section emission of Green House Gases (GHG) has been calculated for the existing Sponge iron plant. GHG emissions have been estimated for the units involves in sponge iron production. GHG emission calculation has been done understanding the IPCC guidelines and following standard methodology of GHG protocol for GHG estimation. Calculations are done majorly for scope 1 where direct use of materials and energy for the proposed plant is considered.

Figure 4: Material flow for sponge iron plant

Section	Technology	Process flow
Sponge Ironplant	Coal Based RotaryKiln Process	Feeding of RM to the Rotary Kiln through feed tube Cooling in the rotary cooler Screening magnetic separation of the product spongeiron Other outputs - Char

Table 3.1: Raw Material Requirement

LAND USE

The total project area is about 25.54 Acres (10.34 Ha.).The area will be used for construction and development of Production lines, Warehouses & Stores, Utilities, R&D, QC, Administrative Blocks and Common facilities etc., apart from the above, internal road sand green belt will be development as per the norms.

This greenbelt will serve as a buffer between the peripheries and the industry, thereby controlling the air emissions and noise levels. The probable land use is given below in Table:

Table 3.2: Land Use of Plant Layout

SL No	TYPE OF USE	Area	
		Acres	Hectares
1	Existing Units (4 nos. Kiln of Sponge Iron)	7.01	2.84
2	Power Plant with WHRB	1.62	0.66
3	Steel Melting Shop	2.73	1.11
4	Rolling Mill	2.5	1.01
5	Iron Ore Beneficiation Plant	1.0	0.40
6	Slag Crushing Plant	0.8	0.32
7	Area Tailing Pond	0.69	0.28
8	Green Belt	10.78	4.36
9	Area for Parking	0.5	0.20
10	Vacant land	3.062	1.24
	Total Land Area	**30.692**	**12.42**

Table3.3: Emission factors of GHG gases from different energy fuel sources

Energy sources	kg CO_2/kg fuel	kg CH_4/kg fuel	kg N_2O/kg fuel
Coal	2.42	2.82E-04	4.00E-05
Electricity	0.43 kg CO2/kwh	0.0223 kg CH4/kwh	0.00342kg N2O/kwh
Natural gas	2.69	2.40E-04	5.00E-06

Methodology for Estimationg GHG Emissions

In this report, the system boundary is gate-to-gate which is from raw materials entering a coke oven to the steel leaving the continuous casting machine (Figure 4). The system boundary in this study includes the Coke oven, sintering, pelletizing, beneficiation, blast furnace, basic oxygen furnace, continuous casting, lime and dolo plant and captive power plant. The major GHG emissions i.e. CO_2, CH_4, and N_2O have been calculated and reported in the form of CO_2-equvalent. Within the defined system boundary, mass and energy inputs for the processes within the boundary are included.

CO_2 Emission:

The GHG emissions has been estimated based on the mass and energy used in the individual process of steel manufacturing. The mass and energy data used in this study are specified for the major steel manufacturing processes including Coke oven, sintering, pelletizing, beneficiation, blast furnace, basic oxygen furnace, continuous casting, lime and dolo plant and captive power plant. CO_2 emissions have been calculated using carbon content data that are expressed on a mass or volume basis. (Equation no_)

Mass basis: $$E = A_f \cdot F_c \cdot E_b \cdot \frac{44}{12}$$ ---- 1

Volume basis: $$E = A_f \cdot F_{cm} \cdot E_b \cdot \frac{44}{12}$$ ---- 2

Equation No. 1 &2: Calculating CO_2 emissions using carbon content data that are expressed on a mass or volume basis

Where:

E = Amount of CO_2 emitted (metric tons)

$A_{f,v}$ = Volume of fuel consumed (e.g., liters, gallons, m^3, etc.)

$A_{f,m}$ = Mass of fuel consumed (e.g., kg, short ton, etc.)

$F_{c,v}$ = Carbon content of fuel on a volume basis (e.g., short tons carbon / gallon)

$F_{c,m}$ = Carbon content of fuel on a mass basis (e.g., short tons carbon / short ton)

F_{OX} = Fraction oxidation factor

44/12 = The ratio of the molecular weight of carbon to that of CO_2

$$E = A \cdot HV_f \cdot F_{c,h} \cdot F_{OX} \cdot \frac{44}{12} \quad \text{---- 3}$$

Equation No. 3: Calculating CO_2 emissions from stationary combustion sources using carbon content data expressed on an energy basis

Where:

E = Amount of CO_2 emitted (metric tonnes)

A = Mass of fuel consumed (e.g., metric tonnes)

HV_f = Heating value of fuel (e.g., MJ/Kg or thousand Btu/lb)

$F_{c,h}$ = Carbon content of fuel on a heating value basis (e.g., short tons C/million Btu or metric tonnes C/GJ)

F_{OX} = Fraction oxidation factor

44/12 = The ratio of the molecular weight of carbon to that of CO_2.

CH_4 and N_2O emissions:

The N_2O and CH_4 emissions from Electricity Generation and Reheating Furnaces can be calculated using Equation 4.

$$E = {}_f . HHV_f . EF \cdot GWP \quad \text{---------- 4}$$

$$E = {}_f . HHV_f . ESEF \cdot GWP \quad \text{---------- 5}$$

Equation :: Calculating N_2O and CH_4 emissions

Where:

E = Amount of either N_2O or CH_4 emitted (metric tonnes CO_2-equivalent)

A_f = Amount of fuel combusted on a mass or volume basis

EF = fuel-specific emission factor

ESEF = Equipment-specific emission factor

GWP = 21 for CH_4 or 310 for N_2O

Table 3.4: Carbon contents for materials consumed in process sources

Process Materials	**Carbon Content*** (kg C/kg)
Blast Furnace Gas	0.17
Charcoal[a]	0.91
Coal	0.67[1]
Coal tar	0.62
Coke	0.83
Coke Oven gas	0.47
Coking Coal	0.73
Direct reduced Iron (DRI)	0.02
Dolomite	0.13
EAF Carbon Electrodes	0.82[2]
EAF Charge Carbon	0.83[3]
Fuel Oil	0.86[4]

Gas Coke	0.83
Hot Briquetted iron	0.02
Limestone	0.12
Natural Gas	0.73
Oxygen Steel Furnace Gas	0.35
Petroleum Coke	0.87
Purchased pig Iron	0.04
Scrap Iron	0.04
Steel	0.01

Table 3.5: Typical Values for CH_4 & N_2O contents for materials consumed in process sources

Fuel		Lower Heating Value(LHV)/Net Calorific Value (NCV) Basis				Higher Heating Value(HHV)/Gross Calorific Value (GCV) Basis			
		kg GHG / TJ fuel		kg GHG / ton fuel		kg GHG / TJ fuel		kg GHG / ton fuel	
		CH_4	N_2O	CH_4	N_2O	CH_4	N_2O	CH_4	N_2O
Crude oil and	Crude oil	3.000	0.600	0.134	0.027	2.850	0.570	0.127	0.025

derived substances	Orimulsion	3.000	0.600	0.087	0.017	2.850	0.570	0.083	0.017
	Natural Gas Liquids	3.000	0.600	0.140	0.028	2.850	0.570	0.133	0.027
	Motor Gasoline	3.000	0.600	0.140	0.028	2.850	0.570	0.133	0.027
	Aviation Gasoline	3.000	0.600	0.140	0.028	2.850	0.570	0.133	0.027
	Jet Gasoline	3.000	0.600	0.140	0.028	2.850	0.570	0.133	0.027
	Jet Kerosene	3.000	0.600	0.139	0.028	2.850	0.570	0.132	0.026
	Other Kerosene	3.000	0.600	0.138	0.028	2.850	0.570	0.131	0.026
	Shale oil	3.000	0.600	0.120	0.024	2.850	0.570	0.114	0.023
	Gas/.Diesel oil	3.000	0.600	0.136	0.027	2.850	0.570	0.129	0.026
	Residual Fuel oil	3.000	0.600	0.128	0.026	2.850	0.570	0.121	0.024
	Liquified Petroleum Gases	1.000	0.100	0.053	0.005	0.900	0.090	0.047	0.005
	Ethane	1.000	0.100	0.052	0.005	0.900	0.090	0.046	0.005

	Naphtha	3.000	0.600	0.141	0.028	2.850	0.570	0.134	0.027
	Bitumen	3.000	0.600	0.127	0.025	2.850	0.570	0.121	0.024
	Lubricants	3.000	0.600	0.127	0.025	2.850	0.570	0.121	0.024
	Petroleum coke	3.000	0.600	0.103	0.021	2.850	0.570	0.098	0.020
	Refinery feedstocks	3.000	0.600	0.136	0.027	2.850	0.570	0.129	0.026
	Refinery Gas	1.000	0.100	0.055	0.006	0.900	0.090	0.050	0.005
	Paraffin waxes	3.000	0.600	0.127	0.025	2.850	0.570	0.121	0.024
	White Spirit & SBP	3.000	0.600	0.127	0.025	2.850	0.570	0.121	0.024
	Other petroleum products	3.000	0.600	0.127	0.025	2.850	0.570	0.121	0.024
Coal and derived products	Anthracite	1.000	1.500	0.028	0.042	0.950	1.425	0.027	0.040
	Coking coal	10.000	1.500	0.297	0.045	9.500	1.425	0.282	0.042
	Other bituminous coal	10.000	1.500	0.272	0.041	9.500	1.425	0.258	0.039

Sub-bituminous coal	10.000	1.500	0.199	0.030	9.500	1.425	0.189	0.028
Lignite	10.000	1.500	0.125	0.019	9.500	1.425	0.119	0.018
Oil shale and tar sands	10.000	1.500	0.094	0.014	9.500	1.425	0.089	0.013
Brown coal briquettes	10.000	1.500	0.218	0.033	9.500	1.425	0.207	0.031
Patent fuel	10.000	1.500	0.218	0.033	9.500	1.425	0.207	0.031
Coke oven coke & lignite coke	10.000	1.500	0.297	0.045	9.500	1.425	0.282	0.042
Gas coke	1.000	0.100	0.030	0.003	0.950	0.095	0.028	0.003
Coal tar	10.000	1.500	0.295	0.044	9.500	1.425	0.280	0.042
Gas works gas	1.000	0.100	0.043	0.004	0.900	0.090	0.039	0.004
Coke oven gas	1.000	0.100	0.043	0.004	0.900	0.090	0.039	0.004
Blast furnace gas	1.000	0.100	0.003	0.000	0.900	0.090	0.002	0.000
Oxygen steel furnace gas	1.000	0.100	0.008	0.001	0.900	0.090	0.007	0.001

Natural Gas	Natural Gas	1.000	0.100	0.053	0.005	0.900	0.090	0.051	0.005
Non-biomass waste	Municipal wastes (non-biomass fraction)	30.000	4.000	0.316	0.042	28.500	3.800	0.300	0.040
	Industrial wastes	30.000	4.000	N/A	N/A	28.500	3.800	N/A	N/A
	Waste oils	30.000	4.000	1.269	0.169	28.500	3.800	1.206	0.161
Peat	Peat	2.000	1.500	0.021	0.015	1.900	1.425	0.020	0.015
Biomass waste	Wood/Wood waste	30.000	4.000	0.493	0.066	28.500	3.800	0.468	0.062
	Sulphite lyes (Black liqour)	3.000	2.000	0.037	0.025	2.850	1.900	0.035	0.024
	Other primary solid biomass fuels	30.000	4.000	0.366	0.049	28.500	3.800	0.348	0.046
	Charcoal	200.000	4.000	6.211	0.124	190.000	3.800	5.900	0.118
	Biogasoline	3.000	0.600	0.085	0.017	2.850	0.570	0.081	0.016
	Biodiesels	3.000	0.600	0.085	0.017	2.850	0.570	0.081	0.016

	Other liquid biofuels	3.000	0.600	0.087	0.017	2.850	0.570	0.082	0.016
	Landfill gas	1.000	0.100	0.056	0.006	0.900	0.090	0.050	0.005
	Sludge gas	1.000	0.100	0.056	0.006	0.900	0.090	0.050	0.005
	Other biogas	1.000	0.100	0.056	0.006	0.900	0.090	0.050	0.005
	Municipal wastes (biomass fraction)	30.000	4.000	0.366	0.049	28.500	3.800	0.348	0.046

Chapter-4

Action plan for Carbon off-setting

Re-use of Steel Scrap in Basic Oxygen Furnace

Scrap is a term used to describe steel that has generated during the manufacture of steel products. While the term 'scrap' may lead one to believe this is a waste product, it is actually a valuable raw material used in every steelmaking process. In blast furnace (BF) steelmaking, each charge of the basic oxygen furnace, in which carbon carbon-rich pig iron is refined into crude steel, typically contains 8%-10% scrap. Scrap acts as a cooling agent, absorbing excess heat from the exothermic decarbonisation process, and also as a source of iron units. Reuse of scrap in BOF helps reducing greenhouse gas emissions.

Table4.1: Heating and cooling reactions of BOF

Heating Reactions	Cooling Reactions
$c + \frac{1}{2} o_2 \rightarrow co$	$Fe_2O_3 + 3C \rightarrow 2Fe + 3CO$
$co + \frac{1}{2} o_2 \rightarrow co_2$	
$Si + o_2 \rightarrow SiO_2$	$Fe_2O_3 + 3CO \rightarrow 2Fe + 3CO_2$
$Fe + \frac{1}{2} o_2 \rightarrow FeO$	
$2Mn + o_2 \rightarrow 2MnO$	
$4P + 5o_2 \rightarrow 2P_2O_5$	

Reuse of internal heat for power generation

The proposed plant is designed for optimum use of the recovered energy of hot off gases from major units such as Blast furnace, Basic oxygen furnace and coke oven plant. A plant is designed to integrate 74 % of the heat generated from coke oven gas to sinter plant, pellet plant & continuous casting machine. Approx. 52 % of the total heat generated from blast furnace will be reused in blast furnace & 20 % of the generated heat will be integrated to sinter plant, pellet plant & continuous casting machine. The surplus gases available in these units will be re-used for power generation. Out of 600 MW, 293 MW power will be generated from internal process heat.

CO_2 capture

The uses of coal for generation of 600 MW electricity produce approximately 5 MT of CO_2 annually. CPP's are one of the major contributors of CO_2 emissions in any steel plant. In view to limit the release of CO_2 in atmosphere it is necessary to capture CO_2. There are several approaches for CO_2 capture out of which amine based CO_2 absorption systems are the most suitable for combustion based power plants. The amine based CO_2 absorption is easy to use and can be retrofitted to existing power plants. Absorption processes are based on thermally regenerable solvents, which have a strong affinity for CO_2. They are regenerated at elevated temperature. In view to limit the CO_2 release, It is suggested to install amine based CO_2 absorption unit at 600 MW CPP.

The equilibrium reactions describing the solution chemistry of CO_2 absorption with MEA

$$MEA + H_3O^+ : \mathrm{MEA} + H_2\mathrm{O} \quad \text{(amine protonation)}$$

$$CO_2 + 2H_2O^+ : + H_3O^+ + HCO^{3-} \quad \text{(bicarbonate formation)}$$

$HCO_3^- + H_2O : + H_3O^+ + CO^{2-}_3$ (carbonate formation)

$MEA + HCO_3^- : + \mathrm{MEACO}O^- + H_2O$ (carbamate formation)

$2H_2O : + H_3O^+ + OH^-$ (water hydrolysis)

Chapter - 5

Terrestrial Sequestration

Terrestrial sequestration involves the capture and storage of carbon dioxide by plants and the storage of carbon in soil. During photosynthesis, carbon from atmospheric carbon dioxide is transformed into components necessary for plants to live and grow. As part of this process, the carbon present in the atmosphere as carbon dioxide becomes part of the plant: a leaf, stem, root, etc. Long-lived plants like trees might keep the carbon sequestered for a long period of time.

The existing greenbelt sure sequesters some amount of the carbon emitted through then industrial process. The greenbelt is spread over an area of 9.95 acres with total plantation of 6030 consisting of trees and shrubs. As the industry falls under the heavily polluted area, greenbelt needs to be enhanced and more trees are to be planted. Hence more carbon can be sequestered. New trees are suggested for plantation to cover approx. 40% of the total Plant Area.

Table 5.1: shows the existing greenbelt and its required expansion during the expansion phase:

1.	Total Area	35.54 acres
2.	Existing Greenbelt	9.95 Acres
3.	Existing no.of plants	6030
4.	Greenbelt Enhancement	4.26 Acres
5.	No. of trees to be planted	2,580

Formula used for determination of Carbon sequestered by Trees

Step 1: Determine the total green weight of the tree:

The green weight is the weight of the tree when it is alive. First, you have to calculate the green weight of the above-ground weight as follows:

$W_{above\text{-}ground} = 0.25\ D^2\ H$ (for trees with D<11)
$W_{above\text{-}ground} = 0.15\ D^2\ H$ (for trees with D>11)
$W_{above\text{-}ground}$ = Above-ground weight in pounds
D = Diameter of the trunk in inches
H = Height of the tree in feet

The root system weight is about 20% of the above-ground weight. Therefore, to determine the total green weight of the tree, multiply the above-ground weight by 1.2:

$W_{total\ green\ weight} = 1.2 * W_{above\text{-}ground}$

Step 2: Determine the dry weight of the tree

The average tree is 72.5% dry matter and 27.5% moisture. Therefore, to determine the dry weight of the tree, multiply the total green weight of the tree by 72.5%.

$W_{dry\ weight} = 0.725 * W_{total\ green\ weigh}$

Step 3: Determine the weight of carbon in the tree

The average carbon content is generally 50% of the tree's dry weight total volume. Therefore, in determining the weight of carbon in the tree, multiply the dry weight of the tree by 50%.

$W_{carbon} = 0.5 * W_{dry\ weight}$

Step 4: Determine the weight of carbon dioxide sequestered in the tree

CO2 has one molecule of Carbon and 2 molecules of Oxygen. The atomic weight of Carbon is 12 (u) and the atomic weight of Oxygen is 16 (u). The weight of CO2 in trees is determined by the ratio of CO2 to C is 44/12 = 3.67. Therefore, to determine the weight of carbon dioxide sequestered in the tree, multiply the weight of carbon in the tree by 3.67.

$W_{carbon\text{-}dioxide} = 3.67 * W_{carbon}$

Selection of the trees is based on:

1. Tolerance towards pollution.
2. Fast Growth
3. High sequestration potential.
4. Indigenously growing species.
5. No exotic species has been suggested.
6. Average Growth period to be three years.
7. No vulnerable or endangered species has been chosen.

As per the study conducted the total carbon emissions mounts to 75,603 ton for the year 2021-2022. In this respect the sequestered carbon is calculated to be 0.02% approximately. List of existing plant is attached as for >10 years, 5-10 years, < 5 years respectively. Therefore a suitable plan has been suggested for plantation attempting to take this sequestration to the rise of 0.1% approximately in an average period of 3 Years. Plantation plan is attached as Annexure 1. When it comes to sequestration through afforestation, it is the best possibleway to sequester carbon and reap other benefits as well. However sequestration has its limits, plantation within the plant limits the area of plantation and therefore sequestrationis limited. However developing thicker greenbelt outside the plant boundaries around
10-20 m allows more sequestration. Keeping in mind the existing plantation also adds significantly to the sequestration. Maintenance of the Greenbelt is another important aspect that can significantly impact the health of the plants, leading to maximum healthy growth. During construction phase due to excessive dust, a decline in survival rate was observed. It is hence suggested to go for expansion post construction.

Chapter - 6

Conclusions

The CO_2 emission intensity in Jharkhand Ispat Pvt. Ltd. has been calculated using ISO 14404 which is proposed by world steel Association. The CO_2 emission intensity in in Jharkhand Ispat Pvt. Ltd. is in optimum range and not harmful for environment. Still the plant has made a proposed plan to further reduce the CO_2 emission intensity. The Indian DRI industry consumes 8.8% of national annual industrial energy use and emits 11% of national annual CO2 emissions. This represents a significant portion of the national contribution in terms of emissions and energy use. it is crucial to carefully examine the DRI industry for energy use and emissions abatement measures. The growing iron and steel industry in India is one of the key sectors to reform in order to meet the country's NDCs to the Paris Agreement, and the anticipated doubling of DRI capacity from 50 MTPA in 2018-19 to 114 MTPA by 2030-31 is further indication of the importance of this sector.

The iron making process is of key focus for reducing energy use, GHG, SOx and PM2.5 emissions. There is a large contribution of NOx emissions from transport at present.

The DRI process metrics suggest that in terms of efficiency, there is a potential for 20-30% improvement on average when considering the best technologies available. This can be brought about by improving the raw material quality, proper selection of materials and process parameters and waste-heat recovery, among others. To improve raw material quality, it is suggested to explore the expansion of domestic beneficiation capacity (particularly for coal) and reduce the import share to bring a gross benefit of up to 5% in GHG emissions and 6% in energy use. Newer and more efficient beneficiation technologies could be adopted to ensure sustainable growth. Land transport using trucks can be reduced in favor of railways to improve transport efficiency and reduce overall emissions by 1-2%. Improving regulations by revising the 12-year old emissions norms and bettering the monitoring framework by inducting CEMS can go a long way in preventing plants from flouting norms without detection and reprehension. Extending the PAT scheme with stricter targets and encouragement of adopting higher productivity, WHR systems and also for fuel switching could be greatly beneficial in accelerating development. Over the next decade, however, considering the broad limitations of raw material quality/availability, technoeconomic uncertainties, etc., the development of a robust and

affordable natural gas network may be of significant potential for reduction in GHG emission from the DRI industry. In addition, capacity building must be taken up early on for accelerated hydrogen steel adoption. By enhancing research and development and deploying pilot production facilities, the overall infrastructure for a hydrogen economy can be stably built for ensured introduction of hydrogen-based steel in the coming decades. The hydrogen economy can revolutionize the industry by reducing GHG emissions by up to 94%.

In conclusion, short-term measures can be taken to increase coal-DRI performance to BAT standards. Over the medium term, natural gas adoption can be explored, whilst a suitable long-term goal is to introduce hydrogen and negate 300 million tonnes of GHG emissions, to enable truly sustainable development. A robust policy must be developed, and relevant stakeholders must be engaged in a timely manner to accelerate the GHG emission of this important industry and thus sustaining the economy over the long term.

CO_2 emissions data submission form for worldsteel sectoral approach

*Please do not change downloaded form

Mandatory to fill-in
Stainless steel only
Fill-in if available
Protected calculation
Fixed value

Site:	JIPL022
Organization:	JIPL
Year(Report period):	2022

Site structure (the number of operated units)

Coke battery		BF > 1000 m^3		Open hearth		Cold rolling		A&P lines	
Sinter plant		100<BF<1000		Hot rolling		HDG lines		Bright A lines	
Pellet plant		BF < 100 m^3		Lime kilns		EG lines		Batch Annealing	
Gas DRI		BOF shops		Oxygen plant		Tining lines		Argon/Oxy Decarb	
Coal DRI		EAF units		Power plant		Smelting Reduction		Vacuum Oxy Decarb	

BASIC information

Total coke production (dry t)	
Sinter production (t)	
Pellet production (t)	
Hot metal production (t)	
DRI production (t)	65,598
BOF crude steel production (t)	
Open Hearth crude steel production (t)	0
EAF crude steel production (t)	0
Carbon crude steel production (t)	0
Hot rolled steel production (t)	
Austenitic stainless steel production (t)	
Ferritic stainless steel production (t)	
Martensitic stainless steel production (t)	
Other stainless steel production (t)	
Stainless steel production (t)	0
Total Steel Production (t)	**49,060**
Total Ironmaking slag production (t)	
Total steelmaking slag production (t)	
Granulated Ironmaking slag production (t)	
Granulated Steelmaking slag production (t)	
Total Granulated slag production (t)	93,039
Hot rolled stainless steel production (t)	
Cold rolled stainless steel production (t)	
Iron supply from upstream (t)	
Purchased carbon steel scraps (t)	
Purchased stainless steel scraps (t)	
Home carbon steel scraps (t)	
Home stainless steel scraps (t)	
Cr-Ni type scraps (%)	
Cr type scraps (%)	
Burnt lime production (t)	
Power generation (MWh)	18
Data verified by external body	No

Electricity grid Information

Source of information	Energy Equivalent GJ/MWh	Upstream CO_2 value t CO_2/MWh
Global average grid mix	9.800	0.504
IEA yearly update global grid mix	9.800	0.476
National or regional regulator mix		
Site power supply contract mix		

			Site data				Conversion factors		Calculation results				
	Materals /Energies	Unit	Purchased Procured	Sold Delivered	C content Site measurement t C/unit	Energy Equivalent GJ/unit	Emission Factor t CO_2/unit	Upstream CO_2 value t CO_2/unit	Scope 1 Direct emissions t CO_2	Scope 1.1 emissions t CO_2	Scope 2 emissions t CO_2	Scope 3 emissions t CO_2	Total Energy TJ
	Iron ore	dry t	94,735		0.010		0.037		3,505			-	-
	Coking coal	dry t			0.835	32.200	3.060		-			-	-
	BF injection coal	dry t			0.806	31.100	2.953		-			-	-
	Sinter/BOF coal	dry t			0.760	29.300	2.785		-			-	-
	Steam coal	dry t	74,571		0.672	25.900	2.462		1,83,594			-	1,931
	EAF coal	dry t			0.889	30.100	3.257		-			-	-
	SR/DRI coal	dry t			0.806	31.100	2.953		-			-	-
	Coke	dry t			0.889	30.100	3.257	0.224	-			-	-
	Charcoal	dry t		8,330		18.800			-			-	- 157
New	Petroleum coke	t			0.850	31.935	3.115		-			-	-
New	Used plastic	t				46.000	2.416		-			-	-
New	Used tires	t				35.000	2.199		-			-	-
	Heavy oil	m^3				37.700	2.907	0.276	-			-	-
	Light oil	m^3				35.100	2.601	0.247	-			-	-
	Kerosene	m^3				34.700	2.481	0.247	-			-	-
	LPG	t				47.300	2.985		-			-	-
	LNG	k.m^3N			0.550	35.900	2.015	0.665	-			-	-
	Natural gas	k.m^3N			0.550	35.900	2.015	0.000	-			-	-
New	Green hydrogen	t				120.000		0.000	-			-	-
New	Blue hydrogen	t				120.000		1.800	-			-	-
New	Grey hydrogen	t				120.000		19.800	-			-	-
New	Fossil free biogas	t			0.751	50.400		0.000	-			-	-
	Limestone	dry t			0.120		0.440		-			-	-
	Burnt lime	t				4.500		0.950	-			-	-
	Crude dolomite	dry t	1,815		0.130		0.476		864			-	-
	Burnt dolomite	t				4.500		1.100	-			-	-
	Sinter	t				2.450		0.262	-			-	-
	Pellets	t				2.100		0.137	-			-	-
	EAF electrodes	t					3.663	0.650	-			-	-
New	Low carbon iron units	t			0.047	20.900	0.172	1.855	-			-	-
	Pig Iron	t	15,258		0.047	20.900	0.172	1.855	2,624			28,304	319
	Cold Iron	t			0.047	20.900	0.172	1.855	-			-	-
	Ni pig iron	t			0.005		0.018	5.200	-			-	-
New	Charcoal based pig iron	t			0.047	20.900	0.172	1.855	-			-	-
New	Biomass	t			0.476	15.600		0.000	-			-	-
	Gas based DRI	t			0.020	14.100	0.073	0.780	-			-	-
	Coal based DRI	t	39,640	65,598	0.020	17.900	0.073	1.210	- 1,895			- 31,409	- 465
New	Low carbon DRI	t			0.020	14.100	0.073	0.780	-			-	-
	Ferro-Nickel	t			0.010		0.037	8.676	-			-	-
	Nickel oxides	t			0.001		0.004	20.279	-			-	-
	Nickel metal	t			0.001		0.004	13.579	-			-	-
	Ferro-Chromium	t			0.075		0.275	5.987	-			-	-
	Molybdenum oxides	t			0.001		0.004	6.500	-			-	-
	Ferro-Molybdenum	t			0.005		0.018	8.500	-			-	-
	Ferro-Manganese	t			0.050		0.183	2.789	-			-	-
New	Ferro-Silicon	t			0.001		0.004	4.000	-			-	-
New	Silico-Manganese	t			0.005		0.018	1.400	-			-	-
New	Silicon (Metal)	t			0.001		0.004	5.000	-			-	-
	Electricity	MWh	74,066			9.800		0.504	-		37,329		726
	Steam	t				3.800		0.195	-		-		-
	Oxygen	k.m^3N				6.900		0.355	-			-	-
	Nitrogen	k.m^3N				2.000		0.103	-			-	-
	Argon	k.m^3N				2.000		0.103	-			-	-

	Coke oven gas	$k.m^3N$			0.228	19.000	0.835	0.977	-	-	-		-
	Blast furnace gas	$k.m^3N$			0.243	3.300	0.890	0.170	-	-	-		-
	BOF gas	$k.m^3N$			0.413	8.400	1.513	0.432	-	-	-		-
New	Waste heat	GJ				1.000		0.051	-		-		-
New	Ethanol	m^3			0.410	23.575		1.494	-			-	-
New	Methanol	m^3			0.293	15.662		1.369	-			-	-
New	Ammonia	t				37.500		1.600	-			-	-
	BF slag	t		93,039				0.550	-			- 51,171	-
	BOF slag	t						0.300	-			-	-
New	EAF slag	t						0.300	-			-	-
	CO2 to external use	t					1.000		-			-	-
New	Permanently sequestered CC	t					1.000		-			-	-
	Coal tar	t				37.000	3.389		-			-	-
	Benzole	t				40.570	3.382		-			-	-
	w/o undecided credits	CO2 Intensity	**4.54**	tCO2/tCrudeSteel	Grand Total	**2,22,916**	tCO2	Sub Total	**1,88,692**	**-**	**37,329**	**- 3,105**	
	w/ undecided credits	CO2 Intensity	3.50	tCO2/tCrudeSteel	Grand Total	1,71,745.00	tCO2	Sub Total	1,88,692	-	37,329	- 54,276	2,354
		CI by Slags	- 1.04	tCO2/tCrudeSteel	Slags	- 51,171.00	tCO2	Slags	-	-	-	- 51,171	
		CI External CO2	-	tCO2/tCrudeSteel	External CO2	-	tCO2	External CO2	-	-	-	-	
		Sequestered CI	-	tCO2/tCrudeSteel	Sequestered CO2	-	tCO2	Sequestered CO2	-	-	-	-	
		CCU Products	-	tCO2/tCrudeSteel	CCU Products	-	tCO2	CCU Products	-	-	-	-	
	Energy Intensity		47.98	GJ/tCrudeSteel									

Useful unit conversions

Volume	1	scf	0.026862	m3N
Volume	1	gal	0.003785	m3
Weight	1	lb	0.453592	kg
Weight	1	nt	0.907184	mt
Energy	1	mmBTU	1.054349	GJ
Energy	1	mBTU/scf	39.251136	MJ/m3N
Energy	1	mBTU/nt	1.162222	MJ/mt
Energy	1	BTU/gal	0.278530	MJ/m3

GREEN BELT PLANTATION PLAN FOR JIPL AND ITS SEQUESTRATION POTENTIAL

Common Name	Plant Spieces	Family	Number	Average Height above the ground (feet)	Average Diameter of the trunk (inches)	Weight of the tree above ground (pounds)	Total Weight of the tree (pounds)	Dry weight of the tree (pounds)	Weight of the carbon present (pounds)	Weight of carbon dioxide sequestered (pounds)	Weight of the carbon sequestered (tonne)	Weight of the carbon sequestered (tonne/annum)
TREES												
P	Monoon Longifolium	Annonaceae	300	49	20	1470000	1764000	1278900	639450	2346781.5	1066.718864	355.5729545
Akashmoni	Acacia auriculiformis	Fabaceae	150	78	25	1828125	2193750	1590468.8	795234.375	2918510.2	1326.595526	442.1985085
Mimosa	Acacia farnesiana	Fabaceae	65	82	18	431730	518076	375605.1	187802.55	689235.36	313.2887993	104.4295998
Chiku	Achrassapota	Sapotaceae	50	75	20	375000	450000	326250	163125	598668.75	272.1221591	90.70738636
	Ailanthus excels	Simaroubaceae	45	65	26.3	505798.31	606957.975	440044.53	220022.266	807481.72	367.0371436	122.3457145
Siris	Albizia amara	Fabaceae	50	64	45	1620000	1944000	1409400	704700	2586249	1175.567727	391.8559091
Frywood	Albizia lebbeck	Fabaceae	45	70	27	574087.5	688905	499456.13	249728.063	916501.99	416.5918134	138.8639378
Karoi	Albizia procera	Fabaceae	35	42	54	1071630	1285956	932318.1	466159.05	1710803.7	777.6380516	259.2126839
Milkwood	Alstonascholaris	Apocynaceae	45	36	12	58320	69984	50738.4	25369.2	93104.964	42.32043818	14.10681273
Neem	Azadirachtaindica	Meliaceae	250	55	19	1240937.5	1489125	1079615.6	539807.813	1981094.7	900.4975781	300.1658594
Bidi leaf	Bauhinia recemosa	Fabaceae	75	16	10	30000	36000	26100	13050	47893.5	21.76977273	7.256590909
White Orchid	Bauhinia acuminata	Fabaceae	55	7	12	13860	16632	12058.2	6029.1	22126.797	10.057635	3.352545
Butterfly Tree	Bauhinia purpurea	Fabaceae	65	15	6	8775	10530	7634.25	3817.125	14008.849	6.367658523	2.122552841
Shisham	Dalbergia sisoo	Fabaceae	75	76	70	6982500	8379000	6074775	3037387.5	11147212	5066.914602	1688.971534
Mango	Mangifera indica	Anacardiaceae	200	60	25	1875000	2250000	1631250	815625	2993343.8	1360.610795	453.5369318
Chinaberry	Melia azadirachta	Meliaceae	50	50	24	360000	432000	313200	156600	574722	261.2372727	87.07909091
Yellow Flame	Peltophorumptero carpum	Fabaceae	75	60	35	1378125	1653750	1198968.8	599484.375	2200107.7	1000.048935	333.3496449
Manila Tamarind	Pithecellobium ducle	Fabaceae	65	45	20	292500	351000	254475	127237.5	466961.63	212.2552841	70.75176136
Java Plum	Syzygium cumini	Myrtaceae	35	47	25	257031.25	308437.5	223617.19	111808.594	410337.54	186.5170632	62.1723544
Tulip Tree	Thespesia populnea	Malvaceae	45	62	32	714240	857088	621388.8	310694.4	1140248.4	518.2947491	172.7649164
Teak	Gmelina arborea	Lamiaceae	350	100	14	1715000	2058000	1492050	746025	2737911.8	1244.505341	414.8351136
Indian Bael	Aegle marmelos	Rutaceae	30	26	8	12480	14976	10857.6	5428.8	19923.696	9.056225455	3.018741818
Banyan	Ficus benghalensis	Moraceae	35	87	112	9549120	11458944	8307734.4	4153867.2	15244693	6929.405738	2309.801913
			2190								23485.41917	7828.473057
Flowering trees												
Golden Shower	Cassia Fistula	Fabaceae	75	40	36	972000	1166400	845640	422820	1551749.4	703.7412245	234.5804082
Champak	Michelia champaca	Magnoliaceae	50	85	62	4084250	4901100	3553297.5	1776648.75	6520300.9	2957.052568	985.6841893
Coral Tree	Erythrina Blakei	Fabaceae	45	65	45	1480781.3	1776937.5	1288279.7	644139.844	2363993.2	1072.105772	357.3685906
Mango-pine	Barringtonia Acutangula	Lecythidaceae	50	82	26	692900	831480	602823	301411.5	1106180.2	501.6690272	167.2230091
Yellow elder	Tecoma stans	Bignoniaceae	40	10	16	25600	30720	22272	11136	40869.12	18.5347483	6.178249433
Bottlebrush	Melaleuca citrina	Myrtaceae	60	25	24	216000	259200	187920	93960	344833.2	156.3869388	52.12897959
			320								5409.490278	1803.163426
												9631.636484

JHARKHAND ISPAT PRIVATE LIMITED

ADMN. OFFICE : Near P.N. Bank, Main Road,Ramgarh Cantt.
Dist Ramgarh (Jharkhand) -829 122
CIN : U34102UP1991PTC012872
Telephone : 06553-226846, Fax:226845
E-mail: jiplramgarh@gmail.com

IS :2830
CM/L - 5406356

WORKS :
Vill, & P.O.- Hesla, Argada
Ramgarh Cantt.-829 122
Dist.-Ramgarh (Jharkhand)

Ref. No..... Date.....

ENVIRONMENT POLICY

JHARKHAND ISPAT PRIVATE LIMITED (JIPL) is engaged in production of Steel & Steel product is committed towards clean and sustainable environment. The mission of JIPL is to produce Steel & Steel product in an environment friendly manner and is strive to;

- Integrate sound environmental management practices in all the activities.
- Conduct the operations in environmentally responsible manner to minimize pollution and its' impact on environment.
- Comply with applicable legal and other requirements related to environmental aspects of the operations and strive to go beyond. The environmental management cell will be headed by EHS Manager, a well qualified and experienced environment engineer.
- JIPL shall ensure that deviations from this policy and cases of violations/non-compliances of Environment or Forest Laws, if any, shall be reported to the Board of Directors through EHS Manager and shall identify designate responsible person for ensuring compliance with the Environmental Laws and Regulations.
- Conserve energy, and other natural resources, minimize waste generation and promote recovery, recycle and reuse.
- Increase greenery in and around the plant.
- Ensure continual improvement in environmental performance by setting & reviewing objectives & targets.

For and on behalf of
JHARKHAND ISPAT PVT. LTD.

Rajeev Kumar Agarwal

RAJEEV KUMAR AGARWAL
(Director)
DIN: 00185959

Analytical Test Report

Unique Lab Report No.	**TC1288724000000284**				
Report Unique ID	**RP0391241510**			**Issue date/time**	**13.04.2024/ 16:49**
Discipline	Chemical	**Group**	Atmospheric Pollution	**Sub Group**	Ambient Air Quality

Report Issue to

M/s – **JHARKHAND ISPAT PRIVATE LIMITED** VILL: HESLA, PO: ARGADA, RAMGARH, JHARKHAND		Contact Person	Mr. Ram Chandra Rungta
		Contact Number	+91 9337292105
		Email Id	jipllegal@gmail.com
Order Number	**18984256**	Order Date	**06.04.2024/ 07:57**

References of Quality Management System *(Steps of Traceability Chain)*

Customer Registration No.	EPIC/PCB/0391	Sample Booking Number	EPIC-241510
Sample(s) Code	241510-(A), (B), (C)	Sample Receipt (D/T)	09.04.2024/ 13:34

Sampling References

Type of Industry	Sponge Iron	Ref. of Sampling Plan	EPIC/LAB/R/036
Sampling method used	IS 5182 and CPCB Air Manual Volume – 1 (NAAQM/36/2012-13)		
Sampling Start (D/T)	07.04.2024/ 14:00	Sampling End (D/T)	08.04.2024/ 14:10
Mode of Sampling	Conducted by laboratory	Sample collected by	Mr. Janardan Kumar & team
Description/condition of sample	Receipt sample(s) were fit for analysis		

Environmental Condition during sampling

Weather condition	Clear	Temperature (^{0}C)	34	Humidity %	50	Wind direction	360^0-180^0

Sampling Location(s) with GPS coordinate(s)

S. Location A	Near Main gate of unit	GPS coordinate	23^0 38' 57.88"/ 85^0 27' 53.21"
S. Location B	West corner side of unit	GPS coordinate	23^0 38' 55.38"/ 85^0 27' 45.98"
S. Location C	Near Online PM 10 Analyzer	GPS coordinate	23^0 38' 56.57"/ 85^0 27' 51.71"

Date(s) of performance of the laboratory activities

Test start date/time	09.04.2024/ 13:46	Test completion date/time	12.04.2024/ 16:34

Sl	Tested Parameters	Method used	Unit	Results			Limits	MU%
				A	B	C		
1.	Particulate Matter (PM_{10})	IS:5182 (P-23) 2022	µg/m^3	92.02	94.95	89.89	100	± 3.24
2.	Fine Particulate Matter ($PM_{2.5}$)	IS 5182 (P-24) 2019	µg/m^3	42.26	46.35	40.31	60	± 6.65
3.	Sulphur Dioxide (SO_2)	IS:5182 (P-02) 2023	µg/m^3	16.46	12.76	14.96	80	± 7.52
4.	Nitrogen Dioxide (NO_2)	IS:5182 (P-06) 2022	µg/m^3	36.63	30.24	34.31	80	± 4.53

--Test result End --

Prescribed Limit	Environmental (Protection) Rules, 1986 Schedule VII.
Remarks	Unit was operational during sampling,

Contractual Notes

1. *The laboratory accepts responsibility for content of this report.*
2. *Test performed at laboratory's permanent facility and results relate only to the sample tested in prescribed Date & time*
3. *Laboratory is maintaining, Temperature 25 ± 2^{0}C and Relative Humidity 45 ± 5 % in all testing area as per IS 196:1966*
4. *The Test report shall not be reproduced full or in part & can't be used as proof in the court of law.*
5. *Any complaint about this report should be communicated in writing within 10 days of its issue (epiclabtech@gmail.com)*
6. *Total liability of EPIC LabTech Pvt. Ltd. will be limited to invoiced amount only.*
7. *All disputes are subjected to Ranchi Jurisdiction and maximum liability of the laboratory does not exceed the testing and sampling charges*
8. *Opinion does not imply endorsement of the tested product by laboratory. Under no circumstances, laboratory accepts any caused by use or misuse of this report.*
9. *When the results are from external provider are marked as * mark.*

Analysed by – Nargish Perween, Supervise by - A.K. Sinha

Laboratory's Seal

Checked by
(B.N. Kumar)
Technical Head

13/4/24
Verified & Issue by
(Umesh Das)
Laboratory Head

Authorized Signatory
EPIC LabTech Pvt. Ltd.
Ranchi, Jharkhand

C/o - R.K. Tripathi, Indrapuri, Road No. - 5, Ranchi, Jharkhand – 834005, India
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JHARKHAND ISPAT PVT.LTD
STATION PARAM VALUE UNIT
AAQMS
SO2 34.48 ppb
NO 22.55 ppb
NO2 1.57 ppb
NOx 24.08 ppb
PM2.5 19.8 ug/m3
PM10 NA µg/m3