



सत्यमेव जयते

File No: IA-J-11011/185/2021-IA-II(IND-I)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Date 04/03/2024



To,

M/s GOS ISPAT PVT. LTD
C/o Varsha Steels, Bhaisthan Main Road, Shri Agrasen Marg, Raipur , RAIPUR, CHHATTISGARH, ,
492001
E-mail: project.gosispat@gmail.com

Subject: Establishment of DRI Kilns (Sponge Iron – 6,27,000 TPA), Induction Furnaces with LRF + CCM (Billets / Ingots / Hot Billets) (3,96,000 TPA), Rolling Mill – 5,25,000 TPA (TMT / Wire Rod – 2,00,000 TPA, HR Strip Mill – 1,00,000 TPA, Structural Mill – 1,00,000 TPA & Pipe mill - 1,25,000 TPA), Gasifier (Producer gas) – 7000 Nm³/hour, Ferro Alloys Unit 2 x 9 MVA (FeSi- 14,000 TPA (or) FeMn- 50,400 TPA (or) SiMn – 28,800 TPA (or) Pig Iron– 50,400 TPA), Briquetting Plant of 200 Kg/hr, Brick manufacturing unit – 65,000 Bricks/day, WHRB based Power Plant – 46 MW & CFBC based Power Plant - 18 MW] by M/s GOS Ispat Pvt. Ltd., located at Ghughuwadih Village, Simga Tehsil, Balodabazar – Bhatapara District, Chhattisgarh - Grant of Environmental Clearance

Sir/Madam,

This refers to your proposal no. IA/CG/IND1/451893/2023 dated 26.12.2023 along with copy of EIA report, Forms (Part A, B and C) seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC23A1001CG5869552N
(ii) File No.	IA-J-11011/185/2021-IA-II(IND-I)
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	3(a) Metallurgical Industries (ferrous and non ferrous),1(d) Thermal Power Plants,1(d) Thermal Power Plants
(vi) Sector	Industrial Projects - 1
(vii) Name of Project	Establishment of DRI Kilns (Sponge Iron –

(viii) Name of Company/Organization
(ix) Location of Project (District, State)
(x) Issuing Authority
(xi) Applicability of General Conditions as per
EIA Notification, 2006

6,27,000 TPA), Induction Furnaces with LRF +
CCM (Billets / Ingots / Hot Billets) (3,96,000
TPA), Rolling Mill – 5,25,000 TPA (TMT / Wire
Rod – 2,00,000 TPA, HR Strip Mill – 1,00,000
TPA, Structural Mill – 1,00,000 TPA & Pipe mill -
1,25,000 TPA), Gasifier (Producer gas) – 7000
Nm³/hour, Ferro Alloys Unit 2 x 9 MVA (FeSi-
14,000 TPA (or) FeMn- 50,400 TPA (or) SiMn
–28,800 TPA (or) Pig Iron– 50,400 TPA), WHRB
based Power Plant – 46 MW & CFBC based Power
M/s GOS ISPAT PVT. LTD
BALODA BAZAR, CHHATTISGARH
MoEF&CC
No

3. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous and Non-ferrous) and 1(d) Thermal Power Plants under Category “A” of the schedule of the EIA Notification, 2006 and being appraised at Central Level.

4. The instant Proposal was considered in the 52nd EAC Meeting held during during **23 – 25th January, 2024** wherein after detailed deliberations, the committee **recommended** the proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the stipulation of specific conditions and general conditions. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at <https://parivesh.nic.in>.

5. The details of the proposal are as per the EIA/EMP report submitted by the proponent. The salient features of the proposal as presented during the above-mentioned meetings of EAC (Industry 1 Sector) are at **Annexure-I**.

6. The Unit configuration and capacity of the proposed project is at **Annexure-II**.

7. The EAC, in its 52nd meeting held during 23 – 25th January, 2024, inter-alia, deliberated the following:

i. The instant proposal is for establishment of DRI Kilns (Sponge Iron – 6,27,000 TPA), Induction Furnaces with LRF + CCM (Billets / Ingots / Hot Billets) (3,96,000 TPA), Rolling Mill – 5,25,000 TPA (TMT / Wire Rod – 2,00,000 TPA, HR Strip Mill – 1,00,000 TPA, Structural Mill – 1,00,000 TPA & Pipe mill - 1,25,000 TPA), Gasifier (Producer gas) – 7000 Nm³/hour, Ferro Alloys Unit 2 x 9 MVA (FeSi-14,000 TPA (or) FeMn- 50,400 TPA (or) SiMn – 28,800 TPA (or) Pig Iron– 50,400 TPA), Briquetting Plant of 200 Kg/hr, Brick manufacturing unit – 65,000 Bricks/day, WHRB based Power Plant – 46 MW & CFBC based Power Plant - 18 MW.

ii. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

iii. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

iv. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and

best practices.

v. The EAC also took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and made following deliberations accordingly.

vi. The total area of the proposed plant is Total land 22.13 Ha [Private land – 17.72 Ha & Govt. land – 4.41 Ha], which is under the possession of the company. The land has been diverted for industrial purpose.

vii. Jhiriya is at distance of 1.1 km in the NE of the project site, Bilari Ghughua RF at 0.2 km, South along with other sensitive areas within the study area of the project site. The EAC is of the opinion that PP shall prepare and strictly implement the environmental safeguard measures to minimise the impact of the project activities on these sensitive areas.

viii. Chitawar Nallah is adjacent and Bhatapara Branch Canal of Mahanadi Canal is at a distance of 1.5 km in SE to the project site along with other water bodies near within the study area. The EAC is of the opinion that the water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be prepared and implemented.

ix. Water requirement for proposed project is estimated as 1690 KLD and will be sourced from Shivnath River. The EAC deliberated on the water requirement and found it satisfactory.

x. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and found it satisfactory.

xi. The PP has submitted that the greenbelt will be developed in 7.38 Ha. which is about 33.3% of the total project area. 20 m wide greenbelt will be developed towards village in NNE direction. 20 m wide greenbelt will be developed towards Reserved Forest in Southern direction will be developed as greenbelt and green cover as per CPCB / MoEF&CC, New Delhi guidelines. Total no. of 18,200 saplings will be planted and nurtured in 7.38 hectares in three Years (1st year – 8,000 nos, 2nd year – 5,200 nos., 3rd year – 5,000 nos.). The EAC deliberated on the greenbelt layout plan along with action plan and the budget earmarked and is of the opinion that greenbelt shall be completed within a period of 1 years.

xii. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.

xiii. The Committee also deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.

xiv. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.

xv. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.

xvi. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. 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. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

xvii. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

8. The EAC (Industry-1 Sector), in its 52nd meeting held during 23 – 25th January, 2024, based on information &

clarifications provided by the project proponent and after detailed deliberations recommended the proposal for grant of Environment Clearance subject to stipulation of specific and general EC conditions as detailed in the Annexures.

9. The MoEF&CC has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the Expert Appraisal Committee (Industry-1 Sector) hereby decided to **grant Environment Clearance for instant proposal of M/s GOS Ispat Pvt. Ltd** under the provisions of EIA Notification, 2006 subject to the following specific conditions and general conditions (**Annexure-III**)

10. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

11. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

12. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

13. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

14. This issues with approval of the competent authority.

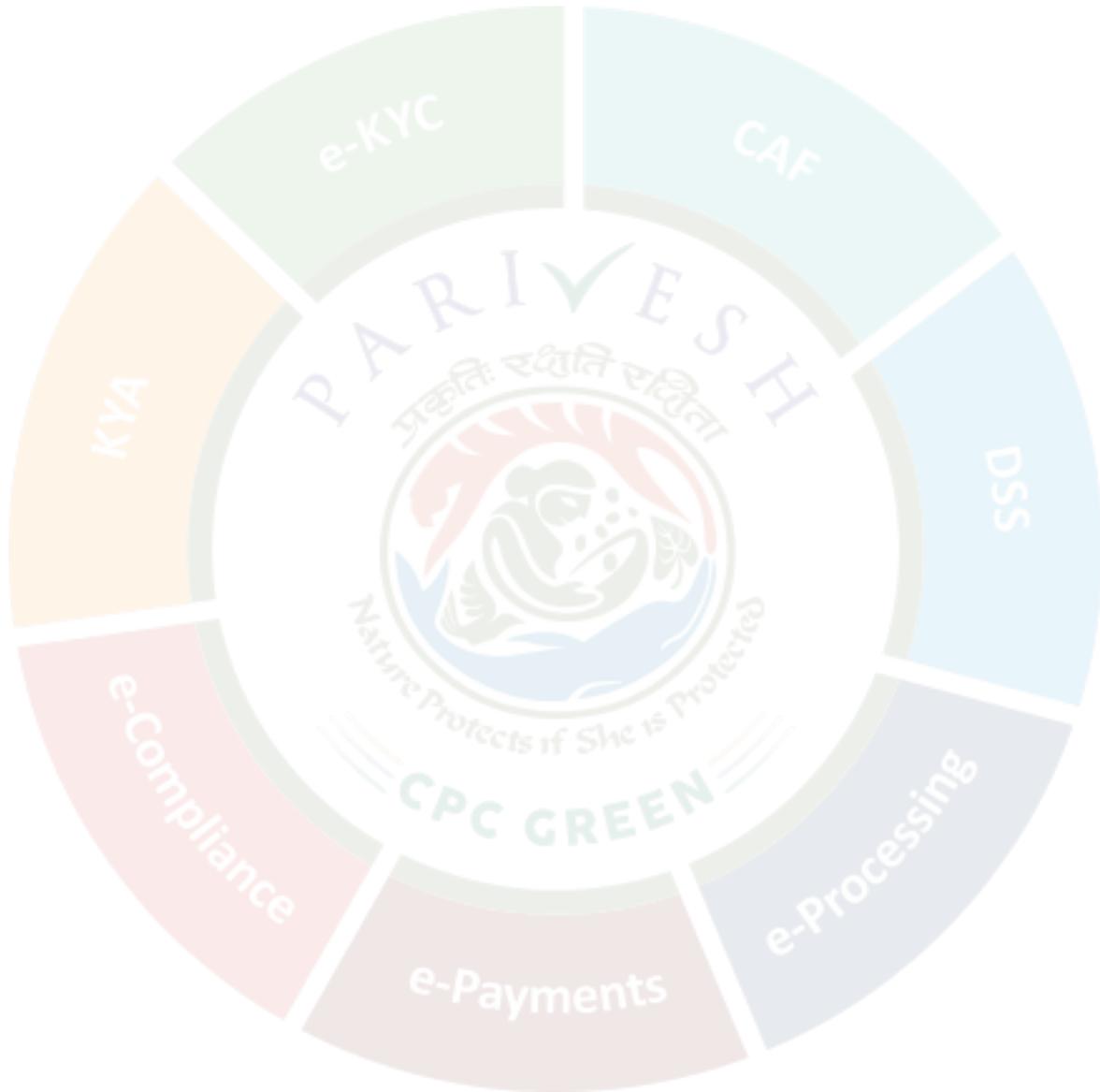
(Dr. R. B. Lal)
Scientist 'F'/Director
Email: rb.lal@nic.in
Tele: 011 20819346

Copy To

1. The Principal Secretary Forest, Mahanadi Bhawan, Nawa Raipur, Atal Nagar Chhattisgarh, India.
2. Additional Chief Secretary Forest, Mahanadi Bhawan, Nawa Raipur, Atal Nagar, Chhattisgarh
3. The Director General of Forest, Ministry of Environment, Forest and Climate Change, New Delhi
4. The Principal Chief Conservator of Forests, Principal Chief Conservator of Forests, Government of Chhattisgarh, Medical Road, Raipur-492001
5. The Inspector General of Forests, Ministry of Environment, Forest and Climate Change, Integrated Regional Office, Aranya Bhawan, North Block, Sector-19 Naya Raipur, Atal Nagar, Chhattisgarh – 492002
6. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32
7. The Member Secretary, Chhattisgarh State Environment Conservation Board (Pollution Control office), Paryavas Bhavan, North Block Sector-19, Atal Nagar Dist- Raipur Chhattisgarh
8. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
9. The District Collector, Balodabazar – Bhatapara District, Chhattisgarh
10. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi.

11. Guard File/Monitoring File/Website/Record File/Parivesh Portal.

(Dr. R. B. Lal)
Scientist 'F'/Director



Details of the proposal are as per the EIA/EMP report

S. No.	Particulars	Details																																										
a.	Terms of Reference for undertaking EIA study	17.05.2021 (ToR) 10.01.2022 (Amendment) 03.11.2023 (Amendment)																																										
b.	Period of baseline data collection	1st October, 2021 to 31st December, 2021 & 1 no of Additional station from 1st January 2022 to 15th February 2022																																										
c.	Date of Public Consultation	04.08.2022																																										
d.	Action plan to address the PH issues	An amount of Rs 8.70 Cr has been earmarked for action plan. Detail of activities proposed attached as Annexure IV .																																										
e.	Location of the project	Ghughuwadih Village, Simga Tehsil, Balodabazar – Bhatapara District, Chhattisgarh																																										
f.	Latitude and Longitude of the project site	<table border="1"> <thead> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>Point # 1</td> <td>21° 37' 24.59" N</td> <td>81° 46' 46.61" E</td> </tr> <tr> <td>Point # 2</td> <td>21° 37' 22.38" N</td> <td>81° 46' 57.38" E</td> </tr> <tr> <td>Point # 3</td> <td>21° 37' 29.42" N</td> <td>81° 47' 5.102" E</td> </tr> <tr> <td>Point # 4</td> <td>21° 37' 29.68" N</td> <td>81° 46' 58.11" E</td> </tr> <tr> <td>Point # 5</td> <td>21° 37' 34.09" N</td> <td>81° 46' 57.96" E</td> </tr> <tr> <td>Point # 6</td> <td>21° 37' 36.40" N</td> <td>81° 46' 59.69" E</td> </tr> <tr> <td>Point # 7</td> <td>21° 37' 36.93" N</td> <td>81° 47' 02.79" E</td> </tr> <tr> <td>Point # 8</td> <td>21° 37' 39.87" N</td> <td>81° 46' 58.48" E</td> </tr> <tr> <td>Point # 9</td> <td>21° 37' 47.593" N</td> <td>81° 46' 55.28" E</td> </tr> <tr> <td>Point # 10</td> <td>21° 37' 47.38" N</td> <td>81° 46' 49.61" E</td> </tr> <tr> <td>Point # 11</td> <td>21° 37' 38.45" N</td> <td>81° 46' 48.82" E</td> </tr> <tr> <td>Point # 12</td> <td>21° 37' 33.83" N</td> <td>81° 46' 47.30" E</td> </tr> <tr> <td>Point # 13</td> <td>21° 37' 29.79" N</td> <td>81° 46' 48.61" E</td> </tr> </tbody> </table>	Point	Latitude	Longitude	Point # 1	21° 37' 24.59" N	81° 46' 46.61" E	Point # 2	21° 37' 22.38" N	81° 46' 57.38" E	Point # 3	21° 37' 29.42" N	81° 47' 5.102" E	Point # 4	21° 37' 29.68" N	81° 46' 58.11" E	Point # 5	21° 37' 34.09" N	81° 46' 57.96" E	Point # 6	21° 37' 36.40" N	81° 46' 59.69" E	Point # 7	21° 37' 36.93" N	81° 47' 02.79" E	Point # 8	21° 37' 39.87" N	81° 46' 58.48" E	Point # 9	21° 37' 47.593" N	81° 46' 55.28" E	Point # 10	21° 37' 47.38" N	81° 46' 49.61" E	Point # 11	21° 37' 38.45" N	81° 46' 48.82" E	Point # 12	21° 37' 33.83" N	81° 46' 47.30" E	Point # 13	21° 37' 29.79" N	81° 46' 48.61" E
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g.	Total land	Total land 22.13 Ha (54.66 acres) [Private land – 17.72 Ha. (43.77 acres) & Govt. land – 4.41 Ha. (10.89 Acres)]																																										
h.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Total land is 22.13 Ha. (54.66 Acres), [Private land of 17.72 Ha. (43.77 acres) is already registered in the name of company & Govt. land 4.41 Ha. (10.89 Acres) is allotted by CSIDC.																																										
i.	Existence of habitation & involvement of R&R, if any	Project site: No habitation exists in the plant site. Hence R&R not applicable. Study area: <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Jhiriya</td> <td>1.1 Kms.</td> <td>NE</td> </tr> </tbody> </table>	Habitation	Distance	Direction	Jhiriya	1.1 Kms.	NE																																				
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j.	Elevation of the project site	98 to 107 m above mean sea level																																										
k.	Involvement of Forest land if any.	Not applicable as no Forest land is involved in the project site.																																										

S. No.	Particulars	Details															
1.	Water body exists within the project site as well as study area	<p>Project Site: Nil</p> <p>Study area:</p> <table border="1" data-bbox="719 275 1406 651"> <thead> <tr> <th data-bbox="719 275 1038 349">Water Body</th> <th data-bbox="1038 275 1190 349">Distance (Kms.)</th> <th data-bbox="1190 275 1406 349">Direction</th> </tr> </thead> <tbody> <tr> <td data-bbox="719 349 1038 427">Chitawar Nallah</td> <td data-bbox="1038 349 1190 427">Adjacent the Site</td> <td data-bbox="1190 349 1406 427">E</td> </tr> <tr> <td data-bbox="719 427 1038 539">Bhatapara Branch Canal of Mahanadi Canal</td> <td data-bbox="1038 427 1190 539">1.5</td> <td data-bbox="1190 427 1406 539">SE</td> </tr> <tr> <td data-bbox="719 539 1038 618">Ghughua Water Reservoir</td> <td data-bbox="1038 539 1190 618">2.6</td> <td data-bbox="1190 539 1406 618">SW</td> </tr> <tr> <td data-bbox="719 618 1038 651">Shivnath River</td> <td data-bbox="1038 618 1190 651">9.0</td> <td data-bbox="1190 618 1406 651">W</td> </tr> </tbody> </table>	Water Body	Distance (Kms.)	Direction	Chitawar Nallah	Adjacent the Site	E	Bhatapara Branch Canal of Mahanadi Canal	1.5	SE	Ghughua Water Reservoir	2.6	SW	Shivnath River	9.0	W
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m.	Existence of ESZ / ESA / national park / wildlife Sanctuary / biosphere Reserve / tiger reserve / elephant reserve etc. if any within the study area	<p>Study Area: Nil</p> <p>List of Reserved and protected forests:</p> <table border="1" data-bbox="719 797 1390 1133"> <thead> <tr> <th data-bbox="719 797 983 909">Name</th> <th data-bbox="983 797 1134 909">Distance (Kms.)</th> <th data-bbox="1134 797 1390 909">Direction</th> </tr> </thead> <tbody> <tr> <td data-bbox="719 909 983 1010">Bilari Ghughua RF</td> <td data-bbox="983 909 1134 1010">0.2</td> <td data-bbox="1134 909 1390 1010">S</td> </tr> <tr> <td data-bbox="719 1010 983 1066">Bilari RF</td> <td data-bbox="983 1010 1134 1066">5.8</td> <td data-bbox="1134 1010 1390 1066">SW</td> </tr> <tr> <td data-bbox="719 1066 983 1133"></td> <td data-bbox="983 1066 1134 1133"></td> <td data-bbox="1134 1066 1390 1133"></td> </tr> </tbody> </table>	Name	Distance (Kms.)	Direction	Bilari Ghughua RF	0.2	S	Bilari RF	5.8	SW						
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n.	Project cost	The capital cost of the project is Rs.580 Crores															
o.	EMP cost	The capital cost for environmental protection measures is proposed as Rs.54.71 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 8.8 Crores.															
p.	Employment opportunity	The employment generation from the proposed project is 650 nos. (direct & Indirect).															
q.	Water and Power requirement	<p>Water requirement for proposed project is estimated as 1690 KLD and will be sourced from Shivnath River (which is at a distance of 9.0 Kms. from the project site).</p> <p>The total power requirement for the proposed project will be about 76.0 MW, this will be partly met from the Captive power plant of 64 MW & Remaining 12 MW will be sourced from the state grid.</p>															

Unit configuration and capacity

S.No.	Units (Products)	Plant configuration	Production capacities
1.	DRI Kilns (Sponge Iron)	2 x 600 TPD & 2 x 350 TPD	6,27,000 TPA
2.	Induction Furnace with LRF + CCM (Hot Billets / Billets / Ingots)	4 x 30 T	3,96,000 TPA
3.	Rolling Mill (85 % Hot charging with Hot Billets and remaining 15% through RHF with LDO / Producer Gas as fuel)		5,25,000 TPA
	TMT / Wire Rod / H.B. Wire	1 x 667 TPD	2,00,000 TPA
	HR Strip Mill	2 x 167 TPD	1,00,000 TPA
	Structural Mill (Angles / channels / Beams / Flat / Round / Square bars)	2 x 167 TPD	1,00,000 TPA
	Pipe Mill	3 x 140 TPD	1,25,000 TPA
4.	Gasifier (Producer Gas)	7000 Nm ³ /hr	7000 Nm ³ /hr
5.	Power generation through WHRB (Electricity)	2 x 15 MW+2 x 8 MW	46 MW
6.	Power generation through CFBC (Electricity)	1 x 18 MW	18 MW
7.	Ferro Alloys Unit (FeSi / FeMn / SiMn / Pig Iron)	2 x 9 MVA	FeSi-14,000 TPA (or) FeMn- 50,400 TPA (or) SiMn - 28,800 TPA (or) Pig Iron - 50,400 TPA
8.	Briquetting Plant	200 Kg/hr	200 Kg/hr
9.	Fly Ash Brick Manufacturing Unit	---	65,000 Brick/ day

Specific and General EC conditions

A. Specific Condition:

- i. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.
- ii. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- iii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- iv. Jhiriya is at distance of 1.1 km in the NE of the project site, Bilari Ghughua RF at 0.2 km, South along with other sensitive areas within the study area of the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.
- v. Chitawar Nallah is adjacent and Bhatapara Branch Canal of Mahanadi Canal is at a distance of 1.5 km in SE to the project site along with other water bodies near within the study area. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- vi. Water requirement of 1690 KLD shall be obtained from Shivnath river. PP shall obtain necessary permission in this regard from Competent Authority. No ground water abstraction is permitted.
- vii. Three tier Green Belt shall be developed in at least 33% of the project area in a period of one year all along the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards sensitive areas such villages and RF nearby project site. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- viii. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's

OM dated 30.09.2020 amounting to Rs. 8.7 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

- ix. PP shall undertake village adoption programme and prepare and implement the action plan to develop them into a model village.
- x. PP shall carry out the soil quality testing every half yearly in Kamta village, Jhiria village and the reports shall be submitted along with six-monthly Compliance reports to IRO, MOEF&CC.

B. General Conditions

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.

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 04 Nos. Continuous Ambient Air Quality Station (CAAQMS) 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.
- ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iii. 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.
- iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. 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.
- vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

- ix. 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.
- x. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- xi. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
- xiii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- xiv. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
- xv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- xvi. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xvii. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm³ and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xviii. Following additional arrangements to control fugitive dust shall be provided:
 - a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
 - b. Proper covered vehicle shall be used while transport of materials.
 - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
- xix. Briquetting and Jigging plant shall be installed in Ferro Alloys Plant.
- xx. The PP shall minimize the evaporation losses in jigging operation to less than 10% using suitable advanced process.
- xxi. The 4th hole extraction system shall be provided in the Sub Merged Arc Furnaces and EAF.
- xxii. Industry is going to use silica quartz in large quantities and going to produce Silico Manganese and Ferro Silicon alloy steel. Therefore, it is necessary to control silica/quartz exposures at production Departments, not only emission norms as per Indian Factories Act. The permissible limit for silica/quartz should be within 10 mg/m³ for total dust as per Indian Factories Act. Therefore, it is recommended to monitor personal and area exposures for silica quartz dust in the process plants.
- xxiii. No Ferro-chrome production shall be carried out without prior Environmental clearance from MOEF&CC.

- xxiv. During operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.
- xxv. The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m³, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.
- xxvi. Online stack monitoring system for IF and RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report.
- xxvii. Low NO_x Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.

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 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- 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 recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. 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.
- iv. Water meters shall be provided at the inlet to all unit processes in the plants.
- v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.
- vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.
- vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.
- viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.
- ix. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.
- x. Air Cooled condensers shall be used in the captive power plant.

IV. Noise monitoring and prevention

- i. Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
- iii. PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.

V. Energy Conservation measures

- i. Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
- ii. Restrict Gas flaring to < 1%.
- iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- iv. Provide LED lights in their offices and residential areas.
- v. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
- vi. Practice hot charging of slabs and billets/blooms as far as possible.
- vii. Ensure installation of regenerative type burners on all reheating furnaces.
- viii. The project proponent shall provide waste heat recovery system on the DRI Kilns.
- ix. The dolochar generated shall be used for power generation.
- x. Tar shall be recovered from producer gas and shall be sold to registered processors and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns.
- xi. The PP shall implement the guidelines on sponge iron plants issued by the CPCB/SPCB in this regard.

VI. Waste management

- i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil.
- ii. Kitchen waste shall be composted or converted to biogas for further use.
- iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- iv. The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at <https://cpcb.nic.in/technical-guidelines-3/>. All the project proponents are hereby requested to sensitize and create awareness among people working within

the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.

- v. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- vi. Solid waste utilization
 - a. PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making.
 - b. PP shall recycle/reuse solid waste generated in the plant as far as possible.
 - c. Used refractories shall be recycled as far as possible.

VII. Green Belt

- i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.
- ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.
- iii. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.

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.
- 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.
- iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Environment Management

- 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. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental

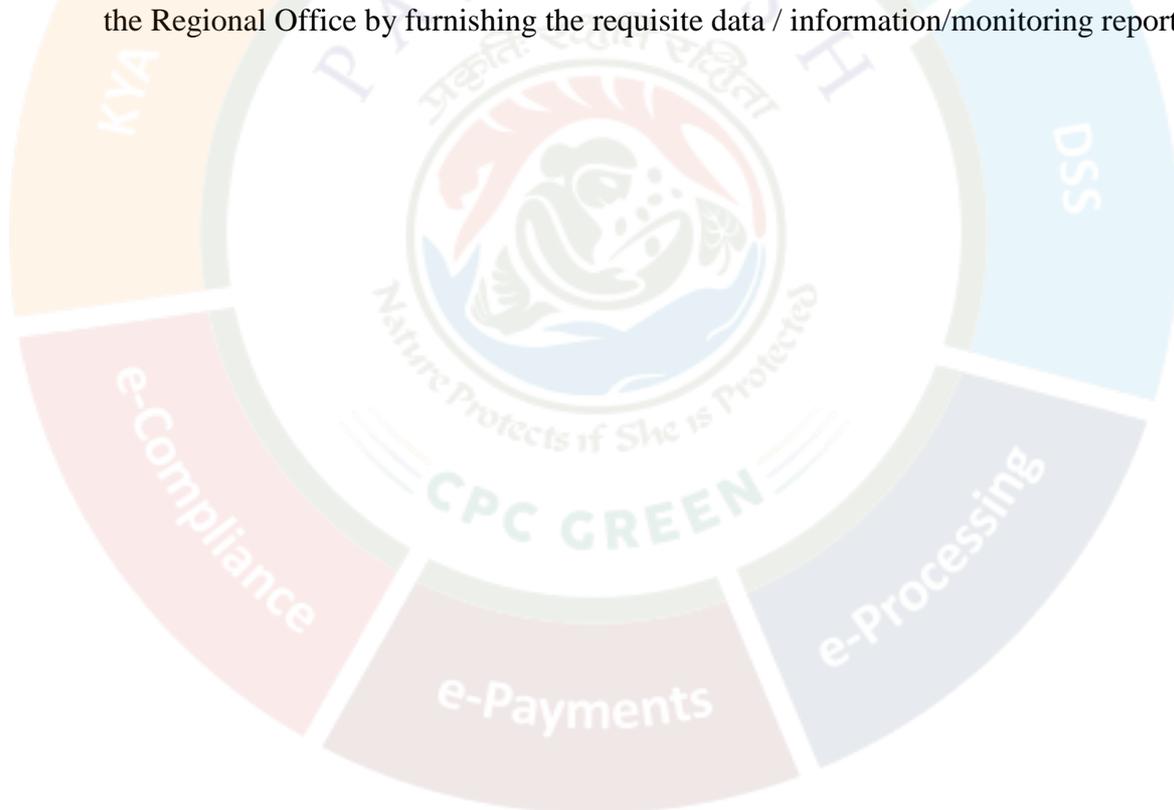
activities in consultation with the village Panchayat and the District Administration as committed.

- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

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.
- 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.
- 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.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO₂, NO_x (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.
- v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented
- vi. 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.
- vii. 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.
- viii. 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.

- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.
- xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.
- xii. 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).
- 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.



Action plan as per MoEF&CC O.M. dated 30/09/2020

S.NO.	MAJOR ACTIVITY HEADS	YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)	
		1st Year (Rs. in Lakhs)	2nd Year (Rs. in Lakhs)	3rd Year (Rs. in Lakhs)		
A). Based on Need Based & SIA Study						
1	Community & Infrastructure Development Programmes					
	i) Construction of public toilets	Physical Nos. & village	3 nos. in Kamta (v) & 3 nos. in Jhiria (v)	3nos. in Musuad (v) & 4 Nos. in Nawagaon (v)	2 nos. in Otagaon (v) & 4 Nos. in Harinbhatta (v)	63
		Budget in Lakhs	21	21	21	
	ii) Mineral water plants	Physical Nos. & village	2 nos. in Musuad (v) & 4 nos. in Kamta(v)	2 nos. in Jhiria(v) & 4 Nos. in Otagaon (v)	2 nos. in Nawagaon (v) & 4 Nos. in Harinbhatta (v)	72
		Budget in Lakhs	24	24	24	
	iii) LED lights with solar panels	Physical Nos. & village	10 nos. in Musuad (v) & 20 nos. in Kamta (v)	15 nos. in Jhiria (v) & 15 Nos. in Otagaon (v)	10 nos. in Nawagaon (v) & 20 Nos. in Harinbhatta (v)	30
		Budget in Lakhs	10	10	10	
				Total		165
2	Education					
	i) Providing Sport kits for schools	Physical Nos. & village	15 nos. in Jhiria(v) & 15 Nos. in Otagaon (v)	10 nos. in Musuad(v) & 10 Nos. in Kamta (v)	15 nos. in Harinbhatta (v) & 15 Nos. in Nawagaon (v)	8
		Budget in Lakhs	3	2	3	
	ii) Construction of class rooms in schools of size 10m x 8m x 4 m	Physical Nos. & village	3 rooms in Jhiria (v)	5 rooms. in Kamta (V)	4 rooms in Musuad (V)	112
		Budget Rs in Lakhs	40	40	32	
				Total		120

S.NO.	MAJOR ACTIVITY HEADS	YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)	
		1st Year (Rs. in Lakhs)	2nd Year (Rs. in Lakhs)	3rd Year (Rs. in Lakhs)		
3	RWH pits in the surrounding villages & Desiltation of ponds	Physical Nos. & village	Harinbhatta (v) pond desiltation 1.5m depth & 10 nos. RWH pits	Kamta (v) pond desiltation 1.5 m & 10 nos. of RWH pits	10 nos. of RWH pits in Jhiria school (10 nos), Nawagaon school (3 nos)	40
		Budget in Lakhs	16	12	12	
			114	109	102	325
			TOTAL (A)			325
B) Based on Public Consultation						
4	Impart training to the local villagers for skill development. a)DISHA Centre” along with necessary infrastructure for various vocational training program for employment generation in association with National Skill Development Mission (Automobile Repair, Welding, Electrical, Computer Hardware, Soft skills like computer programs etc.)	Physical Nos. & village	One DISHA centre in Kamta (v)			300
		Budget in Lakhs	100	100	100	
5	Primary Health Centre with Ambulance	Physical Nos.&village	---	---	Kamta (v)	150
		Budget in Lakhs	---	---	150	
6	Development of plantation in villages	Physical Nos.&village	Kamta (3000 nos), Jhiria (3000 nos),	Kamta (3000 nos), Jhiria (3000 nos), Plantation near Chitavar temple (1000 nos.)	Kamta (3000 nos), Jhiria (3000 nos),	95
		Budget in Lakhs	30	35	30	
			130	135	280	545

S.NO.	MAJOR ACTIVITY HEADS	YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)	
		1st Year (Rs. in Lakhs)	2nd Year (Rs. in Lakhs)	3rd Year (Rs. in Lakhs)		
				Total (B)	545	
		TOTAL	244	244	382	
			Grand Total(A+B)			870
Recurring expenditures under CSR as per companies Act 2014						
<ul style="list-style-type: none"> Health checkup will be carried out periodically in surrounding villages i.e. Kamta, Jhiria, Musuad, Nawagaon, Harinbhatta villages @ Rs 5.0 Lakhs every year 						

