



File No.: J-11011/40/2009-IA-II(IND-I)  
Government of India  
Ministry of Environment, Forest and Climate Change  
IA Division  
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Dated 18/07/2023



To,

M/s BHUSHAN POWER & STEEL LIMITED  
Village Thelkoloi, Post Lapanga, Tahsil Rengali, District Sambalpur, Odisha, Thelkoloi,  
SAMBALPUR, ODISHA, Tarini Temple, 768212  
ranjit.ghosh@jswbpsi.in

**Subject:** Amendments in Environmental Clearance in EC dated 13/01/2023 granted for Change in Configuration from 5.5 MTPA to 4.5 MTPA under Para 7(ii) of EIA Notification 2006 by M/s Bhushan Power and Steel Limited, located at Village Thelkoloi, Tehsil Rengali, District Sambalpur, Odisha- Corrigendum in EC – regarding.

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/OR/IND1/429331/2023 dated 18/05/2023 for grant of an amendment in prior Environmental Clearance (EC) to the project under the provision of the EIA Notification 2006-and as amended thereof.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC23A1001OR5404024A
(ii) File No.	J-11011/40/2009-IA-II(IND-I)
(iii) Clearance Type	Amendment in EC
(iv) Category	A
(v) Schedule No./ Project Activity	3(a) Metallurgical Industries (ferrous and non ferrous)
(vi) Sector	Industrial Projects - 1
(vii) Name of Project	Bhushan Power & Steel Limited - Corrigendum in EC vide Proposal No. IA/OR/IND/297156/2023, File No IA-J-11011/40/2009-IA-II(I)
(viii) Location of Project (District, State)	SAMBALPUR, ODISHA
(ix) Issuing Authority	MoEF&CC
(x) EC Date	13/07/2023
(xi) Applicability of General Conditions	NO
(xiii) Status of implementation of the project	

3. The proposals were considered in the 38<sup>th</sup> meeting EAC(Industry-I) held on 27<sup>th</sup> June, 2023. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at <https://parivesh.nic.in>.

#### **Details submitted by the project proponent**

4. M/s. Bhushan Power & Steel Limited was accorded Environment Clearance by the Ministry vide letter No. IA-J-11011/ 40/2009-IA-II(I) dated 13.01.2023 for Change in EC configuration from 5.5 MTPA to 4.5 MTPA under Para 7(ii) of EIA Notification 2006.

5. The instant proposal is for seeking amendment in EC dated 13.01.2023 w.r.t. correction in the capacity of EAF and correction in the source of water for the said project as **Annexure 1**

6. There is no change in configuration & capacity of units in granted EC.

#### **Deliberations by the Committee**

7. The Committee noted the following:

- M/s. Bhushan Power & Steel Limited was accorded Environment Clearance by the Ministry vide letter No. IA-J-11011/ 40/2009-IA-II(I) dated 13.01.2023 for Change in EC configuration from 5.5 MTPA to 4.5 MTPA under Para 7(ii) of EIA Notification 2006.
- The instant proposal is for seeking amendment in EC dated 13.01.2023 w.r.t. correction in capacity of EAF and correction in source of water for the said project as detailed in para 4 above.
- The EAC deliberated on the justification provided by the project proponent and found it satisfactory in the instant case.
- The EAC noted that there is no change in configuration & capacity of units in granted EC.
- The EAC also deliberated on the compliance of the conditions of EC dated 13.01.2023 made by the project proponent so far and found it satisfactory.

#### **Recommendations of the Committee**

8. After deliberations, the Committee recommended the proposal for amendment in EC granted vide letter no. IA-J-11011/ 40/2009-IA-II(I) dated 13.01.2023 w.r.t. correction in capacity of EAF and correction in source of water for the said project as detailed in para 4 above. The other terms and condition of the EC dated 13.01.2023 shall remain the same.

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 Amendment in Environment Clearance dated 13<sup>th</sup> January, 2023 for instant proposal of **M/s. Bhushan Power & Steel Limited** under the provisions of EIA Notification, 2006.

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. This issues with the approval of the competent authority.

(Dr. R. B. Lal)  
Scientist 'F'/ Director  
Tel: 011-20819346  
Email- [rb.lal@nic.in](mailto:rb.lal@nic.in)

Annexure 1

Annexure 2

**Amendment Logs**

Description	Reference	Existing	Proposed / Amendment	Reason
Corrigendum in EC	Section "A" Specific Condition, Point no. xviii of EC	Waste Heat Recovery system for charge preheating shall be included for 65 T Electric Arc Furnace	Waste Heat Recovery system for charge preheating shall be included for 75 T Electric Arc Furnace	Typographical Error
Corrigendum in EC	Section "A" Specific Condition, Point no. xxiv of EC	Water requirement for the plant shall be met from River Tungbhadra or Krishna. Ground water abstraction is not permitted.	Water requirement for the plant shall be met from back water reservoir of Hirakud Dam. Ground water abstraction is not permitted.	Typographical Error

**Additional EC Conditions**

NA

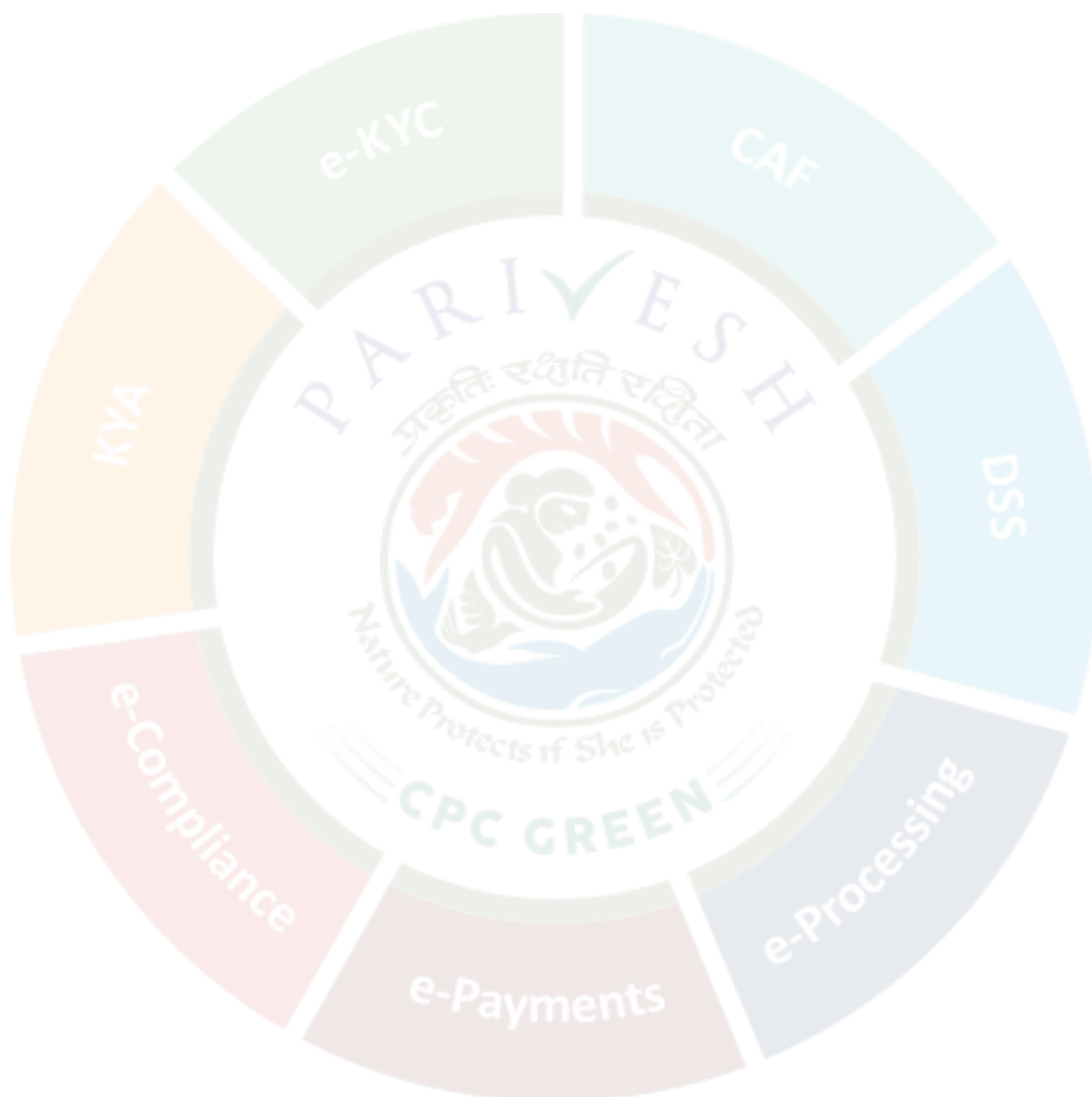
**Copy To**

1. The Principal Secretary, Department of Forest and Environment, Government of Odisha, Bhubaneswar, Odisha
2. Director General of Forest, Ministry of Environment, Forest and Climate Change, New Delhi
3. Principal Chief Conservator of Forests & HoFF, Aranya Bhawan, Chandrasekharpur, Bhubaneswar - 751 023, Odisha
4. The Regional Officer, Ministry of Environment, Forest and Climate Change, Integrated Regional Office, A/3, Chandrasekharpur, Bhubaneswar – 751023 Odisha
5. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 32
6. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
7. The Member Secretary, Odisha State Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit - VIII, Bhubaneswar -12 Odisha.
8. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road,

New Delhi.

9. District Collector, Sambalpur, Odisha.

10. Guard File/Monitoring File/ Parivesh Portal /Record File.



## Annexure 1

Condition	As per EC dated 13.01.2023	Corrections/Modification to be made as per instant application	Justification
Specific Condition (xviii)	Waste Heat Recovery system for charge preheating shall be included for <b>65 T Electric Arc Furnace</b>	Waste Heat Recovery system for charge preheating shall be included for <b>75 T Electric Arc Furnace</b>	It is a typographical error, 65 T to be replaced by 75 T as mentioned in project configuration.
Specific Condition (xxiv)	Water requirement for the plant shall be met from <b>River Tungbhadra or Krishna</b> . Ground water abstraction is not permitted.	Water requirement for the plant shall be met from <b>Back Water Reservoir of Hirakud Dam</b> . Ground water abstraction is not permitted	It is a typographical error, The location of the proposed project is at Village Thelkoloi, Post Lapanga, Tehsil Rengali, District Sambalpur, Odisha and the nearest source of raw water is back water reservoir of Hirakud Dam and presently PP is drawing water from the same source. Approval for drawl of water for the project has been obtained from the Water Resource Department, Govt. of Odisha and the same has been mentioned in the original application made for change in EC configuration from 5.5 MTPA to 4.5 MTPA





**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**(Impact Assessment Division)**

To,

The Director and Occupier

BHUSHAN POWER & STEEL LIMITED

Bhushan Power Steel Limited, Village Thelkoloi, Post Lapanga, District Sambalpur, Odisha,,Sambalpur,Orissa-768212

**Subject:** Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/OR/IND/257254/2022 dated 15 Mar 2022. The particulars of the environmental clearance granted to the project are as below.

1. EC Identification No.	<b>EC23A008OR181742</b>
2. File No.	IA-J-11011/40/2009-IA-II(I)
3. Project Type	Modernization7
4. Category	A
5. Project/Activity including Schedule No.	3(a) Metallurgical industries (ferrous & non ferrous)
6. Name of Project	Change In EC Configuration From 5.5 MTPA to 4.5 MTPA Under Para 7(ii) of EIA Notification 2006
7. Name of Company/Organization	BHUSHAN POWER & STEEL LIMITED
8. Location of Project	Orissa
9. TOR Date	N/A

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 13/01/2023

(e-signed)

Dr. R. B. Lal

Scientist F

IA - (Industrial Projects - 1 sector)

*Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH. Please quote identification number in all future correspondence.*

*This is a computer generated cover page.*



**F. No. IA-J-11011/40/2009-IA-II(I)**  
**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**(I.A. Division – Industry I sector)**  
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**Indira Paryavaran Bhawan**  
**Jor Bagh Road, Aliganj,**  
**New Delhi – 110003**

**Dated: 13<sup>th</sup> January, 2023**

To,

**M/s Bhushan Power & Steel Limited,**  
Village Thelkoloi, Post Lapanga, Tahsil Rengali,  
District Sambalpur, Odisha – 768 212  
Email: [ranjit.ghosh@jswbpsl.in](mailto:ranjit.ghosh@jswbpsl.in)

**Subject: Change in EC Configuration from 5.5 MTPA to 4.5 MTPA by M/s Bhushan Power and Steel Limited, located at Village Thelkoloi, Tehsil Rengali, District Sambalpur, Odisha – Grant of Environment Clearance under the provision of para 7 (ii) of the EIA Notification, 2006 regarding.**

Sir,

This refers to your proposal no. IA/OR/IND/257254/2022, dated 15/03/2022 received through PARIVESH Portal for grant of **Environmental Clearance (EC)** for the project mentioned above. Further, the Project Proponent has submitted the information on Parivesh Portal, vide letters dated 20.09.2022 (uploaded on portal on 27.09.2022), dated 29.10.2022 (uploaded on portal on 01.11.2022) and dated 01.12.2022 (uploaded on portal on 03.12.2022).

2. As per the provisions of the Environment Impact Assessment (EIA) Notification, 2006, the above-mentioned project/activity is covered under category 'A' of item **3(a) Metallurgical Industries (ferrous & non-ferrous), 2 (a) Coal Washeries, 2(b) Mineral Beneficiation, 1(d) Thermal Power Plants and 4(b) Coke oven plants**, and appraised at **Central level**.

3. The above-mentioned proposal was considered in 5<sup>th</sup> EAC meeting held on 12<sup>th</sup> -13<sup>th</sup> May 2022 and followed by 15<sup>th</sup> EAC meeting held on 17<sup>th</sup> -18<sup>th</sup> October, 2022 and 17<sup>th</sup> meeting of Expert Appraisal Committee (Industry 1 Sector) held on 14<sup>th</sup>-16<sup>th</sup> November, 2022. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at <https://parivesh.nic.in>.

4. 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 as under: -

S. No.	Particulars	Details submitted by the PP
a.	Terms of Reference for undertaking EIA study	Proposal is under the provision of para 7 (ii) of EIA Notification, 2006
b.	Period of baseline data collection	December, 2020 to February, 2021
c.	Date of Public Consultation	Earlier PH was conducted on 17/02/2016. The instant proposal is under the provision of para 7 (ii) of EIA Notification, 2006
d.	Action plan to address the PH issues	Attached as <b>Annexure 1</b>

S. No.	Particulars	Details submitted by the PP		
e.	Location of the project	Village Thelkoloi, Tehsil Rengali, District Sambalpur, Odisha.		
f.	Latitude and Longitude of the project site	<b>Point</b>	<b>Latitude</b>	<b>Longitude</b>
		Existing plant 1250.25 acre		
		1	21°46'16.14"N	84° 0'49.60"E
		2	21°45'35.06"N	84° 0'51.46"E
		3	21°44'51.44"N	84° 0'33.81"E
		4	21°44'53.10"N	84° 2'1.75"E
		5	21°45'41.70"N	84° 1'41.13"E
		6	21°46'28.66"N	84° 1'21.75"E
		Additional 700 acres		
		1	21°44'53.17"N	84° 1'22.00"E
		2	21°43'49.85"N	84° 1'7.45"E
		3	21°43'42.73"N	84° 1'39.56"E
		4	21°44'51.88"N	84° 2'02.61"E
g.	Total land	<b>789.24 ha</b> (1950.25 acre) [Private: 789.24 ha] <ul style="list-style-type: none"><li>As per earlier EC dated 06/12/2016 total project area was 829.726 ha (plant area: 789.24 ha + Township: 40.48 ha).</li><li>As per instant proposal, PP has excluded the township area of 40.48 ha and kept plant area of 789.24 ha only.</li><li>As per EC dated 06/12/2016 total land is 789.24 ha out of which 505.96 ha land is existing land and 283.28 ha is for expansion land)</li></ul>		
h.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	The proposed change in configuration will take place within existing plant area of 789.24 ha. Out of total 789.24 ha land existing land 505.96 ha is in possession of the company and for expansion 283.28 ha land acquisition process is in progress. No additional land is required for proposed change in configuration.		
i.	Existence of habitation & involvement of R&R, if any	<b><u>Project site:</u></b> Village Thelkoloi and Khadiapalli having Project displacement families- 111 of 2 villages. Study area:		
		<b>Habitation</b>	<b>Distance</b>	<b>Direction</b>
		Thelkoloi	50 m	West
		Sripura	1.5 km	NE
		Lapanga	0.5 km	SW
j.	Elevation of the project site	222 m above mean sea level (MSL)		
k.	Involvement of Forest land if any.	No Forest Land is involved as reported by the PP		
l.	Water body exists within the project site as well as study area	<b><u>Project site:</u></b> Nil.		
		<b><u>Study area:</u></b>		
		<b>Water Body</b>	<b>Distance</b>	<b>Direction</b>
		Ib river	7.0 km	West
		Matwali river	4.7 km	SSE
		Bheden river	0.88Km	NW
Hirakud Reservoir	1.0 km	SSW		



S. No.	Particulars	Details submitted by the PP
m.	Existence of ESZ / ESA / national park / wildlife Sanctuary / biosphere Reserve / tiger reserve / elephant reserve etc. if any within the study area	Nil.
n.	Project cost	Rs. 4900 Crores
o.	EMP cost	495.7 Cr (Capital); 24.64 Cr (Recurring)
p.	Employment opportunity	2700
q.	Water and Power requirement	Water – 85608 m <sup>3</sup> /day, Power – 605.6 MW

#### **Unit configuration and capacity:**

S. No.	Facility	Configuration as per EC dated 06/12/2016	Configuration after proposed amendment	Remarks by PP
1	Coal Washery	1x1.0 MTPA + 1x3.5 MTPA	1x1.0 MTPA + 1x3.5 MTPA	No change
2	Beneficiation Plant	1x1200 TPH (6.5 MTPA Product)	1x1200 TPH (6.5 MTPA Product)	No change
3	Pellet Plant	4.0 MTPA	4.0 MTPA	No change
4	Sinter Plant	1x105 m <sup>2</sup> + 1x450 m <sup>2</sup> (Total: 5.9 MTPA)	1x105 m <sup>2</sup> + 1x450 m <sup>2</sup> (Total: 5.9 MTPA)	No change
5	DRI Kiln	14x500 TPD (2.3 MTPA)	12x500 TPD (2.0 MTPA)	2x500 TPD surrendered
6	Coke Oven	2x0.45 MTPA (Non-Recovery Type) 1x1.2 MTPA (Recovery Type)	1x0.45 MTPA (Non-Recovery Type) 1x1.2 MTPA (Recovery Type)	1x0.45 MTPA Non-Recovery Coke Oven surrendered
7	Blast Furnace	1x1008 m <sup>3</sup> + 2x2015 m <sup>3</sup> (Total: 3.9 MTPA)	1x1120 m <sup>3</sup> + 1x2015 m <sup>3</sup> (Total: 2.35 MTPA)	Augmentation of BF from 1008 m <sup>3</sup> to 1120 m <sup>3</sup> and 1x2015 m <sup>3</sup> BF surrendered
8	EAF/Zero Power Furnace (ZPF)	SMS-1: EAF: 4x100 T SMS-2: EAF: 2x100 T (Total: 600 T)	SMS-1: EAF: 4x105 T SMS-2: EAF: 1x75 T + ZPF: 1x75 Ton (Total: 570 T)	4x100 is upgraded to 4x105 T and 2x100 T EAF change to 1x75 T EAF + 1x75 T ZPF
9	LF	6x100 ton + 2x250 ton (Total 1050T)	6x100 Ton + 2x75 Ton (Total 675T)	250T LF changed to 75 T LF
10	Alloy Smelter	4x16 MVA	NIL	All units surrendered
11	BOF	2x250 ton	NIL	All units surrendered
12	VD/AOD	2x100 ton + 2x250 ton	2x100 Ton + 2x75 Ton	250T LF changed to 75 T VD/AOD
13	RH	2x250 ton	NIL	All units surrendered
14	HMDP	2x250 ton	2x100 Ton	300 T surrendered
15	Lime Plant	3x300 TPD + 2 x 600 TPD	3x300 TPD + 2x600 TPD	No change
16	Dolo Plant	1x300 TPD + 1 x 100	1x600 TPD	1x300 TPD + 1x100

S. No.	Facility	Configuration as per EC dated 06/12/2016	Configuration after proposed amendment	Remarks by PP
		TPD + 1x600 TPD		TPD surrendered
17	Oxygen Plant	1x400 TPD + 1x660 TPD + 1x1250 TPD	1x400 TPD + 1x660 TPD + 1x1000 TPD + 3x200 TPD	Reduction of capacity of 1250 TPD to 1028 TPD Addition of 3x200 TPD (VPSA)
18	Billet caster	(1x2) +(2x4) +(1x5) Strand	(1x3) + (2x4) Total Strands 11 Nos	4 Strands surrendered
19	Bloom Caster	2x2 Strand	NIL	All units surrendered
20	Thin Slab Caster	3x1 Strand	2x1 Strand	1x1 strand surrendered
21	CSP	4.0 MTPA	4.0 MTPA	No change
22	Cold Rolling Mill	2.5 MTPA	2.5 MTPA	No change
23	Pipe and Tube Mill	0.8 MTPA	0.8 MTPA	No change
24	Galvanising / Galvalume Line	1.3 MTPA	1.3 MTPA	No change
25	Colour Coating	0.7 MTPA	0.7 MTPA	No change
26	WRM	0.45 MTPA	0.60 MTPA	Addition of 0.15 MTPA
27	Bar and Rod Mill	0.55 MTPA	0.60 MTPA	Addition of 0.05 MTPA
28	Captive Power Plant	710 MW (Coal fired, & WHRB)	Total 546 MW: 3x130 MW (CFBC-Coal & WHRB of DRI 5-12) + 40MW (AFBC & DRI 1-4) + 60MW (AFBC&DRI1-4) + 16MW WHRB of HR coke oven + 40 MW (250 TPH process steam boiler (Coal/Gas based)	Surrender of 150 MW coal fired CPP and addition of 40 MW (250 TPH coal/gas-based boiler.)
29	Cement Plant (Slag cement grinding and blending unit)	1.0 MTPA	2.0 MTPA	Addition of 1.0 MTPA
30	Slag processing for aggregates	-	300TPH + 150 TPH	New
31	Iron ore crusher for quality improvement	-	350TPH	New

5. The EAC, in its 5<sup>th</sup> meeting of Expert Appraisal Committee (Industry-1 Sector), held during 12-13 May 2022, recommended the proposal with certain mitigation measures. The recommendations of the EAC have been examined in the Ministry and accordingly the Ministry has sought certain information from the Project proponent (PP). In this context, the PP has submitted the information on portal and accordingly the proposal was reconsidered by the EAC, in its meeting held during **17-18 October 2022 & 14-16 November 2022** wherein the EAC has **recommended** the proposal for grant of Environment Clearance under the provisions of Para 7(ii) of the EIA Notification, 2006 subject to stipulation of specific and general conditions as detailed in the point below.

6. The EAC, inter-alia, deliberated the following:

- (i) 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.
- (ii) 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.
- (iii) 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.
- (iv) The Committee has also found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
- (v) The Committee deliberated on the action plan and budget allocation for green belt development and noted that as per the commitments made by the PP, the green belt development shall be completed within 33% by September 2024.
- (vi) The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found satisfactory.
- (vii) The Committee also deliberated on the public hearing issues along with status of compliance made as per the action plan submitted by the proponent earlier at the time of EC in 2016 to address the issues raised during the public hearing and is of the view that PP shall strictly fulfil commitments made in PH as per the action plan committed.
- (viii) The Committee deliberated upon the latest certified compliance report of IRO as well as action taken report submitted by PP with respect to the observations reported by IRO and found is of the view that PP shall strictly comply with the commitments made and the action plan submitted to comply with partially complied conditions reported by IRO.
- (ix) The EAC also deliberated on the written submissions submitted by the proponent and found it satisfactory.
- (x) The EAC deliberated on the submission of PP against the ADS sought by the Committee during 17-18<sup>th</sup> October, 2022 and found it satisfactory.
- (xi) 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.

- (xii) 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.

7. 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. Bhushan Power and Steel Limited** under the provisions of Para 7(ii) of the EIA Notification, 2006 subject to the implementation of following specific conditions and general conditions:

**A. Specific conditions:**

- (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 Committee deliberated upon the latest certified compliance report of IRO, MoEFCC as well as action plan submitted by PP with respect to the observations reported by IRO, MoEFCC. The PP shall strictly comply with the commitments made and the action plan submitted to comply with partially complied conditions. The timely implementation must be ensured by IRO, MoEFCC as per the Action Plan submitted by the project proponent.**
- (iii) The PP 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.
- (iv) 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.
- (v) The activities and the action plan proposed by the project proponent to address the issues raised during public hearing and socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit.
- (vi) The project proponent shall abide by all orders and judicial pronouncements, made from time to time w.r.t. OSPCB directions under Section 31(A) of Air(P&CP) Act, 1981 and 33(A) of Water(P&CP) Act, 1974 amended thereafter issued vide Letter No-6989/IND\_I\_CON-4650, dated 07.05.2021, Letter No-11377/IND-I-CON-4650 dated 07/08/2021 and Letter No-17816/IND-CON-4650, dated-12/11/2021.
- (vii) The PP shall strictly comply with the commitments made and the action plan submitted to comply with partially complied conditions reported by IRO in the certified compliance report.
- (viii) The PP shall strictly fulfil commitments made in PH as per the action plan committed by December 2023.

- (ix) Rejects from coal washery shall only be used either in the captive power plant (or) in the Thermal Power Plants meeting emission standards.
- (x) Tailings from Iron Ore washing plant shall be dewatered in filter press and stored dry maximum for a period of 30 days inside the plant premises.
- (xi) Solid waste utilization
  - a. Maximum 90 days of slag storage area shall be permitted inside the plant.
  - b. 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.
  - c. PP shall recycle/reuse 100 % solid waste generated in the plant.
  - d. Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.
  - e. Used refractories shall be recycled as far as possible.
- (xii) Sinter Plant
  - a. Sinter cooler waste recovery system shall be installed to generate process steam or power.
  - b. Equipped with MEROS technology to reduce emission of SO<sub>2</sub>, NO<sub>x</sub> and heavy metals.
- (xiii) Producer gas plant shall not be established by the proponent.
- (xiv) Coke Oven Plant
  - a. Coke Dry Quenching (CDQ) shall be installed.
  - b. Coke Oven Gas shall be desulfurized.
  - c. Tar sludge shall be mixed with coal and reused.
- (xv) BF shall be equipped with Top Recovery Turbine, dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.
- (xvi) Secondary fume extraction system shall be installed on converters of Steel Melting Shop.
- (xvii) Basic Oxygen Furnace (BOF) gas shall be cleaned dry.
- (xviii) Waste Heat Recovery system for charge preheating shall be included for 65 T Electric Arc Furnace.
- (xix) Submerged Arc Furnace and Electric Arc Furnace shall be closed type with 4th hole extraction system.
- (xx) 85-90 % of billets/slabs shall be rolled directly in hot stage. Only 10-15 % rolling shall be done through RHF using only Light Diesel Oil or Mixed BF/CO gas.
- (xxi) Cold Rolling Mill (CRM), color coating and galvanizing plants shall have CETP to treat and recycle the treated water from CRM complex. Sludge generated at CRM ETP shall be sent to TSDF.
- (xxii) Acid recovery plant shall be included to recover acid from pickling lines.
- (xxiii) Dust emission from Steel Plant stacks shall not exceed 30 mg/Nm<sup>3</sup>.
- (xxiv) Water requirement for the plant shall be met from River Tungbhadra or Krishna. Ground water abstraction is not permitted.
- (xxv) Three tier Green Belt shall be developed covering at least 33% of the total project area by September, 2024 with native species all along the periphery of 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. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

- (xxvi) Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.
- (xxvii) Specific water consumption in the steel plant shall be less than 6.0 m<sup>3</sup>/t of finished product.
- (xxviii) Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC.
- (xxix) Dedicated railway siding within the steel plant complex shall be established by the proponent by December, 2023 for the transportation of materials as committed.
- (xxx) As committed by the PP, they shall prepare and submit the plan to conserve the nearby lakes and shall develop Lake Fronts for two number of lakes nearby.
- (xxxi) Parking area for trucks/dumpers shall be provided within the steel plant. No truck/dumper shall be parked outside the steel plant premises.
- (xxxii) A proper action plan must be implemented to dispose of the electronic waste generated in the industry.

**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 06 Nos. 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.
- 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.
- iii. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
- iv. 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.
- v. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- vi. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.

- vii. 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.
- viii. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility).
- x. Land-based APC system shall be installed to control coke pushing emissions.
- xi. Monitor CO, HC and O<sub>2</sub> in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.
- xii. Vapor absorption system shall be provided in place of vapour compression system for cooling of coke oven gas in case of recovery type coke ovens.
- xiii. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xiv. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

### **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 vide G.S.R 277 (E) dated 31<sup>st</sup> March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30<sup>th</sup> May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7<sup>th</sup> December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- 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. The project proponent shall provide the ETP for coke oven and by-product to meet the standards prescribed in G.S.R 277 (E) dated 31<sup>st</sup> March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30<sup>th</sup> May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7<sup>th</sup> December 2015 (Thermal Power Plants) as amended from time to time as amended from time to time;
- iv. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- 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.
- vi. Tyre washing facilities shall be provided at the entrance of the plant gates.
- vii. Treated water from ETP of COBP shall not be used for coke quenching.
- viii. Water meters shall be provided at the inlet to all unit processes in the steel plants.

### **IV. Noise monitoring and prevention**

- i. Noise pollution 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.

## **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. Ensure installation of regenerative type burners on all reheating furnaces.

## **VI. Waste management**

- i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.
- ii. Kitchen waste shall be composted or converted to biogas for further use.

## **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 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 monitorable with defined time frames", when PP comes for EC proposal. This study shall be formulated keeping in view of India's Net-zero commitment at the COP-26 Climate Summit.

## **VIII. Public hearing and Human health issues**

- 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 10 villages, namely Thelkoli, Dhuchenpal (Gontiapada), Banjiberna, Siripura, Kheruwal, Sradhapali, Malatika, Khadiapali, Sunamal, Derba villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed by the PP.
- ii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- iii. 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.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

## **IX. Environment Management**

- i. 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.

- ii. 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.

#### **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, 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.
- 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.
- 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.
- 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.
- 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.
- ix. 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.
- x. **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).**

- xi. 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.
8. 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.
9. 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.
10. 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.
11. 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.
12. This issues with approval of the competent authority.



  
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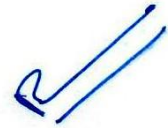
**Encl. as above at Annexure-I**

**Copy to: -**

1. The Principal Secretary, Department of Environment, Government of Odisha, Bhubaneswar, Odisha
2. The Principal Secretary, Department of Forest, Government of Odisha, Bhubaneswar, Odisha
3. The Director General of Forest, Ministry of Environment, Forest and Climate Change, New Delhi
4. The Principal Chief Conservator of Forests & Hoff, Aranya Bhawan, Chandrasekharpur, Bhubaneswar - 751 023, Odisha
5. The Regional Officer, Ministry of Environment, Forest and Climate Change, Integrated Regional Office, A/3, Chandrasekharpur, Bhubaneswar – 751023 Odisha
6. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, Delhi – 32
7. The Member Secretary, Odisha State Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit - Viii, Bhubaneswar -12 Odisha.



8. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
9. The Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi.
10. District Collector, Sambalpur, Odisha.
11. Guard File/Monitoring File/ Parivesh Portal /Record File.



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

<b>S. No.</b>	<b>Area</b>	<b>Year 2022</b>	<b>Year 2023</b>	<b>Year 2024</b>	<b>Total budget in Crore</b>
1	Road Infrastructure	Construction of road in Derba (Repairing 3 km) and Thelkoloji service road (1km)	Construction of road in Sripura (2 km) and Khadiapalli (1km)	Construction of road in Dubhenchaper (3 km) and Lapanga (1km)	7
2	Rainwater harvesting	Construction of village pond at Lapanga	Construction of village pond at Dhubenchapper	Construction of village pond at Khariapalli	1.5
3	Healthcare facilities	Healthcare facility for local people in vicinity of the plant to address respiratory, skin, ENT issues etc. related to environmental pollution – Commencement of construction of building	Completion of construction	Procurement of equipment and engagement of medical staff (operational expenditure like staff salary and consumables to be borne by BPSL)	30
4	Drinking water & sanitation	Allocation of funds towards government drinking water mission and Sanitation in the close vicinity. The approved programmed would be communicated to MoEFCC through 6 monthly compliance report	-	-	5
5	Vocational training arrangements for women and youth	Vocational training courses arrangements for women through various Govt departments/ NGOs- Tailoring, beautician and mushroom cultivation etc. - 200 women Vocational Training courses for local youth through local ITIs for following trade- Electrician, Welder Fitter Electrician Mason Moto winding Machining etc for about 100 local youth	Tailoring, beautician and mushroom cultivation course - additional 200 women  Electrician, welding, fitting and machining course for additional 100 local youth	Tailoring, beautician and mushroom cultivation course - additional 200 women  Electrician, welding, fitting and machining course for additional 100 local youth	1.7
6	Education	Strengthening of village school library – 4 Nos. of PCs and 500 books with bookshelves to Thekoloi Hugh School and Dhubenchapar upper Primary school, Sripura High School & Bir Surendra Sai High School	Strengthening of village school library – 4 Nos. of PCs and 500 books with bookshelves to	Strengthening of village school library – 4 Nos. of PCs and 500 books with bookshelves to Bisadhi Upper	3

S. No.	Area	Year 2022	Year 2023	Year 2024	Total budget in Crore
			Thekoloi Upper Primary School, Lapanga High School, Saraswati Sishu Vidya Mandir & Sripura Upper Primary School	Primary School, Bir Surendra Sai Upper Primary School, Lapanga Upper Primary School & Sripura Upper Primary School	
7	Electrification/ Solar Street Lighting	Solar LED lights at Lapanga, Thekoloi - 50 each village	Solar LED lights at Dhubenchapper, Derba - 50 each village	Solar LED lights at Khariapalli, Khinda - 50 each village	1.8
<b>Total</b>					<b>Rs. 50 Cr.</b>

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