



सत्यमेव जयते

File No: J-11011/758/2009-IA-II(IND-I)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Date 02/05/2024



To,

M/s. BRAVO SPONGE IRON PRIVATE LIMITED
BRAVO SPONGE IRON PRIVATE LIMITED, VILLAGE: MAHUDA, P.O: RUKNI, DISTRICT:
PURULIA, WEST BENGAL - 723145
Email: bravomoef@shakambhargroup.in

Subject: Expansion of Sponge Iron Plant for Production of 2.1555 Million Tons Per Annum Crude Steel/Stainless Steel, 0.160704 Million Tons Per Annum Ferro-Alloys (maximum) and 2x1MTPA Cement Plant (Grinding Unit) along with allied facilities by M/s Bravo Sponge Iron Pvt. Ltd., located at Village- Mahuda, P.O.- Rukni, District: Purulia, West Bengal-Grant of Environmental Clearance under the provisions EIA Notification, 2006 -regarding.

Sir/Madam,

This refers to your proposal no **IA/WB/IND1/451482/2023** dated **08.12.2023** 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. Further, the PP has uploaded the information on portal on 29.02.2024.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC23A1001WB5657490N
(ii) File No.	J-11011/758/2009-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),3(b) Cement plants ,1(d) Thermal Power Plants,4(b) Coke oven plants
(vi) Sector	Industrial Projects - 1
(vii) Name of Project	Expansion of Sponge Iron Plant for Production of 2.1555 Million Tons Per Annum Crude Steel/Stainless Steel, 0.160704 Million Tons Per Annum Ferro-Alloys (maximum) and 2x1MTPA Cement Plant (Grinding Unit) along with allied facilities by M/s Bravo Sponge Iron Pvt. Ltd. at

	Village- Mahuda, P.O.- Rukni, District: Purulia, West Bengal.
(viii) Name of Company/Organization	BRAVO SPONGE IRON PRIVATE LIMITED
(ix) Location of Project (District, State)	PURULIA, WEST BENGAL
(x) Issuing Authority	MoEF&CC
(xi) Applicability of General Conditions as per EIA Notification, 2006	No

3. As per the provisions of the Environment Impact Assessment (EIA) Notification, 2006, the above-mentioned project/activity is covered schedule S. No. 3(a) Metallurgical Industries (ferrous & non-ferrous)), 1(d) Thermal power plant, 3(b) Cement Plants and 4(b) Coke Oven Plant under Category “A” of the schedule of the EIA Notification, 2006 and being appraised at Central Level.

4. The proposal was initially considered by the EAC in its meeting held during **2nd - 4th January, 2024** wherein the proposal was deferred. Based on the information submitted by PP the proposal was again re-considered in the 53rd meeting of the EAC for Industry-I sector held during **12th –14th February, 2024**, wherein the Committee, after detailed deliberations, **recommended** the proposal. 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 given at **Annexure 1**, Unit configuration and capacity are given at **Annexure II**.

6. The EAC, in its meeting held during **12th to 14th February, 2024**, inter-alia, deliberated the following:

(i) The instant proposal is for the expansion of existing steel plant for production of 2.1555 Million Tons Per Annum Crude Steel/Stainless Steel, 0.160704 Million Tons Per Annum Ferro-Alloys (maximum) and 2x1MTPA Cement Plant (Grinding Unit) along with allied facilities.

(ii) M/S BSIPL started manufacturing sponge iron in the year of 2003 after obtaining Consent to Establish (CTE) from West Bengal Pollution Control Board (WBPCB) on 5th February, 2003 for installation of 1x100TPD DRI Kiln. Subsequently, the plant installed another 1x95TPD DRI Kiln after obtaining Environment Clearance (EC) from State Environment Impact Assessment Authority (SEIAA), West Bengal on 24th March, 2008, under the management of Bhalotia Group, Jamshedpur. BSIPL was taken over by Shakambhari Group in the year 2015 and thereafter, the company obtained EC from MoEF&CC vide F.No. J-11011/758/2009-IA.II(I) on 18th April, 2017 for expansion of sponge iron plant from 195 TPD to 395 TPD, installation of 600 TPD Billet Manufacturing unit and Rolling Mill of capacity 600 TPD along with Captive Power Plant 18MW (AFBC 10MW + WHRB 8MW). Further, the company obtained another EC from MoEF&CC vide F.No. 11011/758/2009-IA.II(I) dated on 05th November 2020 for the expansion of the steel plant by installation of 2x0.85MTPA Pellet Plant, additional 1x350TPD Sponge Iron Plant, 3x25Ton Induction Furnaces, 12x4000Nm³/hr. Producer Gas Plant, capacity revision of Rolling Mill from 600TPD to 1000TPD along with 7MW additional power generation from Waste Heat Recovery Boilers. Consent to Operate for the existing unit was accorded by West Bengal State Pollution Control Board vide Memo No. 294-WPBA/ Red (PrI)/ Cont(135)/ 04 Part-I dt. 08.12.2021, Memo No. 894-WPBA/ Red (PrI)/ Cont(135)/ 04 Part-II dt. 23.12.2021, and Memo No: 491-WPBA/ Red (PrI)/Cont (135)/04 Part –II dt. 22.12.2022. The validity of CTOs is up to 31.12.2026.

(iii) 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.

(iv) 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.

(v) 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.

(vi) 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.

(vii) The total plant area after the proposed expansion will be 154.73Ha. (382.35Acres) [Private: 95.89 Ha, Govt. Land: 58.85Ha.]. The existing plant area is 31.73 ha. Additional 123 ha area is proposed for the expansion project. It is reported that out of the total land of 154.73 ha., 96.52 Ha of land has been acquired and the rest 58.21 Ha of land is under the process of acquisition through LTS from Government of West Bengal. Accordingly, inspection was completed on 08.01.24 jointly by various departments of Government of West Bengal. Based on this inspection, District Magistrate, Purulia has recommended LTS for total 303.94Acres (123Ha) of land vide Ir. Memo No. 697/DIC/PPL/2023-24 dated 10.01.2024 in favor of M/s Bravo Sponge Iron Pvt Ltd. This 303.94 Acres (123.0Ha), includes 58.21Ha of Govt. vested land and 64.79Ha land under possession of the company. The EAC deliberated on the District Magistrate, Purulia Ir. Memo No. 697/DIC/PPL/2023-24 dated 10.01.2024 in favour of M/s Bravo Sponge Iron Pvt Ltd and is of the opinion that PP shall complete the land acquisition and conversion for industrial purpose prior to commencement of expansion project. Divisional Forest Officer, Kangsabati North Division, Purulia, Vide letter no. 1723/8 dated 26.09.2023 has stated that no forest land is involved in the project site.

(viii) Mahuda Village (0.01.km, E), Kashberiya Village (0.25 km, SE), Rukni Village (0.5 km), and School is at 0.13 km 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.

(ix) Kumra Jora Nala is at 0.03 km in the West along with other water bodies within the study area of the project site. 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.

(x) The water requirement after proposed expansion is estimated as 20,740 m³/day which will be met from DVC. The EAC deliberated on the water requirement is of the opinion that PP shall obtain necessary permissions from the Competent Authority in this regard.

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

(xii) It is reported that there are 9 numbers of Schedule – I Species (Indian Grey Mongoose (*Urva edwardsi*), Indian Porcupine (*Hystrix indica*), Jungle Cat (*Felis chaus*), Bengal Fox (*Vulpus benghalensis*), Russel's Viper (*Daboia siamensis*), Monitor Lizard (*Varanus bengalensis*), Indian Cobra (*Naja naja*), Common Rat Snake (*Ptyas mucosus*), and Eurasian Eagle Owl (*Bubo bubo*)) are found within the 10km study area. Wildlife Conservation Plan (WLCP) having details of activities along with yearly budget for implementation of activities has been prepared for the conservation of the 9 schedule-I species found in the study area and been submitted to the Chief Wildlife Warden on 17.10.2023 for approval.

The EAC is of the view that PP shall obtain the approval and implement the action plan thoroughly.

(xiii) The PP has submitted that existing green belt has been developed in 11.55Ha. area which is about 36.4% of the existing plant area of 31.73Ha with total sapling of 29,025trees. Proposed greenbelt will be developed in 52.14Ha which is about 33.7% of the total project area. Additional 111,446 no of trees will be planted in 3 years. After expansion a total of 140,471 no. of trees will be present in a total area of 52.14Ha. 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 2 years.

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

(xv) 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.

(xvi) The Committee deliberated on the ADS reply of the project proponent and found it satisfactory.

(xvii) The Committee deliberated on the written submission of the project proponent and found it satisfactory.

(xviii) 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.

(xix) 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.

(xx) 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.

7. The EAC, in its 53rd meeting of Expert Appraisal Committee (Industry-1 Sector) held during 12th–14th February, based on information & clarifications provided by the project proponent and after detailed deliberations **recommended** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the stipulation of specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements.

8. 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 Bravo Sponge Iron Pvt. Ltd** under the provisions of EIA Notification, 2006 subject to **specific conditions and general conditions** at **Annexure III**.

9. 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.

10. 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.

11. 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.

12. 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.

13. This issues with approval of the competent authority.

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

Copy To

1. The Secretary, Department of Environment, Government of West Bengal, Secretariat Kolkata.
2. The Secretary, Department of Forests, Government of West Bengal, Kolkata.
3. The Director General of Forest, Ministry of Environment, Forest and Climate Change, New Delhi.
4. The Principal Chief Conservator of Forests, Government of West Bengal, Block LA, 10A Sector-III, Salt Lake City, Kolkata-700098.
5. The Deputy Director General of Forests (C), Integrated Regional Office, Ministry of Environment, Forest and Climate Change, IB-198, Sector-II, Salt Lake City, Kolkata – 700106
6. The Member Secretary, Central Pollution Control Board, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
7. The Member Secretary, West Bengal State Pollution Control Board, Paribesh Bhawan, 10A- Block LA, Sector –III, Salt Lake City, Kolkata – 700 098.
8. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi 110001.
9. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi.
10. District Collector, Purulia District, West Bengal.
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	14.05.2021 and 02.03.2022			
b.	Period of baseline data collection	1st March 2021 to 31st May 2021			
c.	Date of Public Consultation	29.09.2023			
d.	Action plan to address the PH issues	An amount of Rs. 8501 Lakhs has been earmarked for implementation of the commitments made during Public Hearing and need based activities. Detail of activities proposed attached as Annexure IV .			
e.	Location of the project	Village- Mahuda, P.O.- Rukni, District: Purulia, West Bengal			
f.	Latitude and Longitude of the project site	Point	Latitude	Longitude	
		1.	23° 33' 22.358" N	86° 31' 43.467" E	
		2.	23° 33' 19.361" N	86° 31' 49.993" E	
		3.	23° 33' 19.283" N	86° 31' 57.745" E	
		4.	23° 33' 20.209" N	86° 32' 9.296" E	
		5.	23° 33' 28.997" N	86° 32' 12.126" E	
		6.	23° 33' 20.195" N	86° 32' 29.393" E	
		7.	23° 33' 15.982" N	86° 32' 32.392" E	
		8.	23° 33' 11.346" N	86° 32' 39.295" E	
		9.	23° 33' 06.771" N	86° 32' 46.701" E	
		10.	23° 32' 57.068" N	86° 32' 58.405" E	
		11.	23° 32' 53.990" N	86° 32' 57.890" E	
		12.	23° 32' 48.446" N	86° 32' 50.420" E	
		13.	23° 32' 49.223" N	86° 32' 37.334" E	
		14.	23° 32' 52.290" N	86° 32' 31.842" E	
		15.	23° 32' 52.056" N	86° 32' 19.817" E	
		16.	23° 32' 54.484" N	86° 32' 18.636" E	
		17.	23° 32' 59.089" N	86° 32' 14.505" E	

S. No	Particulars	Details											
		18.	23° 32' 55.538" N	86° 32' 13.194" E									
		19.	23° 32' 56.920" N	86° 32' 10.134" E									
		20.	23° 32' 52.242" N	86° 32' 9.131" E									
		21.	23° 32' 51.829" N	86° 32' 5.620" E									
		22.	23° 32' 48.476" N	86° 32' 5.704" E									
		23.	23° 32' 47.080" N	86° 31' 57.331" E									
		24.	23° 32' 48.788" N	86° 31' 55.581" E									
		25.	23° 32' 51.270" N	86° 31' 53.161" E									
		26.	23° 32' 57.788" N	86° 31' 45.158" E									
		27.	23° 33' 1.604" N	86° 31' 43.912" E									
		28.	23° 33' 5.244" N	86° 31' 44.179" E									
		29.	23° 33' 10.123" N	86° 31' 41.336" E									
		30.	23° 33' 14.743" N	86° 31' 44.038" E									
		31.	23° 33' 13.796" N	86° 31' 40.023" E									
		32.	23° 33' 14.369" N	86° 31' 37.919" E									
g.	Total land	154.73Ha. (382.35Acres) [Private: 95.89 Ha, Govt. Land: 58.85Ha.]											
h.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Out of the total land of 154.73 ha., 96.52 Ha of land has been acquired and the rest 58.21Ha of land is under the process of acquisition.											
i.	Existence of habitation & involvement of R&R, if any	<p>Existence of Habitation Project Site: Nil Study Area:</p> <table border="1"> <thead> <tr> <th>Nearest Habitation</th> <th>Dist.</th> <th>Dir.</th> </tr> </thead> <tbody> <tr> <td>Mahuda Village</td> <td>0.01kms</td> <td>East</td> </tr> <tr> <td>Kashberiya village</td> <td>0.25kms</td> <td>SE</td> </tr> </tbody> </table>			Nearest Habitation	Dist.	Dir.	Mahuda Village	0.01kms	East	Kashberiya village	0.25kms	SE
Nearest Habitation	Dist.	Dir.											
Mahuda Village	0.01kms	East											
Kashberiya village	0.25kms	SE											
j.	Elevation of the project site	190 m											
k.	Involvement of Forest land if any.	There is no forest land is involved in the project, letter no. 1723/8 dated 26.09.2023 obtained from Divisional Forest Officer, Kangsabati North Division, Purulia, West Bengal state that no forest land is involved in the project site											
l.	Water body	Project Site: No water bodies within the project site											

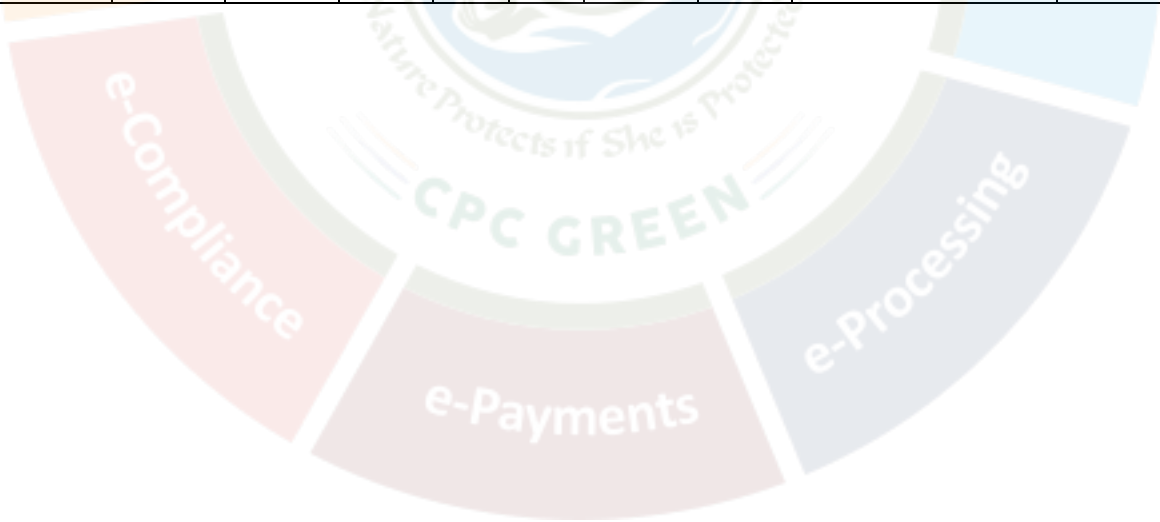
S. No.	Particulars	Details														
	exists within the project site as well as study area	Study Area <table border="1" data-bbox="416 286 1046 495"> <thead> <tr> <th data-bbox="416 286 660 338">Water Body</th> <th data-bbox="660 286 895 338">Distance</th> <th data-bbox="895 286 1046 338">Direction</th> </tr> </thead> <tbody> <tr> <td data-bbox="416 338 660 389">Kumra Jora Nala</td> <td data-bbox="660 338 895 389">0.03km</td> <td data-bbox="895 338 1046 389">West</td> </tr> <tr> <td data-bbox="416 389 660 441">Harai Nadi</td> <td data-bbox="660 389 895 441">6.36km</td> <td data-bbox="895 389 1046 441">SW</td> </tr> <tr> <td data-bbox="416 441 660 495">Damodar River</td> <td data-bbox="660 441 895 495">8.0km</td> <td data-bbox="895 441 1046 495">North</td> </tr> </tbody> </table>			Water Body	Distance	Direction	Kumra Jora Nala	0.03km	West	Harai Nadi	6.36km	SW	Damodar River	8.0km	North
Water Body	Distance	Direction														
Kumra Jora Nala	0.03km	West														
Harai Nadi	6.36km	SW														
Damodar River	8.0km	North														
m.	Existence of ESZ / ESA / national park / wildlife Sanctuary / biosphere Reserve / tiger reserve / elephant reserve etc. if any within the study area	<p>No ESZ/ ESA/ National Park/Wildlife Sanctuary/ Biosphere Reserve/ Tiger Reserve/ Elephant Reserve etc. within the study area.</p> <p>List of Reserve and Protected Forests:</p> <p>There is no Reserve Forest in the Study Area</p> <p>Protected forests in the study area are; Mahuda PF, Gobindapur PF, Bamanbad PF, Barashaliya PF, Dandua PF, etc.</p>														
n.	Project cost	Proposed – INR Rs 5650 Crores														
o.	EMP cost	<table border="1" data-bbox="416 1346 1394 1458"> <thead> <tr> <th data-bbox="416 1346 639 1420">Type</th> <th data-bbox="639 1346 1018 1420">Capital (Rs. in Crores)</th> <th data-bbox="1018 1346 1394 1420">Recurring (Rs. in Crores)</th> </tr> </thead> <tbody> <tr> <td data-bbox="416 1420 639 1458">Proposed</td> <td data-bbox="639 1420 1018 1458">456</td> <td data-bbox="1018 1420 1394 1458">12.293</td> </tr> </tbody> </table>	Type	Capital (Rs. in Crores)	Recurring (Rs. in Crores)	Proposed	456	12.293								
Type	Capital (Rs. in Crores)	Recurring (Rs. in Crores)														
Proposed	456	12.293														
p.	Employment opportunity	4000 persons														
q.	Water and Power requirement	(Total)Water -20,740 KLD, Power –369 MW														

Unit configuration and capacity

Sl No	Plant Equipment / Facility	Existing Facility as per the EC dated 05.11.2020								Proposed Units		Final (Existing + Proposed)	
		Total		Implemented		Un-Implemented		As per CTO		Config	Capacity	Config	Capacity
		Config	Capacity	Config	Capacity	Config	Capacity	Config	Capacity				
1.	Pellet Plant with Grinding Facility	2 X 0.85 MTPA	1,700,000 TPA	2 X 0.85 MTPA	1,700,000 TPA	--	--	2 X 0.85 MTPA	1,700,000 TPA	--	--	2 X 0.85 MTPA	1,700,000 TPA
2.	Producer Gas Plant	12 x 4000 Nm3/hr	48,000 Nm3/hr	12 x 4000 Nm3/hr	48,000 Nm3/hr	--	--	12 x 4000 Nm3/hr	48,000 Nm3/hr	--	--	12 x 4000 Nm3/hr	48,000 Nm3/hr
3.	Sponge Iron Plant	3x100TPD + 1x95TPD + 1x350TPD	260,500 TPA	3x100TPD + 1x95TPD + 1x350TPD	260,500 TPA	--	--	3x100TPD + 1x95TPD + 1x350TPD	260,500 TPA	Additional production from existing DRI Kilns by Capacity revision of 1x95TPD DRI Kiln to 1x100TPD and capacity enhancement of all Kilns	36,500 TPA	4x100TPD+ 1x350TPD+ 8x600TPD	2,197,800 TPA
										Additional 8x600TPD DRI Kiln	1,900,800 TPA		
4.	Blast Furnace	--	--	--	--	--	--	--	--	Blast Furnaces: 1x450m ³ + 1x650m ³	1,309,000 TPA Hot Metal	Blast Furnace: 1x450m ³ + 1x650m ³	1,309,000 TPA Hot Metal
										Pig casting Machine: 1x1530 TPD +1x2200 TPD	-	Pig casting Machine: 1x1530 TPD +1x2200 TPD	-
										Slag Granulation Plants 540 TPD & 775 TPD		Slag Granulation Plants 540 TPD & 775 TPD	
5.	Sinter Plant	--	--	--	--	--	--	--	--	2x130m ²	2,475,200 TPA	2x130m ²	2,475,200 TPA
6.	Ductile Iron Plant	--	--	--	--	--	--	--	--	750 TPD	247,500 TPA	750 TPD	247,500 TPA
7.	Coke Oven Plant	--	--	--	--	--	--	--	--	3LTPA: 4batteries@ 17Ovens each 4LTPA: 4batteries@ 23Ovens each	704,000 TPA	3LTPA: 4batteries@ 17Ovens each 4LTPA: 4batteries@ 23Ovens each	704,000 TPA
8.	SMS I (IF-LRF-CCM)	IF:4x15T+3x25T CCM: 1 x 4/7 CCM and 1x6/11 CCM	MS billets 445,500	2x15T	86,400 TPA MS Billets	IF: 2x15T + 3x25T	359,100 TPA	2x15T	86,400 TPA MS Billets	LRF: 1x30T AOD 1x25 Ton	Only inclusion of 198,000 TPA SS Billets (max.) with no change in overall	IF:4x15T+ 3x25T LRF: 1x30T AOD 1x25 Ton CCM: 1x4/7 CCM and 1x6/11 CCM	445,500 TPA MS Billets including max. 198,000 TPA SS Billets

SI No	Plant Equipment / Facility	Existing Facility as per the EC dated 05.11.2020								Proposed Units		Final (Existing + Proposed)	
		Total		Implemented		Un-Implemented		As per CTO		Config	Capacity	Config	Capacity
		Config	Capacity	Config	Capacity	Config	Capacity	Config	Capacity				
											4,45,000T PA capacity		
9.	SMS II (IF-LRF-CCM)	--	--	--	--	--	--	--	--	IF: 10x30T, LRF: 1x30T, 3x6/11 CCM	MS Billets 1,050,000 TPA	IF: 10x30T, LRF: 1x30T, 3x6/11 CCM	MS Billets 1,050,000 TPA
10.	SMS III (LD-LRF-VD-CCM)	--	--	--	--	--	--	--	--	LD Converter: 1x55T LRF: 2x55T + VD: 1x55 Ton + 2x8/15 CCM	MS Billets 660,000 TPA	LD Converter: 1x55T LRF: 2x55T + VD: 1x55 Ton + 2x8/15 CCM	MS Billets 660,000 TPA
11.	Rolling Mill# 1,2,3 &4 along with wire drawing facility	RM#1 - 1000 TPD	330,000 TPA	--	--	RM#1 - 1000 TPD	330,000 TPA	--	--	RM#2 - 2000TPD	11,55,000 TPA MS long product including max. 194,000 TPA SS Long products	RM#1 - 2000TPD	1,485,000 TPA MS long product including max. 194,000 TPA SS Long products
										RM#3 - 1000TPD		RM#2 - 2000TPD	
										RM#4 - 500TPD		RM#3 - 1000TPD	
12.	Reheating Furnace	--	--	--	--	--	--	--	--	50 TPH@ RM#1	--	50 TPH@ RM#1	--
										100 TPH@ RM#2		100 TPH@ RM#2	
										50 TPH@ RM#3		50 TPH@ RM#3	
										25 TPH@ RM#4		25 TPH@ RM#4	
13.	Air Separation Plant (Oxygen Plant)	--	--	--	--	--	--	--	--	2x225TPD	164,250 TPA	2x225TPD	164,250 TPA
14.	Captive Power Plant	15MW based on DRI WHRB + 10MW based on AFBC	25MW	AFBC +WHRB	23.9MW	AFBC + WHRB	1.1MW	AFBC +WHRB	23.9MW	Based on DRI WHRB: 140MW	255 MW	Based on DRI WHRB: 155MW	280MW
										Based on Coke Oven WHRB: 35MW		Based on Coke Oven WHRB: 35MW	
										Based on Blast Furnace Gas: 30 MW		Based on Blast Furnace Gas: 30MW	
										Based on CFBC: 50 MW		Based on CFBC: 50MW	
15.	Cement Plant	--	--	--	--	--	--	--	--	2x1 MTPA	1,980,000	2x1 MTPA	1,980,000
16.	Ferro-Alloy Plant with Metal Recovery Unit	--	--	--	--	--	--	--	--	6x9MVA SAF	Fe-Mn: 145,543 TPA (or)	6x9MVA SAF	Fe-Mn: 145,543 TPA (or)
											Si-Mn: 107,136 TPA (or)		Si-Mn: 107,136 TPA (or)
											Fe-Si: 48,211TPA (or)		Fe-Si: 48,211TPA (or)
											HC Ferro Chrome:		HC Ferro Chrome:

SI No	Plant Equipment / Facility	Existing Facility as per the EC dated 05.11.2020								Proposed Units		Final (Existing + Proposed)	
		Total		Implemented		Un-Implemented		As per CTO					
		Config	Capacity	Config	Capacity	Config	Capacity	Config	Capacity	Config	Capacity	Config	Capacity
											101,497 TPA (or)		101,497 TPA (or)
											Ferro Silico Chrome: 66,498TP A (or)		Ferro Silico Chrome: 66,498TP A (or)
											Pig Iron: 160,704 TPA (or)		Pig Iron: 160,704 TPA (or)
											or in combination of any		or in combination of any
17.	Metal Recovery Plant (Ferro-Alloy)	--	--	--	--	--	--	--	--	1x25TPH	--	1x25TPH	--
18.	Briquette Plant Ferro Division	--	--	--	--	--	--	--	--	1x 50 TPH	300,000 TPA	1x 50 TPH	300,000 TPA
19.	Sinter Plant for Ferro division	--	--	--	--	--	--	--	--	1x600 TPD	216,000 TPA	1x600 TPD	216,000 TPA
20.	Railway Siding	--	--	--	--	--	--	--	--	From Rukni Railway Stn. to the Plant location 1 km (approx.) with Wagon Tippler		From Rukni Railway Stn. to the Plant location 1 km (approx.) with Wagon Tippler	



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. The PP shall complete the process of land acquisition and conversion for industrial use.
- v. Mahuda Village (0.01.km, E), Kashberiya Village (0.25 km, SE), Rukni Village (0.5 km), and School is at 0.13 km 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.
- vi. Kumra Jora Nala is at 0.03 km in the West along with other water bodies within the study area of the project site. 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.
- vii. The total water requirement of 20,740 m³/day shall be met from DVC. PP shall obtain necessary permissions from the Competent Authority. Ground water shall only be used for domestic purpose.
- viii. Three tier Green Belt shall be developed in at least 33% of the project area in a period of 2 years 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 nearby project site. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- ix. 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. 85 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

- x. PP shall undertake village adoption programme as committed and implement the action plan to develop them into a model village.
- xi. PP shall obtain approval of Site-Specific Wildlife Management Plan. The recommendations of the approved Site-Specific Wildlife Management Plan 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.

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. 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. 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 (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/Nm^3 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. Dry quenching (CDQ) system shall be installed along with power generation facility from waste heat recovery from hot coke
 - xxiv. 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). Land-based APC system shall be installed to control coke pushing emissions.
 - xxv. Monitor CO, HC and O₂ in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.
 - xxvi. 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.
 - xxvii. The coke oven gas shall be subjected to desulphurization if the sulphur content in the coal exceeds 1%.
 - xxviii. Provide Low NO_x burners as primary measures and SCR /NSCR technologies as secondary measure to control NO_x emissions.
 - xxix. The emission norms applicable for the cement plant shall be adhered to.
 - xxx. Dioxin and Furan monitoring shall be carried out once in six months at cement kiln stack.
 - xxxi. DeSO_x system shall be provided dry type. NO_x level shall be maintained below 600 mg/Nm³ by using best available technology.
 - xxxii. Petcoke dosing shall be controlled automatically to control SO₂ emission from chimney within the prescribed limits.
 - xxxiii. PP shall identify the Source of fluoride emissions and action plan to mitigate the same shall be implemented.
 - xxxiv. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
 - xxxv. 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.
 - xxxvi. 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.
 - xxxvii. Ductile Iron (DI) plant shall have the following provisions:
 - a. Bag filter for Zn coating and Mg converter area.
 - b. Wet scrubbers in paint and bitumen coating area.
 - c. Bag Filter in Cement lining area.
 - d. PTFE dipped bags shall be used in the plant.
 - e. PM emissions from BF in Zinc coating area shall be 5 mg/Nm³.
 - f. ETP with recycling facility shall be included.
 - xxxviii. 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.
 - xxxix. 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. The project proponent shall provide appropriate ETP for effluents discharged from coke oven and by-product to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to Coke oven plants) as amended from time to time.
- xi. Treated water from ETP of COBP shall not be used for coke quenching.
- xii. 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. Blast Furnaces 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.
- ix. Coke Dry Quenching (CDQ) shall be provided for coke quenching for both recovery and non-recovery type coke ovens.
 - x. The project proponent shall provide waste heat recovery system on the DRI Kilns.
 - xi. The dolochar generated shall be used for power generation.
- xii. 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.
- xiii. The PP shall implement the guidelines on sponge iron plants issued by the CPCB/SPCB in this regard.
- xiv. The project proponent make efforts to achieve power consumption less than 65 units/tonne for Portland Pozzolona Cement (PPC) and 85 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
- xv. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.
- xvi. Maximize utilization of alternate fuels and Co-processing to achieve best practice norms.
- xvii. Waste heat recovery system shall be provided for kiln and cooler.

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. SMS slag after metal recovery in waste recycling facility shall be conditioned and used for road making, railway track ballast and other applications. The project proponent shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. The project proponent shall establish linkage for 100% reuse of rejects from Waste Recycling Plant.
- viii. Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.
- ix. Waste recycling Plant shall be installed to recover scrap, metallic and flux for recycling to sinter plant and SMS.
- x. In case of Non-Recovery coke ovens, the gas main carrying hot flue gases to the boiler, shall be insulated to conserve heat and to maximise heat recovery.
- xi. Tar Sludge and waste oil shall be blended with coal charged in coke ovens (applicable only to recovery type coke ovens).

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 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.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- 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, 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. 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. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xvi. 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.
- xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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

SL	Public Hearing Adressal Plan	Details of the Activity	Year-wise Plan of Action					Cost (in Lakhs)
			01st Year	02nd Year	03rd Year	4th Year	5th Year	
A	ACTION PLAN FOR EDUCATION SECTOR							
A 01	Development of Schools at nearby locality	<ul style="list-style-type: none"> •Development will include maintenance of existing school building, providing Furniture in classes and in staff room, white boards in classrooms. •Construction of toilets for boys & girls with septic tank. •Construction of Rain Water Harvesting (RWH) Pit. •Installation of Mark-II hand pump for drinking water. •Installation of playing slides & swings for students and distribution of Books and Uniforms to student •Plantation around the school. 	1. Mahuda Primary School 2. Kashiberia Primary School 3. Gobindapur Primary School	1. Kankdih Primary School 2. Gurguripa Primary School	1. Bhalkhuria Primary School 2. Tentulhiti 1 no. Primary School	1. Dubra High School 2. Dubra Girl's High School 3. Rukni Primary School 4. Gobindapur Junior High School	1. Alkusha Primary School 2. Raherdih JB School	200
		Budget in Lakhs	40	40	40	40	40	

SL	Public Hearing Adressal Plan	Details of the Activity	Year-wise Plan of Action					Cost (in Lakhs)
			01st Year	02nd Year	03rd Year	4th Year	5th Year	
A 02	Up-gradation of Company Owned Primary school to Junior Level and later upto 10th level with its development into Smart school.	<ul style="list-style-type: none"> •Construction of additional number of classrooms, staff room, offices, library and computer room. •Additional toilets for boys & girls as well as for staffs with septic tank and RWH pit •Providing furniture, white boards, computers and other accessories in all the classrooms, staff room, offices, library and computer labs, distribution of books and school uniform to students •Installation of Rooftop Solar panels for providing electricity to school, Solar high mast light, providing 2 No. of Bus •Organizing cultural & circular activities in the school. •Plantation surrounding School. 	100	200	200	200	200	900

SL	Public Hearing Adressal Plan	Details of the Activity	Year-wise Plan of Action					Cost (in Lakhs)
			01st Year	02nd Year	03rd Year	4th Year	5th Year	
A 03	Developmental activities for local schools	Construction of Boundary wall (10 schools)	1. Mahuda Primary School 2. Kashiberia Primary School 3. Gobindapur Primary School	1. Kankdih a Primary School	1. Bhalkhuria Primary School 2. Rukni Primary School	1. Dubra Girl's High School 2. Rukni Primary School	1. Alkusha Primary School	90
		Budget in Lakhs	30	10	20	20	10	
A 04	Developmental activities for local schools	Library	--	Dubra High School	--	Dubra Girl's High School	--	20
		Budget in Lakhs	--	10	--	10	--	
A 05	School Bus	Two buses will run to support School transportation	0.0	0	0	40	40	80
A 09	Rural Literacy Mission	This project aims to educate people between the ages of 15 and 65 in the locality.	10	10	10	10	10	50
TOTAL (A)			180	270	270	320	300	1340
B	ACTION PLAN FOR HEALTH CARE SECTOR							
B01	Construction of Health Checkup Centre with pathological facility	Construction of Health Check-up Centre at village Gobindpur & Gurguria with arrangement of visiting doctor 03 days in a week. Villagers shall be benefitted with	At Village Gobindpur & Gurguria	At Village Kankdih a	At Village Dubra	At Village Bhalkhuria	At Village Rukni	150

SL	Public Hearing Adressal Plan	Details of the Activity	Year-wise Plan of Action					Cost (in Lakhs)
			01st Year	02nd Year	03rd Year	4th Year	5th Year	
		free medical assistance and medicines from the centre at primary level treatment.						
		Budget in Lakhs	50	25	25	25	25	
B02	Establishment of Radio Diagnostic Centre and Pathological Lab	Establishment of Radio Diagnostic Centre with Pathological Lab will involve installation of state of art equipment along with necessary furniture, etc. with recruitment of professional staff and doctors. Company will be taking care of its day-to-day operations and medical stocks refilling and maintenance at Raghunathpur sub-division.	0.0	200.0	300.0	400	500	1400
B03	Elegant Care Hospital	Construction of Hospital at Raghunathpur sub-division.	100	200	200	300	400	1200
B04	Health on Wheels	Ambulance facility for Kashiberia (1) and Gobindapur (1) for emergency medical help of local villagers fully integrated with emergency facilities like	60	10	60	10	10	150

SL	Public Hearing Adressal Plan	Details of the Activity	Year-wise Plan of Action					Cost (in Lakhs)
			01st Year	02nd Year	03rd Year	4th Year	5th Year	
		cylinder, nebulizer, stretcher etc. with medicines.						
B05	Sanitary pad vending machines	Installation of Self-service Sanitary pad dispensing machines	2	2	2	2	1	9
B06	Mega Health Camp	Provision for Organizing Health Check-up & Treatment Camps with specialists like Gynaecologist, General Physician, Eye Specialists etc. along with distribution of free of cost Medicine to local villagers.	30	30	30	30	30	150
TOTAL(B)			242	467	617	767	966	3059
C	ACTION PLAN FOR RURAL INFRASTRUCTURE & DEVELOPMENT							
C01	Installation of Solar Light	Installation of street solar lights in schools & villages	40 Nos at village Mahuda	40 Nos. at village Kashiberia & Gobindapur	20 Nos. At village Rukni	10 Nos. at village Dubra	20 Nos. at village Alkusa	65
		Budget in Lakhs	20	20	10	5	10	
C02	Public Bus Stand	Construction of Public Bus Stand (2) with shelter near Mahuda village at Rukni More at SH-5 which will include Platform	At Village Mahuda	Near Dubra High School	--	Near Village Rukni Market	--	45

SL	Public Hearing Adressal Plan	Details of the Activity	Year-wise Plan of Action					Cost (in Lakhs)
			01st Year	02nd Year	03rd Year	4th Year	5th Year	
		construction and Installation of Pre-Fabricated Shelter.						
		Budget in Lakhs	15	15	--	15	--	
C03	Development of Rukni More	Development of Rukni More by revamping of existing road and installing high mast street light, Traffic Tower & installation of water cooler for drinking water facility along with beautification by tree plantation.	10	30	20	15	25	100
C04	Construction of Pucca Road (Paver Block) along with Water Drainage System	Construction of Pucca Road (Paver Block) for the approx. 1km along with revamping and construction of drain/culvert in the village Mahuda, Kashiberia and Gobindapur.	At Village Mahuda	--	At Village Kahiberia	--	At Village Gobindpur	300
		Budget in Lakhs	100	--	100	--	100	
C05	Temple	Construction of Temple	At Village Mahuda	--	At Village Rukni	--	--	80
		Budget in Lakhs	40.0	--	40.0	--	--	
C06	Temple	Renovation of Existing village Temples	At Village Mahuda	At Village Kashiberia	At Village Rukni	At Village Gobindapur	At Village Dubra	60
		Budget in Lakhs	12	12	12	12	12	

SL	Public Hearing Adressal Plan	Details of the Activity	Year-wise Plan of Action					Cost (in Lakhs)
			01st Year	02nd Year	03rd Year	4th Year	5th Year	
C07	Development of Community Hall	Construction of Community Hall Village Mahuda (1) and Kashiberia (1) for organizing social/cultural/marriage programs by villagers.	--	At Village Mahuda	--	At Village Kashiberia	--	100
		Budget in Lakhs	--	50.0	--	50.0	--	
C08	Development of Community Math (for community program)	Development of Community Math shall be done at village Mahuda, Kashiberia & Gobindapur with 01 room, sitting arrangement Mark-2 Hand Pump etc.	At Village Mahuda	At Village Kashiberia	At Village Gobindapur	At Village Rukni	At Village Dubra & Alkusha	180
		Budget in Lakhs	30	30	30	30	60	
C09	Children Park	Construction of two Children Parks	--	50	--	50	--	100
C10	Solar power at Children Park	Solar Power & light's installation at Children parks	--	25	--	25	--	50
C11	Development of Ponds for Rain Water Harvesting	Renovation/upgradation of village pond will include first time shaping with excavation and slide slope stabilization, Construction of 01 nos. Bathing Ghat on one side with changing area, toilets with	At Village Gobindpur & Gurguria	At Village Mahuda, Kankdhia & Bhalkhuria	At Village Kashiberia, Tentulhiti & Rukni	At Village Dubra	At Village Alkusha & Raherdih	275

SL	Public Hearing Adressal Plan	Details of the Activity	Year-wise Plan of Action					Cost (in Lakhs)
			01st Year	02nd Year	03rd Year	4th Year	5th Year	
		septic tank, hand pump and Beautification of pond by plantation of trees along boundary of pond along with Yearly Cleaning/Desilting of Pond.						
		Budget in Lakhs	50	75	75	25	50	
TOTAL(C)			277	307	287	227	257	1355
D	LIVELIHOOD, SKILL DEVELOPMENT & WOMEN EMPOWERMENT							
D 01	Skill Development Centre for Women	Construction of women community centre for promotion of self-help groups for women in villages for their skill development.	At Village Mahuda & Rukni	At Village Kashiberia & Gobindapur	At Village Dubra	At Village Alkusha	At Village Bhalkhuria	245
		Budget in Lakhs	70.0	70.0	35.0	35.0	35.0	
D 02	Samarthya (Women Empowerment)	Women empowerment programs to promote self-efficiency, such as by distribution of sewing machines and training for making cotton hand gloves, sanitary pads etc. in local villages. This will be an earning source for women in villages and	At Village Mahuda	At Village Kashiberia	At Village Dubra	At Village Gobindapur	At Village Rukni	125

SL	Public Hearing Adressal Plan	Details of the Activity	Year-wise Plan of Action					Cost (in Lakhs)
			01st Year	02nd Year	03rd Year	4th Year	5th Year	
		economic empowerment.						
		Budget in Lakhs	25	25	25	25	25	
D 03	Skill Development Centre for local youth	Establishment of Skill Centre in Dubra Village Panchayat. Vocational training will be given to local youths in the field of Automobile Repair, Welding, Electrical, Computer Hardware, etc, so as to open new areas to get employment for them.	--	--	5	85	5	95
D 04	Skill Development Centre for local youth	Establishment of Computer Training Center in Dubra Village Panchayat for the youths to get the training of computer courses and have more opportunities of employment in different areas	--	--	20	50	20	90
D 05	Skill Development Program	Mass community based programs to promote and enhance skills in rural segments	5	5	5	5	--	20

SL	Public Hearing Adressal Plan	Details of the Activity	Year-wise Plan of Action					Cost (in Lakhs)
			01st Year	02nd Year	03rd Year	4th Year	5th Year	
		and support locals.						
D 06	Skill Development Program	Establishment of a model Anganwari and nutrition center (1) for pregnant and lactating women in the Dubra Village Panchayat region to improve women's health and cleanliness.	30	10	10	10	10	70
TOTAL(D)			130	110	100	210	95	645
E	ENVIRONMENT & SUSTAINABILITY							
E0 1	Plantation	Plantation shall be done toward nearby villages of the project site and different other locations including schools and roadside plantations as mentioned in the year wise plan in this table.	500 Nos. Towards At village community ground and Gobindapur play ground	250 Nos. Towards At village Raherdi h	200 Nos Towards At village Kankdi ha	300 Nos. Around Dubra Girls High school and around Playgrou nd	500 Nos. Toward s village Kashibe ria	56
			800Nos. Either side of the road connecting to plant from Mahuda road		200 Nos. At village Gurguri a & 200 Nos. around village Alkush a	200 Nos Towards At village Bhalkhuri a		
		Budget in Lakhs	19.5	7.5	13.0	8	8	
E0 2	Water Sprinkling on roads	Company has already deployed and shall also be	--	01 Truck mounted	--	01 Truck mounted	--	

SL	Public Hearing Adressal Plan	Details of the Activity	Year-wise Plan of Action					Cost (in Lakhs)
			01st Year	02nd Year	03rd Year	4th Year	5th Year	
		deployed 02 nos. water tankers for suppression of dust due to vehicular movement		water tanker		water tanker		100.0
		Budget in Lakhs	--	50.0	--	50.0		
E03	Truck Mounted Mist Cannon, Mist Cannon & Rain Gun	Provision of installing Mist Cannon (10) nos., Truck Mounted Mist Cannon (2) and Rain Gun (25) towards for suppression of fugitive dust towards village Mahuda, Kashiberia, Gobindapur and Rukni as additional safeguard measure for nearby villages	10 Mist Cannon	01 Truck Mounted Mist Cannon	10 Rain Gun	01 Truck Mounted Mist Cannon	15 Rain Gun	220.0
		Budget in Lakhs	50	60.0	20	60.0	30.0	
E04	Road Sweeping Machine	Company shall purchase a truck mounted road sweeping machine (2) to reduce fugitive dust emission from roads due to vehicular movements.	01 Road Sweeping Machine	01 Road Sweeping Machine	--	--	--	110.0
		Budget in Lakhs	55	55	--	--	--	
TOTAL(E)			124.5	172.5	33	118	38	486
F	DRINKING WATER, HYGIENE & SANITATION							

SL	Public Hearing Adressal Plan	Details of the Activity	Year-wise Plan of Action					Cost (in Lakhs)
			01st Year	02nd Year	03rd Year	4th Year	5th Year	
F01	Village Health, Sanitation & Nutrition Program	The purpose is to address health and social issues related to Sanitation and Nutrition at the village level	30	30	30	30	30	150
F02	Kushal Gram Vikas Yojana (Rural Cleanliness Program)	The program addresses the cleanliness activities in nearby villages and locality	15	15	15	15	15	75
F03	Humanitarian aid	Provision for supply of drinking water on community festivals and programs in nearby villages through tractor mounted water Tanker.	10	10	10	10	10	50
F04	Drinking Water Facility	Installation of Mark-2 Hand Pump	10 nos each at village Gobindapur Kashiberia and Mahuda	10 Nos. at village Rukni	10 Nos. at village Alkusa	10 Nos. at village Dubra	10 Nos. at village Gurgurina	56
		Budget in Lakhs	24	8	8	8	8	
F05	Water Tanker for supply of drinking water	Company shall arrange 03 nos. water tanker for drinking water supply to local villagers for their community needs.	01 no. water tanker with tractor	--	01 no. water tanker with tractor	01 no. water tanker with tractor	--	75
		Budget in Lakhs	25.0	--	25.0	25.0	--	

SL	Public Hearing Adressal Plan	Details of the Activity	Year-wise Plan of Action					Cost (in Lakhs)
			01st Year	02nd Year	03rd Year	4th Year	5th Year	
TOTAL(F)			104	63	88	88	63	406
G	SPORTS							
G 01	Development of Playground	Development of Football Ground along with promotion of sports activity every year in Village Mahuda (1), Kashiberia (1) and Rukni (1).	At Village Gobindpura	--	At Village Kashiberia	--	At Village Rukni	75
		Budget in Lakhs	25	--	25	--	25	
G 02	Sports Promotion among local youth	Provision of organizing yearly sports tournaments sponsored by the M/s BSIPL in Village Kashiberia, Dubra, Govindapur, Mahuda, Rukni for promotion of sports activity and increasing awareness of body fitness and healthy body among youths.	Company shall organize Football/Cricket tournament for the youths of village Kashiberia, Dubra, Gobindapur, Mahuda, Rukni for promotion of sports activity and increasing awareness of body fitness and healthy body among youths.					75
		Budget in Lakhs	15	15	15	15	15	
G 03	School Sports	Implementation of District Level Sports Academy (1) near Raghunathpur Area for providing a platform to guide & train the local talented youths for national and	100	100	75	100	75	450

SL	Public Hearing Adressal Plan	Details of the Activity	Year-wise Plan of Action					Cost (in Lakhs)
			01st Year	02nd Year	03rd Year	4th Year	5th Year	
		international level games.						
TOTAL(G)			140	115	115	115	115	600
H	SOCIAL INCLUSION & COMMUNITY DEVELOPMENT							
H 01	Community Cultural Development Program	Company shall invest for community development programs for the village Mahuda, Gobindapur for making Community Rasoi & worship temples as demanded by the local people	Community Rasoi & Shed at village Mahuda	Community Temple at Village Gobindapur	Community Rasoi & Shed at village Dubra	--	Community Rasoi & Shed at village Rukni	95
		Budget in Lakhs	25	20	25	--	25	
H 02	Hope Centre for 'specially abled' children	Construction of infrastructure for various rehabilitation services such as physiotherapy for mobility improvement, special education to mentally challenged children, special education for speech and hearing impaired children, and creating skill upgradation opportunities at village panchayat Dubra.	30	30	75	75	50	260

SL	Public Hearing Adressal Plan	Details of the Activity	Year-wise Plan of Action					Cost (in Lakhs)
			01st Year	02nd Year	03rd Year	4th Year	5th Year	
H 03	Burning Ghat	Construction of Burning ghat for all nearby villages	0	40	40	20	25	125
H 04	Snan Ghat	Construction of Snan Ghats for nearby Villages	0	20	20	15	0	55
H 05	Construction of Community Market	Construction of community market for the benefit of local people.	15	15	15	15	15	75
TOTAL(H)			70	125	175	125	115	610
Budget as per issues raised during public hearing (Rupees in Lakh)								8501
Total (Rupees in Crores)								85

