Ministry of Environment, Forest and Climate Change
Impact Assessment Division
(Industry-1 Sector)

Summary record of the thirty fourth (34th) meeting of Re-Constituted Expert Appraisal Committee (REAC) held on 15-16th April, 2021 for environment appraisal of Industry-1 sector projects constituted under the provisions of Environment Impact Assessment (EIA) notification, 2006.

The thirty fourth meeting of the Expert Appraisal Committee (EAC) for Industry-1 Sector constituted as per the provisions of the EIA Notification, 2006 for Environment Appraisal of Industry 1 Sector Projects was held on **15-16th April, 2021** in the Ministry of Environment, Forest and Climate Change (MoEF&CC) through **video conferencing** in view of the ongoing Corona Virus Disease (Covid-19) pandemic. The list of EAC attendees is as follows.

S. No.	Name	Position	15/04/2021	16/04/2021
1.	Dr. Chhavi Nath Pandey	Chairman	Present	Present
2.	Dr. Kawaljeet Singh, Scientist 'F', CPPRI.	Member	Present	Present
3.	Dr. Siddharth Singh, Scientist 'E' IMD.	Member	Present	Present
4.	Dr. Jagdish Kishwan	Member	Present	Present
5.	Dr. Tejaswini Ananth Kumar	Member	Present	Present
6.	Dr. G.V. Subramanyam	Member	Present	Present
7.	Shri. Ashok Upadhyaya	Member	Present	Present
8.	Shri. Rajendra Prasad Sharma	Member	Present	Present
9.	*Dr. Sanjay Deshmukh*	*Member*	*Absent*	*Absent*
10.	Prof. S.K. Singh	Member	Present	Present
11.	*Dr. R. Gopichandran*	*Member*	*Absent*	*Absent*
12.	Shri Jagannadha Rao Avasarala	Member	Present	Present
13.	Shri. J.S. Kamyotra	Member	Present	Present
Officials from MoEF&CC				
14.	Shri. Sundar Ramanathan	Member Secretary	Present	Present
15.	Dr. Mahendra Phulwaria	Scientist 'C'	Present	Present

After welcoming the Committee Members, discussion on each of the agenda items was taken up. The minutes of 33rd meeting held during 30-31st March, 2021 were confirmed by the EAC as already uploaded on PARIVESH except the following:

33.3 Proposed expansion of steel plant-New Installation of DRI Kilns (Sponge Iron 3,46,500 TPA), Expansion of Induction Furnace (Ms Billets from 55, 500 TPA to 4,12,500 TPA), New Installation of Rolling Mill (TMT Bars/Structural Steel 3,96,000 TPA), New Installation of WHR based Power Plant 24 MW, New Installation of CFBC based Power Plant 20 MW] by **M/s. AMMAN-TRY Sponge & Power (P) Limited** located at Sirasanambedu Village, Mandal Pellakur, **District SPSR Nellore, Andhra Pradesh** -[Online Proposal No. IA/AP/IND/204530/2008, File No. J-11011/308/2019-IAII(I)] –

Environment Clearance– regarding.

Minutes uploaded on PARIVESH:

33.3.6 Implementation status of the existing EC

Sl. No.	Facilities	Units	As per EC dated 29/06/2010	Implementation Status as on 15/03/2021	Production as per CTO
1	DRI kilns	Sponge Iron	180 TPD (54,000 TPA)	Not implemented	Nil
2	Induction Furnaces	MS Billets	370 TPD (1,11,000 TPA)	In operation	54,000 TPA
3	Rolling mill	TMT Bars/ Structural steel	200 TPD (60,000 TPA)	Not implemented	Nil
4	Power	Electricity	8MW (WHRB-4MW & FBC - 4MW)	Not implemented	Nil

33.3.7 The unit configuration and capacity of existing and proposed project is given as below:

S.N.	Name	Existing Units		Proposed Units		Total (Existing + Proposed)	
		Configuration	Production	Configuration	Production	Configuration	Production
1	DRI kilns	2X90 TPD	180 TPD (54,000 TPA)	3x350 TPD	3,46,500 TPA	3x350 TPD	3,46,500 TPA
2	Induction Furnaces	4X12 T	370 TPD (1,11,000 TPA)	1X24 MT & 2X30MT	3,21,500 TPA **Up gradation of Existing Furnace to increase production from 55,500 TPA to 91,000 TPA (Increase by 35,500 TPA)**	2X24 MT & 2X30MT	4,12,500 TPA
3	Rolling mill	1X200 TPD	200 TPD (60,000 TPA)	1X1200 TPD	3,96,000 TPA	1X1200 TPD	3,96,000 TPA
4	Power	2X2 =4 MW 1x4 MW	8MW (WHRB-4MW & FBC - 4MW)	3X8 =24 MW 1X20 MW	44MW (WHRB-24MW & FBC - 20MW)	3X8 =24 MW 1X20 MW	44MW (WHRB-24MW & FBC - 20MW)

To be read as:

33.3.6 Implementation status of the existing EC

Sl. No.	Facilities	Units	As per EC dated 29/06/2010	Implementation Status as on 15/03/2021	Production as per CTO
1	DRI kilns	Sponge Iron	180 TPD (54,000 TPA)	Not implemented	Nil
2	Induction Furnaces	MS Billets	370 TPD (1,11,000 TPA)	In operation	55,500 TPA
3	Rolling mill	TMT Bars/ Structural steel	200 TPD (60,000 TPA)	Not implemented	Nil
4	Power	Electricity	8MW (WHRB-4MW & FBC - 4MW)	Not implemented	Nil

33.3.7 The unit configuration and capacity of existing and proposed project is given as below:

S.N.	Name	Existing Units		Proposed Units		Total (Existing + Proposed)	
		Configuration	Production	Configuration	Production	Configuration	Production
1	DRI kilns	Nil	Nil	3x350 TPD	3,46,500 TPA	3x350 TPD	3,46,500 TPA
2	Induction Furnaces	2X12 T	55,500 TPA)	1X24 MT & 2X30MT	3,21,500 TPA **Up gradation of Existing Furnace to increase production from 55,500 TPA to 91,000 TPA (Increase by 35,500 TPA)**	2X24 MT & 2X30MT	4,12,500 TPA
3	Rolling mill	Nil	Nil	1X1200 TPD	3,96,000 TPA	1X1200 TPD	3,96,000 TPA
4	Power	Nil	Nil	3X8 =24 MW 1X20 MW	44MW (WHRB-24MW & FBC - 20MW)	3X8 =24 MW 1X20 MW	44MW (WHRB-24MW & FBC - 20MW)

15th April, 2021

34.1 Expansion of steel plant by enhancing production capacity of billets (or) TMT from 1000 TPD to 3000 TPD with no change in Sponge Iron (1000 TPD) and CPP (50 MW) by **M/s. Om Sairam Steels and Alloys Private Limited** located at plot no 1, 2, 3, 8, 9, 10 addl. MIDC, Phase- II, and Adjacent Gut no. 46 & 63, Village- Daregaon, Tehsil & **District Jalna, Maharashtra** [Online Proposal No. IA/MH/IND/205502/2015; File No J-11011/57/2015-IA.II (I)] – **Environment Clearance** – regarding**.**

34.1.1 M/s. Om Sairam Steels and Alloys Private Limited has made an online application vide proposal no. IA/MH/IND/205502/2015 dated 25/03/2021 along with copy of EIA/EMP report and Form 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. **3(a) Metallurgical industries (ferrous & nonferrous)** under Category "A" of the schedule of the EIA Notification, 2006 and appraised at the Central level.

Details submitted by Project proponent

34.1.2 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord
24/04/2019	8th meeting of EAC held on 26th June, 2019	Terms of Reference	05/09/2019

34.1.3 The project of M/s Om Sairam Steel & Alloy Limited located at Plot no 1,2,3,8,9,10 addl. MIDC, Phase-II and Gut No. 46 & 63 at Village Daregaon, Tehsil & District Jalna, Maharashtra is for expansion of steel plant by enhancing production capacity of billets (or) TMT from 1000 TPD to 3000 TPD with no change in 1000 TPD of Sponge Iron and 50 MW CPP.

34.1.4 Environmental Site Settings:

SN	Particulars	Detail
i.	Total land	6.86 ha [Government land 6.86 ha]
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Proposed expansion is coming within the existing plant premises. Hence, no land acquisition is required.
iii.	Existence of habitation & involvement of R&R, if any.	Proposed expansion is coming within the existing plant premises. Hence, no land acquisition is required. In view of this, no R&R is required.
iv.	Latitude and Longitude of the project site	**Corner** / **Latitude** / **Longitude** A / 19˚50'53.65" / 75˚50'45.04" B / 19˚50'51.09" / 75˚50'45.15" C / 19˚50'51.12" / 75˚50'45.68" D / 19˚50'46.50" / 75˚50'41.26"

SN	Particulars	Detail
		E: 19°50'46.36" 75°50'33.88" F: 19°50'45.56" 75°50'33.93" G: 19°50'45.42" 75°50'31.96" H: 19°50'46.34" 75°50'31.85" I: 19°50'46.07" 75°50'29.11" J: 19°50'48.98" 75°50'28.76" K: 19°50'50.00" 75°50'35.75" L: 19°50'52.74" 75°50'35.53"
v.	Elevation of the project site	530m above MSL
vi.	Involvement of Forest land if any.	No forest Land involved.
vii.	Water body exists within the project site as well as study area	**Project site:** Nil **Study area:** Moti Talab:2.24 km in ESE Mukteswar Talab: 3.2 km in ESE Kundalika River: 3.9 km in East
viii.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	Nil.

34.1.5 Chronology of statutory clearances for existing project:

Date	Statutory Order
30/12/2015	Consent to Operate for MS Bar vide letter no. MPCB-15/15704 dated:-30.12.2015 valid up to 31.08.2025
02/12/2016	Consent to Operate for MS Billet vide letter no. BO/JD (APC)/ EIC No.AD-18272- 16/ R/CC-10758 dated:-2.12.2016 valid up to 31.05.2021
29/12/2010	SEAC-2009/CR-200/TC-2 for 2 x 30 T IF along with existing 1 x 25 T & 1 x 30T Furnaces for manufacturing TMT bars 1000 TPD.
22/01/2018	Environmental Clearance for production of Billet/ Ingots (528 to 1000 TPD), Sponge Iron (1000 TPD) and Captive Power Plant (50 MW) vide letter no. J-11011/57/2015-IA-II(I).
05/06/2018	Consent to Establish for MS Billet vide letter no. BO/JD (APC) //E/UAN No. 39959/ CC-1806000216 dated 05.06.2018 valid up to 31.05.2021
17/09/2019	Amendment in Environment Clearance for change in configuration of Induction Furnace 1 x 25T, 4 x 30 T vide letter no. J-11011/57/2015-IA.II(I).

34.1.6 Implementation status of the EC dated 29/12/2010 and 22/01/2018:

S. No.	Facilities	Units	As per EC dated 29/12/2010 & 22/01/2018	Implementation Status as on date	Production as per CTO
1.	Sponge	TPD	1000	Nil	Nil

S. No.	Facilities	Units	As per EC dated 29/12/2010 & 22/01/2018	Implementation Status as on date	Production as per CTO
	Iron				
2.	Billets/ Ingots	TPD	1000	1000	1000
3.	TMT bars	TPD	1000	1000	1000
4.	Power generation	MW	50	Nil	Nil

34.1.7 The unit configuration and capacity of existing and proposed project is given as below:

S.No.	Name	Existing Units		Proposed Units		Total (Existing +Proposed)	
		Configuration	Production	Configuration	Production	Configuration	Production
1.	Induction Furnace	1 x 25 T, 1 x40 T & 1 x 30T IF	1000 TPD	2 x 40 T & 3 x 60 T by modification of existing 1 x 25 T furnace to 40 T furnaces & all 30 T furnace to 60 T	2000 TPD	2 x 40 T & 3 x 60 T	3000 TPD
2.	Sponge iron	2 x500 TPD	1000 TPD	Nil	Nil	2 x500 TPD	1000 TPD
3.	Captive Power plant	50 MW (24 MW FBC + 26MW WHRB)	50 MW	Nil	Nil	50 MW (24 MW FBC + 26MW WHRB)	50 MW

34.1.8 The details of the raw material requirement for the expansion cum proposed project along with its source and mode of transportation is given as below:

S. No.	Raw Material	Quantity required per annum (MTPA)			Source	Distance from site (Km)	Mode of Transportation
		Existing	Expansion	Total			
1	Iron Ore Pellets	495000	0	495000	Local market	400	Road
2	Indian Coal	142800	10500	153300	Chandrapur	800	Road
3	DRI Grade Coal (B Gr)	40800	355200	396000	Raigarh	700	Road
4	Iron Scrap	34000	631000	665000	Mumbai and Local Sources	100	Road
5	Pig Iron	27200	77800	105000	Raipur, Bellari	400	Road

S. No.	Raw Material	Quantity required per annum (MTPA)			Source	Distance from site (Km)	Mode of Transportation
		Existing	Expansion	Total			
6	Silico Manganese	3400	6600	10000	Local Purchase	700	Road
7	Dolomite	16500	0	16500	Bhilwara	800	Road

34.1.9 The recirculation water requirement for the project [post expansion] is estimated as 9865 10967 m^3/day, out of which fresh water requirement of 832 m^3/day which will be obtained from MIDC.

34.1.10 The power requirement for the project is estimated as 58 MW, which will be obtained from the captive Power Plant (50 MW) and balance 8 MW shall be from MSEDCL. Two DG set of 2* 750 KVA shall be installed for standby.

34.1.11 Baseline Environmental Studies:

Period	December 2018 to February 2019
AAQ parameters at 8 locations	$PM_{2.5}$ - 18.9 to 27.9 μg/m^3 PM_{10} – 42.4 to 62.2 μg/m^3 SO_2 - 10 to 10.40 μg/m^3 NO_2 - 11 to 28.41μg/m^3
AAQ modelling	PM_{10} – 0.411μg/m^3 SO_2 - 0.595 μg/m^3 NOx - 0.540 μg/m^3
Ground water quality at 5 locations	pH: 7.2 to 7.8, TDS: 668-689 mg/l, Total hardness: 265 – 284.2 mg/l, Iron: 0.05 - 0.2 mg/l, fluoride: 0.28 - 0.62 mg/l, chloride: 152 – 173 mg/l, Sulphate 113 – 152 mg/l.
Surface water quality at 7 locations	pH: 7.3 to 7.8, Total Hardness: 341 to 451 mg/l, COD varies 9.8-11.2 mg/lit, BOD varies 2.1 – 3.1mg/lit.
Noise levels	40.4 Leq dB (A) to 72.6Leq dB (A) for day time and 36.4 Leq dB(A) to 56.4Leq dB (A) for night time
Traffic assessment study findings	It is observed that, where there is industrial activity, the traffic flow increases between 3 PM and 9PM. Otherwise the general traffic flow reflects the peak hour traffic conditions. All the industrial flow of traffic is observed in T-Lock-1-T-Lock-2 and T-lock-3 monitoring locations. As T-Lock-3 is at the outer ring of the Jalna on NH-30, the differential average flow of traffic is an indicator of traffic absorption in industries for the timeline of permissible traffic on road after 7 PM. In general, it is observed that the traffic flow is minimum during the mid-day period between 12 Noon and 5 PM. Further the trend is lower due to non-availability of traffic flow data between 12 Noon and 3 PM in each location. However, it may be concluded that the lowest traffic is during the Noon hours and the highest traffic due to Industrial activities are observed between 7- 10 Pm each day.
Flora and fauna	No such area within 15km radius of the proposed project which are protected, important or sensitive species of flora or fauna for

	breeding, nesting, foraging, resting, over wintering, migration.

34.1.12 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S No	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment / Disposal
1	Spent/ Used Oil: Hazardous waste	Mechanical workshop	1.2KL/annum	Stored separately and sent to authorized recyclers
2	Used Cotton: Hazardous waste	Mechanical workshop	12Kg /annum	Stored separately and sent to TSDF
3	STP Sludge: solid waste	Domestic	0.340	Used as manure
4	Inert	Refractory	144	To be used as building material
5	Dolochar		254320	Will be used in FBC
6	Slag		80240	Will be sold (or) reused.
7	Ash		40120	Will be sent to brick manufacturer

34.1.13 Public Consultation:

Details of advertisement given	08/01/2020
Date of public consultation	10/02/2020
Venue	M/s Om Sairam Steels and Alloys (Proposed Site) Plot no. F-1,2,3,8,9,10 Add. MIDC, Phase-II and Gut No 46 & 63 at Village Daregaon, & Plot No. D-53/1, D-52/6 & D-52/7 District Jalna, Maharashtra
Presiding Officer	Additional District Magistrate, District Jalna
Major issues raised	• Increase no of plantation of trees with tree guard • Increase expenditure for Daregaon village • Rain water Harvesting • Environmental Pollution, • Employment to local villagers, • Monitoring of Environmental pollution control measures.

Point-wise Action plan as per MoEF&CC O.M. dated 30/9/2020

S No	Issue Raised	Physical Target	Budget in INR
1.	Shri Ganesh Tukaram Dhavle, the Ex. Sarpanch, Daregaon, Tq. & Dist: Jalna suggested to spend 25% expenditure under the social work for Daregaon village as the project is located at Daregaon village. He also stated that the company will plant 3600 trees, hence he suggested to plant 1000 trees with tree guard in Daregaon village. He congratulation to project proponent as Company planted 500 Nos. of trees with tree guard in	2000 trees will be planted in the nearby village within next two years.	4,00,000/-

S No	Issue Raised	Physical Target	Budget in INR
	Daregaon before 4 years.		
2.	Shri Kisanrao Tiruke, the Sarpanch, Grampanchayat, Daregaon, Tq. & Dist: Jalna asked whether employment will be given to maximum people in their village as the company is located in the village area	10 people from Daregaon and another 10 people from other nearby villages will be provided suitable jobs in the plant, with respect to their qualification. Planned to provide jobs by 2023.	3,60,000/- (@18000x20 people)
3.	Shri M.B. Korke, the Gramsevak, Grampanchayat, Daregaon, Tq & Dist: Jalna expected that the stack to be provided for control of pollution shall of good quality, the work of rain water harvesting shall also be good so that their village will get the benefit and also they will get water, hence he suggested to give proper attention towards pollution and rain water harvesting	Construction of rain water harvesting structures in the village	5,00,000/-
	Total		**12,60,000/-**

34.1.14 The capital cost of the project is Rs. 103.85 Crore [Expansion] and the capital cost for environmental protection measures including cost to address the public hearing issues is proposed as Rs. 12.49 Crore. The annual recurring cost towards the environmental protection measures is proposed as Rs 4.60 Crores. The employment generation from the proposed project/ expansion is 610 nos. The details of cost for environmental protection measures is as follows:

S.No.	Description of Item	Existing (Rs. In lakhs)	
		Capital Cost	Recurring Cost
i.	Air Pollution Control/Noise	1140.00	388.00
ii.	Water Pollution Control	65.00	36.00
iii.	Environmental Monitoring and Management	15.00	24.00
iv.	Green Belt Development	16.50	12.00
v.	Addressing Public Consultation concerns	12.60	0.00
Total		**1249.10**	**460.0**

34.1.15 Greenbelt will be developed in 2.74 ha (existing 1.0321 ha and proposed 1.7078 ha) which is about 40 % of the total project area (6.86 ha). A 2.5 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 6850 saplings will be planted and nurtured in 2.74 hectares in 3 years.

34.1.16 It has been reported by PP that, there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

34.1.17 Name of the EIA consultant: M/s Ardra Consulting Services Pvt. Ltd, Bhubaneswar [S.No. 87, List of ACOs with their Certificate / Extension Letter no. Rev. 09, Apr. 12, 2021].

Certified compliance report from Regional Office

34.1.18 The Status of compliance of earlier EC dated 22/01/2018 has been obtained from RO, MoEF&CC, Nagpur vide Letter No. EC-409/RON/2017-NGP/7549 dated 07/12/2020. As per the report, RO reported that only expansion of metallurgical industry (528 TPD to1000 TPD) has been carried out. Sponge iron plant and captive power plant have not been set up. Most of the conditions of the EC pertain to sponge iron plant and captive power plant. PP submitted that the same will be complied during the construction and operation of the plants. Besides, the RO reported that PP is yet to establish Environment Management Cell, less expenditure towards ESC related activities, and six-monthly compliance reports are not being regularly submitted to the Regional Office.

34.1.19 M/s Om Sairam Steels and Alloys private Limited has made earlier online application IA/MH/IND/195309/2015 dated 29/01/2021 and Re-constituted EAC considered the proposal in 30th meeting held during 10-11th February, 2021. The Observation and recommendation of EAC is given below:

Observations of the Committee held during 10-11th February, 2021

34.1.20 The Committee noted the following:

i. The issues raised during public consultation have not been adequately addressed in the EIA report in the form of an action plan with physical targets as per the MoEF&CC O.M. dated 30/09/2020.
ii. TOR point # 9 pertaining to Corporate Environment Policy is not addressed in EIA.
iii. Format used for EIA team declaration is not as per NABET requirement.
iv. EIA report is generic. Impacts and mitigation measures have not been quantified and EMP chapter does not describe administrative measures to be taken to implement the EMPs. Quantified EMPs have also not been furnished.

Recommendations of the Committee held during 10-11th February, 2021

34.1.21 In view of the foregoing observations and deliberations, the committee recommended for return the proposal in present form.

34.1.22 The project proponent has made again online application vide proposal no IA/MH/IND/205502/2015 dated 25/03/2021. The proposal was considered by the EAC (Industry 1) in its 34th meeting of the Re-constituted EAC (Industry-I) held on 15- 16th April, 2021. The observations and recommendations of EAC is given as below.

Observations of the Committee

34.1.23 The Committee noted the following:

i. The existing and proposed unit configuration and production capacities of Sponge Iron, Billets and TMT stated in the ToR accorded, Form 2, EIA report and presentation made before the EAC are not matching with each other.

ii. Action plan with physical targets to address the issues raised during public hearing given at page 197-201 of EIA report is not in line with the MoEF&CC Office Memorandum dated 30/09/2020. It is further observed that the said action plan reported to be addressed in Chapter 8, section 8.5, Table 8.1 of EIA is not available in the document. There is no table 8.1 under section 8.5.

iii. TOR point #9 pertaining to Corporate Environment Policy not addressed as per the requirement furnished in the text for TOR (section 10.4 page 215-217 of EIA report).

iv. The text of Chapter 9 in the revised EIA report is irrelevant.

v. Action taken report on the observations stated in the RO report dated 07/12/2020 has not been furnished.

vi. Slide # 48 of PPT submitted reads as, "Measures to control fugitive emission are reported as Periodic cleaning of ESP and Bag houses, online stack monitoring of ESP, bag change over and regular heath checkup of the employees". These are not the measures to control fugitive emissions.

vii. Only 15 % land is available for green belt development inside the plant premises. Additional land of 1.7078 ha is said to have been given by MIDC outside the plant does not belong to PP and MIDC has not provided any assurance to not to disturb this green belt or cut it whenever needed. This needs to be revisited.

viii. Stack details of the DRI plant has not been considered for the purpose of emission calculation and AAQ modeling.

ix. Chimney design needs to be revisited as the flue gas temperature is indicated as 80°c and at this temperature there will be corrosion of chimney and heat exchanger making it unsafe.

x. The quality of the EIA report was not found up to the mark with respect to Appendix III of the EIA Notification, 2006 and most of the sections in Form 2 was found be not filled in properly.

Recommendations of the Committee

34.1.24 In view of the foregoing observations, the committee recommended the following:

i. Proposal is recommended to be returned in its present form to address the shortcomings mentioned above.

ii. Show Cause Notice is recommended to be issued to the EIA consultant - M/s Ardra Consulting Services Pvt. Ltd, Bhubaneswar as the consultant has repeatedly submitted the EIA report on 29/01/2021 and 25/03/2021 with several deficiencies and no tangible efforts are made to improve upon the same.

34.2 Expansion and modernization of Iron ore Crushing, screening capacity 1.2 MTPA to 1.5 MTPA and 1.5 MTPA Iron ore Beneficiation Plant by **M/s Godawari Natural Resources Private Limited** located at Village Gidhali, Tehsil Dondi, **District Balod, Chhattisgarh [**Online Proposal No. IA/CG/IND/207110/2020;File No J-11011/48/2020-IA.II(I)] – **Environment Clearance** – regarding.

34.2.1 M/s Godawari Natural Resources Private Limited has made an online application vide proposal no. IA/CG/IND/207110/2020 dated 31/03/2021 along with copy of EIA/EMP report and Form – 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 2(b) Mineral beneficiation under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by Project proponent

34.2.2 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord
05/02/2020	16th meeting held on 25th February 2020	Terms of Reference	06/04/2020
19/08/2020	23rd meeting held on 28th – 30th September 2020.	Amendment in ToR	04/11/2020
31/10/2020	-	Name change in ToR	11/11/2020

34.2.3 The project of M/s Godawari Natural Resources Pvt. Ltd. Located in Gidhali Village, Dondi Tehsil, Balod District, Chhattisgarh State is for setting up of Capacity enhancement of production of Iron ore Crushing, Screening from 1.2 MTPA to 1.5 MTPA and establishment of 1.5 MTPA Iron Ore Beneficiation Plant.

34.2.4 Environmental Site Settings

<table>
<tr><th>S. No.</th><th>Particulars</th><th colspan="3">Details</th></tr>
<tr><td>i.</td><td>Total land</td><td colspan="3">27.53 ha
[Private Land]
Land use: Industrial</td></tr>
<tr><td>ii.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td colspan="3">Entire land of 27.53 ha is under the possession of M/s Godavari Natural Resources Private Limited</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td colspan="3">Nil</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of the project site</td><td>Points</td><td>Latitude</td><td>Longitude</td></tr>
<tr><td></td><td></td><td>A.</td><td>20°41'4.38"N</td><td>81°4'42.64"E</td></tr>
<tr><td></td><td></td><td>B.</td><td>20°41'3.95"N</td><td>81°4'45.67"E</td></tr>
<tr><td></td><td></td><td>C.</td><td>20°41'7.78"N</td><td>81°4'46.25"E</td></tr>
</table>

S. No.	Particulars	Details
		D. 20°41'6.91"N 81°4'50.19"E E. 20°41'9.45"N 81° 5'7.66"E F. 20°41'15.83"N 81°5'9.72"E G. 20°41'23.59"N 81°5'1.31"E H. 20°41'25.48"N 81°4'58.11"E I. 20°41'21.48"N 81°4'31.52"E J. 20°41'20.48"N 81°4'31.59"E
v.	Elevation of the project site	380 AMSL
vi.	Involvement of Forest land if any.	Nil
vii.	Water body exists within the project site as well as study area	**Project site:** A small water body present close to boundary in North direction. **Study area:** i. Keshala Nallah at 0.10 km in West ii. Gondli reservoir at 2.7 km in NNE iii. Tandula Reservoir at 7.0 km East
viii.	Existence of ESZ/ ESA/ national park / wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	Nil

34.2.5 The existing project was accorded Consent to Operate vide Letter. no. 2152 & 2154 dated 31/03/2008. Existing unit is only for Crushing & screening of iron ore, which does not attract provisions of EIA Notification 1994 & 2006. Consent to Operate for the existing unit was accorded by Chhattisgarh Environment Conservation Board vide Letter. no. 306/TS/CECB/2019 dated 12/04/2019. The validity of CTO is up to 13/06/2024.

34.2.6 Implementation status of the CTO:

Facilities	Units	Implementation Status as on 31/03/2021	Production as per CTO
1.2 MTPA iron ore Crushing & Screening Plant	MTPA	1.2 MTPA Iron ore crushing & screening	1.2 MTPA Iron ore crushing & screening

34.2.7 The unit configuration and capacity of existing and proposed project is given as below:

S.	Name	Existing Units		Proposed Units		Total (Existing + Proposed)	
		Configuration	Production TPA	Configuration	Production TPA	Configuration	Production TPA
1.	Iron Ore crushing, Screening	1 x 1.2 MTPA	1,200,000 TPA	--	3,00,000 TPA	1 x 1.5 MTPA	1,500,000 TPA

S.	Name	Existing Units		Proposed Units		Total (Existing + Proposed)	
		Configuration	Production TPA	Configuration	Production TPA	Configuration	Production TPA
2.	Iron Ore Beneficiation Plant	--	--	1 x 1.5 MTPA	1,500,000 TPA	1 x 1.5 MTPA	1,500,000 TPA

34.2.8 The details of the raw material requirement for the expansion cum proposed project along with its source and mode of transportation is given as below:

Sl. No.	Raw Material	Quantity required per annum			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
1.	Iron Ore Lumps & Fines	1200000	300000	1500000	Material from nearby mines of BSP JNIL IGL etc	25 to 120 KM	In Tarpaulin covered Truck/ Tipper/ Dumper by road.
2.	Crushed Low grade Iron Ore	-	1500000	1500000	From Crushing & screening units	Within plant	Closed Conveyor Belt

34.2.9 The water requirement for the project is estimated as 370 m^3 /day, which will be obtained from the Ground water. The permission for drawl of groundwater is obtained from CGWA vide Letter. No. CGWA/NOC/IND/ORIG/2021/9873 dated 30/12/2020. Application for withdrawal of 370 m^3/day surface water from Keshala nallah has been submitted to WRD, Chhattisgarh. Once the permission is granted, ground water will be used only for domestic use (i.e. 5 m^3/day).

34.2.10 The power requirement for the project is estimated as 2 MW which will be obtained from the Chhattisgarh State Power Distribution Company limited.

34.2.11 Baseline Environmental Studies:

Period:	Summer Season: From 26/02/2020 to 13/06/2020* Additional One Month during Post monsoon 2020 (October 2020) **
AAQ parameters at 08 locations	$PM_{2.5}$ = 19 to 46 µg/m^3 PM_{10} = 58 to 80 µg/m^3 SO_2 = 4 to 18 µg/m^3 NO_2 = 11 to 32 µg/m^3
AAQ modelling	<u>Incremental GLCs in study area for:</u> PM_{10} = 0.5 µg/m^3 SO_2 = 0.03 µg/m^3 NOx = 0.2 µg/m^3

**Environmental Baseline monitoring for the project was conducted from 26th February 2020 and continued till 21stMarch 2020. The monitoring was discontinued from 22ndMarch 2020 to 20thApril 2020 due to the lockdown imposed by Government of India. Nationwide lockdown was ordered for 21 days, as a preventive measure against the COVID-19 pandemic in India. After the relaxation in lockdown, the monitoring was again initiated from 21st April 2020 and continued till 13thJune 2020.*	
Ground water quality at 08 locations	pH: 6.75 to 7.45, Total Hardness: 72 to 846 mg/l, Chlorides: 29.9 to 79.9 mg/l, Fluoride: 0.02 to 0.8mg/l. Heavy metals are within the limits.
Surface water quality at 09 locations	pH: 6.75 to 7.30; DO: 4.6 to 6.2 mg/l and BOD: 2.2 to 6.3 mg/l.
Noise levels	40.0 to 53.0 dB(A) for the day time and 39.1 to 39.9 dB(A) for Night time.
Traffic assessment study findings	• Design capacity of SH 5 : 28800 PCUs/day • Present traffic load on NH23/NH-32: 8827 PCUs/day. • Additional traffic load due to proposed project: 1236 PCUs/day. • Total traffic load in future due to project: 10063 PCUs/hr (which is still within the Carrying capacity of SH 5 of 28800 PCUs/day)
Flora and fauna	No schedule-1 fauna exists in the study area.
***4 weeks (1st October to 31st October 2020) addition data was collected as recommended by EAC, Industry I in ToR amendment letter accord 04/11/2020.*	

34.2.12 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Type of Waste	Source	Quantity (TPA)	Mode of Treatment / Disposal
1.	Solid Waste: Tailings	Beneficiation plant	225000	The tailing generated will be taken back by those companies who will beneficiate their low-grade Iron ore. A temporary provision will be made in the plant for storage of dry tailing (in Cake form) in 2-hectare area.
2.	Hazardous Waste: spent oil, grease, damaged batteries, etc.	Crushing, Screening & Beneficiation Plant	--	Temporary storage in separate room and disposal through authorized recycling vendors.

34.2.13 Public Consultation:

Details of Advertisement given	30/11/2020
Date of Public Consultation	02/01/2021
Venue	Panchayat Bhawan, Village Gidhali
Presiding Officer	Additional District Magistrate
Major Issues Raised	(i) Garland drains and settling tanks in plant premises (ii) Desiltation of Keshala Nallah (iii) Damage assessment of agriculture fields (iv) Organic fertilizer (v) Employment to local people & skill development training program (vi) Development and maintenance of Drinking water facilities. (vii) Solar street light (viii) Support education facility (ix) Health checkup camps

Action plan as per MoEF&CC O.M. dated 30/9/2020

Sr. No.	Issues raised / Action Plan	Particulars	Time bound budget provision (Rs. In Lakh)			Total (Rs. In Lakh)
			Within 6 months	First Year	Second year	
1	**Water pollution**					
a.	Provision of Storm water drains and settling tanks within the plant premises to arrest storm water run-off.	Target	Construction of 3500 m storm water drains & collection of water in 5 existing open pits within the plant premises	--	--	--
		Budget	**-- (included in EMP budget)**	--	--	
b.	De-siltation of Keshala nalla	Target	1 km length of Keshala nalla	--	--	
		Budget	**2.00**			**2.00**
2.	**Damage to Agriculture Fields**					
a.	Assessment of damage to agriculture fields through competent State agency & provision of necessary compensation	Target	20 Agriculture fields each near plant area from Baklitola, Markamtola & Gidhali villages	--	--	

Sr. No.	Issues raised / Action Plan	Particulars	Time bound budget provision (Rs. In Lakh)			Total (Rs. In Lakh)
			Within 6 months	**First Year**	**Second year**	
		Budget	**5.00**	--	--	**5.00**
b.	Provision of organic fertilizers for improvement of soil fertility	Targets	--	20 farmers each from Baklitola, Markamtola & Gidhali villages		
		Budget	--	**2.00**	--	**2.00**
c.	Provision of reclaiming back silt from agriculture land	Targets	--	From agriculture fields as referred in Sr. No. 2(a) above		
		Budget	--	**3.00**	--	**3.00**
3.	**Employment**					
a.	Employment to local village youth as per their eligibility & requirement of the company	Targets	50 persons from villages within 10 km radius			
		Budget	**Included in Project operation cost**	--	--	--
b.	Provision of skill development training to interested youth (e.g., I.T.I., Vocational training) & facilitation to availing existing Government self-employment schemes	Targets	--	10 students to ITI	10 students to ITI	
		Budget	--	**1.00**	**1.00**	**2.00**
c.	Development & assistance to Women Self Help Groups	Targets	--	Gidhali village (1 SHG)	Gainji village (1 SHG)	
		Budget	--	**0.50**	**0.50**	**1.00**
4.	**Village infrastructure**					
a.	Development & maintenance of drinking water facilities	Targets	--	1 Handpump in Markamtola village	1 handpump in Baklitola village	
		Budget	--	**0.50**	**0.50**	**1.00**
b.	Maintenance of village Roads	Targets	--	1 km length in Markamtola village	0.5 km length in Gidhali village	
		Budget	--	**2.00**	**1.00**	**3.00**
c.	Provision of solar street lights	Targets	--	10 No.s in Markamtola & 10 No.s in	10 No.s in Gidhali village	

Sr. No.	Issues raised / Action Plan	Particulars	Time bound budget provision (Rs. In Lakh)			Total (Rs. In Lakh)
			Within 6 months	**First Year**	**Second year**	
				Bakalitola village		
		Budget	--	**1.00**	**0.50**	**1.50**
d.	Repair/maintenance of Community hall, temples, play grounds, community toilets	Targets	--	Gidhali village	Gainji village	
		Budget	--	**1.00**	**1.00**	**2.00**
5.	**Education**					
a.	Provision of furniture, books, computer to village school	Targets	--	One School each from Gidhali & Gainji villages	One School each from Bhaisbod & Chipra villages	
		Budget	--	**1.00**	**1.00**	**2.00**
b.	Repair & maintenance of school toilets	Targets	--	One School each from Gidhali & Gainji villages	One School each from Bhaisbod & Chipra villages	
		Budget	--	**1.00**	**1.00**	**2.00**
c.	Provision of sports kits to village school	Targets	--	One School each from Gidhali & Gainji villages	One School each from Bhaisbod & Chipra villages	
		Budget	--	**0.50**	**0.50**	**1.00**
6.	**Health**					
a.	Conducting periodic health checkup camps	Targets	--	All villages (within 10 km radius), once in every three months	All villages, once in every three months	
		Budget	--	**1.00**	**1.00**	**2.00**
	Total		**7.00**	**14.50**	**8.00**	**29.50**

34.2.14 The capital cost of the project is Rs 25.50 Crores and the capital cost for environmental protection measures is proposed as Rs 2.07 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 0.46 Crores. The employment generation from the proposed project / expansion is 80 persons. The details of cost for environmental protection measures is as follows:

S No	Description	Capital Cost (in Cr.)	Recur. Cost/ annum (In Cr.)
1.	Air Pollution Control Systems	0.75	0.07

S No	Description	Capital Cost (in Cr.)	Recur. Cost/ annum (In Cr.)
2.	Water Conservation & Pollution Control	0.35	0.06
3.	Noise & Vibration control System	0.00	0.01
4.	Solid Waste Management System	0.15	0.05
5.	Baseline monitoring system	0.02	0.10
6.	Plantation/ Green belt development	0.15	0.03
7.	Occupational Health	0.10	0.0275
8.	Miscellaneous	0.25	0.035
Total Cost for Environmental Protection Measures		**2.07**	**0.4575**
9.	Cost of addressing focus areas identified in Public consultation	**0.295**	

34.2.15 Greenbelt will be developed in 9.085 ha which is about 33% of the total project area. A 5.0m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 1500 trees per hectare. Total no. of 13628 saplings will be planted and nurtured in 9.085 hectares in 5 years.

34.2.16 The proponent has reported that there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

34.2.17 Name of the EIA consultant: M/s Srushti Seva Private Limited [S.No. 84, List of ACOs with their Certificate / Extension Letter no. Rev. 09, Apr. 12, 2021].

Certified compliance report from Regional Office:

34.2.18 The Status of compliance of earlier CTO was obtained from Regional Office, CECB vide letter no. 3354/RO/CECB/Bhilai/2019 dated 20/12/2019. As per the report submitted, the project proponent is being comply with the CTO conditions.

34.2.19 M/s Godawari Natural Resources Pvt. Ltd. has earlier made an online application vide proposal no. IA/CG/IND/197113/2020 dated 20/02/2021 along with copy of EIA/EMP report and Form – 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposal was earlier considered by the EAC (Industry 1) in its 32nd meeting of the Re-constituted EAC (Industry-I) held on 15–17th March, 2021. The observations and recommendations of EAC is given as below:

Observations of the Committee held during 15-17th March, 2021

34.2.20 The Committee noted the following:

i. 1.36 ha forest land which has been excluded from the project area shall be indicated in the plant lay out. Further, the space earmarked towards parking of vehicles shall also be indicated.

ii. All stockyards shall be having impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains to trap the run off material.
iii. TOR point number 9 pertaining to Corporate Environment Policy has not been complied with.
iv. Photographs of plant indicate that all roads inside the plant are kutcha and dusty. Scheme to make pave the roads shall be submitted.
v. Base line Data in Chapter 3 of EIA Report have not been interpreted for land use, socio –economic and bio diversity.
vi. Impacts identified in chapter 4 are generic and no quantification has been done. Entire chapter 4 looks like a text book except traffic impact and AAQ modelling. Summary matrix table 4.9 does not indicate any quantification.
vii. It is proposed to stack the tailings inside the plant premises and no limit for storage period has been specified. Further, it is indicated that the tailings will be used for brick manufacturing. No details have been furnished in this regard.
viii. Chapter 11 – Summary and conclusion of EIA report has not been presented as per the requirement of Appendix III of EIA notification 2006.
ix. The project proponent confirmed that surface water will be used for project by developing Anicut on Keshala Nallah, but no action plan is submitted to develop the anicut as well as water quantification of Keshala Nallah.
x. The project area is in two part separated by kachha Village road, the PP has not submitted any proposed plan to connect both portions of the project area.
xi. Mitigation measures proposed in chapter 4 of EIA report are generic. Project specific information needs to be provided.
xii. Action plan is not given with physical targets to address the Public Hearing issues as per MoEF&CC Office memorandum dated 30/09/2020.
xiii. PP confirmed that, the Pits which are available in the project site will be utilized as water reservoir; the details are not given in EIA report.

Recommendations of the Committee held during 15-17th March, 2021

34.2.21 In view of the aforesaid observations, the Committee after deliberations, recommended to return the proposal in its present form for addressing the shortcomings as listed above.

34.2.22 M/s Godawari Natural Resources Private Limited has submitted an revised application vide proposal no. IA/CG/IND/207110/2020 dated 31/03/2021 along with copy of EIA/EMP report and Form – 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposal was considered by the EAC (Industry 1) in its 34th meeting of the Re-constituted EAC (Industry-I) held on 15- 16th April, 2021. The observations and recommendations of EAC is given as below.

Observations of the Committee

34.2.23 The Committee noted the following:

i. The EAC found that the EIA/EMP report is in order reflecting the present environmental concerns and the projected scenario for all the environmental components arising out of the proposed project with respective mitigation measures. The EAC also noted that the baseline data reported and incremental GLC due to the

proposed project were within NAAQ standards.

ii. The Committee also deliberated upon the certified compliance report of RO of CECB and found that the compliance to the existing CTO conditions is satisfactory.

iii. The EAC also deliberated on the public hearing issues as well as action plan to address the issues raised during public hearing and found it satisfactory.

Recommendations of the Committee

34.2.24 In view of the foregoing and after detailed deliberations, the committee 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 pertaining to mineral beneficiation plants based on project specific requirements.

A. Specific conditions

i. Ground water abstraction shall not be permitted beyond three years from the date of the issue of Environment Clearance.

ii. Uniform green belt of 15-meter width shall be developed around the plant boundary (inner side) covering 33% of the plant area with a tree density of 2500 trees per hectare. A green belt of 30 m width shall be provided towards 1.36 ha land locked vacant plot.

iii. Natural drainage of plant shall be maintained, and landscaping shall be done around the three ponds located in the project area for soil and bank conservation.

iv. Particulate matter emission levels from all stacks shall be less than 30 mg/Nm^3.

v. Tailings from iron ore beneficiation plant shall be disposed in dry form after filtration in filter press/vac filters. Maximum storage of filtered cake permitted inside the plant shall be 15 days.

vi. Rainwater harvesting to recharge 96707 m^3 shall be carried out as per the action plan submitted.

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 to trap the runoff material.

viii. All kutcha roads shall be paved during construction of the plant.

ix. The tailings generated shall be taken by the suppliers for beneficiating the low-grade iron content and should not be utilized for brick making.

x. Tyre washing facilities shall be provided for the incoming and outgoing trucks.

xi. Truck parking facility shall be provided in an area of 2440 m^2 within the plant premises for 60 trucks of 20 tonnes capacity each. No vehicles shall be parked outside the factory premises.

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 two Continuous Ambient Air Quality Station (CAAQS) in upwind and downwind directions for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The 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 recognised 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 recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

iii. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed fugitive emission standards.

iv. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.

v. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.

vi. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.

vii. 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 monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.

ii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

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. Noise monitoring and prevention

i. Noise quality shall be monitored as per the prescribed Noise Pollution (Regulation And Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

V. Energy Conservation measures

i. Energy conservation measures may be adopted such as adoption of solar energy and provision of LED lights etc., to minimize the energy consumption.

VI. Waste management

ii. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016

i. 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 including plantation.

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. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Corporate Environment Responsibility

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020.

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.

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; PM_{10}, SO_2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters,

indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

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. 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).

x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

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

34.3 Expansion of Pig Iron plant to Steel Plant by change the configuration of Mini BF with PCI (from 215 m^3 to 350 m^3) Sinter Plant (from 33 m^2 to 69 m^2) adding Sponge Iron (DRI kiln of 1x650 TPD), SMS (IF: 2x25Tons/12 MW and Zero Power Furnace: 50Tons), Rolling Mill (Fully Continuous: 0.2 MTPA, Wire Rod Mill: 0.3 MTPA) new CPP of 35MW, upgraded existing CPP: from 4.5MW to 5MW and Oxygen plant of 250 TPD by **M/s Neo Metaliks Limited** located at village Gopalpur, Tehsil Durgapur, **District Paschim Bardhaman, West Bengal [**Online Proposal No. IA/WB/IND/208095/2007; File No J-11011/779/2007-IA II (I)]– **Environment Clearance** – regarding.

34.3.1 M/s. Neo Metaliks Limited has made an online application vide proposal no. IA/WB/IND/208095/2007 dated 06/04/2021 along with copy of EIA/EMP report and Form – 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a)

Metallurgical industries (ferrous &nonferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by Project proponent

34.3.2 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord
07/03/2019	5th meeting held on 27-29th March, 2019	Terms of Reference	27/05/2019

34.3.3 The project of M/s Neo Metaliks Limited located in Gopalpur Village, Durgapur Tehsil, Paschim Bardhman District, West Bengal State is for Expansion of Pig Iron plant to Steel Plant by change the configuration of Mini BF with PCI (from 215 m^3 to 350 m^3) Sinter Plant (from 33 m^2 to 69 m^2) adding Sponge Iron (DRI kiln of 1x650 TPD), SMS (IF: 2x25Tons/12 MW and Zero Power Furnace: 50Tons), Rolling Mill (Fully Continuous: 0.2 MTPA, Wire Rod Mill: 0.3 MTPA) new CPP of 35MW, upgraded existing CPP: from 4.5MW to 5MW and Oxygen plant of 250 TPD.

34.3.4 Environmental Site Settings:

S. No.	Particulars	Details
i.	Total land	40.93ha, (Private Land)
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Land under possession- 36.47 ha land. Land to be acquired- 4.47 ha. (Consent letter obtained)
iii.	Existence of habitation &involvement of R&R, if any.	No R&R is involved.
iv.	Latitude and Longitude of the project site	23º29´38.25"N to 23º29´40.27"N Latitude 87º22´50.36"E to 87º22´46.60"E Longitude
v.	Elevation of the project site	106 m AMSL
vi.	Involvement of Forest Land, if any	Nil
vii.	Water body exists within the project site as well as study area	**Project site:** Nil **Study area:** Damodar Canal- 2.8 km (SE), Panagar River- 3.2 km (SE), Left Canal- 1.8 km(S), Right canal- 9.6 km (SSW), Damodar River- 4.7 km (SSW), Durgapur Barrage- 7.3 km (SW), Ajay River- 15 km (NE) and Barjora Nala- 7.5 km (SW).
viii.	Existence of ESZ / ESA /	Nil

	National Park / Wildlife Sanctuary / Biosphere Reserve / Tiger Reserve / Elephant Reserve etc. if any within the study area	

34.3.5 The existing project was accorded environmental clearance vide F. No. J-11011/779/2007-IA II (I) dated 4th November, 2008. Consent to Operate for the existing unit was accorded by West Bengal State Pollution Control Board from time to time & current CTO obtained vide Consent No. C0100888 dated on 20.04.2017. The validity of CTO is up to 30/04/2022.

34.3.6 Implementation status of the existing EC

S. No.	Facilities	Units	As per EC dated 04/11/2008	Implementation Status as on 09/04/2021	Production as per CTO
1.	Pig iron plant	TPA	188000	188000	188000
2.	CPP	MW	4.5	4.5	4.5
3.	Sinter Plant	TPA	300000	300000	300000
4.	Pulverised Coal Injection		Compatible PCI (Permission for installation of PCI for the existing BF has been received from MoEF&CC)	22560 TPA @ 120 kg/t HM	22560 TPA @ 120 kg/t HM
5.	Bars & Rods EAF	TPA	369000	Nil	Nil
6.	IF based SMS with LF & CCM	TPA	233000	Nil	Nil
7.	EAF based SMS LF & CCM	TPA	384000	Nil	Nil

34.3.7 The unit configuration and capacity of existing and proposed project is given as below:

S. No.	Name	Existing Units		Proposed Units		Total (Existing+Proposed)	
		Configuration	Production TPA	Configuration	Production TPA	Configuration	Production TPA
1.	MBF with PCI	215 m^3	1,88,000	350 m^3	441000	350 m^3	441000
2.	Sinter Plant	33 m^2	300000	36 m^2	317400	(33+36) m^2	617400
3.	PCI	120 kg	22560	170 kg.	56700	170	56700
4.	Captive Power Plant	4.5 MW	4.5 MW	(5+10+25) MW	(5+10+25) MW	(5+10+25) MW	(5+10+25) MW
5.	Oxygen Plant	-	-	250 TPD	87500 TPA	250 TPD	87500 TPA
6.	Sponge Iron Plant	-	-	650 TPD	210859 TPA	650 TPD	210859 TPA
7.	Zero Power Furnace	-	-	45 T	415800 TPA	45 T	415800 TPA

S. No.	Name	Existing Units		Proposed Units		Total (Existing+Proposed)	
		Configuration	Production TPA	Configuration	Production TPA	Configuration	Production TPA
8.	Induction Furnace	-	-	25t *2	144646 TPA	25t *2	144646 TPA
9.	Ladle Furnace	-	-	25t*1 & 45t*1	-	-	-
10.	Caster	-	-	2 strand 6/11 m and 4 strand 6/11 m	549237 TPA	2 strand 6/11 m and 4 strand 6/11 m	549237 TPA
11.	Vacuum Degassing	-	-	50t*1	-	-	-

34.3.8 The details of the raw material requirement for the expansion project along with its source and mode of transportation is given as below:

S. No.	Raw Material	Quantity required (TPA)			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
Sinter:							
1.	Iron ore fine	240000	253920	493920	Odisha/ Jharkhand		Rail/Road
2.	Coke breeze	19500	20631	40131	(a) Imported: Russia & China (b) Domestic: Jajpur, Haldia, Durgapur		Sea/ Rail/ Road
3.	Lime stone	33000	34914	67914	Imported from UAE		Sea/ Rail/ Road
4.	Dolomite	27000	28566	55566	Birpara, Bhutan		Rail/ Road
5.	Brunt Lime	1500	1587	3087	Domestic Jaisalmer Imported- UAE		Sea/ Rail/ Road
6.	Mill scale	-	Available in plant		Captive generation/ purchased		Road
7.	Iron dust from MBF	Available in plant			Captive generation/ purchased		
Blast Furnace:							
8.	Iron ore lump	94752	127512	222264	Odisha/ Jharkhand		Rail/ Road
9.	Sinter	From Sinter plant			Captive generation		
10.	Coke	84600	113850	198450	(a) Imported – Russia & China (b) Domestic – Jajpur, Haldia, Durgapur		Sea/ Rail/ Road
11.	Coal injection	-	74970	74970	Imported		Sea/ Rail/ Road
DRI Plant:							
12.	Iron ore	-	371147	371147	Odisha/ Jharkhand		Rail/ Road
13.	Coal	-	305775	305775	Domestic-Coal India Ltd., ECL Imported- South Africa		Sea/ Rail/ Road
14.	Dolomite		9490	9490	Birpara, Bhutan		Rail Road
15.	Scrap	-	29470	29470	Open market		Rail/ Road
16.	Pig iron	-	8145	8145	Open market		Rail/ Road

34.3.9 The water requirement for the project is estimated as 6986 m^3/day, out of which 2090 m^3/day of fresh water requirement has been already sanctioned and supplied by Asansol Durgapur Development Authority (ADDA) vide lr. No.- ED/CN- 79/04-05/1428 dt.-

13/07/2005 and the remaining requirement of 4896 m^3/day will also be met from the ADDA vide lr. No.- ED/G-01/2020-21/208, dt.- 29/09/2020.

34.3.10 The power requirement for the project is estimate das 69.7 MW, out of which 29.7 MW will be obtained from the DVC and balance 40 MW power requirement will be fulfilled by captive power plant.

34.3.11 Baseline Environmental Studies:

Period	Pre- Monsoon (From 1st March, 2019 to 31st May, 2019) Additional one month data during January-2021 was collected as recommended by EAC, Industry-1 letter dated 03.12.2020.
AAQ parameters at 9 locations	$PM_{2.5}$ = 46.6 to 96 µg/m^3 PM_{10} = 82.0 to 195.6 µg/m^3 SO_2 = 11.9 to 22.3 µg/m^3 NO_2 = 22.2 to 32.2 µg/m^3
AAQ modelling (Incremental GLC_{max})	PM_{10} = 5.72 µg/m^3 SO_2 = 9.54 µg/m^3 NO_x = 15.8 µg/m^3
Groundwater quality at 8 locations	pH:7.3 to 7.8, Total Hardness:166.1 to 213 mg/l, Chlorides: 90.3 to 110 mg/l, Fluoride: 0.5 to 0.21mg/l. Heavy metals are within the limits.
Surface water quality at 4 locations	pH: 7.1 to7.7; DO:5.3 to 5.9mg/land BOD: 2.4 to 5.1 mg/l. COD from 10.6.to 25.9 mg/l
Noise levels	40.5to73.2 dBA for the daytime and 40.1to 54.7 dBA for the Night time.
Traffic assessment study findings	The traffic density after the plant becoming fully operational was estimated. In 2021-22, out of three surveyed roads (T1, T2 & T3) T1 and T2 will have LoS reduced to level B and C respectively representing decline in general level of comfort. However, the LOS of point T3, LoS as per the IRC norms found to be A which represents a condition of free flow and no congestion during peak hours.
Flora and fauna	No schedule I fauna identified in and around the project site.

34.3.12 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Type of Waste	Source	Quantity (TPA)	Mode of Treatment /Disposal
Solid Wastes:				
1.	Bag Filter Dust	RMHS Bag Filter	524.7	Used in sinter Plant
2.	Dust from Exhaust Gases of WHRB	ESP	4217.4	Sent to Brick Making Plants
3.	Dolochar	Kiln	52800	Use in CFBC Boiler
4.	Bag Filter Dust	RMHS Bags	303.6	Charge back to sinter plant
5.	ESP Dust	Sinter plant including cooler	23100	Charge back to sinter plant
6.	Primary Gas Cleaning Dust	Dust from Dust Catcher & Slurry from GCP	6615	Slurry pass through filter press and along with dust from dust collector is charged back to sinter plant.
7.	Bag Filter Dust	Casting House Bag Filters	1102.5	Charge back to sinter plant
8.	Granulated Slag	Slag granulation plant	176400	Sell for cement manufacturing
9.	IF Slag	Induction Furnace	17280	Processed to obtain stone aggregates & fines for road making.
10.	Mill Scale	Caster	723	Charge back to sinter plant
11.	Bag Filter Dust	IF Bag Filter	12480	Charge back to sinter plant
12.	ZPF Slag	ZPF	40320	Processed to obtain stone aggregates & fines for road making.
13.	Mill Scale	Caster	2016	Charge back to sinter plant
14.	Bag Filter Dust	ZPF Bag Filters	10230	Charge back to sinter plant
15.	Mill Scale	Rolling Mill	6999	Charge back to sinter plant
16.	ESP Dust	CFBC Boiler ESP	40950	Use in brick making
17.	Industrial wastes	All production shops	600	Dumped at the designated Industrial Waste Dumping Yard and sold to designated collectors
Hazardous Wastes:				
18.	Used Oil	Machineries, Gear boxes, compressors etc.	3	Sell to West Bengal Pollution Control Board authorized re-cycler/ co-processor.
19.	Waste Oil and grease	Plumber block/ bearing housing, coupling etc.	0.35	Dispose off through West Bengal Pollution Control Board authorized CHWTSDF facilitator, M/s West Bengal Waste Management Ltd.
20.	Spent ion-exchange resin	DM Plant & Softening Plant	2.3	
21.	DG set Filters	DG set	0.04	

34.3.13 Public Consultation:

Details of advertisement given	26/10/2019
Date of public consultation	29/11/2019

Venue	Meeting Hall of Gopalpur Gram Panchayet at Kanksa Block, Durgapur Tehsil, Paschim Bardhman District.
Presiding Officer	Additional District Magistrate, Paschim Bardhman District.
Major issues raised	i. Drinking water facilities in the village ii. Welfare activities for local people iii. Local employment iv. Enhancing of rain water harvesting system. v. Health Camp vi. Construction of Atchala at local temple vii. Controlling of Pollution by more plantation.

Action plan as per MoEF&CC O.M. dated 30/9/2020:

Sl. No.	Concerns raised during the Public Hearing	Physical activity and action plan	Tentative Budget (INR)	Target date for Implementation of action plan
1.	Drinking water facilities in the village	Construction of pump house, overhead tank and water pipes for supply of drinking water will be done under the Corporate Environment Responsibility (CER).	25,00,000/-	5 Years
2.	Local employment	Project activities will generate direct and indirect employment opportunities in the form of skilled, semi-skilled and unskilled workers etc. A total of additional 500 persons will get chance to be employed	Included in project cost	Continuous
3.	Construction 'Atchala' at local temple.	Provision will be made to construct Atchara in the nearby temples. This will be done under the Corporate Environment Responsibility.	10,00,000/-	5 Years
4.	Health camp	Periodical medical check-up camp by appointing specialist doctor for eyes skin, heart and dental.	25,00,000/-	5 Years
5.	Controlling Environmental pollution	Installing properly designed pollution control equipment as recommended, Plant will be able to strictly comply with all the mitigation measures and prevailing environmental norms. Also plant will develop various management activities for the Environmental Management Program to meet all statutory requirements and help to improve environmental quality.	The cost incurred in EMP cost included with capital expenditure cost and recurring cost. The capital expenditure cost-28.94 crores and recurring cost-6.34 crores.	1 year implement then to monitor regularly.
6.	Welfare of disabled & poor people:	This will be done under CER in which wheel chairs and cloths will be provided to disabled and poor people.	Covered CER & CSR cost 4.78 crores	5 years under CER and then under CSR.

Sl. No.	Concerns raised during the Public Hearing	Physical activity and action plan	Tentative Budget (INR)	Target date for Implementation of action plan
7.	Distribution of saplings among villagers	To be planted in the open and degraded areas and maintaining it.	30,00,000/-	5 Years
	Total		**90,00,000/-**	

34.3.14 The capital cost of the project is Rs 956 Crores and the capital cost for environmental protection measures is proposed as Rs 28.94 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 6.34 Crores. The employment generation from the proposed project / expansion is 500 The details of cost for environmental protection measures is as follows:

S No	Description of Item	Existing (Rs. In Crores)	
		Capital Cost	Recurring Cost
1.	Air Pollution Control	14.34	2.87
2.	Water Pollution Control	8.60	1.72
3.	Solid and Hazardous waste control	2.87	0.57
4.	Noise and vibration	1.43	0.29
5.	Environmental Monitoring	0.27	0.17
6.	Risk and Hazards Control	1.43	0.72
	Total	**28.94**	**6.34**
7.	Addressal of Public Consultation concerns	Rs. 4.78 Crores	

34.3.15 Green belt will be developed in 13.6 ha which is about 33% of the total project area (40.93 ha). A 4 to 5 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 22215 saplings will be planted and nurtured in 6.92 hectares and for making 40% green area another 2.83 hectares land in the vicinity of the plant, MoU for social forestry activity has been signed with gram Panchayat in consultation with DFO.

34.3.16 The proponent has reported that there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

34.3.17 Name of the EIA consultant: M/s GreenC India Consulting Private Limited [S.No.151 List of ACOs with their Certificate / Extension Letter no. Rev. 09, Apr. 12, 2021].

Certified compliance report from Regional Office

34.3.18 The Status of compliance of earlier EC was obtained from Regional Office, Bhubaneswar vide file no. 102-221/07/EPE dated 20/01/2020 in the name of M/s. Neo Metaliks Limited. The Action taken report regarding the partially /non-complied condition was submitted to Regional officer MoEF&CC, Bhubaneswar vide letter no. Nil dated 15/12/2020. MoEF & CC (RO), Bhubaneswar evaluated the same and has issued letter on 17/12/2020. The

details of the observations made by RO in the report dated 17/12/2020 along with its re-assessment/ present status as furnished by the PP is given as below.

S No	Non-compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by RO/ Response by PP
			EC date	Specific	General	
1.	Efforts shall be made to reduce RSPM levels in the ambient air and a time bound action plan shall be submitted. On-line stake monitoring facilities for all the stacks and sufficient air Pollution control devices shall be provided. Electrostatic Precipitator (ESP) to sinter plant and bag house to Electric Arc Furnace (EAF), dust catcher and Ventury scrubber to mini Blast Furnace (BF) shall be provided to control the particulate emissions below 100mg/Nm^3. Data on ambient air quality and stack emissions shall be regularly submitted to this Ministry including its Regional office at Bhubaneswar / CPCB / W.B. Pollution control board (WBPCB) once in six months.	It has been observed that the environmental parameters viz. Stack Emission, Ambient Air Quality (AAQ), Work Zone Emission, Noise Levels, Water Quality etc. are being monitored once in six monthly only. It is recommended increase the frequency of monitoring by monitoring all the parameters at least once in two months by MoEFCC/ NABL accredited laboratory and the monitoring reports to be submitted along with six monthly compliance reports. It requires immediate action.	04/11/2008	A (i)		As per the ATR submitted, it has been observed that the PAs have started environmental monitoring viz., Stack Emission, Ambient Air Quality (AAQ), Work Zone Emission, Noise Levels, Water Quality etc. bi monthly basis by NABL accredited laboratory i.e. M/s Qualissure Laboratory Services. As per the monitoring reports submitted, the emission levels are within the prescribed limits.
2.	Efforts shall be made to reduce RSPM level in the ambient air and a time bound action plan shall be submitted. On-line stake monitoring facilities for all the stacks and sufficient air Pollution control devices shall be provided. Electrostatic precipitator (ESP) to mini blast furnace (BF) shall be provided to control the particular emissions below 100 mg/Nm^3. Data on ambient air quality and stack emissions shall be regularly submitted to this Ministry including its Regional office at, Bhubaneswar, CPCB and W.B. Pollution control board (WBPCB) once in six months.	It is required to conduct the work zone emissions monitoring at raw material handling sections and other transfer points.	04/11/2008	A (i)		As per the ATR submitted, it has been observed that the PAs are monitoring work zone emissions by M/s Qualissure Laboratory, Kolkata at different raw material handling sections as follows: i. Near Head ESP is designated for iron ore fines stockyard. ii. Ground Hopper through which all the raw materials are fed to sinter plant. iii. Near Tail ESP, sinter cooler machine present where hot finished sinter is received and cooled iv. Hot Metal

S No	Non-compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by RO/ Response by PP
			EC date	Specific	General	
						bay where ladle pouring & handling and ladle repairing are executed. As per the monitoring reports submitted, the emission levels are within the prescribed limits.
3.	Efforts shall be made to reduce RSPM level in the ambient air and a time bound action plan shall be submitted. On-line stake monitoring facilities for all the stacks and sufficient air Pollution control devices shall be provided. Electrostatic precipitator (ESP) to mini blast furnace (BF) shall be provided to control the particular emissions below 100 mg/Nm^3. Data on ambient air quality and stack emissions shall be regularly submitted to this Ministry including its Regional office at, Bhubaneswar, CPCB and W.B. Pollution control board (WBPCB) once in six months.	It is required to control the fugitive emissions as well as flying of metal particles at work zone of MBF. It requires immediate action.	04/11/2008	A (i)		As per the ATR submitted, it has been observed that the PAs are in process of controlling fugitive emissions by renovating the primary fume extraction system win enlargement of suction hood and other modifications. In this work order dated 24.11.2020 has been issued to M/s R D Works. It has been stated that the said work expected to be completed by January,2021. It has also been informed that the Secondary Fume Extraction System will be installed and the details of its design and installation document submitted and expected completion will be within 2 years of expansion EC.
4.	As proposed, green belt shall be developed in 33% area within and around the plant premises as per the CPCB guidelines in consultation with DFO.	It is required to develop green belt in 33% area within and around the plant premises as per the CPCB guidelines in consultation with DFO.	04/11/2008	A (x)		As per the ATR submitted, it has been observed that the PAs are in process of developing 33% of green belt within and around the plant premises. It has been stated that till now PAs have planted 11,785 trees within and around the plant premises.
5.	The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean	It has been observed that the present status surface water harvesting system	04/011/2008	A (ix)		As per the ATR submitted, it has been observed that the PAs implemented the rooftop rainwater

S No	Non-compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by RO/ Response by PP
			EC date	Specific	General	
	season besides recharging the ground water table.	is not satisfactory It is required to develop surface water harvesting system as per the rain fall data and proper maintenance of the same is also required.				harvesting system at the following locations: CPP cooling tower area sump. Sinter plant pump house area sump. Building roof top rain water harvesting sumps at MBF area and near Admin building. Photographs of the above were provided. It has also been informed that, apart from the above, we have made a design layout for the Surface Water Harvesting by "Constructed Wetland Technology" where we will nourish the aquatic flora by using the surface water and domestic effluent. And treated water will be used for plantation and others purposes.
6.	All the iron fines, coke fines, flue dust and mill scales shall be reused in the sinter plant. All the blast furnace slag shall be granulated and provided to cement manufacturers for further utilization. SMS / EAF slag shall be properly used inside the plant premises and shall not be disposed off anywhere else. All the other solid waste including broken refractory mass shall be properly disposed off in environments-friendly manner. Waste oil shall be sold to authorized recyclers / pre-processors.	It has been observed that the Pas are in process of obtaining Authorization for hazardous waste management from WBPCB. It is required to provide the copy of the same at the earliest.	04/11/2008	A (vii)		As per the ATR submitted, it has been observed that West Bengal Pollution Control Board has issued us the authorisation for Hazardous Waste Management in Form-2 vide memo no. 38/2S(HW)-2497/2009 dated 02.03.2020 and the authorization is valid up to 31stMarch, 2024.

34.3.19 **M/s. Neo Metaliks Limited** has made earlier online application vide proposal no. IA/WB/IND/152904/2007 dated 22/10/2020 along with copy of EIA/EMP report and Form – 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposal was earlier considered by the EAC (Industry 1) in its 24th meeting of the Re-constituted EAC (Industry-I) held on 27–29th October, 2020. The observations and recommendations of EAC is given as below:

Observations of the Committee held during 27–29th October, 2020

34.3.20 The Committee noted the following:

i. The configuration of the unit accorded in the ToR dated 27/05/2019 and the same furnished in the EIA report are different.
ii. Significant non-compliances have been reported in the certified compliance report of RO and the same is yet to be complied. Further, formal closure report on observed non-compliances has not been obtained.
iii. Plant layout is highly congested. No engineering drawing is made available.
iv. 11acres land as per TOR for green belt adjacent to plant site has not been procured.
v. EIA report does not have Executive Summary and TOR compliance.
vi. Approach to plant site is not clear.
vii. No Top Recovery Turbine is proposed on 450 m^3Blast Furnace.
viii. Breakup of power generation of 40 MW is not given.
ix. Proposal is not clear with respect to provision of secondary fume extraction included with ZPF and adoption of hot charging practice.
x. Fresh baseline data collection shall be conducted for additional one month in 10 km zone, due to the following:
    a) Project site is in critically polluted area. $PM_{10}$is reported as high as 195.6 µg/m^3 and $PM_{2.5}$ is reported as high as 96 µg/m^3 observed. No specific reason for such high level described in EIA report.
    b) Noise levels are not monitored at the plant site and have been monitored at 7.5 KM.
    c) Interpretation of data not carried out to find significant issues that may impact the environment.
xi. There is no connection between Chapter 2 and 3 with chapter 4 except AAQ data used for Modelling.
xii. Hazard Identification and Risk Assessment is not project specific.
xiii. PP shall submit the EMP Matrix indicating; EMP details, Time line for implementation; Budgetary Provisions and Monitoring Schedule and monitoring methodology.
xiv. Existing road conditions to be used for transportation of raw materials and finished products inter-alia including its dimensions along with photographs. Mitigation measures such as strengthening of existing road etc., if any, envisaged for transportation of raw materials and products by road.
xv. Line source modelling based on the quantity of raw materials and products to be transported different modes such as road and rail respectively shall be carried out and submitted.
xvi. Response to the issues raised during the public consultation has not been summarized in the EIA report.
xvii. Action plan to address the issues raised during the public consultation in accordance with the MoEF&CC O.M. dated 30/09/2020 has not been submitted.
xviii. There is no green belt exists at the project site.
xix. Environment policy given in Annexure 6.1, No SOP for compliance monitoring and NC reporting has been given.

Recommendations of the Committee held during 27–29th October, 2020

34.3.21 In view of the foregoing, after deliberations, the Committee opined that plant proposed is in highly polluted area, plant layout is very congested and adequate land is not available for Green belt plantation. In view of this and inadequacies cited above, the Committee recommended to return the proposal in present form.

34.3.22 The proposal was resubmitted by project proponent vide proposal no IA/WB/IND/208095/2007 dated 06/04/2021 and considered by the EAC (Industry 1) in its 34th meeting of the Re-constituted EAC (Industry-I) held on 15-16th April, 2021. The observations and recommendations of EAC is given as below:

Observations of the Committee

34.3.23 The Committee noted the following:

i. The baseline data collected during March to May, 2019 and revalidated AAQ data collected during January, 2021 reveals the following:

1st March, 2019 to 31st May, 2019*	**January, 2021****	**Incremental GLC_{max}**	**Remarks**
$PM_{2.5}$ = 96 µg/m^3 PM_{10} = 195 µg/m^3 SO_2 = 24.3 µg/m^3 NO_2 = 45.6 µg/m^3	$PM_{2.5}$ = 56.5 µg/m^3 PM_{10} = 126.8 µg/m^3 SO_2 = 17.8 µg/m^3 NO_2 = 32.2 µg/m^3	PM = 5.72 µg/m^3 SO_2 = 9.54 µg/m^3 NO_x = 15.8 µg/m^3	The resultant baseline level with respect to particulate matter exceeds the National Ambient Air Quality standards.

** - Data collected during Jan 2021 indicates that the locations having PM_{10} values more than 100 µg/m^3 have shown decrease of about 33% whereas in case of locations having PM_{10} values less than 100 µg/m^3 have not shown significant variations. No explanation has been given in this regard and as such the data collected cannot be relied upon.

ii. The proposed expansion envisages change in configuration of Mini BF with PCI (from 215 m^3 to 350 m^3) Sinter Plant (from 33 m^2 to 69 m^2) adding Sponge Iron (DRI kiln of 1x650 TPD), SMS (IF: 2x25Tons/12 MW and Zero Power Furnace: 45 Tons), Rolling Mill (Fully Continuous: 0.2 MTPA, Wire Rod Mill: 0.3 MTPA) new CPP of 35MW, upgraded existing CPP: from 4.5MW to 40 MW and Oxygen plant of 250 TPD. The pollution load arising out from the proposed expansion will increase the resultant pollution load and ambient air quality will be deteriorated.

iii. RO compliance dated 17.12.2020 indicates that several non-compliances related to CEMS installation, online AAQ monitoring stations, inadequate green belt development, rain water harvesting and utilization of solid waste generated in the plant. ATR submitted by PP on 15.12.2020 has not been verified by RO.

iv. Consultant did not attend the EAC meeting and the proponent presented the case.

v. The EIA report repeatedly failed to address the following:
   a) Issues raised in public consultation have not been addressed along with the action plan as per MoEF&CC O.M. dated 30/09/2020.
   b) Action plan for rain water harvesting not furnished.
   c) Waste utilization issue (point 6) has not been addressed satisfactorily.
   d) Energy conservation measures in the blast furnace and other process units have not been furnished.
   e) Procurement of additional 11.4 ac land for green belt has not been done so far. Only 11785 Trees have been planted that would occupy maximum 5-6 ha of land against 13.60 ha land required for 33 % plantation. Only 12-13 % green belt has been developed so far.
   f) Surya Nagar Village is adjacent to plant boundary in North. RM yard, Power plant and DRI kilns are being planned in North adjacent to the boundary and close to the village. No conservation measures have been proposed in this regard to attenuate the pollution levels.
   g) MOUs with Gram panchayats have been done for plantation. There is no legal standing of such MOUs with regard to permanency of plantation as PP does not have any legal right on land.

vi. Project proponent failed to present that the pollution load levels will not further increase the existing level even after the retrofitting of existing units with adequate air pollution control devices.

vii. The quality of the EIA report was not found up to the mark with respect to Appendix III of the EIA Notification, 2006 and most of the sections in Form 2 was found be not filled in properly.

Recommendations of the Committee

34.3.24 In view of the foregoing observations, the committee recommended the following:

i. The proposal is recommended to be rejected.

ii. Show Cause Notice be issued to the EIA consultant - M/s Green C India Consulting Private Limited as the consultant is repeatedly submitted the EIA report on 22/10/2020 and 06/04/2021 with several deficiencies as enumerated above and no tangible efforts are made to improve upon the same.

34.4 Proposed standalone cement grinding unit (WOPC) production capacity of 300 TPD or 1,03,500 TPA by **M/s Ottathingal India Private Limited** located at plot No. B1, Sipcot, Village Pirancheri, Tehsil &**District Tirunelvelli, Tamil Nadu [**Online Proposal No.IA/TN/IND/202969/2021;File No IA-J-11011/93/2021-IA-II(I)]– **Prescribing for Terms of Reference** – regarding.

34.4.1 M/s. Ottathingal India Private Limited has made an application online vide proposal no. IA/TN/IND/202969/2021 dated 05/04/2021 along with the application in prescribed format

(Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(b) Cement Plants under Category "B" of the schedule of the EIA Notification, 2006. However, due to the applicability of general condition i.e., project site is located at a distance of 3km from the boundary of the Gangaikondan Spotted Deer Sanctuary for which final ESZ notification was issued by MoEF&CC vide S.O. 2773 (E) dated 31/07/2019, the project is being appraised at the central level as Category 'A'.

Details submitted by Project proponent

34.4.2 The project of M/s. Ottathingal India Private Limited located in plot no. B1, Sipcot, Village Pirancheri, Tehsil & District Tirunelvelli, Tamil Nadu is for Proposed standalone cement grinding unit (WOPC) production capacity of 300 TPD or 1,03,500 TPA.

34.4.3 Environmental site settings

<table>
<tr><th>S No.</th><th>Particulars</th><th>Details</th></tr>
<tr><td>i.</td><td>Total land</td><td>1.59 ha (15944.16 sq m)
SIPCOT Industrial Land</td></tr>
<tr><td>ii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>No and R&R is not applicable</td></tr>
<tr><td>iii.</td><td>Latitude and Longitude of the project site</td><td><table><tr><td>Pillar</td><td>Latitude</td><td>Longitude</td></tr><tr><td>1</td><td>8°50'57.30"N</td><td>77°44'33.86"E</td></tr><tr><td>2</td><td>8°50'57.90"N</td><td>77°44'30.12"E</td></tr><tr><td>3</td><td>8°51'0.33"N</td><td>77°44'31.19"E</td></tr><tr><td>4</td><td>8°51'2.88"N</td><td>77°44'31.81"E</td></tr><tr><td>5</td><td>8°51'2.69"N</td><td>77°44'34.58"E</td></tr></table></td></tr>
<tr><td>iv.</td><td>Elevation of the project site</td><td>63 m AMSL</td></tr>
<tr><td>v.</td><td>Involvement of Forest land if any.</td><td>Nil</td></tr>
<tr><td>vi.</td><td>Water body exists within the project site as well as study area</td><td>Project site:
None
Study area :
Gangaikondan tank – 3.7 km – E
Chittar River – 3.2 km – N
Parakirampandiyan kulam – 5.3 km – NE
Palamadai kulam – 6.5 km – W
Thamirabarani River – 8.11 km _ SE
Tirunelveli Canal – 7.3 km – S
Seliyanallur canal – 6.9 km – NW
Uppodai River – 6.5 – NE</td></tr>
<tr><td>vii.</td><td>Existence of ESZ/ESA/national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/elephant reserve etc. if any within the study area</td><td>Project site is located at a distance of 3km from the boundary of the Gangaikondan Spotted Deer Sanctuary for which final ESZ notification was issued by MoEF&CC vide S.O. 2773 (E) dated 31/07/2019.
Gangaikondan Protected Forest – 600m -E</td></tr>
</table>

S No.	Particulars	Details
		Talaiyattu Reserved forest – 1.1 km – W

34.4.4 The unit configuration and capacity of proposed project is given as below:

Description	Capacity
Cement Grinding Plant	300 TPD or 1,03,500 TPA

34.4.5 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

S No	Raw Material	Quantity (TPA)	Likely source	Mode of Transport
1.	Clinker	91080	Imported	Sea, Road
2.	Dolomite	8280	Local Market	Road
3.	Gypsum	4140	Local Market	Road

34.4.6 Total raw/fresh water demand would be 8KLD. The required water will be sourced from SIPCOT industrial park water supply.

34.4.7 The Unit requires 1026.45 KW power and total power demand is provided by the Tamil Nadu Electricity Board (TNEB).

34.4.8 The capital cost of the project is Rs.35.11 Crores. The employment generation from the proposed project is 65 persons.

34.4.9 Proposed Terms of Reference (Baseline data collection period: post monsoon 2021)

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
A. Air				
a. Meteorological parameters	temperature, relative humidity, cloud cover, rainfall, wind speed, wind direction	1	Continuous hourly recording for 90 days	-
b. AAQ parameters	PM_{10}, $PM_{2.5}$, SO_2, NOx, CO, O_3, NH_3, C_6H_6, BaP, Pb, As, and Ni	8	twice a week on 24 hrs basis for a total duration of 12 weeks	-
B. Noise	Leq for day time and night time	8	Once in a season	-
C. Water				
Surface water	Physico-chemical and biological	8	Once in a season	-

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
	covering 28/30 parameters			
Ground water quality parameters	parameters as per IS: 10500	8	Once in a season	-
D. Land				
a. Soil quality	physicochemical, nutrients level and micro-biological characteristics	3	Once in a season	-
b. Land use	Based on recent times satellite imageries, Survey of India's OSM and ground validation	Study area of 10 km aerial coverage	Once in a season	-
E. Biological				
a. Aquatic	Study area of 10 km aerial coverage	8	Once in a season	-
b. Terrestrial				-
F. Socio-economic parameters	-	Study area of 10 km aerial coverage	Once in a season	Focus group discussion

34.4.10 There is no violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration.

34.4.11 EIA consultant - M/s. Aadhi Boomi Mining and Enviro Tech Private Limited [S No 109; List of ACOs with their Certificate / Extension Letter no. Rev. 09, Apr. 12, 2021.

34.4.12 The proposal was considered by the EAC (Industry 1) in its 34th meeting of the Re-constituted EAC (Industry-I) held on 15-16th April, 2021. The observations and recommendations of EAC is given as below.

Observations of the Committee

34.4.13 The Committee noted the following:

i. The proposed cement griding unit is a category B project and appraised as Category A project due to presence of Gangaikondon spotted dear sanctuary only 3 km away from site.
ii. Land required is 1.5944 ha only.
iii. Water demand is 8 KLD to be met from GW source.
iv. Nearest village from the plant is 2.5 Km.

v. Final ESZ notification for Gangaikondan Spotted Deer Sanctuary was issued by MoEF&CC vide S.O. 2773 (E) dated 31/07/2019. As per the said notification, the Eco-sensitive Zone shall be to an extent of zero kilometres to 0.82 kilometres around the boundary of Gangaikondan Spotted Deer Sanctuary. The location of the project, at 3 kms from the sanctuary, appears to be outside the ESZ.

Recommendations of the Committee

34.4.14 After deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToR enclosed at Annexure-1 read with additional ToRs at Annexure-2:

i. Particulate matter emission from the stacks shall not be more than 30 mg/Nm^3.
ii. Action plan for green belt development covering 33 % of the project area shall be submitted.
iii. Action plan for fugitive emission control in the project area shall be submitted.
iv. Authenticated map indicating the distance between the plant site and ESZ boundary of Gangaikondan sanctuary shall be submitted.
v. Authenticated list of flora and fauna existing in the study area from DFO shall be submitted. Site specific wildlife conservation duly approved by the Competent Authority shall be submitted in case of schedule I fauna if any exist in the study area.
vi. All stockyards shall be having impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains to trap the runoff material.
vii. Action plan for rainwater harvesting shall be furnished.

34.5 Proposed Production of Low Carbon Ferro Manganese (100 TPM) or Low Carbon Silico Manganese (100 TPM) or Low Carbon Ferro Chrome (100 TPM) by **M/s. Sri Santhi Industries** at Plot 16, APIIC Growth Center, Phase I, Bobbili, **Vizianagaram District, Andhra Pradesh [**Online Proposal No.IA/AP/IND/203847/2021;File No IA-J-11011/97/2021-IA-II(I)]– **Prescribing for Terms of Reference** – regarding.

34.5.1 M/s. Sri Santhi Industries has made an application online vide proposal no. IA/AP/IND/203847/2021 dated 06/04/2021 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) under Category "A." of the schedule of the EIA Notification, 2006.

Details submitted by Project proponent

34.5.2 The project of M/s. Sri Santhi Industries located in Plot 16, APIIC Growth Center, Phase I, Bobbili, Vizianagaram District, Andhra Pradesh is for Proposed Production of Low Carbon Ferro Manganese (100 TPM) or Low Carbon Silico Manganese (100 TPM) or Low Carbon Ferro Chrome (100 TPM).

34.5.3 Environmental site settings

S No	Particulars	Details
i.	Total land	0.24 ha Government Land.
ii.	Existence of habitation & involvement of R&R, if any.	No and R&R is not applicable
iii.	Latitude and Longitude of the project site	**Point** / **Latitude** / **Longitude** A / 18°33'19.95"N / 83°19'49.09"E B / 18°33'19.24"N / 83°19'50.13"E C / 18°33'17.33"N / 83°19'48.87"E D / 18°33'17.54"N / 83°19'47.67"E
iv.	Elevation of the project site	136 m AMSL
v.	Involvement of Forest land if any.	Nil
vi.	Water body exists within the project site as well as study area	**Project site:** None **Study area:** Vedavati River: 3.6 Km in SW
vii.	Existence of ESZ/ESA/national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/elephant reserve etc. if any within the study area	Nil Bobbali PF at 4.0 km in NW

34.5.4 The unit configuration and capacity of proposed project is given as below:

S No	Proposed Unit	Capacity in TPM
1.	LC Ferro Manganese or	100 TPM
2.	LC Silico Manganese or	100 TPM
3.	LC Ferro Chrome	100 TPM

34.5.5 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

S No	Raw Material	Quantity (TPM)	Source	Distance	Mode of Transportation
1.	Mn ore	173	Open Market	100-km	Road
2.	Aluminium	51.5	Open Market	100-km	Road
3.	M.S. Scrap	11.8	Open Market	100-km	Road
4.	Fluorspar	11.5	Open Market	100-km	Road
5.	Chrome Ore	180	Open Market	100-km	Road

34.5.6 The fresh water requirement for the project is estimated as $3.5m^3$/day and will be obtained from the APIIC Growth Center.

34.5.7 The power requirement for the project is estimated as 0.38MVA, which will be obtained from the AP State Electricity Board.

34.5.8 The capital cost of the project is Rs 2.0 Crores and the capital cost for environmental protection measures is proposed as Rs. 0.5 Crores. The employment generation from the proposed project is 20 nos.

34.5.9 Proposed Terms of Reference (Baseline data collection period: 15th March 2021 to 15th June 2021):

Attributes		**Sampling**		**Remarks**
A. Air		No. of stations	Frequency	
a. Meteorological parameters	Wind Speed, Wind Direction, Humidity, Temperature, Rain fall, Solar Radiation	1	3 months Continuously	Near Project Site
b. AAQ parameters	PM_{10}, $PM_{2.5}$, SO_2, NOx, CO and Specific Parameter defined by EAC.	8 Locations	24 hourly Twice a week at each location for 3 months	
B. Noise	Day Leq and Night Leq	8 Location	Once in season at each location	
C. Water				
Surface water/Ground water quality parameters	**Surface Water** : as per CPCB Norms **Ground Water:** 32 parameters as per Drinking standards	**Surface:** 4 location **Ground** : 8 location Frequency	Frequency :Once in a Season Frequency :Once in a Season	
D. Land				
a. Soil quality b. Land use	**Soil Quality** AS per ICAR Guidelines/ MoEFCC Guidelines Land Use: National Remote Sensing Centre (NRSC)Guidelines and MOEFCC Guidelines	**Locations:** 8 locations Covering 10 km study area	Frequency :Once in a Season	
E. Biological a. Aquatic b. Terrestrial	As per MOEFCC Guidelines	Covering core and Buffer Zone	Frequency :Once in a Season	
F. Socio-economic parameters	As Per MOEFCC Guideline	Covering 10 km radius study Area	Frequency :Once in a Season	

34.5.10 There is no violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration.

34.5.11 Name of the EIA consultant: M/s AmplEnviron Pvt. Ltd., Hyderabad [S.No. 124, List of ACOs with their Certificate / Extension Letter no. Rev. 09, Apr. 12, 2021].

34.5.12 The proposal was considered by the EAC (Industry 1) in its 34th meeting of the Re-constituted EAC (Industry-I) held on 15-16th April, 2021. The observations and recommendations of EAC are given as below.

Observations of the Committee

34.5.13 The Committee noted the following:

i. TOR is required for production of Low carbo FeMn, SiMn and FeCr @ 100 TPM either one of the alloy mentioned here in.
ii. Plant facility shall be located in APIIC growth Centre Bobbili in Vizainagaram AP.
iii. Total Plant area shall be 0.24 ha and 0.08 ha shall be developed into green belt.
iv. 3.5 KLD water shall be required and sourced from APIIC growth Centre.
v. LDO shall be used for drying of raw materials.
vi. Technology selected is Metallo – thermic reduction & not through smelting process in a Furnace. The metallo–thermic reduction is mainly carried out with either silicon or aluminum as the reducing agent.

Recommendations of the Committee

34.5.14 After deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToR enclosed at Annexure-1 read with additional ToRs at Annexure-2:

i. Particulate matter emission level from exhaust hoods/stacks shall be less than 30 mg/Nm^3.
ii. 100 % waste shall be utilised/ sold. No dumping is permitted.
iii. Action plan for Fe-Cr slag management shall be furnished.
iv. No ground water abstraction shall be permitted.
v. All plant roads shall be paved, and industrial vacuum cleaners shall be used to clean the roads regularly.
vi. All stockyards shall be having impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains to trap the runoff material.
vii. Action plan for rainwater harvesting shall be furnished.

34.6 Proposal for Environment Clearance for completion of balance work of 6 MTPA Pellet Plant (Unit – 2) of approved 12 MTPA Pellet Plant of **M/s ArcelorMittal Nippon Steel India Limited** (Formerly Essar Steel India Limited) at Udayabata, Post- Paradip, Kujang Tehsil, District **Jagatsinghpur, Odisha [**Online Proposal No.IA/OR/IND/204957/2021; File No. IA-J-11011/129/2007-IA-II(I)]– **Prescribing for Terms of Reference** – regarding.

34.6.1 M/s ArcelorMittal Nippon Steel India Limited has made an application online vide proposal no. IA/OR/IND/204957/2021 dated 26/03/2021 along with the application in prescribed format (Form-I), copy of pre-feasibility report as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & nonferrous) under Category "A" of the schedule of the EIA Notification, 2006.

Details submitted by Project proponent

34.6.2 The project of M/s ArcelorMittal Nippon Steel India Limited located in Udayabata, Post-Paradip, Kujang Tehsil, District Jagatsinghpur, Odisha is for Proposal for Environment Clearance for completion of balance work of 6 MTPA Pellet Plant (Unit – 2) of approved 12 MTPA Pellet Plant.

34.6.3 Environmental site settings:

S No	Particulars	Details
i.	Total land	54.656 ha
ii.	Existence of habitation & involvement of R&R, if any.	No and R&R is not applicable
iii.	Latitude and Longitude of the project site	20° 18' 55.03" N to 20° 19' 28. 71" N 86° 38' 37.24" E to 86° 39' 9.87"E
iv.	Elevation of the project site	1 - 3 m AMSL
v.	Involvement of Forest land if any.	Nil
vi.	Water body exists within the project site as well as study area	**Project site:** None **Study area:** Mahanadi River – 0.2km (N) Atharabanki Nadi: (2.7 km) Bay of Bengal: (7.18 km) Nuna River: (4.02 km)
vii.	Existence of ESZ/ESA/national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/elephant reserve etc. if any within the study area	Nil

34.6.4 The existing project was accorded previous environmental clearance vide letter no. J-11011/129/2007-1A II(I) dated 29th May 2008 for installation of Integrated steel plant 6 MTPA (including Pellet plant 12 MTPA) along with captive power plant (225 MW). Consent to operate for the existing unit for Iron Ore Pellet Plant of 6 MTPA along with 4.75 MTPA Wet Iron Ore Grinding Unit was accorded by State Pollution Control Board, Odisha vide letter no. Ref. No. 3920/IND-I-CON-6258, dated 16th March 2021 and valid upto 31st March 2023.

34.6.5 Implementation status of the existing EC:

S No	Product	Existing Production	Expansion	Total (Final Production)	End-use
1.	Pelletization Plant	60,00,000 TPA (1 x 6MTPA)	60,00,000 TPA (1 x 6MTPA): 83% installation completed	1,20,00,000 TPA (2 x 6MTPA)	Captive use
2.	Blast Furnace with Pig Casting Machine	Not Installed	-	Dropped	-
3.	Basic Oxygen Furnace	Not Installed	-	Dropped	-
4.	Steel Melting & Continuous Casting shop	Not Installed	-	Dropped	-
5.	Ladle Furnace	Not Installed	-	Dropped	-
6.	RH-TOB	Not Installed	-	Dropped	-
7.	Slab Caster	Not Installed	-	Dropped	-
8.	Oxygen Plant (BOO Basis)	Not Installed		Dropped	
9.	Lime	Not Installed	-	Dropped	-
10.	Dolo Plant	Not Installed	-	Dropped	-
11.	Captive Power Plant	Not Installed	-	Dropped	-
12.	Sinter Plant	Not Installed	-	Dropped	-

34.6.6 The unit configuration and capacity of existing and proposed project is given as below:

Name	Existing Units		Proposed Units		Total (Existing +Proposed)	
	Configuration	Production MTPA	Configuration	Production MTPA	Configuration	Production MTPA
Pelletization Plant	60,00,000 TPA (1x6MTPA)	6.0 MTPA	60,00,000 TPA (1x6MTPA)	6.0 MTPA	2x60,00,000 TPA (2x6MTPA)	12 MTPA

34.6.7 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

S No	Raw Material	Quantity (Tons per annum)			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
1	Iron Ore Concentrate	60,00,000	60,00,000	1,20,00,000	Dabuna	253	Slurry pipeline
2	Limestone	3,60,000	3,60,000	720000	Dubai	3200	Sea/Road
3	Bentonite	48,000	48,000	96000	Gujrat	2080	Sea/Road
4	Anthracite Coal	90,000	90,000	180000	Russia	5330	Sea/Road

34.6.8 The total water requirement for the project is estimated as 21000 KLD, out of which 4,992 KLD of fresh water requirement will be obtained from the Taladanda Canal and the remaining requirement of 17,856 KLD will be met from the slurry water from Dabuna pipeline.

34.6.9 The total power requirement for existing and proposed Pellet Plant is 61 MW. From existing power plant of Essar Power Orissa Ltd. (Presently acquired by ArcelorMittal Nippon Steel India Ltd.), power availability is 54 MW. The additional power requirement for proposed expansion for Pellet Plant-2 is 23 MW. The additional 7 MW power for the proposed expansion will be sourced from TP Central Odisha Distribution Limited (TPCODL).

34.6.10 The capital cost of the project is Rs 1450 Crores and the capital cost for environmental protection measures is proposed as Rs 15Crores. The employment generation from the proposed project/ expansion is 1,157.

34.6.11 Proposed Terms of Reference (Baseline data collection period: (December 2020 to February 2021):

Attributes		**Sampling**		**Remarks**
A. Air		No. of stations	Frequency	
a. Meteorological parameters	Temperature, Humidity, Rainfall, Wind Speed, Wind Direction, Cloud Cover	1	Daily for 3 months	
b. AAQ parameters	Particulate Matter as PM_{10}, Particulate Matter as $PM_{2.5}$, Sulphur dioxide as SO_2, Oxide of Nitrogen as NOx, Carbon Monoxide as CO, Lead as Pb, Free Silica, Aluminium, Calcium, Sodium, Potassium, Magnesium, Lead, Vanadium, Iron, Manganese, Boron, Cadmium, Copper, Chromium, Hexavalent, Chromium, Nickel, Cobalt, Mercury, Arsenic, Sulfur, Phosphorus, Chloride	8	Twice in a Week for three Months	
B. Noise	Leq. Day Time Leq. Night Time	8	Once in a Month For Three Month	
C. Water				
Surface water quality parameters	Color, pH, Dissolved Oxygen (min), Turbidity, Chloride (max), Total Dissolved Solids, Oil & Grease (max), BOD (3) days at 27°C (max), Chemical Oxygen Demand (COD), Arsenic as As, Lead as Pb, Cadmium as Cd (max), Hexa Chromium as Cr+6, Copper as Cu (max), Zinc as Zn(max), Selenium as Se (max), Cyanide as CN (max),	8	Once in a Three Month	(Middle Month of Base line Monitoring)

Attributes		Sampling		Remarks
	Fluoride as F (max), Sulphates (SO4) (max), Phenolic Compounds as C_6H_5OH (max), Iron as Fe (max), Nitrate as NO_3 (max), Anionic Detergents (max), Total Coli form			
Ground water quality parameters	Color, Odour, Taste, Turbidity, pH, Total Hardness (as CaCO3), Iron (as Fe) , Chloride (as Cl) ,Residual Free Chlorine, Total Dissolved Solids as TDS, Calcium as Ca, Magnesium as Mg, Copper as Cu, Manganese as Mn, Sulphate as SO4, Nitrate as NO3, Fluoride as F, Phenolic Compounds as C6H5OH, Mercury as Hg, Cadmium as Cd, Selenium as Se, Arsenic as As, Cyanide as CN, Lead as Pb, Zinc as Zn, Total Chromium as Cr, Mineral Oil, Alkalinity, Aluminium as Al, Boron, Total Coliform as TC	8	Once in a Three Month	(Middle Month of Base line Monitoring)
D. Land a. Soil quality b. Land use	Conductivity, pH, Texture, Sand, Silt, Clay, Bulk, Density, Exchangeable Calcium, Exchangeable Sodium, Exchangeable Magnesium, Available Potassium, Available Phosphorus, Available Nitrogen, Organic Matter, Organic Carbon, Water Soluble Chloride, Water Soluble Sulphate, Sodium Absorption Residue, Aluminium, Iron, Manganese, Boron, Zinc, Chromium, Hexavalent Chromium, Nickel, Copper, Cadmium	8	Once in a Three Month	
E. Biological a. Aquatic b. Terrestrial	Biological study including study of flora and fauna within 10km radius area has been carried out.	Core zone Buffer zone	Study Period	
F. Socio-economic parameters	Need based survey and socio-economic survey (selected samples) have been carried out.	Core zone Buffer zone	Study Period	

34.6.12 It has been reported by PP that, there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

34.6.13 M/s ArcelorMittal Nippon Steel India Limited has been earlier made online application vide proposal no IA/OR/IND/197064/2021 dated 22/02/2021 and listed in 31st Re constituted EAC meeting held on 25-26th February, 2021. The project proponent vide email dated 23/02/2021 expressed their inability to attend the meeting and requested to withdraw their

proposal. In view of this, the Committee recommended for accepting the withdrawal of the instant proposal.

34.6.14 The project proponent has been resubmitted the online application vide proposal no IA/OR/IND/204957/2021 dated 26/03/2021 and considered by the EAC (Industry 1) in its 34th meeting of the Re-constituted EAC (Industry-I) held on 15-16th April, 2021. The observations and recommendations of EAC are given as below:

Observations of the Committee

34.6.15 The Committee noted the following:

i. TOR is being sought for expansion of a 6 MTPA Pellet Plant to 12 MTPA at Jagatsinghpur, Paradeep. Total project cost is 1450 Cr.
ii. EC for 6 MTPA was accorded in May 2008. Current CTO is valid till 31.3.2021.
iii. Total plant area is 135.06 ac and expansion shall be carried out in the existing land only.
iv. EC of 2008 included the proposed plant but could not be completed during validity period of the EC. Only 83 % construction could be completed during validity period. PP is seeking TOR to complete the expansion process as per MoEF&CC notification S.O. 1247 (E) dated 18/03/2021 which states that *"where construction and commissioning of proposed activities have not been completed within the validity period of the Environmental Clearance (EC) and a fresh application for EC has been submitted due to expiry of the said period of the EC, the concerned Expert Appraisal Committee or State Level Expert Committee, as the case may be, may exempt the requirement of public hearing subject to the condition that the project has been implemented not less than fifty percentage in its physical form or construction".*
v. Units other than Pellet plant from the EC of 2008 are being dropped.
vi. Product transport from the plant to Paradeep Port is being done through a dedicated conveyor belt.
vii. Currently scrubbers are used to control dust emission from pellet plant inlet, outlet and hearth Layer building.
viii. Covered storage is provided for raw materials like bentonite, coal etc.
ix. 15 KLD STP is proposed for treatment of domestic waste water.
x. LSHS is proposed to be used as fuel for pellet plant. In future the proposal is in process to change over to natural gas.
xi. Mahanadi river is only 210 m away from plant boundary.

Recommendations of the Committee

34.6.16 After deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToR enclosed at Annexure-1 read with additional ToRs at Annexure-2:

i. Public hearing for the second module of pellet plant is exempted in pursuance to the S.O. 2206 (E) dated 18/03/2021 as the PP has reported 83 percentage completion of construction work.

ii. Water requirement for the project after expansion (852 Cum/Hr) shall be met from water recovered from iron ore slurry and Taladanda Canal.
iii. Action plan for gradual phasing out ground water usage shall be submitted.
iv. Action plan to limit the dust emission from pellet plant below 30 mg/Nm^3 shall be furnished. Usage of scrubbers shall be avoided.
v. Action plan for fugitive emission control in the plant premises shall be provided.
vi. Action plan for green belt development covering 33% of the plant area shall be submitted including green belt development towards Udayabata Village and Mahanadi river which is located at a distance of 600 m and 210 m from the plant boundary.
vii. Action plan for switching over fuel from LSHS/Furnace Oil to Natural Gas shall be submitted.
viii. AAQ modelling shall be done considering proximity to the coast and riverine ecology.
ix. No construction activity/infringement will take place in flood plain of Mahanadi river.

34.7 Greenfield project for implementation of manufacturing facilities for Sponge Iron (DRI Kilns 2x350TPD), MS Billet (IF: 4x20Tons), Steel Rerolled products (Wire Rod/TMT Bars/ Structure steel: 2,25,863 TPA; Hot Charging RM: 1,71,144 TPA; Billets Reheat Furnace (Fuel Fired): 54,719 TPA), CPP (WHRB: 16MW and AFBC: 9MW) and Fly Ash Bricks 34,600 TPA by **M/s Neerganga Ispat Private Limited** located at Village Boriya, Tehsil Berla, **District Bemetara, Chhattisgarh [**Online Proposal No.IA/CG/IND/206315/2021;File No IA-J-11011/125/2021-IA-II(I)]– **Prescribing for Terms of Reference** – regarding.

34.7.1 M/s Neerganga Ispat Private Limited has made an application online vide proposal no. IA/CG/IND/206315/2021 dated 26/03/2021 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical Industries and 1(d) Thermal Power Plant under Category "A" of the schedule of the EIA Notification, 2006.

34.7.2 The EIA consultant – M/s. Anacon Labs vide email dated 14/04/2021 expressed their inability to participate in the meeting and requested to consider the same in the next meeting.

34.7.3 In this regard, it was apprised to the EAC that as per MoEF&CC Office Memorandum No. 22-35/2020-IA.III dated 18/11/2020 pertaining to "Streamlining the process of grant of Environment Clearance process", "*All projects, placed in the agenda, should be considered by the EAC notwithstanding the non-attendance of the Project Proponent or his consultant in the EAC meeting to make a presentation. A clarification may however be sought from the consultant regarding reason for not attending the meeting".*

34.7.4 In pursuance to the O.M. dated 18/11/2020, the proposal was considered by the EAC.

Details submitted by Project proponent

34.7.5 The project of M/s Neerganga Ispat Private Limited located in Village Boriya, Tehsil Berla, District Bemetara, Chhattisgarh is for Proposal for Greenfield project for implementation of manufacturing facilities for Sponge Iron (DRI Kilns 2x350TPD), MS Billet (IF: 4x20Tons),

Steel Rerolled products (Wire Rod/TMT Bars/ Structure steel: 2,25,863 TPA; Hot Charging RM: 1,71,144 TPA; Billets Reheat Furnace (Fuel Fired): 54,719 TPA), CPP (WHRB: 16MW and AFBC: 9MW) and Fly Ash Bricks 34,600 TPA.

34.7.6 Environmental site settings:

<table>
<tr><th>S No</th><th>Particulars</th><th>Details</th></tr>
<tr><td>i.</td><td>Total land</td><td>19.16 ha
[Private Land]</td></tr>
<tr><td>ii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>No</td></tr>
<tr><td>iii.</td><td>Latitude and Longitude of the project site</td><td>Latitude: 21°29'3.37"N,
Longitude: 81°27'57.79"E</td></tr>
<tr><td>iv.</td><td>Elevation of the project site</td><td>292.61 m AMSL</td></tr>
<tr><td>v.</td><td>Involvement of Forest land if any.</td><td>Nil</td></tr>
<tr><td>vi.</td><td>Water body exists within the project site as well as study area</td><td>Project site:
Nil
Study area :
<table>
<tr><th>Name</th><th>Distance (KM)</th><th>Direction</th></tr>
<tr><td>1.SeonathRiver</td><td>9.6</td><td>W</td></tr>
<tr><td>2.KhurmuraMinor</td><td>3.0</td><td>E</td></tr>
<tr><td>3.TarkoriMinor</td><td>1.0</td><td>W</td></tr>
<tr><td>4.TandulaCanal</td><td>8.0</td><td>ENE</td></tr>
<tr><td>5. Anandgaon Minor</td><td>9.2</td><td>ENE</td></tr>
<tr><td>6.BerlaMinor</td><td>3.5</td><td>NE</td></tr>
<tr><td>7.Gandharwan Nala</td><td>6.5</td><td>N</td></tr>
<tr><td>8.Tandula Distributary</td><td>4.6</td><td>WNW</td></tr>
<tr><td>9.Sinwar Minor</td><td>6.6</td><td>NW</td></tr>
<tr><td>10.Sond Distributary</td><td>3.3</td><td>WSW</td></tr>
<tr><td>11.BirodaMinor</td><td>4.3</td><td>WSW</td></tr>
<tr><td>12.DargaonMinor</td><td>7.2</td><td>WSW</td></tr>
<tr><td>13.GotaMinor</td><td>4.3</td><td>SE</td></tr>
<tr><td>14.KokriMinor</td><td>5.3</td><td>SE</td></tr>
<tr><td>15.Canalnr.Kokri</td><td>5.5</td><td>SE</td></tr>
<tr><td>16.SemariyaMinor</td><td>7.9</td><td>SSE</td></tr>
<tr><td>17.GirholaMinor</td><td>9.0</td><td>SSE</td></tr>
<tr><td>18.TandulaCanal</td><td>4.0</td><td>SE</td></tr>
<tr><td>19.Kharra Distributary</td><td>6.7</td><td>S</td></tr>
<tr><td>20.BhatiyaMinor</td><td>6.0</td><td>SE</td></tr>
<tr><td>21.PahraSubminor</td><td>7.3</td><td>SE</td></tr>
<tr><td>22.NarkiNala</td><td>8.9</td><td>SE</td></tr>
<tr><td>23.GhuriNala</td><td>5.7</td><td>SE</td></tr>
<tr><td>24.NavnaraMinor</td><td>4.3</td><td>SE</td></tr>
<tr><td>25.SuroliMinor</td><td>3.7</td><td>NE</td></tr>
<tr><td>26.TathiyaMinor</td><td>6.2</td><td>W</td></tr>
</table></td></tr>
<tr><td>vii.</td><td>Existence of ESZ/ESA/national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/elephant reserve etc. if</td><td>Nil</td></tr>
</table>

S No	Particulars	Details
	any within the study area	

34.7.7 The unit configuration and capacity of proposed project is given as below:

S. No.	Name	Proposed Units	
		Configuration	Production TPA
1.	Sponge Iron	DRI Kilns, (350TPD x 2Nos.)	231,000
2.	MS Billet	Induction Furnace, (20T x 4Nos.)	232,848
3.	Rerolled Steel product	Hot Charging Rolling Mill	171,144
4.	Rerolled Steel product	Billet Reheating Furnace (Fuel Fired)	54,719
5.	Captive Power Plant	WHRB	16 MW
6.	Fly Ash Bricks	AFBC	9MW
7.	Fly Ash Bricks		34,600

34.7.8 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

For Sponge Iron Plant

S. No.	Raw Material	Quantity (TPA)	Source	Distance from site (Kms)	Mode of Transportation
1.	Iron Ore	369600.00	Odisha Iron Ore Mine and NMDC	Within 200 kms	By Road through Covered vehicles
2.	Coal	277200.00	SECL Coal mines	Within 200 kms	By Road through
3.	Limestone/Dolomite	8085.00	Open Market	Within 200 kms	Covered vehicles
4.	Refractory Material	300.00	Open Market	Within 200 kms	By Road through
	Total: 655185.00				

For Induction furnace

S. No.	Raw Material	Quantity (TPA)	Source	Distance from site (Kms)	Mode of Transportation
1.	Sponge Iron	237600.00	Captive production/ Local market	Within 200 kms	By Road through Covered vehicles
2.	Pig Iron/ CI Scrap	29393.00	Captive production/ Local market	Within 200 kms	By Road through Covered vehicles/ Internally available
3.	Melting Scrap	4900.00	Captive generation/ Local market	Within 200 kms	Internally available/ By Road through covered vehicles
4.	Ferro Alloys	2376.00	Captive production/ Local market	Within 200 kms	Internally available/ By Road through covered vehicles
5.	Aluminum	237.60	Open Market/BALCO	Within 200 kms	By Road through Covered vehicles
6.	Ramming Mass	594.00	Open Market	Within 200 kms	By Road through Covered vehicles
7.	Steel Sheet Former	60.00	Open Market	Within 200 kms	By Road through Covered vehicles

S. No.	Raw Material	Quantity (TPA)	Source	Distance from site (Kms)	Mode of Transportation
8.	Furnace Oil for Laddle Preheating	460.94	Open Market	Within 200 kms	By Road through Tankers
9.	Calcined Lime for Refining of Liquid Steel	11880.00	Open Market	Within 200 kms	By Road through Covered vehicles
10.	Flurospar and other additives fordephos	2376.00	Captive production/ Local market	Within 200 kms	By Road through Covered vehicles
11.	Electrode for Arc Furnace	475.20	Captive production/ Local market	Within 200 kms	By Road through Covered vehicles
	Total: 290352.74				

For Hot Charging Rerolling Mill

S. No.	Raw Material	Quantity (TPA)	Source	Distance from site (Kms)	Mode of Transportation
1	Hot Billets	174636.00	Captive Production in Steel Melting shop	Within 200 kms	Internal Transfer
	Total	**174636.00**			

For Reheating Furnace based Rerolling Mill

S. No.	Raw Material	Quantity (TPA)	Source	Distance from site (Kms)	Mode of Transportation
1	Cold Billets	58212.00	Captive production/ Local market as per requirement	Within 200 kms	Internal Transfer /By Road through covered vehicles
2	Coal	5822.00	SECL Mines/ Local Market	Within 200 kms	By Road through Covered vehicles
	Total	**64034.00**			

Captive AFBC Power Plant (9MW)

S. No.	Raw Material	Quantity (TPA)	Source	Distance from site (Kms)	Mode of Transportation
1	Char Dolochar	57750.00	Captive generation in SID		Internally available.
2	Coal	30086.00	SECL Mines	Within 200 kms	By Road through covered vehicles
3	Fluidizing Bed Media	150.00	Open Market	Within 200 kms	By Road through covered vehicles
	Total	**87986.00**			

For Brick Manufacturing

S. No.	Raw Material	Quantity (TPA)
1	Fly Ash/ Coal Ash etc	22490.00
2	Granulated Ferro Alloys Slag	0.00
3	Gypsum and Cement	3460.00
4	Granulated slag from Induction Furnace	8650.00
	Total::	**34600.00**

34.7.9 The water requirement for the project is estimated as 1180 m^3/day (389400 KLA), out of which 138, 060 KLA of fresh water requirement will be obtained from the rain water and the remaining requirement of 251, 340 KLA will be met from Ground water. The permission for drawl of ground water withdrawal will be obtained from CGWA.

34.7.10 The power requirement for the project is estimated as 30MW, out of which **25** MW will be obtained from captive power plant and **5** MW will be sourced through State Grid (CSPDCL).

34.7.11 The capital cost of the project is Rs 265.0 Crores and the capital cost for environmental protection measures is proposed as Rs 3.9759 Crores. The employment generation from the proposed project is 630.

34.7.12 Proposed Terms of Reference (Baseline data collection period: (December 2020 to February 2021):

Attributes	**Parameters**	**Sampling**	
		Stations no's	**Frequency**
A. Air			
a. Meteorological parameters	Temperature, Relative, Humidity, rainfall, wind direction & wind speed.	1 (Project site)	Daily
b. AAQ parameters	PM_{10}, $PM_{2.5}$, SO_2, NO_2, NH_3, Ozone, CO, Benzene and Benzopyrene & Heavy metals, Heavy metals : Ni, Pb, As	9	Monthly
B. Noise	Sound pressure level (Leq)	8	Monthly (day time and night time)
C. Water		16	
Surface water/ Groundwater quality parameters	As per IS: 10500	8 8	Once in a month
D. Land			
a. Soil quality b. Land use	Physical and nutrition properties of soil	2	Once in a season
E. Biological a. Aquatic b. Terrestrial	Flora and fauna within study depending on Ecological receptors in the study area Aquatic Ecological Study 3 locations at Sivnath River and other River in study area	3	Once in a year
F. Socio-economic parameters	Occupational Health monitoring of employees	1 (Project site)	Once in a year

34.7.13 It has been reported by PP that, there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

34.7.14 Name of the EIA consultant: M/s Anacon Laboratories Private Limited, Nagpur [S. No.63, List of ACOs with their Certificate / Extension Letter no. Rev. 09, Apr. 12, 2021].

34.7.15 The proposal was considered by the EAC (Industry 1) in its 34th meeting of the Re-constituted EAC (Industry-I) held on 15-16th April, 2021. The observations and recommendations of EAC are given as below:

Observations of the Committee

34.7.16 The Committee noted the following:

i. The proposal is for a green field steel plant based DRI IF route.
ii. 35 % green belt is proposed.
iii. RHF shall be operating on coal gasifier. Details of coal gasifier are not available in the PFR.
iv. Project area envisaged is 19.16 ha and the entire land proposed for acquisition is for agriculture use.
v. 1180 KLD water shall be abstracted from ground. Sheonath, the nearest river is 9.6 km away from the plant. Within three 3 km area of the plant there are three minors that supply water to the region for agriculture.
vi. 4 sites have been studied. All sites are similar. Boriya site is selected because nearest village is 1.6 km away. In other cases, the villages were nearer to plant site. All sites are fertile agriculture land based on ground water and no surface water is available except from minors that supply water for irrigation in limited area. Minors are also not perennial. It may be worth noting that the area where the plant is being proposed is very fertile and known as rice bowl of the country.
vii. The site is 23.2 km away from Highway and almost 30 Km from Railway station. Plant can be approached through village roads.
viii. Besides there are few other points worth noting from review of PFR;
    a. It is claimed that the proposed plant shall help in reducing GHG emissions. The technology selected does not exhibit any such characteristics.
    b. Section 7.1 claims that no R&R is involved. The entire land is private agriculture land and land losers will claim compensation. There are 38 plots to be acquired from four or five different agencies.
    c. PM emissions have been proposed as 50 mg/Nm^3.
    d. Scrubbers have been considered for RHF.
    e. Details of Coal gasifier are not available.

Recommendations of the Committee

34.7.17 The project proponent and EIA consultant did not attend the meeting. However, the Committee considered the proposal in absentia. The proposed steel plant is water intensive and heavily dependent on ground water. Installation of such a facility in a very fertile land may not be ecologically compatible as it is likely to deplete the ground water table and agriculture productivity would be affected severely. In view of this, the committee

recommended to return the proposal in its present form for addressing the concerns as enumerated above.

34.8 Expansion of clinker production from 1.7 to 3.2 MTPA, cement from 1.8 to 4.0 MTPA (by Installation of new unit (Unit III), & power from 18 to 33 MW (by Installation of WHRB power Plant) by **M/s Deccan Cements Limited**, located at Village Mahankaligudem, Mandal Palakeedu, **District Suryapet, Telangana** [Online Proposal No. IA/TG/IND/ 205448/2021; File No. J-11011/572/2007-IA.II(I)] – **Amendment in Terms of Reference** – regarding.

34.8.1 M/s. Deccan Cements Limited has made an online application vide proposal no. IA/TG/IND/205448/2021 dated 26/03/2021 along with Form 3 and sought for amendment in the Terms of Reference accorded by the Ministry vide letter no. J-11011/572/2007-IA-II(I) dated 10/11/2020. The proposed project activity is listed at 3(b) Cement plants under Category "A" of the schedule of the EIA Notification, 2006 and the proposal is appraised at central level.

Details submitted by the project proponent

34.8.2 The ToR for the Expansion of clinker production from 1.7 to 3.2 MTPA, cement from 1.8 to 4.0 MTPA (by Installation of new unit (Unit III), & power from 18 to 33 MW (by Installation of WHRB power Plant) by M/s. Deccan Cements Limited located at Village Mahankaligudem, Mandal Palakeedu, **District Suryapet, Telangana** was accorded by MoEF&CC vide letter no. J-11011/572/2007-IA-II(I) dated 10/11/2020.

34.8.3 The project proponent has applied for the following amendment in ToR as follows:

i. M/s Deccan Cement Limited proposes to obtain amendment in TOR for change in land use category of 74.5 ha of Revenue land to 66.48 ha of Revenue land and 8.02 ha of Forest Land. In Feb 2021, as per the directive of NGT, the Joint Team of Revenue and Forest officials conducted a Joint Survey and declared that an area of 8.02 ha along the Northern boundary of the Plant Area is falling in Saidulanama RF, in which the Railway siding of DCL plant is exists.

ii. Detail of ToR amendment request for change in land category:

Land Category	**TOR obtained**	**TOR Requested**	**Remarks**
Existing Plant area (ha)			
Revenue Land	53.80	45.78	8.02 ha of existing land is declared as Forest Area (Applied to MOEFCC for Diversion)
Forest Land	0.0	8.02	
Additional Land for Expansion (ha)			
Revenue Land	20.7	20.7	-
Forest Land	0	0	-
Total	**74.5 Totally Revenue land**	**74.5 (66.48 ha Revenue land and 8.02 ha as Forest Land)**	

34.8.4 No change in configuration as well as capacity granted in ToR accord J-11011/572/2007-IA-II(I) dated 10/11/2020. Detail of configuration and capacity grant in ToR is given as below:

Cement Plant	**Present approved Capacity as per MoEF EC (MTPA)**			**Capacity after proposed enhancement (MTPA)**		
	Clinker	**Cement**	**Power (MW)**	**Clinker**	**Cement**	**Power(MW)**
Unit – I	0.5	0.3	18	0.5	0.3	33MW • 18 MW Coal based power plant • 15 MW Waste Heat Recovery Power Plant
Unit – II	1.2	1.5		1.2	1.5	
Line – III	-	-		1.5	2.2	
Total	**1.7**	**1.8**		**3.2**	**4.0**	

34.8.5 Due to the addition of line III, revised water requirement shall be 4220 KLD and the same shall be met from Krishna River and Mine Pits.

34.8.6 Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration is given below:

i. National Green Tribunal – South Zone, Chennai. VakkantiKoteshwar Rao Vs Union of India and Ors in Original Application no. 33 of 2016 Proceedings in Progress - Case filed with respect to alleged violations under EIA Notification to the project.

ii. MoEF&CC on 04.09.2020 has issued show cause notice to PP regarding non-disclosure of pending NGT case. DCL has submitted the reply for the same. Subsequently, MoEF&CC has issued Terms of Reference with a condition that "project proponent shall furnish the details of NGT case in the EIA Report in addition to the prescribed TOR along with compliance report to the observations/direction made by NGT in due course".

M/s Deccan Cement Limited will prepare the EIA report covering in detail about the NGT case.

34.8.7 Name of the EIA consultant: M/s B. S. Envi – Tech (P) Ltd. [S. No.136, List of ACOs with their Certificate / Extension Letter no. Rev. 09, Apr. 12, 2021].

34.8.8 The proposal was considered by the EAC (Industry 1) in its 34th meeting of the Re-constituted EAC (Industry-I) held on 15-16th April, 2021. The observations and recommendations of EAC are given as below:

Observations of the Committee

34.8.9 The Committee noted the following:

i. TOR was granted on 10.11.2020.

ii. There is a NGT case on Violation on Forest land acquisition.

iii. PP wants TOR amendment to add 3rd line of 1.5 MTPA Clinker and 2.2 MTPA Cement and corresponding changings in CPP and WHRB. With revised scheme the clinker production would increase to 3.2 MTPA and Cement capacity would go to 4.0 MTPA.

iv. There is a change in land use classification of the project site due to the involvement of 8.02 ha of forest land.
v. An area of 8.02 ha along Northern boundary of the plant is falling under a Reserve Forest in which a railway siding passes. PP has submitted application for diversion of this forest land to MOEFCC on 19.3.2021.
vi. Proposal for expansion of captive limestone mine is being submitted separately.
vii. Revised water requirement shall be 4220 KLD and the same shall be met from Krishna River and Mine Pits.
viii. Present Green Belt is 17 ha and the same after expansion shall increase to 24.6 Ha.
ix. Nearest Village is Ravipahad, 1.1 km in East.

Recommendations of the Committee

34.8.10 In view of the foregoing and after deliberations, the Committee recommended for `amendment in the ToR dated 10/11/2020 as mentioned at para 34.8.4 above subject to stipulation of following additional specific ToR:

i. Status of stage I Forest clearance for 8.02 ha encroached Forest land shall be furnished.

34.9 Increase in production capacity of Asbestos Corrugated and plain Sheets from 1,44,000 TPA to 2,50,000 TPA, installation of pre-coloured galvanized MS profile sheet plant (non-asbestos) of 25000 TPA and Captive Cotton Rag Pulp of capacity 2000 TPA by **M/s U.P. Asbestos Limited** located at Village Mau, Tehsil Mohanlalganj, **District Lucknow, Uttar Pradesh** [Online Proposal No. IA/UP/IND/207708/2021; File No. J-11011/567/2011-IAII(I)] **– Amendment in Terms of Reference – regarding.**

34.9.1 M/s. U.P. Asbestos Limited has made an online application vide proposal no. IA/UP/IND/207708/2021 dated 03/04/2021 along with Form 3 and sought for amendment in the Terms of Reference accorded by the Ministry vide letter no. J-11011/567/2011-IA-II(I) dated 11/02/2019. The proposed project activity is listed at 4(c) Asbestos milling and asbestos based products under Category "A" of the schedule of the EIA Notification, 2006 and the proposal is appraised at central level.

Details submitted by the project proponent

34.9.2 The ToR for the Increase in production capacity of Asbestos Corrugated Sheets from 1,44,000 TPA to 1,95,000 TPA and installation of pre-colored galvanized MS profile sheet plant (non-asbestos) of 25000 TPA by M/s. U.P. Asbestos Limited located at Village Mau, Tehsil Mohanlalganj, District Lucknow, Uttar Pradesh was accorded by MoEF&CC vide letter no. J-11011/567/2011-IA-II(I) dated 11/02/2019.

34.9.3 The project proponent has applied for the following amendment in ToR as follows:

i. M/s. U.P. Asbestos Limited proposes to obtain amendment in TOR for reduce in land area from 46.68 acres to 26.03 acres by lease out the unutilized land of 20.65 acres.
ii. Increase the production capacity of Asbestos Corrugated & plain sheets from 1,95,000 TPA to 2,50,000 TPA.

34.9.4 Following is the Configuration & capacity change granted in ToR vis-a-vis with the proposed changes in configuration & capacity of units:

S No	Product/Area	As per approved ToR	Proposed request for amendment in approved ToR
1.	Factory Area	46.68 acres	26.03 acres
2.	Asbestos Corrugated & plain sheets	195000 TPA	250000 TPA
3.	Pre coloured galvanized MS Profile Sheet (Non Asbestos)	25000 TPA	No change (25000 TPA)
4.	Captive Cotton Rag Pulp plant	2000 TPA	No change (2000 TPA)

34.9.5 The proponent has mentioned that there is no court case or violation under EIA Notification 2006/court case/show cause/direction related to the project under consideration.

34.9.6 Name of the EIA consultant: M/s Ecomen Laboratories Private Limited [S. No.146, List of ACOs with their Certificate / Extension Letter no. Rev. 09, Apr. 12, 2021].

34.9.7 The proposal was considered by the EAC (Industry 1) in its 34th meeting of the Re-constituted EAC (Industry-I) held on 15-16th April, 2021. The observations and recommendations of EAC are given as below:

Observations of the Committee

34.9.8 The Committee noted the following:

i. The proposal is for amendment in TOR (dated 11.2.2019) for capacity expansion of production of asbestos sheets from 144000 TPA to 250000 TPA. Other product quantities remain unchanged.

Recommendations of the Committee

34.9.9 In view of the foregoing and after deliberations, the Committee recommended for `amendment in the ToR dated 11/2/2019 as mentioned at para 34.9.4 above subject to stipulation following additional specific ToRs:

i. The project proponent should carry out social impact assessment of the project and submit the EMP as per the Ministry's Office Memorandum dated 30/09/2020.
ii. PM emissions shall be less than 30 mg/Nm3.
iii. Periodic health check-up of employees and community as per factory Act to be carried out.
iv. Yearly monitoring of the presence of asbestos fibres in the AAQ will be carried out.
v. Green belt shall remain 40 % of total area with tree density of 2500 trees per ha.
vi. Asbestos Hazard Awareness SOP should cover anyone working with asbestos to be educated and trained to handle asbestos.
vii. Workers must wear the appropriate personal protective equipment (PPE) clothing and respirator for the type of work that they are doing.

viii. Action plan for vehicular management including provision for parking of vehicles within the plant premises shall be furnished.

16th April, 2021

34.10 Expansion of Kamanda Steel Plant by enhancing production capacity from 0.97 MTPA to 1.774 MTPA of Semi-finished Steel and from 0.912 MTPA to 2.022 MTPA of finished steel by **M/s Rungta Mines Limited** located at village Kamanda, Tehsil Koida, **District Sundargarh, Orissa [**Online Proposal No. IA/OR/IND/151729/2020; File No J-11011/434/2009-IA.II (I)] – **Environment Clearance** – regarding**.**

34.10.1 M/s. Rungta Mines Limited has made an online application vide proposal no. IA/OR/IND/151729/2020 dated 05/04/2021 along with copy of EIA/EMP report and Form 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed expansion project activity is listed at schedule no. 3(a) Metallurgical industries (ferrous & nonferrous), 4(b) Coke oven plants and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central level.

Details submitted by Project proponent

34.10.2 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord
13/11/2020	Standard TOR	Terms of Reference (TOR)	21/11/2020

34.10.3 The project of M/s Rungta Mines Limited located at village Kamanda, Tehsil Koida, District Sundargarh, Orissa is for Expansion of Kamanda Steel Plant by enhancing production capacity from 0.97 MTPA to 1.774 MTPA of Semi-finished Steel and from 0.912 MTPA to 2.022 MTPA of finished steel.

34.10.4 Environmental Site Settings:

S.No.	Particulars	Details
i.	Total land	1.Existing: 381.74 acres (154.488 ha) 2.Existing revised to 374.139 acres (151.412 ha) 3.Proposed: 408.09 acres (165.152 ha) **Total (2+3) : 782.229 acres (316.564 ha)**
ii.	Land acquisition details as per MoEF&CC O.M dated 7/10/2014	Acquired: 370.989 acres (150.137 ha) Under acquisition: 411.24acres (166.427 ha)
iii.	Existence of habitation & Involvement of R&R, if any.	No habitation in the proposed site. No R&R is involved
iv.	Latitude and Longitude of the project site	Lat- 21° 54' 24.10'' to 21° 56' 04.07'' N Long- 85° 12' 22.22' to 85° 13' 51.36' E

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>554 m to 599 m AMSL</td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>3.93 ha of forest land is involved for which stage II clearance has been obtained from MOEF&CC vide letter no 5-ORB410/2020-BHU dated 11.12.2020</td></tr>
<tr><td>vii.</td><td>Water body exists within the project site as well as study area</td><td>Project Site:
A high order Karo Nala is flowing through south eastern portion of the expansion area.

Study area:
Kukarha Jora: 0.1 km, NE
Lekerapani Nala: 1.7 km, East</td></tr>
<tr><td>viii.</td><td>Existence of ESZ/ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area</td><td>The entire Singhbhum district has been declared as the habitat of Elephant/ Elephant reserve, part of which falls in 10 km radius at a distance of 8.6 km from the project. As per the letter dated 27/06/2013 of DFO, Saranda Forest Division, Chaibasa, the requirement of obtaining permission from the Standing Board of Wildlife for non-forest activities in the Elephant reserve area has been done away with.
<table>
<tr><th>S No</th><th>Name</th><th>Distance</th><th>Direction</th></tr>
<tr><td>1.</td><td>Torha R.F.</td><td>1.8</td><td>NE</td></tr>
<tr><td>2.</td><td>Sarkanda R.F</td><td>4.7</td><td>S</td></tr>
<tr><td>3.</td><td>Karo R.F.</td><td>0.5</td><td>N</td></tr>
<tr><td>4.</td><td>Kathamala R.F.</td><td>0.5</td><td>E</td></tr>
<tr><td>5.</td><td>Mendhamarani R.F.</td><td>2.9</td><td>ENE</td></tr>
<tr><td>6.</td><td>Khajurdihi R.F.</td><td>7.1</td><td>SE</td></tr>
<tr><td>7.</td><td>R.F. Near Bhabani</td><td>2.9</td><td>SE</td></tr>
<tr><td>8.</td><td>Lakrhaghat R.F.</td><td>9.8</td><td>NE</td></tr>
<tr><td>9.</td><td>Tholkabad R.F.</td><td>8.6</td><td>N</td></tr>
<tr><td>10.</td><td>Uliburu R.F.</td><td>6.5</td><td>N</td></tr>
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34.10.5 The land details of the project is furnished as below:

Sl. No.	**Description**	**As per sanctioned EC**		**Revised existing**		**Proposed additional**		**Total**	
		(a)		**(b)**		**(c)**		**(b) + (c)**	
		Area (acres)	**%**	**Area (acres)**	**%**	**Area (acres)**	**%**	**Area (acres)**	**%**
1.	Plants facilities& Colony	150.39	39.40	144.789	38.70	195.42	47.89	340.209	43.49
2.	Stock yards	23.03	6.0	23.03	6.16	30	7.35	53.03	6.78

3.	Area for solid waste treatment and disposal	51.8	13.6	51.8	13.85	-	-	51.8	6.62
4.	Green belt & plantation	125.97	33.00	125.97	33.67	134.67	33.00	260.64	33.32
5.	Administration building	1.98	0.52	1.98	0.53	-	-	1.98	0.25
6.	Water reservoir	9.4	2.46	9.4	2.51	28	6.86	37.4	4.78
7.	Roads	19.17	5.02	17.17	4.59	20	4.90	37.17	4.75
	Total	**381.74**	**100**	**374.139**	**100**	**408.09**	**100**	**782.229**	**100**

- Company has acquired 370.989 acres (comprising 297.42 acres private land + 63.858 acres Government Land + 9.711 acres forest land) and converted to industrial use.
- Balance 411.24 acres is under acquisition through IDCO. IDCO has issued a letter requiring 10% deposit of IDCO charges, for which already paid on 25.03.2021

34.10.6 The existing project earlier accorded Environmental Clearance vides lr.no. J-11011/304/2007-IA.II (I) dated 12.12.2008 (0.20 MTPA ISP), dated 02.02.2015 (0.20 MTPA to 0.60 MTPA), dated 06.11.2017 (0.60 MTPA to 0.75 MTPA) and amended dated 08.03.2019 (0.9 MTPA ISP) and 19.07.2019 (pellet plant configuration amendment). Thereafter the project obtained EC for expansion under clause 7(ii) of EIA notification 2006 and its amendment from 0.90 to 0.97 MTPA steel vide EC letter dated 29.06.2020. Latest CTE granted by OSPCB vide letter No. 9835/IND-II-CTE-6436 dated 08.10.2020. Consent to Operate for the existing unit of the plant was accorded by Odisha State Pollution Control Board vide letter no. 913/IND-I-CON-4628 dated 30.01.2021. The validity of CTO is up to 31/03/2023.

34.10.7 Implementation status of the existing EC:

Sl. No.	**Facilities**	**Units**	**Sanctioned capacity as per EC dated 29.06.2020**	**Implementation status as on 10.04.2021**	**Production** as per CTO dated 20.01.2021
1	Beneficiation Plant	**TPA**	**1,200,000**	Yet to start construction	
2	Pellet Plant				
2.1	Pellet Plant -1	TPA	900,000 (1 X 0.9 MTPA)	Under construction	Yet to apply
2.2	Pellet Plant -2	TPA	3,000,000 (1 X 3.0 MTPA)	Under construction	Yet to apply
	Sub Total	**TPA**	**3,900,000**		
3	Coal Washery	TPA	924,000	Yet to start construction	Will be applied after completion
4	DRI Plant				
4.1	DRI (6X100 TPD)	TPA	308,850	Operational	3,08,850
4.2	DRI (1X300 TPD)	TPA	161,525	Operational	161,525
4.3	DRI (1x350 TPD)	TPA	166,850	Operational	166,850
4.4	DRI (2X350 TPD)	TPA	294,000*	Yet to start construction	Will be applied after completion
4.5	DRI (2x500 TPD)	TPA	420,000	Yet to start construction	Will be applied after completion
	Sub Total	**TPA**	**1,351,225**	Partly operational	637,225
5	Sinter Plant	TPA	532,224 (1x48 sq.m.)	Yet to start construction	Will be applied after completion
	Total		**532,224**		

Sl. No.	**Facilities**	**Units**	**Sanctioned capacity as per EC dated 29.06.2020**	**Implementation status as on 10.04.2021**	**Production** as per CTO dated 20.01.2021
6	Mini Blast Furnace				
6.1	Mini Blast Furnace-1	TPA	306,250 (1x350 cum)	Yet to start construction	Will be applied after completion
6.2	Mini Blast Furnace-2	TPA	379,750 (1x434 cum)	Yet to start construction	Will be applied after completion
	Sub Total	**TPA**	**686,000**		
7	Coke Oven Plant	TPA	140,000 (2 batteries X 70,000 TPA)	Yet to start construction	Will be applied after completion
	Sub Total	TPA	**140,000**		
8	SMS				
8.1	SMS (I) via IF Route	TPA	346,500 (IF 4X15T, LRF 3x20T)	Operational (IF 4X15T, LRF 1x20T)	3,46,500 TPA
8.2	SMS (II) via IF Route	TPA	623,700 (IF 9X15T, LRF 3x35T)	Yet to start construction	Will be applied after completion
	Sub Total	**TPA**	**970,200**		
9	Billets/ slab/ bloom caster				
9.1	Billet caster (I)	TPA	339,570	Operational	339,570
9.2	Billets caster (II)	TPA	271,656	Yet to start construction	Will be applied after completion
9.3	Billets caster (III)	TPA	339,570	Yet to start construction	Will be applied after completion
	Sub Total	**TPA**	**950,796**		
10	Rolling mill (TMT/ flat/ Round/ wire rod/ structural mill/ others)				
10.1	Rolling mill (I)	TPA	325,988	Operational	3,25,988
10.2	Rolling mill (II)	TPA	260,790	Yet to start construction	Will be applied after completion
10.3	Rolling mill (III)	TPA	325,987	Yet to start construction	
	Sub total		**912765**		
11	Ferro Alloy Plant	TPA			
11.1	Ferro Manganese OR	TPA	9 MVA= 18,000 18 MVA=36,000	Yet to start construction	Will be applied after completion
11.2	Silico Manganese OR	TPA	9 MVA= 14,400 18 MVA=28,800	Yet to start construction	Will be applied after completion
11.3	Ferro Chrome OR	TPA	9 MVA= 14,400 18 MVA=28,800	Yet to start construction	Will be applied after completion
11.4	Ferro Silicon	TPA	9 MVA= 6,400 18 MVA=12,800	Yet to start construction	Will be applied after completion
11.5	Briquette Plant for ferro chrome	TPA	88,320	Yet to start construction	Will be applied after completion
11.6	Briquette Plant for ferro manganese	TPA	111,360	Yet to start construction	Will be applied after completion
12	Captive Power Plant	MW	198+ 13#		
12.1	WHRB	MW	87 + 13#		
a	WHRB from DRI		70 +13#	(i) Operational - 28 (ii) Under construction	(i) 28 (ii) Yet to apply

Sl. No.	Facilities	Units	Sanctioned capacity as per EC dated 29.06.2020	Implementation status as on 10.04.2021	**Production** as per CTO dated 20.01.2021
				-13	
b	WHRB from MBF		7	Yet to start construction	Will be applied after completion
c	WHRB from Coke Oven		10	Yet to start construction	Will be applied after completion
d	TRT		-	Yet to start construction	Will be applied after completion
12.2	AFBC/ CFBC	MW	111	Operational	20
13	Oxygen Plant	TPD	150 (1X150)	Yet to start construction	Will be applied after completion
14	Lime Plant	TPA		Yet to start construction	Will be applied after completion
15	Producer Gas Plant	Million NM^3/ Annum		Yet to start construction	Will be applied after completion
16	Colony built up area	Sq.m.	19,834.6	Built	Not required

34.10.8 The unit configuration and capacity of existing and proposed project is given as below:

Sl. No.	Facilities	Units	Sanctioned capacity as per EC dated 29.06.2020	Additional proposed production and configuration	Total proposed production and configuration
	TOTAL PRODUCTION (SEMI FINISHED STEEL)	**MTPA**	**0.97**	**0.804**	**1.774**
	TOTAL PRODUCTION (FINISHED STEEL)	**MTPA**	**0.913**	**1.109**	**2.022**
1	Beneficiation Plant	**TPA**	**1,200,000**	**400,000**	**1,600,000**
2	Pellet Plant				
2.1	Pellet Plant -1	TPA	900,000 (1 X 0.9 MTPA)	100,000 (augment by 0.1 MTPA)	1,000,000 (1 X 1.0 MTPA)
2.2	Pellet Plant -2	TPA	3,000,000 (1 X 3.0 MTPA)	-	3,000,000 (1 X 3.0 MTPA)
2.3	Pellet Plant -3	TPA		9,000,000 (9 X 1.0 MTPA)	9,000,000 (9 X 1.0 MTPA)
	Sub Total	**TPA**	**3,900,000**	**9,100,000**	**13,000,000**
3	Coal Washery	TPA	924,000	2,244,000	3,168,000
4	DRI Plant				
4.1	DRI (6X100 TPD)	TPA	308,850	0	308,850
4.2	DRI (1X300 TPD)	TPA	161,525	0	161,525
4.3	DRI (1x350 TPD)	TPA	166,850	0	166,850
4.4	DRI (2X350 TPD)	TPA	294,000*	Removed (-294,000)	0
4.5	DRI (2x500 TPD)	TPA	420,000	101,850	521,850
4.6	DRI (1x650 TPD)	TPA	-	311,513	311,513
	Sub Total	**TPA**	**1,351,225**	**1,19,363**	**1,470,588**
5	Sinter Plant 1	TPA	532,224 (1x48 sq.m.)	305,536 (augment by 32 sq.m.)	837,760 (1x80 sq.m.)
	Sinter Plant 2			670,208 1x64 sq.m.	670,208 1x64 sq.m.
	Total		**532,224**	**975,744**	**1,507,968**
6	Mini Blast Furnace				

Sl. No.	Facilities	Units	Sanctioned capacity as per EC dated 29.06.2020	Additional proposed production and configuration	Total proposed production and configuration
6.1	Mini Blast Furnace-1	TPA	306,250 (1x350 cum)	147,000	453,250 (1x350 cum)
6.2	Mini Blast Furnace-2	TPA	379,750 (1x434 cum)	203,000 (augment by 16 cum)	582,750 (1x450 cum)
	Sub Total	**TPA**	**686,000**	**350,000**	**1,036,000**
7	Coke Oven Plant-1	TPA	140,000 (2 batteries X 70,000 TPA)	140,000 (2 batteries X 70,000 TPA)	280,000 (4 batteries x 70,000 TPA)
	Coke Oven Plant-2	TPA	-	350,000 (1 battery x350,000 TPA)	350,000 (1 battery x350,000 TPA)
	Sub Total	TPA	**140,000**	**490,000**	**630,000**
8	SMS				
8.1	SMS (I) VIA IF Route	TPA	346,500 (IF 4X15T, LRF 3x20T)	-	346,500 (IF 4X15T, LRF 3x20T)
8.2	SMS (II) VIA IF Route	TPA	623,700 (IF 9X15T, LRF 3x35T)	69,300 (change in LRF config to 1x35T +1x45 T)	693,000 (IF 9X15T, LRF 1x35T +1x45 T)
8.3	SMS (III) VIA IF Route	TPA		231,000 (IF 3x20 T, LRF 1x 45 T)	231,000 (IF 3x20 T, LRF 1x45 T)
8.4	SMS (III) VIA EAF Route	TPA		504,000 (1x60 T, LRF 1x60 T, VD/AOD 1x60 T	504,000 (1x60 T, LRF 1x60 T, VD/AOD 1x60 T
	Sub Total	**TPA**	**970,200**	**804,300**	**1,774,500**
9	Billets/ slab/ bloom caster				
9.1	Billet caster (I)	TPA	339,570	-	339,570
9.2	Billets caster (II)	TPA	271,656	407,484	679,140
9.3	Billets caster (III)	TPA	339,570	-113,190	226,380
9.4	Billets caster (IV)	TPA		493,920	493,920
9.5	CCM		3 X 4 strands	3 x 4 strand	6x 4 strand
	Sub Total	**TPA**	**950,796**	**788,214**	**1,739,010**
10	Rolling mill (TMT/ flat/ Round/ wire rod/ structural mill/ others)				
10.1	Rolling mill (I)	TPA	325,988		325,988
10.2	Rolling mill (II)	TPA	260,790	9210	270,000
10.3	Rolling mill (III)	TPA	325,987	0	325,987
10.4	Rolling mill (IV)	TPA	0	450,000	450,000
	Sub total		**912765**	**459,210**	**1,371,975**
10.5	Rolling mill with pickling & Galvanising line(Strip mill sheet/ coil/ wire rod/ structural / others (V)	TPA		200,000	200,000
10.6	DI Pipe plant(I)	TPA	-	200,000	200,000
10.7	DI Pipe plant(II)	TPA	-	250,000	250,000
	Grand Total		**912,765**	**11,09,210**	**2,021,975**
11	Ferro Alloy Plant	TPA			
11.1	Ferro Manganese OR	TPA	9 MVA= 18,000 18 MVA=36,000	-	9 MVA= 18,000 18 MVA=36,000
11.2	Silico Manganese OR	TPA	9 MVA= 14,400	-	9 MVA= 14,400

Sl. No.	Facilities	Units	Sanctioned capacity as per EC dated 29.06.2020	Additional proposed production and configuration	Total proposed production and configuration
			18 MVA=28,800		18 MVA=28,800
11.3	Ferro Chrome OR	TPA	9 MVA= 14,400 18 MVA=28,800	-	9 MVA= 14,400 18 MVA=28,800
11.4	Ferro Silicon	TPA	9 MVA= 6,400 18 MVA=12,800	-	9 MVA= 6,400 18 MVA=12,800
11.5	Briquette Plant for ferro chrome	TPA	88,320	-	88,320
11.6	Briquette Plant for ferro manganese	TPA	111,360	-	111,360
12	Captive Power Plant	MW	198+ 13#	196	407
12.1	WHRB	MW	87 + 13#	16	116
a	WHRB from DRI		70 +13#	-	83
b	WHRB from MBF		7	13	20
c	WHRB from Coke Oven		10	-	10
d	TRT		-	3	3
12.2	AFBC/ CFBC	MW	111	180	291
13	Oxygen Plant	TPD	150 (1X150)	210 (1x100 + 1X110)	360 (1x150+1x100+1x110)
14	Lime Plant	TPA		87,500 (1x250 TPD)	87,500 (1x250 TPD)
15	Producer Gas Plant	Million NM^3/ Annum		2432.1 (27x7,500 Nm^3/hr+8x12,500 Nm^3/hr)	2432.1 (27x7,500 Nm^3/hr+8x12,500 Nm^3/hr)
16	Colony built up area	Sq.m.	19,834.6	10,727.5	30,652.1

34.10.9 The details of the raw material requirement for the existing cum proposed expansion project along with its source and mode of transportation is given as below:

S No	Facilities	Raw Material	Unit	Existing	Proposed Additional	Total	mode of transport	Source
1	Beneficiation Plant	Low Grade Iron Ore Fines (0 to 5 mm)	TPA	1,200,000	400,000	1,600,000	Road	Private mines in Odisha/OMC/ Open Market
		Floculant	TPA	0	80	80	Road	Open Market
2	Pellet Plant	Iron Ore/ Fines/ concentrate	TPA	4,368,000	9,893,000	14,261,000	Road	Private mines in Odisha/OMC/ Open Market and inhouse from beneficiation plant
		Dolomite (Flux)	TPA	97,500	84,500	182,000	Road	Open Market
		Bentonite	TPA	39,000	156,000	195,000	Road	Open Market
		Coke Breeze	TPA	39,000	182,000	221,000	Road	Open Market
		Coal >= 5500 Kcal /kg (emergency use)	TPA	28,800	405,400	434,200	Road	Open Market
3	Coal Washery	ROM Coal	TPA	924,000	2,244,000	3,168,000	Road	Open Market/ e-auction/ linkage
4	DRI	Iron Ore	TPA	1,931,251	170,599	2,101,850	Road	Inhouse from pelletisation plant
		Coal	TPA	1,084,817	95,829	1,180,646	Road	Inhouse from washery

S No	Facilities	Raw Material	Unit	Existing	Proposed Additional	Total	mode of transport	Source
		Dolomite	TPA	54,049	4,775	58,824	Road	Open Market
5	MBF	Iron Ore	TPA	1,002,389	-914,329	88,060	Road	Private mines in Odisha/OMC/ Open Market
		Sinter	TPA	26,611	1,470,409	1,497,020	Road	Inhouse from sinter plant
		Pellet	TPA	0	176,120	176,120	Road	Inhouse from pelletisation plant
		Coke	TPA	418,460	-24,780	393,680	Road	Inhouse from coke oven plant
		Coal dust	TPA	34,300	121,100	155,400	Road	Domestic Open Market/ imported
		Dolomite	TPA	96,040	49,000	145,040	Road	Open Market
		Quartz	TPA	35,672	18,200	53,872	Road	Open Market
6	Sinter Plant	Iron Ore Fines	TPA	171,170	926,957	1,098,127	Road	Private mines in Odisha/OMC/Open Market
		Coke Fines	TPA	34,595	152,216	186,811	Road	Inhouse
		Lime Stone	TPA	79,834	126,847	206,681	Road	Open Market
		Dolomite	TPA	26,611	126,847	153,458	Road	Open Market
		From Pellet plant (Dust etc)	TPA	91,446	970,302	1,061,748		Inhouse
		ESP, BF dust, etc from DRI	TPA	27,025	2,387	29,412		Inhouse
		Dust (Iron Ore, Coke, Sinter Fines) from MBF	TPA	34,300	17,500	51,800		Inhouse
		Sludge from GCP from MBF	TPA	3,430	-3,430	0		Inhouse
		Bag Filter Dust from coke oven plant	TPA	6,342	22,197	28,539		Inhouse
		BF dust from IF	TPA	139,567	43,243	182,810		Inhouse
		BF dust from EAF	TPA	0	11,592	11,592		Inhouse
		Fines from Ferro alloys plant	TPA	10,821	0	10,821		Inhouse
		Sinter Return Fines	TPA	32,333	193,862	226,195		Inhouse
7	Coke Oven Plant	Coking Coal	TPA	211,400	739,900	951,300	Road / Rail	Domestic Open Market/ imported
8.1	SMS-IF	DRI	TPA	935,133	289,489	1,224,622		Inhouse
		Pig Iron / Hot Metal	TPA	104,323	32,432	136,755		Inhouse
		Steel Scrap	TPA	104,323	32,432	136,755		In house /Open Market
	CCM	Liquid Metal from Furnace	TPA	970,200	300,300	1,270,500		Inhouse
8.2	SMS-EAF	DRI	TPA		245,966	245,966		Inhouse
		Hot Metal/Pig Iron from MBF	TPA		310,000	310,000		Inhouse

S No	Facilities	Raw Material	Unit	Existing	Proposed Additional	Total	mode of transport	Source
		Lime	TPA		87,500	87,500	Road	Inhouse
	CCM	Liquid Metal from Furnace	TPA		504,000	504,000		Inhouse
9.1	Rolling Mill	Semi Finished Product from IF-CCM	TPA	950,796	254,294	1,205,090		Inhouse
		Semi Finished Product from EAF-CCM	TPA	0	280,920	280,920		Inhouse
9.2	Strip Mill	Semi Finished Product from EAF-CCM	TPA		208,000	208,000		Inhouse
9.3	DPP	Hot Metal from Blast Furnace	TPA		459,184	459,184		Inhouse
10	Ferro Alloy Plant	Quartz (94%-95%)	TPA	37,440	0	37,440	Road	Open Market
		Charcoal / Coke	TPA	24,960	0	24,960	Road	Open Market
		Iron Ore/ Mill Scale	TPA	4,800	0	4,800	Road	Inhouse
		Electrode Paste	TPA	1,344	0	1,344	Road	Open Market
		Dolomite	TPA	4,323	0	4,323	Road	Open Market
		Manganese Ore (38%-40%)	TPA	31,104	0	31,104	Road	Open Market
		Low-Grade High Silicon Moil Ore	TPA	37,368	0	37,368	Road	Open Market
		Fe-Mn Slag	TPA	31,104	0	31,104	Road	Inhouse
		Coal	TPA	9,936	0	9,936	Road	Open Market
		Briquettes	TPA	111,360	0	111,360	Road	Open Market
		Manganese Ore Lump	TPA	10,800	0	10,800	Road	Open Market
		Chrome Ore Lump	TPA	8,646	0	8,646	Road	Open Market
	Briquetting Plant	Manganese Ore Concentrate	TPA	100,224	0	100,224	Road	Open Market
		Chome-ore concentrate	TPA	79,488	0	79,488	Road	Open Market
		Lime	TPA	4,454	0	4,454	Road	Open Market
		Molasses	TPA	6,682	0	6,682	Road	Open Market
11	CPP	Char Generation from DR Plant	TPA	215,622	49,084	264,706		Inhouse
		Middlings from Coal Washery	TPA	122,186	1,224,214	1,346,400		Inhouse
		Coal Fines from RM handling at DR Plant	TPA	392,700	-207,783	184,917		Inhouse
		Coal required for Balance Power	TPA	129,657	393,485	523,142	Road / Rail	Domestic Open Market/ e-auction/ linkage
		Limestone (2 T/hr)	TPA	18,279	31,004	49,282	Road	Open Market

S No	Facilities	Raw Material	Unit	Existing	Proposed Additional	Total	mode of transport	Source
12	Lime Dolo Plant	Lime Stone	TPA		157,500	157,500	Road	Open Market
		Fuel Oil	TPA		17,500	17,500	Road	Open Market
13	PGP	Coal	TPA		737,000	737,000	Road / Rail	In house from washery/ Domestic Open Market/ e-auction/ linkage
	Total		**TPA**	**16,696,015**	**23,268,845**	**39,964,859**		

The transportation distance will vary according to the mines from which raw material has got available at any point of time. The Raw Material will be transport to the plant through road/ Rail.

34.10.10 The water requirement for the project is estimated as 42,192 m^3/day (total after expansion), out of which 36,206 m^3/day of fresh water requirement will be obtained from the Karo & Brahmani rivers, harvested rain water and ground water and the remaining requirement of 5,986 m^3/day will be met from recycling of treated effluent/ sewage. The permission of 7,867 KLD for drawl of surface water is obtained from Department of Water Resources, Govt. of Odisha vide agreement no. L 436057 dated 03.12.2020 and 27,243 KLD has been allocated from Karo & Brahmani vide letter no. Letter no. 8572/WR18/03/21 dated 18.03.2021. Ground water withdrawal permission has been granted by CGWA for 1000 KLD vide letter no. 21-4(156)/SER/CGWA/2009-580 dated 10.05.2019.

34.10.11 The total power requirement for the project is estimated at 410.66 MW. 407 MW power requirement shall be met from its captive power plant and the additional power will be sourced from Odisha State Electricity Board.

34.10.12 Baseline Environmental Studies:

Period	September 2020 to November 2020
AAQ parameters at 8 locations	$PM_{2.5}$= 23.3 to 40.5 µg/m^3 PM_{10}=41.1 to 68.3µg/m^3 SO_2= 6.1 to 15.2 µg/m^3 NO_2 = 7.2 to 19.4 µg/m^3 CO= 0.115 to 0.802 mg/m^3
AAQ modelling (incremental w.r.t. current operation) (in core zone)	PM_{10}=3.14 µg/m^3 $PM_{2.5}$=1.81 µg/m^3 SO_2= 9.84 µg/m^3 NO_x= 4.04 µg/m^3
Groundwater quality at 8 locations	pH: 6.7 to 6.9,Total Hardness:48 to 84 mg/l,Chlorides:10 to16mg/l, Fluoride: BDL to 0.14mg/l. Heavy metals are within the limits.
Surface water quality at 8 locations	pH:6.7 to7.2;DO:6.8 to 7.3mg/l , BOD:2 to 10 mg/l, COD from 6 to 18 mg/l
Noise levels (8 location)	50.19 to 66.41 dB(A) for the day time and 36.50 to 65.22 dB(A) for the Night time.

Traffic assessment study findings	The Integrated steel plant, therefore, will lead to increase in the traffic volume of HMVs, which is a considerable impact on the traffic density. The increase in traffic will be 28.8% of the maximum carrying capacity.
Flora and fauna	Sloth bear and Python are the two Schedule-I species found in study area. A "Site Specific Conservation Plan" has been prepared with respect to Kamanda Steel Plant and approved by The Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden, Odisha vide letter no. 8834/ 7WL-FD & WLC-157/2020 dated 29th October 2020.

34.10.13 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S No	Facilities	Type of waste	Unit	Total	Management
1	Beneficiation Plant	Dust & Tailing	TPA	400,080	Collected in small tailing pond, dewatered and dredged for 100% re-utilization as sand substitute in infrastructure/ fine concrete aggregate/ cement manufacture
2	Pellet Plant	Dust (Iron Ore, Coke, Coal Fines)	TPA	1,061,748	100% reused in sinter making or re-circulated to mixing bin of pellet plant
3	Coal Washery	Middlings	TPA	1,346,400	100% reused in CFBC boiler within project
		Reject	TPA	237,600	100% temporarily stored in solid waste disposal area within project site till sent for backfilling in mine or used for road making/ filling of low lying area
4	DRI	Char	TPA	264,706	100% reused in CFBC boiler within project
		ESP dust	TPA	21,009	100% reused in sinter making within project
		Bag Filter Dust, scrapper etc	TPA	8,403	100% reused in sinter making within project
		Kiln Accretion	TPA	7,353	100% stored in in land fill temporarily till reused in road sub-base
5	MBF	BF Slag	TPA	310,800	100% Sale
		Dust (Iron Ore, Coke, Sinter Fines)	TPA	51,800	100% reused in sinter making within project
6	Sinter Plant	Sinter Return Fines	TPA	226,195	100% reused in sinter making within project
7	Coke Oven Plant	Bag Filter Dust	TPA	28,539	100% reused in sinter making within project
8.1	SMS-IF	BF dust	TPA	182,810	100% reused in sinter making within project
		Slag	TPA	44,823	100% given for metal recovery, converted to aggregates (special balls) and used in road making
	CCM	Mill Scale	TPA	25,410	Reused in ferro alloy plant and balance for sale
8.2	SMS-EAF	BF dust	TPA	11,592	100% reused in sinter making or in pellet plant within project
		Slag	TPA	100,800	100% used in road making, filler in embankment and

S No	Facilities	Type of waste	Unit	Total	Management
					new development show success in use for ceramic tiles production and cement making
		Scales	TPA	866	100% Sale
	CCM	Mill scale	TPA	10,080	100% Sale
9.1	Rolling Mill	Reject	TPA	51,316	100% Reused in SMS
		Mill Scale	TPA	62,719	100% Sale
9.2	Strip Mill	Reject	TPA	3,600	100% Reused in SMS
		Mill Scale	TPA	4,400	100% Sale
9.3	DPP	Reject	TPA	4,133	100% Reused in SMS
		Mill Scale	TPA	5,051	100% Sale
		Zinc recovered		Not separately estimated	100% sale to paint manufacturer
		Cement slurry		Not separately estimated	100% recover water & manufacture brick/ cement tiles
		Core sand (in casting area & annealing furnace)		Not separately estimated	100% used for land leveling
10	Ferro Alloy Plant	Slag	TPA	64,821	Used in Ferro alloy plant and balance for sale
		Fines	TPA	10,821	100% reused in sinter making within project
	Briquetting Plant	Reused Briquette Fines	TPA	16,704	100% reused in Ferro alloy plant
11	CPP	Ash	TPA	1,269,396	100% reused as per Fly ash utilization notification 1999 and its amendments of 2003, 2009, 2016. Used in cement making, brick making, block making, aggregate making, and road making.
12	PGP	Coal Ash	TPA	162,140	100% reused as per MOEF Notification. Used in cement making, brick making, block making, aggregate making, and road making.
		Coal Tar	TPA	29,480	100% Sale
	Total		**TPA**	**6,025,596**	

34.10.14 Public Consultation:

Details of advertisement given	01.02.2021
Date of public consultation	09.03.2021
Venue	Anganwadi Centre of Munda Sahi in Kamanda village under Koira Tehsil of Sundargarh district in the state of Odisha
Presiding Officer	Addl. District Magistrate (A.D.M.), Sundargarh
Major issues raised	i. Employment opportunity ii. Pollution control iii. Health care facility iv. Plantation

	v. Area development activities (road, street light etc.) vi. Fund for sports and educational infrastructure vii. Community welfare centre viii. Old age pension ix. Water supply x. Support to farmers

Point-wise Action plan as per MoEF&CC O.M. dated 30/9/2020

S No	**Activity**		**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Total**
1	Development of Play Ground	**Target**	Development of Play Ground at Kamanda village					
		Budget	3,00,000					3,00,000
2	Enhance funding to Xavier School	**Target**	Funding to Xavier School	Construction of Boundary Wall of Xavier School	Funding to Xavier School	Funding to Xavier School	Funding to Xavier School	
		Budget	1,25,000	1,80,000	1,25,000	1,25,000	1,25,000	6,80,000
3	Dispensary	**Target**	Building construction	Equipment and making operational	Running cost (1 doctor, 2 nurses, medicines & overheads)	Running cost (1 doctor, 2 nurses, medicines & overheads)	Running cost (1 doctor, 2 nurses, medicines & overheads)	
		Budget	10,00,000	15,00,000	15,60,000	15,60,000	15,60,000	71,80,000
4	ANM (Auxiliary Nursing & Midwifery) Centre	**Target**	Repairing of ANM Centre at Kamanda Village	Construction of Toilets & Bathroom of ANM Centre	Maintenance of ANM Centre	Maintenance of ANM Centre	Maintenance of ANM Centre	
		Budget	5,50,000	6,50,000	70,000	75,000	75,000	14,20,000
5	UGUP School	**Target**	Construction of One Class room & baranda of UGUP School at Kulla Village		Construction of Play Ground of UGUP School at Kamanda Village			
		Budget	6,50,000		2,00,000			8,50,000
6	Sports Material & Musical Instruments	**Target**		Supply of sports materials to school in Kusumdihi		Supply of musical instruments to school of Kusumdihi		

S No	**Activity**		**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Total**
		Budget		3,00,000		3,50,000		6,50,000
7	Providing Fertilizers, good quality seeds & training to farmers in Kamanda & Kula	**Target**	20 farmers	20 farmers	20 farmers	20 farmers	20 farmers	
		Budget	3,50,000	3,50,000	3,50,000	3,50,000	3,50,000	17,50,000
8	Organize Annual Football Tournament	**Target**	In Village Kamanda	In Village Kamanda	In Village Kamanda	In Village Kamanda	In Village Kamanda	
		Budget	2,50,000	2,50,000	2,80,000	3,00,000	3,00,000	13,80,000
9	Sports Materials to Anganwadi Centre	**Target**	Sports Materials to Anganwadi Centre at Kamanda village		Sports Materials to Anganwadi Centre at Kamanda village		Sports Materials to Anganwadi Centre at Kamanda village	
		Budget	1,50,000		1,50,000		1,50,000	4,50,000
10	Cultural Mandap	**Target**	Construction of Cultural Mandap at Kamanda Village	Maintenance	Maintenance	Maintenance	Maintenance	
		Budget	4,00,000	20,000	20,000	20,000	20,000	4,80,000
11	Community Welfare Centre	**Target**	Construction of Community Welfare Centre with boundary wall at Kamanda village	Maintenance		Maintenance	Maintenance	
		Budget	6,50,000	25,000	25,000	25,000	25,000	7,50,000
12	Excavation of ponds with construction of wall for separate bathing of men and women	**Target**	One pond in Kamanda village		One pond in in Kula village			
		Budget	8,50,000		8,50,000			17,00,000

S No	**Activity**		**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Total**
13	Drinking water (Provision of new borewell) and repairing of water pipe line using maintenance manpower from project	**Target**	In Kamanda village (1 Borewell), pipeline & maintenance	In Kula village (1 Borewell)	In Kusumidihi (1 Borewell)			
		Budget	6,10,000	60,000	5,10,000			11,80,000
14	Old age pension scheme for Sr. citizens from Kamanda & Kula etc.	**Target**	20 persons	20 persons	20 persons	20 persons	20 persons	
		Budget	40,000	40,000	40,000	40,000	40,000	2,00,000
15	Bus facilities for Kamanda Village	**Target**	Contractual Operation with driver, helper, petrol, R&M	Contractual Operation with driver, helper, petrol, R&M	Contractual Operation with driver, helper, petrol, R&M	Contractual Operation with driver, helper, petrol, R&M	Contractual Operation with driver, helper, petrol, R&M	
		Budget	4,50,000	4,60,000	4,65,000	5,10,000	5,30,000	24,15,000
	GRAND TOTAL							**2,27,25,000**

34.10.15 The capital cost of the project is **Rs. 3405 Crore** [Expansion] and the capital cost for environmental protection measures is proposed as **Rs. 95.47** Crore. The annual recurring cost towards the environmental protection measures is proposed as Rs **9.93 Crores**. The employment generation from the proposed project/ expansion is 1500 nos. The details of cost for environmental protection measures is as follows:

Description	**Capital cost (Rs.lakhs)**			**Recurring cost (Rs.lakhs)**		
	Sanctioned as per ECs	**Additional**	**Total**	**Sanctioned as per EC**	**Additional**	**Total**
Air pollution control	2898.5	8508	11406.50	305.67	774.0	1096.67
Water pollution control	100.00	321.5	421.50	11.61	67.05	78.66
Noise pollution control	10.00	-	10.00	1.84	1.77	3.61
Environment Monitoring and management	226.92	358.18	585.10	19.44	93.76	113.20

Description	Capital cost (Rs.lakhs)			Recurring cost (Rs.lakhs)		
	Sanctioned as per ECs	**Additional**	**Total**	**Sanctioned as per EC**	**Additional**	**Total**
Occupational health	79.75	28.25	108.00	24.44	51.14	75.58
Green belt	45.49	218.21	263.70	12.19	49.37	61.56
Others	0.41	14.59	15.00	12.4	14.65	27.05
Overheads (3% of dep., energy, R&M & interest)		-		118.9	Reduced by 88.43	30.47
Cost for meeting public hearing demands		98.8	98.8		29.8	29.8
Total	**3361.07**	**9547.53**	**12908.6**	**506.49**	**993.11**	**1499.60**

34.10.16 Green belt will be developed in 260.64 acres which is about 33.32% of the total project area. A 5-50 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as green belt and green cover as per CPCB/MoEF & CC, New Delhi guidelines. Local and native species will be planted with a density of at least 2500 trees per hectare. Total no. of 330220 saplings will be planted and nurtured in 5 years.

34.10.17 It has been reported by PP that, there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

34.10.18 Name of the EIA consultant: The EIA report was originally prepared by the consultant namely Min Mec Consultancy Pvt. Ltd. and thereafter the report was revalidated by the M/s Centre for Envotech and Management Consultancy Pvt Limited [S.No. 90, List of ACOs with their Certificate / Extension Letter no. Rev. 09, Apr. 12, 2021] as the former consultant was not accredited by the QCI/NABET.

Certified compliance report from Regional Office

34.10.19 The Status of compliance of earlier EC dated 06.11.2017, 08.03.2019 (amendment) and 19.07.2019 (Change in configuration) was obtained from Regional Office, Bhubaneswar vide letter no. 101-998/17/EPE dated 18/12/2020 in the name of M/s. Rungta Mines Ltd. The Action taken report (ATR) regarding the partially complied condition was initially submitted to Integrated Regional office, MoEF&CC, vide letter no. RML/KSP-639/389/20-21 dated 18.01.202 1. Later, the revised ATR was submitted vide letter no. RML/KSP-686/13/20-21 dated 05.04.2021. The details of the observations made by RO in the report dated 18/12/2020 along with its present status as furnished by the PP are given as below.

Sl.	Non-compliances details	Observation of RO (abridged)	Condition no.			Action Taken by PP
			EC date	Specific	General	
1	Green belt development	It is required to develop the green belt as per the guidelines of CPCB in consultation with DFO.	06/11/2017	ix		Broad leaved native species like Peepal, Mahua, Mango, Neem, Jamun & Shisam have been planted in the existing plant premises. 1,27,970 trees planted

Sl.	Non-compliances details	Observation of RO (abridged)	Condition no.			Action Taken by PP
			EC date	Specific	General	
2	Environmental monitoring	The runoff and leachates from the raw materials stack yard and solid waste disposal yard are being mix with the storm water drainages. It is required to construct the ETP for treatment of wastewater generating from the plant along with the runoff and leachates at the earliest	06/11/2017	xi		Company already installed 250 KLD surface runoff management systems in plant premises. Company committed to install 1000 KLD ETP within plant premises for treatment of wastewater
3	Environmental monitoring	It is required to submit the programme for reduction of GHG emissions including carbon sequestration including plantation	06/11/2017	xiv		Green House emission inventory report prepared by IIT Kharagpur submitted. Several recommendations of the report will become implementable once the expansion units start production, program for reduction of the Green House Gas will be implemented.
4	Environmental Monitoring	It is required to carry out heat stress analysis for the workmen of high temperature work zone, provide PPE as per the norms of Factory Act and the detailed report on heat stress analysis to be submitted	06/11/2017	xv		Heat stress analysis report submitted
5.	Environmental monitoring	It has been observed that 100% of monthly generated char is not being utilized in power plant	06/11/2017	xviii		Char generated from existing DRI is being stored temporarily which got created due to less consumption of fuel at AFBC boiler due to lower power generation. The total char generated shall be utilized in power plant as well as be sold to other power generation plant in future. 100% of the char shall be consumed by 30.10.2021
6	Environmental monitoring	It is required to restrict the all particulate	08/03/2019	Addl. (ii)		All particulate emission from all stacks will be maintained 30 mg/NM3. APCM of

Sl.	Non-compliances details	Observation of RO (abridged)	Condition no.			Action Taken by PP
			EC date	Specific	General	
		emissions from stacks to 30 mg/Nm3.				existing stacks having CTO for 50-100 mg/ Nm3 is also being modified and shall become compliant to 30 mg/Nm3 by 30.10.2021.

34.10.20 The proposal was considered by the EAC (Industry 1) in its 34th meeting of the Re-constituted EAC (Industry-I) held on 15- 16th April, 2021. The observations and recommendations of EAC is given as below.

Observations of the Committee

34.10.21 The Committee noted the following:

i. The EAC found that the EIA/EMP report is in order reflecting the present environmental concerns and the projected scenario for all the environmental components arising out of the proposed project with respective mitigation measures. The EAC also noted that the baseline data reported and incremental GLC due to the existing and proposed project were within NAAQ standards.

ii. The EAC also deliberated on the public hearing issues as well as action plan to address the issues raised during public hearing and found it satisfactory.

iii. The Committee also deliberated upon the certified compliance report of RO and found satisfied with the action taken report submitted by the proponent.

Recommendations of the Committee

34.10.22 In view of the foregoing and after detailed deliberations, the committee recommended the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 for the instant expansion proposal subject to the stipulation of following specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 pertaining to integrated steel plants based on project specific requirements.

A. Specific conditions

i. Application for the environmental clearance for the residential colony envisaged within the plant site shall be submitted to the appropriate authority.
ii. Water requirement of 1509 KLH and same shall be met from Karo/ Brahmani Rivers.
iii. Ground water abstraction shall not be permitted beyond three years from the date of the issue of Environment Clearance.
iv. A seasonal nallah passes through the property and flows adjacent to the plant. PP shall maintain natural drainage pattern of nallah and land scaping on both sides of nallah in the plant complex. Plant drains shall not join the nallah.
v. Three railway sidings are available within 24-33 Km distance from the plant in different directions. PP shall adopt these transportation routes.
vi. Particulate matter emission from the stacks shall not exceed 30 mg/Nm^3.
vii. Air cooled condensers shall be provided in the Captive Power Plant.

viii. Rainwater harvesting shall be carried out in the plant premises as per the action plan submitted to the Ministry.

ix. Treated effluent from the plant shall be reused and recycled completely. STP shall be installed to treat domestic sanitary waste-water.

x. Green belt shall be raised in 33% area with a tree density of 2500 trees per Ha. 30 m wide green belt shall be provided towards 3 villages adjoining plant boundary (inside the project area).

xi. PP shall install filter press to dry the tailings and have dry disposal for maximum 90 days.

xii. TRT shall be included in Blast Furnace of 1x450 cum capacity. Dry gas cleaning and Stove waste gas heat recovery system shall be included.

xiii. Sinter cooler waste heat recovery shall be installed.

xiv. Modified wet quenching tower shall be included in the Coke Ovens.

xv. Land based pushing emission control shall be provided in coke ovens.

xvi. All sub merged arc furnaces shall be closed type with 4th Hole extraction system for flue gases.

xvii. Jigging plant for management of FeCr slag shall be installed.

xviii. Garland drains and catch pits to trap run off material around stock piles shall be constructed.

xix. Closed circuit type Producer gas plant shall be installed. Phenolic water and tar sludge shall be burnt in DRI kiln. Tar sludge shall also be sold.

xx. DI plant shall have the following provisions:

a. Wet scrubbers for VOC in Annealing furnace.
b. Bag filter for Zn coating and Mg converter area.
c. Wet scrubbers in paint and bitumen coating area.
d. Bag Filter in Cement lining area.
e. PTFE dipped bag s shall be used in the plant.
f. PM emissions from BF in Zinc coating area shall be 5 mg/Nm^3.
g. ETP with recycling facility shall be included. All scrubber effluent shall be treated in ETP.

xxi. Hot charging up to 85 % shall be practiced and balance through Reheating Furnace.

xxii. All C&D waste shall be handled as per C&D Rules 2016.

xxiii. Parking area shall be adequate to park 330 trucks.

xxiv. Piezoelectric metering system shall be installed for measurement of water quantity and record shall also be maintained.

xxv. The recommendations of the approved Site-Specific Conservation Plan / 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.

B. General conditions

I. Statutory compliance:

i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time.

It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 04 Nos. Continuous Ambient Air Quality Station (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_2 in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.

xii. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.

xiii. 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 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs 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 to meet the standards prescribed in G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time.

iv. 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.

v. Tyre washing facilities shall be provided at the entrance of the plant gates.

vi. 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. An attrition grinding unit to improve the bulk density of BF granulated slag from 1.0 to 1.5 Kg/l shall be installed to use slag as river sand in construction industry.

ii. Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.

iii. Used refractories shall be recycled as far as possible.

iv. 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.

v. 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.

vi. 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.

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 of Factory Act.

iii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Corporate Environment Responsibility

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020.

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.

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; PM_{10}, SO_2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

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. 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).

x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

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

34.11 Expansion of steel plant from 0.1 MTPA to 0.26 MTPA billets [by change the configuration of DRI kilns (from 1 x 300 TPD to 1 x 350 TPD & 1 x 100 TPD), IF (from 4 x 8Tons to 4 x 12Tons & 1 x 3Tons), LF (from 1x20Tons & 1x15Tons to 1x20Tons, 1x15Tons & 1x16Tons)] out of which 0.132 MTPA to be converted to TMT rods by CCM (from 4/7, 2 strand to 6/11, 3 strand), installing new Rolling Mill of 25 TPH along with CPP (WHRB) from 1x8MW to 1x8MW + 1x10 MW and CPP (AFBC) from 1x4MW to 1x4MW + 1x6MW **by M/s. Bhaskar Steel & Ferro Alloy Private Limited** located at village Badtumkela, Tehsil Banei, **District Sundergarh, Odisha [**Online Proposal No.IA/OR/IND/206041/2020;File No J-11011/491/2008-IA.II((I)] – **Environment Clearance** – regarding**.**

34.11.1 M/s. Bhaskar Steel & Ferro Alloy Private Limited has made an online application vide proposal no. IA/OR/IND/206041/2020 dated 26/03/2021 along with copy of EIA/EMP report and Form 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed expansion project activity is listed at schedule no. 3(a) Metallurgical industries (ferrous & nonferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central level.

Details submitted by Project proponent

34.11.2 The proposal titled "*modification cum expansion of existing project form 0.1 MTPA billet to 0.25 MTPA rolled product at Badtumkela District Sundergarh, Odisha by M/s Bhaskar Steel and ferro Alloys"* was originally accorded ToR on 31/07/2015 and subsequently amended on 18/07/2017. Public hearing for the project was held on 25/05/2018 and application for grant of EC was submitted on 29/06/2020. The maximum extended validity period of the ToR is for a period of four years i.e., till 30/07/2019. As per the Ministry's O.M. dated 29/08/2017, if the proposal for EC has not been submitted within the validity period of ToR, the process shall be started de-novo. In view of this, the proposal was returned to the PP with a request to start the process de-novo. Accordingly, the proponent started the process de-novo by applying for fresh ToR along with a request to consider the proposal based on the public hearing held on 25/05/2018.

34.11.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord
07/08/2020	22nd meeting of EAC held during 26th - 28th August 2020	Terms of Reference	18/09/2020

34.11.4 The project of M/s Bhaskar Steel & Ferro Alloys Ltd located in Badtumkela Village, Banei.Tehsil, Sundergarh District, Odisha State is for enhancement of production of steel billet from 0.1 MTPA to 0.26 MTPA out of which 0.132 MTPA to be converted to TMT rods.

34.11.5 Environmental Site Settings

S. No.	Particulars	Details
i.	Total land	33.99 ha [Private: 33.99 ha] Land use: Land already acquired and converted for Industrial usage.
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Land already acquired and converted for Industrial usage.
iii.	Existence of habitation & involvement of R&R, if any.	The expansion is carried out within existing premises with no habitation within the premises.
iv.	Latitude and Longitude of the project site	21º49'48.53''N to 21º49'56.73'' N Latitudes and 84º55'30.52'' E to 84º 56'01.31'' N Longitudes.
v.	Elevation of the project site	152 m
vi.	Involvement of Forest land if any.	No forest land is involved
vii.	Water body exists within the project site as well as study area	**Project site:** Nil **Study area** Name with distance – Brahmani River at a distance of 1.68 km
viii.	Existence of SZ/ ESA/ national park / wildlife sanctuary/ biosphere reserve/	NIL

S. No.	Particulars	Details
	tiger reserve/ elephant reserve etc. if any within the study area	

34.11.6 The existing project was accorded environmental clearance vide letter no. J-11011/491/2008-IA II(I) dated 11/11/2008. Consent to Operate for the existing unit was accorded by Odisha State Pollution Control Board vide lr. no. 3662/IND-I-CON-523. The validity of CTO is up to 31.03.2021.

34.11.7 Implementation status of the existing EC:

Sl. No.	Facilities	Units	As per EC dated 11/11/2008	Implementation Status as on 10/04/2021	Production as per CTO
1.	DRI Kiln	TPD	1 X 300	Commissioned	96000 TPA
2.	Induction Furnace	T	4 X 8		102400 TPA
3.	Ladle Furnace	T	1X20, 1X15		Matching
4	CPP -WHRB	MW	8		8 MW
5.	CPP - AFBC	MW	4		4 MW
6.	Coal Sizer	TPH	200 (CTE no 18563/Ind-II-NOC-5235 dt 04.11.2011)		200 TPH
7.	Iron Ore Crusher	TPH	100 (CTE no 18563/Ind-II-NOC-5235 dt 04.11.2011)		100 TPH
8.	Slag Crusher	TPH	10 (CTE no 18563/Ind-II-NOC-5235 dt 04.11.2011)		10 TPH
9.	Dry Coal Separator	TPH	50 (CTE no 18563/Ind-II-NOC-5235 dt 04.11.2011)	Installed not commissioned	CTO shall be considered only obtaining EC.

34.11.8 The unit configuration and capacity of existing and proposed project is given as below:

S. No.	Name	Existing Units		Proposed Units		Total (Existing + Proposed)	
		Configuration	Production TPA	Configuration	Production TPA	Configuration	Production TPA
1.	DRI Kiln	1X300 TPD	96000	1X350 + 1X100 TPD	144000	1X300 + 1X350 + 1X300 TPD	240000
2.	IF with LF	4X8 T IF, 1X20 T & 1X15 T LF	102400	4X12T, 1X3T IF & 1X16T LF	163200	4X8 T + 4X12T +1X3 T IF with 1X20 T+1X15t+1 X 16T LF	265600
3.	RM	Nil	nil	25 TPH	1,32,000	25 TPH	1,32,000

S. No.	Name	Existing Units		Proposed Units		Total (Existing + Proposed)	
		Configuration	Production TPA	Configuration	Production TPA	Configuration	Production TPA
4.	CPP (WHRB)	1x8MW	8 MW	1x10MW	10MW	1x8 MW+1x10 MW	18 MW
5.	CPP (AFBC)	1X4MW	4 MW	1X6 MW	6MW	1x4MW+ 1x6MW	10MW
6.	Dry coal separator	1x50 TPH	Installed Not commissioned	-	-	1x50 TPH	
7.	Coal sizer with Truck tipper	1X200 TPH	Nil	-	-	1x200 TPH	
8.	Mobile crusher	1x100TPH	Nil	-	-	1x100 TPH	
9.	Slag crusher	1x10 TPH	Nil	-	-	1x10 TPH	

34.11.9 The details of the raw material requirement for the proposed project/ expansion cum proposed project along with its source and mode of transportation is given as below:

S. No.	Raw Material	Quantity required per annum			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
1	Hematite Iron ore	143200	214800	358000	OMC	140	Rail
2	Coal for DRI	116000	174000	290000	MCL	138	Rail
3	Boiler grade Coal	24000	36000	60000	MCL	138	Rail
4	Pig	13520	16480	30000	Local purchase	11	Road
5	Scrap	6760	8240	15000	Local purchase	4	Road
6	Sponge Iron	-	20000	20000	Local purchase	11	Road
7	Lime stone	6000	9000	15000	Biramitrapur	95	Rail

34.11.10 The water requirement for the project is estimated as 1400.5 m^3 /day, out of which 1257.7 m^3/day of fresh water requirement will be obtained from Brahmani river and the remaining requirement of 142.5 m^3 /day will be met from the rain water harvesting pond. The permission for drawl of surface water is obtained from Govt. of Odisha vide agreement dated 17/01/2020.

34.11.11 The power requirement for the project is estimated as 28 MW, out of which 28 MW will be obtained from the CPP.

34.11.12 Baseline Environmental Studies:

Period	01st Mar 2019 to 31st May 2019
AAQ parameters at 8 locations	$PM_{2.5}$ = 15.0 to 35.0 µg/m^3 PM_{10} = 45.0 to 82.0 µg/m^3 SO_2 = 4.0 to 13.0 µg/m^3 NO_2 = 8.0 to 29.0 µg/m^3
AAQ modelling (Incremental GLC)	PM_{10} = 3.0 µg/m^3 SO_2 = 4.45 µg/m^3
Ground water quality at 8 locations	pH: 6.8 to 7.3, Total Hardness: 102 to 165 mg/l, Chlorides: 16 to 53 mg/l, Fluoride: 0.13 to 0.45 mg/l. Heavy metals are within the limits.
Surface water quality at 8 locations	pH: 6.8 to 7.8; DO: 5.9 to 7.2 mg/l and BOD: 4 to 10 mg/l. COD from 6.8 to 17 mg/l
Noise levels	54.1 to 63.2 for the daytime and 43.1 to 53.6 for the Night time.
Traffic assessment study findings	At present 495 heavy, 421 light, 239 two wheelers and 216 three wheelers move in adjacent road meeting NH143. The total emission for present scenario is 1.46 µg/m^3 Total suspended particulates (TSP), 5.0 µg/m^3 NOx and 6.0 µg/m^3 CO. Due to proposed expansion additional 100 heavy, 90 light, 316 two wheelers and 48 three wheelers will ply resulting in additional 0.35 µg/m^3 TPS, 2.00 µg/m^3 NOx and 2.04 µg/m^3 CO.
Flora and fauna	No schedule I fauna exists in the study area.

34.11.13 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	**Type of Waste**	**Source**	**Quantity generated (TPA)**	**Mode of Treatment**
SOLID WASTE				
1	Char	DRI Kiln	36,000	Use in AFBC
2	IF Slag	Induction Furnace	32,000	To be used in Land Fill after iron recovery
3	Fly Ash	CPP AFBC	1,28,000	To be given to cement plant & use in Brick Manufacturing
4	Bottom ash	CPP AFBC	20,000	Use in brick manufacturing
HAZARDOUS WASTE				
1	Used Grease	Moving equipment	500	Stored temporarily and being lifted by

2	Used Oil Filters	Compressors, power packs, vehicles.	70 nos	authorized Vendor.
3	Waste Jute/Cotton	Use for cleaning machines	200	
4	Oily Sludge	Power Pack Rooms	40	
5	Used Oil	Transformer and all Mechanical Engines	6.2	

34.11.14 Public Consultation:

Details of Advertisement given	17/04/2018
Date of Public Consultation	25/05/2018
Venue	Ground near RMC Godown, Saleibahal, Sunderagrh, Odisha
Presiding Officer	District Magistrate
Major Issues Raised	i. Concern on Pollution control, ii. Employment opportunities, iii. Drinking water facilities, iv. Education & Training and v. other peripheral developments.

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

Sl.No	**Concerns raised during the Public Hearing**	**Physical activity and action plan**	**Tentative Budget, Rs Lacs**	**Target for implementation of action plan**		
				1st. yr. in lakhs	**2nd yr. in lakhs**	**3rd yr. in lakhs**
1	Training course for technical persons on advance industrial technology and exposure to industrial process, energy conservation,safety and environment protection	Establishment +Training material+stipend + faculty	45	15	15	15

Sl.No	Concerns raised during the Public Hearing	Physical activity and action plan	Tentative Budget, Rs Lacs	Target for implementation of action plan		
				1st. yr. in lakhs	2nd yr. in lakhs	3rd yr. in lakhs
2	Providing 12W solar LED street light (preferably solar) on road	Rajamunda to Tumkela – 3.6 km Lighting in Gamlei, Urumkela & Saradhapur @ 10 nos. Lighting in Gamlei road – 3.6 km	13.6	5.6	2.4	5.6
3	Construction of traffic post at Rajamunda chawk		05	05	-	-
4	Supply of drinking water	Installation of 10 nos. of tubewells @ 1.1 lakhs in villages after consultation with local administration	11	4	3	4
5	Development of MSW dump yard	Under swachha Bharat yojana dump yard to be rebuilt, supply of bins for waste collection and tractors	46	22	-	24
6	Medical check up camp & medicines	Free health checkup camp and distribution of free medicines in consultation with local administration	35	11	11	13
7	Construction of toilets	Construction of 2 nos. of community toilets in consultation with local administration	50	25	-	25
8	Plantation & Distribution of saplings in and around the villages	Adoption of 5 villages for plantation and distribution of saplings @1000 plants /village	5.5	2.2	1.1	2.2

Sl.No	Concerns raised during the Public Hearing	Physical activity and action plan	Tentative Budget, Rs Lacs	Target for implementation of action plan		
				1st. yr. in lakhs	2nd yr. in lakhs	3rd yr. in lakhs
9	Technical & Infrastructural aid to farmers	Providing high yield paddy seeds, fertilizers, and drip irrigation points with electricity	16.4	8.2	-	8.2
Total			**227.5**	----	----	-----

34.11.15 The capital cost of the project is Rs. 270 Crores and the capital cost for environmental protection measures is proposed as Rs. 13.4 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 1.34 Crores. The employment generation from the proposed expansion is 1000. The details of cost for environmental protection measures are as follows:

S. No.	Description of Item	Existing (Rs. In lakhs)	
		Capital Cost	Recurring Cost
i.	Air Pollution Control/ Noise	470	47
ii.	Waste water management	80	8
iii.	Solid waste management	200	20
iv.	Environmental monitoring	100	10
v.	Occupational health	210	21
vi.	Safety equipments & Disaster Management budget	180	18
vii.	Green Belt Development	100	10
Total		**1340**	**134**

34.11.16 Greenbelt will be developed in 13.6 ha which is about 40% of the total project area. A 6m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 5160 saplings will be planted and nurtured in 6.02 hectares in 2 years.

34.11.17 The proponent has reported that there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

34.11.18 Name of the EIA consultant: M/s Global Tech Enviro Experts Pvt ltd [S.No. 92, List of ACOs with their Certificate / Extension Letter no. Rev. 09, Apr. 12, 2021].

34.11.19 **Certified compliance report from Regional Office:**

The Status of compliance of earlier EC was obtained from Regional Office, Bhubaneswar *vide* letter no. 101-520/09/EPE, dated 20/03/2020 in the name of M/s Bhaskar Steel & Ferro

Alloys Ltd. The Action taken report regarding the partially/non-complied condition was submitted to Regional officer MoEF&CC, Bhubaneshwar vide letter no. BSFAPL/RKL/20-21/21 dated 06/06/2020. MoEF&CC (RO), evaluated the same and has issued letter dated 11/01/2021. The details of the observations made by RO in the report dated 11/01/2021 along with its re-assessment / present status as furnished by the PP is given as below:

Sl.	**Non-compliances details**	**Observation of RO (abridged)**	**Condition no.**			**Re-assessment by RO / Response by PP**
			EC date	**Specific**	**General**	
1	PAs have not installed online ambient air quality monitoring stations in the project site	PAs are monitoring by third party monitoring agency. Online monitoring will be installed along with expansion project	11/11/2008	No condition mentioned in EC		Partially Complied Response By PP: Online monitoring will be installed along with expansion project.
2	It is required to provide NABL accreditation of M/s R V Briggs & Co. Pvt Ltd	PAs have submitted copies of NABL Accreditation	11/11/2008			Complied.
3	Provide photograph of surface runoff collection & treatment system	Photographs provided	11/11/2008			Complied.
4	As per preamble total project area is 1.8 acres. It is required to provide detailed information regarding development of green belt	Total project area is 34 ha. 1.8 acres mentioned is typographical error.	11/11/2008			Complied.

Sl.	Non-compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Response by PP
			EC date	Specific	General	
5	Detailed point wise compliance status of all environmental protection measures and safeguards recommended in EIA/EMP report to be submitted.	PAs are in process of complying all environmental protection measures. Detailed expenditure statement submitted to RO, Bhubaneshwar.	11/11/2008	i) to xi)	-	Being Complied.

Serious non-compliances detected. RO Requested that the Ministry may appraise the issue of coal separator.

It has been observed that PAs have obtained Consent-To-Establish (CTE) from State Pollution Control Board, Odisha for 50 TPH Dry Coal separator and 10 TPH slag crusher vide letter no. 18563/INDII-NOC-5235 dated 04.11.2011. The said components were not mentioned in EC and as per the Special Condition No.-1 of CTE: "The proponent has to seek clarification from the MoEF, Govt. of India or SEIAA, Orissa regarding applicability of EIA notification, 2006 for installation of 50 TPH dry coal separator by air jigging method". However, PAs have not approached Ministry for clarification. The said component was installed in the existing plant and applied for Consent-To-Operate (CTO}. As per the CTO vide letter no. 3181/IND-I-CON-5237 dated 28.03.2019, it has been mentioned that "The CTO for Dry Coal Separator (50 TPH) through air jigging shall be considered only after obtaining EC or Clarification from MoEF&CC, Govt. of India regarding EIA applicability as. per CTE condition." In addition, it has been observed that PAs have obtained CTE for installation of 3 T/Heat of Induction furnace (IF) for production of M.S. Billets of capacity 2700 TPA inside the existing premises vide letter no. 1746/Ind-II-NOC-5963 dated 25.01.2016. The same has also not mentioned in EC. Subsequently, PAs have included the 1 X 3 TPH in the amended TOR vide letter no. J-1011/491/2008-IA.II (} dated 17.11.2016 and 18.08.2017. It is requested to the Ministry may appraise the above issues.

34.11.20 M/s Bhaskar Steel & Ferro Alloy Private Limited has made earlier online application IA/OR/IND/193242/2020 dated 15/01/2021 and Re-constituted EAC considered the proposal in 29th meeting held during 25-27th January, 2021. The Observation and recommendation of EAC is given below:

Observations of the Committee held during 25-27th January, 2021

i. As per the RO report, the facilities namely for 50 TPH Dry Coal separator, 10 TPH slag crusher, 3 T/Heat of Induction furnace (IF) for production of M.S. Billets of capacity 2700 TPA, coal sizer of 200 TPH and iron ore crusher of 100 TPH have been

established and operated at the site except dry coal separator based on the Consent issued by Odisha Pollution Control Board without obtaining prior Environment Clearance. The committee was of the view that dry coal separator and coal sizer is a part of iron ore beneficiation process and PP could have obtained EC prior to the establishment of the same. For the remaining facilities established, EC may not be required under the purview of EIA, 2006.

ii. As per Ministry's O.M. No. J-11015/286/2007-IA.II(I) dated 7/2/2020, any specific non-compliance singled out while the project is being appraised by the EAC, the concerned sector shall issue Show Cause Notice.

iii. TOR point # 9 pertaining to Corporate Environment Policy has not been addressed in EIA Report.

iv. The issues raised during the public consultation in verbatim by each stake holder and action plan to address the same in physical terms as mandated under MoEF&CC O.M. dated 30/09/2020 have not been furnished in EIA report.

v. Action plan for green belt development covering 40% of the project area has not been furnished.

vi. Details of the pollution control devices to achieve 30 mg/Nm^3 particulate emission has not been furnished.

vii. Parking area for 200 trucks shall be provided and the area shall be indicated on the layout drawing.

viii. Details of OHS center to be established shall be furnished. Details of activities to be completed in Rs. 2.1 Cr budget shall be explained.

ix. Capacity of fly ash brick manufacturing plant shall be furnished.

x. Chapter 5 of EIA report - Analysis of alternate technology needs to be explained.

xi. Action plan for providing impervious lining for raw material stockpiles and garland drains around the stock piles shall be submitted.

Recommendations of the Committee held during 25-27th January, 2021

34.11.21 In view of the foregoing observations and deliberations, the committee recommended the following:

i. Show cause notice may be issued to the unit as they have established the dry coal separator and coal sizer which are part of iron ore beneficiation process without obtaining prior Environment Clearance under the provisions of EIA, 2006.

ii. Instant proposal is being considered on merit and the same is returned in present form due to the technical shortcomings enlisted at paragraph number 29.1.21.

34.11.22 It was apprised to the EAC that following principle has been approved by the Competent Authority with respect to consideration of violation cases in the instant proposal under consideration.

i. Send the matter to the Sector EAC for consideration of the case on merit.

ii. Take action against the alleged violation as per law.

iii. Do not wait for either the evidence of action having been started or violation proceedings to finish before taking up the case on merit.

iv. The EC if given after consideration on merit would be valid from the date it is given and not with retrospective effect. For the period before it, if violation is established

by the court or the competent authority, the punishment/penalty as per law would be imposed.

34.11.23 Further, apprised to the EAC that in pursuance to the EAC recommendations, following action have been initiated by the Ministry:

i. SCN was issued to the PP under section 5 of the EP Act, 1986 on 23/02/2021.

ii. Reply to the SCN was submitted by the PP on 08/03/2021 which is under process in the Ministry.

34.11.24 The revised application was submitted vide proposal no IA/OR/IND/206041/2020 dated 26/03/2021 and considered by the EAC (Industry 1) in its 34th meeting of the Re-constituted EAC (Industry-I) held on 15- 16th April, 2021. The observations and recommendations of EAC is given as below.

Observations of the Committee

34.11.25 The Committee noted the following:

i. The Committee noted that the EIA/EMP report is found to be in order reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data reported and incremental GLC due to the proposed project are within NAAQ standards.

ii. The Committee has also deliberated on the issues raised during the public hearing as well as action plan to address various issues and found the Action Plan satisfactory.

iii. The EAC has considered the proposal as per the directions of the Competent Authority referred at para 34.11.22.

Recommendations of the Committee

34.11.26 In view of the foregoing and after detailed deliberations, the committee recommended the instant proposal on merit for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the following 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. These recommendations of the Committee, may be considered by the Ministry in the light of processing and decision of the Ministry on the Show Cause Notice (SCN) issued to the proponent.

A. Specific conditions

i. No ground water abstraction shall be permitted.
ii. Particulate matter emission from stacks shall not exceed 30 mg/Nm^3.
iii. Plant roads shall be paved and an industrial vacuum cleaner shall be deployed to clean the roads regularly to keep fugitive emission under control.
iv. Green belt shall be 34% with tree density of 2500 trees per ha inside the factory and additional 4.5 ha land shall be acquired adjacent to plant site to make it 40 %.
v. Treated effluent from the plant shall be reused and recycled completely. STP shall be installed to treat domestic sanitary waste water.

vi. 85 to 90 % hot charging shall be done and remaining through reheating furnace.
vii. Rain water harvesting shall be implemented as per the action plan (Annual rain water harvesting potential 460900 m^3) submitted to the Ministry.
viii. 2.05 Ac land shall be allotted near main gate for parking of 175 vehicles inside the plant.
ix. Occupational Health center shall be provided within the plant premises.
x. Impervious lining in RM storage area and garland drains with catch pits to trap run off material shall be provided.

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 two 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 recognised 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. 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.
iv. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
v. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
vi. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.
vii. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.
viii. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
ix. 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

iv. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008; G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF); S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

v. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.

vi. Adhere to 'Zero Liquid Discharge'.

vii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

viii. 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. Noise monitoring and prevention

ii. Noise quality shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

V. Energy Conservation measures

iii. Energy conservation measures may be adopted such as adoption of solar energy and provision of LED lights etc., to minimize the energy consumption.

VI. Waste management

ii. Used refractories shall be recycled as far as possible.

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. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused in melting Furnaces.

v. Kitchen waste shall be composted or converted to biogas for further use.

VII. Green Belt

ii. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant

iii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. Public hearing and Human health issues

iii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

iv. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.

v. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Corporate Environment Responsibility

iv. 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.

v. 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.

vi. 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; PM_{10}, SO_2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

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. 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).

x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

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

34.12 Brownfield project for substantial expansion by installation of production facilities for production of: Sponge Iron 200,000 TPA; Mild Steel Billet 300,000 TPA and/or Rerolled Steel Products through Hot Charging 150,000 TPA; Rerolled Steel Product through Reheating Furnace 150,000 TPA; MS Black Pipe Mill 140,000 TPA, Galvanizing plant 140,000 TPA, Captive Power 20MW (12MW through WHRB and 8MW through AFBC) and Fly Ash Bricks 69,300 TPA by **M/s. Kalindi Ispat Private Limited** located at Village-Belpan, Tahsil- Masturi, **District- Bilaspur, Chhattisgarh [**Online Proposal No.IA/CG/IND/207065/2021;File No IA-J-11011/126/2021-IA-II(I)]– **Prescribing for Terms of Reference** – regarding.

34.12.1 M/s. Kalindi Ispat Private Limited has made an application online vide proposal no. IA/CG/IND/207065/2021 dated 05/04/2021 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. Project Activity 3(a) Metallurgical Industries and 1(d) Thermal Power Plant under Category "**A**" of the schedule of the EIA Notification, 2006 and being appraised at Central Level.

34.12.2 The EIA consultant – M/s. Anacon Labs vide email dated 14/04/2021 expressed their inability to participate in the meeting and requested to consider the same in the next meeting.

34.12.3 In this regard, it was apprised to the EAC that as per MoEF&CC Office Memorandum No. 22-35/2020-IA.III dated 18/11/2020 pertaining to "Streamlining the process of grant of Environment Clearance process", "All projects, placed in the agenda, should be considered by the EAC notwithstanding the non-attendance of the Project Proponent or his consultant in

the EAC meeting to make a presentation. A clarification may however be sought from the consultant regarding reason for not attending the meeting".

34.12.4 In pursuance to the O.M. dated 18/11/2020, the proposal was considered by the EAC.

Details submitted by Project proponent

34.12.5 The project of M/s. Kalindi Ispat Private Limited located in Village- Belpan, Tahsil- Masturi, District- Bilaspur, Chhattisgarh is for Brownfield project for substantial expansion by installation of production facilities for production of: Sponge Iron 200,000 TPA; Mild Steel Billet 300,000 TPA and/or Rerolled Steel Products through Hot Charging 150,000 TPA; Rerolled Steel Product through Reheating Furnace 150,000 TPA; MS Black Pipe Mill 140,000 TPA, Galvanizing plant 140,000 TPA, Captive Power 20MW (12MW through WHRB and 8MW through AFBC) and Fly Ash Bricks 69,300 TPA.

34.12.6 Environmental site settings:

<table>
<tr><th>S No</th><th>Particulars</th><th>Details</th></tr>
<tr><td>i.</td><td>Total land</td><td>25.619 ha (Private Land)
Land use: land use of 9.72Ha. is diverted for Industrial purposes which will be used for implementation of industrial activity</td></tr>
<tr><td>ii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>No and R&R is not applicable</td></tr>
<tr><td>iii.</td><td>Latitude and Longitude of the project site</td><td><table><tr><td>Pillar</td><td>Latitude</td><td>Longitude</td></tr><tr><td>1</td><td>21°47'21.20"N</td><td>82°13'57.62"E</td></tr><tr><td>2</td><td>21°47'10.88"N</td><td>82°14'26.08"E</td></tr><tr><td>3</td><td>21°47'27.84"N</td><td>82°14'3.36"E</td></tr><tr><td>4</td><td>21°47'22.12"N</td><td>82°14'20.76"E</td></tr><tr><td>5</td><td>21°47'21.19"N</td><td>82°14'8.18"E</td></tr></table></td></tr>
<tr><td>iv.</td><td>Elevation of the project site</td><td>250-257 m AMSL</td></tr>
<tr><td>v.</td><td>Involvement of Forest land if any.</td><td>Nil</td></tr>
<tr><td>vi.</td><td>Water body exists within the project site as well as study area</td><td>Project site:
None

Study area :
1. Seonath River –4.8KM–W
2. KhorsiNala–9.2KM -S
3. JamuniyaN–4.8KM -WSW
4. Arnaor Arpa River –6.5KM -NW
5. Kurung Left Bank Canal–0.2KM -N
6. Jalso Distributary–7.1KM–NE</td></tr>
<tr><td>vii.</td><td>Existence of ESZ/ESA/national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/elephant reserve etc. if any within the study</td><td>Nil
Mohtara RF: 9.7 km - SSW</td></tr>
</table>

S No	Particulars	Details
	area	

34.12.7 The existing project was accorded Consent to vide lr. no. 2438/TS/CECB/2005 Raipur dated 03/06/2005. The unit was set up prior to EIA Notification 2006 with less than 100 Crores Rs investment therefore exempted from it EC under EIA Notification 1994. Consent to Operate for the existing unit was accorded by Chhattisgarh State Pollution Control Board vide lr. no. 4092/TS/CECB/2006 dated 18/08/2006. The validity of CTO is up to 31.08.2021.

34.12.8 Implementation status of the existing CTO:

Facilities	Configuration	As per CTO renewal	Implementation Status as on 05/04/2021
Sponge Iron: 60,000 TPA	DRI Kiln: 2 x100 TPD	60,000 TPA	60,000 TPA

34.12.9 The unit configuration and capacity of existing and proposed project is given as below:

S No	Name	Existing Units		Proposed Units		Total (Existing + Proposed)	
		Configuration	Production TPA	Configuration	Production TPA/ MW	Configuration	Production TPA/MW
1	Sponge Iron	DRI Klins, (2 x 100 TPD)	60,000 TPA	DRI Klins, (4x100TPD)	140,000 TPA	DRI Klins, (6x100 TPD)	200,000 TPA
2	Mild Steel Billet	0	0	Induction Furnace, 15 MT X 6 Nos along with LRF and CCM	300,000 TPA	Induction Furnace, 15 MT X 6 Nos along with LRF and CCM	300,000 TPA
3	Re Rolled Steel Products like; Structural Steel	0	0	Billet Reheating Furnace based Rerolling Mill will be about 455 TPD	300,000 TPA	Billet Reheating Furnace based Rerolling Mill will be about 455 TPD	300,000 TPA
4	MS Black Pipe or pipes	0	0	ERW pipe mill will be about 425 TPD	140,000 TPA	ERW pipe mill will be about 425 TPD	140,000 TPA
5	Galvanized Steel products Steel products	0	0	Galvanizing unit will be about 304 TPD	100,000 TPA	Galvanizing unit will be about 304 TPD	100,000 TPA
6	WHRB Power Plant	0	0	WHRB from Sponge Iron	12 MW	WHRB from Sponge Iron	12 MW
7	AFBC Power plant	0	0	AFBC boiler	8 MW	AFBC boiler power generation from Char/	8 MW

S No	Name	Existing Units		Proposed Units		Total (Existing + Proposed)	
		Configuration	Production TPA	Configuration	Production TPA/ MW	Configuration	Production TPA/MW
						Dolochar & Coal	
8	Fly Ash brick	0	0	Fly Ash brick manufacturing facility	69300 TPA	Fly Ash brick manufacturing facility	69300 TPA

34.12.10 The details of the raw material requirement for the existing and proposed project along with its source and mode of transportation is given as below:

For Sponge Iron Plant

S. No.	Raw Material	Quantity required per annum			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
1	Iron Ore	96,000	224,000	320,000	Odisha Iron Ore Mine and NMDC	Within 200 kms	By Rail to the nearest railway siding and then by Road through covered vehicles
2	Coal	78,000	182,000	260,000	SECL Coal mines	Within 200 kms	By Rail to the nearest railway siding and then by Road through covered vehicles
3	Limestone/ Dolomite	3,000	7,000	10,000	Open Market	Within 200 kms	By Road through covered vehicles
4	Refractory Material	90	210	300	Open Market	Within 200 kms	By Road through covered vehicles
	Total	**177,090**	**413,210**	**590,300**			

For Induction Furnace (Steel Melting Shop)

S. No	Raw Material	Quantity (TPA)			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
1	Sponge Iron	-	300,000.00	300,000.0	Captive production/ Local market	Within 200 kms	By Road through covered vehicles
2	Pig Iron /CI Scrap	-	37,113.00	37,113.00	Captive production/ Local market	Within 200 kms	By Road through covered vehicles/ Internally available
3	Melting Scrap	-	6,200.00	6,200.00	Captive generation/ Local market	Within 200 kms	Internally available/ By Road through covered vehicles

S. No	Raw Material	Quantity (TPA)			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
4	Ferro Alloys	-	3,000.00	3,000.00	Captive production/ Local market	Within 200 kms	Internally available/ By Road through covered vehicles
5	Aluminum	-	300.00	300.00	Open Market/ BALCO	Within 200 kms	By Road through covered vehicles
6	Ramming Mass	-	750.00	750.00	Open Market	Within 200 kms	By Road through covered vehicles
7	Steel Sheet Former	-	75.00	75.00	Open Market	Within 200 kms	By Road through covered vehicles
8	Furnace Oil for Laddle Preheating	-	582.00	582.00	Open Market	Within 200 kms	By Road through covered vehicles
9	Calcined Lime for Refining of Liquid Steel	-	15,000.00	15,000.00	Open Market	Within 200 kms	By Road through covered vehicles
10	Flurospar and other additives fordephos	-	3,000.00	3,000.00	Open Market	Within 200 kms	By Road through covered vehicles
11	Electrode for Arc Furnace	-	600.00	600.00	Open Market	Within 200 kms	By Road through covered vehicles
	Total	-	**366,620.00**	**366,620.00**			

For Hot Charging Rerolling Mill

S. No	Raw Material	Quantity required per annum			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
1	Hot Billets	-	153,062.00	153,062.00	Captive Production in Steel Melting shop	--	Internal Transfer
	Total	**-**	**153,062.00**	**153,062.00**			

For Reheating Furnace based Rerolling Mill

S No	Raw Material	Quantity (TPA)			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
1	Cold MS billet (internally available)	-	146,938.00	146,938.00	Captive production as per requirement	--	Internal Transfer
2	Cold MS Billet (from outside)	-	6,062.00	6,062.00	Local market as per requirement	Within 200 kms	By Road through covered vehicles
3	Coal	-	18,000.00	18,000.00	SECL Mines Local Market	Within 200 kms	By Road through covered vehicles
	Total	-	**171,000.00**	**171,000.00**			

For Captive AFBC Power Plant (8 MW)

S. No.	Raw Material	Quantity required per annum			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
1	Char Dolochar	-	60,000.00	60,000.00	Captive generation in SID		Internal Transfer
2	Coal	-	38,779.00	38,779.00	SECL Mines	Within 200 kms	By Road through covered vehicles
3	Fluidizing Bed Media	-	150.00	150.00	Open Market	Within 200 kms	By Road through covered vehicles
	Total	-	**98,929.00**	**98,929.00**			

Black Pipe Mill and Galvanizing unit

S. No.	Raw Material	Quantity required per annum			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
1	MS Strip	-	150,000.00	150,000.00	Captive generation from Billet Reheating Furnace		Internal Transfer.
2	Zinc	-	5,000.00	5,000.00	Open Market	Within 200 kms	By Road through covered vehicles
3	Lead	-	50.00	50.00	Open Market	Within 200 kms	By Road through covered vehicles
4	Furnace Oil	-	2,000.00	2,000.00	Open Market	Within 200 kms	By Road through covered vehicles
5	Acid	-	4,500.00	4,500.00	Open Market	Within 200 kms	By Road through covered vehicles
6	Lime for Treatment	-	2,500.00	2,500.00	Open Market	Within 200 kms	By Road through covered vehicles
	Total	-	**164,050.00**	**164,050.00**			

Fly Ash Brick Plant

S. No.	Raw Material	Quantity required per annum			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
1	Fly Ash/ Coal Ash etc.	-	45,045.00	45,045.00	Internally available.		Internal Transfer
2	Gypsum and Cement	-	6,930.00	6,930.00	Internally available.		Internal Transfer
3	Granulated slag from Induction Furnace	-	17,325.00	17,325.00	Internally available.		Internal Transfer
	Total	-	**69,300.00**	**69,300.00**			

34.12.11 The water requirement for the project is estimated as 1599 m^3/day, (559,325KLA), out of which 119925 KLA of fresh water requirement will be obtained from the Rain water and the remaining requirement of 358176KLA will be met from Ground Water. The permission for

drawl of ground water is obtained for its existing requirement from CGWA vides Lr. No. CGWA/NOC/IND/ORIG/2020/8463 dated 19.08.2020 for expanded capacity we will obtain prior NOC from CGWA before implementation.

34.12.12 The power requirement for the project is estimated as 37 MW, out of which 20MW will be obtained from the captive power plant and 17 MW will be sourced through State Grid (CSPDCL).

34.12.13 The capital cost of the project is Rs **231.9371** Crores (including existing cost & proposed CER) and the capital cost for environmental protection measures is proposed as Rs **3.01** Crores. The employment generation from the proposed project/ expansion is **945.**

34.12.14 Proposed Terms of Reference (Baseline data collection period - 1st March, 2021 to 31st May, 2021)

Attributes		**Sampling**	
A. Air		**No of stations**	**Frequency**
a. Meteorological parameters	Temperature, Relative Humidity, rainfall, wind direction & wind speed.	1 (At project site)	Daily
b. AAQ parameters	PM10, PM2.5, SO2, NO2, NH3, Ozone, CO, Benzene and Benzopyrene & Heavy metals, Heavy metals : Ni, Pb, As	8	Monthly
B. Noise	Sound pressure level (Leq)	8	Monthly (day time and night time)
C. Water		16	
Surface water Groundwater	As per IS: 10500	8 8	Once in a month
D. Land			
a. Soil quality b. Land use	Physical and nutrition properties of soil	2	Once in a season
E. Biological a. Aquatic b. Terrestrial	Flora and fauna within study depending on Ecological receptors in the study area Aquatic Ecological Study 3 locations at Sivnath River and other River in study area	3	Once in a year
F. Socio-economic parameters	Occupational Health monitoring of employees	1 (Project site)	Once in a year

34.12.15 The proponent has mentioned that there is no court case or violation under EIA Notification 2006/court case/show cause/direction related to the project under consideration.

34.12.16 Name of the EIA consultant: M/s Anacon Laboratories Private Limited, Nagpur [S. No., List of ACOs with their Certificate no. NABET/EIA/1922/RA 0150 dated 03 Feb 2020 Valid till September 30, 2022.

34.12.17 The proposal was considered by the EAC (Industry 1) in its 34th meeting of the Re-constituted EAC (Industry-I) held on 15-16th April, 2021. The observations and recommendations of EAC is given as below.

Observations of the Committee

34.12.18 The Committee noted the following:

i. 50% hot charging and 50% rolling through RHF is committed.
ii. Belpan village is only 600 m away from the plant.
iii. PGP details for use of gas in RHF have not been furnished.
iv. Pickling and galvanising is included. Details like ETP for Pickling section, acid recovery and disposal of zinc dross have not been provided.
v. PM emission level of 50 mg/Nm^3 is proposed.
vi. 600 TPA of carbon electrodes shall be used as per DPR. It is not clear as to where these electrodes will be used.

Recommendations of the Committee

34.12.19 The project proponent did not attend the meeting. However, the Committee considered the proposal in absentia. PP has not addressed the issues pertaining to hot charging, pm emission level, use of furnace oil, SO_2 and NOX emission from RHF and provision of ETP for pickling section and usage of carbon electrode etc. In view of this, the committee recommended to return the proposal in its present for addressing the concerns enumerated above.

34.13 Expansion of integrated steel plant from 3.6 MTPA to 12.6 MTPA & of Cement plant from 1.0 MTPA to 12.0 MTPA by **M/s. Jindal Steel and Power Limited** located at Village Panchayats Patrapali, Saraipali, Chirraipani, Kalmi, Gorka, Saraipali, Barmuda, Kosamapali, Dhanagar **District Raigarh, Chhattisgarh** [Online Proposal No.IA/CG/IND/208071/2021; File No J-11011/799/2008-IA-II(I)]– **Prescribing for Terms of Reference** – regarding.

34.13.1 M/s. Jindal Steel and Power Limited has made an application online vide proposal no. IA/CG/IND/208071/2021 dated 05/04/2021 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S.No. Project Activity 3(a) Metallurgical industries (ferrous & nonferrous), 3(b) Cement plants and 4(b) Coke oven plants under Category "**A**" of the schedule of the EIA Notification, 2006 and being appraised at Central Level.

34.13.2 The Committee noted that the instant proposal involves expansion of integrated steel plant and integrated cement plant for which consolidated ToR have been sought by the proponent. As per the available records, there are two different Environment Clearances have been accorded by the Ministry vide letter no. J-11011/799/2008-IA.II(I) dated 04.11.2009 and letter no. J-11011/79/2007-IA.II(I) dated 16.04.2009 for the integrated steel plant and integrated cement plant respectively. The location of the integrated steel plant and cement plant are different and formal amalgamation of these ECs is yet to be obtained from the Ministry.

Observations of the Committee

34.13.3 The Committee noted the following:

i. PP has to first amalgamate the steel & cement plant EC from MoEF&CC by applying through PARIVESH in relevant forms along with the requisite supporting documents including Board Resolution from both the units for merger of ECs.

ii. Consolidated ToR for the both the units cannot be considered without amalgamation mentioned above.

Recommendations of the Committee

34.13.4 In view of the foregoing observations, the Committee recommended to return the proposal in its present form.

34.14 Greenfield Steel Plant (Iron ore beneficiation cum pellet plant- 6,00,000 TPA, Producer Gas plant – 27,000 Nm^3/hr, DRI plant 3,50,000 TPA, Billet Making using Induction Furnaces - 3,20,000 TPA, Automotive Components Manufacturing Facility-1,20,000 TPA using Billets, Ferroalloy Plant-52,000 TPA, and Captive Power Plant- 35 MW using WHRB and AFBC) by **M/s. Suvidhi Ispat Private Limited** located at Borai Industrial Growth Centre, Rasmara, **District Durg, Chhattisgarh – [**Online Proposal No.IA/CG/IND/207674/2021;File No J-11011/393/2018-IA-II(I)] – **Amendment in Environmental Clearance – regarding.**

34.14.1 M/s Suvidhi Ispat Private Limited has made an online application vide proposal no. IA/CG/IND/207674/2021 dated 02/04/2021 along with Form 4 and sought for Amendment / Clarification in Environmental Clearance granted to accord by the Ministry vide letter no. J-11011/393/2018-IA II (I), dated 24/02/2020.

Details submitted by the project proponent

34.14.2 M/s. Suvidhi Ispat Private Limited vide has obtained Environment Clearance from MoEF&CC vide J-11011/393/2018-IA II (I), dated 24/02/2020 for the project mentioned above.

34.14.3 The instant amendment proposal is for seeking amendment in the general condition II (iii) of the EC dated 24/02/2020 which states that *"The project proponent shall install system to carry out continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NO_x in reference to SO_2 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^o each) covering upwind and downwind directions".*

Reference of approved EC	Description as per Approved EC dated 24/02/2020	Amendment sought in proposal	Remark
General condition II (iii)	PP shall install at least at four locations (one	Deletion of this general condition II (iii).	Deletion of condition because several Ambient Air Quality Monitoring

Reference of approved EC	Description as per Approved EC dated 24/02/2020	Amendment sought in proposal	Remark
	within and three outside the plant area		Stations are already operational near the plant and financial issues of the company.

34.14.4 The project proponent seeks the deletion of the said general condition II (iii) in the Environment Clearance due to following reasons:-

- The said Project is being set up in an Industrial Area namely Borai Industrial Growth Centre belonging to Chhattisgarh State Industrial Development Corporation, Government of Chhattisgarh. There are several industries located in the said Industrial Area.
- Further, several Ambient Air Quality Monitoring Stations are already operational in the said industrial area near the plant. The location of a few AAQ monitoring stations is within close vicinity ranging within about 50 meter to 1000 meter from our project site.
- Also, as a matter of fact, financial institutions are not keen in providing financial assistance to steel projects at the moment; PP is able to manage setting up of the proposed project in small phases. The first phase is only consisting of 2 x 100 TPD Sponge Iron Plant with other phases to follow in subsequent phases as per the availability of the funds.
- Hence, company is already constrained with the funds and will not be financially capable of taking such substantial investments from the very first phase.

34.14.5 There is no change in production capacity as well as Configuration accorded environment clearance dated 24/02/2020.

34.14.6 The proposal was considered by the EAC (Industry 1) in its 34th meeting held on 15-16th April, 2021. The observations and recommendations of EAC is given as below:

Observations of the Committee

34.14.7 The Committee noted the following:

i. Amendment in EC General condition # II (iii) is requested. The condition is related to installation of 4 online AAQ monitoring stations (one inside and three outside the plant). PP is pleading that there were several such units in the area hence this condition should be dispensed with.

ii. The first phase is only consisting of 2 x 100 TPD Sponge Iron Plant with other phases to follow in subsequent phases as per the availability of the funds. Further, company is already constrained with the funds and will not be financially capable of taking such substantial investments from the very first phase.

Recommendations of the Committee

34.14.8 In view of the foregoing and after deliberations, the Committee recommended for amendment in General Condition II (iii) of EC dated 24/02/2020 as given below:

iii. Manual monitoring of Ambient Air Quality at two locations (upwind and downwind) shall be carried out as per CPCB guidelines through NABL accredited laboratory. Continuous Ambient Air Quality Monitoring Station (CAAQMS) shall be installed at two locations covering upwind and downwind directions within three years from the date of accord of EC.

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ANNEXURE –1

GENERIC TERMS OF REFERENCE (ToR) IN RESPECT OF INDUSTRY SECTOR

1. **Executive Summary**
2. **Introduction**
   - i. Details of the EIA Consultant including NABET accreditation
   - ii. Information about the project proponent
   - iii. Importance and benefits of the project
3. **Project Description**
   - i. Cost of project and time of completion.
   - ii. Products with capacities for the proposed project.
   - iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
   - iv. List of raw materials required and their source along with mode of transportation.
   - v. Other chemicals and materials required with quantities and storage capacities
   - vi. Details of Emission, effluents, hazardous waste generation and their management.
   - vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
   - viii. The project proponent shall furnish the requisite documents from the competent authority in support of drawl of ground water and surface water and supply of electricity.
   - ix. Process description along with major equipment and machineries, process flow sheet (Quantitative) from raw material to products to be provided
   - x. Hazard identification and details of proposed safety systems.
   - xi. Expansion/modernization proposals:
     - a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MoEF&CC/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment, Forest and Climate Change as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing /existing operation of the project from SPCB/PCC shall be attached with the EIA-EMP report.
     - b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4. **Site Details**

i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.

ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)

iii. Co-ordinates (lat-long) of all four corners of the site.

iv. Google map-Earth downloaded of the project site.

v. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.

vi. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.

vii. Landuse break-up of total land of the project site (identified and acquired), government/private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)

viii. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area

ix. Geological features and Geo-hydrological status of the study area shall be included.

x. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)

xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.

xii. R&R details in respect of land in line with state Government policy.

5. **Forest and wildlife related issues (if applicable):**

i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable).

ii. Land use map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (*in case of projects involving forest land more than 40 ha).*

iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.

iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon.

v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area.

vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.

6. **Environmental Status**

i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.

ii. AAQ data (except monsoon) at 8 locations for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.

iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with – min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.

iv. Surface water quality of nearby River (60m upstream and downstream) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.

v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC.

vi. Ground water monitoring at minimum at 8 locations shall be included.

vii. Noise levels monitoring at 8 locations within the study area.

viii. Soil Characteristic as per CPCB guidelines.

ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.

x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.

xi. Socio-economic status of the study area.

7. **Impact Assessment and Environment Management Plan**

i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be well assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.

ii. Water Quality modelling – in case, if the effluent is proposed to be discharged in to the local drain, then Water Quality Modelling study should be conducted for the drain water taking into consideration the upstream and downstream quality of water of the drain.

iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport

of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.

iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.

v. Details of stack emission and action plan for control of emissions to meet standards.

vi. Measures for fugitive emission control

vii. Details of hazardous waste generation and their storage, utilization and disposal. Copies of MOU regarding utilization of solid and hazardous waste shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.

viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.

ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.

x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.

xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.

xii. Action plan for post-project environmental monitoring shall be submitted.

xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8. **Occupational health**

i. Details of existing Occupational & Safety Hazards. What are the exposure levels of above mentioned hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,

ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre-designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre-placement and periodical examinations give the details of the same. Details regarding last month analysed data of abovementioned parameters as per age, sex, duration of exposure and department wise.

iii. Annual report of health status of workers with special reference to Occupational Health and Safety.

iv. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.

9. **Corporate Environment Policy**

i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.

ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.

iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.

iv. Does the company have system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.
11. To address the Public Hearing issues, provisions contained under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 30/09/2020 shall be complied.
12. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
13. A tabular chart with index for point wise compliance of above ToRs.
14. The ToRs prescribed shall be valid for a period of three years for submission of the EIA-EMP reports along with Public Hearing Proceedings (wherever stipulated).

<u>The following general points shall be noted:</u>

i. All documents shall be properly indexed, page numbered.
ii. Period/date of data collection shall be clearly indicated.
iii. Authenticated English translation of all material in Regional languages shall be provided.
iv. The letter/application for environmental clearance shall quote the MOEF&CC file No. and also attach a copy of the letter.
v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.
vi. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report
vii. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MOEF&CC vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry shall also be followed.

viii. The consultants involved in the preparation of EIA-EMP report after accreditation with Quality Council of India (QCl)/National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA-EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation details shall be posted on the EIA-EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.

ix. ToRs' prescribed by the Expert Appraisal Committee (Industry) shall be considered for preparation of EIA-EMP report for the project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The SPCB shall conduct the Public Hearing/public consultation, district-wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA-EMP Report in a separate chapter and summarized in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.

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ANNEXURE-2

ADDITIONAL ToRS FOR INTEGRATED STEEL PLANT

1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
3. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
4. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
5. PM (PM_{10} and $P_{2.5}$) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM_{10} to be carried over.
6. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
7. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
8. Plan for slag utilization
9. Plan for utilization of energy in off gases (coke oven, blast furnace)
10. System of coke quenching adopted with justification.
11. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
12. Trace metals in waste material especially slag.
13. Trace metals in water
14. Details of proposed layout clearly demarcating various units within the plant.
15. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs and outputs (material and energy balance).
16. Details on design and manufacturing process for all the units.
17. Details on environmentally sound technologies for recycling of hazardous materials, as per CPCB Guidelines, may be mentioned in case of handling scrap and other recycled materials.
18. Details on requirement of energy and water along with its source and authorization from the concerned department. Location of water intake and outfall points (with coordinates).
19. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
20. Details on toxic content (TCLP), composition and end use of slag.

ADDITIONAL ToRs FOR PELLET PLANT

1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
3. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
4. PM(PM_{10} and $P_{2.5}$) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM_{10} to be carried over.
5. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
6. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
7. Plan for slag utilization
8. Plan for utilization of energy in off gases (coke oven, blast furnace)
9. System of coke quenching adopted with justification.
10. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
11. Trace metals in waste material especially slag.
12. Trace metals in water

ADDITIONAL ToRs FOR CEMENT INDUSTRY

1. Limestone and coal linkage documents along with the status of environmental clearance of limestone and coal mines
2. Quantum of production of coal and limestone from coal & limestone mines and the projects they cater to;
3. Present land use shall be prepared based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
4. If the raw materials used have trace elements, an environment management plan shall also be included.
5. Plan for the implementation of the recommendations made for the cement plants in the CREP guidelines must be prepared.
6. Energy consumption per ton of clinker and cement grinding
7. Provision of waste heat recovery boiler
8. Arrangement for co-processing of hazardous waste in cement plant.
9. Trace metals in waste material especially slag.

ADDITIONAL ToRs FOR PULP AND PAPER INDUSTRY

i. A note on pulp washing system capable of handling wood pulp shall be included.
ii. Manufacturing process details for the existing and proposed plant shall be included. Chapter on Pulping & Bleaching shall include: no black liquor spillage in the area of pulp mill; no use of elemental chlorine for bleaching in mill; installation of hypo preparation plant; no use of potcher washing and use of counter current or horizontal belt washers. Chapter on Chemical Recovery shall include: no spillage of foam in chemical recovery plant, no discharge of foul condensate generated from MEE directly to ETP; control of suspended particulate matter emissions from the stack of fluidized bed recovery boiler and ESP in lime kiln
iii. Studies shall be conducted and a chapter shall be included to show that Soda pulping process can be employed for *Eucalyptus/Casuarina* to produce low kappa (bleachable) grade of pulp.
iv. Commitment that only elemental Chlorine-free technology will be used for the manufacture of paper and existing plant without chemical recovery plant will be closed within 2 years of issue of environment clearance.
v. A commitment that no extra chlorine base bleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills. Plan for reduction of water consumption.

ADDITIONAL ToRs FOR LEATHER/SKIN/HIDE PROCESSING INDUSTRY

1. Justification for engaging a particular type of process (raw hide/skin into semi finishing or finished leather, semi-finished leather to finished leather, dry finishing operations, chrome/vegetable tanning, *etc.).*
2. Details regarding complete leather/ skin/ hide processing including the usage of sulphides, nitrogen compounds, chromium or other tanning agents, post-tanning chemicals, biocides, *etc.*, along with the material balance shall be provided.
3. In case of chrome tanning, details of the chrome recovery plant, management of shavings/solid waste including safe disposal.
4. Details on reuse of soak liquor / saline stream from membrane system, if applicable, to the extent possible in pickling activity after required treatment. Also, mention the salt recovery measures.

ADDITIONAL ToRs FOR COKE OVEN PLANT

1. Justification for selecting recovery/non-recovery (beehive) type batteries with the proposed unit size.
2. Details of proposed layout clearly demarcating various facilities such as coal storages, coke making, by-product recovery area,*etc* within the plant.
3. Details of coke oven plant (recovery/non-recovery type) including coal handling, coke oven battery operations, coke handling and preparation.
4. Scheme for coal changing, charging emission centre, Coke quenching technology, pushing emission control.
5. Scheme for coke oven effluent treatment plant details including scheme for meeting cyanide standard.

ADDITIONAL ToRs FOR ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS

1. Type of the project – new/expansion/modernization
2. Type of fibres used (Asbestos and others) and preference of selection from techno-environmental angle should be furnished
3. As asbestos is used in several products and as the level of precautions differ from milling to usage in cement products, friction products gasketing, textiles and also differ with the process used, it is necessary to give process description and reasons for the choice for selection of process
4. Technology adopted, flow chart, process description and layout marking areas of potential environmental impacts
5. National standards and codes of practice in the use of asbestos particular to the industry should be furnished
6. In case of newly introduced technology, it should include the consequences of any failure of equipment/ technology and the product on environmental status.
7. In case of expansion project asbestos fibre to be measured at slack emission and work zone area, besides base line air quality.
8. In case of green field project asbestos fibre to be measured at ambient air.

ADDITIONAL ToRs FOR METALLURGICAL INDUSTRY (FERROUS AND NON-FERROUS)

1. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
2. Emission from sulphuric acid plant and sulphur muck management.
3. Details on installation of Continuous Emission Monitoring System with recording with proper calibration system
4. Details on toxic metals including fluoride emissions
5. Details on stack height.
6. Details on ash disposal and management
7. Complete process flow diagram describing process of lead/zinc/copper/ aluminium, *etc.*
8. Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation
9. Details on Holding and de-gassing of molten metal from primary and secondary aluminium, materials pre-treatment, and from melting and smelting of secondary aluminium
10. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
11. Trace metals in waste material especially slag.
12. Plan for trace metal recovery
13. Trace metals in water

Executive Summary

Executive summary of the report in about 8-10 pages incorporating the following:

i. Project name and location (Village, Dist, State, Industrial Estate (if applicable)
ii. Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier EC.
iii. Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)
iv. Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes. Materials balance shall be presented.
v. Measures for mitigating the impact on the environment and mode of discharge or disposal.
vi. Capital cost of the project, estimated time of completion
vii. Site selected for the project – Nature of land – Agricultural (single/double crop), barren, Govt/private land, status of is acquisition, nearby (in 2-3 km.) water body, population, with in 10km other industries, forest, eco-sensitive zones, accessibility, (note – in case of industrial estate this information may not be necessary)
viii. Baseline environmental data – air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population
ix. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
x. Likely impact of the project on air, water, land, flora-fauna and nearby population
xi. Emergency preparedness plan in case of natural or in plant emergencies
xii. Issues raised during public hearing (if applicable) and response given
xiii. CSR plan with proposed expenditure.
xiv. Occupational Health Measures
xv. Post project monitoring plan

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Re: DRAFT MOM OF 34 EAC MEETING HELD ON 15 TO 16 APRIL, 2021

From : cnpandey@iitgn.ac.in Tue, Apr 27, 2021 05:16 PM

Subject : Re: DRAFT MOM OF 34 EAC MEETING HELD ON 15 TO 16 APRIL, 2021 1 attachment

To : Sundar Ramanathan <r.sundar@nic.in>

Dear Mr. Sundar,
Please find herewith the approved MoM of the 34th EAC meeting held on 15th to 16th April, 2021. Please take further necessary action for uploading this on Parivesh.
Best wishes,
C. N. Pandey.
Chairman, EAC (Industry I),
MoEFCC, GOI.