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

Date of zero draft MoM sent to Chairman: 7/07/2021
Approval by Chairman: 10/07/2021
Uploading on PARIVESH: 11/07/2021

Summary record of the Thirty Ninth (39th) meeting of Re-Constituted Expert Appraisal Committee (REAC) held on 30th June - 1st July, 2021 for environment appraisal of Industry-1 sector projects constituted under the provisions of Environment Impact Assessment (EIA) notification, 2006.

The Thirty Ninth 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 **30th June- 1st July, 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) issue. The list of EAC attendees is as follows:

S. No.	Name	Position	30/06/2021	01/07/2021
1.	Dr. Chhavi Nath Pandey	Chairman	Present	Present
2.	Dr. M.K. Gupta, Director, CPPRI.	Member	Present	Present
3.	Dr. Siddharth Singh,	Member	Present	Present
4.	Dr. Jagdish Kishwan	Member	Present	Present
5.	*Dr. Tejaswini Ananth Kumar*	*Member*	*Absent*	*Absent*
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 38th meeting held during 15-16th June, 2021 were confirmed by the EAC as already uploaded on PARIVESH except the following:

ITEM NO 38.9

Minutes uploaded on PARIVESH:

38.9 Expansion of the existing **0.052** MTPA Sponge Iron to **0.16** MTPA Sponge Iron, 2x9 MVA Arc Furnace for manufacturing of Ferro Alloys of 30,000 TPA (Fe-Mn, Si-Mn, Fe-Si & Pig Iron combined), Iron Ore Sinter Plant of 80,000 TPA, **2x20** TPH Iron ore washery of 2,40,000 TPA and 20 MW Power Plant [WHRB – **10 MW & AFBC – 10 MW**] by **M/s. Maithan Steel & Power Limited** located at PO Bonra, PS Neturia, **Purulia District, West Bengal** [Online Proposal No. IA/WB/IND/70780/2017; MoEF&CC File No. IA-J-11011/554/2017-IA.II(I)]**– Reconsideration for grant of Environment Clearance based on ADS reply–** regarding.

38.9.7 The unit configuration and capacity of existing and proposed unit are given as below:

Sl. No	Name	Existing configuration	Proposed Configuration	Final configuration	Final Production Capacity In TPA
1.	DRI Kilns	2x100 TPD	1x350 TPD	2x100 TPD 1x350 TPD	1,81,500 Sponge Iron
2.	Power (DRI WHRB)	Nil	12MW	12 MW	12 MW
3.	Power(AFBC)	Nil	8.0MW	8.0 MW	8.0 MW
4.	Ferro Alloys Plant	NIL	2x9 MVA	2x9 MVA	30,000 (Fe-Mn, Si-Mn, Fe-Si & Pig Iron combined)
5.	Iron Ore Sinter Plant	NIL	250 TPD	250 TPD	As required.
6.	Iron Washery	NIL	1x40 TPH	1x40 TPH	2,06,000

38.9.9 The water requirement for the project is estimated as 72,515m^3/day, out of which1800m^3/day of fresh water requirement will be obtained from the Surface water and the remaining requirement of 54,515m^3 /day will be met from the treated recycled water. The permission for drawl of groundwater / surface water is obtained from Damodar River at confluence of Maithan and PanchetRiver vide Lr. No. MRO/water Tariff/183 dated 26/03/2019

To be Read as:

38.9 Expansion of the existing 0.064 MTPA Sponge Iron to 0.17 MTPA Sponge Iron, 2x9 MVA Arc Furnace for manufacturing of Ferro Alloys of 30,000 TPA (Fe-Mn, Si-Mn, Fe-Si & Pig Iron combined), Iron Ore Sinter Plant of 80,000 TPA, 1x40 TPH Iron ore washery of 2,40,000 TPA and 20 MW Power Plant [WHRB – 12 MW & AFBC – 8 MW] by **M/s. Maithan Steel & Power Limited** located at PO Bonra, PS Neturia, **Purulia District, West Bengal – Environment Clearance – regardin**

38.9.7 The unit configuration and capacity of existing and proposed unit are given as below:

Sl. No	Name	Existing configuration	Proposed Configuration	Final configuration	Final Production Capacity In TPA
1.	DRI Kilns	2x100 TPD	1x350 TPD	2x100 TPD 1x350 TPD	176,000 Sponge Iron
2.	Power (DRI WHRB)	Nil	12MW	12 MW	12 MW
3.	Power (AFBC)	Nil	8.0MW	8.0 MW	8.0 MW
4.	Ferro Alloys Plant	NIL	2x9 MVA	2x9 MVA	30,000 (Fe-Mn, Si-Mn, Fe-Si & Pig Iron combined)
5.	Iron Ore Sinter Plant	NIL	250 TPD	250 TPD	80,000
6.	Iron Washery	NIL	1x40 TPH	1x40 TPH	2,06,000

38.9.9 The fresh water requirement for the project is estimated as 1800 m^3/day which will be obtained from the Damodar River. The permission for drawl of water from Damodar River at confluence of Maithan and Panchet River has been obtained from DVC vide Lr. No. MRO/water Tariff/183 dated 26/03/2019.

30th June, 2021

39.1 Change in Configuration of the Existing 1.26 MTPA Integrated Steel Plant of **M/s. Tata Steel Long Products Limited** at Adityapur Industrial Area, Village Gamharia, **Saraikela-Kharsawan, Jharkhand** [Online Proposal No. IA/JH/IND/207765/2021; MoEF&CC File No. J-11011/611/2010-IA.II(I)] **– Environment Clearance under para 7(ii) of EIA, 2006 – regarding.**

39.1.1 M/s. Tata Steel Long Products Limited has made an online application vide proposal no. IA/JH/IND/207765/2021 dated 14/06/2021 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 Central level.

Details submitted by Project proponent

39.1.2 The 1.26 MTPA Integrated Steel Plant project was originally accorded environmental clearance vide letter no. J-11011/611/2010-IA-II (I) dated 25/10/2011 in the name M/s. Usha Martin Limited. The unit is located at located in Village Gamharia, Saraikela- Kharsawan, Jharkhand. In April 2019, M/s. Tata Steel Long Products Limited (TSLPL) had acquired 1.26 MTPA Integrated Steel Plant of M/s Usha Martin Limited at Adityapur Industrial Area, Village Jhurkuli, Tehsil Gamharia, District Saraikela Kharsawan in Jharkhand. In June 2019, EC for the 1.26 MTPA Integrated Steel Plant of M/s Usha Martin Limited was transferred in the name of M/s Tata Sponge Iron Limited which was later changed to Tata Steel Long Products Limited on 18/02/2020. Presently, the Consent to Operate for the existing plant was accorded by Jharkhand State Pollution Control Board on 03/05/2020 with a validity up to valid up to 31/03/2022 for Mini Blast Furnace, Steel Melting Shop & Rolling Mill. With

respect to the remaining facilities CTO renewal was accorded on 31/12/2020 with a validity up to 31/12/2025.

39.1.3 Implementation status of the existing Environmental Clearance.

S No	Facilities	Units	As per EC dated 25.10.2011	Implementation Status as on date	Production as per CTO
1.	Coke Ovens	2 batteries, 96 ovens	0.5 MTPA	0.5 MTPA	0.5 MTPA
2.	**Sinter Plant**	**80 m^2 Straight grate**	**0.6 MTPA**	**0.95 MTPA***	**0.6 MTPA**
3.	Iron Ore Washing Plant	-	2.7 MTPA	2.7 MTPA	2.7 MTPA
4.	Pellet Plant	168 m^2 Grate Kiln technology	1.2 MTPA	1.2 MTPA	1.2 MTPA
5.	Blast Furnace	280 m^3& 380 m^3	0.65 MTPA	0.65 MTPA	0.65 MTPA
6.	DRI Kilns	5 Kiln of 350 TPD each (OSIL & Lurgi technology)	0.625 MTPA	0.625 MTPA	5x350 TPD
7.	Steel Melt Shop (EAF)	40MT - 2 nos 70MT - 1 no	1.2 MTPA	1.2 MTPA	1.2 MTPA
8.	Continuous Casting	2x3 + 1x2 + 1x4 Strand Billet Caster	1.2 MTPA	1.2 MTPA	-
9.	Rolling Mill	WRM - 5.5 to 25.4 (DMH mill) Bloom Mill - 68-160 mm dia 63-200 mm RCS Bar Mill - 28 – 68 mm dia55 RCS	1.2 MTPA	1.2 MTPA	1.2 MTPA
10.	Power Plant	-	130 MW Coal Based - 94MW Waste heat - 36MW	130 MW Coal Based- 64 MW Waste heat- 66MW	130 MW
11.	Oxygen Plant	Lease, operate and maintenance contract basis by Praxair	220 TPD	220 TPD	-
12.	**Nitrogen Facility**	-	-	**39 TPD**	-
13.	**Producer Gas Plants**	**For Pellet Plant- 3 Nos**	-	**3x3000 Nm^3/hr**	-

Note * - Production of Sinter was above the sanctioned and consented capacity 0.60 MTPA since 2011-12.

39.1.4 Present proposal under para 7(ii)

After acquiring and transfer of EC from erstwhile Usha Martin Limited, TSLPL observed that there are some deviations in EC from unit capacities which were already installed & in operations and also facilities which were installed, but not appearing in the EC, viz. Nitrogen Plant and Producer Gas Plant. In addition, the water requirement and land requirement as mentioned in EC dated 25/10/2011 needs correction. In order to regularise the EC in line with the existing plant configuration and infrastructural facilities, TSLPL sought for fresh EC under para 7(ii) and amendment in EC. The overall production of the plant has not exceeded its capacity of 1.26 MTPA as per EC. Hence, the present proposal envisages following:

Sl. No.	Description as per EC dated 25/10/2011	Description as per Proposal
1	Sinter plant – 0.6 MTPA	Sinter plant – 0.95 MTPA (installed capacity)
2	-	Nitrogen Facility – 39 TPD (existing facility)
3	87 MW – [27 MW from waste gases from 3 DRI plants and 2 X 30 MW coal based power plants] (Total Power generation: 130 MW)	87 MW – [27 MW from waste gases from 3 DRI plants, 30 MW coal based power plants and 30 MW based on Waste Heat Recovery Boilers of Coke Oven] (existing facility) (Total Power generation: 130 MW)
4	The total plant area is 79.0 ha out of which 10.35 ha will be earmarked for the proposed expansion.	The total plant area is 151.16 ha
5	The major raw materials required for the proposed pellet plant will be..7,500 Nm^3/hr of Blast Furnace gas (BFG)	The major raw materials required for the proposed pellet plant will be 9,000 Nm^3/hr of Producer Gas (PG) through existing and in operation Producer gas plants
6	The water requirement for existing plant is 7,600 m^3/d and for proposed expansion is 3,440 m^3/d, which would be sourced from Subarnarekha Multipurpose Project	The water requirement for existing plant is 21900 m^3/d. For the proposed expansion, 4,230 m^3/d of makeup water is required, which would be partly sourced from Subarnarekha river (330 m^3/day) and balance shall be made up from recycled water from existing plant process.

39.1.5 The details of the raw material requirement for the existing 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.	Coking coal	740000	0	740000	Open Market	-	Road, Rail
2.	PG Feed coal	48000	0	48000	Open Market	-	Road, Rail
3.	EAF Electrode	3384	0	3384	Open Market	-	Road, Rail
4.	Coal (Power Generation)	611600	0	611600	Open Market	-	Rail
5.	PCI	176850	0	176850	Open Market	-	Road, Rail
6.	Scrap	180000	0	180000	Open Market	-	Road, Rail
7.	Fluxes for SMS	152156	0	152156	Open Market	-	Road, Rail
8.	Flux for DRI	50000	0	50000	Open Market	-	Rail
9.	Iron ore fines (Sinter grade)	807500	0	807500	Open Market	-	Road, Rail
10.	Fluxes for Sinter	197787	0	197787	Open Market	-	Road, Rail
11.	Coal for Sinter	30400	0	30400	Open Market	-	Road, Rail
12.	Coal for DRI	587500	0	587500	Open Market	-	Road, Rail
13.	Iron ore fines (Pellet)	1380000	0	1380000	Open Market	-	Road, Rail
14.	Iron ore	1342936	0	1342936	Open Market	-	Rail
15.	Fluxes for MBF	50471	0	50471	Open Market	-	Road, Rail

39.1.6 The water requirement for the project is estimated as 22,230 m^3/day which is being sourced from Subarnarekha River and around 7,200 m^3/day of waste water is also being recycled and used in Plant process. The permission for drawl of raw water is obtained from Water Resources department, Govt. of Jharkhand vide receipt no. 6f0ba868e66492ae47e0 dated 12/02/2021.

39.1.7 The power requirement for the project is estimated as 180MW, out of which 130MW will be generated in the Captive Power Plant and balance shall be obtained from Jharkhand State Electricity Board (JSEB).

39.1.8 Baseline Environmental Studies (From post project monitoring data)

Period	March 2020 to Feb 2021
AAQ parameters at 4 locations (CAAQMS)	**$PM_{2.5}$ = 111 µg/m^3** **PM_{10} = 302 µg/m^3** SO_2 = 30 µg/m^3 NO_x = 20 µg/m^3
AAQ modelling	All Plant units are already in operation. The contribution from existing units is reflected on AAQ.
Ground water quality at4 locations	pH: 6.7 to 6.8, Total Hardness: 34 to 52 mg/l, Chlorides: 15 to 28 mg/l, Fluoride: 0.2 to 0.4 mg/l. Heavy metals are within the limits.
Surface water quality at locations	Not monitored
Noise levels	48.9 to 71.2 dB for the day time and 41.5 to 66.1 dB for the Night time.
Traffic assessment study findings	Not carried out.
Flora and fauna	Elephant is present in 10 Km Study Area.

39.1.9 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	Non Hazardous	End cut	23901	Reused/Sold
2	Non Hazardous	Mill Scale	6343	Reused / Sold
3	Non Hazardous	Fes Dust	8320	Reused
4	Non Hazardous	Tundish skull	14858	Reused / Sold
5	Non Hazardous	Flue Dust	31466	Reused
6	Non Hazardous	GCP sludge		Reused
7	Non Hazardous	DE dust (MBF)		Reused
8	Non Hazardous	Pig Iron	634	Reused / Sold
9	Non Hazardous	Pooled Iron	2400	Sold
10	Non Hazardous	Laddle skull	3585	Sold
11	Non Hazardous	PCM runner skull		Sold
12	Non Hazardous	Char	70798	Reused / Sold
13	Non Hazardous	DE Dust (DRI)	31466	Sold

S No	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment / Disposal
14	Non Hazardous	DSC Dust	3933	Sold
15	Non Hazardous	Mixed waste	7200	Sold / Disposed
16	Non Hazardous	PG ash	3761	Disposed
17	Non Hazardous	Fly Ash	140056	Disposed
18	Non Hazardous	WHRB Ash	24449	Disposed
19	Non Hazardous	Bed Ash	31675	Reused / Disposed
20	Non Hazardous	EAF /LF Slag	165308	Reused / Sold / Disposed
21	Non Hazardous	MBF Slag	240000	Sold
22	Hazardous	Used/Waste oil	4	Sold
23	Hazardous	E waste	15	Sold
24	Hazardous	Glass wool	3	Sold
25	Hazardous	Coal Tar	1034	Sold

39.1.10 Public Consultation:
Public Hearing for the project was exempted as per section (iii), stage (3), Para (i) (b) of the EIA notification 2006 due to the project being located in Notified Adityapur Industrial Area.

39.1.11 The annual recurring cost towards the environmental protection measures is Rs 9.4 Crores.

39.1.12 **Existing Greenbelt cover is 31.98 ha (21%). Further Greenbelt will be developed in 18.05 ha which is about 12% of the total project area.** A 2m - 20m 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 30000 saplings will be planted and nurtured in 18.05 hectares in 2 years.

39.1.13 Summary of court case as furnished below:
Following cases related to environmental pollution, which were filed during the period of erstwhile M/s. Usha Martin Limited, are pending before Sub Divisional Magistrate (SDM) Saraikela related to the project-

1. Misc. case No.93 of 2012 - Environment protection forum & Others Vs. Usha Martin Limited

   Status of case: Directions have been given by SDM to the local pollution control board and the Police Station to verify the status of allegation in the complaint and submit the report. The verification / investigation report is awaited in the matter. The case is currently pending before SDM, Saraikela

2. Misc. case No.130 of 2015 - State Vs. M/s. Usha Martin Limited.
   Status of case: Directions have been given by District Transport Officer to verify the status of allegation in the complaint and submit the report. The verification / investigation report is awaited in the matter. The case is currently pending before SDM, Saraikela.

39.1.14 Name of the EIA consultant: M/s. MECON Limited [S. No. 49, List of ACOs with their

Certificate no. NABET/EIA/2023/RA 0195 and valid up to 09/02/2023; Rev. 11, June 09, 2021].

Certified Compliance report from Regional Office

39.1.15 The Status of compliance of earlier EC was obtained from Regional Office, Ranchi vide letter no. 103-314/11/EPE dated 04/12/2020 in the name of M/s. Tata Sponge Iron Limited. The Action taken report regarding the partially/non-complied condition was submitted to Regional officer MoEF&CC, Ranchi vide letter no. TSLP/EMD/EC-Comp/12/2020/01 dated 18/12/2020. The details of the observations made by RO in the report dated 04/12/2020 along with its present status as furnished by the PP is given as below:

Sl.	Non-Compliances details	Observation of RO (abridged)	Condition no.			Response by PP
			EC Date	Specific	General	
1.	Efforts shall be made to mitigate RSPM levels in the ambient air and a time bound action plan shall be submitted. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks shall be provided.	At the project site it was observed that raw material stock yards neither covered with tarpaulin nor wind barrier to prevent dust pollution in the project site, (photos 1 &2). The iron ore, iron ore fine, sinters and coal materials were being haphazardly dumped. The height of the iron ore and coal dumps were observed to be excessive exceeding the slope limit, (photo -3). Project proponent should have dumps in benching pattern. Most part of the road is yet to be cemented as result its create dust pollution and the local population residing inside the industry premises is suffering dust pollution due to these materials dumping area during the windy period, (photo -4).	25/10/ 2011	(i)	-	All raw material yards are equipped with fixed type water sprinkling system to suppress the fugitive dust and major raw materials are being conveyed to respective department after proper wetting. However most of the raw material yards live and in continuous operational. Yards are maintained in such a way to stock material for maximum 15 days and continuous evacuation & conveying of raw material is done on regular basis. As directed by the ministry, the slope and stacking of raw material heaps would be done in a safe and organized manner. All high elevated yards including Slag dump yards are very old and are fully weathered and stabilized. The material in the yard is a property of erstwhile owner company (M/S Usha Martin Limited) and they are already in the process of liquidating the heap on daily basis (@ of around 1000 MT/day). We expect the total heap to be cleared in next few months. Concrete Road construction under infrastructure project is taken on priority. In FY'20 around 560 meters of new RCC roads has been laid. In forthcoming years (FY'21 and FY'22) additional stretch of around 1057 meters and 3361 meters respectively has been targeted. Meanwhile we are taking utmost care for reduction of vehicular fugitive emission and all unpaved haul roads are being regularly watered through mobile and fixed water sprinklers to suppress road dust. All paved roads are cleaned through mechanical road sweepers to maintain the roads clean.
2.	In-plant control measures like bag filters, de-dusting and dust suppression system shall be provided to control fugitive emissions from all the vulnerable sources. Dust extraction and suppression	It was also observed having huge concentration of suspended fine dust particles arises all around the project site due to sudden wind blowing, which may affect the	25/10/ 2011	(v)	-	All dust prone areas including haul roads are regularly watered through mobile water tanker. Raw Material Handing Areas are provided with fixed type water sprinklers (rain gun). Apart from this, plan has been made to convert all haul roads into RCC road. Around

Sl.	Non-Compliances details	Observation of RO (abridged)	Condition no.			Response by PP
			EC Date	Specific	General	
	system shall be provided at all the transfer points, coal handling plant and coke sorting plant of coke oven plant. Bag filters shall be provided to hoods and dust collectors to coal and coke handling to control dust emissions. Water sprinkling system shall be provided to control secondary fugitive dust emissions generated during screening, loading, unloading, handling and storage of raw materials etc.	respiratory system and eyes of workers and also visitors. Project proponent should take proper precautionary measures on this condition.				560 meter of haul road has been converted into RCC road and action plan has made to convert all haul roads into RCC road in the future. To reduce fugitive emission in raw material circuits, existing systems are regularly strengthened. Images of 2 new projects installed recently at Sinter Plant and CPP for control of fugitive emission are attached for kind reference as annexure-1
3.	Total requirement of the water for the proposed expansion shall not exceed 3,440m^3/day. All the treated wastewater shall be recycled for dust suppression and green belt development. Domestic wastewater shall be treated in septic tank followed by soak pit and used for green belt development. Zero effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.	At present project proponent is being using river water for this project. A copy of water withdrawal permission along with water tankers log book signed by authorized signatory must be submitted to this IRO, Ranchi. Project proponent should have provided adequate measuring arrangement at the inlet point of water uptake and at the discharge point for the measurement of water utilized in different categories and monitoring daily water consumption in a time bound manner.	25/10/2011	(viii)	-	Copy of water withdrawal permission is attached as Annexure- 2. Water tanker log book is attached as Annexure-3. Water flow meter with totalizer has been installed at the water uptake point near Subarnarekha river. The photograph of water flow meter installed at water uptake point is attached as Annexure- 4 Flow meters are installed at all required locations and monitoring of water consumed under different categories is done on daily basis. Pictures of flow meters installed at different locations within the plant are attached as Annexure- 4.
4.	As proposed, green belt shall be developed in 33% of plant area within and around the project site to mitigate the impact of fugitive emissions as per the CPCB guidelines in consultation with local DFO.	Some tree plantation has been done in the project site, which is inadequate as per the stipulation. There is scope for development of green belt in most of the areas of the project which have been undertaken.	25/10/2011	(xi)	-	Tree plantation is an on-going activity and new saplings are planted each year. As a special drive under 'Go Green' project, 22488 new saplings were planted in the last few years. Continuous effort is being taken to increase the green belt. The plantation record with photos are attached as Annexure-5
5.	Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB within 3 months of issue of environment clearance letter.	A copy of risk & disaster management plan has not been received by MOEFCC Integrated Regional Office Ranchi as on date.	25/10/2011	(xiii)	-	The copy of risk and disaster management plan is attached as Annexure-6
6.	At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on locals need and item-wise details along with time	Project proponent should have furnished the details of Enterprise Social Commitment based on locals need and item-wise details along with time bound action plan.	25/10/2011	(xiv)	-	The Enterprise Social Commitment based on locals need and item wise details along with time bound action plan is attached as Annexure- 7

Sl.	Non-Compliances details	Observation of RO (abridged)	Condition no.			Response by PP
			EC Date	Specific	General	
	bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhubaneswar. Implementation of such program should be ensured accordingly in a time bound manner. The action plan shall include major items like school, vocational training etc.·					
7.	The project authorities shall strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994 and January, 2000. Authorization from the JPCB shall be obtained for collection, treatment, storage, and disposal of hazardous wastes.	A signed copy of disposal of hazardous wastes, solid waste management and disposal scheme ensuring storage and segregation of biodegradable and non-biodegradable wastes has not been submitted to RO, Ranchi.	25/10/2011	-	(v)	All generated hazardous wastes are being disposed to authorize disposal facility only. Scan copy of manifest is attached as Annexure-8 Solid waste generated within the plant is segregated and most of the waste are recycled back in process. Solid waste like mill scale, scarp, FES dust, GCP dust are used in sintering process. Blast furnace slag is sold to open market. (Used by major cement industry). Metal is recovered from slag of arc furnace and reused in furnace. Details showing disposal scheme is enclosed as Annexure-9
8.	A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the environmental management and monitoring functions.	Project proponent should submit the details of personnel along with their qualification associated with the environment management cell (separate lists for personnel exclusive and others). A signed copy of Corporate Environment responsibility has not yet submitted.	25/10/2011	-	(xi)	Details of personnel along with their qualification associated with the environment management cell are attached as Annexure-10. Corporate Environment Policy is attached as Annexure-10.
9.	As proposed, Rs. 50 Crores and Rs. 2.5 Crores shall be earmarked towards total capital cost and recurring cost/annum for environmental pollution control measures and judiciously used to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. A time bound implementation schedule shall be submitted to the Ministry and its Regional Office at Bhubaneswar to implement all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	The year wise and activity wise expenditure incurred for environmental protection measures has not been furnished to IRO, Ranchi as yet. Project proponent should have submitted the details of environmental audit report to this IRO, Ranchi.	25/10/2011	-	(xii)	The year wise and activity wise expenditure incurred for environmental protection measures is attached as Annexure-11 Environmental audit report (Form-V) attached as Annexure-12.

39.1.16 During the course of meeting, project proponent has requested EAC to consider the following points:

i. Usha Martin was taken over by Tata Sponge/Tata Steel Long Products Limited in 2019
ii. Once the new Project Proponent observed deviations, they came upfront for resolution and seeking fresh EC
iii. EC capacity is of 1.26 MTPA which has never been crossed and currently operating at 0.6 MTPA capacity.
iv. Closing any facility would lead to closure of the entire plant leading to unemployment.

Observations of the Committee

39.1.17 The Committee noted the following:

i. PP has increased the capacity of Sinter Plant from 0.6 MTPA to 0.95 MTPA since 2010-11, added 39 TPD nitrogen Plant and 3x3000 Nm^3/hr Producer Gas Plant without any EC or information to MoEF&CC. Thus, Project proponent has exceeded the Sinter Plant production beyond 0.6 MTPA since 2010-11 without obtaining requisite EC from MoEF&CC and consent from JSPCB.
ii. Total plant area as per EC dated 25/10/2011 was 79 ha as against the present area of 151.16 ha today. This was never intimated to MoEF&CC.
iii. The actual water consumption is 22230 KLD as against 11040 KLD of water consumption stated in the EC dated 25/10/2011.
iv. The 30 MW coal fired power plant has been converted to gas firing without any information to MoEFCC. Thus, CPP configuration has been changed without any amendment to EC.
v. As per the EC, BF gas was to be used as fuel in the Existing Pellet Plant. Till 2014, the pellet plant was running on BF gas presumably, thereafter, PP has switched over to Producer gas as fuel without any amendment to EC or information to MoEF&CC.
vi. Emissions of SO_2, NOx and PM from the plant shall increase due to use of additional 48000 TPA of coal for Producer Gas Plant and increase in sinter capacity from 0.6 to 0.95 MTPA. The additional Sulphur input and related emissions were not considered in EIA report prepared for EC of 2011.
vii. There would be increase in Noise due to installation of Nitrogen Plant.
viii. During past 10 years the plant has developed only 21% greenbelt as against the requirement of 33%.
ix. Fly ash utilization has not reached 100 % as required under Flyash Rules of 1999. The wet ash is being ponded.
x. Certified compliance report of RO dated 04/12/2020 indicates several non-compliances with respect to the prescribed conditions stated in the EC dated 25/10/2011.
xi. There are two cases bearing number # 93 of 2012 and #130 of 2015 are pending before the Saraikela District Court as on date pertaining to environment pollution.
xii. PM_{10} and $PM_{2.5}$ level in the ambient air are reported to be 302 µg/m^3 and 111 µg/m^3 which is exceeding the National Ambient Air Quality Standards, 2009.
xiii. Unit has never undergone public hearing process as per the procedure stated in the EIA notification, 2006.

Recommendations of the Committee

39.1.18 In view of the foregoing and after detailed deliberations, the committee recommended the following:

i. The instant proposal is a violation case under the provisions of EIA Notification, 2006 in view of the observations mentioned at para no. 39.1.17.
ii. The present proposal does not qualify to be recommended under para 7(ii) of the EIA notification, 2006.
iii. The EAC recommended to return the proposal in its present form.
iv. The project proponent is free to apply for seeking fresh Terms of Reference under the provisions of EIA, 2006.
v. The MoEF&CC may initiate appropriate legal action against the project proponent by invoking relevant provisions of the Environment (Protection) Act, 1986 in view of the observations listed at para 39.1.17 above.

39.2 Expansion of Iron and Steel Plant (2,60,000-12,60,000 MTPA) and installation of Captive Power Plant (87 MW) of **M/s. Tata Steel Long Products Limited** at Adityapur Industrial Area, Village & Tehsil Gamhoria, District Saraikela, Kharsawan, Jamshedpur, Jharkhand [Online Proposal No. IA/JH/IND/200437/2021; MoEF&CC File No. J-11011/611/2010-IA.II(I)] **– Amendment in Environment Clearance** – regarding.

39.2.1 M/s. Tata Steel Long Products Limited has made an online application vide proposal no. IA/JH/IND/200437/2021 dated 14/06/2021 along with Form 4 and sought for Amendment / Clarification in Environmental Clearance accorded by the Ministry vide letter no. J-11011/611/2010-IA-II (I) dated 25th Oct, 2011.

Details submitted by the project proponent

39.2.2 The existing project was accorded environmental clearance vide lr. no. F. No. J-11011/611/2010-IA-II (I) dated 25/10/2011 issued to M/s. Usha Martin Limited. EC was transfer to M/s. Tata Sponge Iron Limited dated 19/06/2019 and further Transfer to M/s. Tata Steel Long Products Limited dated 18/02/2020.

39.2.3 Reason for the amendment:

i. The total plant area of the existing Integrated Steel plant including the facilities such as SMS, Blast Furnace, Mills, Storage yards etc. is 151.16 ha. The same is inadvertently mentioned as 79.0 ha in the EC letters dated 11.10.2007 (J-11011/681/2007-IA II (I)) and EC dated 25.10.2011 (J-11011/611/2010-IA-II (I)) which is to be amended to the actual plant area of 151.16 ha.
ii. The total quantity of fresh water required for the existing plant is 22,230 m^3/day. However, in the EIA report for expansion from 0.26 MTPA to 1.2 MTPA, the same was inadvertently indicated as 11040 m^3/day which was also reflected in EC letter dated 25/10/2011. As such the mentioned quantity is very less as per standard industry practices. For an old establishment such as TSLPL Gamharia, fresh water requirement is 22,230m^3/day. For the same, permission for drawl of 5 MGD (22730 m^3/day) fresh water has been obtained from Water Resource Department, Govt. of Jharkhand.

39.2.4 Details of configuration of existing EC dated 25/10/2011 and EC amendment sought:

S No	Plant facility	Existing configuration	Proposed configuration	Final configuration after amendment	Remarks
1.	Pellet Plant	168 m^2 Grate Kiln technology = 1.2 MTPA		168 m^2 Grate Kiln technology = 1.2 MTPA	Separate application submitted for PG Plant installation
2.	Rolling Mill	WRM + Blooming Mill = 1.2 MTPA		WRM + Blooming Mill = 1.2 MTPA	No change
3.	Sinter Plant	80m^2 Straight grate = 0.6 MTPA		80m^2 Straight grate = 0.95 MTPA	Separate application submitted for increase in capacity.
4.	Iron Ore Washing Plant	2.7 MTPA		2.7 MTPA	No Change
5.	Coke Ovens	2 batteries, 96 ovens = 0.5 MTPA		2 batteries, 96 ovens = 0.5 MTPA	No Change
6.	Nitrogen Plant	--	39 TPD	39 TPD	Separate application submitted for Nitrogen Plant installation
7.	DRI Kilns	5 rotary Kiln of 350TPD each = 0.625 MTPA		5 rotary Kiln of 350TPD each = 0.625 MTPA	No Change
8.	Continuous Casting	2x3 + 1x2 + 1x4 Strand Billet Caster = 1.2 MTPA		2x3 + 1x2 + 1x4 Strand Billet Caster = 1.2 MTPA	No Change
9.	Blast Furnace	280 m^3 + 380 m^3 = 0.65 MTPA		280 m^3 + 380 m^3 = 0.65 MTPA	No Change
10.	Steel Melt Shop (EAF)	40MT - 2 nos 70MT - 1 no = 1.2 MTPA		40MT - 2 nos 70MT - 1 no = 1.2 MTPA	No Change
11.	Power Plant	25+30+30 MW (Coal) + 30 MW (WHR) +15 MW Mix =130 MW		25+30+30 MW (Coal) + 30 MW (WHR) +15 MW Mix =130 MW	Separate application submitted for change in configuration
12.	Oxygen Plant	220 TPD		220 TPD	No Change

39.2.5 Any other amendment required In approved EC dated 25/10/2011:

S No	Reference of Approved EC	Description as per Approved EC	Description as per Proposal.	Remarks
1.	Clause 6, Water requirement	Total requirement = 11,040 m^3/day	Total requirement = 22,230 m^3/day	mentioned in the EIA as 11040 m^3/day
2.	Clause 2, Total Plant Area	Total plant area 79.0 ha	Total plant area 151.16 ha	Wrongly mentioned in the EIA as 79.0 ha.

39.2.6 Summary of court case as furnished below:

Following cases related to environmental pollution, which were filed during the period of erstwhile Usha Martin Limited, are pending before Sub Divisional Magistrate (SDM) Saraikela related to the project-

1. Misc. case No.93 of 2012 - Environment protection forum & Others Vs. Usha Martin Limited

   Status of case: Directions have been given by SDM to the local pollution control board and the Police Station to verify the status of allegation in the complaint and submit the report. The verification / investigation report is awaited in the matter. The case is currently pending before SDM, Saraikela

2. Misc. case No.130 of 2015 - State Vs. Usha Martin Limited.

Status of case: Directions have been given by District Transport Officer to verify the status of allegation in the complaint and submit the report. The verification / investigation report is awaited in the matter. The case is currently pending before SDM, Saraikela.

39.2.7 Name of the EIA consultant: M/s. MECON Limited [S. No. 49, List of ACOs with their Certificate no. NABET/EIA/2023/RA 0195 and valid up to 09/02/2023; Rev. 11, June 09, 2021].

39.2.8 Instant EC amendment proposal is linked with item 39.1. In view of this, the observations and recommendations referred in para no. 39.1.18 & 39.1.19 may be referred in.

39.3 Proposed expansion in production from 30,000 TPA of MS Ingots to 1,20,000 TPA of MS Ingots/ Billets; from 48,000 TPA to 1,20,000 TPA of Twisted and ribbed bars by **M/s. Prime Gold International Limited** located at S.F. Nos. 284/2B, 289/2A2, 289/2A3, 290/1B, 289/2C, 283/3, 284/1B2, 289/2B3, 282/1B, 283/4, 290/1A, 285/1C, 284/1B1, 289/2B1, 289/2B2, 282/2A at Kalugondapalli Village Denkanikotta Taluk, Krishnagiri **District, Tamil Nadu** [Online Proposal No. IA/TN/IND/166064/2019; MoEF&CC File No. J-11011/78/2019-IA.II(I)] **– Environment Clearance –** regarding.

39.3.1 M/s. Prime Gold International Limited has made an online application vide proposal no. IA/TN/IND/166064/2019 dated 18/06/2021 along with copy of EIA/EMP report and Form – 1, 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 under Category "B" of the schedule of the EIA Notification, 2006 and attracts general condition due to existence of interstate boundary within 5km radial distance of the site, hence, the project has been appraised at the Central level as Category 'A'.

Details submitted by Project proponent

39.3.2 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord
12/03/2019	5th meeting of EAC held on 27-29th March, 2019	Terms of Reference	08/05/2019

39.3.3 The project of M/s. Prime Gold International Limited located at Kalugondapalli Village Denkanikotta Taluk, Krishnagiri District, Tamil Nadu is for proposed expansion in production from 30,000 TPA of MS Ingots to 1,20,000 TPA of MS Ingots/ Billets and from 48,000 TPA to 1,20,000 TPA of Twisted and ribbed bars.

39.3.4 Environmental Site Settings:

S No	Particulars	Details	Remarks
a	Total land	7.98 Hectare	Owned by Self
b	Land acquisition details as per MoEF & CC O.M. dated 7/10/2014	No land acquisition required as the land is owned by the company	
c	Existence of habitation & involvement of R&R, if any.	NIL	

S No	Particulars	Details	Remarks
d	Latitude and Longitude of the project site	12°38'52.13"N 77°44'56.04"E	
e	Elevation of the project site	Highest – 951 MSL; Lowest – 938 MSL.	
f	Involvement of Forest land if any.	Nil	
g	Water body exists within the project site as well as study area	**Project site:** Nil **Study area**: Nearest water body is Mathukur Lake (1.48 km)	
h	Existence of ESZ /ESA/national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. if any	Nil	

39.3.5 The existing project was operating on NOC obtaining from Tamil Nadu Pollution Control Board. Existing project of 30,000 TPA of MS Ingots and 48,000 TPA of Steel Bars and Rods was established in year of 2005 and does not comes under preview of EIA, Notification, 2006. Consent to Operate renewal is accord dated 22/05/2021 and valid up to 31/03/2023.

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

S No	Product	Existing Capacity (TPA)	Proposed Capacity (TPA)	Total After Expansion (TPA)
1	Twisted and Ribbed Bars	48,000	72,000	1,20,000
2	MS Ingots/Billets	30,000	90,000	1,20,000

S.No.	Equipment	Existing/New	Total After expansion
1	Induction Furnace	1 No. – 4.2 Tonnes	1 No. 4.2 T & 1 No.12.5 T
2	Reheating Furnace (Fuel is Furnace Oil)	1 No. – 6.67 Tonnes	1 No 16.67 T
3	Continuous Casting Machine	Nil	1 No. 16.67 T

39.3.7 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	Existing	Proposed	Total	Source	Mode of Transport
		Consumption				
For MS Ingots/ MS Billets						
1	MS Scraps	25800	70200	96000	Local	By Road
2	Sponge Iron	6300	27300	33600	Local/Import	By Road
3	Ferro Alloys	390	1170	1560	Local	By Road
Details of Raw Material for Rolling mill unit MS Ingots/Billets (TPA)						
4	MS Ingots/ Billets	30000	90000	120000	In-house	-
5	M.S. Billets/Ingots	-	9600	9600	Purchased	By Road

S. No.	Raw Material	Existing	Proposed	Total	Source	Mode of Transport
		Consumption				
Note: 9600 TPA M.S. Billets/M.S Billets will be procured from the local market after the proposed expansion						

39.3.8 The water requirement for the project is estimated as 160 m^3/day, out of which 25 m^3/day of fresh water requirement will be obtained from the local body and the remaining requirement of 135 m^3/day will be met from the recycled water. The permission for drawl of groundwater/ surface water is obtained from Local body Kalugondapalli 1st Grade Panchayat by N. Krishna President, Dated: 29.10.2014.

39.3.9 The power requirement for the project is estimated as 13000 KVA and will be obtained from the Tamil Nadu Generation and Distribution Corporation (TANGEDCO).

39.3.10 Baseline Environmental Studies:

Period	1st April, 2019 to 30th June, 2019
AAQ parameters at 8 locations	$PM_{2.5}$ = 21.40 to 48.65 µg/m^3 PM_{10} = 35.07 to 72.84 µg/m^3 SO_2 = 8.7 to 16.50 µg/m^3 NO_x = 9.13 to 36.10 µg/m^3
AAQ modelling	PM_{10} = 4.52 µg/m^3 $PM_{2.5}$ = 2.04 µg/m^3 SO_2 = 1.02 µg/m^3 NO_x = 2.89 µg/m^3
Ground water quality at 8 locations	pH: 6.9 to 7.6, Total Hardness: 612 to 710 mg/l, Chlorides: 188 to 264 mg/l, Fluoride: 0.2 to 1.2 mg/l. Heavy metals are within the limits.
Surface water quality at 8 locations	pH: 7.6 to 8.0, DO: 4.8 to 12.6 mg/l, BOD: 3.2 mg/l to 15.1, COD: 40.2 mg/l to 65.2 mg/l.
Noise levels	51.2 to 72.0 dBA for the day time and 40.9 To 62.1 dBA for the Night time.
Traffic assessment study findings	--
Flora and fauna Presence of schedule I fauna if any. If yes, status of site specific wildlife conservation plan	NA

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

Waste Quantity in TPA			Treatment/ disposal
Type of Waste	**Existing**	**Total after expansion**	
Solid Waste- Non-Hazardous			
Slag	1500	6000	will be handing over to cement bricks manufacturers
Waste Scrap	3300	5400	Disposed to Authorized recycler
Mill Scale	-	655	Disposed to Authorized recycler

STP Sludge		-	0.5	Used as manure
Domestic Solid waste	Biodegradable	7.392	10.35	Used as manure
	Non-Biodegradable	4.928	6.9	Disposed to Authorized recycler
Hazardous Waste Generation:				
Solar pan residue		0.015	0.030	Approved TSDF facility
Waste Oil (Lt/Annum)		20	40	To be sent to Authorized Re-processors / Recyclers
Used Lead Acid Batteries		2	4	To be returned to manufacturers / dealers on buy back basis

39.3.12 Public Consultation:

Details of advertisement	05/01/2020: Indian Express and Dhinamani newspapers
Date of public consultation	06/02/2020
Venue	Sri Raja Rajeswari Kalyana Mantapam, Mathagondapalli Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu.
Presiding Officer	1. Tmt. S. Shanthi – District Revenur Officer, Krishnagiri District, Krishnagiri 2. Thiru. S. Palanisamy – District Environmental Engineer, Tamil Nadu Pollution Control Board, Hosur
Major issues raised	i. Employment to local people. ii. Disposal of Solid waste and effluent in nearby water bodies iii. Air pollution and chimney height. iv. Plantation issue in the industry and nearby area. v. Road construction & public transportation nearby villages

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

S No	Minutes	Reply
1	Thiru. Shiva Shankar has stated that presently the agricultural activities are being decreased to 10 percent, no employment opportunity to the nearby public; i. All the companies are disposing their solid wastes generated from their industrial activities into the nearby Ponds, Lakes and Drains, etc., and also blocked the rain water path connected into the nearby water bodies. ii. Smoke arises from the Chimneys of all the companies during the morning 6.00 AM to 8.00 AM which is causing the health effects. iii. Also, all the companies are discharging the effluent into the nearby water bodies which is also causing health effects and no water in the nearby lakes and ponds due to blocking the water flows towards nearby lake/water bodies. iv. Whether the specified height of the chimney is available or not? v. The number of trees mentioned in the presentation is not available in the unit. vi. Reverse Osmosis system is not available in the unit, no	i. We will dispose the solid waste in a safe manner as mentioned in Chapter– 2 of EIA Report. ii. We will provide the effective Air pollution control measures such as Bag Filter, Wet Scrubber to control the smoke arise from the chimneys. iii. We will dispose the Sewage generated through Sewage Treatment Plant and effluent through Solar Evaporation Pan. iv. We will provide the Chimney as per the norms prescribed by the Board. v. The number of trees mentioned is the proposed one. We will plant the trees as proposed. vi. Reverse Osmosis is not needed in the proposed unit. Sewage treatment plant proposed is more

S No	Minutes	Reply
	proper road has been provided as mentioned in the presentation.	than enough to treat the sewage.
2	Thiru. P. Nagaraj, Kalugondaplli village has expressed his views that the agricultural activities are going down due to the lower rain fall. But, growth of industries helps the common public in getting multi sources of income for their livelihood like increase in employment, development of commercial activities, and people started earning money by supplying materials and giving services to the industries.	Positive comments and no specific comments to offer.
3	Thiru N. Krishna, Ex-Panchayat President, Kalugondapali Village, he expressed that there may be a benefit and cause due to the development of industries, but our village people are being benefited. If anyone find issues in the industries regarding pollution etc., let we approach the industry to support and resolve the issues. He said, in general the growth of industries are good to the society.	We ensure that we will support the nearby village people through our CSR activities.
4	Thiru. Ramesh, Kalugondapalli Village has welcomed the proposed expansion activity of M/s. Prime Gold International Ltd. Due to the industrial growth the public and Panchayat are getting good revenue and employments to the local public. He also added that there is no objection to expand the industrial activity and requested the officials of the respective government departments/ statutory body to follow and monitor the industries and help the public in solving the common issues.	We will comply with the conditions given by the Statutory bodies.
5	Thiru. Ravi, Ex-District Chairman, Thally Block has said that we are happy about the expansion activity of the company due to which improves our livelihood and to help for population growth which leads more houses, shops, commercial activity and good employment. He requested that all the industries should support and help in getting common facilities to the public such as local employment, water pumps, road facility, temple and also help to the school children.	Already we have given employment to local persons even though we will give preference to local persons, the companies is already involving themselves in supporting the school students, repairing roads, and other common facilities, etc. He added that the local public may approach the company towards any grievances and want of support regarding the betterment of common facilities.
6	Thiru. Venkatachalapathy, Belagondapalli Village has welcomed the expansion activity of the company and he requested to give employment to the local persons. Further, he stated that M/ s. Prime Gold International Ltd., and all other steel manufacturing industries located nearby the villages should take the necessary preventive measures regarding impact of environmental pollution and other social activities at par with the unit of M/ s. Indus TMT Industries Pvt. Ltd. He requested to consult with local public for doing any social activities, these industries engaging 90 percent of the employees from north Indian and hence requested to give opportunity in employment to the local public.	We will support the local people after consultation with them. We will give employment opportunities to the local people as much as possible.
7	Thiru. Srinivsan, Ex-President has also welcomed the expansion activity of the company and asked the company to support the common facility of the village people and plant more trees, take necessary preventive measures to control the pollution at par with M/s. Indus TMT Industries Pvt. Ltd.	We will support the local people With the common facilities through our CSR activities.

S No	Minutes	Reply
8	Smt. Sarala, Project Officer of Vidya Nikethan NGO said that they are serving the children in getting good education in the area of Karnataka and Tamil Nadu. She also expressed that they are running a school consist of 40 children as early learning centre for children education. The unit of M/s. Prime Gold International Ltd is extending their support in providing good nutrition food to the children on regular basis every day and they have invited them to help any sort of development activities of the poor village children. She welcomed the expansion project of the company on behalf of the Vidya Nikethan NGO.	We will also support in the future.
9	Thiru. B.V. Reddy, Sakthi Rural Environmental Supporter, NGO, Bellary has welcomed the management of Prime Gold International Ltd. And expressed that the unit of M/s. Prime Gold International Ltd is doing well, and functioning the unit for the last many years before and there is no issues from the unit to the nearby public and villages. The unit has continuously supported the society in the welfare of common facilities. He also submitted his recommendation letter to the TNPCB for the necessary Environmental Clearance to be issued from MoEFCC, New Delhi.	--
10	Thiru.Suresh, Kappakal Village has informed that they are finding problem in public road which was damaged, he requested all the companies in the surrounding area to help and lay the good road to their village.	We have already discussed with the concerned local body authority towards laying the public roads. We also assure that we are ready to support for laying roads up to our possible level in coordination with other industries.
11	Thiru.Prasanth, Upparapalli Village has made his suggestion and requested the DEE, TNPCB, Hosur to develop the more trees in the nearby villages, bank of the water bodies like lake, pond etc., apart from planting tree in the factory premises.	We will develop more trees in the nearby villages through our CSR funds.
12	Thiru. Harish, Uliveeranapalli Village has expressed his views that there are many industries located in and around his village, but the companies are not supporting their common facilities. Also, he added that there is no public transportation to the nearby Kappakal village and hence he requested to provide one electrical or battery operated vehicle with the help of other industries. He also requested the concerned department/ authority to monitor and take necessary action to control the air pollution from the industries in the area.	We will provide the common facilities in all possible ways. Also we will comply with the Air pollution Standards as prescribed by the Board.

39.3.13 The capital cost of the project is Rs. 35 Crores and the capital cost for environmental protection measures is proposed as Rs. 0.7 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 0.15 Cores. The employment generation from the expansion project is 30 Nos. The details of cost for environmental protection measures is as follows:

S. No.	Description of Item	Capital Cost in Lakhs	Recurring Cost in Lakhs
1.	Air Pollution Control measures	40.0	5.0
2.	Water Pollution Control measures	10.0	2.5

S. No.	Description of Item	Capital Cost in Lakhs	Recurring Cost in Lakhs
3.	Environmental & Safety Management and Environmental Monitoring	10.0	5.0
4.	Green Belt	10.0	2.5
	Total	**70.0**	**15.0**

39.3.14 Greenbelt will be developed in 2.68 ha which is about 33.58 % of the total project area. A 3m 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 4700 saplings will be planted and nurtured in 2.68 hectares in 2 years.

39.3.15 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.

39.3.16 Name of the EIA consultant: M/s. Pridhvi Envirotech (P) Ltd [S. No. 133, List of ACOs with their Certificate no. NABET/EIA/1922/RA0132 valid up to 03-06-2022 Rev. 11, June 09, 2021].

Certified compliance report from Regional Office

39.3.17 No report has been furnished by the proponent although EDS has been raised by the Ministry.

Observations of the Committee

39.3.18 The Committee observed the following:

i. 7.98 ha land is available for installation of the plant. 2.68 ha (33 %) of this land shall be allocated for GB development. Presently there is only 10 % green belt.
ii. PH was represented by a consultant called Pollucare Engineers while EIA is prepared by Pridhvi Consultants.
iii. Compliance to the existing CTO conditions from Regional Office of TNPCB has not been submitted as required under compliance to the generic ToR no. xi.
iv. Recent water withdrawal permission from Gram panchayat has not been submitted.
v. The annexures stated in the reply of EDS points of MoEF&CC are not available in the Annexures uploaded on PARIVESH.
vi. EIA Report:
    a. Cover page of EIA report is not as per O.M. of Aug, 2009.
    b. There are eleven chapters in the report. While chapter 1 mentions twelve and the table of content says eleven.
    c. Chapter wise contents are not as per the format given in Appendix III of EIA Notification 2006.
    d. There is no declaration by PP on 2nd Page of the report as per OM mentioned above.
    e. Signature of the team involved in EIA are scanned.
    f. EIA has been prepared by Pridhvi Consultant but PH was conducted by Pollucare.

g. Analysis report of water both Ground and Surface and that of soil presented in the executive summary is not complete.
h. Action plan to address the issues raised during public hearing as per MoEF&CC O.M. dated 30/09/2020 has not been furnished.
i. PH proceedings have been given in Annexure and are not available in EIA report under section 7.1.
j. The report mentions use of bag filters only to control PM emissions, and not wet scrubbers, yet the section 2.8.1.2 indicates the wet scrubber diagram.
k. Interpretation of base line data for physical parameters, environment baseline and socioeconomic environment has not been done.
l. Chapter 4 is a generic text book presentation without any quantification of impacts and mitigation measures. Data from Chapter 2 and 3 have not been used to quantify the impacts except the AAQ data used in modelling.
m. Section 7.6, supposed to be Social Impact Assessment is written in one page only.
n. Table 8.1 has not been drawn from PH proceedings or from SIA.
o. Chapter 9 as per EIA notification 2006 has not been included in the report.
p. Figure 9.4, Environment Cell is not for Environment Personnel it is for production line.
q. TOR point 9 pertaining to Corporate Environment Policy has not been complied.
r. The Chapter on "Summary and Conclusion" is not as per Appendix III of EIA Notification 2006. It is presented in half a page.

Recommendations of the Committee

39.3.19 In view of the foregoing and after detailed deliberations, the committee recommended the following:

i. Proposal recommended to be returned in its present form to address the shortcomings enumerated at para 39.3.18.
ii. Show Cause Notice (SCN) may be issued to the consultant has EIA report with the several technical deficiencies as enumerated above.

39.4 Proposed Expansion of Sponge Iron /Sponge Pellets (2 Nos. of Kiln), Billets/Ingots (2 Nos. of Furnace), TMT bars & Channel/Angle (Rolling & Section Mill), CPP (2 MW) and Waste Heat Recovery Boiler (4 MW) Manufacturing Unit in existing premises by **M/s. Nilkanth Concast Private Limited** located at Survey no. 221, Village Vadala, Taluka Mundra, **District Kutch, Gujarat** - [Online Proposal No. IA/GJ/IND/114302/2008, File No. J-11011/85/2008-IA.II(I)] **– Reconsideration for grant of Environment Clearance based on ADS reply** – regarding.

39.4.1 M/s. Nilkanth Concast Private Limited has made an online application vide proposal no. IA/GJ/IND/114302/2008 dated 12/09/2019 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.

39.4.2 The proposal was considered by EAC (Industry-I) in its 12th meeting held on 21-23rd October, 2019 and deferred for want of additional information.

39.4.3 PP has submitted ADS reply on 12/06/2021 and the proposal was listed for re-consideration by the EAC.

39.4.4 PP vide email dated 29/06/2021 expressed their inability to participate in the meeting due to medical reasons and requested to consider the same in the next hearing.

39.4.5 It was apprised to the EAC to consider the proposal in the absence of proponent and their EIA consultant based on the records made available by them as per the Ministry's O.M. dated 18/11/2020 pertaining to streamlining the process of grant of Environment Clearance. However, the EAC opined that proposal shall be considered in presence of proponent only as they have requested for deferment of the proposal.

39.4.6 EAC noted that they are in receipt of public representation vide email dated 29/06/2021 against the proposed expansion project. EAC was of the considered view to seek the comments of the proponent on said representation.

Recommendations of the Committee

39.4.7 In view of the foregoing and after detailed deliberations, the Committee recommended that Ministry may forward a copy of the public representation to proponent to provide their comments and clarifications along with their ADS reply. Accordingly, the proposal to be returned in present form.

39.5 Expansion of Steel Plant – New Induction Furnace with Rolling Mill (Hot Charging) (Structural Steel & Rolled products 3,00,000 TPA), Rolling Mill (Structural Steel & Rolled products - 1,20,000 TPA to 2,40,000 TPA) & Wire Drawing (60,000 TPA to 1,20,000 TPA) by **M/s. Hira Steels Limited** located at Rawabhata Industrial Area, Tehsil & **District: Raipur, Chhattisgarh** - [Online Proposal No. IA/CG/IND/213977/2021, File No. J-11011/210/2020-IAII(I)] **– Amendment in Environment Clearance** – regarding.

39.5.1 M/s. Hira Steels Limited has made an online application vide proposal no. IA/CG/IND/213977/2021 dated 11/06/2021 along with Form 4 and sought for amendment in Environment Clearance accorded by the Ministry vide letter no. J-11011/210/2020-IA-II (I) dated 01/12/2020.

Details submitted by the project proponent

39.5.2 The existing project was accorded environmental clearance vide lr. no. F. No. J-11011/210/2020-IA-II (I) on 01/12/2020 for Expansion of Steel Plant – New Induction Furnace with Rolling Mill (Hot Charging) (Structural Steel & Rolled products 3,00,000 TPA), Rolling Mill (Structural Steel & Rolled products – 1,20,000 TPA to 2,40,000 TPA) & Wire Drawing (60,000 TPA to 1,20,000 TPA) located at Rawabhata Industrial Area, Tehsil & District: Raipur, Chhattisgarh.

39.5.3 The EC was accorded for the following products:

S.No.	Unit	Existing (TPA)	Proposed Expansion (TPA)	After Expansion (TPA)
1.	Rolling Mill	1,20,000	1,20,000	2,40,000
2.	Wire Drawing	60,000	60,000	1,20,000
3.	Induction Furnaces with Rolling Mill (through Hot Charging)	--	3,00,000 (6 x 15 T & 1 x 10 T)	3,00,000

39.5.4 The project proponent has sought for amendment in specific condition no. ii of EC dated 01/12/2020:

Reference of Approved EC	Description as per Approved EC	Proposed EC amendment	Remarks
Specific Condition - ii	90% hot charging shall be practiced in the plant and balance 10% shall be through RH Furnace which shall operate on LDO. Gasifier shall be phased out latest by December, 2022	90% hot charging shall be practiced in the plant and balance 10% shall be through RH Furnace which shall operate on LDO. Existing gasifier shall continue to operate.	Requested to retain the existing gasifier and permission to continue the operation PGP beyond Dec, 2022 as there is no generation of Phenolic water and Tar from existing hot Gasifier and will have additional operational cost impact of Rs. 1500/-(Rupees One Thousand Five hundred Only) per ton of finished product.

39.5.5 Reason for the amendment:
There is no generation of Phenolic Water and Tar from existing hot gasifier and replacement of existing hot gasifier by LDO Burner will have additional operational cost impact of Rs.1500/- (Rupees One Thousand Five Hundred Only) per ton of finished product. Therefore, replacement of Gasifier by LDO Burner is economically not feasible.

39.5.6 Project proponent has not proposed configuration and capacity change in existing EC dated 01/12/2020.

39.5.7 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.

Observations of the Committee

39.5.8 The Committee noted the following:

i. EC was granted on 1.12.2020.

ii. The Specific Condition (ii) that requires amendment reads as - "90% hot charging shall be practiced in the plant and balance 10% shall be through Reheating Furnace which shall operate on LDO. Gasifier plant shall be phased out latest by Dec 2022."

iii. Reason for amendment – "There is no generation of phenolic water and tar from existing hot gasifier and replacement of existing hot gasifier by LDO will have additional burden of Rs 1500 per ton of finished product. Therefore, the replacement of gasifier by LDO is economically not feasible."

iv. During meeting of the EAC held on 15th – 17th March, 2021 the following was submitted- "there is no generation of phenolic waste water and tar from Producer Gas Plant. 90% hot charging and remaining 10% shall be practiced in proposed Rolling Mill with Hot Charging. An undertaking was submitted to the Ministry on 29/10/2020 is for the proposed project".

v. The Committee, after detailed deliberations, recommended that the PP should submit documentary evidence inter-alia any documentary evidence for technological up-gradation of existing PGP leading to non-generation of phenolic waste water and tar. Therefore, for want of sufficient documentary evidence, the proposal was returned in its present form to address the aforesaid issue.

vi. PP has now proposed that the existing mill (120000TPA) along with expanded capacity of 120000 TPA (total 240000TPA) shall operate on gasifier and new facility of 300000 TPA shall be hot charged 90 % and balance 10 % shall be rolled through existing reheating furnace operating on gasifier. It is also being proposed that phenolic water generated from water seal shall be injected into ash zone of gasifier for burning and cooling of ash.

vii. Producer Gas Plant with capacity of 2x5000 Nm^3/hr that is said to be sufficient to roll 240000 TPA of existing and proposed Rolling. Additional rolling of 30000 TPA shall also be rolled using gas from existing Producer Gas Plant.

Recommendations of the Committee

39.5.9 In view of the foregoing and after deliberations, the Committee recommended for amendment in the specific condition ii of the EC dated 1/12/2020 as mentioned at para 39.5.4 subject to stipulation following additional specific conditions:

i. Producer gas generated in existing Producer Gas Plant shall be used in existing mill modified to roll 240000 TPA finished product and rolling of 30000TPA from new facility of 300000 TPA envisaged under the expansion project.

ii. No additional capacity shall be added to the existing producer gas plant.

iii. Phenolic water generated from seals and condensate tanks shall be injected in ash zone of gasifier for burning and cooling of ash. Records shall be kept for such injection for verification by Regional Office of the MoEF&CC.

iv. Online monitoring for Total Organic Carbon (TOC) shall be installed on the reheating furnace chimney.

39.6 Proposed 2.4MTPA Pellet Plant over an area of 57.005 acre by **M/s. Narbheram Power and Steel Private Limited** at Village- Tanto, Tehsil- Barbil, **District– Keonjhar, Odisha** [Online Proposal No. IA/OR/IND/202021/2021; file no: IA-J-11011/241/2021-IA-II(I)] – **Prescribing for Terms of Reference**– regarding.

39.6.1 M/s. Narbheram Power and Steel Private Limited has made an application online vide proposal no. IA/OR/IND/202021/2021, dated 12/06/2021 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

39.6.2 The project of M/s. Narbheram Power and Steel Private Limited located at Village- Tanto, Tehsil- Barbil, District– Keonjhar, Odisha is for Proposed 2.4MTPA Pellet Plant over an area of 57.005 acre.

39.6.3 Environmental site settings:

S No	Particulars	Details	Remarks
i.	Total land	Total land: 23.069 ha. (Forest land: 19.148 ha + Non-Forest land: 3.921 ha.)	Land use will change from existing to Industrial Use
ii.	Existence of habitation &involvement of R&R, if any.	There is no existence of habitants identified within the plant boundary.	-
iii.	Latitude and Longitude of the project site	Latitude: 22°02'27.04200" to 22°02'57.25608" Longitude: 85°21'47.77812" to 85°22'16.14540"	-
iv.	Elevation of the project site	492-514 meters above MSL	-
v.	Involvement of Forest land if any	Forest Land: 47.315 Acre	FC application submitted (Proposal No. FP/OR/IND/125237/2021)
vi.	Water body exists within the project site as well as study area	**Project Area:** Nil **Study Area:** Kundra Nala- 4.40 km (SE) Karo River- 6.00 km (NNW) Sona Nadi- 6.97km (E) Bolani reservoir- 7.35 km (NNE) Jhikra Waterfall- 7.60 km (NW) Baitarani River – 9.95 km (SE)	Water Requirement for the project will be met from Baitarani River.
vii.	Existence of ESZ/ESA/ national park/ wildlife sanctuary/ biosphere reserve/tiger reserve/ elephant reserve etc. if any within the study area	No, none within a 10 km radius.	-

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

S No	Facility	Configuration	Production (TPA)

i.	Iron Ore Pellet Plant	2x 1.2 MTPA	2.4 MTPA (2400000 TPA)
ii.	Producer Gas Plant	2 x 25,000 Nm^3/hr	50,000 Nm^3/hr

39.6.5 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 Required (TPA)	Source	Distance from Site (Kms)	Mode of Transport
i.	Iron ore fines	26,92,800	Roida II Mines and other Iron Ore mines in the Joda/ Barbil area	02	Road
ii.	Bentonite	19,800	Local traders of Bhuj, Gujarat product	1900	Rail
iii.	Limestone/ Dolomite	47,520	Local Market/ Sundargarh, Odisha	185	Road
iv.	Coke / Coal Fines	47,520	Open Market	280	Road/ Rail
v.	Fuel for Gasifier – Coal	1,25,400	Open Market	280	Road/ Rail

39.6.6 The water requirement for the project is estimated as 7,368 m^3/day, out of which 4800 m^3/day of fresh water requirement will be obtained from the Baitarani River and the remaining requirement of 2,568m^3/day will be met from the recycling of the process water. The permission for drawl of surface water is obtained from recommended by IPICOL (Industrial Promotion and Investment Corporation of Odisha Limited) to DWR (Department of Water Resources) vide Lr. No CGM/SLNA/NPSL/327/20/1462 dated 11.06.2021.

39.6.7 The power requirement for the project is estimated as 18MW. Power required for the plant operation shall be sourced from the State grid- OPTCL.

39.6.8 The capital cost is Rs. 350 Crores. The capital cost for Environmental protection measures is proposed to be around Rs. 30 Crores. The employment generation from the proposed project is 258.

39.6.9 Proposed Terms of Reference (**Baseline data collection period: March, 2021 to May, 2021**):

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
A. Air				
a. Meteorological parameters	Temperature, Humidity, Rainfall, Wind Speed, Wind Direction, Cloud Cover	1	Continuous recording of hourly micro-meteorological parameters for	

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
b. AAQ parameters	Particulate Matter as PM_{10}, Particulate Matter as $PM_{2.5}$, Sulphur dioxide as SO_2, Oxide of Nitrogen as NO_x, Carbon Monoxide as CO,	8	Twice in a Week on 24 hrs basis for three Months	
B. Noise	Leq. Day Time Leq. Night Time	8	Continuous monitoring for 24 hours at each location, Once during the study period	
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), Fluoride as F (max), Sulphates (SO_4) (max), Phenolic Compounds as C_6H_5OH (max), Iron as Fe (max), Nitrate as NO_3 (max), Anionic Detergents (max), Total Coli form	8	Once during the study period	(Middle Month of Base line Monitoring)
Ground water quality parameters	Color, Odour, Taste, Turbidity, pH, Total Hardness (as $CaCO_3$), 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 SO_4, Nitrate as NO_3, Fluoride as F, Phenolic Compounds as C_6H_5OH, Mercury as Hg, Cadmium as Cd, Selenium as Se, Arsenic as	8	Once during the study period	(Middle Month of Base line Monitoring)

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
	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			
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,	6	Once during the study period	
E. Biological a. Aquatic b. Terrestrial	Biological study including study of flora and fauna within 10km radius area has been carried out.	10 km radius study area	Primary survey during study period. Secondary data collection from Forest department	
F. Socio-economic parameters	Need based survey and socio-economic survey (selected samples) have been carried out.	10 km radius study area	Primary survey during study period. Secondary data collection from Govt. offices, Village Panchayats, Census of India records	

39.6.10 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.

39.6.11 Name of the EIA Consultant: M/s. Visiontek Consultancy Services Private Limited. [S. No. 95, Certificate No. QCI/NABET/ENV/ACO/21/1771, Valid Up to 09/06/2021; Rev. 11, June 09, 2021].

Observations of the Committee

39.6.12 The EAC noted the following:

i. Out of 57.005 acres of land, 47.315 acres is forest land. Application for FC is under process. PP has not optimized the land requirement to reduce of the extent of forest land involvement.
ii. There is a village (Jhadagaon) within 400 meters and also a temple of Shiva 1.6 Km away.
iii. There are three villages adjacent to Easter boundary of the proposed plant.
iv. Tanta Air Strip is only 200 meters in eastern side of the project site.
v. Revisit of layout of the plant is required
   a. Optimize the area requirement with specific emphasis on reducing Forest land.
   b. Layout plan be designed to keep the polluting units at maximum distance away from villages.
   c. Transfer of iron ore from mines to plant by closed conveyor.

Recommendations of the Committee

39.6.13 In view of the foregoing and after detailed deliberations, the Committee recommended to return the proposal in its present from to address the shortcomings enumerated at para 39.6.12.

39.7 Proposed 1.0 Million Ton Per Annum (Finished Steel) along with 153MW (108MW WHRB based & 45MW Coal and Dolochar mix based) Captive Power Plant **by M/s. Rashmi Forgings India Private Limited** at Mouja–Chakganesh (J.L. No. 225), Malipur (J.L. No. 226) & Baradiha (J.L. No. 227), P.S. –Kharagpur(Local), **Dist. - Paschim Medinipur, West Bengal** setting **[**Online Proposal No. IA/WB/IND/214920/2021; file no: IA-J-11011/242/2021-IA-II(I)] – **Prescribing for Terms of Reference**– regarding.

39.7.1 M/s. Rashmi Forgings India Private Limited has made an application online vide proposal no. IA/WB/IND/211972/2021 dated 26/05/2021 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.

39.7.2 The proposal was listed for consideration before the EAC in its meeting held on 31/05/2021 to 01/06/2021. However, the project proponent requested the EAC and Ministry to withdraw their proposal as they would like to modify their proposal. In this regard, project proponent also sent an email to the Ministry as well as EAC members on 24/05/2021. In view of this, the Committee recommended for accepting the withdrawal of the instant proposal.

39.7.3 The proponent again submitted a revised application vide proposal no. IA/WB/IND/214920/2021 on 11/06/2021. The proposal was listed for consideration before the EAC. The proponent again requested for withdrawal of the proposal vide email dated 28/06/2021.

39.7.4 The Committee noted that instant proposal has been withdrawn for making corrections in PFR. It was noted that PP has made the proposal and withdrawn the same twice so far. EAC

was of the opinion that PP does not have a clarity of what they want and by applying for TOR again and again they are wasting Committee's time. After deliberations, the Committee recommended that warning letter may be issued to the proponent to submit the proposals only after fulfilling the technical requirements envisaged by the proponent.

39.8 Review and prescribing of EC conditions for metallurgical sector: The Committee decided to consider the matter in the next EAC meeting.

1st July, 2021

39.9 Setting up of a Greenfield Integrated Steel Plant of 0.7 MTPA with Captive Power Plant of 70 MW by **M/s. Spintech Tubes Private Limited (STPL)** at Village Dhasal, Mamudpur & Bahadurpur, Tehsil Jamuria, **District Paschim Bardhaman, West Bengal** [Online Proposal No. IA/WB/IND/78705/2018; File No. J-11011/295/2018- IA.II (I)] – **Reconsideration for grant of Environment Clearance based on ADS reply** – regarding.

39.9.1 M/s. Spintech Tubes Private Limited has made an online application vide proposal no. IA/WB/IND/78705/2018 dated 29/04/2021 along with copy of EIA 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 Central Level.

Details submitted by Project proponent

39.9.2 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord
25/09/2018	➢ 36th meeting of EAC held on 9th October, 2018 and ➢ 5th meeting of REAC held on 27th March, 2019	Terms of Reference	01/05/2019

39.9.3 The project of M/s. Spintech Tubes Private Limited located at Village Dhasal, Bahadurpur & Mamudpurvillages, Jamuria tehsil, Paschim Bardhaman district, West Bengal is for Setting up of a Greenfield Integrated Steel Plant of 0.7 MTPA with Captive Power Plant of 70 MW.

39.9.4 Environmental Site Settings

S No	Particulars	Details	Remarks
i)	Total land	97.16 ha [Private :83.01 ha Govt. :14.15 ha] [Agriculture :19.53 ha Others : 77.63 ha Grazing land : Nil]	Land use – The proposed site primarily consists of Poor crop land 56.72 ha (58.4%) followed by medium agricultural land 18.61 ha (19.2%), non-agricultural land 16.59 ha (17.1%), water bodies 4.32 ha (4.4%) &

<table>
<tr><th>S No</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td></td><td>agricultural land 0.92 ha (0.9%).</td></tr>
<tr><td>ii)</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>54.57 ha already purchased and balance land would be in possession by September 2021. Consent from the land owners have been obtained for the private land.</td><td>-</td></tr>
<tr><td>iii)</td><td>Existence of habitation & involvement of R&R, if any</td><td>No habitation exist at the site and hence R&R is not applicable</td><td>-</td></tr>
<tr><td>iv)</td><td>Latitude and Longitude of the project site</td><td><table><tr><th>SN</th><th>Latitude</th><th>Longitude</th></tr><tr><td>A</td><td>23°41’15” N</td><td>87°07’48” E</td></tr><tr><td>B</td><td>23°41’16” N</td><td>87°08’02” E</td></tr><tr><td>C</td><td>23°41’12” N</td><td>87°08’22” E</td></tr><tr><td>D</td><td>23°40’47” N</td><td>87°08’14” E</td></tr><tr><td>E</td><td>23°40’46” N</td><td>87°07’56” E</td></tr><tr><td>F</td><td>23°40’38” N</td><td>87°07’59” E</td></tr><tr><td>G</td><td>23°40’42” N</td><td>87°07’44” E</td></tr></table></td><td>-</td></tr>
<tr><td>v)</td><td>Elevation of the project site</td><td>106 m above MSL</td><td>-</td></tr>
<tr><td>vi)</td><td>Involvement of Forest land if any</td><td>Nil, no forest land involved</td><td>-</td></tr>
<tr><td>vii)</td><td>Water body exists within the project site as well as study area</td><td>Project site:
2 numbers of ponds and one seasonal nalla.

Study area:
Ajay river - 7 km in South</td><td>The seasonal rainfed nallah passing through the plant site would not been disturbed or diverted. The existing two ponds within the project area would be desilted to enhance its storage capacity and has been considered as rain water harvesting ponds.</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>Nil</td><td>-</td></tr>
</table>

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

SN.	Unit Name	Configuration		Production, MTPA
1	Iron Ore Grinding Unit	1.2 MTPA		1.186
2	Pellet plant	1 x 1.13 MTPA		1.13
3	Sinter plant	1 x 60 m^2		0.62
4	DRI plant (coal based)	3 x 500 TPD		0.495
5	Blast furnace	1 x 350 m^3		0.367
6	Submerged Arc Furnace	1 x 12 MVA (FeCr), 1 x 12 MVA (FeMn, SiMn)		0.0466
7	Chrome Ore Briquetting Plant	1 x 10 TPH		0.041
8	Steelmaking Shop (SMS)	4x 25 t IF 1 x 50 t LF	1 x 50 t EAF 1 x 50 t LF	0.729
9	Caster Shop	Billet Caster - 1 x 3 strand Billet/Bloom Caster - 1 x 3 strand		0.712
10	Mill	Bar mill - 1x0.25 MTPA Wire Rod Mill - 1x0.25 MTPA Wire drawing facility with 50% hot dip galvanizing - 0.03 MTPA Structural Mill with hot dip galvanizing - 1x 0.2 MTPA		0.699
11	Captive Power Plant	BF gas based - 10 MW DR kiln off gas based WHRB - 37.5 MW Char & Coal based AFBC/CFBC boiler – 22.5 MW		70 MW
12	Air Separation Plant	1 x 180 TPD		180 TPD

39.9.6 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)	Source	Distance from site (kms)	Mode of Transportation
1	Coke	219,920	Merchant cokery in India/abroad	300	Rail-Road, Sea-Rail-Road
2	Anthracite	18,384	International market - Australia	300	Sea-Rail-Road
3	Non coking Coal	400,950	Domestic market – WB, Jharkhand region	70	Rail-Road
4	Iron ore fines	1,597,228	Procured from the Joda-Barbil, Koira, Sundargarh mines and Jharkhand region	400	Rail-Road
5	PCI coal	36,750	International market - Australia	300	Sea-Rail-Road
6	Limestone	73,287	Purchased from mines in Sundergarh district, Odisha or quarries in Jukehi-Katni-Niwar area in Central India	700	Rail-Road
7	Calcined lime	48,132	Rajasthan, MP	1400	Rail-Road
8	Dolomite	82,698	Purchased from mines in Sundergarh district, Odisha & Baradwar regions in Chattisgarh	600	Rail-Road
9	Chrome Ore Fines	37,106	Procured from the mines in Sukinda regions, Odisha	350	Rail-Road

10	Chrome Ore lump	7,236	Procured from the mines in Sukinda regions, Odisha	350	Rail-Road
11	Manganese Ore	56,968	Procured from the mines of Manganese Ore India Limited in MP & Odisha	900	Rail-Road
12	Steam coal	143,416	Domestic (WB, Odisha, Jharkhand region)	70	Rail-Road
13	Bentonite	11,724	Domestic (Rajasthan)	1400	Rail-Road
14	Quartzite	21,395	Procured from West Bengal, Jharkhand, Odisha & Bihar	180	Rail-Road

39.9.7 The water requirement for the project is estimated as 8,256 m^3/day, out of which 3,480 m^3/day and 3,480 m^3/day of fresh water requirement will be obtained from Ajay river and Asansol Municipal Corporation respectively and the remaining requirement of 1,296 m^3/day will be met from the recycled effluent of the proposed project. The permission for drawl of groundwater/surface water are obtained from Asansol Municipal Corporation vide Lr. No. 1623–LA dated 26.07.2018 and Office of Geologist, SWID & Member Secretary vide Permit No. P221306400003000001TSE & P221306400003000002TSE dated 10.03.2021.

39.9.8 The power requirement for the project is estimated as 141 MW, out of which 64 MW will be obtained from the Captive Power Plant and rest 77 MW will be sourced from Grid (India Power Corporation Limited).

39.9.9 Baseline Environmental Studies:

Period	March 2019 - June 2019
AAQ parameters at 8 locations	$PM_{2.5}$ = 52.0 to 56.2 µg/m^3 PM_{10} = 86.1 to 93.9µg/m^3 SO_2 = 7.9 to 18.4µg/m^3 NO_x = 28.5 to 45.4µg/m^3 CO = <0.1 to 0.6mg/m^3
AAQ modeling (Incremental GLC)	PM_{10} = 0.1 – 7.4 µg/m^3 SO_2 = 0.1 – 14.0 µg/m^3 NO_x = 0.1 – 14.8µg/m^3
Ground water quality at 8 locations	pH: 6 to 7.6, Total Hardness: 162.7 to 493.3 mg/l, Chlorides: 34.5 to 148.4 mg/l, Fluoride: <0.1 mg/l. Heavy metals are within the limits.
Surface water quality at 8 locations	pH: 6.9 to 7.8, DO: 5.1 to 5.8 mg/l, BOD: 6.0 to 20.0 mg/l, COD:23.3 to 59.0 mg/l
Noise levels	53.5 to 71.3 Leq dB (A) for the day time and 39.1 to 64.5 Leq dB (A) for the Night time
Traffic assessment study findings	• Design capacity of Two Lane Roads: 15,000 PCU/day • Present traffic load at Ranisayer More i.e. confluence point of Dr. B. C. Roy Avenue and NH-2: 4,740 PCU/day. • Additional traffic load due to the project: 1,258 PCU/day. • Total traffic load in future due to project: 5,998 PCU/day

	(which is still within the carrying capacity of two lane roads of 15,000 PCU/day)
Flora and fauna	There are no Schedule-1 species in the study area.

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

SNo	Type of waste	Source	Quantity generated (TPA)	Mode of Treatment / Disposal
1	Char	DRI	89,100	Used to generate power in AFBC/CFBC boiler along with purchased steam coal
2	BF Slag	Blast Furnace	1,47,000	Granulation in Slag granulation plant and sell to cement manufacturers for production of Slag cement
3	Steelmaking Slag	SMS	1,59,318	Use in construction purposes mainly for filling of low-lying areas & road sub grade preparation, Brick manufacturing
4	BF Flue Dusts	Blast Furnace	5,513	Reuse in Agglomeration
5	Mill Scales	Mills	8,339	Reuse in agglomeration
6	Ferro alloy & SiMn and FeCr Slag	Ferro alloy	39,769	Used for filing of low-lying area after recovery of metallics, road construction
7	Caster scale	Caster	3,645	Reuse in agglomeration
8	Caster scrap	Caster	13,140	Recycle in induction furnace
9	Fly Ash	CPP	95,788	Sell to agencies for manufacture of pozzolona cement, bricks, etc
10	Bottom Ash	CPP	23,948	Would be stored in ash pond and used for road making/sale for brick manufacturing

39.9.11 Public Consultation:

Details of advertisement given	3rd October, 2020
Date of public consultation	4th November, 2020
Venue	Jamuria Town Hall, Dist. - Paschim Bardhaman, West Bengal
Presiding Officer	Dr. Abhijit Shevale, IAS, Additional District Magistrate (General), Paschim Bardhaman
Major issues raised	i. Control measures for air pollution ii. Development of local roads iii. Development of schools iv. Local employment v. Community hall vi. Water pipeline vii. Development of hospitals

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

Sl. No.	Issues	Response of PP	Year – 1 2021-22	Year – 2 2022-23	Year – 3 2023-24
1.	Control measures of air pollution	ESP and Bag Filter will be installed to control the air pollution level within the norms. In addition, dry fog system and water sprinkler will be installed. Budget – Rs. 90 crores	Installed with process unit equipment	Installed with process unit equipment	Installed with process unit equipment
2.	Development of local roads	Village road will be repaired and repairing work of existing road of Hizalgoda and Dhasna will be taken up in consultation with the District Administration. Budget – Rs. 1.5 crore	Rs. 75 lakhs for 2 km village road of Hizalgoda and 3 km for Dhasna	Rs. 75 lakhs for 2 km village road of Hizalgoda and 3 km for Dhasna	-
3.	Development of schools	As suggested by ADM, STPL will contribute to the plan prepared by local administration for Hizalgoda, Dhasna & Bahadurpur villages Budget – Rs. 1.35 crore	@Rs. 15 lakhs for each village = Rs. 45 lakhs subject to approval of plan	@Rs. 15 lakhs for each village = Rs. 45 lakhs subject to approval of plan	@Rs. 15 lakhs for each village = Rs. 45 lakhs subject to approval of plan
4.	Good survival rate of trees	PP will take care of survival rate of the planted trees. Budget – Rs. 1.5 crore	Rs. 50 lakhs	Rs. 50 lakhs	Rs. 50 lakhs
5.	Local employment	Local youth will be preferred as per their knowledge and skill. In addition, vocational training will be given for the employment to local. Budget – Rs. 3.0 crore	@Rs. 40 lakhs for each village for 3 villages (Hizalgoda, Dhasal & Bahadurpur) = Rs. 1.2 crore	@Rs. 40 lakhs for each village for 3 villages (Hizalgoda, Dhasal & Bahadurpur) = Rs. 1.2 crore	@Rs. 20 lakhs for each village for 3 villages (Hizalgoda, Dhasal & Bahadurpur) = Rs. 0.6 crore
6.	Community hall	Requirement of community hall at Dhasal village will be taken up with the District Administration. Budget – Rs. 0.25 crore	Rs. 25 lakhs Fund will be provided through DM/ADM	-	-
7.	Safety due to vehicle movement	Trained driver will be selected	-	-	-
8.	Concern on ground water depletion	No ground water will be used for the proposed project. However, RWH will be constructed and recharge ground water	Included in EMP cost	-	-
9.	Proper utilization of waste water	Waste water will be treated in the ETP and the treated water will be recycled into the	Included in EMP cost	-	-

Sl. No.	Issues	Response of PP	Year – 1 2021-22	Year – 2 2022-23	Year – 3 2023-24
		plant.			
10.	Water pipeline	Drinking water will be supplied through tankers for which a plan will be drawn in consultation with District Administration. Budget – Rs. 1.2 crore	@Rs. 20 lakh/village for 2 villages (Bahadurpur & Bijaynagar) = Rs. 40 lakhs	@Rs. 20 lakh/village for 2 villages (Bahadurpur & Bijaynagar) = Rs. 40 lakhs	@Rs. 20 lakh/village for 2 villages (Bahadurpur & Bijaynagar) = Rs. 40 lakhs
11.	Development of hospitals	Health camp will be taken up in the villages at free of cost and requirement for development of hospital will be assessed by the District Administration and the same will be communicated by the District Administration. Budget – Rs. 1.2 crore	Rs. 40 lakhs for Bahadurpur village	Rs. 40 lakhs for Bahadurpur village	Rs. 40 lakhs for Bahadurpur village
12.	Noise pollution	No impact of noise due to plant activity still greenbelt will be developed along the boundary	Already covered in 4		
Total, lakhs			**Rs. 395**	**Rs. 370**	**Rs. 235**

Needs Assessment

Physical Activity	Year – 1 2021-22	Year – 2 2022-23	Year – 3 2023-24
Tubewell (110 nos.)	10 nos in Bahadurpur (Rs. 5 lakhs)	15 nos in Bahadurpur (Rs. 7.5 lakhs)	5 nos in Bahadurpur (Rs. 2.5 lakhs)
	10 nos in Chakdola (Rs. 5 lakhs)	10 nos in Chakdola (Rs. 5 lakhs)	10 nos in Chakdola (Rs. 5 lakhs)
	20 nos in Bijaynagar (Rs. 10 lakhs)	15 nos in Bijaynagar (Rs. 7.5 lakhs)	15 nos in Bijaynagar (Rs. 7.5 lakhs)
	5 nos in Bijipur (Rs. 2.5 lakhs)	10 nos in Bijipur (Rs. 5 lakhs)	5 nos in Bijipur (Rs. 2.5 lakhs)
	5 nos in Nimsa (Rs. 2.5 lakhs)	10 nos in Nimsa (Rs. 5 lakhs)	5 nos in Nimsa (Rs. 2.5 lakhs)
Installation of tubewell with RO in 5 schools	2 schools in Shaldanga and 1 in Chinchuria (Rs. 60 lakhs)	1 school in Shaldanga and 1 in Chinchuria (Rs. 40 lakhs)	-
Installation of toilet block with sanitary water facilities in Bahadurpur 8 nos, Dhasal 7 nos and Bhuri – 5 nos	Bahadurpur and Dhasal villages – 2 nos in each village (Rs. 40 lakhs)	Bahadurpur, Bhuri and Dhasal villages – 2 nos in each village (Rs. 60 lakhs)	Bahadurpur – 4 nos, Dhasal and Bhuri villages - 3 nos (Rs. 100 lakhs)
Solar lighting facilities	in Bijaynagar temple (Rs. 15 lakhs)	-	-
Providing books and shelves to the library	in Topsi village (Rs. 15 lakhs)	-	-

Physical Activity	Year – 1 2021-22	Year – 2 2022-23	Year – 3 2023-24
Providing collection bins	to Topsi, Shaldanga & Bhuri villages (Rs. 5 lakhs)	-	-
Installation of Solar street light in Dhasna,Bahadurpur, and Shaldanga – 35 nos in each villages	20 nos in each villages (Rs. 30 lakhs)	10 nos in each villages (Rs. 15 lakhs) + Maintenance charge (Rs. 2.5 lakhs)	5 nos in each villages (Rs. 7.5 lakhs) + Maintenance charge (Rs. 4.0 lakhs)
Total	Rs. 190 lakhs	Rs. 147.50 lakhs	Rs. 131.50 lakhs

39.9.12 The capital cost of the project is Rs. 3,200 crores and the capital cost for environmental protection measures including cost to address the public hearing issues and needs assessment is proposed as Rs. 239.69 crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 6 crores. The employment generation from the proposed project is 6850(Direct-1350, Indirect-5500). The detail of cost for environmental protection measures is as follows:

S No	Description of Item	(Rs. In crores)	
		Capital Cost	Recurring Cost
1.	Water Conservation and Wastewater Treatment	80.00	1.80
2.	Air Pollution Control Measure	90.00	2.03
3.	Energy Conservation	9.00	0.25
4.	Solid Waste management	22.00	0.30
5.	Rainwater Harvesting	8.30	0.10
6.	Greenbelt Development	1.00	0.02
7.	On-line Monitoring & Environmental Laboratory	14.70	1.50
8.	Addressal of Public Consultation concerns	14.69	0.00
Total		**239.69**	**6.00**

39.9.13 Greenbelt will be developed in 32.06 ha which is 33 % of the total project area. A 15-100 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEFCC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 80,300 saplings will be planted and nurtured in 32.06 hectares in 5 years.

39.9.14 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.

39.9.15 Name of the EIA consultant: M/s. M. N. Dastur & Co. (P) Ltd. [S. No. 168, List of ACOs with their Certificate no. NABET/EIA/1821/RA0131, valid up to 09/09/2021; Rev. 11, June 09, 2021.

39.9.16 The proposal was considered by the EAC (Industry 1) in its 36th meeting held on 18-19th May, 2021. The observations and recommendations of EAC is given as below:

Observations of the Committee held on 18-19th May, 2021

39.9.17 The Committee noted the following:

i. Coal Bed Methane or Producer gas shall be used as fuel in pellet plant. Producer Gas Plant details are not available in the EIA report.
ii. Dry Blast Furnace gas cleaning has been proposed. Top Recovery Turbine (TRT) and BF Stove waste heat recovery are not proposed.
iii. Action plan with the physical targets to address the issues raised during public hearing has not been submitted as per MoEF&CC O.M. dated 30/09/2020.
iv. Post project PM10 and NOx concentrations in study area shall be more than 100/80 ug/m3 respectively at several stations. Control measures to reduce the same have not been elaborated.
v. Raw material and final product will be transported by Road up to railway siding located at about 2.0 km from the project site and further it will be transported through railway. The carrying capacity of the railway siding facility has not been furnished in the EIA report.

Recommendations of the Committee held on 18-19th May, 2021

39.9.18 In view of the foregoing and after deliberations, the Committee deferred the consideration of the proposal and sought for the following additional information:

i. Scheme for usage of Coal Bed Methane (CBM) instead of Producer Gas as a fuel shall be furnished.
ii. Action plan for Hot Charging of billets up to 85-90 % shall be furnished. Balance rolling shall be done using Reheating Furnace operating on Light Diesel Oil (LDO).
iii. Action plan for Steel Melting Shop (SMS) slag crushing and processing to generate aggregate for construction and fine sand for use in cement and brick making shall be furnished.
iv. Revised action plan with physical targets to address the issues raised during public hearing as per MoEF&CC O.M. dated 30/09/2020 shall be submitted.
v. Scheme to achieve PM emissions < 30 mg/Nm^3, SO_2 and NO_x emissions less than 100 mg/Nm^3 respectively from CPP shall be furnished.
vi. Post project PM_{10} and NO_x concentrations in study area are predicted more than 100/80 µg/m^3 respectively at several stations. Control measures to reduce the same shall be submitted.
vii. Action plan for transportation of materials through railway siding shall be explored and submitted.
viii. PP shall submit confirmation on the following points:
    - PP shall install a state-of-the-art Waste Recycling Plant (WRP) to process various types of slags and wastes generated in the plant to recover and recycle metallics, fluxes, aggregates and boulders.
    - No ground water shall be abstracted.
    - Natural drainage system of the plant area shall not be disturbed.
    - FeCr slag shall be subjected to TCLP tests and only when Chromium level is within limit, it shall be used for construction otherwise it shall be sent to TSDF.
ix. Scheme for, control of Dioxins/Furan emissions from sinter plants, and mercury emissions from power plants shall be submitted.
x. PP shall provide details of specific water and power consumption post operation and energy conservation measures to be adopted in the steel plant.

39.9.19 The PP was submitted the ADS reply on 21/06/2021 raised during 36th meeting held on 18-19th May, 2021. Point wise reply of ADS submitted by PP are as given below:

S No	Additional detail sought	Reply of Project proponent
1.	Scheme for usage of Coal Bed Methane (CBM) instead of Producer Gas as a fuel shall be furnished.	STPL is committed to protect the environment as per their Environmental Policy. In the Section 2.6.2 of EIA report (April 2021) on page 2-13, it is mentioned that CBM/Producer Gas will be used as fuel. Producer gas is an alternate source of the fuel if there is a disruption in the supply of CBM. We confirmed that only during the non-availability of CBM, Producer gas will be used as fuel.
2.	Action plan for Hot Charging of billets up to 85-90 % shall be furnished. Balance rolling shall be done using Reheating Furnace operating on Light Diesel Oil (LDO).	The hot charging of billet will be performed for wire rod mill, bar mill and structural mill to a maximum extent of production. However, the production through structural mill may require temperature correction for which induction heating will be required
3.	Action plan for Steel Melting Shop (SMS) slag crushing and processing to generate aggregate for construction and fine sand for use in cement and brick making shall be furnished.	The EAF, IF & LF slags will be transported to slag storage area located towards south of plant (see Layout legend 29) where the slag will be stored and processed. The slag will be crushed, balled, screened and the ferrous material will be magnetically separated for recycle in the plant. The non-metallic part thus received will be sold to pavement block maker and cement manufacturer
4.	Revised action plan with physical targets to address the issues raised during public hearing as per MoEF&CC O.M. dated 30/09/2020 shall be submitted.	Revised action plan addressed to public hearing issues and need based assessment have been submitted.
5.	Scheme to achieve PM emissions < 30 mg/Nm^3 , SO_2 and NOx emissions less than 100 mg/Nm^3 respectively from CPP shall be furnished	The total power generation will be 70 MW out of which 10 MW from BF gas based, 37.5 MW from WHRB of DR kiln and 22.5 MW from char and coal based CFBC/AFBC boiler. The fuels for the power generation are BF gas which is a clean gas and char/purchased coal. The flue gas generated in the process will be taken through cyclone separator where the coarse dust will get separated and then it will be passed through 4 fields ESP to achieve the design target of < 30 mg/Nm^3 for PM. The hydrated lime will be injected to tail gas to reduce the SO_2 level to below 100 mg/Nm^3. Ultra-low NOx burners and staged combustion with controlled excess air to reduce the NOx level to below 100 mg/Nm^3 as per S.O. 3305 (E) dated 7th December, 2015.
6.	Post project PM_{10} and NO_x concentrations in study area are predicted more than 100/80 µg/m^3 respectively at several stations. Control measures to reduce the same shall be submitted.	**Control measures for PM_{10}:** i. Pneumatic or covered truck transportation would be employed for the collected dusts from the dust catchers of various units. ii. Plant roads would be black topped & kept dust free by using industrial vacuum cleaners and water sprinkling at regular intervals.

S No	Additional detail sought	Reply of Project proponent
		iii. Provision of wind barrier and water sprinkling system around stockpiles to reduce wind-borne fugitive dust emissions. iv. All vehicles shall have Pollution Control Certificate with regular maintenance check and shall conform to latest Emission Standards v. Development of 33% greenbelt coverage within the project area vi. The existing peripheral road of the proposed project site would be maintain properly and industrial vacuum cleaning with water sprinkling would be carried out twice in a day to reduce the vehicular dust emission. vii. Initiative would be taken for roadside plantation to reduce the dust level. viii. Deployment of truck mounted industrial vacuum cleaner. The vacuum cleaning of the peripheral roads will be done thrice in a day. ix. Truck mounted water sprinkler. After vacuum cleaning of the roads, water will be sprinkled on the clean road to restrict further emission of fugitive dust. x. Initiative will be taken up for road side plantation with tall leafy trees xi. The peripheral roads will be repaired and maintained on a regular basis in collaboration with the District Administration. **Control measure for NOx** a) Maintaining the optimum air fuel ratio b) Combustion will be controlled through PLC based control system c) Use of ultra-low NOx burner with staged combustion in the furnace
7.	Action plan for transportation of materials through railway siding shall be explored and submitted.	Gagan Ferro Tech Limited (parent company of STPL) is in the vicinity of the proposed plant site. It is served by a railway siding at Topsia for handling iron ore and another railway siding at Asansol for handling coke & coal. The same railway sidings are envisaged to cater to the requirement of the proposed plant. Total 2.8 MTPA of raw material would be transported by road (NH-60) to the plant. Out of which 0.75 MTPA and 1.9 MTPA of coke & coal would be received at Asansol siding and Topsia siding respectively. The balance would be transported by road from the local market. Considering dumpers of 20 T capacity, it is estimated that 400 nos. dumpers would be required per day i.e. 20 dumpers/hour. The total PCU in the study area is 4740/day and the projected traffic due to the proposed activity could be 1258 PCU/day. Therefore, the total traffic in the area

S No	Additional detail sought	Reply of Project proponent
		will be 5998 PCU/day. As per IRC:64:1990 recommended design service volumes for Two Lane Roads is 15,000 PCU/day. Hence the existing roads are sufficient to handle the additional traffic of the proposed project.
8.	PP shall submit confirmation on the following points:	
	• PP shall install a state-of-the-art Waste Recycling Plant (WRP) to process various types of slags and wastes generated in the plant to recover and recycle metallics, fluxes, aggregates and boulders.	STPL confirmed that a state-of-the-art Waste Recycling Plant (WRP) to process various types of slags and wastes generated in the plant to recover and recycle metallics, fluxes, aggregates and boulders would be installed.
	• No ground water shall be abstracted	STPL confirmed that i) river bed water of Ajay river and ii) Asansol Municipal Corporation will be the source of water in the proposed project.
	• Natural drainage system of the plant area shall not be disturbed.	STPL confirmed that the Natural drainage system of the plant area shall not be disturbed.
	• FeCr slag shall be subjected to TCLP tests and only when Chromium level is within limit, it shall be used for construction otherwise it shall be sent to TSDF.	STPL confirm the same.
9.	Scheme for, control of Dioxins/Furan emissions from sinter plants, and mercury emissions from power plants shall be submitted.	Dioxins/Furan are formed in the temperature region of 250 °C to 450 °C below the combustion zone in the bed. After that it was carried downward with the gas and condensed near to the bottom of the sinter bed. It also formed in the last wind boxes when the hot off-gases cooled. The quantity of Dioxins/Furan formation depends on presence of carbon and chlorine bearing material in the sinter bed. **Measures to reduce dioxins and furan emissions:** a) Stable and consistent operation of sinter strand. b) Continuous monitoring of parameters like state of dampers, suction, opacity of the gases, speed of the sinter strand to ensure the optimal running of the sinter plant. c) The oil content in the sinter feed for preparation of base mix will be controlled through regular measurement of oil content in the base mix and it will be maintained at <0.02%. Further addition of urea in the base mix will reduce formation of dioxins and furan up to 50%. **Measures to reduce mercury emissions:** Mercury emissions would only occur in the coal-based power plant. Oxidised mercury shall be removed in the

S No	Additional detail sought	Reply of Project proponent
		wet flue gas desulphurization system and particulate bound mercury will be removed in ESP. Moreover, the input coal to the power plant will be regularly monitored and the stack emission from coal-based power plant shall be monitored for mercury concentration in the flue gas to ensure it is maintained within CPCB norms.
10.	PP shall provide details of specific water and power consumption post operation and energy conservation measures to be adopted in the steel plant.	Specific water consumption = 3.39 m^3/ton of steel Specific power consumption = 1215.7 kWh/ton of steel **Energy Conservation during Construction Phase:** i. Efficient work scheduling and methods that minimise equipment idle time and double handling of material ii. Throttling down and switching off construction equipment when not in use iii. Switching off truck engines while they are waiting to access the site and while they are waiting to be loaded and unloaded iv. Switching off site office equipment and lights and using optimum lighting intensity for security and safety purposes v. Careful design of temporary roads to reduce transportation distances vi. Regular maintenance of equipment to ensure optimum operations and fuel efficiency **Energy Conservation during Operation Phase:** i. Design of buildings and terminal layout would aim to achieve the following energy efficiencies: a) Employing renewable energy sources such as day lighting and passive solar heating; b) Designing roads on the site to reduce transportation distances. ii. Waste Heat Recovery boiler with DRI (37.5 MW) will be installed to capture the sensible heat from waste heat. iii. Blast furnace gas will be recovered through BF Stove Gas Recovery System and consumed in Sinter, Pellet plant etc iv. Direct charging of hot billet from SMS in rolling mill. v. Sinter Cooler waste heat recovery will be installed to recover the heat. vi. Use of energy efficient electric motors complying IEE3 Standards. vii. Maximum utilization of renewable energy resources. Installation of energy efficient lightings. Use of energy saving light fittings. viii. Installation of LED/CFL lighting

39.9.20 Based on ADS reply made by PP, the Proposal was reconsidered by the EAC (Industry 1) in its 39th meeting held on 30th June, to 1st July, 2021. The observations and recommendations of EAC is given as below:

Observations of the Committee

39.9.21 The Committee observed following points have not been satisfactorily addressed.

i. Scheme for dioxin and Furan controls.
ii. Action plan to address the public hearing issues such as drinking water supply to villages and provision of dispensary to nearby villages etc has not been covered.
iii. No details are made available on wet FGD System proposed for control of mercury emissions from power plant.
iv. Project proponent as well as the consultant was unable to explain the site details with respect to location of village(s) on eastern side of the plant and the plant boundary in that direction.

Recommendations of the Committee

39.9.22 In view of the foregoing and after deliberations, the Committee deferred the consideration of the proposal and sought for following additional information:

i. Scheme for dioxin and Furan controls.
ii. Revised action plan to address all the public hearing issues inter-alia drinking water supply to villages and provision of dispensary to nearby villages etc.
iii. Details on wet FGD System proposed for control of mercury emissions from power plant.
iv. Site details with respect to location of village(s) on eastern side of the plant and the plant boundary in that direction. Features of 1 km area around the project site shall also be submitted.

39.10 Green field project for implementation of production facilities for MS Ingot/Billet (164160 TPA); Steel Rerolled products from Hot Charging Rolling Mills 160800 TPA; MS Wire drawing unit 157500 TPA; Ferro Alloys (silico manganese) 82000 TPA and/or Pig Iron 164000 TPA by **M/s. N.R. Steel and Ferro Private Limited** located at Plot No. 251, 252, 253 & 254, OP Jindal Industrial Park, Punjipathra, Village Tumidih, Tahsil - Gharghoda, **District - Raigarh, Chhattisgarh** [Online Proposal No. IA/CG/IND/180780/2020; File No. J-11011/200/2020-IA.II(I)] - **Environment Clearance**– regarding.

39.10.1 M/s. N.R. Steel and Ferro Private Limited have made an online application vide proposal no. IA/CG/IND/180780/2020 dated 21/06/2021 along with copy of EIA 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 Central Level.

Details submitted by Project proponent

39.10.2 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord
09/09/2020	Standard ToR Approved dated 19/09/2020	Standard ToR	19/09/2020

Date of application	Consideration	Details	Date of accord
31/10/2020	25th meeting EAC (Industry – I) held on 25/11/2020	Amendment in TOR increase the capacity of Ferro Alloys furnaces from 2x9 MVA to 4x 9 MVA	16/12/2020

39.10.3 The project of M/s. N.R. Steel and Ferro Private Limited is located at Plot No. 251, 252, 253 & 254, OP Jindal Industrial Park, Punjipathra, Village Tumidih, Tahsil - Gharghoda, District - Raigarh, Chhattisgarh is for Green field project for implementation of production facilities for MS Ingot/Billet (164160 TPA); Steel Rerolled products from Hot Charging Rolling Mills 160800 TPA; MS Wire drawing unit 157500 TPA; Ferro Alloys 82000 TPA and/or Pig Iron 164000 TPA.

39.10.4 Environmental Site Settings:

S No	Particulars	Details	Remarks
i.	Total land	8 ha [Private Industrial land on lease in Industrial park]	Firm Letter of Intent is already obtained for Land on lease from OP Jindal Industrial park.
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Firm Letter of Intent for allotment of Land on lease is already obtained from OP Jindal Industrial park. Chhattisgarh State Industrial Development Corporation (CSIDC), a Government of Chhattisgarh undertaking (registered under the Companies Act, 1956), provided land to M/s. Jindal Steel & Power Ltd. for development of industrial estate on lease for 99 years commencing from 05/06/2004.	
iii.	Existence of Habitation & involvement of R&R, if any.	No R & R is involved in the project.	
iv.	Latitude and Longitude of the project site	**Sr.** / **Latitude** / **Longitude** (a) / $22^0$3’29.38 N / $83^0$19’52.51 E (b) / $22^0$3’28.03 N / $83^0$19’45.59 E (c) / $22^0$3’40.84 N / $83^0$19’43.25 E (d) / $22^0$3’41.83 N / $83^0$19’50.16 E	
v.	Elevation of the Project site	Project site located at min. 294 m, max. 301 m (above MSL)	

S No	Particulars	Details	Remarks
vi.	Involvement of Forest land if any.	No	
vii.	Water body exists within the project site as well as study area	**Project site:** • None **Study area:** • Kelo River – 7.7, E • Kosam Nala – 2.4, NW • Pajhar Nadi – 8.0 ENE • Khalmura Nala – 8.0,N • Jam Nala – 3.3, SE • Bhendra Nala – 9.7, NNE • Dewanmunda Nala – Adjacent, W • Ranai Nala – 5.5, NEW • Korapali Nala – 2.2, SW • Chui Nala – 8.0, NE • Barade Nala – 5.5, WSW • Gardharasi Nala – 7.2, NENE • Bodojuri Nala – 2.1, SW • Ratrot Nala – 7.2, SE • Kesh Nala – 6.9, WNW • Banjari Nala – 3.8, E • Kurket Nadi – 6.4, WNW • Gerwani Nala – 4.1, S E • Karanara Nala – 8.4, SE	
viii.	Existence of ESZ/ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant Reserve etc .if any within the study area	None	

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

Sl.	Process plant	Proposed capacity of plant	Proposed product name	Annual capacity (in TPA)	Remarks
1.	Induction Furnace and CCM to produce M.S. Ingot/ Billet along with CCM and 15 Ton LRF	15 MT x 4 Nos. Induction Furnace 15 Ton LRF x 1 No.	Ms Ingot/ Billets	164160	No fossil fuel is required
2.	Hot charging rolling mill	Approx. 450 TPD	Rerolled product (wire rod, TMT bar, structure steel etc)	160800	Through fuel free process

Sl.	Process plant	Proposed capacity of plant	Proposed product name	Annual capacity (in TPA)	Remarks
3.	Cold wire drawing unit	Approx. 450 TPD	M.S. wire	157500	Through fuel free process
4.	Submerged arc furnace	9 MVA x 4Nos.	Ferro alloys (Silico Manganese only)	82000	Metallurgy Coke/Carbon is required for reduction. no coal is required in process
		or			
		9 MVA x 4Nos.	Pig iron	164000	-do_.

39.10.6 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)	Source	Distance from site (Kms)	Mode of Transportation
Induction Furnace, CCM					
1.	Sponge Iron	140652.00	Local sponge iron plants in Raigarh	Within 50 kms	By Road through covered truck
2.	Pig Iron / CI Scrap	26721.00	JSPL/BSP/RSP and other steel plants or Self production	Within 50 kms	By Road through covered truck
3.	Melting Scrap	25600.00	Local industries and traders	Within 50 kms	By Road through covered truck
4.	Ferro Alloys	1728.00	Self-production as well as from Local Units	Within 250 kms	By Road through covered truck
5.	Aluminum	173.00	BALCO or from local srcap processing units	Within 150 kms	By Road through covered truck
6.	Ramming Mass	432.00	local refractory processing units	Within 300kms	By Road through covered truck
7.	Steel Sheet Former	44.00	Local suppliers and BSP or RSP	Within 300kms	-
8.	Furnace Oil for Laddle Preheating	503.00	Oil Companies like IOCL; HP; BPCL	Within 100 kms	By Road through Tanker
9.	Calcined Lime for Refining of Liquid Steel	7033.00	Local Lime Kilns	Within 100 kms	By Road through covered truck
10.	Flurospar and other additives for de-phosphorization	1407.00	Local suppliers	Within 100 kms	By Road through covered truck
11.	Electrode for Arc Furnace	282.00	Graphite India and other suppliers	Within 100 kms	By Road through covered truck
Ferro Alloys Plant through SAF					
12.	Mn Ore	168571.00	From OMC or MOIL	Within 500 kms	By Road through covered truck
13.	High Mn Slag	32109.00	Captive	-	Internally Available

S.No.	Raw Material	Quantity (TPA)	Source	Distance from site (Kms)	Mode of Transportation
14.	Quartz	6422.00	Local mines	Within 100 kms	By Road through covered truck
15.	Coke/Coal/Charcoal	49200.00	Local suppliers	Within 50 kms	By Road through covered truck
16.	Dolomite	2409.00	Local mines	Within 50 kms	By Road through covered truck
17.	Electrode Paste	2409.00	Units located in Raipur; Korba and other states too	Within 500 kms	By Road through covered truck
18.	M.S. Sheet Item.	803.00	Local suppliers and BSP or RSP	Within 300 kms	By Road through covered truck
19.	Lancing Pipe and Cannaster Sheet	1205.00	Units located in Raipur; and Durg	Within 100 kms	By Road through covered truck
20.	Oxygen Gas	241.00		Within 100 kms	By Road
Pig Iron Plant through SAF					
21.	Iron Ore & Mill Scale	246000.00	Iron Ore from OMC mines. But mill scale will be locally available from rolling mills	Within 300 kms	By Road through covered truck
22.	Coke/Coal/Charcoal	98400.00	Local suppliers	Within 50 kms	By Road through covered truck
23.	Dolomite/Lime/Limestone	16400.00	Local Mines	Within 50 kms	By Road through covered truck
24.	Electrode Paste	2460.00	Units located in Raipur; Korba and other states too	Within 500 kms	By Road through covered truck
25.	M.S. Item.	1148.00	Local suppliers and BSP or RSP	Within 300 kms	By Road through covered truck
26.	Lancing Pipe	492.00	Units located in Raipur; and Durg	Within 300 kms	By Road through covered truck

39.10.7 The water requirement for the project is estimated as 560 m^3/day, out of which 18m^3 /day will be used for domestic purposes. Water will be sourced from Ground water and collected rain water. (NOC obtained from CGWA for 453 m^3/day abstraction of groundwater. The permission for balance 107 KLD requirement will also be obtained from CGWA). The permission for drawl of groundwater is obtained from CGWA vide NOC no. CGWA/NOC/IND/ORIG/2020/9722 dated 05/12/2020. The total yearly water requirement will be 560 KLD * 360 days = 201600 KLA. The management decided to implement 10,000 KL Rain water collection Tank which will be enough to cater water requirement of 17 day, and in rainy day of 75 days water requirement will be met through it. Therefore, it is considered that about 85 days (48720 KLA) water requirement will be met through rain water and rain water collection, and balance 273 days water (152880 KLA) will be sourced from Ground Water. Zero discharge will be maintained.

39.10.8 The power requirement for the project is estimated as 50MW, which will be drawn from JSPL power supply network. To meet out the emergency backup on standby DG set (1500 kVA x 2 Nos.) shall be always kept in ready alert in order to have a higher safety level.

39.10.9 Baseline Environmental Studies:

Period	15th March to 15th June 2019
AAQ parameters at 8 locations	$PM_{2.5}$ =15.3 to 29.8 µg/m^3 PM_{10} =42.4 to 86.2 µg/m^3 SO_2 = 5.0 to 20.1 µg/m^3 NO_2 = 14.1 to 30 µg/m^3 CO = 0.264 to 0.429 mg/m^3
AAQ modelling (Incremental GLC)	PM_{10} (incremental) =0.63 µg/m^3, PM_{10} (Resultant) = 86.83 µg/m^3 SO_2(incremental) =2.19µg/m^3, SO_2(Resultant) = 21.89µg/m^3 NO_x(incremental) =7.0µg/m^3, NO_x(Resultant) =37 µg/m^3
Groundwater quality at 8locations	pH: 6.67-7.92; Total Hardness: 100.58 - 181.15 mg/l, TDS:168-342 mg/l, Fluoride: 0.1-0.32 mg/l. Heavy metals are within the limits.
Surface water quality at 5 locations	pH:7.54-7.91;DO:6.3-6.4 mg/landBOD:from 1.22mg/l to 2.66 mg/l; CODfrom3.88to 7.92mg/l
Noise levels	Noise levels at every station were within specified standards **Residential Area**- 46.1 dB(A) – 51.7 dB(A) during day time. 38.7 dB(A) -41.9dB(A) during night time. **Commercial Area**- 51.9 dB(A) – 52.9 dB(A) during day time. 41.6 dB(A) -43.8 dB(A) during night time. **Silence Zone**- 47.1 dB(A) – 48.6dB(A) during day time. 37.2 dB(A) during night time. **Industrial Area**- 51.4 dB(A) – 61.7 dB(A) during day time. 41.6 dB(A) -52.9 dB(A) during night time.
Traffic assessment study findings	The LOS value from the proposed project may be "very good" for highway which was earlier "very good". So the additional load on the carrying capacity of the concern roads is not likely to have any significant adverse effect.
Flora and fauna	Presence of Schedule- I species. Biological conservation plan has been submitted to Chief conservator Forest, govt. of Chhattisgarh dated 21.06.2021.

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

S No	Type of Waste	Quantity generated	Mode of Treatment/ Disposal
1	Melting Scrap (i.e. Defective Billets, End Cutting, Miss Rolls etc)	8514 TPA	Reused in process/ sold to smaller units
2	Mill Scale from Induction Furnace	6786 TPA	Reused in process/ sold to other ferro Alloys or Sold to Pelletization unit.
3	Slag from Induction Furnace	25534 TPA	Sold to metal recovery units.
4	Refractory and Ramming Mass waste	216 TPA	Given to Recycler/ land back fill/ Brick making
5	Slag from Ferro Alloys Plant	82000 TPA	The slag from Ferro Silicon Plant shall be crushed and supplied preferably to

S No	Type of Waste	Quantity generated	Mode of Treatment/ Disposal
			cement plant, while the slag from Ferro Manganese Plant shall be supplied to Ferro Silicon Plant. All the slag materials are good for backfilling material at construction site. Thus, it can be also used for backfilling.
6.	Waste Oil/Used Oil (Hazardous waste)	5 KL/annum	Partly used for lubrication and will be stored in covered HDPE Drums & will be given to CECB approved vendors/authorized recycler

39.10.11 Public Consultation:

Details of advertisement given	30/01/2021: Nai Duniya and Kelo Prawah (Hindi News paper) 31/01/2021The Times of India (English Newspaper)
Date of public consultation	05/03/2021
Venue	Banjari Temple open Ground at Village Taraimal, Tehsil: Tamnar District- Raigarh (CG)
Presiding Officer	• Mr R.K. Katara (Additional District Collector, Raipur) • Mr. S. K. Verma (Regional Officer) Chhattisgarh Environment Conservation Board, Raipur. • Other officials of CECB & Revenue Department Govt. of C.G
Major issues raised	i. Labour wages increase ii. Water facility iii. Employment to locals iv. Road development v. Advertisement of public hearing vi. Several disease and death due to pollution vii. Regarding Impact of Air Pollution on Air Regime viii. Regarding Impact of Water Pollution on Water Regime and deepening and beautification of village Pond ix. Conversion of land from Agricultural to industrial x. Regarding CER funds xi. Regarding Venue of PH xii. Regarding greenbelt development xiii. Regarding socio economic report

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

S.N	Concerns raised during the PH	Physical activity and action plan	Tentative Budget, (Rs Lacs)	Target date for implementation of action plan
1	Impact of Air Pollution on Air Regime	The project will be mainly use electrical energy. Therefore, there will be insignificant impact of PM contribution and	**Budget:** Total Proposed EMP Cost: Capital: Rs 360 lakhs	**Timeframe:** This investment will be made along with the implementation of the

S.N	Concerns raised during the PH	Physical activity and action plan	Tentative Budget, (Rs Lacs)	Target date for implementation of action plan
		gaseous concentration on air quality. Particulate Matter emission will be kept within 30 mg/Nm^3 for which high efficiency bag filter will be provided and online stack monitoring system will also provide. Therefore there will be a negligible impact due to the proposed project.	Recurring: Rs. 70.0 lakhs During Construction Phase For Air regime Capital cost Rs. 80 Lakhs and Recurring Cost Rs. 12 Lakhs included in EMP Cost	Project. So it is likely to be implemented within 2 years from date of starting construction or before going into production whichever is earlier.
2	Impact of Water Pollution on Water Regime and deepening and beautification of village Pond	The water will be required for cooling purpose, and the cooling will be done in closed circuit cooling system. Waste water will be treated and regularly re-circulated. All industrial effluent will be treated in ETP. Domestic effluent will be treated through STP and treated water will be utilized in greenbelt, slag quenching and dust suppression etc. Zero discharge will be maintained. The source of water will be ground water. The site falls under safe zone as per CGWA, We have obtained NOC from CGWA. Rain water harvesting practice will be adopted as per norm, it is proposed to implement rain water harvesting structure of 100% capacity of runoff availability in plant premises. In addition will create rain water harvesting structures outside the plant.	**Budget:** Total Proposed EMP Cost: Capital : Rs 360 lakhs Recurring : Rs. 70.0 lakhs During Construction Phase For water environment (Water and Wastewater Management (STP, Sedimentation Tank, Oil Traps, etc.) and Rain Water Harvesting Structure Capital cost Rs. 20 Lakhs and Recurring Cost Rs. 5 Lakhs included in EMP Cost.	**Timeframe:** This investment will be made along with the implementation of the Project. So it is likely to be implemented within 2 years from date of starting construction or before going into production whichever is earlier.
3	Conversion of land from Agricultural to industrial	Proposed project is located in OP Jindal Industrial park which has diverted industrial land. Therefore, there will no loss to agriculture land due to our project.	Not required	Not required
4	Why Employment to Local people not given? Maximum manpower taken from outside i.e. Bengal and Odisha why not CG people?	The industry will be providing priority to local peoples. Govt. of Chhattisgarh also has made it compulsory to give priority in employment to local people.	Employment Generation – During Construction phase – 100 Employment Generation during operation phase - 360 **Cost of EMP for Social & Infrastructure**	**Time frame: 3 Years after receipt of EC**

S.N	Concerns raised during the PH	Physical activity and action plan	Tentative Budget, (Rs Lacs)	Target date for implementation of action plan
			Development Capex: Rs. 180 Lakhs **Provision of Rs. 30 Lakhs under the head of skill development program for local youth to facilitate local employment**	
5	NOC from Gram Sabha	The proposed project is located in OP Jindal Industrial park which has diverted industrial land. The land was allotted by Govt. of CG for the same. Therefore, there is no need to obtain NOC from gram sabha for implementation of the project in approved industrial area.	Not required	Not required
6	Venue and delay in public Hearing	45 days timeline has been given under EIA Notification 2006 to complete the public consultation process, however district administration is at liberty to decide upon the timing and venue after taking into consideration the present Covid situation as well as law and order situation. Due to ongoing Covid impact various guidelines of Central Governments with respect to Corona have been issued and the same have been adhered with, which resulted in the delay of public hearing. Our Public Hearing has been conducted through C.G. Environment Conservation Board and District Administration based on the applicable legal proceedings. The Project Proponent doesn't have any role in deciding the venue, time and date of public hearing.	Not required	Not required
7	CER funds	Industry is proposed by a Company incorporated under Company Act 2013 CER regulation will be applicable to this industry on making profits. Thus, the industry will be spending upon social development and also adhere to	**Cost of CER (EMP) for External Infrastructure Development to improve surrounding environment** Capex: Rs. 180 Lakhs	**Timeframe: 3 Years within going into Commercial operation or receipt of Consent to operate**

S.N	Concerns raised during the PH	Physical activity and action plan	Tentative Budget, (Rs Lacs)	Target date for implementation of action plan
		the District Administration guidelines as and when CER liability arises then according to the Companies Act 2013, That, in proposed green field project there will be a liability of Rs. 180 Lakhs under CER, for that we will place the proposal before the Hon'ble EAC for making expenses to improve surrounding environment in local school and other works on environment Education, Health and improvement of Environment, the work approved by them. The same will be done according to the law along with the implementation of project.		
8	Proper information not provided to villages	Our company has applied to Chhattisgarh Environment Conservation Board on dated 1 December, 2020for conducting Public Hearing along with required fees after completing the study of EIA Report as accordance with TOR). The C.G. Environment Conservation Board in coordination with the District Administration have decided to conduct Public Hearing at Banjari Mandir premises keeping in view the Law and Order situation and the C.G. Environment Conservation Board in its discretion had informed concerned as per their general practice, in which they have published Public Notice in newspaper as advertisement 30 days prior public hearing, for which payment was made by us and we have provided the required quantity of EIA and Executive summary in English and Executive summary in Hindi translation. Apart from this, we have gone one step ahead beyond the instruction of EIA notification and provided Hindi Translations of the complete EIA in the required quantity. In addition, public announcement "MUNADI" have also been made in concerned villages.	Not required	Not required
9	Why this public	MHA guidelines for Corona have	Not required	Not required

S.N	Concerns raised during the PH	Physical activity and action plan	Tentative Budget, (Rs Lacs)	Target date for implementation of action plan
	hearing is conducted during this Corona period.	been followed by District Administration during Public Hearing. All guidelines related to Corona have been duly enforced by the District Administration in public hearing.		
10	Elephant Corridor present at 10 km radius or not? No plan is provided for conservation of Annex-I species like elephant wandering in study area.	The study area of project is not having any elephant corridor nor has any Elephant habitat area The stray elephants are found have impacted a few villages. Elephant impacted zone is more than 10 KM form project site. Also, historically there was no elephant impact in the study area, but during the last few years only, it has come to light on some wandering elephants' impact. This is not an elephant corridor. However, due to occasional sighting of the elephant in the study area and to improve the habitat of Sch. I species, we propose Forest conservation plan and shall submit the same to Conservator Wild life of CG Forest Department. The conservation plan for the project will be implemented by forest and wildlife department only in its existing state wildlife program. NR Steels will provide expenses to them. Contribution of expenditure will be made before starting the production activity in the project.	**Budget:** Total Proposed EMP Cost: Capital : Rs 360 lakhs Recurring : Rs. 70.0 lakhs Budgetary provision made under Biological Conservation plan is Rs. 10 Lakhs Timeframe:This project will be implemented by the Wild Life division of State Forest Department. The company will deposit the amount approved by the Conservator wild life before starting the commercial production in the Unit,	
11	Old Baseline data taken and presented now in the month of march please cancel the Public Hearing	Anacon Laboratories Pvt. Ltd. had conducted the baseline for one of the steel project within Jindal Industrial Park along with 10 Km Study area surrounded to the project site during Pre Monsoon Season (15th March 2019 to 15th June 2019) accordingly, EIA study report was prepared and submitted to Public Hearing. Since, NR Steel and Ferro Pvt. Ltd. are also located within Jindal Industrial Park which is near to earlier studied project, thus the aforesaid baseline data for preparation of EIA study report was used. Whereas, additional monitoring data generated by the	The base line data is also collected post monsoon season October to December 2020 which has been also submitted to CECB with the EIA report	

S.N	Concerns raised during the PH	Physical activity and action plan	Tentative Budget, (Rs Lacs)	Target date for implementation of action plan
		Anacon Laboratories private limited. for the baseline monitoring during **post monsoon season (October to December 2020)** and submitted to CECB, Raigarh. The MoEFCC allows preparing the EIA on the basis of data collected within 3 years from the date of presentation.		
13	Regarding socio economic report not a thorough research done.	Socio economic study is well described in EIA report. It was prepared by the team based on the Publicly available data as well ground truth validation and interviews with important stake holders of the region.	Not required	Not required
14	Dust from the industry is maximum but no step taken by industry people to mitigate	In our plant there will not be any production of Sponge iron as well as there will be no power generation. Most of the process is electrically operated and PM emission level has also been proposed to be kept as less than 30 mg/NM^3. So no impact is likely to be there.	**Budget:** Total Proposed EMP Cost: Capital : Rs 360 lakhs Recurring : Rs. 70.0 lakhs	**Timeframe:** Before commissioning of project
15.	Company is not having Ash Dyke	This question is not related to proposed project, no ash generation envisaged during project activities.	Not required	Not required
16.	What are solid waste disposal program	**Solid Waste Management** ➢ 100% of waste water will be recycled and Zero discharge condition will be maintained. ➢ The Induction furnace slag will be given to units for metal recovery or in case used internally for the same then the ground slag will be used to making bricks. ➢ The waste water generated will be used in Slag quenching. ➢ Defective Billets generated as waste will either be sold to smaller mills or will be reused in process. ➢ The domestic sewage outflow from toilets will be treated in Sewage Treatment Plant and treated overflow will be used for green belt and dust suppression.	**Budget:** Total Proposed EMP Cost: Capital : Rs 360 lakhs Recurring : Rs. 70.0 lakhs Provision of Solid waste Management is made under EMP with Capital Cost Rs. 15 Lakhs and Rs. 4 Lakhs as recurring cost	**Timeframe:** During operation phase

S.N	Concerns raised during the PH	Physical activity and action plan	Tentative Budget, (Rs Lacs)	Target date for implementation of action plan
		Disposal of waste to be carried out outside the plant premises are as below: 1. The used oil and waste oil estimated to be around 5 KL/year will be given to authorized recycler having authorization from competent authority. 2. The lead acid battery or dry battery will be given to authorized recycler having authorization from competent authority. 3. E-waste generated from the plant will be given to authorized recycler having authorization from competent authority. 4. The refractory waste generated from relining of induction furnace will be given to the refractory units for recycling located in the state of Chhattisgarh. 5. No waste will be dumped at any location outside site boundary. 6. Surplus construction material shall be disposed on site as fill material or sold as scrap, paint containers etc shall be returned to suppliers. 7. Record of all waste generated, recycled, sold or disposed will be maintained in a Waste tracking Register		
	Green Belt development.	The total plant area is 8.00 Ha. The total plantation of about 4680 nos. will be carried out on 3.12 Ha. (39.01%) @ 1500 trees/ha, some trees shall be planted along approach road side in proposed project area. It is proposed to developed 3 - tier green belt will be planned within the plant premises.	**Budget:** Total Proposed EMP Cost: Capital : Rs 360 lakhs Recurring : Rs. 70.0 lakhs Budgetary provision for Greenbelt development Capital Cost Rs. 12 Lakhs Recurring Cost Rs. 5 Lakhs. .	**Time frame:** Continuous activities from the inception of construction phase and will be completed within 3 years. Under CER (EMP for Social and Infrastructure development for Environment), Tree plantations in 3 nos. of nearby villages approx. 2.00 ha of Land @ 1500 trees / ha is also planned. Budgetary provision is of Rs. 30 Lakhs. Timeframe – 3 Years

S.N	Concerns raised during the PH	Physical activity and action plan	Tentative Budget, (Rs Lacs)	Target date for implementation of action plan
	Road side dust to be controlled and made dust free. Traffic system should be improved to avoid accidents.	• Necessary dust suppression measures like water sprinkling using road tankers will be deployed to mitigate the dust nuisance. • The vehicular traffic plying in and out of the project site will be one of the significant sources of air pollution. This difficulty can be tackled to a great extent by properly regulating the traffic and by following strict and disciplined vehicular movement and operation at the project site. By imposing vehicular emission standards, this problem can be further curbed to a large extent. Adequate and planned road network will be set up at the project site for smooth movement of the goods vehicles. • All the internal roads within the plant shall be asphalted / concreted; hence dust arising from the internal roads shall be insignificant. The greenbelt development shall further help in reduction in fugitive emissions.	**Budget:** Total Proposed EMP Cost: Capital : Rs 360 lakhs Recurring : Rs. 70.0 lakhs During Construction Phase For Air regime Capital cost Rs. 80 Lakhs and Recurring Cost Rs. 12 Lakhs included in EMP Cost	**Timeframe: Shall be implemented within 2 years after grant of EC.**

39.10.12 The capital cost of the project is Rs.11900 Lakhs and the capital cost for environmental protection measures is proposed as Rs. 360 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs 70 Lakhs. The proposed project will provide employment to 360 peoples as direct employment which includes 37 people as administrative staff and 323 people will be production staff whereas indirect employment to 500 persons will also be generated. The details of cost for environmental protection measures are as follows:

Sr. No.	Description of Item	Cost (Rs in Lakhs)	
		Capital	Recurring
1.	Pollution Control during Construction Stage (Water sprinklers, etc.)	18	10
2.	Air Pollution Control Measures Bag filters, dust extraction systems, online monitor, etc.	80	12
3.	Water and Wastewater Management (STP, Sedimentation Tank, Oil Traps, etc.) and Rain Water Harvesting Structure	20	5
4.	Solid waste Management	15	4

Sr. No.	Description of Item	Cost (Rs in Lakhs)	
		Capital	Recurring
5.	Noise Reduction Systems	10	4
6.	Occupational Health & Safety (Provision of PPE, Medical Examination)	25	5
7.	Greenbelt Development (Plantation and maintenance) & Biological Conservation	12	15
8.	**Environmental Monitoring Program (Rs. 15 Lakhs as recurring Cost)**		
a.	Air Quality Monitoring	-	9.0
b.	Noise monitoring	-	1.5
c.	Water and waste water monitoring	-	3.0
d.	Soil quality monitoring and Solid and hazardous waste quality	-	1.5
9.	**"EMP" for Social and Infrastructure development**	180	
	Total	**360**	**70**

39.10.13 Greenbelt will be developed in 3.12 ha which is about 39.01% of the total project area. A 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 4680 nos. of sapling of local native species will be planted. Greenbelt will be maintained with regular sprinkling of water. Taraimal RF is 0.2 km in South direction thus 30 M width greenbelt will be proposed towards periphery of South direction of project site.

39.10.14 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.

39.10.15 Name of the EIA consultant: M/s. Anacon Laboratories Pvt. Ltd. Nagpur [S. No. 63 vides accreditation Certificate No: NABET/EIA/1922/RA 0150, valid up to 30/09/2022; Rev. 11, June 09, 2021].

Observations by the Committee

39.10.16 The Committee observed the following:

i. The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has also found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.

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

Recommendations of the Committee

39.10.17 In view of the foregoing and after 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 based on project specific requirements.

A. Specific conditions

i. Particulate Matter emissions from all the stacks shall be less than 30mg/Nm^3.
ii. All roads shall be made Pucca and a vacuum cleaner shall be used to clean the roads.
iii. Rain Water Harvesting shall be carried out as per the action plan submitted in the EIA report.
iv. 100 % slag generated in the facility shall be utilized.
v. 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.
vi. Submerged Arc Furnace shall be equipped with the fourth hole fume extraction system.
vii. Green Belt shall be developed in 39 % of total area with tree density of 2500 trees per ha. (or 1000 trees per acre) as committed by the project proponent.
viii. No Ferro Chrome shall be manufactured without obtaining prior EC from MoEF&CC.
ix. The Plant shall reuse/recycle the entire wastewater after treatment and no treated wastewater shall be discharged outside the plant premises.
x. 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 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 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. 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. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.
vi. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
vii. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
viii. 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 recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
ii. 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.
iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
iv. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.

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

i. Used refractories shall be recycled as far as possible.
ii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces
iii. 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 and also estimate carbon sequestration by the plantations.

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. Environment Management

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

39.11 Expansion of Sponge Iron Production from 60,000 TPA to 1,20,000 TPA Along with Captive Power Plant of 15 MW, M S Billets Production of (1,35,000 TPA) by Installing 3 x 15 Ton Induction Furnace, and Re-Rolling Mill (60,000 TPA) **by M/s. Satyam Iron & Steel Co. Private Limited** at Plot No G-7, B-7/11 & G-7/A, Mangalpur Industrial Estate,PO & PS – Raniganj, Distt. -**Paschim Bardhaman, West Bengal** [Online Proposal No. IA/WB/IND/210103/2018; File No. J- 11011/253/2020-IA.II(I)] - **Environment Clearance** – regarding.

39.11.1 M/s. Satyam Iron & Steel Company Private Limited has made an online application vide proposal no. IA/WB/IND/210103/2018 dated 22/06/2021 along with copy of EIA/EMP report and Form-2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006. The proposed project activity is listed at schedule no. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by Project proponent

39.11.2 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord
06/10/2020	Standard ToR has been granted vide File No. J-11011/253/2020-IA.II(I)	Terms of Reference	26/10/2020

39.11.3 The project of M/s. Satyam Iron & Steel Co. Private Limited is located at Plot No G-7, B-7/11 & G-7/A, Mangalpur Industrial Estate, PO & PS –Raniganj, Distt. -Paschim Bardhaman, West Bengal is for Expansion of Sponge Iron Production from 60,000 TPA to 1,20,000 TPA Along with Captive Power Plant of 15 MW, M S Billets Production of (1,35,000 TPA) by Installing 3 x 15 Ton Induction Furnace, and Re-Rolling Mill (60,000 TPA).

39.11.4 Environmental Site Settings:

SNo	Particulars	Details
1	Total Land	Existing – 5.84 ha Expansion – 2.46 ha **Total Land – 8.30 ha** Project Site falls within Mangalpur Industrial Estate
2	Land acquisition details as per MoEF&CC O.M dated 7/10/2014	Entire land of 8.30 ha is under the possession of M/s Satyam Iron & Steel Co. Private Limited
3	Existence of habitation & involvement of R&R, if any.	Nil
4	Latitude and Longitude of the project site	**Latitude** / **Longitude** 23°36'42.43"N / 87° 8'35.34"E 23°36'40.58"N / 87° 8'37.48"E 23°36'44.77"N / 87° 8'41.56"E 23°36'38.75"N / 87° 8'47.52"E 23°36'34.79"N / 87° 8'43.19"E 23°36'37.21"N / 87° 8'39.71"E 23°36'35.92"N / 87° 8'36.57"E 23°36'30.60"N / 87° 8'36.54"E 23°36'30.97"N / 87° 8'42.37"E 23°36'29.42"N / 87° 8'41.69"E 23°36'29.12"N / 87° 8'37.96"E 23°36'28.33"N / 87° 8'37.45"E 23°36'28.92"N / 87° 8'35.57"E
5	Elevation of the project site	100 meter above MSL
6	Involvement of Forest land if any.	Nil
7	Water body exists within the project site as well as study area	**Project Site** – Nil **Study Area** Damodar River – 4.0 km – SW Mejia Lake – 6.0 km – SW
8	Existence of ESZ / ESA/national park /wildlife sanctuary /biosphere reserve /tiger reserve /elephant reserve etc. if any within the study area	Nil Gangajalghati PF: 5.5 km/ SSW

39.11.5 The existing DRI kiln (2x100 TPD) for production of Sponge Iron was established based on the NOC accorded by West Bengal Pollution Control Board (WBPCB) on 7/8/2001 and 24/4/2003. In view of this, EC has not been obtained under the provisions of EIA Notification, 2006. Consent to Operate renewal was issued by WBPCB on 22/04/2019. The validity of CTO is up to 30/04/2024.

39.11.6 Implementation status of the existing facility:

S	Facilities	Units	As per CTO dated:-	Implementation	Production as

No			22.04.2019	Status as on date	per CTO
1	2 x 100 TPD Kiln	DRI unit	Yes	Implemented	60,000 TPA

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

Sponge Iron Production			
	Existing	**Expansion**	**Total Capacity**
No of Rotary Kiln	02 No's	01 No's	**1,20,000 TPA**
Capacity of Rotary Kiln	100 TPD	200 TPD	
Production capacity per day	200 Ton	200 Ton	
No. of days operation per day	300	300	
Installed Capacity Per Annum	60,000 TPA	60,000 TPA	
Billets Production			
No of Induction Furnace	Nil	3 No.	**1,35,000 TPA**
Melting Capacity of Induction Furnace		15 Ton Each	
No of Heat per Day		10	
Production capacity per day		450 Ton	
No. of days operation per day		300	
Installed Capacity Per Annum		1,35,000 TPA	
Rolling Mill			
No of Re-heating Furnace	Nil	01 No	**60,000 TPA**
Production capacity per day		200 Ton	
No. of days operation per day		300 Days	
Installed Capacity Per Annum		60,000 TPA	
Captive Power Plant			
Power Plant ➢ WHRB Boiler (03 No's) ➢ AFBC Boiler (01 No's)	Nil	2 x 10 TPH-4MW 1 x 22 TPH-4MW 1 x 30 TPH-7MW	**15 MW**

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

Raw Material Details for Sponge Iron (1,20,000 TPA)

S No	Name	Quantity (TPA)	Source	Transportation	Distance w.r.t Project Site
1	Iron ore lumps	1,80,000	Captive mines, purchase from NMDC/ OMDC/ other mines	Through Rail /Road	Between 300 to 350 KMs
2	Coal	132,000	Purchase from CIL, Imported from SA	Through sea route/ rail route/ by road	Between 20 – 250 KMs.
3	Dolomite	3,600	Local purchase	Road through covered trucks	Between 20 – 40 KMs
	Total	**3,15,600**			

Raw Material for Billets (1,35,000 TPA)

S No	Name	Quantity (TPA)	Source	Transportation	Distance w.r.t Plant

1	Sponge Iron	1,20,000	In house	Internal Movement	Captive Consumption
2	Pig Iron	18,000	Local Purchase	Road through covered trucks	Between 20 – 40 KMs
3	Scrap	30,000	Local Purchase	Road through covered trucks	Between 20 – 40 KMs
Total		**1,68,000**			

Raw Material for Rolling Mill (60,000 TPA)

Raw Material requirement	Quantity (TPA)	Source	Transportation	Distance w.r.t Plant
Billet	64,920 TPA	In-house	Internal Movement	Captive Consumption
CBM Gas (SM^3/Annum)	24,00,000	Local Purchase	Through Pipelines	Between 02 – 03 KMs

Material Balance for Power Plant (AFBC Boiler – 30 Ton)

SNo	Input	Quantity	Output	Quantity
1	Coal Imported	10,500	Power	7 MW
2	Dolochar (In-house)	36,000	Ash	22,600 TPA
			Gases	23,900 TPA
	Total	**46,500**	**Total**	**46,500**

39.11.9 Total Water requirement will be 574 KLD and will be sourced from Asansol Durgapur Development Authority. Permission for the withdrawal of 300 KLD has been obtained vide Letter No-ADDA/DGP/ED/CN-65/03-04/924 dated 27/09/2004. For the remaining quantity of 274 KLD, PP applied for additional water supply to Asansol Durgapur Development Authority and the same is under process.

39.11.10 Existing power requirement is 0.60 MW and additionally 20.5 MW power will be required for the expansion project and 15 MW will be sourced from CPP and remaining will be from government supply. 2 x 500 KVA DG set will be installed to meet the power requirement during load shedding/ emergency.

39.11.11 Baseline Environmental Studies:

Period	**Winter Season :17/12/2019 to 16/03/2020 and Additional one month Study : 01/10/2020 to 31/10/2020**
AAQ parameters at 08 locations	$PM_{2.5}$ = 38.8 to 49 µg/m^3 PM_{10} = 64.7 to 86.0 µg/m^3 SO_2 = 6.5 to 12.9 µg/m^3 NO_2 = 15.4 to 30.0 µg/m^3
AAQ modelling	Incremental GLCs due to the expansion proposal: PM_{10} =3.6µg/m^3 SO_2 = 4.7µg/m^3 NO_x = 3.2µg/m^3 $PM_{2.5}$ = 1.2µg/m^3
Ground water quality	pH: 6.48 to 7.25, Total Hardness:240 to 300 mg/l, Chlorides: 125

at 08 locations	to 145 mg/l, Fluoride:0.26 to 0.82 mg/l. Heavy metals are within the limits.
Surface water quality at 7 locations	pH: 7.19 to 7.89, DO: 3.1 to 6.6 mg/l, BOD: 3 to 7 mg/l and COD from 27 to 55 mg/l
Noise levels	49.30 to 73.0 dBA for the day time and 42.0 To 68.9 dBA For the Night time.
Traffic assessment Study findings	Existing Level of Service is A (Excellent) with 0.29 V/C ratio. Incremental Load due to proposed project will be 17 vehicles/ hour. Level of Service after expansion will be remain B with 0.20 V/C ratio.
Flora and fauna	No schedule I species present in study area.

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

SNo	**Name**	**Quantity,**	**Utilization**
1	DRI Char	36,000	100% In power generation
2	Ash/Dust from DRI	15,000	In civil construction purpose and will be given to Brick manufacturers.
3	Kiln Accretion Slag	600	Will be utilized in road construction
4	SMS slag	24,000	Slag from SMS will be crushed and iron will be recovered & remaining non-magnetic material will be inert nature and will be used as sub base material in road construction/ used for brick manufacturing/ civil construction works like PCC and wall construction.
5	Mill scales from Rolling Mill	15,00	Will be given to Ferro alloy manufacturing units and used in IF.
6	End Cutting	3,420	Will be recycled to SMS unit
7	Ash from CPP	22,600	Ash will be collected in dry form and stored in silos. From silos it will be given to cement plants / brick manufacturers. MOU has been done.

Hazardous waste generation, storage & disposal

Waste Oil: 1.0 KL/ Annum: This will be stored in covered HDPE drums in a designated area and will be given to WBPCB approved vendors.

39.11.13 Public Consultation:

Details of advertisement given	04/12/2020
Date of public consultation	05/01/2021
Venue	Muralidhar Bhawan, Raniganj, WB
Presiding Officer	Mr. Apratim Ghosh, Additional District Magistrate, Paschim Bardhaman.
Major issues raised	The issues raised during Public Hearing are: ➢ Water Pollution problems ➢ Employment generation ➢ Medical and education facilities

	➢ Road Development

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

S No	Concerns raised during public hearing	Physical activity & action plan	Budget INR (Lakh)	Target for implementation of action plan	
				1st year	2nd year
1	Improve Health Infrastructure in Area	Provide the Medical equipment to Government Hospital / Health Centre at Raniganj, Ballavpur and Baktarnagar (Beds, Oxygen Cylinder, Oxygen Concentrator, AC, Air Purifer)	15.5 Lakhs 20 Bed - 4 Lakhs 20 O_2 Cylinder – 3 Lakh 10- Oxygen Concentrator – 5 Lakh 8 Air Purifier – 2 Lakh Sanitizer and Mask – 1.5 lakh	10 Lakhs In Ballabhpur & Baktarnagar Health Centre	5.5 Lakhs In Raniganj Health Centre
2	Repair of roads in Baktarnagar and Chak Brindabanpur	2000 m road will be strengthened. This will be done in consultation with the village panchayat	10 lakh	The work will be completed in first year	
3	Providing employment to local people	Willing and employable youths will be identified in consultation with gram panchayat of village Mangalpur (25 Nos). They will be trained in Raniganj ITI for trades namely electrician, fitters, welders, painters, and civil construction work, etc. Fees will be paid by PP. After successful completion of training, the youths will be offered employment in company	10.5 Lakhs Stipend – 3.0 Lakh (1000/- stipend to 25 persons for 1 year) ITI Fee – 7.5 Lakhs (30000/- yearly fee for 25 persons)	Training of 12 persons will be completed in 1st year	Training of 13 persons will be completed in 2nd year
4	Infrastructure development of local Primary Schools	PP will make pucca kitchen with fume exhaust in 3 local schools providing mid-day meals to students, provide furniture, computers and colour printers to the 3 schools Mangalpur village Baktarnagar village ChakBrindabanpur village	10 Lakhs 3 Kitchen – 2.5 Lakhs 400 Tables & Chairs – 4.0 L 12 Computer – 3.0 Lakhs 3 Colour printer – 1.5 Lakhs	PP will complete work in Mangalpur and Chak Brindabanpur schools	PP will complete work in Baktar Nagar school in 2nd year

S No	Concerns raised during public hearing	Physical activity & action plan	Budget INR (Lakh)	Target for implementation of action plan	
				1st year	2nd year
5	Development of rain water harvesting structures	Make recharge shaft type RWH structures in 3 villages Mangalpur village Baktarnagar village ChakBrindabanpur village	Rs. 7.5 Lakhs	PP will complete the work in 2 villages in first year	PP will complete the work in Baktarnagar in 2nd year

39.11.14 The capital cost of the project is Rs 171Cr and the capital cost for environmental protection measures is proposed as Rs 794.5Lakh. The annual recurring cost towards the environmental protection measures is proposed as Rs 177.5 Lakh. The total employment generation from the proposed project is 300 after expansion:

S. No	Activity	Capital Cost (Lakh)	Recurring expenses proposed/ annum (Lakh)
1	Pollution control during construction phase	10	--
2	Air Emission Management (ESPs, Fume/Dust extraction systems with Bag filters, Chimneys, and Industrial Vacuum cleaner)	450	50
3	Green Belt development	7.50	7.50
4	Water Pollution Control Measures (STP,ETP, Garland Drains around stock pile with runoff treatment system,, separate storm water drains along plant boundary with sedimentation tanks, etc)	65	10
5	Occupational Health (OHC with doctor and paramedical staff, medicines, first aid, ambulance with basic equipment,)	24	15
6	Post Project Environmental Monitoring (CEMS (2 stacks), CAAQMS (1 inside plant), Manual Monitoring stations (3 outside plant), water and wastewater, Noise Meter	60	16
7	Raw materials storage yard (scientific make), Solid wastes storage facilities, utilization and disposal	8	4
8	Noise Mitigation measures.	5	1
9	Plant Safety and Risk mitigation measures	40	8
10	Rainwater Harvesting structures	15	4
11	Energy conservation Measures (Solar lights, water heating systems, LED lights, etc)	10	2
12	Development of EMD and Laboratory for routine environmental monitoring	120	60

S. No	Activity	Capital Cost (Lakh)	Recurring expenses proposed/ annum (Lakh)
Total		**814.5**	**177.5**

39.11.15 Total 2.74ha (existing + expansion) area is earmarked for green belt development along the plant boundary. 1,500 trees have been planted. Remaining 5,350 trees will be planted in 2021-2022.

39.11.16 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.

39.11.17 Name of the EIA consultant: - Grass Roots Research & Creation India (P) Ltd. [S No 162, List of ACOs with their Certificate no. QCI/NABET/EIA/ACO/21/1728 valid up to 09/08/2021 Rev. 11, June 09, 2021].

Certified compliance report from Regional Office

39.11.18 The Status of compliance of earlier EC was obtained from West Bengal Pollution Control Board (WBPCB) vide letter no. 265/WPBA/Red(BMW)/Cont(339)/2002 Part-II dated 07/04/2021. As per the WBPCB report, the existing CTO conditions are being complied by project proponent.

39.11.19 It was apprised to the EAC that Ministry was in public representation on 36/06/2021 alleging that the proponent has commenced the expansion project activity without obtaining the environment clearance.

39.11.20 During the course of meeting, PP has submitted written submissions on the following points:

i. Revised EMP cost as mentioned at para no. 39.11.4
ii. Revised plant layout by providing an additional entry/exit for raw material movement also shifted the parking towards south end.
iii. Revised material balance for the coal based power plant and committed to use the Indian coal for the CPP.
iv. Undertaking on affidavit has been submitted by the proponent stating that no construction activity has been commenced at the project site.

Observations of the Committee

39.11.21 The Committee observed 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 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 EAC noted that the written submissions made by the project proponent during the course of meeting are addressing the concerns of the Committee and acceded to the

same.

Recommendations of the Committee

39.11.22 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 subject to the stipulation of specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements.

A. Specific conditions

i. Project proponent shall commence the activity at the site only after obtaining prior water withdrawal permission for additional 274 KLD water from Asansol Durgapur Development Authority. Ground water withdrawal is not permitted.
ii. Green belt shall be developed in 33% percentage of the total area with a tree density of 2500 trees per hectare. This shall also include a 20 m wide green belt development along the plant boundary in the south towards the Mangalpur village located at 700 m away from plant boundary.
iii. Particulate matter emission from all the stacks shall be less than 30 mg/Nm^3.
iv. Parking area for trucks/dumpers shall be provided within the unit.
v. Indian coal shall be used in the Captive Power Plant as committed by project proponent.
vi. Rain water harvesting shall be carried out as per the action submitted in the EIA report.
vii. 100 % solid waste generated in the facility shall be utilized as committed by the project proponent. Storage of solid waste will not be allowed for more than 90 days.

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 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. 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. Plant internal roads shall be concreted and a vacuum cleaner shall be used to regularly clean the roads.
viii. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.
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

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008; G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF); S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
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.

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

i. Used refractories shall be recycled as far as possible.
ii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused in melting Furnaces.
iii. 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. 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).
iii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Environment Management

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

39.12 Expansion of Iron Ore Pelletisation Plant (0.6 MTPA to 1.8 MTPA), Iron Ore Beneficiation Plant (3.0 MTPA), DRI Plant (0.6 MTPA), Pig Iron BF (0.6 MTPA), Sinter Plant (0.8 MTPA), SMS (1.2 MTPA), Rolling Mills (1.2 MTPA) & Captive Power Plant (125 MW) by **M/s. Ardent Steel Limited** at Village- Phuljhar, Block- Bansapal, Tehsil- Telkoi, **District-Keonjhar, Odisha** [Online proposal No. IA/OR/IND/18852/2013; MoEF&CC File No. J-11011/112/2013-IA-II(I)] - **Environment Clearance** – regarding

39.12.1 M/s. Ardent Steel Limited has made an online application vide proposal no. IA/OR/IND/18852/2013 dated 22/06/2021 along with copy of EIA/EMP report and Form-2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006. The proposed project activity is listed at schedule no. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 due to which it will be appraised at Central Level.

39.12.2 The Committee noted that as per the pre-feasibility submitted by the project proponent at the time of grant of ToR, the total land requirement for the project was 180.473 ha including forest land of 21.246 ha. Further, stated that application for Forest Clearance is yet to be submitted. The said proposal was considered by the EAC and ToR was accorded on

27/06/2018. As per the specific ToR no v, PP has submitted a letter dated 31/12/2020 of Divisional Forest Officer which stated that plot no 1817, 1815, 1757, 1795, 1798, 1770, 1567, 1571 & 1540 all in khata no. 153 in phuljhar village under Banspal tehsil are lying within the proposed expansion site. Hence, forest clearance would be required if the said nine plots are to be utilized for expansion of the plant. However, PP claimed that they have excluded the nine plots stated in the DFO letter and revised area for the expansion would be 174.832 ha. Further, PP stated that application for Forest Clearance has not been submitted.

Observations of the Committee

39.12.3 The Committee noted that as per the layout submitted by the proponent, the plot no 1817, 1815, 1757, 1795, 1798, 1770, 1567, 1571 & 1540 all in khata no. 153 in phuljhar village are located in patches within the expansion project site and exclusion of the said plots are not practically feasible as these plots are land locked in all four sides due to the proposed expansion project.

Recommendations of the Committee

39.12.4 In view of the foregoing and after detailed deliberations, the Committee recommended the proposal to be returned in its present form as application for stage 1 FC has not been made by the proponent and the EIA proposal is not in compliance with the prescribed ToRs.

39.13 Greenfield Project of Iron Ore Pelletization Plant (9, 00,000 TPA), Sponge Iron (2, 31,000 TPA), MS Billets (2, 04,000 MTPA), Rolling Mill (1, 98,000 TPA) with Captive Power Plant (24 MW) **by M/s. Saar Steel & Power Private Limited** located at Village- Kunkuni (Near ROB Railway Station), Tehsil- Kharsia, **District-Raigarh, Chattisgarh** [Online Proposal No. IA/CG/IND/215867/2021; File No. IA-J- 11011/257/2021-IA-II(I)] **Prescribing for Terms of Reference**– regarding.

39.13.1 M/s. Saar Steel & Power Private Limited has made an application online vide proposal no. IA/CG/IND/215867/2021 dated 19/06/2021 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 (ferrous & Non-ferrous) & 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and being appraised at Central Level.

Details submitted by Project proponent

39.13.2 The project of M/s. Saar Steel & Power Private Limited located at Village- Kunkuni (Near ROB Railway Station), Tehsil- Kharsia, District- Raigarh, Chattisgarh is for Greenfield Project of Iron Ore Pelletization Plant (9, 00,000 TPA), Sponge Iron (2, 31,000 TPA), MS Billets (2, 04,000 MTPA), Rolling Mill (1, 98,000 TPA) with Captive Power Plant (24 MW).

39.13.3 Environmental site settings:

SNo	Particulars	Details	Remarks
1	Total land	Total Land –20.28 ha (including 0.05 ha of railway line) ➢ 14.119 ha has been allotted by **Chhattisgarh State Industrial**	Land use is agricultural and will be converted for industrial

SNo	Particulars	Details	Remarks
		Development Corporation Ltd for **industrial purpose**. ➢ 3.135 ha land is **government land** for which company have signed MoU with the government for the same. ➢ 3.026 ha land is **private land** and will be diverted for **industrial purpose**.	purpose.
2	Existence of habitation & involvement of R&R, if any.	No R & R involved in the project	
3	Latitude and Longitude of the project site	Latitude - 21°59'17.02"N Longitude - 83°10'31.69"E	
4	Elevation of the project site	AMSL – 233 m	
5	Involvement of Forest land if any.	No Forest land involved	
6	Water body exists within the project site as well as study area	**Project site**: Nil **Study Area:-** Mand River- 2.8 km, NE Kurket River – 8.5 km, NE Rabo Dam – 12 km, North Kansa Dam-15.42 km, SW Reservoir – 2 km, SW DanturNala –adjacent to project site	
7	Existence of ESZ/ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger Reserve / elephant reserve etc. if any within the study area	**Nil** **Study Area:** Rabo RF: Approx. 5.5 km, N Lotan RF: Approx. 11 km, NE Endu RF: Approx. 8.5 km, NNW Bargarh RF: Approx. 4.5 km, NW Dumapahari RF: Approx. 14.5 km, NNE Suhai RF: Approx. 13.3 km, NE Burha Pahar RF : Approx. 1.5 km WSW Basnajhar RF: Approx. 3.5 km, West Urdana RF :Approx. 14.5 km, East Rabo RF: Approx. 5.5 km, N	

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

SNo	Facility	Configuration	Total Capacity
1	**Iron Ore Pellet Plant**	2,727 TPD x 330 Days	**9,00,000 TPA**
	Sponge Iron Production		

SNo	Facility	Configuration	Total Capacity
2	No of Rotary Kiln	02 No's	**2,31,000 TPA**
	Capacity of Rotary Kiln	350 TPD	
	Production capacity per day	700 Ton	
	No. of days operation per day	330	
3	**Billets Production**		
	No of Induction Furnace	3 No.	**2,04,000 TPA**
	Melting Capacity of IF	20 Ton Each	
	No of Heat per Day	10	
	Production capacity per day	618 Ton	
	No. of days operation per day	330	
4	**Rolling Mill**		
	Production capacity per day	600 TPD	**1,98,000 TPA**
	No. of days operation per day	330	
5	**Captive Power Plant**		
	WHRB Boiler (2 x 36 TPH) CFBC Boiler (35 TPH)	16 MW 8 MW	**24 MW**

39.13.5 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)	Sources	Distance w.r.t Site	Mode of Transport
1	**For Iron Ore Pellet Plant - 9,00,000 TPA**					
a	Iron Ore Concentrate		11,48,400	In-house Production	--	Through covered conveyers
b	Bentonite		9,900	From local traders, Bhuj, Gujarat	600 km	By rail & road (through covered trucks)
c	Lime Stone/ Dolomite		4,950	Local Market /Sundergarh, Odisha	100 -600 km	By rail & road (through covered trucks)
d	Anthracite Coal		23400	IOCL, Paradeep	700 km	By rail & road (through covered trucks)
e	Coal for Producer Gas		29160	Local Mines	200-300 km	By rail & road
2	**For DRI Kilns (Sponge Iron) – 2,31,000 TPA**					
a	Pellets (100%)		3,46,500	In-house Production	--	Through covered conveyers
OR						
b	Iron Ore Fines		3,88,000	Barbil, Orissa NMDC, Chhattisgarh	600 km	By rail & road (through covered trucks)
c	Coal	Indian	3,00,950	SECL Chhattisgarh/ MCL Odisha	500 km	By rail & road (through covered trucks)

S No	Raw Material		Quantity (TPA)	Sources	Distance w.r.t Site	Mode of Transport
		Imported	1,94,460	Indonesia / South Africa / Australia	600 km (Vizag/ Paradeep Port)	Through sea route, rail route & by road (through covered trucks)
d	Dolomite		11,575	Chhattisgarh	100 km	By road (through covered trucks)
3	**MS Billets (2,04,000 TPA)**					
A	Sponge Iron		2,06,040	In-house	--	Through covered conveyers
B	Pig Iron/MS Scrap		30,906	Chhattisgarh	100 km	By road (through covered trucks)
C	Ferro Alloy		10,302	Local	50-100 km	By road (through covered trucks)
4	**Rolling Mill (1,98,000 TPA)**					
a	Hot Billets / Billets / Ingots		2,09,365	In-house and Local Market	--	
5	**For AFBC Boiler [Power Generation 8 MW]**					
a	Indian Coal		50,400	SECL Chhattisgarh/ MCL Odisha	500 km	By rail & road (through covered trucks)
OR						
b	Imported Coal		33,600	Indonesia / South Africa / Australia	600 Kms. (from Vizag/Para deep Port)	Through sea route, rail route & by road (through covered trucks)
OR						
c	Dolochar + Indian Coal	Dolochar	41,580	In-house	--	through covered conveyors
		Indian Coal	29,610	SECL Chhattisgarh/ MCL Odisha	500 km	By rail & road (through covered trucks)
OR						
d	Dolochar + Imported Coal	Dolochar	41,580	In-house	--	through covered conveyors
		Imported Coal	12,810	Indonesia / South Africa / Australia	600 Kms. (from Vizag / Paradeep Port)	Through sea route, rail route & by road (through covered trucks)

39.13.6 The water requirement for the project is estimated as 1,776.5KL/day. Source of the water will be ground water and permission will be obtained from the Competent Authority.

39.13.7 Power Requirement for the project is estimated that about 38 MW out of which 24 MW will be sourced from CPP and remaining will be sourced from Chhattisgarh State Electricity Board (CSEB).

39.13.8 The capital cost of the project is Rs.385 Crores and the capital cost for environmental protection measures is proposed as Rs.5.5 Crores. The employment generation from the proposed project is Admin Staff – 25, unskilled staff-95 and Production Staff – 180.

39.13.9 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	Rainfall, Temperature, Relative humidity, wind speed	Project Site	Daily.	
b. AAQ Parameters	$PM_{2.5}$, PM_{10}, SO_2, NO_2 & CO	08	Twice in a week	
B. Noise	Leq, dB(A)-Day Leq, dB(A)-Night	08	Once in study a period	
C. Water				
a. Surface water	Total Parameters -32	08	Once in a month	
b. Ground water quality parameters	Total Parameters -32	08	Once in a month	
D. Land				
a. Soil Quality b. Land Use	Total Parameters -20 10 KM Buffer Area	04	Once in a Study Period	
E. Biological a. Aquatic b. Terrestrial	10 KM Buffer Area	NA	Once in a Study Period	
F. Socio-economic parameters	10 KM buffer Area	NA	Once in a Study Period	

39.13.10 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.

39.13.11 Name of the EIA Consultant: M/s. Grass Roots Research and Creation India (P) Ltd [S. No. 162, Certificate No. QCI/NABET/EIA/ACO/21/1728, Valid Up to 09/08/2021; Rev. 11, June 09, 2021].

Observations of the Committee

39.13.12 The EAC noted the following:

i. Land area available is 20.28 ha.
ii. 1776.5 KLD water shall be drawn from Ground water
iii. In North there is a railway line adjacent to boundary and on South is Kharsia road.
iv. Roberson Railway station is 0.5 km North East.
v. Mand River flows 2.8 km NE of site.
vi. Garland drains have been proposed all around plant boundary.
vii. Proposed layout does not permit uniform green belt around the lant boundary.

viii. PGP with a capacity of 2x7000 Nm^3/hr is proposed.

ix. Baseline data collected during December-2020 to February-2021. The selection of base line monitoring locations has not been carried out as per the meteorological condition existing at the site and the guidelines issued by the CPCB from time to time. In light of this, the Committee has not acceded to the request of proponent regarding use of baseline data collected during December-2020 to February-2021 for EIA report preparation and opined that fresh baseline data shall be collected during post monsoon season of 2021.

Recommendations of the Committee

39.13.13 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. Fresh base line data shall be collected for three months during post monsoon season of 2021 which shall be used for preparation of EIA report. The data collected shall be in conformity with the meteorological data and CPCB guidelines.

ii. The Plant shall submit action plan for reuse/ recycling of entire wastewater after treatment.

iii. Action plan to limit the dust emission from all the stacks below 30 mg/Nm^3 shall be furnished.

iv. Action plan for fugitive emission control in the plant premises shall be provided.

v. Action plan for green belt development covering 33% of the plant area shall be submitted.

vi. Action plan for 100 % solid waste utilization shall be submitted.

vii. Action plan for rain water harvesting shall be submitted.

viii. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

ix. Air Cooled condensers shall be used in Captive Power Plant.

x. Scheme for use of surface water shall be furnished for gradual phase out of ground water shall be submitted.

****

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.

****

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

******

Email **Sundar Ramanathan**

Re: DRAFT MOM OF 39 EAC HELD DURING 30/06/2021 TO 1/07/2021

From : cnpandey@iitgn.ac.in Sat, Jul 10, 2021 09:47 PM

Subject : Re: DRAFT MOM OF 39 EAC HELD DURING 30/06/2021 TO 1/07/2021 1 attachment

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

Dear Mr. Sundar,
Please find herewith the approved and finl MoM for 39th EAC meeting held on 30th June and 1st July, 2021. You are requested to take further necessary action for uploading this on Parivesh.
Thanking you,
With best wishes,
C. N. Pandey,
Chairman, EAC (Industry I),
MoEFCC, GoI.