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

Date of zero draft MoM sent to Chairman: 17/01/2022
Approval by Chairman: 19/01/2022
Uploading on PARIVESH: 20/01/2022

Summary record of the Fifty First (51st) meeting of Re-Constituted Expert Appraisal Committee (REAC) held on 11-12th January, 2022 for environment appraisal of Industry-1 sector projects constituted under the provisions of Environment Impact Assessment (EIA) Notification, 2006.

The Fifty First 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 **11-12th January, 2022** in the Ministry of Environment, Forest and Climate Change (MoEF&CC) through **video conferencing** in view of the ongoing Corona Virus Disease (Covid-19) pandemic. The list of EAC attendees is as follows:

S. No.	Name	Position	11/01/2022	12/01/2022
1.	Dr. Chhavi Nath Pandey	Chairman	Present	Present
2.	Dr. M.K. Gupta, Director, CPPRI.	Member	Present	Present
3.	*Dr. Siddharth Singh,*	*Member*	*Absent*	*Absent*
4.	Dr. Jagdish Kishwan	Member	Present	Present
5.	Dr. Tejaswini Ananth Kumar	Member	Present	Present
6.	Dr. G.V. Subramanyam	Member	*Absent*	*Absent*
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. Sandeepan B.S.	Scientist 'B'	Present	Present

After welcoming the Committee Members, discussion on each of the agenda items was taken up. The minutes of 50th meeting held during 29th December, 2021 were confirmed by the EAC as already uploaded on PARIVESH.

11th January, 2022

51.1 Expansion of Steel Plant by enhancing Sponge Iron Plant from 2,83,500 TPA to 4,93,500 TPA; Sinter plant from 2,59,000 TPA to 5,18,400 TPA; Pig Iron through Blast Furnace from 87,500 TPA to 3,12,500 TPA; Billets through Induction Furnace (IF) from 2,16,000 TPA to 4,56,000 TPA, Rolled products through Rolling Mill from 90,000 TPA to 4,20,000 TPA, Power generation through WHRB of DRI Kilns -16 MW to 40 MW & Pelletization Plant of 2x 0.6 MTPA capacity with existing Ferro Alloy plant (Si-Mn) of 10,800 TPA, Coal washery of 1,50,000 TPA and CPP (FBC Boiler) of 48 MW by **M/s. Singhal Enterprises Private Limited** located at Taraimal Village, Tamnar Tehsil, **Raigarh District, Chhattisgarh** [Online Proposal No. IA/CG/IND/88614/2018, File No. J-11011/195/2007-IA.II(I)] – **Environment Clearance – regarding.**

51.1.1 M/s. Singhal Enterprises Private Limited has made an online application vide proposal no. IA/CG/IND/88614/2018 dated 27/12/2021 along with copy of EIA/EMP report, Form-2 and Certified compliance report 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 and Non/ferrous) and 1 (d) Thermal Power Plant under Category "A" of the schedule of the EIA Notification, 2006 and appraised at central level.

Details submitted by Project proponent

51.1.2 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	Validity of ToR
09/09/2020	Standard TOR issued	TOR issued	19/09/2020	18/09/2024

51.1.3 The project of M/s. Singhal Enterprises Private Limited is located in Taraimal Village, Tamnar Tehsil, Raigarh District, Chhattisgarh is for Expansion of Steel Plant by enhancing Sponge Iron Plant from 2,83,500 TPA to 4,93,500 TPA; Sinter plant from 2,59,000 TPA to 5,18,400 TPA; Pig Iron through Blast Furnace from 87,500 TPA to 3,12,500 TPA; Billets through IF from 2,16,000 TPA to 4,56,000 TPA, Rolled products through Rolling Mill from 90,000 TPA to 4,20,000 TPA, Power generation through WHRB of DRI Kilns -16 MW to 40 MW & Pelletization Plant of 2x0.6 MTPA capacity with existing Ferro Alloy plant (Si-Mn) of 10,800 TPA, Coal washery of 1,50,000 TPA and CPP (FBC Boiler) of 48 MW.

51.1.4 Environmental Site Settings:

S.No.	Particulars	Details	Remarks
i.	Total land	137 ha. (338.53 Acres) [Private Land: 137 ha.]	Land use: Industrial
ii.	Land acquisition details as per MoEF&CC, O.M. dated 7/10/2014	Proposed expansion will be carried out in existing project area of 137 ha. Total existing land of 137 ha is acquired and is under the possession of M/s. Singhal Enterprises Pvt. Ltd. No additional land is required for proposed expansion.	
iii.	Existence of habitation &	**Project site:** Nil	R&R not required.

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td>involvement of R&R, if any.</td><td>Study Area:<table><tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr><tr><td>Taraimal</td><td>0.80</td><td>SE</td></tr></table></td><td></td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of the project site</td><td><table><tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr><tr><td>1</td><td>22°02'21.96"N</td><td>83°21'03.20"E</td></tr><tr><td>2</td><td>22°02'17.15"N</td><td>83°21'10.51"E</td></tr><tr><td>3</td><td>22°02'14.46N</td><td>83°21'29.74"E</td></tr><tr><td>4</td><td>22°02'10.03"N</td><td>83°21'31.47"E</td></tr><tr><td>5</td><td>22°02'10.03"N</td><td>83°21'40.51"E</td></tr><tr><td>6</td><td>22°02'12.54"N</td><td>83°21'48.40"E</td></tr><tr><td>7</td><td>22°02'10.61"N</td><td>83°21'57.44"E</td></tr><tr><td>8</td><td>22°02'03.88"N</td><td>83°22'06.29"E</td></tr><tr><td>9</td><td>22°02'02.15"N</td><td>83°21'53.98"E</td></tr><tr><td>10</td><td>22°01'30.60"N</td><td>83°22'05.91"E</td></tr><tr><td>11</td><td>22°01'40.99"N</td><td>83°21'32.63"E</td></tr><tr><td>12</td><td>22°01'42.33"N</td><td>83°21'18.39"E</td></tr><tr><td>13</td><td>22°01'48.68"N</td><td>83°21'12.04"E</td></tr><tr><td>14</td><td>22°01'49.64"N</td><td>83°21'06.85"E</td></tr></table></td><td>--</td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>275 m AMSL</td><td>--</td></tr>
<tr><td>vi.</td><td>Involvement of Forest Land, if any</td><td>Nil</td><td>--</td></tr>
<tr><td>vii.</td><td>Water body exists within the project site as well as study area</td><td><u>Project Site:</u> Nil

<u>Study area:</u><table><tr><th>Water Body</th><th>Distance</th><th>Direction</th></tr><tr><td>Kelo river</td><td>2.7</td><td>East</td></tr><tr><td>Banjari Nala</td><td>0.44</td><td>NE</td></tr><tr><td>Gerwani Nala</td><td>0.72</td><td>SW</td></tr></table>Few other ponds and Nalas are present within study area of the plant.</td><td></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
However, existence of Reserved Forests (RF) RF and Protected Forests (PF) and movement of Elephants is observed within 10 Kms. radius of the plant, as per the secondary source. Conservation plan is prepared.
Taraimal RF: Adjacent to the West and South plant boundary
Barkachaar: RF 3.0 Km/ East,
Rabo RF: 6.3 Km/ WSW,
RF: 8.0 Km/ NNE,
Samaruna RF: 5.5 Km/ North,
Pajhar PF: 5.0 Km/ NE</td><td>Conservation plan is approved by PCCF with budget of Rs.57 Lakhs to be spent over a period of 5 years.</td></tr>
</table>

S.No.	Particulars	Details	Remarks
		Urdana RF: 4.2 Km/ SSE	

51.1.5 The project was originally accorded EC on 19/02/2008. Subsequently, EC was amended on 21/12/2010 & 23/03/2011. Thereafter, another expansion EC was accorded vide lr.no. J-11011/195/ 2007 – IA II (I) dated 23/07/2018 and amended on 06/03/2019. Consent to Operate for the existing unit was accorded by Chhattisgarh Environment Conservation Board (CECB) vide lr. no. 9605 /TS/CECB/ 2021 dated 04/02/2021, which is valid up to 30/11/2023.

51.1.6 Implementation status of the existing EC:

S No	Plant Equipment/ Facilities	Units	As per EC dated 23/07/2018 and EC amendment dated 06/03/2019	Implementation Status as on 23/11/2021	As per CTO renewal dated 04/02/2021
1	DRI Kilns [Sponge Iron]	TPA	2,83,500	2,53,500 (in operation) 30,000 (under implementation)	2,53,500 (1x25 + 3x40 + 7x100) TPD DRI Kiln
2	Induction furnace with CCM & LRF [Hot Billets / MS Billets]	TPA	2,10,000	1,14, 000 (in operation) 96,000 (under implementation)	1,14,000 (90,000 to Hot charging for rolled product and 24,000* MS Billets)
3	Rolling Mills (with Hot charging) [Rolled products]	TPA	90,000	90,000 (in operation)	90,000*
4	Ferro Alloy [Si-Mn]	TPA	10,800	10,800 TPA (in operation)	10,800
5	Sinter Plants [Sinter]	TPA	2,59,200 (1 x 50 m^2)	Yet to be Implemented	--
6	Blast Furnaces [Pig Iron]	TPA	87,500 (1 x 125 m^3)	Yet to be Implemented	--
7	Coal Washery [Washed Coal]	TPA	1,50,000	(Applied for CTO & awaiting for the same)	--
8	Power Plant through WHRB	MW	16	14 (in operation) 2 (yet to be Implemented)	14(8 + 6*)
9	Power Plant through FBC Boiler	MW	48	33 (in operation) 15 (yet to be Implemented)	33 (18+ 8+ 7*)

*Note: * For 24,000 TPA MS Billets, 90,000 TPA Rolling Mill, 6 MW WHRB and 7 MW FBC Power plant validity is for one year from first date of month of commissioning of facility or 30/11/2023 whichever is earlier.*

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

S No	Unit (Products)	Existing Plant (in Operation) As per EC dated 19/02/2008 and its amendments dated 21/12/2010 & 23/03/2011 (A)	EC dated 23/07/2018 &06/03/2019 (B)	Present Expansion Proposal (C)	Production capacities after Proposed Expansion (A+B+C)
1.	DRI Kilns [Sponge Iron]	2,53,500 TPA	30,000 TPA **(Under operation)**	2,10,000 TPA (2x350TPD)	4,93,500 TPA
2.	Induction furnace with CCM & LRF [Hot Billets / MS Billets]	96,000 TPA	1,20,000 TPA	2,40,000 TPA (4x20 MT)	4,56,000 TPA
3.	Rolling Mills (*With Hot charging*) [Rolled products]	--	90,000 TPA* (300 TPD) **(In operation)**	3,30,000 TPA (1,20,000 TPA* + 2,10,000 TPA) (The existing 300 TPD will be upgraded to 1x700 TPD & New 1x700 TPD unit)	4,20,000 TPA
4.	Ferro Alloy [Si-Mn]	10,800 TPA	--	--	10,800 TPA
5.	Sinter Plants [Sinter]	--	2,59,200 TPA (1x50 m^2) **(Yet to be implemented)**	2,59,200 TPA (1 x 50 m^2)	5,18,400
6.	Blast Furnaces [Pig Iron]	--	87,500 TPA (1x125 M^3) **(Yet to be implemented)**	2,25,000 TPA (1 x 300 M^3)	3,12,500 TPA
7.	Coal Washery [Washed Coal]	--	1,50,000 TPA **(Applied for CTO & awaiting for the same)**	--	1,50,000 TPA
8.	Power Plant through WHRB	8 MW	8 MW **(in operation) (2 MW Yet to be implemented)**	2x8 MW from DRI + 8.0 MW from MBF (from Existing & proposed)	40 MW
9.	Power Plant through FBC Boiler	1x8 MW & 1x18 MW	7 MW **(in operation) (1x15 MW Yet to be implemented)**	--	48 MW

Note:
*** The CTO of 90,000 TPA* (300 TPD) Rolling mill has been obtained and in operation. After Obtaining E.C. for present expansion proposal this 300 TPD Rolling mill will be upgraded to 700 TPD (2,10,000 TPA) capacity.**

51.1.8 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	Quantity (TPA)	Sources	Distance (in Km)	Mode of Transport
For manufacturing Pellets – 2 x 0.6 MTPA				
Beneficiated Iron Ore	13,44,000	Odisha & NMDC Chhattisgarh	300 to 600	By rail & road (through covered trucks)
Bentonite	9,600	Local area	50	By road (through covered trucks)
Limestone	72,000	Janjgirchampa, CG	120	By road (through covered trucks)
Coal (Bituminous)	12,000	Chhattisgarh	100	By rail & road (through covered trucks)
Fuel (Anthracite Coal)	52,800	Chhattisgarh	100	By rail & road (through covered trucks)
For manufacturing Sponge Iron – 2,10,000 TPA				
Iron ore / Pellets	3,36,000 3,15,000	Oraghat Mines, Sanindpur Mines, Odisha in plant generation	300-400	By rail & road (Through covered trucks) conveyers
Coal – Indian	2,73,000	SECL Chhattisgarh / MCL Odisha	100-150	By rail & road (Through covered trucks)
Coal – Imported	1,74,720	Indonesia / South Africa / Australia	700	Through sea route, rail route & by road
Dolomite	10,500	Local area	50	By road (through covered trucks)
For manufacturing Sinter – 2,59,200 TPA				
Iron ore fines	2,30,688	Oraghat Mines, Odisha / Sanindpur Mines, Odisha	300-400	By rail & road (through covered trucks)
Limestone	18,144	Janjgirchampa, CG	120	By rail & road (through covered trucks)
Dolomite	20,736	Local area /Janjgirchampa, CG	50-120	By rail & road (through covered trucks)
Coke breeze	15,552	Chhattisgarh	250-300	By road (through covered trucks)
Burnt Lime Powder	6,480	Raigarh / Durg	300-350	By road (through covered trucks)
Mill scale	6,600	Nearby Industries	20	By road (through covered trucks
Flue dust	31,104	In plant generation	---	through covered conveyors
Sinter plant return	25,920	In plant generation	---	through covered conveyors
Return fines from BF	23,328	In plant generation	---	through covered conveyors
For manufacturing Pig Iron –2,25,000 TPA				
Sinter	2,97,000	In plant generation	---	through covered conveyors
Iron ore lump	2,02,500	Oraghat Mines, Sanindpur Mines, Odisha	300-400	By rail & road (through covered trucks)
LAM coke	78,750	Vizag.	700	Through sea route, rail route & by road
Quartzite	5,625	CG / MP region	200-400	By rail & road (through covered trucks)
Manganese ore	3,375	MOIL, Maharashtra	600	By rail & road (through covered trucks)

Raw Material	Quantity (TPA)	Sources	Distance (in Km)	Mode of Transport
For manufacturing Hot Metal / MS Billets – 2,40,000 TPA				
Sponge Iron	2,42,000	In plant generation	---	By Conveyor
Pig iron / Scrap	36,000	In plant generation /Raigarh	0-50	By conveyor / By road (Through covered trucks)
Ferro Alloys	12,000	Raigarh	20-40	By road (through covered trucks)
For manufacturing Rolled Products –3,30,000 TPA				
Hot Metal / MS Billets	3,63,000	In plant generation	---	Covered Conveyor
LDO / LSHS	10,800 KL	Local	50	By Road through tanker

51.1.9 The existing water requirement is 6735 m^3/day. Water requirement is obtained form Chuikansa Nallah (a tributary of Kelo river) and permission for the same has been obtained from Water Resources Department of Government of Chhattisgarh vide letter no. 342/WRD/05/D-4in June, 2008 for a quantity of 5.42 MCM/ annum (14,850 KLD). The water requirement for the proposed expansion project is estimated as 2968 m^3 /day. The existing permission is sufficient for expansion project also.

51.1.10 Existing power requirement of 52.5 MW is obtained from Captive Power Plant and State grid. Power requirement for the existing & present proposal is estimated as 100.6 MW, out of which 88 MW will be obtained from Captive Power Plant & remaining 12.6 MW will be imported from State Grid.

51.1.11 Baseline Environmental Studies:

Period	**01/10/2020 to 31/12/2020**
AAQ parameters at 8 locations (Min and max)	$PM_{2.5}$ =21.7 to 51.2 µg/m^3 PM_{10} = 36.8 to 88.2 µg/m^3 SO_2 = 7.5 to 22.8 µg/m^3 NO_2 = 8.3 to 35.1 µg/m^3 CO= 425 to 1495 µg/m^3
Incremental GLC level	PM= 2.48 µg/m^3 (1550 m in S) SO_2 = 14.9 µg/m^3 (1550 m in S) NO_x= 13.35 µg/m^3 (1550 m in S) CO= 4.9 µg/m^3 (1550 m in S)
Ground water quality at 8 locations	pH:.7.0 to 7.8, TSS: 0.2 to 0.5 mg/l, TDS: 319 to 556 mg/l, Total hardness:208 to 300 mg/l, Chlorides:134 to 188 mg/l, Fluoride**:** 0.42 to 0.75 mg/l Heavy metals (Iron -Fe): 0.014 to 0.19 mg/l
Surface water quality at 4 locations	pH: 7.2 to 7.8, DO: 3.9to 6.5mg/l, BOD: 2.2 to 2.7 mg/l TDS: 177 to 308mg/l, Chlorides: 88to 142mg/l; Sulphates: 54 to 94 mg/l

<table>
<tr><td>Noise levels Leq (Day and Night)</td><td>42 to 63 dBA for day time; 34 to 56 dBA for night time</td></tr>
<tr><td>Traffic assessment study findings</td><td>Traffic study has been conducted at SH-1which is adjacent to the plant site.
Transportation of raw material, fuel & finished product will be done 100% by road.
Existing PCU is 614 PCU/hr on SH-1 and existing level of service (LOS) is:
<table>
<tr><th>Road</th><th>V Volume in PCU/hr)</th><th>C Capacity in PCU/hr)</th><th>Existing V/C Ratio)</th><th>LOS</th></tr>
<tr><td>SH-1</td><td>614</td><td>833</td><td>0.73</td><td>D (Poor)</td></tr>
</table>
PCU load after proposed project will be 706.6 (614+ 92.6) PCU/hr and level of service (LOS) will be:
<table>
<tr><th>Road</th><th>V Volume in PCU/hr)</th><th>C Capacity in PCU/hr)</th><th>Proposed V/C Ratio)</th><th>LOS</th></tr>
<tr><td>SH-1</td><td>706.6</td><td>833</td><td>0.84</td><td>E (Very Poor)</td></tr>
</table>
Conclusion: The level of service will be reduced from Level ‘D’ (Poor) to level ‘E’ (very Poor) after including additional traffic due to proposed project.</td></tr>
<tr><td>Flora and fauna</td><td>No Endemic, Rare, Endangered and Threatened (RET) species of flora were found in the study area.
In buffer zone Elephant (Elephas maximus) schedule -I species is present.
Conservation Plan has been approved by PCCF, Raipurvides letter dated 14/09/2021 and allotted budget of Rs.57 Lakhs to be spent over a period of 5 years.</td></tr>
</table>

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

S No	Waste	Quantity (TPA)			Method of disposal	Agreement Details of Disposal
		Existing	Proposed	Total		
1	Ash from Pellet Plant	--	11,400	11,400	used in own brick manufacturing	Own Brick making unit
2	Ash from DRI	51,030	37,800	88,830	used in own brick manufacturing unit and remaining quantity will be given to other brick manufacturers.	Own Brick making unit
3	DoloChar	85,050	42,000	1,27,050	is being utilized in FBC boiler as fuel. Similar practice in expansion also.	Captive consumption
4	Wet scrapper sludge	14,075	10,500	24,575	Brick manufacturing	Own Brick making unit

S No	Waste	Quantity (TPA)			Method of disposal	Agreement Details of Disposal
		Existing	Proposed	Total		
5	Kiln Accretion Slag	2,835	2,100	4,935	Will be given to Road contractor	Willingness letter given by Rakesh Kumar Agarwal (Road Contractor)
6	FES & Bag filter dust	6,470	24,562	31,032	will be utilized in the sinter plant.	Captive consumption
7	Sinter returns	23,860	23,860	47,720	Will be recycled to process again	Captive consumption
8	Granulated slag	26,250	67,500	93,750	Will be given to Road contractor	Willingness letter given by Rakesh Kumar Agarwal (Road Contractor)
9	GCP sludge	30	72	102	will be used in Sinter Plant	Captive consumption
10	Slag from SMS*	21,600	24,000	45,600	Slag will be crushed and after recovery of iron, will be given to Road contractor	Willingness letter given by Rakesh Kumar Agarwal (Road Contractor)
11	Mill Scale from Rolling Mill	1,800	6,600	8400	Will be reused in Ferro Alloy plant / Sinter Plant	Captive consumption
12	End Cuttings from Rolling Mill	2,700	9,900	12,600	Will be reused in Induction Furnace.	Captive consumption
13	Ash from Power Plant (with Indian coal)	1,64,749	--	1,64,749	is being given to local Fly Ash Bricks Manufacturer	Agreement entered with M/s. G.S. Fly ash Bricks, M/s. Bhanu Pratap Sahu, M/s. Shri Shakti Enterprises.
14	Ash from Power Plant (with Imported coal)	1,12,048	--	1,12,048	is being given to local Fly Ash Bricks Manufacturer	
15	Washery rejects (yet to implement)	42,000	--	42,000	Will be utilized in FBC boiler.	Captive consumption

Hazardous waste Generation:

1) Waste Oil: 30 KL/Annum
   Disposal: This will be stored in covered HDPE drums in a designated area and will be given to SPCB approved vendors.
2) Used batteries will be given back to the supplier under buy back agreement with supplier.

51.1.13 Public Consultation:

Date of advertisement	25/06/2021 & 27/06/2021
Name of newspapers	Local newspaper (Hindi) "Patrika Sarkar" National newspaper (English) "Times of India"
Date on which Public Hearing conducted	28/07/2021
Venue	Near Banjari Temple, Village-Taraimal, Tehsil-Tamnar,

	District-Raigarh (Chhattisgarh).
Attended by	Additional District Magistrate
Issues are	• Employment to Locals • Air, water and Soil Pollution Control measures • Protection of elephants • NGT case pending on project • Impact on crop yield • Additional facilities in schools • Relaying of Road • Social & infrastructural development activities

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

SNo	Major Activity Heads		Year of Implementation			Total Expenditure (Rs in Lakh)
			1st Year (Rs in Lakhs)	2nd Year (Rs. in Lakhs)	3rd Year (Rs. in Lakhs)	
A). Based on Need Based & SIA Study						
1	**Community & Infrastructure Development**					
	i) Construction of public toilets	Physical Nos. & village	2 nos. in Taraimal (V) 2 nos. Gerwani (V)	2 nos. in Saraipali (V) 2 nos. in Delari (V)	2 nos. in Samaruma (V) 2 nos. in Shivpuri (V)	12
		Budget in Lakhs	4	4	4	
	ii) Providing LED Street lighting with solar panels	Physical Nos. & village	5 nos. in Taraimal (V) 5 nos. Gerwani (V)	5 nos. in Saraipali (V) 5 nos. in Delari (V)	5 nos. in Samaruma (V) 5 nos. in Shivpuri (V)	6
		Budget in Lakhs	2	2	2	
					Total	**18**
2	**Education**					
	i). Construction of toilets in surrounding schools & its maintenance	Physical Nos. & village	3 nos. in Higher secondary school, Taraimal Village 3 nos. Gerwani Village	3 nos. in AmidihVillage 3 nos. in Shivpuri Village	3 nos. in BarpaliVillage 3 nos. in DelariVillage	18.0
		Budget in Lakhs	6.0	6.0	6.0	
	ii) Sports kits for schools	Physical Nos. & village	in Taraimal Village in Gerwani Village	inAmidihVillage& in Samaruma Village	in Barpali Village in Delari Village	6.0
		Budget in Lakhs	2.0	2.0	2.0	
					Total	**24.0**
3	**Distribution of tricycles for handicapped**	Physical Nos. & village	5 nos. of tricycles in Taraimal Village 5 nos. of tricycles in Gerwani Village	5 nos. of tricycles in Samaruma Village 5 nos. of tricycles in in Amidih Village	5 nos. of tricycles in Saraipali Village 5 nos. of tricycles in Barpali Village	**3.0**
		Budget in Lakhs	1.0	1.0	1.0	

SNo	Major Activity Heads		Year of Implementation			Total Expenditure (Rs in Lakh)
			1st Year (Rs in Lakhs)	2nd Year (Rs. in Lakhs)	3rd Year (Rs. in Lakhs)	
4	**RWH pits in the surrounding villages & De-siltation of ponds**	Physical Nos. & village	1 no. in Government Primary School in Taraimal Village 1 no. at Anganwadi Kendra of Amlidih village	Increase of 1.0 m depth in storage due to De-siltation of pond in Jamadbari Village (22° 1'14.12"N, 83°19'56.25"E) & increase of 1.0 m depth in storage due to De-siltation of pond in Shivpuri Village (22° 0'35.67"N, 83°21'48.24"E)	Increase of 1.0 m depth in storage due to De-siltation of pond in Chiraipani Village (21°58'38.27"N, 83°22'7.95"E) & increase of 1.0 m depth in storage due to De-siltation of pond in Jhingolpara Village (22° 4'47.77"N, 83°22'56.57"E)	62
		Budget in Lakhs	2	30	30	
5	Financial assistance to Self Help Groups (SHG) of women and providing training in sewing, making incense sticks, embroidery	Physical Nos. & village	Women SHG -10 groups in Taraimal & Gerwani Villages	Women SHG -10 groups in Samaruma & saraipali Villages	Women SHG -10 groups in Shivpuri &Punjipathra Villages	15
		Budget in Lakhs	5	5	5	
6	Primary Health Centre with Ambulance	Physical Nos. & village	---	Primary Health Centre with Ambulance facility in Gerwani Village	Primary Health Centre with Ambulance facility in Samaruma Village	100
		Budget in Lakhs	---	50	50	
7	**Provision of drinking water facility**	Physical Nos. & village	Drinking water facility in Taraimal & Gerwani Villages	Drinking water facility in Saraipali & Delari Villages	Drinking water facility in Shivpuri &Punjipathra Villages	**18**
		Budget in Lakhs	6	6	6	
					TOTAL (A)	240
B). Based on Public Consultation/Hearing						
1.	Construction of additional classrooms in surrounding schools	Physical Nos. & village	5 nos. of Rooms in Higher Secondary School Taraimal Village	5 nos. of Rooms in Higher Secondary School Saraipali Village	5 nos. of Rooms in Higher Secondary School Samaruma Village	75
		Budget in Lakhs	25	25	25	
2	For relaying of	Physical	---	700 m length of	---	35

SNo	Major Activity Heads		Year of Implementation			Total Expenditure (Rs in Lakh)
			1st Year (Rs in Lakhs)	2nd Year (Rs. in Lakhs)	3rd Year (Rs. in Lakhs)	
	Roads / maintenance of Roads	Nos. & village		Road from the plant to Taraimal Village		
		Budget in Lakhs	---	35	---	
3	**Impart training to the local villagers for skill development.** a) DISHA Centre" along with necessary infrastructure for various vocational training program for employment generation in association with *National Skill Development Mission* (Automobile Repair, Welding, Electrical, Computer Hardware, Soft skills like computer programs etc.)	Physical Nos. & village	Vocational training to unemployed youth 30 nos. from Taraimal Village 30 nos. from Gerwani Village 30 nos. from Saraipali Village 30 nos. from Punjipathra Village	Vocational training to unemployed youth 30 nos. from Taraimal Village 30 nos. from Gerwani Village 30 nos. from Saraipali Village 30 nos. from Punjipathra Village	Vocational training to unemployed youth 30 nos. from Taraimal Village 30 nos. from Gerwani Village 30 nos. from Saraipali Village 30 nos. from Punjipathra Village	90
		Budget in Lakhs	30	30	30	
					Total (B)	**200**
					Grand Total (A+B)	**440**

51.1.14 The capital cost of the expansion project is **Rs.577 Crores** and the capital cost for environmental protection measures is proposed as **Rs.86.4 Crores**. The annual recurring cost towards the environmental protection measures is proposed as **Rs.9.63 Crores**. The employment generation from the proposed expansion project is **750 Nos.** The details of cost for environmental protection measures is as follows:

SNo	Particulars	Capital Cost (Rs.in Crores)				Recurring Cost/ Annum (Rs.in Crores)
		2022-2024	2024-2026	2026-2028	Total	
1.	**Air Emission Management**	31.68	46.18	1.5	**79.36**	7.831
2.	**Wastewater Management**	0.62	0.62	0.0	**1.24**	0.214
3.	**Solid waste Management**	0.73	0.02	0.5	**1.85**	0.725
4.	Greenbelt development, RWH etc.	0.05	---	---	**0.05**	0.02

SNo	Particulars	Capital Cost (Rs.in Crores)				Recurring Cost/ Annum (Rs.in Crores)
		2022-2024	2024-2026	2026-2028	Total	
5.	Noise Management	0.2	---	---	**0.2**	0.10
6.	RWH in Plant	0.05	---	---	**0.05**	0.005
7.	Fire Safety Systems	1.0	0.5	---	**1.5**	0.15
8.	**Environmental Monitoring**					
	• CEMS	0.25	0.25	---	0.5	0.01
	• CAAQMS	0.4	0.4	0.4	1.2	0.24
	• Environment Monitoring	---	---	---	---	0.10
	• Performance monitoring of APCS	---	---	---	---	0.01
9.	**Occupational Health & Safety**	0.10	0.35	---	**0.45**	0.225
	Sub Total (A)	**35.08**	**48.92**	**2.4**	**86.4**	**9.63**
10.	Addressed to the Public consultation concerns	2.79	1.61	---	4.40	----
	Sub Total (B)	**37.87**	**50.53**	**2.4**	**90.8**	**----**
11.	**Budget for Conservation plan ---------- (C)**	0.335	0.179	0.056	0.57	**----**
	GRAND TOTAL (A+B+C)	**38.205**	**50.709**	**2.456**	**91.37**	**----**

51.1.15 Existing green belt has been developed in 51 ha. area which is about 37.2% of the total project area of 137 Ha. with total sapling of 1,30,536 Trees. Proposed greenbelt will be developed in 1.0 Ha. Thus, total of 52 ha area (37.9% of total project area) will be developed as greenbelt. Total no. of 3000 saplings will be planted and nurtured in 1.0 hectares within 1 year from the date of receipt of EC as a compensatory plantation against 600 numbers of trees to be transplanted from existing green belt.

51.1.16 Summary of court case related to the project under consideration is given as below:
Application filed before the Hon'ble National Green Tribunal (NGT), Central Zone Bench, Bhopal vide Original Application No. 55/2021 (CZ) under Section 18 (1) read with 14,15,16 and 17 of the NGT Act, 2010 on 11/07/221 by JilaBachao Sangharsh Morcha (Petitioner) vs Union of India & others (Respondents) & M/s. Singhal Enterprises Pvt. Ltd. is Respondent No. 5.

The Issues raised are

i. Non-compliance of terms of conditions of Environment clearance,
ii. Illegal disposal and illegal storage of fly ash in the green belt,
iii. Disturbing ecology of protected area,
iv. The plant is in operation over the land, not owned by the Company and no change of land use, without assessment of carrying capacity of the area,
v. Withdrawal of ground water illegally without the permission of Central Ground Water Authority (CGWA) and in violation of terms of conditions of Environmental Clearance.

Brief on application filed before the Hon'ble NGT:

Application filed by the applicant vides no. 55/2021 (CZ) on 11/07/2021. Honorable NGT has issued Notice to M/s. Singhal Enterprises Pvt. Ltd. on 29/07/2021 to appear before the honorable NGT in person on 22/09/2021.

Honorable NGT has directed the Respondents to submit their reply within six weeks by way of E-filing portal. Further, Honorable NGT has called for a report on the matter in issue in present application from a Joint Committee consisting of following members and directed the Joint Committee to submit a factual and action taken report within six weeks:

i. One representative from the Ministry of Environment, Forest and Climate Change.
ii. One representative from Chhattisgarh Environmental Conservation Board.
iii. One representative from Central Pollution Control Board.
iv. One representative from SEIAA, Chhattisgarh.

The joint committee has visited the site on 27-28th August, 2021 and accordingly report was submitted on 20/10/2021. The observation and recommendation of the joint committee:

Observation of the Joint committee:

i. The industry claims ownership of 137 hectares of land out of which about 74.836 hectares is in the name of M/s. Singhal Enterprises and rest of the land is in the names of Directors of the company for which industry has made resolution in the board meeting of its Directors. Copy of the same submitted to joint committee.
ii. The industry has at present 13.106 hectare diverted land for industrial purpose and applied for diversion of 13.147 hectare and 24.69 hectare. Document related with diversion and receipt of payment of diversion fee is enclosed. The issue of diversion is related with revenue department of the state and its relevance with EC is the policy matter, hence IRO, Raipur has requested Member Secretary, IA Division on 09/09/2021 seeking guidance on the above said subject. The same shall be informed accordingly to the committee.
iii. The committee has gone through the inspection reports of MoEF&CC dated 20/05/2017, 06.06.2018, 13.12.2020 and 02.03.2021. The report reveals about green belt development in more than 33 percent of the area. The committee has also observed during field visit that green belt has been developed in front portion of the premises as well as towards boundary wall near forest area. Plantation of new saplings were also observed in plant process area. The committee is in opinion that industry has developed required green belt as per EC condition.
iv. Solid Waste Management was found in accordance with MoEF&CC notification dated 30thMay, 2008.The industry has installed a fly ash Brick making plant of capacity 30,000 numbers per day in the premises. Kiln accretion was found being used in road construction inside the plant. Char is used in AFBC boiler. Bottom ash was found stored inside premises.
v. The committee during visit in Forest area did not observe any fly ash dumping in forest area. The same has also been reported by the Ranger, Tamnar, Forest Department that no-fly ash has been dumped in forest area and no forest land has been encroached by the industry.
vi. The monitoring of source emission and fugitive emission has been conducted jointly by CPCB and CECB on 27- 28thAugust, 2021. The results were found within prescribed limit. At the time of visit operational status of online continuous

emission monitoring system and continuous ambient air quality monitoring system was also verified and found operational.

vii. During inspection housekeeping in the plant premises was not found satisfactory and needs improvement.

viii. The Joint Committee discussed and prepared a comprehensive report in the matter which is given below:

S No	Objections by applicant	Field status
1	**Ownership of Land**: Unit claims that the proposed land about 137 Hectares is owned by Company since inception 2000, it's not true, Khasra of proposed land obtained from Revenue Department dated 3 February 2021 clearly states that only 51.470 Hectares (38%) is owned by Company and rest 68% land is owned by other people. Company has never provided the papers of land in its name.	The industry had mentioned the ownership of 137 Hectares of land in the proposal submitted for EC to MoEF&CC. In this context the details of land as per report obtained from SDM (R), Gharghoda is as under: 1. The land registered in the name of M/s. Singhal Enterprises is about 74.836 Hectares. Out of which the mutation of 14.516 Hectares land is under process. 2. The land registered in the name of Directors of the Industry is about 62.583 Hectares (**i**-Shree P.D. Agrawal-15.73 ha,**ii**-Shree Sanjay Agrawal-35.951 Ha, **iii**- Shree Ajay Agrawal – 9.661 Ha,**iv**- Shree Sanjay & Shree Ajay Agrawal – 1.241 Ha) Hence the total land under possession of the industry is 137.469 Hect.
2	**Diversion of Land**: Unit claims that entire 137 Hectares land is diverted for industrial purpose since inception 2000, it's not true, as enquired verbal from Patwari/RI it was reported that only 13 Hectares i.e., 10% of total land is diverted. No paper related with diversion of the land 137 hectares nor any receipt of payments of diversion fees since in caption 2000 are not attached by the Company.	The industry has at present 13.106 Hectare diverted land and applied for Diversion of 13.147 Hectare and 24.769 Hectare Since, this is the policy matter, IRO, Raipur has also sent a letter to the Member Secretary, IA Division on 09/092021 seeking guidance on the above said subject. The same shall be informed accordingly to the committee.
3	**Ownership of 3 different companies/plants at same place adjoining each other**: Unit with mala field in tension kept Respondents 1 to 4 in dark regarding same ownership/directorship of three different companies/plants situate dad joining to each other. Company must have informed in all applications for clearances that they under same direct or ship owns two more plants adjoining to the proposed unit. No information regarding other units under same managements engaged in manufacturing of same products located ad joining to the unit provided by the company. Directors of the company had proposed expansion in all three companies/plants. Public hearing is organised for only one plant of Respondent No.5 rest two plants are exempt from public clearing	The issue does not have environmental relevance in the matter and moreover M/s. Singhal Enterprises is the only respondent.
4	**Verification of old lay out plan**: Respondent no. 5 had submitted layout plan while applying for environment clearance in 2016 stating green belt of 51 Hectare as proposed and approved by Ministry while according clearance to the unit. Layout plan submitted	**i.** IRO Nagpur Office has inspected the plant on 20/05/2017 and the observations as follows: "The PP has informed that green belt has been developed in the 50 ha of land in their premises. However, growth of vegetation was observed to be stunted which is likely due to stacking of

S No	Objections by applicant	Field status
	was not as per actual position at site. Unit has misled the respondent no. 1 to 4 by providing false lay out plan, area marked as green belt to comply the condition of clearance is used as illegal dumping yard of fly ash, Slag and other solid wastes. No verification of said lay out plan, plants/structures/green belt present in actual is done by Respondents 1to4. No area demarcated for expansion. No road sand to her structures related to housekeeping and save environment are not constructed as proposed. Housekeeping in the unit is totally mess. Entire premises is filled with Dust, Fly ash, Slag, other suspended particles. Solid Waste, Fume etc. Not a single inch of land is found clean.	emissions on the leaves of the impending with the process of photosynthesis and transpiration. The details of number of seedlings and area planted in the premises have been made available by the PP. During the inspection, it was observed that there is still scope for the plantation in the premises of PP. It was reported that from the year 2001-2002 to 2016- 2017 a total number 198900 plantation has been done out which 71151 (Approx) plants has survived. (EC no. J.11011/195/2007-IA.II (I) dated 19/02/2008 and letter dated 21/12/2010 and 23/03/2011). **ii.** IRO Nagpur Office has inspected the plant on 06/06/2018 and the observations as follows: "The total area of the premises of the PP is approximately 131 ha, out of which green belt development works have been reported to be maintained over an area of 50.0 ha by undertaking plantation of approximately 1,23,5000 plants. It was further observed that pursuant to the observation of the Regional Office, during its visit held in July 2017, the PP has undertaken plantation over additional area of approximately 1.0 ha wherein the PP has planted species like Ashoka, Petloforum, Casia, Amla, Karanj, etc. in their premises. It was further observed that the PP is undertaking levelling and other preparatory works for undertaking plantation during the coming monsoon season. The PP has informed that they are planning to plant nearly 5,000 trees in the coming monsoon seasons. Plantation work will be undertaken in the blank areas as well as in the form casualty replacement. **iii.** IRO Nagpur again inspected the plant on 13/12/2020 and the observations are as follows: "PP has developed greenbelt in 50 Ha. Out of total 137 Ha. Within the existing plant premises which is more than 33% of the total area. As on date PP has planted more than 1, 23,500 Nos of trees including some fruit bearing species and proposed to plant another 3000 Nos during upcoming monsoon. Photographs showing greenbelt in the plant premises &third-party verification of plantation report was submitted by the PP. **iv.** IRO Raipur has inspected the plant on 02/03/2021 the observation are as follows: "It was informed that 50 Ha of greenbelt has already been developed out of total 137 Ha. Within the existing plant Premises. Project authorities are directed to submit the plant layout plan with earmarking the plantation done in the 33% of the plant area. IRO Raipur has issued a Monitoring of Compliance status of EC Stipulation with vide letter No. 5-34/2008 (ENV)/126 dated 10/06/2021 to PP. PP have submitted the reply to this office on 30/08/2021,

S No	Objections by applicant	Field status
		which is not as per the stipulated observation made by this office. **v.** Additional information provided by the PP to the Joint Committee. Solid Waste Management was found in accordance with MoEF&CC notification dated 30/05/2008.The industry has installed a fly ash Brick making plant of capacity 30,000 numbers per day in the premises. Kiln accretion was found being used in road construction inside the plant. Char is used in AFBC boiler. Bottom ash is found inside premises *The industry should carryout detailed ground water study around bottom ash storage area in accordance with the notification. Housekeeping inside the plant premises needs to be improved.*
5	**Verification of New Lay out Plan**: Unit submitted new Lay out plan with application for expansion submitted on 2nd September 2020. It is totally mess. Unit does not have any fear of any authority or public. While going through said layout plan duly compared with old lay out plan it is clearly seen that area proposed for green belt (claimed as already developed Green Belt consisting 81151 tree saliva out of 208900 planted) is reduced and proposed expansion is placed/proposed over said already developed green belt. This means unit in tended to expand its plant overall ready exist green belt by removing it. This type of blunder mischief is being played by Respondents regularly since beginning of its inception. A strict lesson and penal action must be taken against them to avoid mischiefs played by respondent No. 5 and other units in locality.	**i.** IRO Nagpur Office has inspected the plant on 20/05/2017 and the observations as follows: "The PP has informed that green belt has been developed in the 50 ha of land in their premises. However, growth of vegetation was observed to be stunted which is likely due to stacking of emissions on the leaves of the impending with the process of photosynthesis and transpiration. The details of number of seedlings and area planted in the premises has been made available by the PP. During the inspection, it was observed that there is still scope for the plantation in the premises of PP. It was reported that from the year 2001-2002 to 2016- 2017 a total number 198900 plantation has been done out which 71151 (Approx) plants has survived. (EC NO. J.11011/195/2007-IA.II (I) dated 19/02/2008 and letter dated 21/12/2010 and 23/03/2011). **ii.** IRO Nagpur Office has inspected the plant on 06/06/2018 and the observations as follows: "The total area of the premises of the PP is approximately 131 ha, out of which green belt development works have been reported to be maintained over an area of 50.0 ha by undertaking plantation of approximately 1,23,5000 plants. It was further observed that pursuant to the observation of the Regional Office, during its visit held in July 2017, the PP has undertaken plantation over additional area of approximately 1.0 ha wherein the PP has planted species like Ashoka, Petloforum, Casia, Amla, Karanj, etc. in their premises. It was further observed that the PP is undertaking levelling and other preparatory works for undertaking plantation during the coming monsoon season. The PP has informed that they are planning to plant nearly 5,000 trees in the coming monsoon seasons. Plantation work will be undertaken in the blank areas as well as in the form casualty replacement.

S No	Objections by applicant	Field status
		iii. IRO Nagpur again inspected the plant on 13/12/2020 and the observations are as follows: "PP has developed greenbelt in 50 ha out of total 137 Ha. Within the existing plant premises which is more than 33% of the total area. As on date PP has planted more than 1,23,500 Nos of trees including some fruit bearing species and proposed to plant another 3000 Nos during upcoming monsoon. **iv.** IRO Raipur has inspected the plant on 02/03/2021 the observation are as follows: "It was informed that 50 Ha of greenbelt has already been developed out of total 137 Ha. Within the existing plant Premises. Project authorities are directed to submit the plant layout plan with earmarking the plantation done in the 33% of the plant area. IRO Raipur has issued a Monitoring of Compliance status of EC Stipulation with vide letter No. 5-34/2008 (ENV)/126 dated 10/06/2021 to PP. PP has submitted the reply to this office on 30/08/2021, which is not as per the stipulated observation made by this office. **v.** In accordance with EC Project proponent should ensure availability of 33 percent land for green belt development and submit details of measurement for the same.
6	**Disposal of Fly Ash and other Solid Waste**: Unit claims that 100% Fly Ash is disposed as per fly ash notification duly amended, submitted a letter of Cement plant attached in this connection but in fact the unit has not despatched any fly ash to any cement plant as it is very far from the unit and transportation is costly. Unit could not produce any documents related with transportation of Ash from plant to cement plant or other places permitted under fly ash notification duly amended. Unit disposed entire fly ash produced in nearby forest area without obtaining any permission from Respondents 1 to 4, local transporters use to lift fly ash from the unit and dump it in nearby reserve and protected forest. Three four big humps of fly ash and slag are seen in GIS and google imaginary of the plant over the area proposed for green belt. Storing or throwing of fly ash here and there in forest instead of disposal as per law is violation of all acts in force regarding environment conservation. Penal Action must be as certain in the matter.	The Ranger, Tamnar, Forest Department has submitted report that no fly ash has been dumped in forest area and no forest land has been encroached by the industry During visit committee also did not find fly ash dump in the forest area. Fly ash utilization report submitted by project proponent total generation of fly ash in year 2019-20 & 2020-21 is respectively 65148MT and 80472 MT and fly ash utilized in land filling and brick making 100% utilization has been done by project proponent utilization report submitted to CECB year 2009-10 to 2020-21. Observations about solid waste management have been presented in point number-04.
7	**Reserve and Protected Forest**: About 60% of area within 10 Km Radius of the unit is Reserved and Protected Forest. Toposheet attached Lot of suspended particles, ash and Fumigation impact damaged the Reserve and Protected Forest situated beside the unit and nearby. No plan to regular maintenance of	The Ranger, Tamnar Forest Department has submitted report that no fly ash has been dumped in forest area and no forest land has been encroached by the industry.

S No	Objections by applicant	Field status
	forest is made by the unit. Respondents are not taking care of the Reserve and Protected Forest situated in 10 Km Radius. Entire environment of the area inclusive of forests is badly damaged by Air pollution as well a sun authorised/ illegal discharge of solid waste/ Fly ash in the area.	
8	**Carrying Capacity:** Unit proposed expansion of the unit unto the tune of about 36 Lac Tons per annum for which unit will require movement of about 70 lac tons material per annum. On an average about 750 Trucks per day. Area Available in the unit and roads to the plant are not adequate to take care of such heavy quantity of material. Road conditions are poor and general public are facing lot of problems of damaged roads and regular Jam over road because of unit's trucks. A detailed assessment of carrying capacity of area must be done prior to award any further expansions well as operation in present plant also. Taraimal area within 10 Kms radius has heavy traffic of trucks and all conditions of roads, environment and living standards of general public are all badly affected with heavy pollution of units situated in area. NGT vide its order dated 24.06.2021 passed in OA 104 of 2018 stipulated that carrying capacity must be ascertain in the area and long-term measures must be under taken to protect environment. No further expansion in any plant nor any new establishment must be permitted in Tamnar and Gharghoda Block until and unless proper carrying plan and environment protection measures ascertained in this heavy polluted area for living of general public in area.	IIT, Kharagpur has submitted it carrying capacity study report of Raigarh Region in 2018 to CECB. Remark and recommendations made in the report is as 1. Regular monitoring of water quality of river, lake, ponds, tube well, underground water etc should be tested periodically through an organization of national repute and enlisted third party as notified by CPCB to ensure that toxic compounds are not present in the water bodies of Raigarh, the appropriate action plan should be taken after the review of reports. 2. The water carrying capacity in Raigarh may continue until 2041 as predicted from model up to acceptable values. That means, in next 10 years, there may not be a problem if similar water uses and recycling pattern continues. However, the decrease in comprehensive index for water is a concern and attempts may made to improve the comprehensive index for sustainable development. 3. In Raigarh region there are many small and medium scale sponge iron and steel industries. Sometimes fugitive emission causes the higher concentration of PM and it is essential to carry out the performance and capacity adequacy efficiency of existing pollution control devices by third party technical experts from organizations of national importance like IITs/NITs/CFTIs/CSIR Labs for minimization and provide recommendation for modification/alternation so that environment is not affected due to industrial activities. 4. The approach road needs to be cleaned regularly and accumulation of dust on road side or plant area should be completely eliminated. 5. Sewage drainage system is poor in few areas of Raigarh region and PHE department may be requested for appropriate delineation measures. 6. The concept of construction of Kelo Dam is appreciable to reserve the water. To meet the water demand and maintain the quality construction of similar dam may be planned in next 20 years. 7. Setting-up further new industrial development should not compromise the environmental quality in coming ten years. Only industries, which will be able to install ESP as dust pollution control

S No	Objections by applicant	Field status
		equipment and ETP with zero discharge concept only may be allowed to set-up.
9	**Monitoring the Compliance of terms and conditions of environment clearances accorded:** Respondents 1 to 4 had not taken care of regular monitoring of compliance of terms and conditions of clearances only once in last 20 years conducted inspection in May 2017. Lot of irregularities found during said inspection reported vide letter of inspection committee. Unit simply replied that all irregularities were taken care off and had regularised the compliance but no further inspection to check the regularisation of irregularities pointed out had been carried out by Respondent1to4. Separate detailed in section of authorised, experienced and responsible authorities with specific terms and conditions of clearance accorded to the unit must be conducted department wise so that compliance of terms and conditions of clearances and environment of the area must be maintained. Every concerned department must conduct separate detailed inspection and must verify all respective conditions.	**i.** Scientist- C of IRO Nagpur has inspected the plant on 20/05/2017 and issued a certified compliance report on 27/07/2017. Ministry has directed the IRO Nagpur office to re-inspect the plant and submit he updated certified compliance report; accordingly, IRO Nagpur has inspected the plant on 06/06/2018 and issued the updated certified compliance report on 07/06/2018. **ii.** The PP has requested IRO Nagpur to conduct the site visit and issue a certified compliance report on existing EC (J-11011/195/2007 – IA. II (I) dated 20/07/2018). Accordingly, Scientist –D of IRO Nagpur Office has conducted the site visit on 13/12/2020 and issued certified compliance report on 31/12/2020. PP has submitted the ATR to Scientist-D of IRO Nagpur office on 13/01/2021. Accordingly, Scientist-D of IRO Nagpur office has forwarded the ATR submitted by the PP to IA division, Ministry. **iii.** Scientist-C of IRO Raipur has conducted a random inspection on 02/03/2021 and issued the observation letter to PP on 10/06/2021 to submit the ATR within 30 days from the date of issuance of this letter. However, PP didn't submit the ATR in the time bound period to this office. Hence IRO Raipur has sent a Reminder letter to PP on 12/08/2021 to submit the ATR on observations made by this office. In response to the above letter issued by this office, PP has submitted the ATR dated 20/08/2021 received in this office on 30/08/2021. After analysing the ATR submitted by the PP, it was observed that out 18 observations made by this office 11 conditions were complied, 04 conditions were partially complied or in process and 03 conditions were not complied**.** **iv.** The Water Resources Department, Raigarh has provided the details of water bills paid by the industry in the year 2019-20 Rs. 3593667.00 and 2020-21 Rs. 5718330.00 information received from Water Resources Department. **v.** Information received from Transport Department daily heavy vehicle (trucks) movement from Raigarh city to Punjipathra is about 2500-3000. Letter received from RTO Raigarh. **vi.** The Mining Department, Raigarh has provided information that no mining lease has been granted for any minerals to the industry so that no royalty is being paid by PP. Letter received from Mining Department, Raigarh. **vii.** Regarding CSR and other activities done by PP in year 2019-20 Rs. 3372000.00 and 2020-21 is Rs. 5395000.00. Letter received from District Administration, Raigarh.

S No	Objections by applicant	Field status
		viii. Regarding Health and Safety measures done by PP is received from Health and Safety Department, Raigarh. **ix.** As per information received from Industry Department, Raigarh total no. of 1026 employees are working in Industry out of them 896 belongs to C.G. State. Letter received from DTIC, Raigarh.
10	ESP were not observed to be efficient as the smoke was visibly observed to be emitting from the stacks	Joint monitoring has been done by the team of CPCB, Bhopal and CECB as per emission monitoring report stack emission within standard norms. The monitoring values were also verified with OCEMS display data and found same. The monitoring report and list of air pollution control devices installed.
11	Examination of the instant level of emissions as available on online portal accessed in the office of the PP, revealed the same above average level.	Online Continuous Monitoring report of 27 - 28thAugust, 2021 is shown the PM concentration in stack emission within prescribed limit.
12	Measures installed by the PP to control fugitive emission needs to be further strengthen as the entire premises of the PP was observed to be laden with the dust.	The fugitive emission monitoring was done at four locations by joint team of CPCB and CECB on 27/08/2021 and found fugitive emission within prescribed norms as per MoEF&CC notification dated 30/05/2008.
13	Considerable secondary emissions were observed in the premises;	
14	Supporting details regarding activities where fly ash is being utilized has not been made available by the PP.	The report onward provided to IRO, Nagpur and the same has been incorporated in the report of year 2018.
15	No details pertaining to the number of seedlings and area planted in the premises has been made available by the PP;	**i.** IRO Nagpur Office has inspected the plant on 20/05/2017 and the observations as follows: "The PP has informed that green belt has been developed in the 50 ha of land in their premises. However, growth of vegetation was observed to be stunted which is likely due to stacking of emissions on the leaves of the impending with the process of photosynthesis and transpiration. The details of number of seedlings and area planted in the premises has been made available by the PP. During the inspection, it was observed that there is still scope for the plantation in the premises of PP. It was reported that from the year 2001-2002 to 2016- 2017 a total number 198900 plantation has been done out which 71151 (Approx) plants has survived. (EC NO. J.11011/195/2007-IA.II (I) dated 19/02/2008 and letter dated 21/12/2010 and 23/03/2011. **ii.** IRO Nagpur Office has inspected the plant on 06/06/2018 and the observations as follows: "The total area of the premises of the PP is approximately 131 ha, out of which green belt development works have been reported to be maintained over an area of 50.0 ha by undertaking plantation of approximately 1,23,5000 plants. It was further observed that pursuant to the observation of the Regional Office, during its visit held in July 2017, the PP has undertaken

S No	Objections by applicant	Field status
		plantation over additional area of approximately 1.0 ha wherein the PP has planted species like Ashoka, Petloforum, Casia, Amla, Karanj, etc. in their premises. It was further observed that the PP is undertaking levelling and other preparatory works for undertaking plantation during the coming monsoon season. The PP has informed that they are planning to plant nearly 5,000 trees in the coming monsoon seasons. Plantation work will be undertaken in the blank areas as well as in the form casualty replacement. **iii.** IRO, Nagpur again inspected the plant on 13/12/2020 and the observations are as follows: "PP has developed greenbelt in 50 Ha. Out of total 137 Ha. Within the existing plant premises which is more than 33% of the total area. As on date PP has planted more than 1, 23,500 Nos. Of trees including some fruit bearing species and proposed to plant another 3000 Nos. During upcoming monsoon. Photographs showing greenbelt in the plant premises &third-party verification of plantation report was submitted by the PP. **iv.** IRO Raipur has inspected the plant on 02/03/2021 the observation are as follows: It was informed that 50 Ha of greenbelt has already been developed out of total 137 Ha. Within the existing plant Premises. Project authorities are directed to submit the plant layout plan with earmarking the plantation done in the 33% of the plant area." IRO Raipur has issued a Monitoring of Compliance status of EC Stipulation with vide letter No. 5-34/2008 (ENV)/126 dated 10/06/2021 to PP. PP have submitted the reply to this office on 30/08/2021, which is not as per the stipulated observation made by this office.
16	Details of expenditure incurred in the environment protection measures has not been made available by the PP;	Details of expenses for Environmental Protection measures for the April 2017-21 is Rs. 40433506.
17	Occupational health surveillance of the workers has not been made available by PP	Project Proponent has submitted the occupational health surveillance data.
18	No Data on the air quality monitoring is recorded;	The ambient air quality monitoring done by third party M/s Enviro 1 analysts & engineers pvt.ltd. Mumbai (NABET accredited and MOEF (Government of India) approved} in factory premises on dated 21.11.2020 and 05.07.2021 Ambient Air Quality is under prescribed limit.
19	Details of data on the AAQ collected by CECB and CPCB has not been made available by the PP;	
20	Details of monitoring of noise level has not been made available;	The Noise Level Monitoring done by third party M/s. Enviro Analysts &Engineers Pvt. Ltd, Mumbai (NABET accredited and MoEF, Government of India approved) in factory premises on dated 21/11/2020 and 05/07/2021 Ambient Noise Level is under prescribed limit.
21	Details of expenditure incurred in the environment safeguard has not been made available by the PP,	PP has submitted the details of expenses for Environmental Protection measures for the April 2017-21 is Rs. 40433506.

S No	Objections by applicant	Field status
22	No arrangements were observed to display the data RSPM, SO_2 and NO_x outside the premises;	One CAAQMS was found installed and operational and arrangement for display of the data has been done on the main gate of the industry.
23	Stack height of the boiler was observed to be below 120 meters;	It seems typographical error as prescribed height of stack in Consent to Operate is 30 m i.e. 120 ft.

Next hearing of honorable NGT is listed on 18/01/2022.

51.1.17 Name of the EIA consultant: M/s. Pioneer Enviro Laboratories & Consultants Pvt. Ltd. [at S No. 139, List of ACOs with their Certificate no. NABET/EIA/1922/RA0149, valid up to 22/03/2022; Rev. 18, January 05, 2022].

Certified compliance report from Regional Office

51.1.18 The Status of compliance of earlier EC was obtained from Integrated Regional Office (IRO), Raipur *vide* letter no. 5-34/2008 (ENV)/ 126 dated 10/06/2021 on the basis of site inspection on 02/03/2021. Project proponent has submitted action taken report to IRO, Raipur vide letter dated 20/08/2021. A site inspection was carried out on 27/08/2021 by RO, Raipur. PP applied for closure report vide letter dated 05/11/2021. Comments on the ATR submitted by PP obtained from RO, Raipur on 21/12/2021. The detail is given as below:

S.No.	Observations made in CCR dated 10/06/2021	Corrective action taken by PP	Comments of RO dated 21/12/2021
i.	Project authorities are directed to submit the detailed ESC expenditure along with six monthly compliance reports to this office **(Specific Condition - I).**	The expenditure details of ESC have been submitted to IRO, Raipur. An amount of Rs.90,16,780/- has been spent in the year May 2018 to March 2020 for ESC/CER expenditures. The six-monthly compliance report of EC granted to PP for the period of January 2021 to June 2021report has already been submitted to IRO, Raipur through email on 16/08/2021.	PP has submitted the comprehensive ESC details for the period 01/04/2019 to 31/03/2020. However, for the details of ECS for the period 01/04/2020 to 31/03/2021 has not been provided by PP.
ii.	Project authorities are directed to submit a copy of the letter submitted to Chief Conservator of Forest and physical & financial targets of the implement the wildlife conservation plan shall be submitted to is office **(Specific Condition —III).**	PP has given letter to Chief Conservator of Forest to adjust the amount of Rs. 74,97,881/- already PP has deposited to the Department for diversion of Forest land for laying 133 KV Transmission line. Since PP has cancelled that proposal and requested the Department to Refund the amount and out of which Rs. 65 Lakhs to be adjusted for implementation of Wild life Conservation Plan.	The PP has submitted a letter to PCCF, and the same is under consideration.

S.No.	Observations made in CCR dated 10/06/2021	Corrective action taken by PP	Comments of RO dated 21/12/2021
iii.	Project authorities are directed to carry out the monitoring of stack, ground water, noise levels once in a month, effluent Quality twice in a month respectively as per stipulated condition and reports shall be submitted to Ministry's Regional Office, Raipur **(Specific Condition - IV).**	PP is regularly monitoring stack emissions, Effluent, ground water and noise levels as per stipulation. The latest report has been submitted to IRO, Raipur.	PP has submitted the stack emission report (No. 8), Ambient Air quality report (4 locations), fugitive emission report (4 locations), Noise monitoring report (4 locations), Ground water monitoring report (4 locations), DM effluent and cooling Tower blow down water sample reports conducted by third party for the month of 05/07/2021 has been submitted and it was analyzed that all the parameters are within standards.
iv.	Project authorities are directed to submit detailed report on reasons for dumping the huge quantity of Dolo char waste and fly ash the inside plant premises and time taken to 100% utilization of the same submitted to this on quarterly basis **(Specific Condition -V) & (General Condition -VIII).**	All dolochar generated from DRI plant is being utilized in the FBC power plant. Fly ash generated from the ESP of FBC boiler is being used in PP's own brick making plant as well as given local brick manufacturers. Left over Bottom ash is disposed onto the land and properly levelled and then soil layer has been kept on the top it. Greenbelt also has been developed over the fly ash area. Accretion slag is used in road construction inside the plant premises.	The industry has installed a fly ash brick making plant of capacity 30,000 numbers per day in the premises. Kiln accretion was being used in road construction inside the plant. Char is used in AFBC boiler, Bottom ash is found inside premises.
v.	Project authorities are directed to submit the plant layout plan with earmarking the plantation done in the 33% of the plant area **(General Condition -I).**	The plant layout earmarking the plantation developed in the 37% of the plant area has been submitted. Greenbelt has been developed in **51 Ha.**	PP has submitted the layout plan of the plant of year 2016. However, PP got expansion in 2018, from the layout plan submitted by PP it

S.No.	Observations made in CCR dated 10/06/2021	Corrective action taken by PP	Comments of RO dated 21/12/2021
			was not cleared that whether the green belt was developed in 33% area of the plant.
vi.	Project authorities are directed to submit the detailed expenditure made towards capital cost and recurring cost/annum (for past two financial years) for environmental pollution control measures to implement the condition stipulated by the Ministry of Environment and Forests and its implementation schedule to the Regional Office of this Ministry at Raipur **(General Condition -II).**	The detailed expenditure made towards capital cost and recurring cost/annum for the period from 01/04/2017 to 23/03/2021 for environmental pollution control measures have been submitted to IRO, Raipur.	The detailed expenditure made towards capital cost for the period 01/04/2017 to 23/03/2021 has been provided.
vii.	Project authorities are directed to install the AAQ as per stipulation condition and submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality/ fugitive emissions. ATR in this regard may be submitted this office on quarterly basis to Regional Office of MoEF&CC, Raipur **(General Condition - III).**	PP has already installed the continuous ambient air quality monitoring station and connected to CPCB online servers. A photograph showing the same has been submitted to IRO, Raipur**.** Monthly reports of stack emission are also submitted to IRO, Raipur**.**	It was observed that one AAQS has been found installed and operational and arrangement for display of the data has been done at main gate of the industry.
viii.	Project authorities are directed to submit the water balance sheet which ensures that the industry is being maintained the zero effluent discharge and conduct the ground water mentoring in and around areas (at least 4 locations) of where the char waste, sludge crushing area and fly ash is being disposed and the monthly summary reports of the same shall be submitted to this office **(General Condition - IV).**	The water balance sheet has been submitted. The ground water analysis reports carried out near the char dump area, near fly ash area., near slag crushing area, near weigh bridge. All parameters are within the IS: 10500 specifications.	Water balanced sheet prepared by the PP has been submitted. Ground water monitoring Near Weigh Bride, Char Dump area, near fly ash area and near slag crush unit has been conducted through third party in the month of July, 2021 and the reports of the same has been provided

S.No.	Observations made in CCR dated 10/06/2021	Corrective action taken by PP	Comments of RO dated 21/12/2021
			and it was observed that the parameters are within the limits.
ix.	It was also observed that Solid wastes like, ESP dust, Fly ash, Dolochar, slag. Bag Filter dust, coal fines etc were found observed in almost all the units which show that the air pollution control devices are not function properly. PA has been directed to install the bag filters at all the raw material handling unit which are connected to Kilns and take appropriate action for reducing the solid waste where are disposed in open areas, ATR in this submitted to this office on quarterly basis **(General Condition —V).**	We have installed 03 New Bag Filters in each of the raw material handling systems which are connected to Kilns. All the solid waste such as ESP dust, slag, bag filter dust is being disposed off in environment-friendly manner. Solid waste management plan is maintained as given below: 1.Ash from DRI is used in own brick manufacturing as well as given to other brick manufacturers. 2.The Reason for accumulation of dolochar is the FBC boiler was under maintenance. Now there is no dolochar accumulation in the premises. The entire dolochar is being completely used in FBC boiler as fuel. 3. Kiln Accretion slag is used in road construction inside the plant premises.	It was observed that new bag filters have been installed by the PP. The industry has installed a fly ash Brick making plant of capacity 30,000 numbers per day in the premises. Kiln accretion was being used in road construction inside the plant. Char is used in AFBC boiler. Bottom ash is found inside premises.
x.	After analyzing the noise level monitoring report (Sampling date 911.2020) it has been observed that the noise level result at the location near TG building is fund to be 74.1 dB(A) (day) which is almost exceeds the prescribed limits, PA has been asked to clarify the same and submit ATR to this office **(General Condition - XX).**	Silencers have been provided to reduce the noise levels during steam blowing. Sometimes the noise level might be in the range of 74 dBA because of sudden Power fluctuation which is within the permissible limit of 75 dBA.	Silencers has been provided to control the noise level by the PP. However. Noise monitoring report submitted by the PP for the month of July, 2021 was analyzed and it was observed that at the same location i.e. near TG building is found 74.3 dB(A) (day) time.
xi.	Project authorities are directed to upload the status of compliance of the stipulated environment clearance conditions, including results of	Noted & agreed.	Assured to comply

S.No.	Observations made in CCR dated 10/06/2021	Corrective action taken by PP	Comments of RO dated 21/12/2021
	monitored data on their website and update the same periodically **[General Condition —XXV (d)].**		
xii.	Project authorities are directed to install a display board at the main gate of the plant to display the criteria pollutants level namely; $PM_{2.5}$, PM_{10}, NO_x (ambient levels as well as stack emissions) and upload on the website of the company also **[General Condition —XXV (2)].**	We have already provided a display board at the main gate of the plant to display the pollutant levels of $PM_{2.5}$, PM_{10}, SO_2, NO_x (ambient levels as well as stack emissions) and also uploaded the same on the website of the company.	It was observed that display board has been installed at the main gate of the plant by the PP.
xiii.	Project authorities are directed to submit the details of date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work to this office **[General Condition —XXV (h)].**	CTE has been obtained from CECB on 26/10/2018 & CTO on 14/12/2018 for Rolling Mill & 18 MW FBC power plant.	PP informed that CTE was obtained from CECB on 26/10/2018 and CTO was obtained from CECB on 14/12/2018.
xiv.	Project authorities are directed to submit time bound action plan on to reducing the Particulate emission from the stacks shall be less than 30 mg/Nm^3 and installing fiber glass to all the bag filters to achieve above emission norms on quarterly basis to this office (EC dated 06/03/2019).	We have replaced the existing bag which are connected with 4x8 MT Induction Furnaces & 4x10 MT Induction Furnaces to achieve the Particulate emission below 30 mg/Nm^3.	PP has installed fiber glass bag filter to achieve PM below 30 mg/Nm^3.
xv.	Heavy fugitive emission was observed from the conveyor belts of the boiler and transferring points in this regard ATR shall be submitted to this office.	Covers of conveyers have been replaced to reduce the fugitive emission. We have replaced the existing bag which is connected with 4x8 MT Induction Furnaces & 4x10 MT Induction Furnaces to achieve the Particulate emission below 30 mg/Nm^3. Fugitive emission monitoring report shows the emission within the prescribed limits.	Fugitive emission report for the month of July, 2020 submitted by the PP has been analyzed and it was observed that PM is within the limit.
xvi.	Project authorities are directed to submit the Fly ash utilization report to this office.	Report of fly ash utilization of latest month has been submitted.	Fly ash utilization report prepared by the PP for the month of July,

S.No.	Observations made in CCR dated 10/06/2021	Corrective action taken by PP	Comments of RO dated 21/12/2021
			2021 has been submitted.
xvii.	Uploading six monthly progress reports and monitoring reports on the web site of the company may be ensured.	Noted &complying	Six monthly compliance report for the period April, 2021 has been received by this office.
xviii	Regular submission of six-monthly progress reports in soft copies may be ensured as the same will be displayed on the website of the Ministry in pursuance of the EIA notification, 2006 Next date of submission of six-monthly compliance report is 1st week of December, 2021.	Noted &submitted.	Assured to Comply.

Observations of the Committee

51.1.19 The committee noted the following:

i. The project proponent has uploaded the application for grant of EC wrongly against the previous EC granted on 6/3/2019 instead of the ToR accorded on 19/09/2020.

ii. The traffic assessment study reveals that the level of service with existing traffic load is poor which is expected to be poorer after commencement of the proposed project. PP has not provided tangible action plan/management plan to address the said issue. Details regarding the carrying capacity of the road as per IRC guidelines have not been submitted.

iii. PP submitted that 600 nos of tree to be translocated from existing green belt area. To compensate this, PP reported that they will be planting 3000 trees in 1.0 ha in addition to the existing land. PP shall provide the information details (type, height, age, etc.) of trees to be translocated. Recalculate the total land under green belt area after translocating the 600 trees from existing green belt and the same needs to be furnished. However, as per the CPCB norms, only 2500 trees can be planted in one hectare. Therefore, the PP should explore additional area or explain how they will plant 3,000 trees.

iv. PP submitted in document that granulated slag will be sold to road contractors and cement plants. PP shall provide copy of Memorandum of Understanding to this effect.

v. Incremental Ground Level Concentration for SO_2 and NOx are reported to be high. No additional mitigation measures are proposed in this regard.

vi. Action plan to address the issues raised during public hearing is not in conformity to the MoEF&CC O.M. dated 30/09/2020.

vii. Data (Land and AAQ modeling results) reported in the EIA report and Form 2 are not in consonance with each other.

viii. There is a ground water usage for the domestic activity. Details regarding the same and the approval of the Competent Authority has not been made available.

ix. PP has claimed that they have their own brick plant to consume fly ash and the ash from the pellet plant. The details of the brick plant are not available in the documents. It has also been mentioned that fly ash shall be given to nearby brick industry.

x. ToR point #9 pertaining to Corporate Environment Policy has not been addressed.

xi. Taraimal Village and Taraimal Reserved Forest is located at 0.80km in SE direction from project boundary. Mitigation/conservation measures to be adopted in this regard has not been elucidated in the EIA report.

xii. Out of total 137 ha project land about 74.8 ha land is in the name of company and about 62.5 ha land is in the name of company directors. PP shall be provided the valid lease document of 137 ha in the name of company only.

xiii. PP shall give an undertaking that there is no any other company operating adjoining to the project under the same ownership.

xiv. There are partially complied conditions as per comments on the ATR submitted by PP obtained from RO, Raipur on 21/12/2021. PP shall be provided the action taken report by PP and final closure report from RO, Raipur.

xv. IA- Monitoring Cell vide letter 29/11/2021 sought for an Action taken report from the proponent on the observations made by the Joint Committee constituted by Hon'ble NGT and in the IRO monitoring report. The response submitted by the proponent in this regard, have not been made available in the EIA report.

xvi. A court case is pending before Hon'ble NGT, Central Zone Bench, Bhopal. PP informed that the case is listed for hearing on 18/01/2022. The outcome of the said case shall be brought on record by the proponent.

Recommendations of the Committee

51.1.20 In view of the foregoing and after deliberations, the Committee recommended that proposal to be returned in its present form to address the technical shortcomings enumerated at para no. 51.1.19 and submit the revised application as per the provisions of EIA Notification, 2006.

51.2 Proposed capacity expansion of Asbestos Cement Sheets & Accessories Project from 60,000 TPA to 2,50,000 TPA by **M/s. Royal Uniforce Roofing Private Limited** located at Plot no U-4, Sector – A, AKVN Industrial Growth Centre, Village Borgaon, Tehsil Sausar, **District Chhindwara, Madhya Pradesh.** [Online Proposal No. IA/MP/IND/236722/2009, File No. J-11011/7/2010-IA II(I)] – **Environment Clearance – regarding.**

51.2.1 M/s. Royal Uniforce Roofing Private Limited has made an online application vide proposal no. IA/MP/IND/236722/2009 dated 21/12/2021 along with copy of EIA/EMP report, Form – 2 and certified compliance report 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. 4(c) Asbestos Milling and Asbestos Based Products under Category "A" of the schedule of the EIA Notification, 2006 and appraised at central level.

Details submitted by Project proponent

51.2.2 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
16/05/2021	Standard TOR Granted	Terms of Reference	19/05/2021	15/05/2025

51.2.3 The project of M/s. Royal Uniforce Roofing Private Limited is located at Plot no U-4, Sector – A, AKVN Industrial Growth Centre, Village Borgaon, Tehsil Sausar, District Chhindwara, Madhya Pradesh is for Proposed capacity expansion of Asbestos Cement Sheets & Accessories Project from 60,000 TPA to 2,50,000 TPA.

51.2.4 Environmental Site Settings:

<table>
<tr><th>SNo</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total land</td><td>Total Land: 5.958ha.
[Govt: 5.958ha]</td><td>Land use: Industrial</td></tr>
<tr><td>ii.</td><td>Land acquisition details asper MoEF&CC O.M. dated 7/10/2014</td><td>Proposed expansion will be developed in existing project area of 5.958 ha only. Complete land of 5.958 ha is under possession of company. Additional land is not required for the proposed expansion.</td><td>--</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td><u>Project site:</u> Nil

<u>Study area</u>
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Tinkheda</td><td>1.25 km</td><td>WSW</td></tr>
<tr><td>Khairitaygaon</td><td>1.1 km</td><td>SE</td></tr>
</table></td><td>R & R is not required.</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of the project site</td><td>
<table>
<tr><th>Corners</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>1</td><td>21°32'23.72"N</td><td>78°49'0.27"E</td></tr>
<tr><td>2</td><td>21°32'27.61"N</td><td>78°49'6.11"E</td></tr>
<tr><td>3</td><td>21°32'21.45"N</td><td>78°49'10.43"E</td></tr>
<tr><td>4</td><td>21°32'19.05"N</td><td>78°49'4.90"E</td></tr>
</table></td><td></td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>352 m Above Mean Sea Level</td><td></td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>No forest land is involved</td><td></td></tr>
</table>

<table>
<tr><th>SNo</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>vii.</td><td>Waterbody exists within the project site as well as study area</td><td><u>Project site</u>: Nil

<u>Study area</u>
<table>
<tr><td>Water Body</td><td>Distance</td><td>Direction</td></tr>
<tr><td>River Kanhan</td><td>6.5</td><td>East</td></tr>
<tr><td>Jam Nadi</td><td>6.25 Km</td><td>NNE</td></tr>
<tr><td>Borgaon Dam</td><td>3.0 km</td><td>NNW</td></tr>
<tr><td>Water reservoir</td><td>3.23 km</td><td>NW</td></tr>
<tr><td>Water reservoir</td><td>3.25 km</td><td>SW</td></tr>
<tr><td>Wadhona Dam</td><td>3.7 km</td><td>South</td></tr>
<tr><td>Raibasa Dam</td><td>7.4 km</td><td>SSE</td></tr>
</table></td><td></td></tr>
<tr><td>viii.</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant</td><td>Nil
However, following forests are present within study area:
Waghora PF: 3.5 km/ East
Reserved Forest: 3.8 km/ SW
Protected Forest: 3.9 km/ SSW
Protected Forest: 3.4 km/ South</td><td></td></tr>
</table>

51.2.5 The existing project was accorded environmental clearance Vide F. No. J-11011/7/2010-IA.II(I) dated 29/10/2010. Consent to Operate for the existing unit was accorded by Madhya Pradesh State Pollution Control Board (MPPCB) vide. Consent No.: AW-51293 on 05/03/2020. The validity of CTO is up to 31/03/2023:

51.2.6 Implementation status of the existing EC:

Facilities	Units	As per EC dated 29/10/2010	Implementation Status as on 21/12/2021	Production as per CTO
Production of Asbestos Cement Sheets & Accessories Unit	TPA	60,000	60,000	60000

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

Name	Existing Units		Proposed Units		Total (Existing +Proposed)	
	Configuration	Production TPA	Configuration	Production TPA	Configuration	Production TPA
Asbestos Cement Sheets Project	--	60000	--	190000	--	250000

51.2.8 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 – 60000 TPA	Proposed – 250000 TPA	Total	Source	Mode of Transport
1.	Cement (OPC)	26400	110000	136400	Nearby	By Rail / Road

S No	Raw material	Existing – 60000 TPA	Proposed – 250000 TPA	Total	Source	Mode of Transport
					Cement Plants – Chhindwara, Nagpur	
2.	Fiber (Chrysotile)	5400	22500	27900	Imported (Russia)	By Ship up to the port then by Road (Closed containers)
3.	Fly ash	16200	67500	83700	Nearby Power Plant	By Road (Trucks)
4.	Pulp	360	1500	1860	Chennai	By Road (Trucks)
5.	Slag	4602	19174	23776	Chhindwara, Nagpur	By Road (Trucks)
6.	DWR	684	2851	3535	Plant Generation	Internal
7.	MMF002	138	576	714	Patalganga, Maharashtra	By Road (Trucks)
8.	FR2	720	3000	3720	Rajasthan	By Road (Trucks)

51.2.9 Existing water requirement is 77m^3/day, water requirement is obtained from Madhya Pradesh Industrial Development Corporation (MPIDC). The water requirement for the after expansion is estimated as 288 m^3/day, which will be met from MPIDC.

51.2.10 Existing power requirement of 900 KVA is obtained from Madhya Pradesh State Electricity Board (MPSEB). Power requirement after proposed expansion is estimated as 2000 KVA and will be met from MPSEB. 2 no of 380 KVA DG set already installed utilized for power backup.

51.2.11 Baseline Environmental Studies:

Period	March to May, 2021
AAQparametersat8 Locations (min and max)	$PM_{2.5}$= 19.9 to 48.7 µg/m^3 PM_{10}= 40.4 to 79.4µg/ m^3 SO_2= 7.5 to 33.2 µg/ m^3 NO_2= 10.1 to 38.7 µg/ m^3 CO= 50 to 670 mg/ m^3
Incremental GLC Level	PM= 2.88 µg/ m^3(100 m in NEN)
Groundwaterqualityat8locations	pH:7.11 to 7.54, TotalHardness:200.5 to 478.0mg/l, Chlorides:25.1to160mg/l, Fluoride: 0.76 to1.58mg/l. Heavy metals are within the limits.
Surfacewaterqualityat2 locations	pH:7.75 to8.11, DO:4.8 to 5.1mg/l, BOD: 3.0 to 3.3 mg/l. COD from 8 to 12 mg/l

<table>
<tr><td>Noise levels Leq (Day and Night)</td><td>40.5 to 62.1 dBA for the day time and 28.9 to 41.4 dBA for the Night time.</td></tr>
<tr><td>Traffic assessment study findings</td><td>Traffic study has been conducted at SH-19 (NH-547) which is located at 1.0 km from project site.
Transportation of raw material, fuel & finished product will be done 100% by road.
Existing PCU is 191.5 PCU/hr on SH-19 and existing level of service (LOS) is:
<table>
<tr><th>Road</th><th>V Volume in PCU/hr)</th><th>C Capacity in PCU/hr)</th><th>Existing V/C Ratio)</th><th>LOS</th></tr>
<tr><td>SH-19</td><td>191.5</td><td>416.6</td><td>0.46</td><td>C (Good/ Average)</td></tr>
</table>
PCU load after proposed project will be198.6 (191.5+ 7.1) PCU/hr and level of service (LOS) will be:
<table>
<tr><th>Road</th><th>V Volume in PCU/hr)</th><th>C Capacity in PCU/hr)</th><th>Proposed V/C Ratio)</th><th>LOS</th></tr>
<tr><td>SH-19</td><td>198.6</td><td>416.6</td><td>0.47</td><td>C (Good/ Average)</td></tr>
</table>
Conclusion: The level of service will remain same after proposed expansion as C (Good/ Average).</td></tr>
<tr><td>Flora and fauna</td><td>No Endangered species of Flora and schedule I species of Fauna observed in study area.</td></tr>
</table>

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

S No	Type of Waste	Source	Quantity Generated	Mode of Treatment / Disposal
1.	Broken Sheets	Industrial Waste	2500 TPA	These sheets will be pulverized and recycled in the close circuit manufacturing process
2.	Sediments from Cone Tank	Industrial Waste	25 TPA	This waste will be processed through ball mill and recycled in the close circuit manufacturing process

51.2.13 Public Consultation:

Details of advertisement given	15/09/2021
Date of public consultation	22/10/2021
Venue	Within premises of RURPL at Industrial Growth Centre, Borgaon, Sausar, Chhindwara, MP
Presiding Officer	Additional Collector

Major issues raised	i. Employment ii. Air Pollution Control iii. Social Welfare iv. Tree Plantation v. Environmental Management

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

S No	Concerns raised during the Public Hearing	Physical activity and action plan	Tentative Budget, Rs Lacs	Target date for implementation of action plan
1.	Employability	Skill development for 100 nos. local youths (as per employability potential) from villages within 10 km. radius. Training Charges Rs. 7500/= plus Rs. 2500/= stipend per month for 3 months. (Rs. 10000 / youth)	Rs. 10 Lakhs	2022- 23: 50 Youths 2023 - 24: 50 youths
2.	Construction of Library	Construction of library in Borgaon. Cost of Civil Infrastructure Rs. 10 Lakhs. Cost of Books etc. 5 Lakhs	Rs. 15 Lakhs	Jun.'2022
3.	Installation of Tower Light	Installation of Tower light at Ambedkar Chowk & Shivaji Chowk	Rs. 15 Lakhs	Jun.'2022
	Total		**40 lakhs**	

51.2.14 Existing capital cost of project was 25.0 Cr. The capital cost of the proposed project is Rs. 40.0 Crores and the capital cost for environmental protection measures along with the budget of activities to address Public Hearing Issues is proposed as Rs. 140Lakhs.The annual recurring cost towards the environmental protection measures is proposed as Rs 40Lakhs. The employment generation from the proposed project / expansion is 180. The details of cost for environmental protection measures are as follows:

S No	Description of Item	(Rs. In lakhs)	
		Capital Cost	Recurring Cost/ Annum
1	Air Pollution Control	40	8
2	Water Pollution Control	5	2
3	Noise Pollution Control	4	1
4	Solid Waste Management	12	4
5	Upgradation of Existing Green Belt	5	5
6	Housekeeping	4	4
7	Occupation health	25	14
8	Safety	5	2
9	Addressal of Public Consultation concerns	40	--
	Total	**140**	**40**

51.2.15 Existing green belt has been developed in 2 ha. area which is about 33.6 % of the total project area of 5.958 ha with total sapling of 2200 Trees. Proposed greenbelt will be developed in 0.26 ha which is about 4.5 % of the total project area. Thus, total of 2.26 ha

area (38% of total project area) will be developed as greenbelt. A 5 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Additional 3450 saplings will be planted and nurtured in 2.26 hectares in 2 years to achieve 2500 Trees/ ha.

51.2.16 There is no violation under EIA notification 2006/No Court cases/no show cause/no direction issued for RURPL.

51.2.17 Name of the EIA consultant: M/s. Paramarsh Servicing Environment and Development [S.No. 164 in List of ACOs with their Certificate no. NABET/EIA/2124/RA0224; valid up to 01/05/2024, Rev. 18, January 05, 2022].

Certified Compliance report from RO

51.2.18 The Status of compliance of earlier EC was obtained from Regional Office, Bhopal vide letter no. J-11011/7/2010-IA II(I), dated 29/10/2010 in the name of M/s. Royal Uniforce Roofings Pvt. Ltd. (RURPL). The Action taken report regarding the partially/non-complied condition was submitted to IRO, Bhopal vide letter dated 10/12/2021. Present status as furnished by the PP is given as below:

S No	Non-compliance details	Observation of RO (abridged)	Condition no.			Response by PP
			EC date	Specific	General	
1.	As per Noise Monitoring test result furnished by the project proponent, it is noted that noise levels are well within the stipulated noise standards. However, copies of the test reports of the NABL accredited laboratory are yet to be furnished.	In view of the information furnished by PP and as per site observations noted above w.r.t. said site visit, the stipulated condition is considered as partly complied till submission of requisite test report of noise monitoring as monitored by an NABL accredited laboratory.	J-11011/7/2010-IA II(I) Dt: 29/10/2010	--	vi	Test Report of Noise Monitoring by an NABL accredited laboratory has been submitted. To IRO, Bhopal.

S No	Non-compliance details	Observation of RO (abridged)	Condition no.			Response by PP
			EC date	Specific	General	
2.	During the site visit, project proponent is seen complying all the environmental protection measures as noted in the observations against each of the Conditions stipulated in the said Environment Clearance. During the site visit, project proponent informed that several socioeconomic	In view of the information furnished by the project proponent and as per the site observations noted above w.r.t. said site visit the stipulated condition is considered as party complied till submission of requisite information as noted above.	J-11011/7/2010-IA II(I) Dt: 29/10/2010	NA	ix	Details of socio-economic development activities have been submitted.
3.	Requisite documentary evidence in compliance of the stipulated condition is yet to be furnished by the project proponent. Copy of environment clearance is yet to be uploaded on company's website.	In the view of the information furnished by the project proponent and as per the site observations noted above w.r.t. said site visit the stipulated condition is considered as party complied till submission of requisite information.	J-11011/7/2010-IA II(I) Dt: 29/10/2010	NA	xi	EC uploaded on company website at https://royalsheets.asia/environmental-clearance.html
4.	As per the records furnished during the site visit, it is noted that half yearly compliance reports in respect of the stipulated prior environmental clearance conditions are being submitted to all the regulatory agencies on a regular basis however, the environment clearance compliance report are yet to be uploaded on the	In view of the information furnished by PP and as per site observations noted above, w.r.t. said site visit, the stipulated condition is considered as partly complied till uploading of the data on the company's website.	J-11011/7/2010-IA II(I) Dt: 29/10/2010	NA	xii	EC compliance uploaded on company website at https://royalsheets.asia/environmental-clearance.html Display board has been installed at Gate.

S No	Non-compliance details	Observation of RO (abridged)	Condition no.			Response by PP
			EC date	Specific	General	
5.	As per there records furnished subsequent to the visit it was noted that copy of the environmental statement for the year 2019-20 and 2020-21 was submitted on 21st Sept, 2020 and 9th August, 2021 respectively. Copy of the same is furnished to MOEFCC, IRO Bhopal along with	In view of the information furnished by the project proponent and as per the site observations noted above w.r.t said site visit, the stipulated condition is considered as partly complied till submission of requisite documents to MOEFCC, IRO Bhopal by e-mail.	J-11011/7/2010-IA II(I) Dt: 29/10/2010	NA	xiv	Environmental statement has been submitted to IRO, Bhopal through email.
6.	Requisite documentary evidence in compliance of the stipulated condition is yet to be furnished by the project proponent.	In view of the information furnished by the project proponent and as per the site observations noted above w.r.t said site visit, the stipulated condition is considered as partly complied till submission of requisite information.	J-11011/7/2010-IA II(I) Dt: 29/10/2010	NA	xvi	Plant commission details has been submitted and documentary evidence has been submitted to IRO, Bhopal.

Observations of the Committee

51.2.19 The Committee noted the following:

i. Asbestos fiber concentration has not been monitored in the baseline Air quality and also in the stack.

ii. Rain Water Harvesting (RWH) is proposed with recharge. There is no action plan to remove asbestos fiber from runoff before recharge.

iii. Action plan to address the issues raised during public hearing is not in conformity to the MoEF&CC O.M. dated 30/09/2020.

iv. Septic tank has been proposed for treatment of domestic wastewater in place of sewage treatment plant.

v. Impact of the project on nearby crops has not been carried out.

vi. Samples collected during environmental baseline study is not as per CPCB and MoEF&CC guideline as samples for Air, water, Noise and soil collected from same locations. No explanation is made available in this regard during the meeting.

vii. There are several deficiencies in the EIA report given as below:

a. NABET accreditation number of the EIA Consultant is not given on the cover page. Validity of NABET accreditation expires on 13 Jan, 2022.
b. Signatures of all team members are scanned.
c. Environment Policy is not dated nor signed. Environment Engineer reports to DGM.
d. The Organization Chart given on page 176 and the one shown on page 177 of EIA report are different. SOP to bring into focus any infringement / deviation is not available. The company does not have a system of reporting non compliances to the Board.
e. Consultant is still proposing CER action plan as per OM of 31 May 2018 which is not valid now. 1.0 % of the Capex is given as CER budget in chapter 10 section 10.16. Table 10.3 gives CER activities not drawn from PH proceeding or SIA.
f. Chapter 1 & 2 of the EIA report are not as per the format given in Appendix III of EIA Notification 2006.
g. Stack height is taken as 18m only for fiber bag opening and milling section.
h. PM levels for fly ash handling and raw material feeding area are considered as 50 mg/Nm^3.
i. Interpretation of the BL data has not been carried out in Chapter 3.
j. AAQ monitoring stations are not as per wind rose. AAQ and noise are monitored at same place.
k. Noise has been monitored as far as 9.8 km NW of the plant site.
l. SIA study is very sketchy in 2.5 pages, no primary data has been collected for EB and SE, no interpretation has been done for the same.
m. The impacts and mitigation measures have not been quantified in Chapter 4.
n. Performance monitoring schedule of pollution control equipment is not available in Chapter 6.
o. In the monitoring schedule in Chapter 6, asbestos fiber monitoring in stack or in AAQ have not been proposed.
p. Detailed traffic study has not been done.
q. Type of PPEs to be used by workers in bag opening area and milling/mixing area have not been specified. Occupational Health records of workers in existing plant are not available.
r. EMPs in Ch 10 are generic. No quantification has been done.
s. Risk assessment provided by PP is in generic form, no project specific data provided in the risk assessment.

Recommendations of the Committee

51.2.20 In view of the foregoing and after deliberations, the Committee recommended that the proposal to be returned in its present form to address the technical deficiencies enumerated at para no. 51.1.19 and submit the revised application as per the provisions of EIA Notification, 2006. Further, the Committee also recommended for issuance of show cause notice to the consultant for submitting poor quality EIA report.

51.3 Expansion in Clinker Production Capacity (5.0 to 5.2 MTPA) and WHRS {13.2 (Water Cooled) to 15 MW (Air Cooled)} along with additional WHRS {15 MW (Air Cooled)} and Reduction in capacity of Captive Power Plant (47 to 22 MW) by **M/s. JK Cement Limited**

located at Kailash Nagar, Tehsil Nimbahera, **District Chittorgarh, Rajasthan** [Online Proposal No. IA/RJ/IND/236959/2021, File No. IA- J-11011/243/2016-IA-II(I)] – **Environment Clearance under the provision of para 7 (ii) of EIA Notification, 2006 – regarding.**

51.3.1 M/s. JK Cement Limited has made an online application vide proposal no IA/RJ/IND/236959/2021 dated 22/12/2021 along with copy of Addendum EIA report, Form – 2 and certified compliance report seeking Environment Clearance (EC) under the provisions of para 7(ii) of EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(b) Cement Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraisal at Central Level.

Details submitted by the project proponent

51.3.2 The project of M/s JK Cement Limited is located in Kailash Nagar, Tehsil Nimbahera, District Chittorgarh, Rajasthan State is for Expansion in Clinker Production Capacity (5.0 to 5.2 MTPA) and WHRS {13.2 (Water Cooled) to 15 MW (Air Cooled)} along with additional WHRS {15 MW (Air Cooled)} and Reduction in capacity of Captive Power Plant (47 to 22 MW).

51.3.3 Environmental site settings

<table>
<tr><th>S No</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total land</td><td>98.05 ha [Private Land]</td><td>Land use: Industrial</td></tr>
<tr><td>ii.</td><td>Land acquisition details as per MoEF&CC OM dated 7/10/2014</td><td>The expansion is proposed in existing project area of 98.05. Total land is under the possession of the company. No additional land is required for proposed expansion.</td><td>-</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Plant Site: Nil
<table>
<tr><th>Habitation</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>Rampura</td><td>0.22</td><td>SE</td></tr>
<tr><td>Aheerpura</td><td>0.34</td><td>NNW</td></tr>
<tr><td>Karthana</td><td>0.35</td><td>East</td></tr>
<tr><td>Nimbahera (M)</td><td>0.86</td><td>SE</td></tr>
</table></td><td>No R&R is required</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of all the corners of project site</td><td>
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>74°40'51.56" E</td><td>24°39'19.13" N</td></tr>
<tr><td>B</td><td>74°40'55.45" E</td><td>24°39'20.94" N</td></tr>
<tr><td>C</td><td>74°41'4.83" E</td><td>24°38'54.27" N</td></tr>
<tr><td>D</td><td>74°41'11.59" E</td><td>24°38'36.05" N</td></tr>
<tr><td>E</td><td>74°41'14.31" E</td><td>24°38'29.25" N</td></tr>
<tr><td>F</td><td>74°41'17.35" E</td><td>24°38'19.76" N</td></tr>
<tr><td>G</td><td>74°41'19.27" E</td><td>24°38'12.58" N</td></tr>
<tr><td>H</td><td>74°41'8.57" E</td><td>24°38'11.71" N</td></tr>
<tr><td>I</td><td>74°40'58.07" E</td><td>24°38'19.25" N</td></tr>
<tr><td>J</td><td>74°40'58.26" E</td><td>24°38'20.11" N</td></tr>
<tr><td>K</td><td>74°40'52.98" E</td><td>24°38'21.75" N</td></tr>
</table></td><td>-</td></tr>
</table>

<table>
<tr><th>S No</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>L</td><td>74°40'51.09" E</td><td>24°38'21.55" N</td></tr>
<tr><td>M</td><td>74°40'52.12" E</td><td>24°38'6.66" N</td></tr>
<tr><td>N</td><td>74°40'50.80" E</td><td>24°38'6.57" N</td></tr>
<tr><td>O</td><td>74°40'48.43" E</td><td>24°38'14.22" N</td></tr>
<tr><td>P</td><td>74°40'49.27" E</td><td>24°38'21.07" N</td></tr>
<tr><td>Q</td><td>74°40'38.52" E</td><td>24°38'21.34" N</td></tr>
<tr><td>R</td><td>74°40'37.37" E</td><td>24°38'27.62" N</td></tr>
<tr><td>S</td><td>74°40'48.17" E</td><td>24°38'27.29" N</td></tr>
<tr><td>T</td><td>74°40'58.16" E</td><td>24°38'41.61" N</td></tr>
<tr><td>U</td><td>74°40'59.07" E</td><td>24°38'41.90" N</td></tr>
<tr><td>V</td><td>74°40'54.98" E</td><td>24°38'53.68" N</td></tr>
<tr><td>W</td><td>74°40'58.95" E</td><td>24°38'57.62" N</td></tr>
</table>
</td><td></td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>437 to 446 m above mean sea level</td><td>-</td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>No Forest Land is Involved in the plant site.</td><td>-</td></tr>
<tr><td>vii.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project site: Nil
Study area:
<table>
<tr><th>Water Body</th><th>Distance</th><th>Direction</th></tr>
<tr><td>KadamaliNadi</td><td>2.0 km</td><td>SE</td></tr>
<tr><td>Gambhiri Reservoir</td><td>2.15 km</td><td>East</td></tr>
<tr><td>Daru Nadi</td><td>5.5 km</td><td>SSW</td></tr>
<tr><td>Gambhiri Right Main Canal</td><td>7.0 km</td><td>NNE</td></tr>
<tr><td>Muraliya Right Main Canal</td><td>7.0 km</td><td>NNW</td></tr>
<tr><td>UnchaTalav</td><td>8.0 km</td><td>SW</td></tr>
</table>
</td><td>-</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.
However, following Reserved & Protected Forest are located in study area:
• Arnod RF (8.0 km in NE)
• Bhanda Block RF (9.0 km in SSW)</td><td>-</td></tr>
</table>

51.3.4 The existing project was accorded Environmental Clearance vide MoEF&CC letter no. J-11011/243/2016-IA. II (I) dated 23/07/2018. The status of production details in accordance with consent issued from Rajasthan Pollution Control Board (RPCB) is as below:

(a) CTO for 4.9 MTPA of cement and 2.8 MTPA of Clinker production was issued vide file no F(CMP)/Chittorgarh (Nimbahera)/4002/ (1)/2020-2021/1806-1808 on 13/08/2021 and validity of the CTO is up to 31/12/2025.

(b) CTO for 22.0 MW CPP was issued vide file no. F(Tech)/Chittorgarh (Nimbahera)/5(1)/2010-2011/1721-1723 on 29/07/2019. Validity of CTO is up to 31/03/2024.

(c) CTO for 13.2 MW WHRB power plant was issued vide file no F(Tech)/Chittorgarh (Nimbahera)/5(1)/2010-2011/4732-4734 on 29/10/2018. Validity of the CTO is up to 31/07/2023.

51.3.5 Implementation status of the existing EC:

Product	Unit/Line	Implementation Status	Existing capacity (as per EC dated 23/07/2018	Existing installed Capacity	Additional capacity under the instant proposal	Proposed capacity after expansion	Remarks
Clinker (Million TPA)	Line-I, II & III	Implemented	2.8	2.8	(+) 0.4	3.2	Expansion of Clinker production capacity of L-III by 0.40 MTPA by process optimization& debottlenecking.
	Line-IV	To be implemented	2.2	Yet to install	(-) 0.2	2.0	Reduction in proposed production capacity by 0.2 MTPA.
Total Clinker			**5.0**	**-**	**0.2**	**5.2**	-
Cement Mill(MTPA)	Line - I	Implemented	0.51	0.51	-	0.51	No change
	Line - II		0.72	0.72		0.72	
	Line - III (Two Mills)		2.37	2.37		2.37	
	HRP		1.30	1.30		1.30	
	Cement Mill-4	To be implemented	1.60	Yet to Install	-	1.60	
Total Cement			**6.5**	**4.9**	**-**	**6.5**	-
CPP (MW)	CPP-1	Implemented	22	22		22	No Change
	CPP-2	Implemented	25	Yet to install	(-) 25	Nil	Drop the additional CPP of 25 MW and proposed 15 MW WHRS with Line - 4.
Total			**47**	**22**	**-**	**22**	
WHRS (MW)	WHRS-Existing	Operative	15	13.2 (Water cooled)		15.0 (Air Cooled)	No Change in EC capacity. The existing installed capacity is 15 MW and present operative capacity is 13.2 MW which is proposed to operate at full design capacity by overhauling of turbine and replacement of water to air cooled condenser.
	WHRS (MW) Proposed	NA	NA	NA	15	15	New installation with Line - IV

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

S. No.	Plant Equipment/ Facility	Existing Facilities as per EC dated 23/07/2018 and amended on 18/11/2020								Proposed Unit		Final (Existing + Proposed)	
		Total (A + B)		Implemented (A)		Un - implemented (B)		As per CTO					
		Configuration (TPD)	Capacity (MTPA)	Configuration (TPD)	Capacity (MTPA)	Configuration (TPD)	Capacity (MTPA)	Configuration (TPD)	Capacity (MTPA)	Configuration (TPD)	Capacity (MTPA)	Configuration (TPD)	Capacity (MTPA)
1.	Clinker	Kiln: 1175 +1675	**5.0**	Kiln: 1175 +1675	**2.8**	Kiln: 6700	**2.2**	Kiln: 1175 +1675	**2.8**	No Change	0.2 MTPA	Kiln: 1175 +1675	**5.2**

		+5500 +6700		+5500				+5500				+5500 +6700	
2.	Cement	Cement Mill: 1509 +2152+7067+3880+4777	**6.5**	Cement Mill: 1509 +2152+7067+3880	**4.9**	Cement Mill: 4777	**1.60**	Cement Mill: 1509 +2152+7067+3880	**4.9**	No change		Cement Mill: 1509 +2152+7067+3880+4777	**6.5**
3	CPP	CPP-1: 22MW CPP-2: 25 MW	**47** MW	--	22MW	--	27		**22MW**	Drop the additional CPP of 25 MW		--	**22 MW**
4	WHRB	--	**15 MW**	--	**13.5 MW**	--	**1.5 MW**	--	**13.5 MW**	--	**15MW**	--	**30 MW**

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

S. No.	**Raw Material**	**Basis**	**Installed capacity (L1, L2, L3, L4 & CPP)**	**Additional for expansion**	**Total L1, L2, L3, L4 and CPP**	**Source**	**Mode of transport& Distance**
			Consumption (MTPA)				
1.	Limestone	1.45 T/ T of Clinker	6.96	0.58	7.54	Maliakhera Limestone Mine, Karunda Limestone Mine, Ahirpura Block	8 kms Road/Over Land Belt Conveyor is proposed
2.	Red Ochre/Red Mud	0.10 T/ T of Clinker	0.48	0.04	0.52	Sawa, Chittorgarh, Raj.	15 km/Road
3.	Laterite	0.15 T/ T of Clinker	0.72	0.06	0.78	Choti Sadri, Chittorgarh, Rajasthan.	35-40 km/Road
4.	Gypsum (Indian & imported Mineral Gypsum, Chemical Gypsum, Synthetic Gypsum, Anhydrite Gypsum)	0.07 T/T of Cement	0.45	0	0.45	Nagaur/ Bikaner Districts and Gujrat Synthetic Gypsum from Own plant, Chemical gypsum from Gujarat & other state, Imported gypsum from Oman and Iran	350 to 850 km/Road
5.	Fly Ash	0.35 T/T of Cement	2.28	0	2.28	Kota, Suratgarh, Bina, Chabra, Kawai, Bhadresh	250 to 750 km/Road

51.3.8 Existing water requirement is 4071 KLD, water requirement is obtained from groundwater & mine pit water and permission for ground water withdrawal has been obtained from from CGWA *vide* letter no. CGWA/NOC/IND/REN/3/2021/6476 dated 14/05/2020. The water requirement after the proposed expansion & modification project will be 2892 KLD; out of which 441.5 KLD water will be source from ground and remaining 2450.5 KLD will be sourced from mine pit water. The permission for drawl of ground water has obtained from CGWA *vide* letter no. CGWA/NOC/IND/REN/3/2021/6476 dated 14/05/2020 and is valid up to 13/05/2022.

51.3.9 Existing power requirement is 62.5 MW is obtained from CPP, WHRB and Grid. The power requirement for the proposed expansion project will remain same (62.5 MW); out of which 22 MW will be obtained from CPP & 30 MW from WHRB & remaining from State Grid.

51.3.10 Baseline Environmental Studies (Post project monitoring data)

<table>
<tr><th>Period</th><th>April, 2021 to Sept., 2021</th></tr>
<tr><td>AAQ parameters at 04 locations</td><td>$PM_{2.5}$ - 28.84 to 34.83 µg/m^3
PM_{10}- 76 to 95 µg/m^3
SO_2 - 6.8 to 9.9 µg/m^3
NO_2-18.1 to 20.4 µg/m^3</td></tr>
<tr><td>Incremental GLC Level</td><td>PM -0.24 µg/m^3 (at 462 m in NE direction)
SO_2 -1.03µg/m^3 (at 924 m in NE direction)
NOx - 1.11 µg/m^3 (at 924 m in NE direction)</td></tr>
<tr><td>Ground water quality at 6 locations</td><td>pH - 7.59 to 8.12
Total Hardness – 330 to 410 mg/l
Alkalinity – 230 to 280 mg/l
TDS - 498 to 623 mg/l</td></tr>
<tr><td>Surface water quality</td><td>pH 7.88 to 8.10
TDS- 382 to 474 mg/l
Alkalinity -130 to 240 mg/l
Suspended Solids- 11 to 16 mg/l</td></tr>
<tr><td>Noise levels</td><td>Noise Level During Day Time -58 to67.1 Leq dB (A)
Noise Level During Night time -52.9 to 56.6 Leq dB (A)</td></tr>
<tr><td>Traffic assessment study findings</td><td>▪ Traffic Study has been conducted at NH-56 which approximately 1.0 Km in North West (distance) from the plant site.
▪ Transportation of raw material fuel & finished product will be done 100 % by road.
▪ Existing PCU is 450.95 PCU/hr on NH-56 and existing level of service (LOS) is:
<table>
<tr><th>Road</th><th>V (Volume in PCU/hr)</th><th>C (Capacity in PCU/hr)</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>NH-56</td><td>450.95</td><td>3600</td><td>0.1252</td><td>A</td></tr>
</table>
▪ PCU load after proposed project will be 450.95 (Existing) + 2.625 (Additional) PCU/hr and level of service (LOS) will be:
<table>
<tr><th>Road</th><th>V (Volume in PCU/hr)</th><th>C (Capacity in PCU/hr)</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>NH-56</td><td>453.57</td><td>3600</td><td>0.1259</td><td>A</td></tr>
</table>
*Note: Capacity as per IRC -. 106 - 1990 Guide line for capacity for roads
Conclusion: The level of service will be excellent after including additional traffic due to proposed project.</td></tr>
</table>

Period	April, 2021 to Sept., 2021
Flora and fauna	Wildlife Conservation Plan for two Schedule I species i.e. Indian Peafowl and Panther has been approved vide letter dated 13/07/2021. A budget of Rs. 285.35 lakhs has been proposed for 10 years. Out of which, 20 % (Rs. 57.07 Lakhs) has been deposited.

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

S. No.	Type of Waste	Waste	Source	Quantity generated	Mode of Treatment / Disposal
1.	SW	Ash	CPP	350 TPD	Will be used in cement manufacturing
2.	SW	Bottom/ Bed Ash	CPP	33 TPD	
3.	SW	Sludge	STP	1 TPM	Used as manure for plantation
4.	SW	MSW	Kitchen waste/	800 KG/day	MSW is being/will be disposed of through Nagar Palika, Nimbahera
5.	HW	Used Oil Waste Oil	Different sections of Plant maintenance	100 KLA 150 KLA	Existing hazardous waste generated sold to CPCB/SPCB authorized recycler.

51.3.12 Public Consultation (Part of the Original EC accorded on 23/07/2018)

Details of advertisement given	Dainik Bhaskar – 28/05/2017 Rajasthan Patrika – 28/05/2017
Date of public consultation	30/06/2017
Venue	Sub Divisional office, Nimbahera, Tehsil - Nimbahera, District - Chittorgarh (Raj.).
Presiding Officer	Additional District Collector
Major issues raised	i. Employment, ii. Environment & Pollution, iii. Health, iv. Education, v. Social & Others.

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

S No	Proposed Budget For CER Schemes For the Financial Year 2017-22		Year wise Expenses				Action plan
	Enterprise Social Commitment Activities	Proposed Budget for CER schemes for the Financi	2018-19	2019-20	2020-21	2021-22 (to be incurred)	

S No	Proposed Budget For CER Schemes For the Financial Year 2017-22		Year wise Expenses				Action plan
		al Year 2017-22					
1.	**Centre for women training**						
	Women Income Generating Programmes through the various economic activities - Cutting & Tailoring, Pickle & Sauces making, Soft Toys & Gem Jeweller, and Beautician Courses will be continued.	5000000	Rs 1554767has been incurred towards Sparsh Sanitary Pad Project for Women self-help groups and providing structured setups & training for earning through production and sell of low cost sanitary pads. Organizing training programs for Woman Skill development.	Rs 633217 has been incurred towards Sparsh Sanitary Pad Project for Women self-help groups and providing structured setups & training for earning through production and sell of low cost sanitary pads. Organizing training programs for Woman Skill development. Donated stitching machines to MewarViklangSevaSamiti for supporting livelihood activities.	2370383	441633	Work is under progress and will be completed by FY 2021-22.
2.	**Community Centre required at Mangrol**						
	Mangrol residents were continuously requiring a community centre as mention in the Public Hearing	4000000	Rs 377413 has been outlay towards Various community welfare activities which includes beautification of railway station and providing facilities & Renovation of structures of public interest Rs	Rs 517440 has been out layed towards Manpower hired for smooth working of CSR activities & Construction of Community Centre.	1835564	1269583	Work is under progress and will be completed by FY 2021-22.

S No	Proposed Budget For CER Schemes For the Financial Year 2017-22		Year wise Expenses				Action plan
			19059929 has been incurred towards Construction of roads for connectivity in rural area, panchayat area, link road. Gitti road, Gravel road, CC roads				
3.	**Medical & Health**						
	Further modern technology Development in the Hospital Nimbahera (Path lab equipments, OT, Diagnostic center)	2000000	Rs 2095081 has been incurred towards Medical Check-up camps & Eye camps in nearby villages, distributed medicines & organised health awareness programs. Providing facilities at Aanganbadi centre. Construction of toilets & Supporting in different projects like Nand Ghar Yojana.	Rs 162108 has been incurred Medical Check-up camps in nearby villages, distributed medicines & organised health awareness programs. Expenses for maintenance of Aanganbadi Kendra.	-	1642811	Work is under progress and will be completed by FY 2021-22.
	Establishment of the Blood bank in Nimbahera in approach of the Hospital, Nimbahera.	1900000					
4.	**Water supply line works required at Shahabad**						
	Laying of Water supply line works in Shahabad 4.3 km , to solve the Water supply	2000000	-	-	18655020	134980	Work is under progress and will be

S No	Proposed Budget For CER Schemes For the Financial Year 2017-22		Year wise Expenses				Action plan
							completed by FY 2021-22.
5.	**School/ Education**						
	Construction of Three New rooms in Govt. School PhacherAhiran (Total six room constructed-500 sq. ft each room)	3000000	Rs. 4433705 has been incurred towards Infrastructural work at schools like building classrooms, furnishing with necessary equipments& furniture. Electrification of schools in nearby areas. Providing coaching facilities to children in nearby villages. Donation to NGO for education promotion	Rs. 1346623	Rs. 3712947	-	Against the Budget of Rs. 5400000, Rs. 9493275 has been incurred.
	To recognize and motivate the Students on Independence day function (8th to 12th class) by Distributor of Silver Medal to those who have achieved 65% and above marks in Board Exam Nimbahera	200000					
	Permanent water body creation by anicuts / check bund.	2200000					
6.	**Livelihood Promotion/ Job Creation & Skill Generation**						
	Organize a Rural Skill developing programme for Women &Youth. Provide the various kind of training(Handicrafts, agriculture, Cattle farming, jewelry, Tailoring, Cottage industrial training)	3700000	Rs3651855has been incurred towards Sparsh Sanitary Pad Project for Women self-help groups and providing structured setups & training for earning through production and sell of low cost sanitary pads.	Rs 1498587has been incurred towards Sparsh Sanitary Pad Project for Women self-help groups and providing structured setups & training for earningthrough production and sell of low cost sanitary pads.	Rs. 2370383		Against the Budget of Rs. 3700000, Rs. 7520825 has been incurred.
7.	**Infrastructure work**						
	C.C. Road & Drainage line	8000000	In the FY 2018-19 and FY 2019-20 Rs 24855598 has been incurred		Rs. 21391406	-	Against the

S No	Proposed Budget For CER Schemes For the Financial Year 2017-22		Year wise Expenses				Action plan
	construction work in Phalwa village. (P.P. Mode)&Maintenance		Construction of a fully modern Convention Center for the society. Developmental work at Aanganbadi Centers. Road construction in nearby Rural areas, Park Development & Maintenance.				Budget of Rs. 13450000, Rs. 46247004 has been incurred.
	Grave Yard shed & Boundary wall construction work in Shabad village. (P.P. Mode)	900000					
	Community hall construction work in Bhawliya village (P.P. Mode).	550000					
	Construction &Development of a Community centre in Mangrol village.	4000000					
8.	**Drinking Water**						
	Water Tanker Supply in Summer season in Nimbahera city & Nearby villages.	2000000	Rs 11,96,907 has been expenses towards providing Drinking water facilities for nearby villages. Activities like laying pipelines, tube well and Deeping of tube wells as & when required.	Rs 1220990 has been incurred towards Providing Drinking water facilities for nearby villages. Activities like laying pipelines, tube well and Deeping of tube wells as & when required.	Rs. 1418976	Rs. 913127	Work is under progress and will be completed by FY 2021-22.
	Mukyamantri JAL SWALAMBAN YOJNA 2017-18.	1200000					
	Water Pipe Line work construction work in Pipliya village (P.P. Mode)	1550000					
	Total	**42200000**					

51.3.13 Existing capital cost of the project was Rs. 2,959.9 Crores (L1, L2, L3, L4, CPP & WHRS). The capital cost for the proposed expansion project is Rs. 40 Crores. No capital cost for environmental protection measures is proposed. The annual recurring cost towards the environmental protection measures for proposed expansion is nil (Existing recurring cost - 421.06 Crores). There is no employment generation from the proposed expansion project.

51.3.14 Existing Greenbelt has been developed in 32.36 ha which is about 33% of the total project area of 98.05 ha with total sapling of 121180 Trees and Additional plantation has also been done on 14.57 ha outside the plant. A 15 m wide greenbelt, consisting of at least 3 tiers around plant boundary has been developed as greenbelt and green cover as per

CPCB/MoEF&CC, New Delhi guidelines. Local and native species has been planted with a density of 2500 trees per hectare.

51.3.15 Justification under para 7(ii) of EIA, 2006

M/s. JK Cement Limited (JKCL) is proposing Expansion in Clinker Production Capacity {(5.0 to 5.2 MTPA) by change in configuration through optimization & debottlenecking} and WHRS {13.2 (Water Cooled) to 15 MW (Air Cooled)} along with installation of additional WHRS {15 MW (Air Cooled)} and Reduction in capacity of Captive Thermal Power Plant (47 to 22 MW under section 7(ii) of EIA Notification 2006 as amended thereof.

51.3.16 It has been reported that following will be resource consumption after the proposed change:

Particulars	**As per EC dated 23/07/2018**	**After Proposed change under Para 7(ii)**	**% Increase/ decrease**
Land	98.05 ha	98.05ha	No additional land is required
Greenbelt	32.36 ha	32.36 ha	Additional plantation has also been done on 14.57 ha outside the plant.
Water	4071 KLD	2892 KLD	Decreased by 28.96%
Power	62.5 MW	62.5 MW	Power requirement will remain same.
Raw materials	Limestone- 6.96 MTPA RedOchre/ Red Mud-0.48 MTPA Laterite- 0.72 MTPA Gypsum- 0.45 MTPA Fly Ash -2.28 MTPA	Limestone- 7.54 MTPA Red Ochre/Red Mud - 0.52 MTPA Laterite- 0.78 MTPA Gypsum- 0.45 MTPA Fly Ash -2.28 MTPA	Limestone- 8.64% increase Red Ochre/Red Mud - 8.88 % increase Laterite - 8.33% increase
Products	Clinker- 5.0 MTPA Cement- 6.5 MTPA CPP- 47 MW WHRS- 15 MW	Clinker - 5.2 MTPA Cement - 6.5 MTPA CPP - 22 MW WHRS - 30 MW	4% increase. Drop the additional CPP of 25 MW capacity.

51.3.17 Pollution load assessment:

Particulars	**As per EC dated 23/07/2018**	**After Proposed change under Para 7(ii)**	**% Increase/ decrease**
Air	PM - 95.41	PM - 81.42	decrease by 14.66%
	SOx - 357.58	SOx - 196.07	decrease by 45.16%
	NOx - 1259.88	NOx - 1130.47	decrease by 10.23%
Domestic waste water	17.4 KLD	17.4 KLD	No change
Industrial Effluent	522.2 KLD	256.2 KLD	50% decrease
	Ash - 383 TPD	Ash - 383 TPD	No change

Particulars	As per EC dated 23/07/2018	After Proposed change under Para 7(ii)	% Increase/ decrease
Solid & Hazardous Waste	Sludge - 1TPM	Sludge - 1TPM	No change
	MSW - 800kg/day	MSW - 800kg/day	No change
	Waste oil: 150 KLA	Waste oil: 150 KLA	No change
	Used Oil: 100 KLA	Used Oil: 100 KLA	No change
Traffic Load	Existing: 830	After Proposed expansion:21 trucks	Increase in 2.5% traffic

51.3.18 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

51.3.19 Name of the EIA consultant: M/s. J.M. EnviroNetPvt. Ltd [S.No. 44, List of ACOs with their Certificate/ Extension Letter no. NABET/EIA/2023/RA 0186 and valid up to 07/02/2023; Rev. 18, January05, 2022].

Certified compliance report from Regional Office:

51.3.20 The Status of compliance of earlier EC was obtained from Integrated Regional Office, Jaipur *vide* letter No. IV/Env/Raj/IND-183/993/2019 dated 20/12/2021 in the name of M/s. JK Cement Limited after site inspection carried out on 02/12/2021. The Action taken report regarding the partially/ non - compliance condition was submitted to MoEF&CC, 21/12/2021. Detail of noncompliance observed by IRO, Jaipur and action taken report submitted by PP is given as below:

S No	Non-compliance details	Observation of RO (abridged)	Condition no.			Response by PP
			EC date	Specific	General	
1.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shallbe implemented.	Partial Complied	23rd July, 2018	-	13	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan has been prepared and same has been submitted to the office of IRO, MoEF&CC, Jaipur.
2.	The PP shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) asper the norms of Factory Act	Partial Complied	23rd July, 2018	_	14	In cement industry, no workmen engaged in high Temperature work zone. However, PPEs are being provided to all the employees & worker while working near kiln and preheater.
3.	Send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the	Reported to be complied	23rd July, 2018	_	29(a)	Copy of EC has already been sent to heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government and receipt of the same has been submitted to IRO, Jaipur.

S No	Non-compliance details	Observation of RO (abridged)	Condition no.			Response by PP
			EC date	Specific	General	
	Government;					
4.	Inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forests and Climate Change(MoEF&CC) at http:/envfor.nic.in.	Reported to be complied	23rd July, 2018	_	29(c)	Public Notice for issuance of EC had been Published in two local newspapers viz. Dainik Bhaskar and Rajasthan Patrika on 26/07/2018. Copy of the same has been submitted to IRO, Jaipur.
5.	Upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same Periodically.	Partial Complied	23rd July, 2018	_	29(d)	EC letter along with EC Compliance have been uploaded on the company's website. However, Presently, the website is under upgradation and will be completed by 31/12/2021.

Observations of the Committee

51.3.21 The Committee noted the following:

i. The existing proposal was accorded EC on 23/07/2018 for production of Clinker of 5.0 MTPA and Cement of 6.5 MTPA along with CPP (FBC based of 47 MW and WHRB of 15 MW) at Kailash nagar, tehsil Nimbahera, District Chhittorgarh, Rajasthan.

ii. The instant proposal of PP is for seeking Environmental Clearance under para 7 (ii) of the EIA notification, 2006 for expansion in clinker production from 5.0 MTPA to

5.2 MTPA by increasing the capacity of Line III of 0.4 MTPA by process optimization and debottlenecking & reduction the capacity of line IV of 0.2 MTPA; modified the WHRB system from 13.5 MW (water cooled) to 15. MW (Air cooled) with addition of new WHRB system of 15 MW (Air cooled) and reduction capacity of FBC based power plant from 47 MW to 22 MW.

iii. The proposed amendment is proposed within existing project are of 98.05 ha only and green belt will remain same as 32.36 ha.

iv. PP submitted that water consumption will be reduced from 4071 KLD to 2892 KLD and there will be overall reduction in pollution load as given at para no. 51.3.17 above.

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

vi. The Committee deliberated upon the certified compliance report of RO and action taken report submitted by PP with respect to the compliance status of all the existing EC and found its satisfactory.

vii. The EAC has carried out requisite due diligence of the instant proposal and considered the same under para 7(ii) (a) of the EIA Notification, 2006 and dispense with the requirement of conducting fresh public consultation in light of the observations mentioned above.

Recommendations of the Committee

51.3.22 In view of the foregoing and after detailed deliberations, the committee recommended the instant proposal for grant of Environment Clearance under the para 7(ii) of EIA Notification, 2006 subject to the stipulation of following specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 pertaining to integrated cement plants based on project specific requirements:

A. Specific Conditions

i. Particulate matter emissions from all the stacks shall be less than 30 mg/Nm^3.

ii. Air cooled condensers shall be used in the captive power plant in place of water-cooled system.

iii. Water consumption shall be reduced from 4071 KLD to 2892 KLD due to switch over from water cooled system to air cooled condensers. Compliance status in this regard shall be submitted to the concerned Regional Office of the MoEF&CC along with the six-monthly compliance report.

iv. Dioxin and furans shall be monitored twice a year during co-processing of hazardous waste and report shall be submitted to the Regional Office of the MoEF&CC.

v. Green belt shall be developed in 33% of the total area all along the entire periphery of the area with a density of 2500 trees per ha by 31st December, 2022 as committed. This shall include development of green belt with a width of 20 m within the project site towards 4 villages around the plant i.e. Rampura (220m), Ahirpura (340m), Kautha (350m) and Nimbaheda(860m) from the project site. Additionally, 14.57 ha land located outside the project site shall be brough under green belt development as committed by the proponent.

vi. Rain Water harvesting shall be implemented as per the action plan submitted in the addendum EIA report.
vii. 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.
viii. Slip roads shall be provided at the gates and along crossings on main roads.
ix. All internal and connecting road to the Highway shall be black topped/ concreted with suitable load in term of Million Standard Axle (MSA) as per IRC guidelines.
x. Performance monitoring of pollution control equipment shall be taken up yearly and compliance status in this regard shall be reported to the concerned Regional Office of the MoEF&CC.
xi. 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 to the concerned Regional Office of the MoEF&CC.

A. 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 (CEMS) at process stacks to monitor stack emission as well as 4 Nos. Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.
iii. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
iv. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash;
v. The project proponent shall provide wind shelter fence and chemical spraying on the raw material stock piles;
vi. Ventilation system shall be designed for adequate air changes as per the prevailing norms for all tunnels, motor houses, and cement bagging plants.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R.

No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement)as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall regularly monitor ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
iii. 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
v. Water meters shall be provided at the inlet to all unit processes in the cement plant.
vi. The project proponent shall make efforts to minimize water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.

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. Waste heat recovery system shall be provided for kiln and cooler.
ii. The project proponent makes efforts to achieve power consumption less than 65 units/ton for Portland Pozzolona Cement (PPC) and 85 units/ton for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
iv. Provide the project proponent for LED lights in their offices and residential areas.

VI. Waste management

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

VII. Green Belt

i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration by trees in the plant premises.

VIII. Public hearing and Human health issues

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

ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.
iii. 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; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

ix. 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.

51.4 Green field Integrated Steel Plant of 6.0 MTPA along with Captive Power Generation of 893 MW by **M/s. Uttam Galva Ferrous Limited** located at Villages Kuduthini, Veniveerapura, Yerangaligi & Kolagallu, **Taluka & District Bellary, Karnataka** [Online Proposal No. IA/KA/IND/234365/2021; File no: IA-J-11011/80/2014-IAII(I)] – **Prescribing of Terms of Reference – regarding.**

51.4.1 M/s. Uttam Galva Ferrous Limited has made an online application vide proposal no. IA/KA/IND/234365/2021 dated 20/12/2021, the application in prescribed format (Form-1), 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 schedule no.3(a) Metallurgical Industries (Ferrous & non-ferrous), 2 (b) Minerals Beneficiation, 4(b) Coke Oven &1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at central level.

Details submitted by Project proponent

51.4.2 The project of M/s. Uttam Galva Ferrous Limited is located in Villages Kuduthini, Veniveerapura, Yerangaligi &Kolagallu, Taluka & District Bellary, Karnataka is for setting up of green field Integrated Steel Plant of 6.0 MTPA along with Captive Power Generation of 893 MW.

51.4.3 Environmental site settings:

S.No.	Particulars	Details	Remarks
i.	Total land	4877Acres (2015.4Hectares).	Industrial Land
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	The total land admeasuring 4877 acres already been handed over to UGFL by Karnataka Industrial Areas Development Board (KIADB).	

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td><u>Project Site</u>: Nil

<u>Study Area</u>:<table><tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr><tr><td>Krishnanagar</td><td>1.7 km</td><td>NE</td></tr><tr><td>Kolagal</td><td>1.6 km</td><td>SE</td></tr><tr><td>Veniveerapura</td><td>0.25 km</td><td>South</td></tr><tr><td>Kudathini Village</td><td>1.9 km</td><td>WSW</td></tr></table></td><td>No R&R is required</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of the project site</td><td><table><tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr><tr><td>1</td><td>15°11'04.61"N</td><td>76°49'29.66"E</td></tr><tr><td>2</td><td>15°11'39.04"N</td><td>76°50'46.06"E</td></tr><tr><td>3</td><td>15°14'06.37"N</td><td>76°46'33.65"E</td></tr><tr><td>4</td><td>15°13'24.88"N</td><td>76°46'18.38"E</td></tr></table></td><td></td></tr>
<tr><td>v.</td><td>Elevation of the project site.</td><td>470 m above MSL</td><td></td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>Nil</td><td></td></tr>
<tr><td>vii.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project Site: Three streams (Urumandra nalla) are crossing the site

Study area:<table><tr><th>Water Body</th><th>Distance</th><th>Direction</th></tr><tr><td>Tungbhadra High Level Canal</td><td>Adjacent to project boundary</td><td>NE</td></tr><tr><td>Allipura Reservoir</td><td>3.0 km</td><td>South</td></tr><tr><td>Daroji Reservoir</td><td>9.4 km</td><td>West</td></tr></table></td><td></td></tr>
</table>

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

S. No	Name of Facility	Configuration of each unit	Total Capacity
1	Coke oven and By-product plant	2x60 ovens &2x60 ovens	2.74 MTPA
2	Beneficiation & Pellet plant	1x420 m^2	4 MTPA
3	Sinter plant	2x460 m^2	8.532 MTPA
4	Blast Furnace	2x4200 m^3	6.464 MTPA
5	Basic Oxygen Furnace (BOF)	SMS-I 2x160 T SMS-II 2x160 T LRF -I 2x160 T LRF -II 2x160 T VD - 2x160 T	6.0 MTPA
6	Continuous Casting Machine (CCM)	2x2.940 MTPA	5.88 MTPA
7	Rolling Mill (RM)	2x2.809 MTPA	5.615 MTPA

S. No	Name of Facility	Configuration of each unit	Total Capacity
8	Captive Power Plant	2x200 MW 1x200 MW GBPP: 110 MW & 153 MW, TRT: 2x15 MW	893 MW
9	Oxygen Plant	4x1000 TPD	4000 TPD
10	Lime Plant	4x450 TPD	0.524 MTPA

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

Raw material	Quantity Total (TPA)	Source	Mode of Transportation
Lumpore for SMS	72,000	Iron ore mines in Karnataka and Goa	Rail
Ore fines			
For Sinter plant	79,70,000	Indigenous Sandur/Hospet	Rail
For Beneficiation	66,30,000	Indigenous Sandur/Hospet	Rail
Prime coking coal	28,40,000	Coking coal will be imported from Australia, Indonesia, Canada, China and Venezuela	Rail
Semi coking coal	12,16,500	Semi-coking coal will be imported from Australia, Indonesia, Canada, China and Venezuela	Rail
Coal for PCI	11,62,000	Australia/Indonesia	Rail
Coal for CPP (Full power generation)	39,70,000	Indigenous/Indonesia	Rail
Anthracite for SP	1,16,500	Will be imported from Vietnam and/or South Africa	Rail
Limestone			
For SP	7,11,000	High grade low silica limestone will be imported from Japan, Thailand, Vietnam, Middle east etc.	Rail/Road
For SMS(HG)	11,54,000	High grade low silica limestone will be imported from Japan, Thailand, Vietnam, Middle east etc.	Rail
For Pellet plant	85,500	Indigenous source	Rail/Road
Dolomite		Indigenous source	Rail/Road
For SP	7,92,000	Indigenous source	Rail/Road
For SMS(HG)	3,28,000	Indigenous source	Rail/Road
Quartzite for BF	34,000	Indigenous source	Rail/Road
Sand for SP	1,40,500	Indigenous source	Rail/Road
Bentonite for PP	35,500	Indigenous source	Rail/Road

51.4.6 The water requirement for the project is estimated to be about 145,080 m^3/day, out of which 7056 m^3/day of fresh water requirement will be obtained from the rain water harvesting and

the remaining requirement of 138024 m^3/day will be met from the surface water from river Tungabhadra. Government of Karnataka has granted permission to draw 4 TMC (12,930 m^3/hr) of surface water from downstream of Tungabhadra River, and agreement has been signed with Govt. of Karnataka on 28/09/2021 vide Agreement No:02/2021/22.

51.4.7 The power requirement of the project estimated to be 650 MW and shall be met from total power generation of 893 MW from the plant operations. The captive power plant generation is about 600 MW from coal based and TRT, GBPP will generate another 293 MW. 40MW additional power will be generated from the CDQ process. In case of power evacuation/drawing will be from KPTCL sub station 400kV/ 220kV grid near Kuduthini which is about 5km from the project site.

51.4.8 The capital cost of the project is Rs 36,000/- Crores and the capital cost for Environmental protection measures is proposed as capital cost Rs.5625 Crores. & Recurring cost per annum Rs.563 Crores. The employment generation from the proposed project is 6427 persons.

51.4.9 Proposed Terms of Reference (**Baseline data collection period:01/10/2021 to 31/12/2021) Post monsoon**):

Attributes	**Sampling**		**Remarks**
	No. of stations	**Frequency**	
A. Air			
a. Meteorological parameters - Wind speed, direction, temperature, humidity, rainfall, etc.	1	Once during study period	
b. AAQ parameters PM_{10}, $PM_{2.5}$, SO_2, NO_2 and CO etc	8	24hourly samples twice a week for 8 locations covering one full season (post Monsoon 2021)	
B. Noise- Noise levels in dB(A)	8	Noise level (day & night) will be monitored once during the study period.	
C. Water			
Surface water/ Ground water quality parameters	8	Once during study period post monsoon 2021 Physical, Chemical and Bacteriological parameters	
D. Land			
a. Soil quality b. Land use	Study area	Once during study period post monsoon 2021	
E. Biological a. Aquatic b. Terrestrial	Study area	Once during study period post monsoon 2021	
F. Socio-economic parameters	Study area	Once during study period	

51.4.10 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.

51.4.11 Name of the EIA consultant: M/s. AMPL Environ Pvt. Ltd [S No 134, NABET Certificate no. NABET/EIA/2023/IA0061 and valid upto13/08/2023; Rev. 18, January05, 2022].

Observations of the Committee

51.4.12 The EAC noted the following:

i. 10 km study area is selected based on center of the plant site which is wrong. The project site is spread over in area of 20 Sq. Km. In such cases, 10 km distance is selected from Chimney locations towards the boundary of the plant. The study area selected is wrong. Number of villages indicated in study area is also wrong.

ii. PP has selected the locations of the sampling stations for environmental baseline study on basis of wind rose prepared with meteorological data from 1951 to 1980 which is not as per CPCB guidelines. PP needs to be carried out fresh baseline monitoring for all the environment components afresh.

iii. As the project site is spread over an area of 4877 acres, the number of monitoring stations selected by PP are not sufficient. PP shall increase the number of sampling locations to cover all sources of the proposed project. Besides, the monitored data does not contain the parameters such as BAP and Ammonia etc. which are relevant for proposed green field integrated steel plant.

iv. There are 3 water streams passing through the project site. Conservation measures to protect the water bodies have not furnished in PFR.

v. There are two villages in North and West near to the project site. Measures to be adopted for protection of these villages have not been made available.

vi. PP has not proposed for energy recovery system with sinter cooling system.

vii. Most of the sections in Form I have not been filled in properly despite three EDS raised by the Ministry. Form I need to be resubmitted with quantified data.

viii. MEROS technology has not been proposed in the Sinter plant.

ix. Power generation from Sinter cooler has not been proposed.

x. Dry gas cleaning plant for BF and BOF has not been proposed.

xi. Details of Secondary Fume extraction from BOF are not available.

xii. Stove waste heat recovery for pre heating the blast air has not been proposed.

xiii. BOD plant for coke oven is included. BOD plant shall be ZLD using latest technology for treatment of Coke Oven effluent.

xiv. ETPs for various sections shall be independent as far as possible to ensure recycling at the source of generation.

xv. Energy conservation measures to be adopted in the proposed ISP project have not been furnished in the pre-feasibility report.

xvi. PP has sought for waiver of public hearing based on the earlier public hearing held on 4/8/2016. As per the Ministry's O.M. No. J-11011/321/2016-IA.II(I) dated 27/04/2018, public hearing exemption is not available for the metallurgical industries even if the project site is located within the industrial estates/parks.

Recommendations of the Committee

51.4.13 In view of the foregoing and after deliberations, the Committee recommended that the proposal to be returned in its present form to address the technical deficiencies enumerated at para no. 51.4.12 and submit the revised application as per the provisions of EIA Notification, 2006.

51.5 Set up of green field Steel Melting Shop of 2,08,400 TPA and Rolling Mill of 2,00,000 TPA by **M/s. Ambica Steel India Limited** located at Mokhana Village, Taluka Bhuj, **District Kutch, Gujarat** [Online Proposal No. IA/GJ/IND/243213/2021; File no: IA-J-11011/508/2021-IA-II(IND-I)] - **Prescribing of Terms of Reference – regarding.**

51.5.1 M/s. Ambica Steel India Limited has made an application online vide proposal no. IA/GJ/IND/243213/2021 dated 21/12/2021, the application in prescribed format (Form-1), 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 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

51.5.2 The project of M/s. Ambica Steel India Limited is located in Mokhana Village, Taluka Bhuj, District Kutch, Gujarat for Set up of green field Steel Melting Shop of 2,08,400 TPA and Rolling Mill of 2,00,000 TPA.

51.5.3 Environmental site settings:

<table>
<tr><th>SNo</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1</td><td>Total land</td><td>27.28 ha
(Private land: 27.28)</td><td>Land use-Agriculture land</td></tr>
<tr><td>2</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>Land is in name of Ambica Steel Limited, which under process of transferring land to M/s. Ambica Steel India Limited</td><td></td></tr>
<tr><td>3</td><td>Existence of habitation & involvement of R&R, if any.</td><td><u>Project Site</u>: Nil

<u>Study Area</u>:<table><tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr><tr><td>Kaniyabe</td><td>1.65km</td><td>West</td></tr><tr><td>Mokhana</td><td>1.6 km</td><td>NNW</td></tr></table></td><td>No R&R is involved</td></tr>
<tr><td>4</td><td>Latitude and Longitude of all</td><td><table><tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr><tr><td>A</td><td>23°17'10.42"N</td><td>70°0'19.78"E</td></tr></table></td><td></td></tr>
</table>

<table>
<tr><th>SNo</th><th>Particulars</th><th colspan="4">Details</th><th>Remarks</th></tr>
<tr><td></td><td>corners of the project site.</td><td colspan="4"><table>
<tr><td>B</td><td>23°17'10.96"N</td><td>70°0'22.25"E</td></tr>
<tr><td>C</td><td>23°17'10.55"N</td><td>70°0'24.70"E</td></tr>
<tr><td>D</td><td>23°17'11.51"N</td><td>70°0'28.68"E</td></tr>
<tr><td>E</td><td>23°17'10.35"N</td><td>70°0'31.08"E</td></tr>
<tr><td>F</td><td>23°17'11.08"N</td><td>70°0'37.04"E</td></tr>
<tr><td>G</td><td>23°17'03.45"N</td><td>70°0'41.05"E</td></tr>
<tr><td>H</td><td>23°17'03.02"N</td><td>70°0'39.76"E</td></tr>
<tr><td>I</td><td>23°16'53.46"N</td><td>70°0'43.79"E</td></tr>
<tr><td>J</td><td>23°16'53.26"N</td><td>70°0'40.63"E</td></tr>
<tr><td>K</td><td>23°17'0.15"N</td><td>70°0'38.51"E</td></tr>
<tr><td>L</td><td>23°16'59.65"N</td><td>70°0'34.45"E</td></tr>
<tr><td>M</td><td>23°16'52.99"N</td><td>70°0'36.38"E</td></tr>
<tr><td>N</td><td>23°16'52.52"N</td><td>70°0'31.00"E</td></tr>
<tr><td>O</td><td>23°16'59.36"N</td><td>70°0'29.81"E</td></tr>
<tr><td>P</td><td>23°16'59.26"N</td><td>70°0'23.99"E</td></tr>
<tr><td>Q</td><td>23°16'52.37"N</td><td>70°0'25.75"E</td></tr>
<tr><td>R</td><td>23°16'51.88"N</td><td>70°0'18.33"E</td></tr>
<tr><td>S</td><td>23°16'55.65"N</td><td>70°0'17.22"E</td></tr>
<tr><td>T</td><td>23°16'56.74"N</td><td>70°0'20.96"E</td></tr>
<tr><td>U</td><td>23°17'04.06"N</td><td>70°0'19.22"E</td></tr>
<tr><td>V</td><td>23°17'04.64"N</td><td>70°0'21.91"E</td></tr>
</table></td><td></td></tr>
<tr><td>5</td><td>Elevation of the project site</td><td colspan="4">89m above mean sea level</td><td></td></tr>
<tr><td>6</td><td>Involvement of Forest land if any.</td><td colspan="4">Not involved forest land</td><td></td></tr>
<tr><td>7</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td colspan="4"><u>Project Site</u>: Nil

<u>Study Area:</u><table>
<tr><th>Water body</th><th>Distance km</th><th>Direction</th></tr>
<tr><td>Sang Nadi</td><td>0.60</td><td>N</td></tr>
<tr><td>Nihwara Nala</td><td>6.1</td><td>NNW</td></tr>
<tr><td>SakraNadi</td><td>6.3</td><td>E</td></tr>
<tr><td>Tappar Reservoir</td><td>10.0</td><td>ESE</td></tr>
<tr><td>Talav</td><td>3.0</td><td>S</td></tr>
<tr><td>Talav</td><td>8.8</td><td>WSW</td></tr>
<tr><td>Talav</td><td>6.8</td><td>SE</td></tr>
<tr><td>Hothisar Lake</td><td>5.6</td><td>ENE</td></tr>
<tr><td>Rann (Salt Waste-Dry)</td><td>10.0</td><td>NNE</td></tr>
</table></td><td>--</td></tr>
<tr><td>8</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/</td><td colspan="4">Nil

List of Reserved & Protected Forest</td><td></td></tr>
</table>

SNo	Particulars	Details			Remarks
	tiger reserve/ elephant reserve etc. if any within the study area	**Forest**	**Distance**	**Direction**	
		Nadapa RF	12.8km	WNW	
		Chapreli RF	14.3km	WNW	
		Naliyeri Timbo RF	8.0km	NW	
		Modsar RF	4.3km	NNW	
		Jawaharnagar RF	10.9km	NNE	
		Jawaharnagar RF	6.5km	NNE	

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

S No	Name of Facility	Configuration	Total Capacity
1	SMS	IF: 1x3 T + 1x40 T	2,08,400 TPA
2	Rolling Mill (RM)		2,00,000 TPA

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

S. No	Raw Material	Quantity (TPA)	Source	Distance from Site (km)	Mode of Transportation
1	Stainless Steel Scrap	166,720	Purchased 80% Imported 20% Local	Imported 75 Km & Locally 400 km approximately.	By Road
2	M.S. Scrap	20,840	Purchased Locally	200 km approximately.	By Road
3	Nickel	2,084	Imported	75 Km.	In sealed bags by road
4	Ferro-Silicon	10,420	Imported	75 Km.	In sealed bags by road
5	Ferro Manganese	14,588	Purchased Locally	200 Km approximately.	In sealed bags by road
6	Ferro-Chrome	22,924	Purchased Locally	350 Km approximately.	In sealed bags by road
7	Burnt Dolomite and lime	35,845	Purchased Locally/ Imported	Imported 75 Km & Locally 900 Km approximately.	In sealed bags by road
8	Fluorspar	1,042	Purchased Locally	100 Km approximately.	In sealed bags by road
9	Calcined Petroleum Coke (CPC)	1,667	Purchased Locally	Imported 75 Km & Locally 2200 Km approximately.	In sealed bags by road

51.5.6 The water requirement for the proposed project is estimated as 1130 m^3 /day, out of which 1130 m^3/day of fresh water requirement will be obtained from the Gujarat Water Infrastructure Ltd. (GWIL) (Surface water - Narmada River). Application submitted to

Executive Engineer, GWIL, Bhuj for permission of surface water withdrawal of 1130 m^3/day on 29/11/2021.

51.5.7 The power requirement for the proposed project is estimated as 30MW, which will be obtained from the Paschim Gujarat Vij Company limited (PGVCL).

51.5.8 The capital cost of the project is Rs 535 crores. The employment generation from the proposed project is 837.

51.5.9 Proposed Terms of Reference (**Baseline data collection period: December, 2021-February, 2022**):

S No	Attributes	Sampling		Remarks
		No of Stations	Frequency	
A	**Air**			
a	Meteorological Parameters	1 Station near the project site	One season (3 months) - Winter 2021-2022	Secondary data from IMD and onsite meteorological station
b	AAQ Parameters	9 Stations	Twice a week for 24 hours a day for 3 months	AAQ monitoring stations are selected based on the coverage factor and Wind flow in the downwind and upwind direction
B	**Noise**	8 Stations	Once in 3 months for daytime and night time by collecting hourly data and converting it to Leq	Stations are selected based on land use pattern and major sensitive areas
C	**Water**			
C-1	Surface water/ Groundwater Quality Parameters	8 stations each	once in 3 months	Stations are selected in the upstream and downstream of the nearest waterbody
D	**Land**			
a	Soil Quality	9 Stations		
b	Land Use	Study area		Satellite Imagery and SOI Toposheet
E	**Biological**			
a	Aquatic	Study Area	Once in study period	Primary field data survey and Forest working plan
b	Terrestrial			
F	**Socio-economic Parameters**	Core zone and buffer zone	Once in study period	Census of India 2011, BPL List, Revenue Department data

51.5.10 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.

51.5.11 Name of the EIA consultant: M/s Greencindia Consulting Private Limited [S No 161, NABET Certificate/ Ext. ltr no. NABET/ EIA/1922/ RA 0159 valid upto27/10/2022; Rev. 18, January 05, 2022].

51.5.12 During the meeting, project proponent submitted written submission on the following points:

- PP submitted revised lay out plan with proposed green belt all along the boundary of plan, separate entry and exist gate and no green area near electric substation.
- List of shrub, small trees and tall trees proposed for green belt is provided.
- PP has updated the name from M/s. Ambica Steel India limited (unit-1) to M/s. Ambica Steel India Limited in all documents.

Observations of the Committee

51.5.13 The Committee noted the following:

i. The instant proposal is for seeking ToR for undertaking EIA study for setting up Greenfield project for SMS of 2,08,400 TPA and Rolling Mill of 2,00,000 TPA in Mokhana Village, Bhuj Taluka, Kutch District of Gujarat state within project area of 27.28 ha.
ii. The scope includes 40 T IF, 50 T AOD, 50 T VOD, Ingot casting, LRF 50 T, Bar and rod mill and annealing furnaces.
iii. Location of AAQ monitoring stations are not in conformity to the wind rose diagram.
iv. Kanyabi Village is 1.6 KM West from site. Mundra is 15 km from site.
v. Sangnadi river flows 600m N of site.
vi. Pickling and passivation facilities are included. There would be one pickling line for coils and 2 lines for bars. Passivation line shall be provided for bars.
vii. Cold finishing facilities like bright bar peeling, grinding, bar drawing, shot blasting and wire drawing are included.
viii. Pet coke shall be used as carburizer.
ix. Nearly 2000 T per annum acids (HNO_3, H_2SO_4, HCL and HF shall be used)
x. 47 KLD STP shall be installed.
xi. 1200 Nm^3 per hour PNG shall be required; 1500 Nm^3/hr Oxygen, 22800 Nm^3 per day nitrogen shall also be required.
xii. Storage capacity of oxygen is 50000 Nm^3, nitrogen – 40000 Nm3, and 40000 Nm3 – Argon
xiii. Slag from IF, AOD and VOD is reported to be nonhazardous.

Recommendations of the Committee

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

i. With respect to ongoing baseline data collection, one additional AAQ station in West direction and AAQ 9 sampling station may be shifted in East direction from the project site in cross wind direction.
ii. Pickling and passivation facilities shall have acid/alkali fume extraction facility and ETP to treat effluent to recyclable quality. Sludge from ETP shall be sent to TSDF.
iii. Project specific risk assessment study shall be prepared and submitted inter-alia for storage of PNG, Oxygen, Nitrogen, Argon and various acids.

iv. Slag from IF, AOD and VOD shall be processed in Jigging plant and rejects shall be tested as per TCLP and decision to used slag for construction or sending it to TSDF shall be based on TCLP test results.
v. Plant layout shall be such that the agriculture farming in two plots on southern side is not affected by acid fumes.
vi. Action plan to limit the dust emission from all the stacks below 30 mg/Nm^3 shall be furnished.
vii. Action plan for fugitive emission control in the plant premises shall be provided.
viii. Action plan for green belt development covering 33% of the project area all along the periphery of the project site with a density of 2500 trees per hectare shall be submitted. Locally growing tree species should be planted in the Green belt. This shall include 30-meter-wide green belt development within the project area towards Kanyabi village.
ix. Action plan for rain water harvesting shall be submitted.
x. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
xi. HFL details of Sangnadi river from the concerned Competent Authority and impact on riverine ecology due to the proposed project shall be submitted in the EIA report.

51.6 Proposed Standalone Grinding Unit with Cement Production Capacity of 2.0 MTPA along with D.G. Set of 500 KVA by **M/s. Orient Cement Limited** located at Village: Kachewani, MIDC Industrial area, Taluka: Tirora, **District: Gondia, Maharashtra** [Online Proposal No. IA/MH/IND/243570/2021; File no: IA-J-11011/529/2021-IA-II(IND-I)] - **Prescribing of Terms of Reference – regarding.**

51.6.1 M/s. Orient Cement Limited has made an application online vide proposal no. IA/MH/IND/243570/2021 dated 21/12/2021, the application in prescribed format (Form-1), 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 schedule no. 3 (b) Cement Plants under Category "B" of the schedule of the EIA Notification, 2006 and attract the general condition due to existence of Eco-Sensitive Zone of Nagzira, New Nagzira Wildlife Sanctuary, Koka Wildlife Sanctuary, Navegaon Wildlife Sanctuary and Navegaon National Park falls at a distance of about 1.84 km from the proposed project site. Hence, the project is appraised as Category 'A' at central level.

Details submitted by Project proponent

51.6.2 The project of M/s. Orient Cement Limited located in Village: Kachewani, MIDC Industrial area, Taluka: Tirora, District: Gondia, Maharashtra for Proposed Standalone Grinding Unit with Cement Production Capacity of 2.0 MTPA along with D.G. Set of 500 KVA.

51.6.3 Environmental site settings:

S.No.	Particulars	Details	Remarks
i.	Total land	Total project area is 13.77 ha (34 acres).	Land Use: Industrial land
ii.	Land acquisition	The land has been taken on long term lease	

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td>details as per MoEF&CC O.M. dated 7.10.2014</td><td>by Orient Cement Ltd (OCL) from Adani Power Maharashtra Limited (APML).</td><td></td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project Site - Nil; No habitation exists within the project site and therefore, R&R is not applicable.
Study Area*:
<table>
<tr><th>Habitation</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>Kachewani Tola Village</td><td>0.5</td><td>SW</td></tr>
<tr><td>Gumadhaura Tola Village</td><td>0.8</td><td>SW</td></tr>
</table></td><td>-</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of the project site</td><td>
<table>
<tr><th colspan="3">PART A</th></tr>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>21°25'39.08"N</td><td>79°58'44.53"E</td></tr>
<tr><td>B</td><td>21°25'41.39"N</td><td>79°58'47.68"E</td></tr>
<tr><td>C</td><td>21°25'43.28"N</td><td>79°58'55.52"E</td></tr>
<tr><td>D</td><td>21°25'47.11"N</td><td>79°59'01.25"E</td></tr>
<tr><td>E</td><td>21°25'45.57"N</td><td>79°59'02.85"E</td></tr>
<tr><td>F</td><td>21°25'44.80"N</td><td>79°59'02.92"E</td></tr>
<tr><td>G</td><td>21°25'44.62"N</td><td>79°59'02.15"E</td></tr>
<tr><td>H</td><td>21°25'43.44"N</td><td>79°59'02.32"E</td></tr>
<tr><td>I</td><td>21°25'42.93"N</td><td>79°59'01.20"E</td></tr>
<tr><td>J</td><td>21°25'37.10"N</td><td>79°59'01.58"E</td></tr>
<tr><td>K</td><td>21°25'37.55"N</td><td>79°59'06.55"E</td></tr>
<tr><td>L</td><td>21°25'35.92"N</td><td>79°59'06.84"E</td></tr>
<tr><td>M</td><td>21°25'34.79"N</td><td>79°59'05.67"E</td></tr>
<tr><td>N</td><td>21°25'30.69"N</td><td>79°58'55.85"E</td></tr>
<tr><td>O</td><td>21°25'34.63"N</td><td>79°58'55.72"E</td></tr>
<tr><td>P</td><td>21°25'34.66"N</td><td>79°58'52.37"E</td></tr>
<tr><td>Q</td><td>21°25'38.33"N</td><td>79°58'52.52"E</td></tr>
<tr><td>R</td><td>21°25'37.58"N</td><td>79°58'48.00"E</td></tr>
<tr><td>S</td><td>21°25'38.55"N</td><td>79°58'48.66"E</td></tr>
<tr><td>T</td><td>21°25'38.82"N</td><td>79°58'47.80"E</td></tr>
<tr><td>U</td><td>21°25'38.09"N</td><td>79°58'47.68"E</td></tr>
<tr><td>V</td><td>21°25'38.12"N</td><td>79°58'45.68"E</td></tr>
<tr><td>W</td><td>21°25'37.28"N</td><td>79°58'44.81"E</td></tr>
<tr><th colspan="3">PART B</th></tr>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>1</td><td>21°25'33.62"N</td><td>79°58'51.39"E</td></tr>
<tr><td>2</td><td>21°25'33.58"N</td><td>79°58'54.33"E</td></tr>
<tr><td>3</td><td>21°25'30.69"N</td><td>79°58'53.72"E</td></tr>
</table>
</td><td>--</td></tr>
</table>

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td><table><tr><td>4</td><td>21°25'31.29"N</td><td>79°58'52.89"E</td></tr></table></td><td></td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>298 m to 303 m above mean sea level</td><td>--</td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>No Forest land is involved in the project area</td><td></td></tr>
<tr><td>vii.</td><td>Water body exists within the project site as well as study area</td><td><u>Project Site</u>: Nil
<u>Study area:</u><table><tr><th>Water body</th><th>Distance</th><th>Direction</th></tr><tr><td>Wainganga River</td><td>8.0 km</td><td>NW</td></tr><tr><td>BodalkasaNadi</td><td>2.0 km</td><td>SSW</td></tr><tr><td>Bodalkasa Right Main Canal</td><td>0.5 km</td><td>NW</td></tr><tr><td>Kharbanda Left Canal</td><td>3.0 km</td><td>NNE</td></tr><tr><td>Sangrampur Main Canal</td><td>3.5 km</td><td>East</td></tr><tr><td>Bodalkasa Left Bank Canal</td><td>6.5 km</td><td>WSW</td></tr><tr><td>Amba Nala</td><td>5.0 km</td><td>SE</td></tr><tr><td>Khadhandha Nala</td><td>9.5 km</td><td>NNE</td></tr><tr><td>Kharbanda Tank</td><td>9.0 km</td><td>NE</td></tr><tr><td>Bodalkasa Tank</td><td>8.0 km</td><td>SSE</td></tr><tr><td>SangrampurTalav</td><td>4.5 km</td><td>ESE</td></tr><tr><td>RamanghataTalav</td><td>8.0 km</td><td>SSW</td></tr><tr><td>Hari Talav</td><td>8.5 km</td><td>East</td></tr></table></td><td>--</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>As per the MoEF&CC Notification S.O. 612 (E) dated 25/02/2016; the extent of Eco-sensitive Zone of Nagzira, New Nagzira Wildlife Sanctuary, Koka Wildlife Sanctuary, Navegaon Wildlife Sanctuary and Navegaon National Park lies at a distance of ~ 1.84 km from the project site and Nagzira Wildlife Sanctuary is located at a distance of ~ 10.6 km from the project site.
Therefore, NBWL approval is not applicable.
Apart from this, there are 03 Reserve Forests (RF) in the study area:
Kondebarra RF (~5.5 km in ESE direction)
RF (~8.5 km in NE direction)
RF (~9.0 km in ENE direction)</td><td>--</td></tr>
</table>

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

S. No.	Plant equipment / Facility	Proposed Units	
		Configuration	Capacity
1.	Cement	VRM - 280 TPH	2.0 MTPA
2.	D.G. Set	-	500 KVA

51.6.5 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 (MTPA)	Source	Distance from site (Kms)	Mode of Transportation
1.	Clinker	1.31	Integrated Cement Plant of M/s. OCL at Devapur	273 Km	By Rail
2.	Gypsum (Chemical)	0.06	Vizag/ Paradip and later may be from Adani Power Maharashtra Ltd. (APML)	750 - 800 Km /	By Road
3.	Fly ash	0.63	Adani Power Maharashtra Ltd. (APML)	2.5 Km /	By Road / Pneumatic system

51.6.6 The water requirement for the proposed project is estimated as 300 KLD, which will be obtained from M/s. Adani Power Maharashtra Limited (APML).

51.6.7 The power requirement for the proposed project is estimated as 12 MW, which will be obtained from the Maharashtra State Electricity Board and D.G. Sets (500 KVA) (as emergency backup in case of Grid power failure).

51.6.8 The capital cost of the project is Rs. 499.16 Crores and the capital cost for environmental protection measures is proposed as Rs. 50 Crores. The employment generation from the proposed project is 818 Persons (118 persons direct and 700 people indirect).

51.6.9 Proposed Terms of Reference (**Baseline data collection period: October, 2021 to December, 2021**):

Attributes	Parameters	Sampling		Remarks
		No. of Stations	Frequency	
A. Air				
a. Meteorological parameters	Temperature, Relative Humidity, Wind Speed, Wind Direction	o1 (Project site)	Hourly	-
b. AAQ Parameters	PM_{10}, $PM_{2.5}$, SO_2 & NO_x	08	Twice a week (24 Hourly)	-
B. Noise	Equivalent noise levels in Leq in dB (A)	08	Once in a study period (Day &	-

Attributes	Parameters	Sampling		Remarks
		No. of Stations	Frequency	
			Night time)	
C. Water				
a. Surface water/ b. Ground water quality parameters	Parameters as per IS 10500 - 2012	13* 08	Once in a study period	-
D. Land				
a. Soil Quality	Parameters As per IS 2720/USDA	08	Once in a study period	-
b. Land Use	Agriculture, Habitation, Industry, Stony waste/ Quarries, Forest area, Plantation/ Vegetation, Open scrub, Water bodies etc	10 km radius Study Area	Once in a study period	-
E. Biological				
a. Aquatic	Flora and fauna	Study area	Once in a study period	-
b. Terrestrial				
F. Socio-economic parameters	Economic Demography	Study area	Once in a study period	-

**Note: Sample is/ will be taken from water available surface water bodies only.*

51.6.10 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.

51.6.11 Name of the EIA consultant: M/s. J.M. EnviroNet Pvt. Ltd [S.No. 44, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/RA 0186 and valid up to 07/02/2023; Rev. 18, January 05, 2022].

51.6.12 During the meeting, project proponent submitted written submission on the following points:

- PP submitted MOU between M/s. Orient Cement Limited and M/s. Adani Power Maharashtra Limited for long terms lease for land required to set up proposed project.
- PP has been submitted revised layout plan with proposing green belt towards railway siding.
- PP confirmed that Hot Air Generator (HAG) is not envisaged for the proposed project.
- Water requirement will be met from M/s. Adani Power Maharashtra Limited for proposed project.

Observations of the Committee

51.6.13 The Committee noted the following:

i. The instant proposal is for seeking ToR for undertaking EIA study for Standalone Grinding Unit with Cement Production Capacity of 2.0 MTPA along with D.G. Set of 500 KVA at village: Kachewani, MIDC Industrial area, Taluka: Tirora, District: Gondia (Maharashtra) state within project area of 13.77 ha.
ii. Total land of 13.77 ha is taken on long term lease by Orient Cement Ltd (OCL) from Adani Power Maharashtra Limited.
iii. The proposed project is a 'B' category project due to Eco Sensitive Zone of Nagzira, New Nagzira Wildlife Sanctuary, Koka Wildlife Sanctuary, Navegaon Wildlife Sanctuary and Navegaon National Park is located at a distance of 1.84 km from the project site appraised as Category 'A' at central level.
iv. Location of AAQ monitoring stations are not in conformity to the wind rose diagram.

Recommendations of the Committee

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

i. Project proponent shall submit authenticated map from Chief Wildlife Warden indicating the distance between project site boundary and ESZ boundary.
ii. Project proponent shall submit a long-term lease agreement in the EIA report as the land for the proposed project is being obtained from Adani Power Maharashtra Limited.
iii. List of flora and fauna existing in the study area shall be authenticated by the Competent Authority in the State Government.
iv. PP shall submit action plan for translocation of trees if any required inter-alia trees to be translocated in term of age, girth, height and type of trees. Compensation plan for tree translocation shall be incorporated in EIA / EMP report.
v. An agreement shall be made available for requirement of gypsum fulfilled from Adani Power Maharashtra Limited.
vi. With respect to the base line data collection, one-month additional data shall be carried out at all locations with one additional location in NW direction.
vii. 300 KLD water including drinking water shall be sourced from Adani Power. No Ground water abstraction shall be permitted.
viii. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm^3 shall be furnished.
ix. Action plan for fugitive emission control in the plant premises shall be provided.
x. Action plan for green belt development covering 33% of the project area, with 2500 plants per ha shall be submitted. This shall include 20 m green belt development inside the project area towards the Kachewani Tola Village and Gumadhaura Tola Village.
xi. Action plan for rain water harvesting shall be submitted.
xii. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

51.7 Proposed Sattur Cement Grinding Unit (2x2.5 MTPA - OPC/PPC/PSC/PCC) by **M/s. Dalmia Bharat Green Vision Limited** located at Mulliseval & Peddureddipatti Villages, Sattur Taluk, **Virudhunagar District, Tamil Nadu** [Online Proposal No.

IA/TN/IND/243976/2021; File no: IA-J-11011/532/2021-IA-II(IND-I)] - **Prescribing of Terms of Reference – regarding.**

51.7.1 M/s. Dalmia Bharat Green Vision Limited has made an application online vide proposal no. IA/TN/IND/243976/2021 dated 22/12/2021along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(b) under Category "B" of the schedule of the EIA Notification, 2006 and being appraised at Central Level as Category 'B' due to the absence of SEIAA/SEAC in the State of Tamil Nadu.

Details submitted by Project proponent

51.7.2 The project of M/s. Dalmia Bharat Green Vision Limited located in Mulliseval & Peddureddipatti Villages, Sattur Taluk, Virudhunagar District, Tamil Nadu for Proposed Sattur Cement Grinding Unit (2x2.5 MTPA - OPC/PPC/PSC/PCC).

51.7.3 Environmental site settings:

<table>
<tr><th>S No</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total land</td><td>26.47 ha
[Private:26.47 ha]</td><td>Land use: agriculture land</td></tr>
<tr><td>ii.</td><td>Land acquisition details as per MoEF&CC O.M. Dated 7/10/2014</td><td>An area of 52.41 ha is identified for proposed project site and out of which 26.47 ha will be utilized for proposed project.
About 75% land has been purchased and remaining is under process of purchasing.</td><td></td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td><u>Project site</u>: Nil

<u>Study Area</u>:<table><tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr><tr><td>Mulliseval</td><td>0.40 km</td><td>SE</td></tr><tr><td>Peddu-reddipatti</td><td>1.8 km</td><td>WNW</td></tr><tr><td>Periyaodaipatti</td><td>1.3 km</td><td>N</td></tr><tr><td>Sattur</td><td>8.3 km</td><td>N</td></tr><tr><td>Kovilpatti</td><td>9.1 km</td><td>SSW</td></tr></table></td><td>Status of R&R: There is no habitation/ infrastructure at site hence R&R is not applicable</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of all corners of the project site.</td><td><table><tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr><tr><td>NE</td><td>09°16’50.47”</td><td>77°55’26.34”</td></tr><tr><td>SE</td><td>09°16’06.82”</td><td>77°55’19.90”</td></tr><tr><td>SW</td><td>09°16’13.60”</td><td>77°55’13.20”</td></tr><tr><td>NW</td><td>09°16’29.52”</td><td>77°55’07.79”</td></tr></table></td><td></td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>70-75m above mean sea level</td><td></td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>Not involved forest land.</td><td></td></tr>
<tr><td>vii.</td><td>Water body (Rivers, Lakes, Pond, Nala,</td><td><u>Project site:</u> Nil</td><td>--</td></tr>
</table>

<table>
<tr><th>S No</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td>Natural Drainage, Canal etc.) exists within the project site as wellas study area</td><td><u>Study area</u>:<table><tr><th>Water body</th><th>Distance</th><th>Direction</th></tr><tr><td>Uppar River</td><td>2.7 km</td><td>S</td></tr><tr><td>Vaippar River</td><td>7.7 km</td><td>N</td></tr><tr><td>Arjuna River</td><td>9.25km</td><td>NE</td></tr><tr><td>Irukkankudi Dam</td><td>9.5 km</td><td>NE</td></tr><tr><td>UppuOdai</td><td>9.8 km</td><td>NW</td></tr></table></td><td></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>

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

S No	Plant Equipment/ Facility	Proposed Configuration & Capacity
1	Cement Grinding Unit – Line-I	2.5 Million TPA
2	Cement Grinding Unit – Line-II	2.5 Million TPA
3	Standby DG Sets- Line-I	2x500 KVA
4	Standby DG Sets- Line-II	2x500 KVA

51.7.5 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	*Qty. Required, MTPA for Each Line				Source	Distance	Mode of Transportation
	OPC	PPC	PSC	PCC			
Clinker	2.375	1.550	0.800	0.900	Integrated Cement Plant of the Group at Dalmiapuram, Ariyalur, Kadappa and open market.	250-700 km	Rail & Road
Gypsum	0.125	0.075	0.075	0.050	SPIC Thoothukudi	70 km	Road
Fly ash	-	0.875	-	0.850	Tuticorin TPSs	70 km	Road
Slag	-	-	1.625	0.700	Jindal Steel, Salem	250 km	Road

**The major raw materials requirement is estimated considering 100% of individual type of cements i.e. OPC/PPC/PSC/PCC. However, the actual quantity will be less than the proposed as a mix of different type of products will be produced depending upon market condition.*

51.7.6 The water requirement for the proposed project is estimated as 200 m^3/day, which will be sourced from the Ground Water along with harvested rain water. The permission for drawl of ground water will be obtained from SGWB.

51.7.7 The power requirement for the proposed project is estimated as 25 MW (Line I: 13 MW + Line II: 12 MW), which will be obtained from the State Grid-TANGEDCO supported with in-house Solar power.

51.7.8 The capital cost of the project is Rs. 765.0 Crores (Rs. 434.0 crores for Line-I & Rs. 331.0 crores for Line-II) and the capital cost for environmental protection measures is proposed as Rs.50.0 Crores. The employment generation from the proposed project is 265 people (65 Direct & 200 Indirect).

51.7.9 Proposed Terms of Reference (**Baseline data collection period July to September, 2021**):

Attributes	**Parameters**	**Sampling**		**Remarks**
		No. of stations	**Frequency**	
A. Air				
a. Meteorological parameters	Wind speed, wind direction (wind roses), temperature, humidity, cloud cover, atmospheric pressure, rainfall	1	Hourly Readings continuously for the Season	
b.AAQ parameters	All 12 Parameters as per NAAQ Norms	10	1/8/24- hourly basis, continuously for 2 days in a week for 4 weeks in a month for 3 months in the season	
B. Noise	Leq, Lday and Lnight values	10	Once in the season	
C. Water				
Surface water/ Ground water quality parameters	CPCB Norms & IS:10500-2012 Norms	Surface Waters (8 locations) & Ground Waters (8 Locations)	Once in the season	
D. Land				
a. Soil quality b. Land use	Physico-chemical, Nutrients & Textural parameters	6 Study Area	Once in the season	
E. Biological a. Aquatic	Flora & Fauna	Study Area 3	Once in the season	

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
b. Terrestrial		10		
F. Socio-economic parameters	Demographic pattern, Occupational structure, etc.	Study Area	Once in the season	

51.7.10 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.

51.7.11 Name of the EIA consultant: M/s. ABC Techno Labs India Private Limited [S No 120, NABET Certificate/ Ext ltr no. NABET/EIA/1922/RA0155 valid up to 24/05/2022; Rev. 18, January 05, 2022].

51.7.12 During the meeting, project proponent submitted written submission on the following points:

- PP submitted that an area of 52.41 ha is identified for proposed project site and out of which 26.47 ha will be utilized for proposed project. Green belt area is proposed in 17.30 ha (33% of complete 52.41 ha).
- About 1.25 lakh cum earth will be excavated during site development. Top soil will be stored separately and used for green belt development.
- HSD/ LSHS will be used for initial firing of HAG/FBC and coal having low sulphur content (< 0.5%) will be utilized further.
- EMP cost has been revised to include PTFE/ Homopolymer membrane bag filter to be used in bag filters.
- 10 KLD of STP is proposed for treatment of domestic waste water.

Observations of the Committee

51.7.13 The Committee noted the following:

i. The instant proposal is for seeking ToR for undertaking EIA study for Cement Grinding Unit (2x2.5 MTPA- OPC/PPC/PSC/PCC) at Mulliseval & Peddureddipatti Villages, Sattur Taluk, Virudhunagar District, Tamil Nadu state within project area of 26.47 ha.
ii. PP has identified an area of 52.41 ha for proposed project site and out of which 26.47 ha will be utilized for proposed project. Green belt area is proposed in 17.30 ha (33% of complete 52.41 ha).
iii. The proposed project is a 'B' category project due to absence of SEIAA, Tamil Nadu the project is appraised at central level.

Recommendations of the Committee

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

i. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm^3 shall be furnished.
ii. Action plan for fugitive emission control in the plant premises shall be provided.

iii. Action plan for green belt development in 17.30 ha with tree density of 2500 plants per ha shall be submitted. This shall include 20 m green belt development inside the project area towards the Mulliseval Village located at distance of 400 meter from the project site.
iv. Action plan for rain water harvesting shall be submitted.
v. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
vi. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be submitted.
vii. Action plan for gradual shifting of ground water usage to surface water source shall be submitted along with the EIA report.

51.8 Integrated Steel Plant of 0.9 MTPA (Finished Steel) along with 137 MW (92 MW WHRB based & 45 MW Coal and Dolochar mix based) Captive Power Plant by **M/s. Orissa Alloy Steel Private Limited** located at Mouza - Chakganesh, Malipur, & Baradiha, Tehsil Kharagpur (L), **District Paschim Medinipur, West Bengal** [Online Proposal No. IA/WB/IND/244109/2021; File no: IA-J-11011/518/2021-IA-II(IND-I)] - **Prescribing of Terms of Reference – regarding**.

51.8.1 M/s. Orissa Alloy Steel Private Limited has made an application online vide proposal no. IA/WB/IND/244109/2021dated 21/12/2021, the application in prescribed format (Form-1), 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 schedule no. schedule 3 (a)' Metallurgical Industries (ferrous & non-ferrous) and '1(d)' Captive Power Plants; '2(a)' Coal Washeries; '2(b)' Mineral beneficiation; '4(b)' Coke oven Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at central level.

Details submitted by Project proponent

51.8.2 The project of M/s. Orissa Alloy Steel Private Limited is located in Mouza - Chakganesh, Malipur & Baradiha, Tehsil Kharagpur (L), District Paschim Medinipur, West Bengal is for Integrated Steel Plant of 0.9 MTPA (Finished Steel) along with 137 MW (92 MW WHRB based & 45 MW Coal and Dolochar mix based) Captive Power Plant.

51.8.3 Environmental site settings:

<table>
<tr><th>S No</th><th>Particulars</th><th>Details</th></tr>
<tr><td>i.</td><td>Total land</td><td>102.39 ha
[Private: 60.10 ha; and Govt.: 42.29 ha (Industrial)]
Land use:
<table>
<tr><th>S No</th><th>Particulars</th><th>Area in Ha.</th><th>%</th></tr>
<tr><td>1</td><td>Main Plant</td><td>40.92</td><td>39.96</td></tr>
<tr><td>2</td><td>Water Reservoir</td><td>5.07</td><td>4.95</td></tr>
<tr><td>3</td><td>Built up Area</td><td>1.20</td><td>1.17</td></tr>
<tr><td>4</td><td>Internal roads</td><td>6.60</td><td>6.45</td></tr>
<tr><td>5</td><td>Green Belt</td><td>36.15</td><td>35.3</td></tr>
<tr><td>6</td><td>Tailing Area</td><td>1.40</td><td>1.37</td></tr>
<tr><td>7</td><td>Truck Parking area</td><td>1.57</td><td>1.54</td></tr>
<tr><td>8</td><td>Raw Material Storage</td><td>9.48</td><td>9.26</td></tr>
<tr><td colspan="2">Total Project Area</td><td>102.39</td><td>100.0</td></tr>
</table></td></tr>
</table>

<table>
<tr><th>S No</th><th>Particulars</th><th>Details</th></tr>
<tr><td>ii</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>Out of the 102.39 hectare of land, 42.29 hectare of land is Industrial land at Vidyasagar Industrial Park, Kharagpur and in principal approval from West Bengal Industrial Development Corporation Limited (WBIDC) obtained vide letter dated 20/07/2021.
For rest of land (60.10 hectare) final stage negotiation from private rayat is in progress.</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project Site: Nil
No rehabilitation and resettlement is involved for the subject project.

Study Area:
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Chakganesh</td><td>0.25 Km</td><td>East</td></tr>
<tr><td>Jakpur</td><td>1.1 km</td><td>EEN</td></tr>
<tr><td>Baradhia</td><td>0.8 km</td><td>SSW</td></tr>
<tr><td>Rupnaryanpur</td><td>1.1 km</td><td>NWN</td></tr>
</table></td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of the project site</td><td>
<table>
<tr><th>Site</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>Point A</td><td>22°22'27.12"N</td><td>87°22'07.88"E</td></tr>
<tr><td>Point B</td><td>22°22'40.48"N</td><td>87°22'25.04"E</td></tr>
<tr><td>Point C</td><td>22°22'11.64"N</td><td>87°22'41.46"E</td></tr>
<tr><td>Point D</td><td>22°21'44.18"N</td><td>87°22'52.59"E</td></tr>
<tr><td>Pont E</td><td>22°21'38.81"N</td><td>87°22'40.05"E</td></tr>
</table></td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>26 m to 30 m AMSL.</td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>No forest land involved.</td></tr>
<tr><td>vii.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project site:
02 Nos. artificial ponds to be developed as rain water harvesting pond.

Study area:
<table>
<tr><th>Water body</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Jakala Nala</td><td>0.03 Km</td><td>South</td></tr>
<tr><td>Kangsabati River</td><td>3.0 Km</td><td>North</td></tr>
<tr><td>Medinipur Canal</td><td>2.1 Km</td><td>North</td></tr>
<tr><td>Walipur Pond</td><td>5.50 Km</td><td>WNW</td></tr>
<tr><td>Purtonbazar Pond</td><td>4.50 Km</td><td>SSW</td></tr>
<tr><td>Chakmakrampur Pond</td><td>8.50 Km</td><td>SSE</td></tr>
<tr><td>Uttarshimla Pond</td><td>1.50 Km</td><td>NNE</td></tr>
<tr><td>Rameshwarup Pond</td><td>6.00 Km</td><td>North</td></tr>
</table></td></tr>
<tr><td>viii.</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/elephant reserve etc. if any</td><td>Nil,

However, three protected forest is present within 15 Km area of the project.
~11.0 km in NNW direction
~8.0 km in SW direction
~10.0 km in SW direction</td></tr>
</table>

S No	Particulars	Details
	within the study area	

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

S No	Particulars of Facilities	Revised Working days per annum	Revised		Product
			Configuration	Capacity	
1.	Blast Furnace	350	1 x 550 m^3	0.64 MTPA	Molten Liquid Metal
	PCM		2 X 800 TPD		Pig Iron
	LD Converter /BOF		1 x 50 T		High Quality Liquid Steel
2.	Sinter	330	1 x 75 Sq. m	0.90 MTPA	Sinter
3.	DRI with dryer	330	4 x 700 TPD	0.93 MTPA	Sized Sponge Iron
4.	SMS with Matching LRF/AOD, CCM and oxygen optimized furnace	330	8 x 30 T	0.72 MTPA	Billet, Slab
5.	SMS Slag Crusher	330	2 x 200 TPD	0.132 MTPA	Metal recovery
6.	Ferro Alloy Plant with Jigging plant and matching Briquette plant	330	3 x 12 MVA	0.075 MTPA	FeMn, FeSi, SiMn & FeCr
7.	Non-recovery type Coke Oven Plant	365	2 x 0.235 MTPA	0.47 MTPA	Metallurgical Coke
8.	Coal Washery	300	1 x 500 TPH	0.75 MTPA	Washed Coal
9.	Lime Dolomite Plant	330	1 x 300 TPD	0.099 MTPA	Calcined lime/ Dolo
10.	Oxygen Plant	350	2 x 200 TPD	0.14 MTPA	Oxygen
11.	Bar/ Wire Rod Mill and Wire drawing with stand by reheating furnace	330	0.39 MTPA		TMT Bar, Wire Rod & Wire
	Annealing, Pickling & Galvanizing Line	330			Galvanized product
12.	Strip Mill/ CRM	330	0.67 MTPA		H.R. Plate, Flat products, Coils
13.	Captive Power Plant	330	**92 MW-WHRB Based** (60 MW from DRI Plant + 30 MW from Coke Oven Plant, 2 MW TRT BF) **45 MW CFBC** (Coal & Dolochar Mix based)	137 MW	Power

S No	Particulars of Facilities	Revised Working days per annum	Revised		Product
			Configuration	Capacity	
14.	Pellet Plant with matching beneficiation	330	2 X 1.65 MTPA	3.3 MTPA	Iron Ore Pellet
15.	Producer Gas Plant	330	6 x 12,500 Nm^3/hr	75,000 Nm^3/hr	Producer Gas
16.	Railway Siding	365	01 No.	01 No.	---

51.8.5 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	Name of the Raw Materials	Quantity (TPA)	Source	Distance of source from	Mode of Transportation
1	Iron Ore Fines & Lump	4,710,094	Purchased from Barbil-Joda, Orissa	270-300	Rail /Road
2	Non-coking coal	22,00,000	CCL, MCL & Imported Coal.	300-500	Rail /Road
3	Coking Coal	536,000	E-Auction, Purchased from BCCL, Dhanbad or Imported	300-500	Rail /Road
4	Dolomite	107,600	From Birmitrapur, Orissa / Bilaspur, CG	270-350	Rail /Road
5	Limestone	297,900	From Birmitrapur, Orissa / Bilaspur, Raipur CG / Katni MP	270-350	Rail /Road
6	Manganese / Chrome Ore	104,000	From Balaghat, MP & Orissa	1000	Rail /Road
7	Quartzite	175,000	From Belpahar Orissa / Bilaspur, Raipur CG	500	Rail /Road
8	Pyroxenite	15,000	Fromm Jharkhand, Orissa	500	Rail /Road
9	Bentonite	60,000	From Kutch, Gujrat	2500-3000	Road
10	Ferro Alloy	7,200	From Associate company, Kharagpur West Bengal	30-50	Road

51.8.6 The water requirement for the project is estimated as 5,184m^3 /day, water requirement will be made from Kangsabati River (305 days @ 5184 KLD), Rainwater Harvesting Structure (60 days @ 5184 KLD) and ground water-90-110 m^3 /day (during construction phase only). Permission obtained by West Bengal Industrial Development Corporation Limited, Govt. of W.B. for 2.0 MGD surface water from Kangsabati River vide letter no-327 dated

01.03.2021 in name of associate company RISPL (Formerly Gleam Iron Mines Pvt. Ltd.). Tie-up made for water demand with associate company vide letter dated 10/11/2021.

51.8.7 The power requirement for the project is estimated as 213 MW, out of which 137 MW will be obtained from proposed Captive Power Plant (WHRB-92 MW, CFBC-45 MW) and balance 76 MW from WBSEDCL. Further the management will have 10 x 720 KVA DG sets to meet the emergency power requirement.

51.8.8 The capital cost of the project is Rs 1,300 Crores and the capital cost for environmental protection measures & EMP for social & infrastructure development is proposed as Rs. 91.0Crores. The employment generation from the proposed project is 4,000 {3,000 Direct (Regular – 1,000 & Contractual – 2,000) and 1,000 Indirect}.

51.8.9 Proposed Terms of Reference (**Baseline data collection period: October 2021 to December 2021**):

Attributes	**Parameters**	**Sampling**		**Remarks**
		No. of stations	**Frequency**	
A. Air				
a. Meteorological parameters	Wind speed, wind direction, Relative humidity, Temperature, Rainfall	**01**	Daily	Nearest Regional Micrometeorological Centre Kharagpur
b. AAQ parameters	PM_{10}, $PM_{2.5}$, SO_2, NO_2, CO, NH_3, Ozone, Benzene and Benzopyrene & Heavy metals (Ni, Pb, As)	**11**	Twice a week (Total No. of Samples – 216)	Setup based on 5 years data and wind rose of IMD.
B. Noise	Sound pressure level (Leq)	**09**	Once during the study period (Hourly basis for 24 hrs at each location)	
C. Water				
Surface water/Ground water quality parameters	**<u>Surface water:</u>** Parameters tested for physical and chemical and biological parameters as well as according to applicable standards	**08**	Once during the study period	***WATER: -As per IS 2296: 1982 / As per IS 10500: 2012 quality parameters.*** Water samples collected from

Attributes	Parameters	Sampling		Remarks
		No. of stations	**Frequency**	
	Ground water: Parameters tested for physical and chemical and biological parameters as well as according to applicable standards	**09**		various locations in core and buffer zone (10 km radius).
D. Land				
a. Soil quality b. Land use	--	5 Locations/ Primary data/ Secondary data 10 Km Buffer Zone Secondary data	Once in a season	
E. Biological				
a. Aquatic b. Terrestrial	--	Core and Buffer Zone Primary data / Secondary data	Once during the study period	
F. Socio-economic parameters	Demographic structure Infrastructure resource base. Economic resource base. Cultural and aesthetic attributes, Health Education	Core and Buffer Zone Primary data / Secondary data	Once during the study period	

51.8.10 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.

51.8.11 Name of the EIA consultant: M/s Centre for Envotech& Management Consultancy Pvt. Ltd. [S No 100, NABET Certificate/ Ext ltr no. QCI/NABET/ENV/ACO/21/2182 valid up to 15/03/2022; Rev. 18, January05, 2022].

51.8.12 During the meeting, project proponent submitted written submission on the following points:

- Number of working days is revised from 300 days to 300 - 365 days for proposed project.

- One-month additional baseline data collection has been proposed at 2 locations one in East and one in West direction.
- Out of 102.39 ha project area, 36.15 ha (about 35.3% area of the project area) will be developed as green belt. To minimize the impact on human settlement a 50 m wide green belt will be developed all along the project boundary with tree density of 2500 trees/ ha.
- Air pollution control devices will be designed to keep emission level below 30mg/Nm^3.
- Total makeup water requirement is 5184 KLD, rain water during monsoon season (3 months) will be utilized as makeup water as maximum possible extent and during lean season (2 months) harvested rain water will be utilized.
- Direct hot charging of billets of 80% will be preferred.
- A dedicated wagon tippler facility is proposed for proposed project.
- About 15-20% of the total project cost will be earmarked as CAPEX of environment management plan.
- Coal tar produced from producer gas plant will be sold to authorized vendors and phenolic water will be in ABC of DRI kilns.

Observations of the Committee

51.8.13 The Committee noted the following:

i. The instant proposal is for seeking ToR for undertaking EIA study for steel plant at Mouja – Chakganesh (J.L. No. 225), Malipur (J.L. No. 226) & Baradiha (J.L. No. 227), P.S. – Kharagpur (Local), Dist. - Paschim Medinipur in the state of West Bengal within project area of 102.39 ha.
ii. Out of total water requirement of 5184 KLD, requirement of 5-month makeup water will be fulfilled by rain water harvesting.
iii. PP submitted that green belt will be developed of 50 m width all along the plant boundary with tree density of 2500 trees/ ha.

Recommendations of the Committee

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

i. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm^3 shall be furnished.
ii. Action plan for fugitive emission control in the plant premises shall be provided.
iii. Action plan for green belt development covering 33% of the project area, with 2500 plants per ha shall be submitted. This shall include 30 m green belt development inside the project area towards the villages namely Chakganesh, Jakpur, Baradhia and Rupnaryanpur.
iv. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
v. Action Plan shall be provided in EIA/ EMP report for 5184 KLD water sourced from Kansabati river and rain water harvesting system. A rain water harvesting pond shall be included in the project site to cater to 150 days of water requirement. No ground water abstraction is permitted.
vi. Action plan for tailing management, utilization and disposal shall be incorporated in EIA report.

vii. Action plan for treatment of phenolic wastewater in After Burn Chamber (ABC) of DRI Kilns. Tar shall be sold and burning of the same in DRI Kiln is not permitted.
viii. Action plan for disposal of sludge from galvanizing and pickling section in Haldia TSDF shall be submitted.
ix. Project proponent shall submit action plan for complying with the following:
    a. Top Recovery Turbine (TRT), Stove Waste Heat Recovery(WHR), Cast house ventilation and dry gas cleaning at BF.
    b. Primary and secondary fume extraction and dry gas cleaning for converter at BOF Shop.
    c. Sinter cooler WHR system.
    d. Closed type Submerged Arc Furnace (SAF) with 4th hole extraction system and jigging and Briquetting plant for Ferro Alloy section.
    e. Pollution control systems as per statutory requirement for Non recovery Coke Oven. Land based bag filter for pushing emission control.
    f. Desulphurisation of flue gases from Non recovery coke oven.
    g. Pressure filters for coal washery and IOBP tailings.
    h. Vertical regenerative type lime kilns.
    i. Acid fume control and acid recovery systems for Cold Rolling Mill (CRM).
x. Action plan for setting up of Wagon tippler at the railway siding shall be submitted.
xi. Bag filters have been proposed for BOF fume control at converters. Secondary fume extraction system shall be provided for converter.
xii. Action Plan shall be submitted for annual performance monitoring of all Pollution Control Devices.
xiii. Two more AAQ stations in addition to proposed one shall be installed in West and east (one each) direction. One-month additional monitoring at these locations shall also be carried out for all the 12 parameters.
xiv. Jakala Nallah shall not be disturbed and action plan for landscaping of nallah shall be submitted.
xv. Socio-economic survey in the project influence area that is 10 Kms radial coverage from the project site shall be carried out and included as a part of EIA report.
xvi. Traffic study shall be carried out inter-alia including existing road details with traffic load, proposed quantum of material to be transported by rail/road with anticipated rakes/vehicles details, line source modelling and infrastructure strengthening details etc., These details shall be included in the EIA report.
xvii. Mass balance as well as energy balance of the steel plant shall be submitted.

12th January, 2022

51.9 Proposed installation of Pellet Plant (1x0.6 MTPA), Sponge Iron Plant (2x350 TPD DRI kilns), Induction Furnaces (4x20 T) with matching LRF & CCM, Rolling Mill (0.25 MTPA) along with 26 MW capacity Captive Power Plant (16 MW WHRB & 10 MW AFBC based) by **M/s AIC Metaliks Private Limited** located at Jamuria Industrial Estate, Jamuria, **District Paschim Burdwan, West Bengal.** [Online Proposal No. IA/WB/IND/117709/2019, File No. IA-J-11011/274/2019-IA-II(I)] –**Environment Clearance– regarding**

51.9.1 M/s. AIC Metaliks Private Limited has made an online application vide proposal no. IA/WB/IND/117709/2019 dated 31/12/2021 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 and Non-ferrous) and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by Project proponent

51.9.2 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	Validity of ToR
11/09/2019	11th meeting of EAC, held on 25th September, 2019	Terms of Reference	30/10/2019	29/10/2022

51.9.3 The project of M/s. AIC Metaliks Private Limited is located at Jamuria Industrial Estate, Jamuria, District Paschim Burdwan, West Bengal State is for Proposed installation of following facilities:

- Pellet Plant (1x0.6 MTPA)
- Sponge Iron Plant (2x350 TPD DRI kilns) for production of 2,31,000 TPA Sponge Iron
- Induction Furnaces (4x20 T) with matching LRF & CCM for production of 2,60,000 TPA Billets (2,64,000 TPA Liquid Steel)
- Rolling Mill (0.25 MTPA) for production of structural (Sheets, Angels, Channels, TMT Bars, Wires, Rods, Strips, Pipes)
- 26 MW capacity Captive Power Plant (16 MW WHRB & 10 MW AFBC based)

51.9.4 Environmental Site Settings:

<table>
<tr><th>S No</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total land</td><td>19.27 ha
[Private: 19.27 ha]</td><td>Land use:
Industrial – 19.27 ha</td></tr>
<tr><td>ii.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>Total land of 19.27 ha for the proposed project is already under the possession of the Company.</td><td>Site located in notified Jamuria industrial Estate</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any</td><td>There is no habitation and no involvement of R&R.</td><td>Total land under the possession of the company.</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of the project site</td><td><table><tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr><tr><td>1</td><td>23°41'11.73"N</td><td>87° 5'47.09"E</td></tr><tr><td>2</td><td>23°41'13.00"N</td><td>87° 5'53.32"E</td></tr><tr><td>3</td><td>23°41'10.97"N</td><td>87° 6'1.69"E</td></tr><tr><td>4</td><td>23°41'0.75"N</td><td>87° 6'18.37"E</td></tr><tr><td>5</td><td>23°40'53.37"N</td><td>87° 6'11.98"E</td></tr></table></td><td></td></tr>
<tr><td>V.</td><td>Elevation of the project site.</td><td>115 meters AMSL</td><td></td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>Not Applicable</td><td></td></tr>
</table>

S No	Particulars	Details	Remarks
vii.	Water body exists within the project site as well as study area	**Project Site:** No water body in the project site. **Study area:** Ajay River – 8.7 Km/NNE Damodar River – 9.3 km/SSW Several village pond within 3 km from the project site	
viii.	Existence of ESZ / ESA / national park / wildlife Sanctuary / biosphere Reserve / tiger reserve / elephant reserve etc. if any within the study area	Nil	

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

S No	Proposed Units	Unit Configuration	Production capacity
1	Pelletization Plant	(Module: 1×6,00,000 TPA)	6,00,000 TPA Pellets
2	Sponge Iron Plant	700 TPD (2×350 TPD)	2,31,000 TPA Sponge Iron
3	Induction Furnaces with matching LRF & CCM	4×20 T	2,60,000 TPA Billets (2,64,000 TPA Liquid Steel)
4	Rolling Mill	2,50,000 TPA	2,50,000 TPA Structural (Sheets, Angles, Channels, TMT Bars, Wires, Rods, Strips, Pipes)
5	Captive Power Plant	26 MW (16 MW WHRB based + 10 MW AFBC Boiler based)	26 MW Power

51.9.6 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	Annual Requirement (in TPA)	Source	Distance (in km)	Transportation		
					Internal	Rail	Road
Pellet Plant (1x6,00,000 TPA)							
1	Iron Ore Fines	7,20,000	Barbil- Joda, Orissa	300-350	-	7,20,000	-
2	Limestone	6,000	Birmitrapur, Orissa Bilaspur Raipur CG Katni MP	300 700 800 900	-	-	6,000

S No	Raw Material	Annual Requirement (in TPA)	Source	Distance (in km)	Transportation		
					Internal	Rail	Road
3	Bentonite	51,000	Gujarat	2200	-	51,000	-
4	Coal	24,000	Imported- Haldia Port Open Market	290-300 100-150	-	24,000	-
DRI Plant (2x350 TPD)							
1	Pellet	3,46,500	In-House	-	3,46,500	-	-
2	Coal	2,31,000	Imported- Haldia Port Open Market	290-300 100-150	-	1,61,700	69,300
3	Dolomite	6,930	Raipur CG Katni MP	800 900	-	-	6,930
Induction Furnaces (4x20 T)							
1	Sponge Iron	2,31,000	In-House	-	2,31,000	-	-
2	Scraps	24,000	Howrah Durgapur Asansol	200 35 20	-	-	24,000
3	Pig Iron	47,000	Durgapur Jamuria	35 5-10	-	-	47,000
4	Ferro Alloys	3,500	Barjora Durgapur Jamuria	50 35 5-10	-	-	3,500
Captive Power Plant (10.0 MW based on AFBC boiler)							
1	Coal	63,000	Imported- Haldia Port Open Market	290-300 100-150	-	44,100	18,900
2	Dolochar	69,300	In-House	-	69,300	-	-
Total		**1816930**	**-**	**-**	**6,40,500**	**10,00,800**	**1,75,630**
Percentage (%)					**35%**	**55%**	**10%**

51.9.7 The water requirement to the tune of 743 m^3/day (Fresh Water 643 cu.m/day and recycled water 100 cu.m/day) including 18 m^3/day for domestic purposes will be required for the proposed project. The raw water will be sourced from Asansol Municipal Corporation supply system. No ground water shall be abstracted. The permission for drawl of 900 m^3/day water is obtained from Asansol Municipal Corporation vide Ref. No. 0854/B-1/J/AMC dated 29/06/2021.

51.9.8 The estimated power requirement of the proposed unit is around 45.5 MW. The power requirement will be met from proposed 26 MW captive power plant and the rest from the State grid.

51.9.9 Baseline Environmental Studies:

Period	1st October, 2019 – 31st December, 2019	Additional Study (Nov- Dec 2021)
AAQ	$PM_{2.5}$ = 19 - 41 µg/m^3	$PM_{2.5}$ = 25 - 44 µg/m^3

Period	1st October, 2019 – 31st December, 2019	Additional Study (Nov- Dec 2021)
parameters at 8 locations & Additional study for 3 new locations (min and max)	PM_{10} = 52 - 85 µg/m^3 SO_2 = 5 - 21 µg/m^3 NO_2 = 10 - 36 µg/m^3 CO = 0.173 - 1.281 mg/m^3	PM_{10} = 62 - 81 µg/m^3 SO_2 = 6 - 18 µg/m^3 NO_2 = 16 - 31 µg/m^3 CO = 0.153 - 1.054 mg/m^3 Fresh ambient air quality monitoring has been done in the month of November, 2021 at three additional locations.
Incremental GLC level	PM = 2.10 µg/m^3 (0.8 km in SE) SO_2 = 2.56 µg/m^3 (1.2 km in SE) NO_x = 2.56 µg/m^3 (1.2 km in SE)	
Ground water quality at 9 locations	pH: 6.9 - 7.6, Total Hardness: 206 - 263 mg/l, Chlorides: 87 - 130 mg/l, Fluoride: 0.15 - 0.39 mg/l, Iron: 0.19 - 0.44 mg/l, TDS: 347 - 473 mg/l	
Surface water quality at 10 locations (3 River water & 7 pond water samples)	**River Water (Ajay River)** pH: 7.5 & 7.7, DO: 6.6 & 6.8 mg/l, BOD: 3 & 2 mg/l, COD: 12 & 10 mg/l, Fe: 0.12 & 0.13 mg/l, Coliform: 1670 & 1460 MPN/100ml, TDS: 194 & 191 mg/l, Total Hardness: 111 & 113 mg/l, Chloride: 40 & 37 mg/l **River Water (Damodar River)** pH: 7.1, DO: 6.5 mg/l, BOD: 3 mg/l, COD: 16 mg/l, Fe: 0.28 mg/l, Coliform: 1880 MPN/100ml, TDS: 398 mg/l, Total Hardness: 202 mg/l, Chloride: 110 mg/l **Pond Water** pH: 6.8 - 7.6, DO: 5.9 - 6.8 mg/l, BOD: 4 - 8 mg/l, COD: 18 - 31 mg/l, Fe: 0.15 - 0.34 mg/l,	***(19th Nov, 2021 – 14th Dec, 2021)*** **River Water (Ajay River)** pH: 7.45 to 7.79, DO: 6.8 to 7.2 mg/l, BOD: 2 to 5 mg/l, COD: 6 to 13 mg/l, Coliform: 1300 to 5800 MPN/100ml, Free NH_3 : <0.05 mg/lit. **River Water (Damodar River)** pH: 7.12 to 7.56, DO: 6.4 to 7.3 mg/l, BOD: 2 to 4 mg/l, COD: 8 to 21 mg/l, Coliform: 1700 to 6300 MPN/100ml, Free NH_3 : <0.05 mg/lit.

Period	1st October, 2019 – 31st December, 2019	Additional Study (Nov- Dec 2021)
	Coliform: 820 - 2330 MPN/100 ml, TDS: 321 - 398 mg/l, Total Hardness: 156 - 214 mg/l, Chloride: 80 - 123 mg/l	
Noise levels (min and max)	53.6 to 71.4 dBA for day time and 44.8 to 58.6 dBA for night time.	
Traffic assessment study findings	Existing Load (in PCU/day): ❖5948 on Jamuria-Ranisayer road near Ikrah More ❖28973 on NH-2 near Ranisayar More ❖11873 On NH-60, near Topsi Petrol Pump Total traffic load during operation of the proposed project (PCU/Day): ❖7453 on Jamuria-Ranisayer road near Ikrah More ❖30,479 on NH-2 near Ranisayar more ❖13,378 On NH-60, near Topsi petrol pump As per IRC:106 – 1990 code, guidelines for capacity of urban roads in plain areas (PCU/day): ❖57,600 for Jamuria-Ranisayer road near Ikrahmore ❖86,400 for NH-2 near Ranisayar More ❖57,600 for NH-60, near Topsi petrol pump Level of Service of all three roads mentioned above as per IRC Guideline (Volume/ capacity) **Present level of service** ❖Jamuria–Ranisayer Road: 5948/57600 = 0.10 (level A– Excellent) ❖NH-2: 28973/86400 = 0.33 (level B- Very good)6 ❖NH-60: 11873/57600 = 0.20 (level B - Very good) **After operation of proposed project level of service** ❖Jamuria – Ranisayer Road: 7453/57600 = 0.13 (level A – Excellent) ❖NH-2: 30479/86400 = 0.35 (level B – Very good) ❖NH-60: 13378/57600 = 0.23 (level B- Very	

Period	1st October, 2019 – 31st December, 2019	Additional Study (Nov- Dec 2021)
	good) The level of service will remain same even after including the traffic of proposed project.	
Flora and fauna	No endangered flora is present in the study area. No Schedule I species is present in the study area.	

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

S No	Type	Quantity in Tons/Year	Utilization
1	Dolochar from Sponge Iron Plant	69,300	100% to be used in AFBC boiler of CPP.
2	Slag from Induction Furnaces.	29,600	The slag generated from the furnaces shall be 29,600 TPA considering 100% production in the furnaces. After metal recovery about 10% metal shall be recovered from the total slag and the balance 26,640 TPA (as stone chips / road construction materials) shall be used for road construction & repairing / land filling purposes. Considering 7 m width & depth 12 inch (0.3 m) of the road and density of the slag as 3.5 ton/cum, 7,350 T slag may be consumed for 1.0 km stretch. Therefore, the entire quantity of slag generated in a year (26,640 TPA) shall be utilized for the construction of around 4 km roads. As per an estimate, it was found that around 450 km undeveloped (Kuchha) road is existing in the surrounding villages in the 10 km radius area. Hence, there is lot of potential of slag utilisation during construction of these roads.
3	End Cuts, Scale & Scrap from CCM & Rolling Mill	14,000	100% to be used in Induction Furnaces.
4	Fly Ash from CPP	24,192	100% to be sold as a raw material in cement plant / brick manufacturers in the neighborhood.
5	Bottom Ash from CPP	6,048	100% to be utilised for brick making / landfilling purposes.

51.9.11 Public Consultation:

Details of advertisement given	6th January, 2021 in Bengali newspaper "Bartaman", Hindi newspaper "Sanmarg" and English newspaper "The Times of

	India"
Date of public consultation	10th February, 2021
Venue	Jamuria Town Hall, Jamuria, Dist. - Paschim Bardhaman, West Bengal
Presiding Officer	Additional District Magistrate, Paschim Bardhaman, West Bengal
Major issues raised	• Control measures for abatement of Air Pollution due to the proposed project • Development of local roads and local schools • Regarding Ground water depletion • Regarding no discharge of waste water outside the plant premises • Development of Green Belt inside and outside the plant • Organizing health camp for the local people • Generation of employment for the local people and youths • Providing drinking water facilities in village during dry season • Safety due to vehicle movement for transportation of materials

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

Concerns raised during Public Hearing	**Physical Activity and Action Plan**	**Particulars**	**YEAR OF IMPLEMENTATION**		
			1st Year	**2nd Year**	**3rd Year**
• Regarding Control measures for abatement of Air Pollution due to the proposed project	• Adequate control measures like installation of ESP, Bag filters, dust suppression system&stacks of adequate height at relevant places will be installed. • Air borne dust shall be controlled by mobile water tanker inside the plant premises. • Maintenance of air pollution control equipment shall be done at regular intervals. • All roads shall be paved on which movement of raw materials or products will take place inside the plant premises.	Physical Target	The physical Target for the entire activities shall be achieved in 3 years.		
		Budget	Included in the EMP Cost.		
• Development of local roads	Construction of metal road (6 km) (@Rs. 18,00,000/- per Km) in the nearby six villages.	Physical Target (3 years)	2 km	2 km	2 km
		Budget : Rs. 108 Lakhs	Rs. 36 Lakh	Rs. 36 Lakh	Rs. 36 Lakhs
• Development of local schools	Financial support will be given to the local schools for the renovation / repairing work through extension of building / class room/ development of library facilities/ provision of computers for educational development purpose.	Physical Target (3 years)	Development of existing building in 5 local schools by creating	Development of 5 nos. playground each of 7200 sq.m along with the sports items in the local	Supply of 15 nos. of computers with printers to the 5 local schools along with

Concerns raised during Public Hearing	Physical Activity and Action Plan	Particulars	YEAR OF IMPLEMENTATION		
			1st Year	2nd Year	3rd Year
			extra space @1000 sq.ft per school.	schools.	upgradation of existing libraries.
		Budget: Rs. 60 Lakhs	Rs.25 Lakhs	Rs.10 Lakhs	Rs.25 Lakhs
• Ground water depletion	As per an initial estimate, water to the tune of around 743 m^3/day including 18 m^3/day for domestic purposes will be required for the proposed project which will be fulfilled from Asansol Municipal Corporation supply system. No groundwater will be used for the proposed project.	Physical Target	-		
		Budget	-		
• No discharge of waste water outside the plant premises	The plant will be designed as a zero-discharge plant. The water will be recirculated through cooling and treatment. The entire waste water will be recycled for various purposes inside the plant.	Physical Target	The physical Target shall be achieved with the commissioning of the project.		
		Budget	Included in the EMP Cost.		
• Development of Green Belt inside and outside the plant	• The company has earmarked 15.72 acres (6.36 Ha) of land for Green Belt Development within its plant site. Around 15900 number of trees (@ 2500 nos. of tree per hectares) shall be planted under greenbelt development programme within the plant premises. • Development of Parks and Tree Plantation Programme in the nearby villages will be done and distribution of saplings will be done to the nearby villagers and school students.	Physical Target	Physical Target for greenbelt development inside the plant premises shall be achieved before commissioning of the project.		
			Development of 1 no. park of 25000 sq.m area along with tree plantation & distribution of saplings.	Development of 1 no. park of 25000 sq.m area along with tree plantation & distribution of saplings.	8000 numbers Tree plantation & distribution of saplings.
		Budget: Rs. 40 Lakhs	Greenbelt development inside the plant included in the EMP Cost.		
			Rs.15 Lakhs	Rs.15 Lakhs	Rs.10 Lakhs
• Organizing health camp	Periodic health check-up programme will be conducted by arranging camps through Primary	Physical Target	Health checkup camps shall be organized on half-yearly basis, in 5 nearby villages for general body, eyes,		

Concerns raised during Public Hearing	Physical Activity and Action Plan	Particulars	YEAR OF IMPLEMENTATION		
			1st Year	2nd Year	3rd Year
for the local people	Health Care Centers in nearby villages.		blood test and donation along with mass vaccination for polio, dengue, typhoid, malaria, etc. For this purpose, one doctor along with 2 – 3 assistants shall be deputed. This will come under CSR activities of the company.		
		Budget	Shall be included in the CSR budget of the company		
• Generation of employment opportunities for the local people	In the proposed project, top most priority will be given to the local people based on their academic qualification. Skill development to unemployed local youths through National Skill Development Corporation, Govt. of India Scheme. Construction of a building along with the necessary infrastructures for this purpose like different machineries for industries.	Physical Target (3 years)	Construction of a 2 – room building (1200 sq.ft area) with infrastructure development like installation of 5 sewing machines, 5 computer systems & 7 machines for making hand craft items along with necessary raw materials for training purpose.		
		Budget: Rs. 40 Lakhs	Rs. 15 Lakhs	Rs. 15 Lakhs	Rs. 10 Lakhs
• Providing drinking water facilities in village during dry season	20 numbers Tube well / Hand pumps in nearby villages (@ Rs. 50,000/- per Tube Well / Hand Pumps	Physical Target (3 years)	8 nos. Tube wells in nearby 4 villages	6 nos. Tube wells in nearby 3 villages	6 nos. Tube wells in nearby 3 villages
		Budget: Rs. 10 Lakhs	Rs. 4 Lakhs	Rs. 3 Lakhs	Rs. 3 Lakhs
• Safety due to vehicle movement for transportation of materials	• All roads shall be paved on which movement of raw materials or products will take place inside the plant premises. • Allowing only PUC certified vehicle movement inside the plant premises. • Repairing of the roads wherever necessary and to the extent possible.	Physical Target	The physical Target for the entire activities shall be achieved in 3 years.		
		Budget	Included in the EMP Cost.		
Total Budget - Public Hearing related: Rs. 258 Lakhs					

Need based Assessment:

Need based Activities	Particulars	Year of Implementation		
		1st Year	2nd Year	3rd Year
To provide COVID related items	Physical Target:	200 nos. Oximeters, 20,000 nos. mask, 1000 bottles Sanitizer		
	Budget: Rs. 15 Lakhs	Rs. 15 Lakhs	-	-
Street Lighting (Solar) provision at suitable	Physical Target:	Providing 25 nos. Solar light	Providing 25 nos.	-

Need based Activities	Particulars	Year of Implementation		
		1st Year	2nd Year	3rd Year
public places in and around the nearby villages (50 numbers, @ Rs. 20,000/- per Solar Light)			Solar light	
	Budget: Rs. 10 Lakhs	Rs. 5 Lakhs	Rs. 5 Lakhs	-
Providing Dustbins (300 nos @Rs. 1000/- per unit) in nearby villages (under Swachh Bharat Scheme) for waste segregation and handling	Physical Target:	100 nos. Dustbins	100 nos. Dustbins	100 nos. Dustbins
	Budget: Rs. 3 Lakhs	Rs. 1 Lakh	Rs. 1 Lakh	Rs.1 Lakh
Rain Water Harvesting ponds in nearby villages (4 nos. @ Rs. 5 Lakhs per pond).	Physical Target:	2 Rain Water Harvesting Pond	2 Rain Water Harvesting Pond	-
	Budget: Rs. 20 Lakhs	Rs. 10 Lakhs	Rs. 10 Lakhs	-
Construction of 7 nos. of ground water Recharging system for rainwater in nearby villages (@3 lakhs per system).	Physical Target:	3 no. of ground water Recharging system	2 no. of ground water Rechargi ng system	2 no. of ground water Recharging system
	Budget: Rs. 21 Lakhs	Rs. 9 Lakhs	Rs. 6 Lakhs	Rs. 6 Lakhs
Total Budget - Need based activities: Rs. 69 Lakhs				
Overall Budget (Public Hearing related + Need based Activities): Rs. 327 Lakhs				

51.9.12 The capital cost of the project is Rs. 353 Crores and the capital cost for environmental protection measures is proposed as Rs. 52.98 Crores (around 15% of the project cost). The annual recurring cost towards the environmental protection measures is proposed as Rs. 5.04 Crores. The employment generation from the proposed project is 400 persons. The details of cost for environmental protection measures is as follows:

S. No.	Description of Item	Proposed (Rs. in Crores)	
		Capital Cost	Recurring Cost
i.	Cost of Air Pollution Control Systems	27.5	2.75
ii.	Cost of Water conservation & Pollution Control	8.5	0.85
iii.	Cost of Solid Waste Management System	3.7	0.37
iv.	Green belt development	0.2	0.02
v.	Noise Reduction Systems	3.3	0.33
vi.	Occupational Health Management	2.9	0.29
vii.	Risk Mitigation & Safety Plan	2.6	0.26
viii.	Environmental Management Department	1.7	0.17

S. No.	Description of Item	Proposed (Rs. in Crores)	
		Capital Cost	**Recurring Cost**
ix.	Total Budget - Public Hearing related	2.58	-
TOTAL		**52.98**	**5.04**

51.9.13 M/s. AIC Metaliks Pvt. Ltd.has earmarked 6.36 hectares (15.72 acres) of land for Green Belt Development out of 19.27 hectares (47.62 acres) of total land, within its plant area at Jamuria Industrial Estate, Jamuria, District Paschim Burdwan in West Bengal. Around 15,900 trees (2500 nos. of tree per hectares) will be planted in the green belt development area.

51.9.14 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.

51.9.15 Name of the EIA consultant: M/s. Envirotech East Pvt. Ltd. [Sl. No. 178, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2124/SA0145 Valid upto 12/09/2022, Rev. 18, January 05, 2022].

51.9.16 The proponent had earlier applied for Environment Clearance vide proposal no. IA/WB/IND/117709/2019dated 6th October, 2021and the proposal was considered in 47th meeting of REAC held on 28th – 29thOctober, 2021 wherein the Committee recommended the proposal to be returned in present form due to the shortcomings.

51.9.17 The proponent has again applied vide proposal no. IA/WB/IND/117709/2019dated 31st December, 2021 with revised EIA Report addressing the observations of the EAC as mentioned below:

Sl. No.	Observation of EAC	Submission by proponent
i.	The budget proposed for environment protection measures needs to be revisited and enhanced.	The budget proposed for environment protection measures has been revised to Rs. 52.98 Crores (around 15% of the project cost) as capital cost and Rs. 5.04 Crores as annual cost. The same is incorporated in para 51.1.12.
ii.	Action plan submitted to address the issues raised during public hearing is not as per the MoEF&CC O.M. dated 30/09/2020. PP need to submit the revised action plan.	Revised Action plan is submitted and incorporated in para 51.9.11.
iii.	A primary school is located at distance of 660 meters from the project boundary. The PP needs to provide additional protection measures for the protection of the same.	10 m to 70 m greenbelt shall be developed all along the boundary of the project site. The project boundary facing the Ikrah primary School will have 50 m to 107 m wide greenbelt which will help in mitigating both noise pollution as well as air pollutants, to be generated due to the project. Besides, dust suppression system shall be installed at various relevant locations inside the plant premises. Regular health check-up of the students of this school shall be undertaken by the Company.

Sl. No.	Observation of EAC	Submission by proponent
iv.	Water permission is obtained from Asansol Municipal Authority (AMA) for withdrawal of surface water from Ajay River. Clarification is required from PP in this regard as the AMA does not appear to the concerned competent authority for issuing water withdrawal permission from Ajay river.	The permission for allocation of water for industrial/domestic requirement has been obtained from Asansol Municipal Corporation which is the authority for issuing such permission in the region.
v.	Material balance needs to be revised as the same is not correct.	Revised Material balance has been incorporated in the EIA report (Pg. C11-5) uploaded on PARIVESH.
vi.	Water balance diagram is incomplete.	As per an initial estimate make up water to the tune of 725 cu.m/day will be needed for the proposed project for industrial purpose. In addition, water around 18.0 cu.m/day will be needed for in-plant domestic use. Thus, total 743 cu.m/day make up water (Fresh Water 643 cu.m/day and recycled water 100 cu.m/day) will be required for the proposed project. No ground water shall be abstracted. Revised Water balance has been incorporated in the EIA report (Pg. C2-36) uploaded on PARIVESH.
vii.	Surface water analysis result is not correct as there is no co-relation between the total coliform and BOD reported values. Fresh analysis of surface water sampling needs to be carried out.	Fresh surface water samples (5 nos.) collected on different dates (19th Nov, 2021 – 14th Dec, 2021) following standard protocols for sample collection and testing. The results obtained are presented in the table at para 51.9.9
viii.	Ambient air quality monitoring stations (AAQMS) have not covered all the directions as per the wind rows diagram. PP shall collect additional one-month baseline data at the additional AAQMs locations as per wind rows diagram. AAQ modeling shall be redone with new AAQ data.	Fresh ambient air quality monitoring has been done in the month of November, 2021 at three additional locations (AQ9, AQ10 & AQ11) in addition to the previous eight locations (AQ1, AQ2, AQ3, AQ4, AQ5, AQ6, AQ7 & AQ8), based on the wind rose diagram. Statistical analysis (minimum, maximum, arithmetic mean and 98 percentile values) of the ambient air quality in the study area for the month of November, 2021 is presented in the table at para 51.9.9.
ix.	EMPs and mitigation measures have not been quantified in the EIA report.	• Air environment management - Company has allocated a budget of Rs. 27.5 Crores with recurring cost of Rs. 2.75 Crores/ annum.

Sl. No.	Observation of EAC	Submission by proponent
		• Waste water management- Company has allocated a budget of Rs. 8.5 Crores with recurring cost of Rs. 0.85 Crores/ annum. • Solid waste management- Company has allocated a budget of Rs. 3.7 Crores with recurring cost of Rs. 0.37 Crores/ annum. • Noise management- Company has allocated a budget of Rs. 0.19 Crores with recurring cost of Rs. 0.019 Crores/ annum. • Greenbelt development- Company has allocated a budget of Rs. 3.3 Crores with recurring cost of Rs. 0.33 Crores/ annum. • Occupational Health - Company has allocated a budget of Rs. 2.9 Crores with recurring cost of Rs. 0.29 Crores/ annum. The detailed mitigation measures have been incorporated in the EIA report (Pg. C10-17 to C10-23) uploaded on PARIVESH.
x.	Compliance to the specific ToR pertaining to rain water harvesting has not been addressed.	The scheme for rain water harvesting system for the proposed project has been prepared to the tune of 5,42,390 m^3 which is equal to 200% of annual water consumption. The detailed scheme has been incorporated in the EIA report (Pg. C2-48 to C2-51) uploaded on PARIVESH.
xi.	Power point presentation sent to EAC members is different from what was presented during the EAC meeting.	The practice as observed shall be discontinued immediately
xii.	PP has provided the mitigation measures in generic form; same need to be provided with quantitative data.	Addressed in observation no. ix above.

Observations of the Committee

51.9.18 The Committee noted the following:

i. Action plan to address various issues raised during public hearing is not given as per Ministry O.M. dated 30/09/2020. The same needs to be revised.

ii. Project proponent has not submitted the revised lay out earmarking 50 -107 m wide green belt towards primary school.

iii. BOD value is only 2 mg/liters with total coliform of 2200 MPN/ 100 liters. PP as well as consultant was unable to explain the reason for such results. EAC noted that the reason for such incorrect result is prima-facie due to dilution of the sample. However, the consultant repeatedly tried to justify the incorrect data and not willing to accept the mistake committed in collection of samples for estimation of BOD.

iv. Consultant confirmed that BOD in treated water of STP shall be 5 mg/L. ACO could not explain the technology to achieve 5 BOD in STP and what shall be coliform level in treated water at 5 BOD?
v. Consultant was not able explain how at 2 m Water Table, recharge of RWH shall be carried out.
vi. Ground Water Monitoring is proposed once in a year while CPCB guidelines say "it should be twice (pre monsoon and post monsoon).
vii. Raw lab data for monitoring of SO_2 and NOx need to be made available to analyze the accuracy of SO_2 and NOx monitoring.
viii. Expenditure incurred towards Covid 19 has been considered as EMP for socio - economic development. Such expenditure is not considered as capital projects.
ix. Budget for Environment management is very low. It should be around 15 % of the Capital Expenses for the project.
x. No credible document has either been made available by the PP or by the Consultant to establish the fact that Asansol Municipal Authority (AMA) is Competent Authority for issuing water withdrawal permission from Ajay River as pointed out by the EAC in its meeting held on 28-29th October, 2021.
xi. Surface water has been analyzed again and revised data are again wrong. Consultant explanation does not corroborate with extant provision of scientific principles.

Recommendations of the Committee

51.9.19 In view of the foregoing and after deliberations, the Committee recommended that proposal to be returned in its present form to address the technical shortcomings enumerated at para no. 51.9.18 and submit the revised application as per the provisions of EIA Notification, 2006.

51.10 Proposed Expansion by Enhancement of Sponge Iron Plant (From 29700 TPA to 211200 TPA) with addition of new facilities of Pellet Plant 0.6 MTPA & Iron Ore beneficiation 0.8 MTPA; Induction Furnace with CCM 210000 TPA (Hot Charging); Rolling Mill (Automated) 205800 TPA; Ferro Alloys 9 MVA × 3 (Silico Manganese – 45000 TPA, Ferro Manganese- 45000 TPA & Ferro Silicon– 22000 TPA); and Captive Power 43 MW (from 0.5 MW to 18 MW WHRB & 25 MW AFBC) by **M/s. Sunil Sponge Private Limited** located at Village: Saraipali, RNM Tamnar, **District: Raigarh, Chhattisgarh** [Online Proposal No. IA/CG/IND/248137/2021, File No. IAJ- 11011/541/2021-IA-II(Ind1)] – **Prescribing of Terms of Reference – regarding.**

51.10.1 M/s. Sunil Sponge Private Limited (SSPL) has made an application online vide proposal no. IA/CG/IND/248137/2021 dated 29/12/2021 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. 2(b) Mineral Beneficiation and 3(a), Metallurgical industries (ferrous & non-ferrous) and 1(d) Thermal Power Plant under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by Project proponent

51.10.2 The project of M/s. Sunil Sponge Private Limited located at Saraipali Village, RNM Tamnar Tehsil, Raigarh District, Chhattisgarh is for expansion by enhancement of Sponge Iron Plant (From 29700 TPA to 211200 TPA) with addition of new facilities of Pellet Plant

0.6 MTPA & Iron Ore beneficiation 0.8 MTPA; Induction Furnace with CCM 210000 TPA (Hot Charging); Rolling Mill (Automated) 205800 TPA; Ferro Alloys 9 MVA × 3 (Silico Manganese – 45000 TPA, Ferro Manganese- 45000 TPA & Ferro Silicon– 22000 TPA); and Captive Power 43 MW (from 0.5 MW to 18 MW WHRB & 25 MW AFBC).

51.10.3 Environmental site settings:

<table>
<tr><th>SNo</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total land</td><td>Total project area after expansion will be 28.14 Hectare (69.54 Acre) out of which 13.17 Hectare land is already in possession whereas 14.97 Hectare land is under active stage of acquisition.</td><td>Proposed Land Status:
M/s. SSPL, Raigarh have applied to State Investment promotion Board (SIPB) is providing one window clearances and MOU is signed with Chhattisgarh Govt.
Request letter given to State Investment Promotion Board (SIPB), CG to avail permission for purchase of additional land (i.e. 14.97 Ha.) for Industrial Purpose. Land acquisition is under advanced stage.</td></tr>
<tr><td>ii.</td><td>Existence of habitation & involvement of R&R if any.</td><td>Nil</td><td></td></tr>
<tr><td>iii.</td><td>Latitude and Longitude of the project site</td><td><table><tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr><tr><td>BP1</td><td>22°1'48.20"N</td><td>83°18'45.69"E</td></tr><tr><td>BP2</td><td>22°1'42.14"N</td><td>83°18'43.98"E</td></tr><tr><td>BP3</td><td>22°1'41.37"N</td><td>83°18'37.17"E</td></tr><tr><td>BP4</td><td>22°1'42.35"N</td><td>83°18'24.76"E</td></tr><tr><td>BP5</td><td>22°1'50.60"N</td><td>83°18'24.07"E</td></tr><tr><td>BP6</td><td>22°1'50.63"N</td><td>83°18'25.78"E</td></tr><tr><td>BP7</td><td>22°1'57.05"N</td><td>83°18'25.47"E</td></tr><tr><td>BP8</td><td>22°1'56.03"N</td><td>83°18'48.20"E</td></tr></table></td><td>--</td></tr>
<tr><td>iv.</td><td>Elevation of the project site</td><td>297- 303 m.</td><td></td></tr>
<tr><td>v.</td><td>Involvement of Forest land if any.</td><td>Nil</td><td>NA</td></tr>
</table>

SNo	Particulars	Details	Remarks
vi.	Water body exists within the project site as well as study area	**Project site:** Nil **<u>Study area</u>** 1. Kelo River, 8.2 KMs/E 2. Jam Nala, 4.5 KMs/E 3. Dewanmunda Nala, 2.6 KMs/NE 4. Korapali Nala, 1.5 KMs/NE 5. Barade Nala, 2.2 KMs/W 6. Bodojuri Nala,1.9 KMs/N 7. Kosam Nala, 5.1 KMs/N 8. Ranai Nala, 9.2 KMs/NE 9. Gardharsi Nala 9.8 KM/NE 10. Ratrot Nala, 9.3KM/ENE 11. Banjari Nala, 7.0 KMs/ENE 12. Jindal Dam, 9.3 KM/SSE 13. Rabo Dam, 5.0 KM/ NW 14. Gerwani Nala, 3.6 KMs/ESE 15. Bilaspur Reservior 6.2 KM/ SE 16. Kelo Dam 7.2 KM/ESE	Ref. Study area map.
vii.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/tiger reserve/ elephant reserve etc. if any within the study area	**Project site:** Nil **<u>Study area</u>** 1. Urdana RF 2.2 KM, S 2. Barkachhar RF 8.9 KM, E 3. Kharidungri RF 9.3 KM, N 4. Taraimal RF 0.4 KM, SE 5. PF (Near Vill. Jamadbhari) 1.2 KM, N 6. Rabo RF 1.4 KM, SW 7. Samaruma RF 5.9 KM, N 8. PUNJIPATHRA PF 4.8 KM, ENE 9. PAJHAR P.F 8.6 KM, NE 10. PF near Saraipali 2.0 KM, SE 11. PF near Dokarbura 6.0 KM, NNW 12. PF near Shivpuri 4.9 KM, SSE 13. Lakha PF 7.6 KM, SE 14. Keradongri PF 8.8 KM, ESE 15. Amaghat PF 9.1 KM, NE 16. PF nr Taraimal 7.8 KM, E 17. Suhai RF 6.0 KM, NW	

51.10.4 The existing project was accorded Consent to Establish (First Consent) vide lr.no 3661/TS/CECB/2005Raipur, dated 05/08/2005 in the name of M/s. Mekko Steel and Power Pvt. Ltd. for its existing sponge iron plant capacity (1 x 90 TPD DRI Kiln) i.e. before EIA Notification, 2006.The first CTO for existing plant was granted by CECB vide ltr. No. 8378/ TS/CECB/2008, Raipur dated 24.12.2008 in the name of M/s. Mekko Steel and Power Pvt. Ltd. Subsequently initial consent for WHRB – 0.5 MW was also granted from CECB vide letter no. 5265/TS/CECB/2010 Raipur, dated: 20/12/2010 in the name of M/s.

Mekko Steel and Power Pvt. Ltd. The plant was under shut down from 08/10/2014 to 2019 due to NPA and NCLT case was in progress.

The unit was taken over by M/s. Sunil Sponge Pvt. Ltd. (Raigarh) on 13/06/2019 through e-auction and obtained Consent to Operate for the existing unit from Chhattisgarh Environment Conservation Board, vide lr. No. 7229/TS/CECB/2019 Raipur dated 22/11/2019 in the name of M/s. Sunil Sponge Pvt. Ltd. The validity of CTO is up to 31/10/2022.

51.10.5 Implementation status of the existing Consent:

Sl. No.	Facilities	Units	Production as per CTO Dated 22/11/2019 valid up to 31/10/2022	Implementation Status
1.	Sponge iron kilns	90 TPD x 1 No.	29700 TPA	Implemented 29700 TPA
2.	WHRB from Sponge Iron	0.5 MW	0.5 MW	Implemented 0.5 MW

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

S. No	Plant Equipment/ facility	Existing Units		Proposed Units		Final (Existing + Proposed)	
		Config-uration	Production capacity TPA	Configuration	Production capacity TPA	Configuration	Production capacity TPA
1.	Sponge iron kilns	90 TPD x 1 No.	29700 TPA	200 TPD X 1 No. and 350 TPD x 1 No.	181500 TPA	(90 TPD x 1 No., 200 TPD X 1 No. and 350 TPD x 1 No.)	211200 TPA
2.	Induction Furnace and CCM to produce M.S. Ingot/ Billet along with CCM	Nil	Nil	15 tons X 4 Nos plus 10 tons X 1 Nos Induction furnace with CCM	2,10,000 TPA	15 tons X 4 Nos plus 10 tons X 1 Nos Induction furnace with CCM	2,10,000 TPA
3.	Automated Rolling Mill -Rerolled Product (TMT or Wire Rod)	Nil	Nil	Electrical driven Rolling Mill about 640 TPD	Rerolled Product (TMT or Wire Rod) 2,05,800 TPA	Electrical driven Rolling Mill about 640 TPD	Rerolled Product (TMT or Wire Rod) 2,05,800 TPA
4.	Iron Ore Pellets	Nil	Nil	0.6 MTPA Pellet Plant	0.6 MTPA	0.6 MTPA Pellet Plant	0.6 MTPA
	Iron Ore Concentrate	Nil	Nil	0.8 MTPA Iron Ore Beneficiation	0.8 MTPA	0.8 MTPA Iron Ore Beneficiation	0.8 MTPA
5.	Ferro Alloy	Nil	Nil	9 MVA X 3 Nos	• Silico Manganese- 45000	9 MVA X 3 Nos	• Silico Manganese - 45000

S. No	Plant Equipment/ facility	Existing Units		Proposed Units		Final (Existing + Proposed)	
		Config-uration	Production capacity TPA	Configuration	Production capacity TPA	Configuration	Production capacity TPA
					TPA • Ferro Manganese- 45000 TPA • Ferro Silicon- 22000 TPA		TPA • Ferro Manganese - 45000 TPA • Ferro Silicon- 22000 TPA
6.	Captive Power Plant (WHRB)	0.5 MW (WHRB)	0.5 MW	17.5 MW	17.5 MW	18 MW	18 MW
7.	Captive Power Plant (AFBC)	Nil	Nil	25 MW	25 MW	25 MW	25 MW

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

For Sponge Iron Plant

S. No.	Raw Material	Consumption (In TPA)	Source	Distance from site (Kms)	Mode of Transportation
1	Iron Ore (Fe 64+)	337920	Odisha Iron Ore Mine and NMDC	Within 200 kms	By Rail to the nearest railway siding and then by Road through covered truck.
2	Coal (FC 40)	211200	SECL Coal mines or imported Coal	Within 200 kms	By Rail to the nearest railway siding and then by Road through covered truck or by port and then by rail to the nearest railway siding and then by Road through covered truck
3	Dolomite /Limestone	10560	Open Market	Within 200 kms	By Road through covered truck

For Induction Furnace (Steel Melting Shop)

S. No.	Raw Material	Consumption (In TPA)	Source	Distance from site (Kms)	Mode of Transportation
1	DRI (Sponge Iron)	2,10,210	Captive production/ Local market	Internal/ Within 200 kms	By Road through covered truck.
2	Scrap	32,340	Captive	Internal/	Internally available/ By

S. No.	Raw Material	Consumption (In TPA)	Source	Distance from site (Kms)	Mode of Transportation
	(10%)		production/ Local market	Within 200 kms	Road through covered truck.
3	Pig Iron (10%)	32,340	Local market	Within 200 kms	Internally available/ By Road through covered vehicles
4	Ferro Alloys	2,425.5	Captive production/ Local market	Internal/ Within 200 kms	
5	Fluxes	16,170	Open Market	Within 200 kms	By Road through covered truck.
6	Oxygen	23,10,000 Nm3	Open Market	Within 200 kms	
7	Coke	2079	Open Market	Within 200 kms	

For Continuous Casting Machine (CCM, Billets)

S. No.	Raw Material	Consumption (In TPA)	Source	Distance from site (Kms)	Mode of Transportation
1	Liquid Steel from IF	231,000	Induction Furnace production	Internal transfer	Internally available/ By Road thru covered vehicles
2	Argon	41,250 Nm^3	Open Market	Within 200 kms	By Road through covered vehicles

For Pellet Plant and Mineral Ore Beneficiation Unit

Sl.	Raw Material		Consumption (In TPA)	Source	Distance from site (Kms)	Mode of Transportation
For Iron Ore beneficiation plant (Iron ore concentrate)						
1	Iron Ore Fines		9,00,000	Odisha	Within 200 kms	By Rail & Road through covered trucks
For Pellet Plant(Pellets)						
1	Iron ore Concentrate		6,30,000	Own Generation	-	Covered Conveyor
2	Bentonite		9,000	Gujarat	~ 1400 kms	By Rail & Road through covered trucks
3	Limestone		9,000	Chhattisgarh / Madhya Pradesh	200-300 Kms	
4	Coke breeze		21,450	Chhattisgarh / Andhra Pradesh	~ 900 kms	
5	Coal (Gasifier)	Indian	39,000	SECL	Within 200 kms	
		Imported	24,000	Indonesia / South Africa / Australia		from Vizag Port by Sea, Rail& Road (Covered trucks)
6	Furnace Oil		10500 KL	Raipur	Within 100	By road

Sl.	Raw Material	Consumption (In TPA)	Source	Distance from site (Kms)	Mode of Transportation
				km	(through Tankers)

For Hot Charging Rerolling Mill

Sl.	Raw Material	Consumption (In TPA)	Source	Distance from site (Kms)	Mode of Transportation
1	Hot Billets	210000	Captive Production in Steel Melting shop	Internal Transfer	Internal Transfer

For Ferro Alloys Plant

S. No.	Raw Material	Consumption (In TPA)	Source	Distance from site (Kms)	Mode of Transportation
1.	Mn Ore	100558	Open Market	Within 200 kms	By Road through covered vehicles
2.	High Mn Slag	19156			
3.	Quartz	3831			
4.	Coke/Coal/Charcoal	28731			
5.	Dolomite	1437			
6.	Electrode Paste	1439			
7.	M.S. Item.	480			Internal Transfer
8.	Lancing Pipe and Canister Sheet	721			By Road through covered vehicles

Captive AFBC Power Plant (25 MW)

S. No.	Raw Material	Unit	Consumption per annum	Source	Distance from site (Kms)	Mode of Transportation
1	Char Dolochar	TPA	154837	Captive generation in SID	Internal transfer	Internally available.
2	Coal (GCV – 5000)	TPA	99000	SECL Mines	Within 200 kms	By Rail through nearest Railway station and thereby through covered Trucks
3	Fluidizing Bed Media	TPA	295	Open Market	Within 200 kms	By Road through covered truck

51.10.8 The water requirement for the project is estimated as 5150 m^3 /day, (1699500 KLA). The water requirement will be sourced from Surface Water (Rabo Dam) which is 5.0 KM in NW direction.

51.10.9 Power requirement will be around 54 MW out of which 43 MW will be from CPP and rest 11 MW will be drawn from CSPDCL supply network.

51.10.10 The capital cost of the project is Rs 375 Crores and the capital cost for environmental protection measures is proposed as Rs. 45Crores. The employment generation from the proposed expansion is 1020.

51.10.11 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.

51.10.12 Name of the EIA consultant: M/s. Anacon Laboratories Pvt. Ltd., Nagpur [S. No. 66, List of ACOs with their Certificate / Extension Letter no. Rev. 18, January 05, 2022]

51.10.13 Proposed Terms of Reference (**Baseline data collection period: 1st December 2021 to 28th February 2022**):

Attributes	**Parameters**	**Sampling**		**Remarks**
		No. of Stations	**Frequency**	
A. Air				
a. Meteorological parameters	Temperature, Relative Humidity, rainfall, wind direction & wind speed.	1 (Project site)	Daily	Hourly Met. data (Continuous during baseline period through data logger
b. AAQ	PM_{10}, $PM_{2.5}$, SO_2, NO_2, NH_3, Ozone, CO, Benzene and Benzopyrene & Heavy metals, Heavy metals: Ni, Pb, As	8	Monthly	Twice in a week continuously 24 hrs
B. Noise	Sound pressure level (Leq)	8	Once during the study period.(hourly reading for 24 hrs at each location)	Leq (dB A) Day time (6am to 10pm) and Night time (10pm to 6am) with hourly Measurement (Continuous 16 hrs.)
C. Water		13		
Surface water Ground water quality	As per IS: 10500	8 5	Once in a month	Grab Sample
D. Land				
a. Soil quality b. Land use	Physical and nutrition properties of soil	8	Once in a season	-
E. Biological				
a. Aquatic b. Terrestrial	Sapling location for Flora and fauna within study depending	8	Once in a Season	-

Attributes	Parameters	Sampling		Remarks
		No. of Stations	Frequency	
	on Ecological receptors in the study area Aquatic Ecological Study at Kelo River and other River in study area			
F. Socio – economic parameters	Employment and Working Conditions, Income Water Supply, Communicatio n, Sanitation, Education, Housing, Health, Environment and Pollution, Food, Energy & Fuel, Recreation, Clothing, Transportation, Social Security and Occupational Health monitoring of employees	8 (Project site)	Once in a Season	

51.10.14 During the meeting, project proponent submitted written submission on the following points:

- PP agreed upon change the configuration of existing DRI Kiln from 90 TPD to 100 TPD along with the proposed expansion.
- PP agree upon 100% solid waste generated utilization within plant including char/ dolochar of 1,54,837 TPA from sponge iron plant will be utilized in proposed 25 MW AFBC CPP plant.
- PP will develop green belt all along the plant boundary, accordingly revised lay out plant will be incorporated in EIA report.

Observations of the Committee

51.10.15 The Committee noted the following:

i. The instant proposal is for seeking ToR for undertaking EIA study for expansion of existing sponge iron plant to Integrated Steel plant at Saraipali Village, RNM Tamnar Tehsil, Raigarh District, Chhattisgarh within project area of 28.14 ha.

ii. Total project area after expansion will be 28.14 Hectare (69.54 Acre) out of which 13.17 Hectare land is already in possession whereas 14.97 Hectare land is under active stage of acquisition.
iii. PP confirmed during meeting that the existing DRI Kiln of 90 TPD will be replaced by 100 TPD with proposed expansion.

Recommendations of the Committee

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

i. Action plan for modification of 90 TPD kiln to 100 TPD with power generation of 2 MW from waste heat recovery system shall be submitted along with the EIA report.
ii. No ferro chrome shall be manufactured without prior permission from MoEF&CC.
iii. Action plan to limit the particulate matter 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 project area, with 2500 plants per ha shall be submitted. This shall include 30 m green belt development inside the project area towards the Barpalli village and Taraimal Reserved Forests.
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. 5150 KLD surface water shall be sourced from Rabo dam. No ground water abstraction shall be permitted.
x. Submerged Arc Furnace shall be closed type with 4^{th} hole extraction system for fume control.
xi. There is a Steel plant situated only 300 m SSW from the proposed project site. EIA report shall be prepared considering cumulative impact of the said plant.
xii. Singhanpur cave is located at a distance of 7 km from the site. Impact assessment of the plant on these caves shall be studied.
xiii. Action plan for tailing management, utilization and disposal shall be incorporated in EIA report.
xiv. Action plan for treatment of phenolic wastewater in After Burn Chamber (ABC) of DRI Kilns. Tar shall be sold and burning of the same in DRI Kiln is not permitted.
xv. Action plan for 85-90 % direct hot charging shall be submitted.

51.11 Iron Ore Beneficiation Plant (2x1.5 MTPA)- 3.0 MTPA, Pellet Plant (2x1.2 MTPA) – 2.4 MTPA, Producer Gas Plant (14x5000 Nm^3 /Hr.)- 588 MNm^3 , DRI Kilns (8x600 TPD) – 1.68 MTPA, WHRB Power through DRI kilns – (8x15 MW)-120 MW ,Through BF - 18 MW , Through Coke Oven- 15 MW and CFBC based Power Plant of (2x15 MW)- 30 MW, SMS – IF (18x20 T) with LRF(6x20 T)- 1.26 MTPA, BOF (1x50 T) with LRF (1x50 T) and VD unit (1x50 T)- 0.525 MTPA and EAF (1x50 T) with LRF (1x50 T) - 0.175 MTPA, Rolling Mill through hot charging (3x1000 TPD) - 1.05 MTPA, Sinter Plant (1x100 m^2) – 1.092 MTPA , Blast Furnace (1x750 m^3) – 0.7875 MTPA, Coke Oven Plant (Non recovery) – 0.5 MTPA, Ferro Alloys (4x9 MVA)- 0.084 MTPA, Oxygen Plant (1x250 TPD) - 0.087 MTPA, Lime & Dolomite Plant (1x450 TPD) – 0.1575 MTPA, Brick Manufacturing Unit - 350 Million Bricks/Year and Slag Recycling Plant (1x150 TPD) –

0.0525 MTPA by **M/s. Shyam Steel Works (P) Limited** located at Jangal Sundari Karmanagri- Parcel -II, Village Lachhmanpur, Jarukhamar, Siulibari, Digardhi, Shikratyar, Senera & Talshankra Tehsil Raghunathpur-I, **District Purulia, West Bengal.** [Online Proposal No. IA/WB/IND/248348/2021, File No. IA-J-11011/228/2021-IA-II(I)] **– Prescribing of Terms of Reference.**

51.11.1 M/s. Shyam Steel Works (P) Limited has made an online application vide proposal no. IA/WB/IND/248348/2021 dated 29/12/2021 along with the application in prescribed format (Form- I), Copy of Pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no 2(b) Mineral Beneficiation, 3(a) Metallurgical Industries (Ferrous and Non-ferrous) and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by Project proponent

51.11.2 The project of M/s. Shyam Steel Works (P) Limited located at Jangal Sundari Karmanagri-Parcel -II, Village Lachhmanpur, Jarukhamar, Siulibari, Digardhi, Shikratyar, Senera & Talshankra Tehsil Raghunathpur-I, District Purulia, West Bengal is for setting up of Iron Ore Beneficiation Plant (2x1.5 MTPA)- 3.0 MTPA, Pellet Plant (2x1.2 MTPA) – 2.4 MTPA, Producer Gas Plant (14x5000 Nm^3 /Hr.)- 588 MNm^3 , DRI Kilns (8x600 TPD) – 1.68 MTPA, WHRB Power through DRI kilns – (8x15 MW)-120 MW, Through BF - 18 MW, Through Coke Oven- 15 MW and CFBC based Power Plant of (2 x 15 MW)- 30 MW, SMS – IF (18x20 T) with LRF(6x20 T)- 1.26 MTPA, BOF (1x50 T) with LRF (1x50 T) and VD unit (1x50 T)- 0.525 MTPA and EAF (1x50 T) with LRF (1x50 T) - 0.175 MTPA, Rolling Mill through hot charging (3x1000 TPD) - 1.05 MTPA, Sinter Plant (1x100 m^2) – 1.092 MTPA, Blast Furnace (1x750 m^3) – 0.7875 MTPA, Coke Oven Plant (Non recovery) – 0.5 MTPA, Ferro Alloys (4x9 MVA)- 0.084 MTPA, Oxygen Plant (1x250 TPD) - 0.087 MTPA, Lime & Dolomite Plant (1x450 TPD) – 0.1575 MTPA, Brick Manufacturing Unit - 350 Million Bricks/Year and Slag Recycling Plant (1x150 TPD) – 0.0525 MTPA.

51.11.3 Environmental site settings:

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total Land</td><td>242.81 hectares. (600 Acres).

In-principle approval has been given by West Bengal Industrial Development Corporation (WBIDC) for allotment of 242.81 Ha. (600 Acres) of land vide letter No. WBIDC/VIP/JSK/Shyam Steel/2021-22/1309 dated 21/12/2021.</td><td>---</td></tr>
<tr><td>ii.</td><td>Existence of habitation & involvement of R & R, if any</td><td>No habitation exists in project site; Hence no R & R is involved.</td><td>---</td></tr>
<tr><td>iii.</td><td>Latitude and Longitude of the project site</td><td><table><tr><th>Points</th><th>Latitude</th><th>Longitude</th></tr><tr><td>Pt-1</td><td>23°35'03.75"</td><td>86°43'56.92"</td></tr><tr><td>Pt-2</td><td>23°35'30.64"</td><td>86°43'33.09"</td></tr><tr><td>Pt-3</td><td>23°35'35.96"</td><td>86°43'27.93"</td></tr><tr><td>Pt-4</td><td>23°35'36.54"</td><td>86°43'23.3"</td></tr></table></td><td>---</td></tr>
</table>

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>Pt-5</td><td>23°35'35.82"</td><td>86°43'19.45"</td></tr>
<tr><td>Pt-6</td><td>23°35'34.23"</td><td>86°43'18.1"</td></tr>
<tr><td>Pt-7</td><td>23°35'32.50"</td><td>86°43'21.24"</td></tr>
<tr><td>Pt-8</td><td>23°35'24.08"</td><td>86°43'19.10"</td></tr>
<tr><td>Pt-9</td><td>23°35'23.89"</td><td>86°43'20.86"</td></tr>
<tr><td>Pt-10</td><td>23°35'16.72"</td><td>86°43'16.96"</td></tr>
<tr><td>Pt-11</td><td>23°35'09.11"</td><td>86°43'19.59"</td></tr>
<tr><td>Pt-12</td><td>23°35'01.54"</td><td>86°42'56.14"</td></tr>
<tr><td>Pt-13</td><td>23°34'38.64"</td><td>86°42'45.5"</td></tr>
<tr><td>Pt-14</td><td>23°34'33.73"</td><td>86°42'47.31"</td></tr>
<tr><td>Pt-15</td><td>23°34'29.12"</td><td>86°42'32.64"</td></tr>
<tr><td>Pt-16</td><td>23°34'16.46"</td><td>86°42'31.62"</td></tr>
<tr><td>Pt-17</td><td>23°34'15.99"</td><td>86°42'37.63"</td></tr>
<tr><td>Pt-18</td><td>23°34'26.63"</td><td>86°42'40.64"</td></tr>
<tr><td>Pt-19</td><td>23°34'32.46"</td><td>86°43'01.35"</td></tr>
<tr><td>Pt-20</td><td>23°34'42.53"</td><td>86°42'58.23"</td></tr>
<tr><td>Pt-21</td><td>23°34'51.62"</td><td>86°43'01.04"</td></tr>
<tr><td>Pt-22</td><td>23°34'44.05"</td><td>86°43'16.41"</td></tr>
<tr><td>Pt-23</td><td>23°34'26.86"</td><td>86°43'23.07"</td></tr>
<tr><td>Pt-24</td><td>23°34'25.23"</td><td>86°43'39.11"</td></tr>
<tr><td>Pt-25</td><td>23°34'28.83"</td><td>86°43'52.66"</td></tr>
<tr><td>Pt-26</td><td>23°34'37.91"</td><td>86°43'51.48"</td></tr>
<tr><td>Pt-27</td><td>23°34'45.1"</td><td>86°43'52.48"</td></tr>
<tr><td>Pt-28</td><td>23°34'48.1"</td><td>86°43'45.99"</td></tr>
<tr><td>Pt-29</td><td>23°35'4.62"</td><td>86°43'45.05"</td></tr>
<tr><td>Pt-30</td><td>23°35'15.68"</td><td>86°43'47.47"</td></tr>
<tr><td>Pt-31</td><td>23°35'14.93"</td><td>86°43'52.00"</td></tr>
<tr><td>Pt-32</td><td>23°35'27.21"</td><td>86°43'53.82"</td></tr>
<tr><td>Pt-33</td><td>23°34'35.53"</td><td>86°43'54.04"</td></tr>
</table>
</td><td></td></tr>
<tr><td>iv.</td><td>Elevation of the project site</td><td>129 m to 154 m AMSL</td><td>---</td></tr>
<tr><td>v.</td><td>Involvement of Forest land, if any</td><td>No Forest land is involved in the project site.</td><td>---</td></tr>
<tr><td>vi.</td><td>Water body exists within the project site as well as study area</td><td>Project site:
<table>
<tr><th>Water Body</th><th>Distance</th></tr>
<tr><td>Stream</td><td>SW to North direction</td></tr>
<tr><td>Digardhi Village Pond</td><td>Within the site (South East)</td></tr>
<tr><td>Sikratyar village pond</td><td>(adjacent) (S)</td></tr>
</table>
Study area:
<table>
<tr><th>Water Body</th><th>Distance</th></tr>
<tr><td>Uttala Nadi</td><td>3.5 Kms (NW)</td></tr>
<tr><td>Panchet Reservoir</td><td>8.0 Kms (NNE)</td></tr>
<tr><td>Panchet Dam</td><td>9.0 Kms (NNE)</td></tr>
<tr><td>Ramachandrapur Reservoir</td><td>10.2 Kms (E)</td></tr>
<tr><td>Shimlon Village Pond</td><td>0.5 Kms (W)</td></tr>
<tr><td>Senara village pond</td><td>1.1 Kms (S)</td></tr>
</table></td><td>---</td></tr>
</table>

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td><table><tr><td>Kelahi village pond</td><td>0.9 Kms (W)</td></tr><tr><td>Durmut Village Pond</td><td>2.9 Kms (W)</td></tr><tr><td>Garh Panchkot Village Pond</td><td>3.8 Kms (NEE)</td></tr></table>Few seasonal nallahs, ponds exist within the study area.</td><td></td></tr>
<tr><td>vii.</td><td>Existence of ESZ/ ESA/ National Park/ Wildlife Sanctuary/ Biosphere Reserve/ Tiger Reserve/ Elephant Reserve etc. if any within the study area</td><td>Nil</td><td>---</td></tr>
<tr><td>viii.</td><td>Forest within the study area</td><td>The following Forests exist within 10 Km radius.<table><tr><th>Name</th><th>Distance</th></tr><tr><td>Senara R.F.</td><td>0.05 Kms. (S)</td></tr><tr><td>Indira Pahari P.F.</td><td>0.12 Kms. (SSW)</td></tr><tr><td>Panchet R.F</td><td>2.8 Kms. (NNE)</td></tr><tr><td>Bindabanpur P.F.</td><td>2.0 Kms. (SE)</td></tr><tr><td>Muktipur P.F.</td><td>4.0 Kms. (SEE)</td></tr><tr><td>Bheti P.F.</td><td>5.5 Kms. (SEE)</td></tr><tr><td>Dubrajpur PF</td><td>6.5 Kms. (SEE)</td></tr><tr><td>Dandahit PF</td><td>11.6 Kms. (SEE)</td></tr><tr><td>Unnamed PF</td><td>0.65 Kms. (SW)</td></tr><tr><td>Unnamed PF</td><td>1.6 Kms. (NW)</td></tr></table></td><td>---</td></tr>
</table>

51.11.4 It has been informed by the project proponent that Environment Clearance for the project site mentioned above was accorded by the Ministry vide letter no. J-11011/1283/2007-IA.II(I) dated 5/01/2010. However, the project activity could not be commenced due to financial issues. Subsequently, the land as well as EC was surrendered to WBIDC and MoEF&CC respectively. Therefore, proposed project is a Greenfield project.

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

S. No.	Unit (product)	Unit configuration	Production capacity
1	Iron ore beneficiation plant (I/O concentrate)	2 x 1.5 MTPA	3.0 MTPA
2	Pelletization Plant (pellets)	2 x 1.2 MTPA	2.4 MTPA
3	Producer Gas Plant (Producer Gas)	14 X 5000 NM^3/HR	588 MNM^3 /annum
4	DRI Kiln (Sponge Iron)	8 x 600 TPD	1.68 MTPA
5	Power generation through WHRB	8 x 15 MW	120 MW

S. No.	Unit (product)	Unit configuration	Production capacity
	from DRI Kiln		
6	Power generation through WHRB from Blast Furnace	1 x 18 MW	18 MW
7	Power generation through WHRB from Coke Oven	1 x 15 MW	15 MW
8	Power generation through CFBC Boiler	2 x 15 MW	30 MW
9	SMS {IF+LRF} – (Hot Billets / M.S.Billets)	18 x 20 T	1.26 MTPA
10	SMS {BOF+LRF*+ VD} - (Hot Billets / M.S.Billets)	1 x 50 T	0.525 MTPA
11	SMS (EAF+LRF*)- (Hot Billets / M.S.Billets)	1 x 50 T	0.175 MTPA
12	Rolling Mill through Hot charging (Rolled products i.e. TMT bars / Angles / Channels e.t.c)	3 x 1000 TPD	1.05 MTPA
13	Blast Furnace (Pig Iron)	1 x 750 m^3	0.7875 MTPA
14	Coke oven plant (Coke)	1 x 0.5 MTPA	0.5 MTPA
15	Sinter Plant (Sinter)	1 x 100 m^2	1.092 MTPA
16	Ferro Alloy Unit (FeMn (or) SiMn (or) FeCr (or) Pig Iron)	4 x 9 MVA	0.084 MTPA
17	Oxygen Plant	1 x 250 TPD	0.0875 MTPA
18	Lime & Dolomite Plant	1 x 450 TPD	0.1575 MTPA
19	Brick Manufacturing plant	350 Million Bricks /annum	350 Million Bricks /annum
20	Slag Recycling Plant	1 x 150 TPD	0.0525 MTPA

51.11.6 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	Quantity (TPA)	Sources	Mode of Transport
Beneficiation Plant - 30,00,000 TPA			
Iron Ore Fines	31,68,000	Odisha, Jharkhand & Chhattisgarh	By Rail
Pellet Plant – 24,00,000 TPA			
I/O Concentrate	26,40,000	Own generation	Through Conveyer
Anthracite Coal	48,000	Jharkhand, Odisha, WB & Imported	By Rail & Road (Covered trucks) & Through vessel.
Bentonite	21,600	Gujarat	By Road (Covered trucks)
Lime stone	60,000	M.P. & Odisha	By Rail & Road (Covered trucks)
Coke breeze	1200	Own generation, WB & Jharkhand	Internal Transfer & By Road

Raw Material	Quantity (TPA)	Sources	Mode of Transport
			(Covered trucks)
Dust from Pellet Plant	48,000	Own generation	Internal Transfer (Covered trucks)
Producer Gas Plant- 58,80,00,000 NM^3			
Domestic Coal	3,60,000	Odisha, Jharkhand & WB	By Rail & Road (Covered trucks)
DRI Kilns (Sponge Iron) – 16,80,000 TPA			
Pellet/ Iron Ore	24,00,000	Own generation, Odisha, Chhattisgarh, Jharkhand & Imported	By Conveyers & Rail and Through vessel
Imported Coal	14,28,000	South Africa, Indonesia & Australia	Through vessel & Road
Dolomite	84,000	M.P., Chhattisgarh & Imported from Bhutan/ Own Generation	By Rail & Road (Covered trucks) and Internal Transfer
CFBC Boilers [Power Generation-2 x 15 MW- 30 MW]			
Dolochar	3,70,000	Own generation	Through Conveyer
Domestic Coal	30,240	Odisha, Jharkhand & WB	By Rail & Road (Covered trucks)
Steel Melting Shop (IF+LRF) – 12,60,000 TPA			
Sponge Iron	12,60,000	Own generation	Through Conveyers
Pig Iron	2,28,000	Own generation	Internal Transfer (Covered trucks)
Melting Scrap (end cuttings also)	30,000	Own generation, Odisha, Chhattisgarh, Jharkhand, WB & Imported	Internal transfer (Covered Trucks), By Rail & Road (Covered trucks) & Through vessel.
Slag Scrap	52,500	Own generation	Internal Transfer (Covered trucks)
SiMn.	18,900	Own generation	Internal Transfer (Covered trucks)
Steel Melting Shop (BOF+LRF+VD) – 5,25,000 TPA			
Hot Metal	5,60,000	Own generation	Through Ladle
Lime	28,900	Odisha, Chhattisgarh, Jharkhand / Own Generation	By Rail & Road (Covered trucks) / Internal Transfer (Covered trucks)
Dolomite	13,100	M.P., Chhattisgarh & Imported from Bhutan/ Own Generation	By Rail & Road (Covered trucks) /Internal Transfer (Covered trucks)

Raw Material	Quantity (TPA)	Sources	Mode of Transport
SiMn	7900	Own generation	Internal Transfer (Covered trucks)
Steel Melting Shop (EAF + LRF)-1,75,000 TPA			
Sponge Iron	87,500	Own generation	Through Conveyers
Pig Iron	17,500	Own generation	Internal Transfer (Covered trucks)
Lime	26,400	Odisha, Chhattisgarh, Jharkhand / Own Generation	By Rail & Road (Covered trucks) / Internal Transfer (Covered trucks)
Melting Scrap	87,500	Own generation, Odisha, Chhattisgarh, Jharkhand, WB & Imported	Internal Transfer, By Rail & Road (Covered trucks) & Through vessel.
SiMn	2600	Own generation	Internal Transfer (Covered trucks)
Rolling Mills – 10,50,000 TPA with 85% hot charging + 15% with RHF (LDO/LSHS as fuel)			
MS Billet/ Ingots/ Bloom	11,02,500	Own generation	Roller Conveyers
LDO /LSHS	5200 KL	Nearby IOCL, BPCL & HPCL Depot	By Road (Through tankers)
Blast Furnace- 7,87,500 TPA			
Iron Ore	3,15,000	Odisha, Chhattisgarh, Jharkhand & Imported	By Rail & Through vessel.
Sinter	10,92,000	Own Generation	Roller Conveyers
Coke	4,41,000	Own generation	Internal Transfer (Covered trucks)
Quartz	15,750	WB	Covered trucks
Dolomite	43,000	Odisha, Chhattisgarh, Jharkhand/ Own Generation	By Rail & Road (Covered trucks) / Own Generation
Lime Stone	51,000	Odisha, Chhattisgarh, Jharkhand/ Own Generation	By Rail & Road (Covered trucks) / Own Generation
Coke Oven Plant – 5,00,000 TPA			
Coking Coal	7,50,000	Jharkhand &Imported from Australia	By Rail & Road (Covered trucks)& Through vessel.
Sinter Plant – 10,92,000 TPA			
I/O Fines	9,82,800	Odisha, Chhattisgarh & Jharkhand	By Rail & Road (Covered trucks)
Mill Scales	27,300	Own Generation	Internal Transfer (Covered trucks)
Lime Stone	1,40,000	Odisha, Chhattisgarh,	By Road

Raw Material	Quantity (TPA)	Sources	Mode of Transport
		Jharkhand/Own Generation	(Covered trucks))/ Internal Transfer (Covered trucks)
Dolomite	98,000	Odisha, Chhattisgarh, Jharkhand / Own Generation	By Road (Covered trucks)/ Internal Transfer (Covered trucks)
Coke Fines	93,000	WB, Odisha & Jharkhand / in-house	By Road (Covered trucks)
Dust from SMS, BF, Coke Oven	1,08,200	Own generation	Internal Transfer (Covered trucks)
Return fines from Sinter Plant	2,29,320	Own generation	Internal Transfer (Covered trucks)
For Ferro Alloys : 4 x 9 MVA [SiMn (or) FeMn (or) FeCr (or) Pig Iron]			
(i) For manufacturing Silico Manganese - 71,080 TPA			
Manganese Ore	1,15,860	MOIL, OMC& Imported from South Africa & Indonesia	By Rail & Road (Covered trucks) & Through vessel.
FeMn Slag	57,140	Own Generation	Through Conveyor
LAM Coke	27,360	Own Generation	Internal Transfer (Covered trucks)
Quartz	14,200	WB	By Road (Covered trucks)
Dolomite	21,000	Odisha, Chhattisgarh, Jharkhand & WB/ Own Generation	By Rail & Road (Covered trucks)/ Internal Transfer (Covered trucks)
(OR)			
(ii) For manufacturing Ferro Manganese – 84,000 TPA			
Manganese Ore	1,91,100	MOIL, OMC& Imported from South Africa & Indonesia	By Rail & Road (Covered trucks) & Through vessel.
LAM Coke	30,660	Jharkhand, Assam,Meghalaya& Imported	By Rail & Road (Covered trucks) & Through vessel.
Quartz	2520	WB	By Road (Covered trucks)
Dolomite	25,200	Odisha, Chhattisgarh, Jharkhand & WB	By Rail & Road (Covered trucks)
(OR)			
(iii) For manufacturing Pig Iron – 84,000 TPA			
HG Iron ore	1,23,900	Chhattisgarh, Odisha ,Jharkhand& Imported	By Rail & Road (Covered trucks) & Through

Raw Material	Quantity (TPA)	Sources	Mode of Transport
			vessel.
LAM Coke	41,160	Jharkhand, Assam, Meghalaya & Imported	By Rail & Road (Covered trucks) & Through vessel.
Lime stone	34,440	Chhattisgarh, Madhya Pradesh & Odisha	By Rail & Road (Covered trucks)
(OR)			
(iv) For manufacturing Ferro chrome – 79,800 TPA			
Chrome Ore	1,59,600	Odisha & Imported from South Africa	By rail, road (Covered trucks) & Through vessel.
LAM Coke	26,334	Jharkhand, Assam, Meghalaya & Imported	By rail, road (Covered trucks) & Through vessel.
Quartz	1596	WB	By Road (Covered trucks)
Lime	1996	Chhattisgarh, Madhya Pradesh & Odisha	By rail, road (Covered trucks)
Bag filter dust	2794	Own Generation	Through Pipeline
Lime & Dolomite Plant- 1,57,500 TPA			
Lime/Dolo Stone	2,83,500	Chhattisgarh, Madhya Pradesh & Odisha	By Rail & Road (Covered trucks)
Composite Brick Plant- 350 Million Bricks/Year			
IOB Tailing	5,28,000	Own generation	Covered trucks
Cement	1,10,000	WB	By rail & road (Covered trucks)
Bed Material	88,200	Own Generation	In covered trucks
Fly Ash/ash	5,95,800	Own Generation	In covered trucks
Slag Dust	3,72,765	Own Generation	In covered trucks
Wet scrapper sludge	57,231	Own Generation	In covered trucks
Slag Recycling Plant-52,500 TPA			
Slag	4,05,000	Own Generation	In covered trucks
Note: Own Railway siding is proposed upto the plant from Ram Kanali / Bero R.S. at a distance of 3.5 Kms.			

51.11.7 Water required for the proposed project will be 30,743 KLD, which will be sourced from Panchet Reservoir of Damodar Valley Corporation (at a distance of 8.0 Kms. from project site). Water drawl permission Water Resource Department, Govt. of West Bengal will be obtained.

51.11.8 Power required for the proposed project will be 256.60 MW and same will be sourced from Captive Power Plant (183 MW) and remaining 73.6 MW from the WBSEDCL/WBSETCL.

51.11.9 The capital cost of the project is Rs. 4591 Crores. Employment generation from proposed project will be 8000 nos. through direct employment and 1000 nos. through indirect employment.

51.11.10 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.

51.11.11 Name of the EIA consultant: M/s. Pioneer Enviro Laboratories & Consultants Pvt. Ltd. [Sl. No. 139, List of ACOs with their Certificate no. NABET/EIA/1922/RA0149, valid up to 22/03/2022; Rev. 18, January 05, 2022].

51.11.12 Proposed Terms of Reference (**1st March 2022 to 31st May 2022.)**:

Attributes	**Sampling**		**Remarks**
	No. of Stations	**Frequency**	
A. Air			
a. Meteorological parameters	1	On hourly basis for one season	• Wind Speed • Wind Direction • Temperature • Relative Humidity • Rainfall
b. AAQ parameters	12	24 hourly Twice a week for 3 months (One Season)	Parameters to be Monitored: • PM_{10}, • $PM_{2.5}$, • SO_2, • NO_x, • CO, • Hg • Lead (Pb), • Arsenic (As), • Nickel (Ni), • Benzene (C6H6), • Ammonia (NH3), • Benzo (a) Pyrene • Chemical characterization RSPM Poly-Aromatic Hydrocarbons (PAH), i.e. Benzene soluble fraction
B. Noise	12	On hourly basis for 24 Hrs. at each station	Parameters to be monitored: • Day equivalent • Night equivalent
C. Water			

Attributes	Sampling		Remarks
	No. of Stations	Frequency	
a. Ground Water	12	One sample at each of the locations	Parameters will be Monitored: as per IS: 10500
b. Surface Water	6	One sample at each of the locations	Parameters will be Monitored: as per BIS: 2296
D. Land			
a. Soil quality	12	One sample at each of the locations	Parameters will be Monitored: Texture, infiltration rate, SAR bulk density, pH, Ca, Mg, Na, K, Zn, Mn
b. Land use	--	--	LU map will be prepared by concerned FAE for study area
E. Biological			
a. Aquatic	--	Once in Season	---
b. Terrestrial	--	Once in Season	---
F. Socio economic parameters	--	Once in Season	Social Impact Assessment will be carried out by concerned FAE for study area
G. Traffic Density	--	Once in Season	Vehicular traffic study will be carried out at Transportation route.

Observations of the Committee

51.11.13 The Committee noted the following:

i. The instant proposal is for seeking ToR for undertaking EIA study for Integrated Steel plant at Jangal Sundari Karmanagri- Parcel -II, Village Lachhmanpur, Jarukhamar, Siulibari, Digardhi, Shikratyar, Senera & Talshankra Tehsil Raghunathpur-I, District Purulia, West Bengal within project area of 242.81ha.

ii. Approval has been given by West Bengal Industrial Development Corporation (WBIDC) for allotment of 242.81 Ha.

iii. PP proposed for railway siding at Bero R.S. at a distance of 3.5 Kms.

iv. A seasonal natural nallah is passing through the project site and a pond is located in project site and one pond is adjacent to south boundary of the project.

Recommendations of the Committee

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

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

ii. Action plan for fugitive emission control in the plant premises shall be provided.
iii. Action plan for green belt development covering 33% of the project area, with 2500 plants per ha shall be submitted. This shall include 30 m green belt development inside the project area towards the villages namely Maharajnagar (0.02 Kms), Lachhmanpur (0. 03 kms), Shikratyar (0.06 Kms) and Digardhi (0.05 kms).
iv. Seasonal nallah is passing adjacent to the boundary to the west and across the plot in north. The natural drainage pattern of the said nallah shall not be disturbed and action plan for landscaping on the both the sides of the nallah shall be submitted.
v. Action plan for conservation of Digardhi Village Pond and Sikratyar village pond located within the project site shall be submitted.
vi. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
vii. Action Plan shall be provided in EIA/ EMP report for 30473 KLD water sourced from Panchet Reservoir of Damodar Valley Corporation and rain water harvesting system. No ground water abstraction is permitted.
viii. Action plan for tailing management, utilization and disposal shall be incorporated in EIA report.
ix. Action plan for treatment of phenolic wastewater in After Burn Chamber (ABC) of DRI Kilns. Tar shall be sold and burning of the same in DRI Kiln is not permitted.
x. Project proponent shall submit action plan for complying with the following:
    a. Top Recovery Turbine (TRT), Stove Waste Heat Recovery(WHR), Cast house ventilation and dry gas cleaning at BF.
    b. Primary and secondary fume extraction and dry gas cleaning for converter at BOF Shop.
    c. Sinter cooler WHR system.
    d. Closed type Submerged Arc Furnace (SAF) with 4th hole extraction system and jigging and Briquetting plant for Ferro Alloy section.
    e. Pollution control systems as per statutory requirement for Non recovery Coke Oven. Land based bag filter for pushing emission control.
    f. Desulphurisation of flue gases from Non recovery coke oven.
    g. Pressure filters for IOBP tailings.
    h. Vertical regenerative type lime kilns.
xi. Action plan for setting up of captive railway siding for transportation of materials shall be submitted.
xii. Bag filters have been proposed for BOF fume control at converters. Secondary fume extraction system shall be provided for converter.
xiii. The Project Proponent shall submit action plan for annual performance monitoring of all Pollution Control Devices.
xiv. Socio-economic survey in the project influence area that is 10 Kms radial coverage from the project site shall be carried out and included as a part of EIA report.
xv. Traffic study shall be carried out inter-alia including existing road details with traffic load, proposed quantum of material to be transported by rail/road with anticipated rakes/vehicles details, line source modelling and infrastructure strengthening details etc., These details shall be included in the EIA report.
xvi. Mass balance as well as energy balance of the steel plant shall be submitted.

51.12 Setting up of 3.2 MTPA Pellet plant and 3.6 MTPA Pellet feed cum Beneficiation plant by **M/s. Resources Concentrates Private Limited (RPCL)** located at Somalapur Village,

Sandur Taluk, **Bellary District, Karnataka** [Online Proposal No. IA/KA/IND/246254/2021, File No. J-11011/39/2021-IA.II(I)] –**Amendment in terms of Reference – regarding.**

51.12.1 M/s. Resources Concentrates Private Limited (RPCL) has made an application online vide proposal no. IA/KA/IND/246254/2021 dated 22/12/2021 along with Form 3, revised Form-1 and PFR seeking amendment in standard Terms of Reference accorded by the Ministry vide letter no. J-11011/39/2021-IA. II(I) dated 26/02/2021. The proposed project activity is listed at S. No. 2(b) Mineral beneficiation and 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 the project proponent

51.12.2 M/s. Resources Concentrates Private Limited (RPCL) had proposed for setting up of 3.2 MTPA Pellet plant and 3.6 MTPA Pellet feed cum Beneficiation plant located at Somalapur Village, Sandur Taluk, Bellary District, Karnataka. Application for ToR was submitted to MoEF&CC, New Delhi on 29/01/2021. The proposal was considered by the EAC in its meeting held on 10/02/2021 and accordingly ToR letter was issued vide letter no. J-11011/39/2021-IA. II(I) dated 26/02/2021.

51.12.3 The instant proposal of M/s. RPCL is requesting the Ministry to replace the specific ToR condition (vii) w.r.t. tailings management in the ToR dated 26/02/2021as follows:

S. No.	Reference of approved ToR	Description as per Approved ToR dated 26/02/2021	Proposed condition	Remarks
1.	Specific ToRs Point No (vii)	PP shall submit the plan to reduce storage up to 90 days of tailings generated.	Action Plan for treatment, storage & utilization of tailings shall be submitted.	Tailings (4635 TPD) from beneficiation plant shall be dewatered and dry tailings shall be disposed of in the tailing pond. Tailing pond is within the vicinity of the plant and at a distance of approximately 1.5 km from the plant. Tailing storage will be approximately for 15 years with 22.5 MT. Off take arrangements for reuse and recycle from time to time in road making, brick making and in cement industry. The total area will remain same as per the original ToR application and there will be no change in the area requirement or plant capacity.

51.12.4 The proponent has submitted that there is no change in the configuration and capacities of the facilities envisaged in the ToR dated 26/02/2021.

Reason for seeking amendment in ToR:

51.12.5 The said condition would create operational difficulty in running the plant consistently, due to very low level of consistent demand of tailings in the downstream industries.

51.12.6 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.

51.12.7 During the meeting, project proponent submitted written submission on the following points:

- PP submitted the revised land use for tailing disposal area from 120 acres to 50 acres and the rest of 70-acre land is reserved for future expansion. Detail of land use of plant site is given as below;

S No	Land use description	Land area in acre
1	Plant area	117
2	Green belt	145
3	Utilities, water storage 7 miscellaneous	58
4	Tailing storage facility	50
5	Future expansion	70
	Total	**440**

Observations of the Committee

51.12.8 The Committee noted the following:

i. Proposal was accorded Terms of Reference on 26/02/2021 for undertaking EIA study.
ii. With respect to tailings disposal, project proponent has acquired 120 acres of land, out of which 50 acres land will be used for tailing disposal and 70 acres land will be kept reserved for future expansion.
iii. Instant proposal is for seeking amendment in the ToR dated 26/02/2021 with respect to Tailings disposal.

Recommendations of the Committee

51.12.9 In view of the foregoing and after deliberations, the Committee is recommended for amendment in specific ToR point no vii of ToR letter no. J-11011/39/2021-IA. II(I) dated 26/02/2021 with following specific ToR. Other terms and condition prescribed in ToR dated 26/02/2021 shall remain unchanged:

i. IOBP tailings shall be dewatered in filter press and stacked in total 50-acres of land. Detailed scheme for stacking of filter cake to ensure stability shall be furnished in the EIA report.

51.13 Proposed expansion in 1,20,000 TPA of Sponge Iron Plant to 1.0 MTPA Integrated Steel Plant by **M/s. Vanya Steels Private Limited** located at Sy. No. 45,47,48,49-A, 50-62, Kasankandi Road, Village Hirebanganal, **District Koppal, Karnataka** [Online Proposal No. IA/KA/IND/246751/2021; File no: J-11011/269/2007-IA II(I)] – **Amendment in Terms of Reference – regarding.**

51.13.1 It was apprised to the EAC that the project proponent vide email dated 12/01/2022 expressed their inability to participate in the meeting and requested for withdrawal of the proposal cited above.

51.13.2 In view of the above and after detailed deliberations, the Committee recommended that proposal to be returned in its present form.

51.14 Proposed expansion of Steel Plant by enhancing MS Billets/Ingots (from 1,12,000 TPA to 3,25,500 TPA); Rolling Mill (from 45,000 TPA to 3,08,000 TPA) by **M/s. Prime Steel Processors** located at Village: Jandali Budhewal Road, Tehsil Kum Kalan, **District Ludhiana, Punjab** [Online Proposal No. IA/PB/IND/247223/2021; File no: IA-J-11011/185/2013-IA-II(I)] – **Amendment in Terms of Reference – regarding.**

51.14.1 M/s. Prime Steel Processors has made an online application vide proposal no. IA/PB/IND/247223/2021 dated 24/12/2021 along with Form 3, revised Form-1 and PFR seeking amendment in standard Terms of Reference accorded by the Ministry vide letter no. IA-J-11011/185/2013-IA-II(I) dated 08/06/ 2021. The proposed project activity is listed under category "B" of the schedule of the EIA Notification and attracts general condition as the unit falls within 5 km radius boundary of Critically Polluted Area of Ludhiana (Punjab). Hence, the project is being appraised as Category 'A' at Central level.

51.14.2 The project proponent did not attend the meeting and no request has been received from the proponent seeking deferment of the proposal. 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. Accordingly, the proposal was considered by the EAC in the absence of the project proponent.

Details submitted by the project proponent

51.14.3 The existing project was accorded Environment Clearance vide letter no. J-11011/185/2013-IA II (I) dated 14th October, 2015. M/s. Prime Steel Processors had applied for grant of ToR vide proposal No. IA/PB/IND/213718/2021 on dated 05/06/2021 for expansion of Steel Plant by enhancing MS Billets/Ingots (from 1,12,000 TPA to 3,25,500 TPA); Rolling Mill (from 45,000 TPA to 3,08,000 TPA). Accordingly, standard Terms of Reference was issued by MoEF&CC vide letter no IA-J-11011/185/2013-IA-II(I) on 08/06/2021.

51.14.4 The instant proposal of M/s. Prime Steel Processors is for changing the production capacity in Steel Plant. The products sanctioned under the existing EC dated 14/10/2015, and proposed amendment in ToR dated 8/06/2021 are as follows:

S. No.	Particulars	Existing (As per EC dated 14/10/2015)	As per TOR dated 08/06/2021	Proposed Amendment in ToR	Remarks
A	**EXISTING & PROPOSED CAPACITY OF FURNACES & ROLLING MILLS**				
1	Induction Furnace	2x10 TPH 1x6TPH (To be Replaced) & Concast	2x25TPH & 1x12TPH, LRF 30TPH & Concast	2x25TPH & 1x12TPH, LRF 30TPH & Concast	No change
2	Reheating Furnace (Oil Fired)	On no. of 10TPH	Increase the capacity of Reheating Furnace	Increase the capacity of Reheating Furnace	No change

S. No.	Particulars	Existing (As per EC dated 14/10/2015)	As per TOR dated 08/06/2021	Proposed Amendment in ToR	Remarks
			(40TPH)	(40TPH)	
B	**PRODUCTS**				
1	Steel Ingot/Billets (TPA)	1,12,000	3,25,500	**3,50,000**	**Enhancement**
2	Rounds, TMT Bars, wire rode, Flats and structural steel	45,000	3,08,000	**3,40,000**	**Enhancement**
C	**RAW MATERIAL**				
1	MS Scrap (TPA)	1,20,960	3,52,800	**3,77,300**	**Enhancement**
2	Ferro-alloys (TPA)	1200	3500	3500	No change
D	**GENERALS**				
1	Project Cost (Crores)	Rs. 45	Rs. 85	**Rs. 135**	**Increase**
2	Land	11acres 46268.44m^2	11acres 46268.44m^2	**12.6 acres 49,544.74 m^2**	**Additional land added**
3	Power (KW)	13000	41,000	41,000	No change
4	DG Set	380 kVA	380 kVA 320 kVA	380 kVA 320 kVA	No change
5	Manpower (No's)	266	450	450	No change
6	Working days	24 hrs 350 working days in year	24 hrs 350 working days in year	24 hrs 350 working days in year	No change

Reason for seeking amendment in ToR:

51.14.5 Based on the market scenario, the project proponent has proposed to enhance the proposed production capacity.

51.14.6 The water requirement for the project is estimated as 73.28 KLD. The existing water demand is 25.0 KLD, in addition 48.28 KLD of water will be required. The total water requirement will be met from the tube well. The permission for drawl of groundwater is under process from PWRDA.

51.14.7 The existing Power requirement is 13 MW. For expansion, additional power of 28 MW will be required. Thus after expansion total power requirement will be 41 MW which will be met from Punjab State Power Corporation Limited.

51.14.8 The capital cost of the project is Rs 135 Crore including Rs 90.0 Crore as cost of expansion. The capital cost of environmental protection measures is measured as Rs. 3.5 Crore. The employment generation from the proposed/expansion is estimated as 450.

51.14.9 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.

51.14.10 Name of the EIA Consultant: M/s Chandigarh Pollution Testing Laboratory – EIA Division [Sl. No. 103, List of ACOs with their Certificate no. NABET/EIA/1922 SA 0135; Rev. 18, January 05, 2022].

Observations of the Committee

51.14.11 The Committee noted the following:

i. PP proposed for amendment in ToR for enhancement in SMS from 3,25,500 TPA to 3,50,000 TPA and enhancement in rolling mill from 3,08,000 TPA to 3,40,000 TPA along with addition of extra land of 1.6 acre.
ii. Total project cost will increase from 85 crores to 135 crores.

Recommendations of the Committee

51.14.12 In view of the foregoing and after deliberations, the Committee recommended for amendment in the ToR dated 08/06/2021 as mentioned at paragraph no. 51.14.4 & 51.14.5 above. All other terms and conditions prescribed in ToR dated 08/06/2021 shall remain unchanged.

51.15 Proposed Mini Integrated Steel Plant - Sponge Iron Unit (2.7 LTPA), Power generation [65 MW (CPP 45 MW & WHRB 20 MW)], Steel Melting Shop (2.97 LTPA), Rolling Mill (2.64 LTPA), Ferro Alloy Plant [SiMn (0.27 LTPA) / FeSi (0.14 LTPA) / FeMn (0.504 LTPA) / FeCr (0.30 LTPA) / Pig Iron (0.504 LTPA)], Fly Ash Brick Plant (60000 Nos./Day), Slag Crushing Unit (0.30 LTPA) **by M/s. Para Power and Coal Beneficiation Limited** at Village Ghutku, Tehsil Takhatpur, **District Bilaspur (Chhattisgarh)** [Online Proposal No. IA/CG/IND/237761/2021, File No. IA-J- 11011/485/2021-IA-II(IND-I)] – **Prescribing of Terms of Reference**

51.15.1 It was apprised to the EAC that the project proponent vide email dated 11/01/2022 expressed their inability to participate in the meeting and requested for postponement for consideration of their proposal.

51.15.2 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. Accordingly, the proposal was considered by the EAC in the absence of the project proponent.

Observations of the Committee

51.15.3 The Committee noted the following:

i. Total plant area is 43.67 ha. The entire area is lush green agriculture land. 33 % area has been earmarked for greenbelt. Further, land acquisition status has not been made available.

ii. No details are available about the habitation in the vicinity of the plant.
iii. 2583 KLD water shall be sourced from ground. Ground water abstraction in an area rich in agriculture is not recommended.
iv. Capex is Rs.491.00 Cr and EMP cost is only Rs.25.00 Cr. This needs to be revisited.
v. 492 KLD effluent shall be treated and will be utilized for dust suppression, ash conditioning and green belt development. This needs to be revisited.
vi. Ferro chrome slag is reported to be used for construction. It is a Hazardous waste.
vii. Jigging and briquetting plant is not proposed.
viii. Site selection has not been done properly. Other 2 sites compared have only 1/3rd of the area required for the plant.
ix. Percentage hot charging has not been specified.
x. SAFs size, type and its fume extraction capacity has not been defined

Recommendations of the Committee

51.15.4 The project proponent and EIA consultant did not attend the meeting. However, the Committee considered the proposal in absentia. After deliberations, the Committee recommended to return the proposal in its present form to address the technical shortcomings enumerated at para no. 51.15.3 and submit the revised application as per the provisions of EIA Notification, 2006.

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ANNEXURE –1

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

1. **Executive Summary**
2. **Introduction**
   - i. Details of the EIA Consultant including NABET accreditation
   - ii. Information about the project proponent
   - iii. Importance and benefits of the project
3. **Project Description**
   - i. Cost of project and time of completion.
   - ii. Products with capacities for the proposed project.
   - iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
   - iv. List of raw materials required and their source along with mode of transportation.
   - v. Other chemicals and materials required with quantities and storage capacities
   - vi. Details of Emission, effluents, hazardous waste generation and their management.
   - vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man/power requirement (regular and contract)
   - viii. The project proponent shall furnish the requisite documents from the competent authority in support of drawl of ground water and surface water and supply of electricity.
   - ix. Process description along with major equipment and machineries, process flow sheet (Quantitative) from raw material to products to be provided
   - x. Hazard identification and details of proposed safety systems.
   - xi. Expansion/modernization proposals:
     - a. Copy of <u>all</u> 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 <u>all</u> the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing /existing operation of the project from SPCB/PCC shall be attached with the EIA/EMP report.
     - b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005/2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.
4. **Site Details**
   - i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.

ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco/sensitive areas and environmentally sensitive places)
iii. Co/ordinates (lat/long) of all four corners of the site.
iv. Google map/Earth downloaded of the project site.
v. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
vi. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
vii. Landuse break/up of total land of the project site (identified and acquired), government/private / agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)
viii. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
ix. Geological features and Geo/hydrological status of the study area shall be included.
x. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
xii. R&R details in respect of land in line with state Government policy.

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

i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable).
ii. Land use map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (*in case of projects involving forest land more than 40 ha).*
iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis/à/vis the project location and the recommendations or comments of the Chief Wildlife Warden/thereon.
v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area.
vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.

6. **Environmental Status**

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

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

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

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

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

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

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

viii. Soil Characteristic as per CPCB guidelines.

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

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

xi. Socio/economic status of the study area.

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

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

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

iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail/cum road transport or conveyor/cum/rail transport shall be examined.

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

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

vi. Measures for fugitive emission control

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

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

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

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

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

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

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

8. **Occupational health**

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

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

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

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

9. **Corporate Environment Policy**

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

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

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

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

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

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

i. All documents shall be properly indexed, page numbered.
ii. Period/date of data collection shall be clearly indicated.
iii. Authenticated English translation of all material in Regional languages shall be provided.
iv. The letter/application for environmental clearance shall quote the MOEF&CC file No. and also attach a copy of the letter.
v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA/EMP Report.
vi. The index of the final EIA/EMP report must indicate the specific chapter and page no. of the EIA/EMP Report
vii. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MOEF&CC vide O.M. No. J/11013/41/2006/IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry shall also be followed.
viii. The consultants involved in the preparation of EIA/EMP report after accreditation with Quality Council of India (QCl)/National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation

details shall be posted on the EIA/EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.

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

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ANNEXURE/2

ADDITIONAL ToRS FOR INTEGRATED STEEL PLANT

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

ADDITIONAL ToRs FOR PELLET PLANT

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

ADDITIONAL ToRs FOR CEMENT INDUSTRY

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

ADDITIONAL ToRs FOR PULP AND PAPER INDUSTRY

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

ADDITIONAL ToRs FOR LEATHER/SKIN/HIDE PROCESSING INDUSTRY

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

ADDITIONAL ToRs FOR COKE OVEN PLANT

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

ADDITIONAL ToRs FOR ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS

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

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

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

Executive Summary

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

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

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Email **Sundar Ramanathan**

Re: DRAFT MOM OF 51 EAC HELD DURING 11-12 JAN 2022

From : cnpandey@iitgn.ac.in Wed, Jan 19, 2022 10:12 PM

Subject : Re: DRAFT MOM OF 51 EAC HELD DURING 11-12 JAN 2022 1 attachment

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

Dear Mr, Sundar,
Please find herewith the approved and final MoM for the 51st EAC meeting. Please go ahead with publishing this on Parivesh.
With warm regards,
C. N. Pandey,
Chairman, EAC, (IndustryI)
MoEFCC, GoI,